INSTRUCTIONS

HQC45 & HQC90 QUICKCHILLERS & HQCF45 QUICKCHILLER-FREEZER

MODEL	
HQC45	*ML-124066*
HQCF45	*ML-124067*
HQC90	*ML-124068*

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FORM 34639 Rev. A (Sept. 2001)

Model HQC45
QuickChiller
With Legs

Model HQCF45
QuickChiller-Freezer
With Casters

Model HQC90
QuickChiller
With Casters

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Installation, Operation, Use and Care of HQC45 & HQC90 QuickChillers & HQCF45 QuickChiller-Freezer

SAVE THESE INSTRUCTIONS

GENERAL

The HQC45 QuickChiller is designed for rapid chilling of 45 pounds of food (9 pounds of food per pan in five 12" x 20" x 2½" pans or five 18" x 26" sheet pans) from 150°F to 37°F in approximately 90 minutes. The rapid chilling process preserves food quality, texture and nutritional value for up to 5 days. As many as 5 chill cycles can be handled per 8 hour shift. At the end of a chill cycle, the chiller automatically goes into Hold mode at normal refrigerator temperatures, enabling overnight chilling.

The HQCF45 QuickChiller-Freezer is designed to chill exactly like the HQC45 and it can also freeze product down to – 20°F. Freezing time varies according to the initial and final product temperatures as well as product type and quantity. Coated wire shelves can accommodate five full-size 12" x 20" x 2½" pans or five 18" x 26" sheet pans.

The HQC90 QuickChiller is designed for rapid chilling of 90 pounds of food (9 pounds of food per pan in ten 12" x 20" x 2½" pans) from 150°F to 37°F in approximately 90 minutes. Optional coated wire shelves can accommodate ten full-size 12" x 20" x 2½" pans or five 18" x 26" x 2½" pans.

Chill and Freeze times are dependent upon product type, thickness, density, thermal conductivity, and type of covering. For best results, approximately 9 pounds of product per 12" x 20" x 2½" pan or 18" x 26" sheet pan is recommended. If more product per pan is being chilled, the time required to chill will be increased.

Cabinets are provided with a junction box in the lower section which allows for permanent, hard-wire connection. Stainless steel legs or casters are available accessories.

The durable stainless steel interior has coved corners for ease of cleaning. The exterior sides, front, and back are stainless steel. Left or right door swing is available on order and cannot be changed in the field. Compressors supplied by Hobart are rated 1¼ HP on HQC45 and HQCF45. Compressors are rated 1¾ HP on HQC90. Refrigerant is R404A. Remote refrigeration system or water cooled refrigeration system are optional. Location of RS232 port for SmartChill is standard in front behind the printer door and optional at the rear.

The SmartChill™ controller provides the ability to:

- Select the chill mode: By Product, By Time or By Temperature (Chill or Freeze, model HQCF45).
- Display the current air and product temperatures and time.
- Monitor product temperature with three smart probes to reduce chances of freezing.
- Select Soft Chill to reduce the chances of freezing in the final phase of chilling.
- Provide service diagnostics to quickly check machine functions and control circuitry.
- Send Chill Cycle data via RS232 port to SmartChill™ computer software, state-of-the-art HACCP data management.

The standard printer provides the ability to:

- Print data from the last or any chill cycle with time, date, and temperature information.
- Charts chill temperatures vs. time at intervals that can be set by the supervisor.

An optional second printer can print a condensed ‘Label’ type of report with Product and User info.

- Printers provide HACCP reporting of chill data.

INSTALLATION

Before installing, check the electrical service to make sure it agrees with the electrical specifications on the rating plate located inside the cabinet.

UNCRATING

Immediately after unpacking, check for possible shipping damage. If the chiller is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

DO NOT LAY THE CHILLER ON ITS FRONT, BACK OR SIDES. EXERCISE EXTREME CARE WHEN REMOVING THE CRATE BOTTOM ESPECIALLY WHEN THE LAST SHIPPING BOLT IS REMOVED. CABINET MUST BE PROPERLY BLOCKED AND STABLE.

Cabinet is bolted onto a wood shipping base from underneath using the Threaded Hole (Fig.1). Remove shipping bolts.

LEGS OR CASTERS

The HQC45, HQCF45 and HQC90 must be installed with legs or casters.

WARNING: THE CABINET MUST BE BLOCKED AND STABLE BEFORE INSTALLING THE LEGS OR CASTERS.

Legs (Optional)

To install the legs, raise up and block the cabinet a minimum of 7" from the floor and thread the legs into the threaded holes on the bottom of the cabinet.

The chiller must be level to operate properly. Turn the adjustable feet in or out as required to level the chiller front-to-back and side-to-side (Fig. 1).

Casters (Optional)

Casters may be supplied for use on self-contained units. The swivel casters with brake should be installed in front; casters without brake, in rear (Fig. 2). Caster equipped chillers should be located on a level floor.

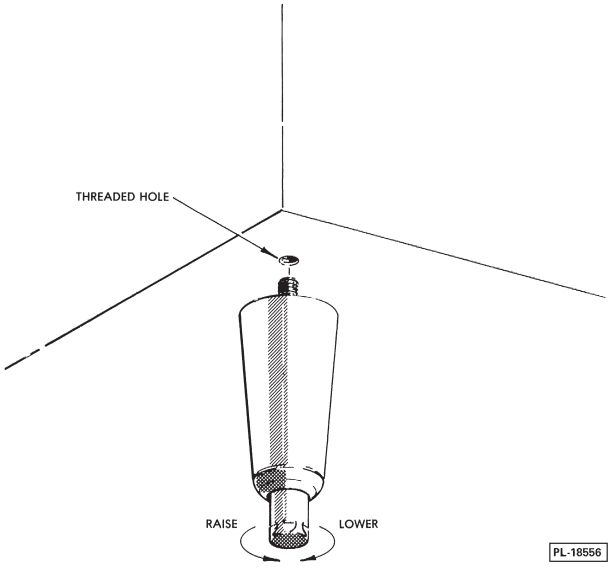


Fig. 1

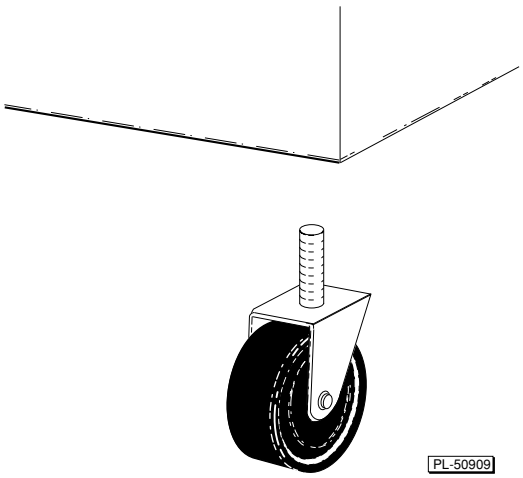


Fig. 2

LOCATION

Good air circulation at the condenser coil in the lower section is necessary to provide proper operation. The cabinet may be located in any one of the following three ways to assure satisfactory performance.

- The unit can be situated so the lower back section is open to room air, allowing free air discharge. No side clearance and no top clearance is required. This is the preferred situation and provides the most effective cooling.
- The unit can be provided with no side clearance, two inches of clearance at the rear, and six inches of clearance above.
- If the unit is situated with no back clearance and no top clearance, it is necessary to provide either five inches of clearance on each side or ten inches of clearance on one side of the cabinet.

NOTE: Performance is enhanced when the air going into the condenser coil through the lower front section is cool. For example, locating the chiller adjacent to an oven would not be recommended.

FEATURES

Shelves (Set of Five)

A set of five shelves is optional on HQC90. A set of five shelves is standard with HQC45 and HQCF45. Shelf clips are packed with the shelves. For each shelf, insert two front shelf clips and two rear shelf clips into the pilaster slots at the same height. After installing shelf clips on pilasters, place shelves on clips.

Optional single shelves are available; up to eight shelves can be installed in the cabinet at one time.

Recommended Pans

Full size 12" x 20" x 2½" pans or 18" x 26" sheet pans are recommended. Pans are not included.

Probes

During a chill cycle, insert probes in pans of food to monitor temperatures. Probes should not touch bottom of pan. Place probe in the middle of the food for best temperature indication.

The Top Probe in the cabinet corresponds to Probe 1 (Fig. 3); the Center Probe is Probe 2; the Bottom Probe is Probe 3.

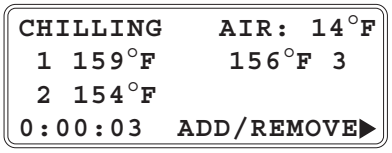


Fig. 3

Door Switch

When the door is opened, the door switch shuts off fans and DOOR OPEN displays. If the door is open for 30 seconds, the refrigerant valve closes. If the door is open for 120 seconds (or the *DOOR OPEN* time setting on page 25), a buzzer sounds. After the door closes, timer and chiller operations resume.

Fan Door Switch

A fan door switch also shuts the fans and refrigerant valve off if the metal fan grill is not properly fastened in place. A notice displays: WARNING !!! FAN DOOR IS OPEN. CALL HOBART SERVICE FOR REPAIR. If the operator and supervisor cannot shut the interior fan door, contact Hobart Service. The chiller will not operate with the fan door open.

ELECTRICAL CONNECTIONS

Line voltage supplied to the cabinet junction box must not be affected by the operation of other electrical equipment. Junction box is located at the rear of the lower section. The rear compressor cover is maintained in place with Velcro. Pull to remove it.

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH INDICATING THAT YOU ARE WORKING ON THE CIRCUIT.

The circuit should be protected with a Dual Element Time-Delay Fuse or Inverse Time Circuit Breaker.

INSTALLATION OF REMOTE ALARM (Optional)

The chiller provides a connection for a remote alarm that operates when the buzzer sounds on completion of a chill cycle. Connect to terminals on terminal block (# 5 and # 6 in the upper section of the chiller) per the wiring diagram and these restrictions:

1. Maximum remote alarm rating: 120 – 240 Volts at 2 amps resistive or 100 watt incandescent lamp.

2. Connection must be made of 600 volt insulated wire suitable for supply voltage. Do not use bell wire, lamp cord or similar type wire.

INSTALLATION CHECKOUT

The self-contained refrigeration system (when equipped) is shipped fully charged with refrigerant and requires only proper electrical connections. Remote refrigeration systems must be installed, connected and charged by others.

After proper electrical connections are made, place the switch next to the control in the On position.

OPERATION

CONTROLS (Fig. 4)

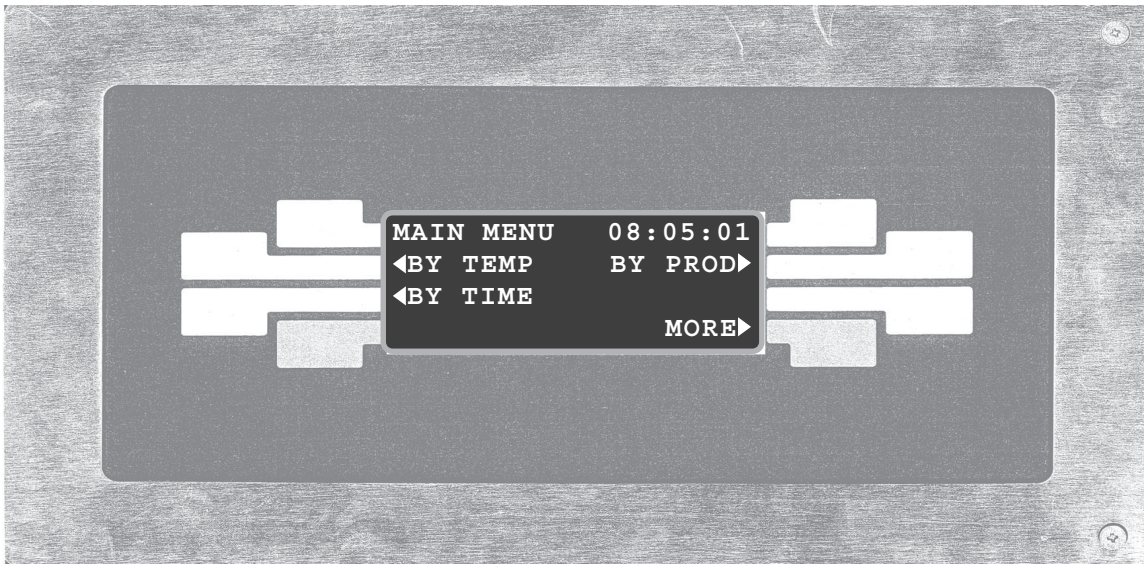
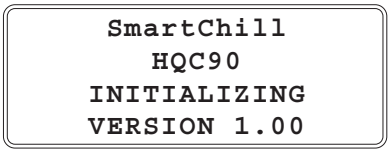


Fig. 4

Choose a selection from the menu that appears on the control's display by pressing the button graphically connected to the display prompt. Four buttons are arranged on the left and four on the right.

For example, to select By Temp, press the second button on the left.

START-UP



The screen at left is displayed when the chiller is first turned on.

OVER TEMPERATURE

If CAUTION HI AIR 150°F displays, turn the chiller off, open the door and allow the excessively high temperature and humidity to evacuate the chamber. Then restart the chiller and resume the chill cycle.

If air temperature increases to 160°F, the unit will shut down and service must be called.

PRINTER SUPPLIES

Printer supplies are available from your local Hobart sales and service office.

The standard printer uses 2¼" thermal printer paper, Hobart Part Number 434409, per roll. Minimum order quantity: 50 rolls per 1 case. Roll length is 80 feet.

The optional label printer uses peel-off label stock, Hobart Part Number 434408, per roll. Minimum order quantity: 50 rolls per 1 case. Each roll contains 225 labels.

LOADING ROLL STOCK ONTO THE PRINTERS (Fig. 5)

Plain Thermal Paper

A roll is placed on the printer shaft. The ends of the printer shaft are installed in the two roll holders. Follow the diagram on the back of the printer so the paper is correctly fed through the printer. The bottom of the roll feeds down over the feeder bar and into the printer. The printer mechanism will automatically advance the paper through the slot. If this is done properly, the correct side of the thermal paper can be activated by the thermal printer head.

Adhesive-Backed Label Stock for Optional Label Printer

A roll of label stock is placed on the printer shaft. The ends of the printer shaft are installed in the two roll holders. Follow the diagram on the back of the printer so the paper is correctly fed through the printer. The bottom of the roll feeds down over the feeder bar and into the printer. The printer mechanism will automatically advance the label paper through the slot.

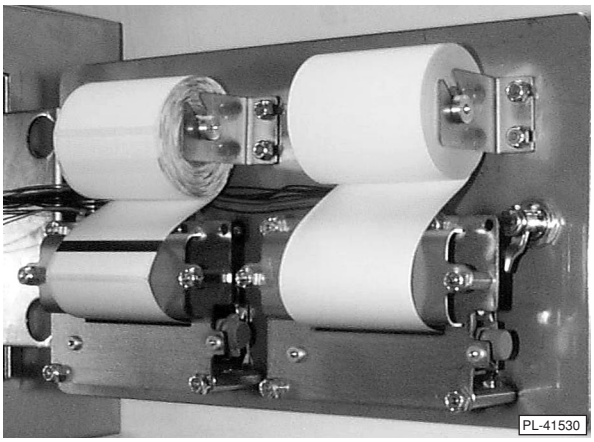


Fig. 5

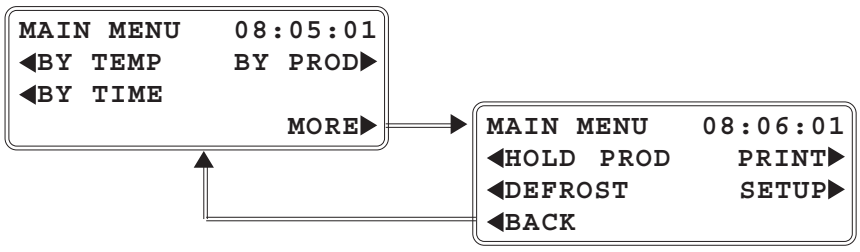
WHEN POWER IS RESTORED AFTER A POWER INTERRUPTION

```
CYCLE INTERRUPTED:
FROM  3/15/01 10:17
UNTIL  3/15/01 13:22
CONT. CHILLING    OK▶
```

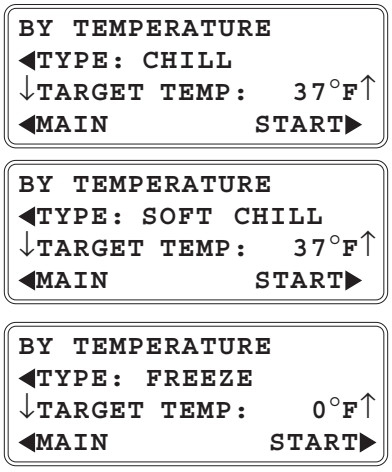
The display indicates the time and duration of any power interruption that occurs during a Chill cycle. The operator can make appropriate decisions about food stored in the chiller. Press OK to continue. A *CYCLE INTERRUPT* report is printed. Then, the system resumes at the previous activity. Return to the Main Menu for any other action.

NOTE: The display indicates *CYCLE INTERRUPTED* any time the power switch is turned off and on during any chilling, holding, or freezing mode. Always stop chilling by returning to the Main Menu before turning the power switch off.

MAIN MENU



BY TEMP — *Chill Cycle is complete when any (or all) product probe(s) reaches the Target Temp.*



From the Main Menu, select BY TEMP.

- Select the Type: CHILL, SOFT CHILL or FREEZE*.

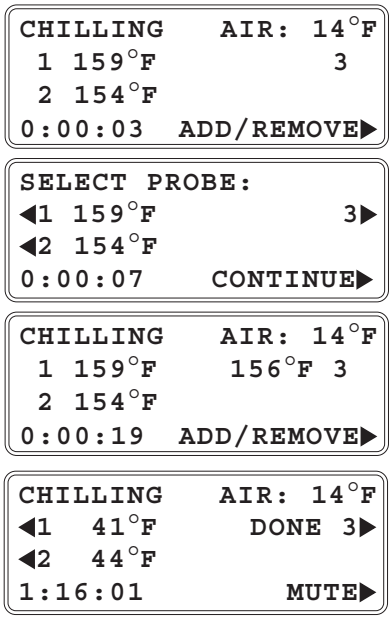
SERIES	BY TEMP	FACTORY PRESET TARGET TEMP	RANGE
HQC, HQCF	CHILL	37°F	33 TO 40°F**
HQC, HQCF	SOFT CHILL	37°F	33 TO 40°F**
HQCF	FREEZE	0°F	– 22 to 28°F

** Range can be extended to 55°F by supervisor if desired — see page 26.

- To adjust the TARGET TEMP: Press ↓ or ↑.
- Insert probes in product — smart probes sense temperature of product and are automatically selected.
- Close the door.
- To begin Chilling, select START.

  (MAIN returns to the Main Menu.)
- To add more product while chilling: Open door; insert probe in product; close door; press ADD/REMOVE.

❄



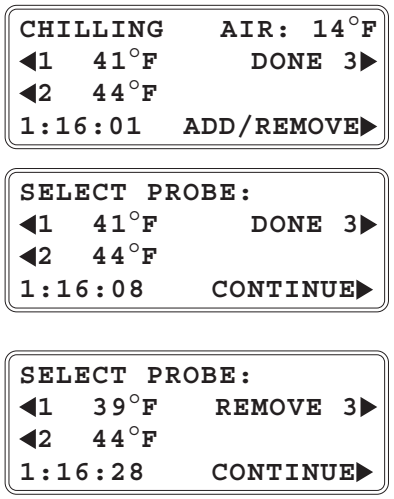
- If any probes are *OFF*, select the desired probe(s).
- Press CONTINUE.
- The chill time displays in the lower left corner — Hr: Min: Sec.

☛ A probe has reached the target temperature.

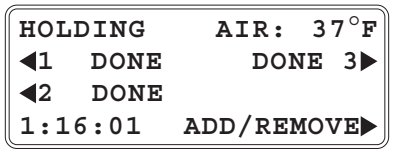
- Press MUTE or select the 'done' probe's number to silence the buzzer.

(This step is repeated as each probe reaches the target temperature; see next page.)

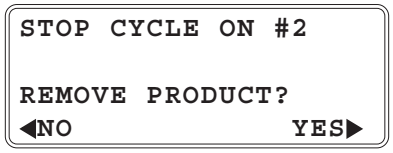
* Some chill types are not available on all models.



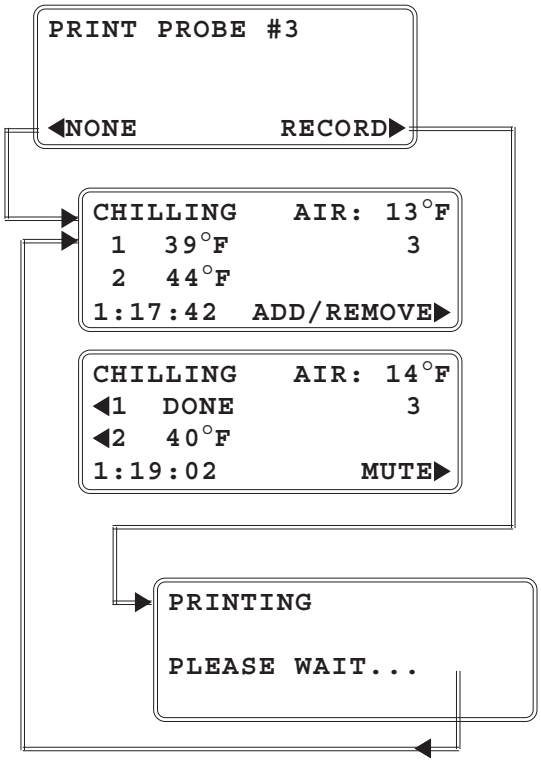
- Press ADD/REMOVE.
- If all probes are 'done,' the display goes to HOLDING.



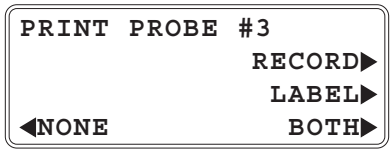
- Select the 'done' probe's number to remove it.
- Remove all product associated with the 'done' probe.
- Select any other probe's number to stop cycle and remove it. Answer YES or NO.



- Press CONTINUE.

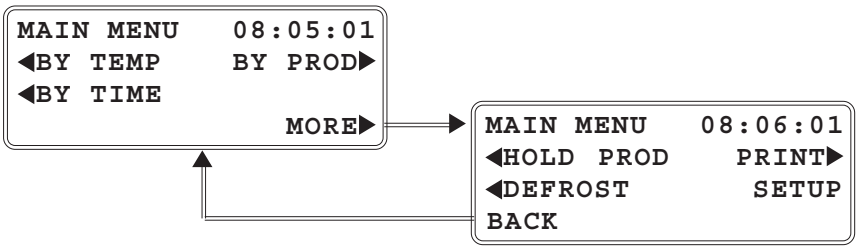


- Select NONE to continue chilling with no report.
- Or, select RECORD to print a Chill Report on Probe #3. Refer to the alternate Print Probe menu at the bottom of this page.
- Repeat from ☛ as each probe reaches the target temperature.
- When all probes are done, return to the Main Menu.

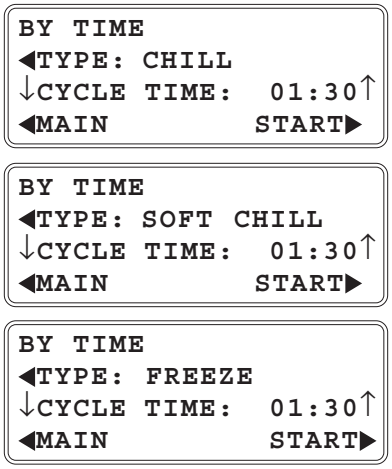


- If equipped with the optional label printer, an alternate Print Probe menu, shown at left, permits the choice of printing . . . RECORD, LABEL or BOTH . . . types of reports.

MAIN MENU



BY TIME — *Timer counts down until cycle is done.*



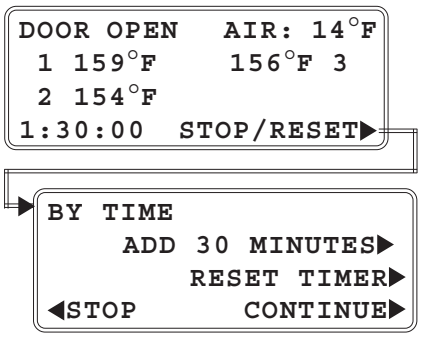
From the Main Menu, select BY TIME.

- Select the Type: CHILL, SOFT CHILL or FREEZE*.

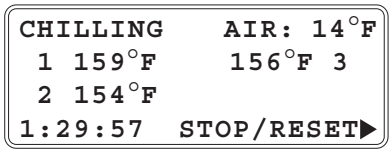
SERIES	BY TEMP	INITIAL TIME SETTING	TIME RANGE
HQC, HQCF	CHILL	01:30	00:01 TO 24:00
HQC, HQCF	SOFT CHILL	01:30	00:01 TO 24:00
HQCF	FREEZE	01:30	00:01 TO 24:00

- To adjust the CYCLE TIME: Press ↓ or ↑.
- To begin Chilling, select START.

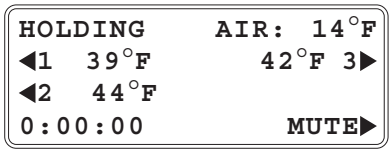
  (MAIN returns to the Main Menu.)



- Close the door.
- Probes display temperatures but have no effect on the chilling process.
- Select STOP / RESET to obtain these menu items:
  - ADD 30 MINUTES adds 30 minutes to the timer.
  - RESET TIMER re-starts at the original time setting.
  - CONTINUE resumes the cycle at the time remaining.
  - STOP allows a report to be printed and then returns to Main Menu.



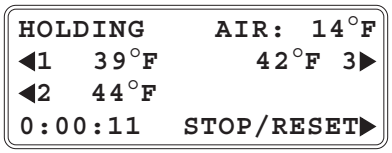
- Time Remaining displays in the lower left corner — Hr: Min: Sec.



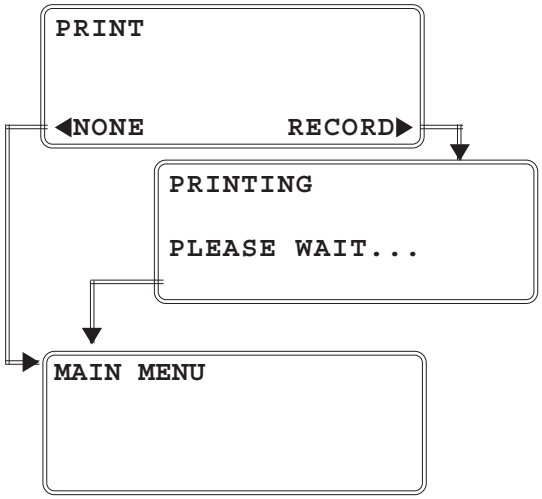
☛ The timer has counted down to 0:00:00. The chiller changes to HOLDING Mode.

- Press MUTE to silence buzzer.

* Some chill types are not available on all models.



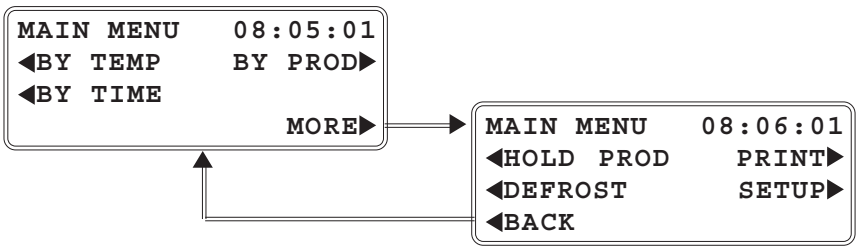
- The total time since the cycle was finished is displayed — Hr: Min: Sec.
- Remove all chilled product.
- Press STOP/ RESET.



- Select NONE to continue without printing.
- Select RECORD to print a Chill Report. If equipped with the optional label printer, refer to the alternate Print menu below. **NOTE**: Chilling BY TIME does not retain Product Probe temperature data in memory and will not print TEMP vs. TIME information.
- After printing or selecting NONE, return to Main Menu.

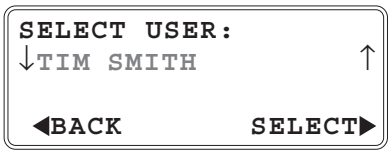
- If equipped with the optional label printer, an alternate Print menu, shown at left, permits the choice of printing . . . RECORD, LABEL or BOTH . . . types of reports.

MAIN MENU

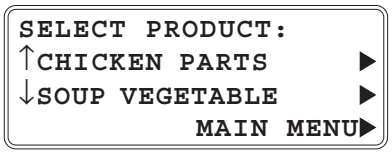


BY PROD — *Recalls programmed chill parameters for the product, either BY TEMP or BY TIME.*

From the Main Menu, select BY PROD.



- If two or more users have been entered, use the ↓ or ↑ keys until the users name is displayed. Then press SELECT.

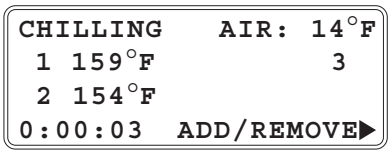


- The two products displayed are the most recently chilled products. The ↓ key will access the next enabled product from the product list, etc.
- Press the ▶ key beside the product name to recall that product's chill parameters and begin chilling.

  (MAIN returns to the Main Menu.

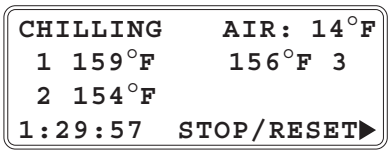
NOTE: If the product you wish to select is on the Product List on page 16 but is not available from the Select Product screen, it needs to be enabled. The Supervisor should refer to Setup Products, page 19.

If the selected product was set to chill BY TEMP:



- Follow the cycle run information on pages 10 – 11 beginning at ❄.

If the selected product was set to chill BY TIME:



- Follow the cycle run information on pages 12 – 13 beginning at ❄.

NOTE: If the chill parameters for the product you selected do not chill the way you want, the product's chill settings need to be edited. The Supervisor should refer to Setup Products, page 19.

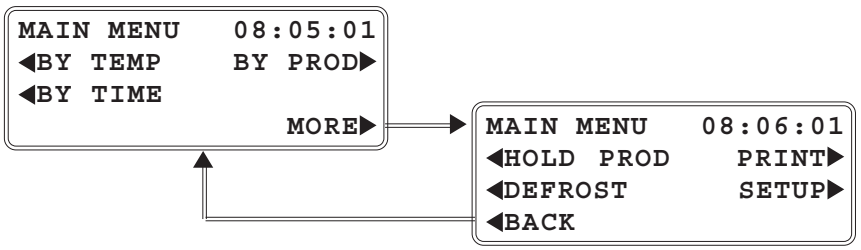
PRODUCT LIST

Any product from the PRODUCT LIST can be chilled using the BY PROD mode, once it has been enabled in Setup Products (page 19). Only CHICKEN PARTS and SOUP VEGETABLE are initially enabled as preset at the factory.

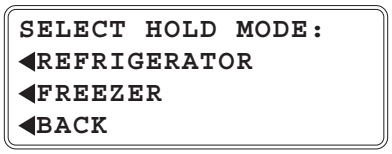
NOTE: All products are initially set in the BY TEMP – CHILL mode with a Target Temp of 37°F and Hold Temp of 37°F.

☐ ASPARAGUS	☐ LAMB	☐ SALAD POTATO
☐ BEANS	☐ LASAGNA	☐ SANDWICHES
☐ BEANS BAKED	☐ LIVER	☐ SAUCE
☐ BEEF	☐ MACARONI & CHEESE	☐ SAUCE CHEESE
☐ BEEF CREAMED	☐ MACARONI & GROUND BEEF	☐ SAUCE MEAT
☐ BEEF ROAST	☐ MEAT	☐ SAUCE TOMATO
☐ BEEF TIPS	☐ MEAT GROUND	☐ SAUSAGE
☐ BROCCOLI	☐ MEAT LOAF	☐ SOUP BEAN
☐ CABBAGE STUFFED	☐ MEAT SLICED	☐ SOUP CREAM OF CELERY
☐ CARROTS	☐ MEAT WITH SAUCE	☐ SOUP POTATO
☐ CASSEROLE	☐ OATMEAL	☐ SOUP TOMATO
☐ CEREAL COOKED	☐ PASTA	■ SOUP VEGETABLE
☐ CHICKEN & DUMPLINGS	☐ PEAS	☐ SPAGHETTI
■ CHICKEN PARTS	☐ PEPPERS STUFFED	☐ STARCH DISH
☐ CHICKEN POT PIE	☐ PORK	☐ STEAK
☐ CHOWDER CORN	☐ PORK CHOPS	☐ STEAK CHOPPED
☐ COLE SLAW	☐ POTATO MASHED	☐ STEAK SALISBURY
☐ COMBINATION DISHES	☐ POTATO SLICED	☐ STEAK SWISS
☐ CORN	☐ POTATOES	☐ STEW
☐ DRESSING CORNBREAD	☐ POTATOES SCALLOPED	☐ STEW BEEF
☐ FISH BAKED	☐ POULTRY	☐ TACO MEAT
☐ FISH BREADED	☐ POULTRY SLICED	☐ TUNA SALAD
☐ GRAVY	☐ POULTRY WITH SAUCE	☐ TURKEY BREAST
☐ GRITS	☐ PRE PLATES	☐ TURKEY ROAST
☐ HAM	☐ RICE	☐ VEAL CHOPS
☐ JELLO	☐ ROAST WHOLE	☐ VEGETABLES

HOLD PROD — *After Chilling or when selected, runs the chiller like a regular refrigerator.*

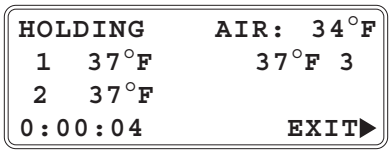


From the Main Menu, select MORE and HOLD PROD.



- Select REFRIGERATOR or FREEZER mode, if available.

  (BACK returns to the Main Menu.)



(Temperatures are indicated for air and probes.)

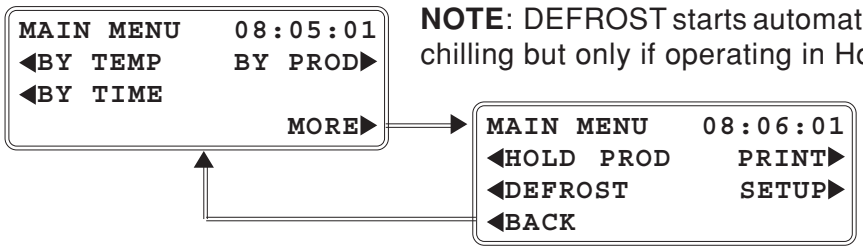
(Timer indicates the run time.)

(EXIT returns to the Main Menu; however, Hold mode continues until another selection is made.)

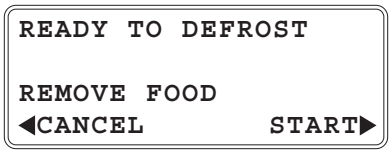
NOTE: HOLD mode does not retain temperature vs. time data in memory; printed reports are not available.

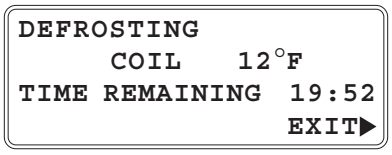
NOTE: Freezer Hold mode is only available on Model HQCF45.

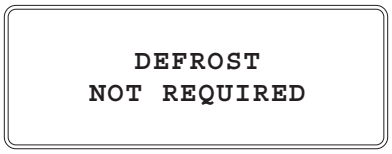
DEFROST



NOTE: DEFROST starts automatically after 6 hours of chilling but only if operating in Holding mode.







From the Main Menu, select MORE and DEFROST.

- To begin Defrosting, remove food and select START.

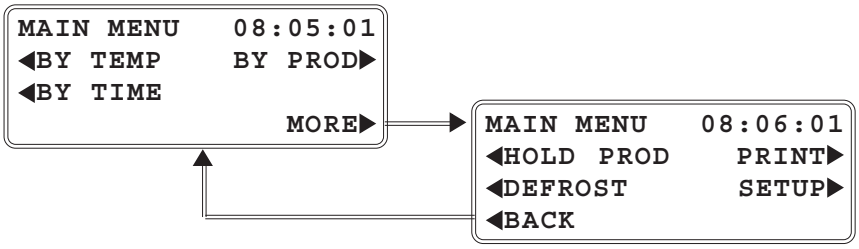
  (CANCEL returns to the Main Menu.)

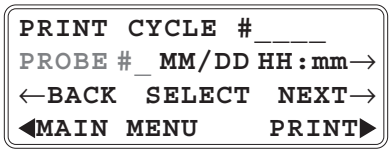
- The DEFROST cycle runs 20 minutes or until the Coil Temperature reaches 50°F.

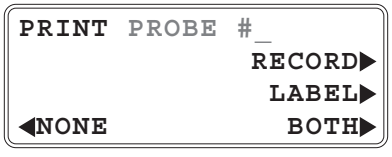
  (EXIT returns to the Main Menu.)

- If DEFROST NOT REQUIRED is displayed, return to Main Menu is automatic.

PRINT — *Once a chill cycle is done, data can be printed.*







From the Main Menu, select MORE and PRINT.

- The last chill cycle displays Probe # (if BY TEMP), MM/DD (= month/day), and HH:mm (= hour:minute). Probe # will not display if the chill cycle was BY TIME.
- Select the Cycle you want to print by pressing ← (for previous) and → (for next).
- Press PRINT.

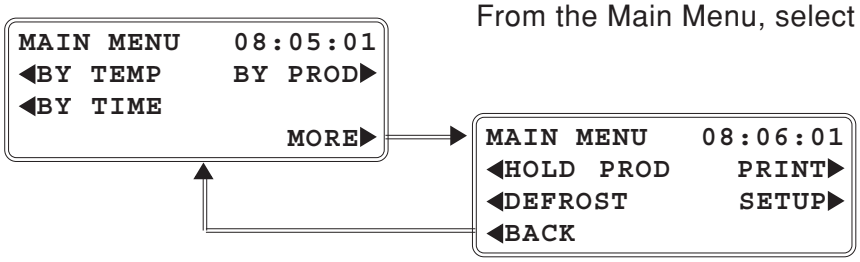
  (MAIN returns to the Main Menu.)

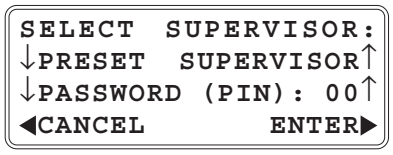
- To print, select RECORD, LABEL or BOTH. After printing, the display returns to the Main Menu.

  (NONE returns to the Main Menu.)

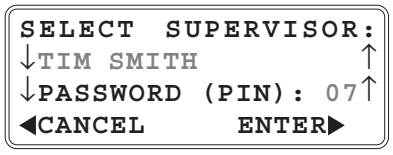
SETUP

From the Main Menu, select MORE and SETUP.



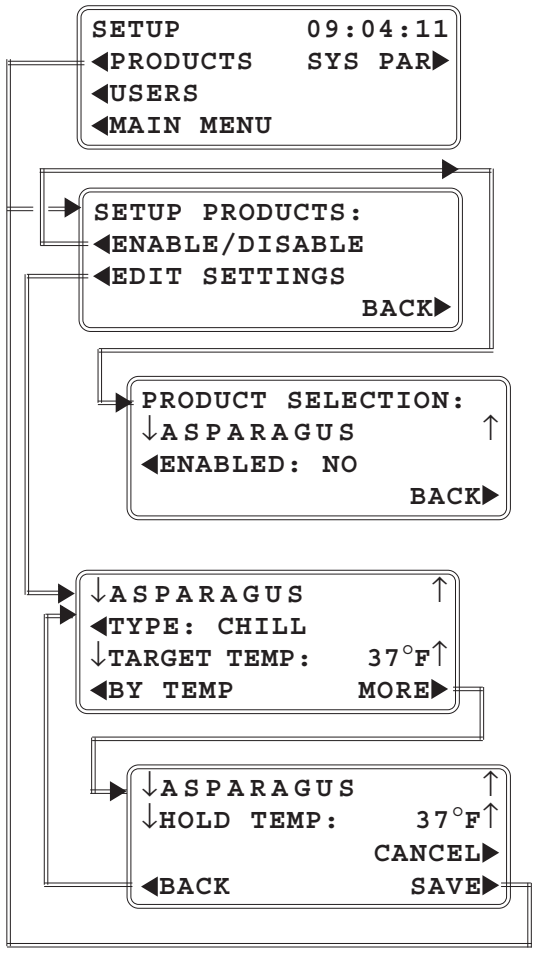


- When you first enter SETUP, only Preset Supervisor is available. On the PASSWORD (PIN) line, use the ↓ or ↑ keys until 57 is displayed as the Preset Supervisor's Personal Identification Number. Press ENTER.



- If users have already been setup, select the supervisor's name using the ↓ or ↑ keys. On the next line, use the ↓ or ↑ keys to enter their Password (or Personal Identification Number). Press ENTER.

PRODUCTS



- From Setup, select PRODUCTS.
- Select ENABLE / DISABLE to choose what products are enabled from the Product List. Only an enabled product is available to chill BY PROD. Go to ☞.
- Select EDIT SETTINGS to adjust chill parameters for any product that has already been enabled. Go to ➢.

  (BACK returns to SETUP.)

☞ After selecting ENABLE / DISABLE, use the ↓ or ↑ keys to select a product from the list. Press ◀ to change ENABLED: NO to YES to enable the product or to change YES to NO to disable it. The two most recently chilled products cannot be disabled.

- BACK saves the 'enabled' and returns to SETUP PRODUCTS.

➢ After selecting EDIT SETTINGS, use the ↓ or ↑ keys to select a product. Finish all ⊗ steps to change any setting(s).

⊗ Select the Type: CHILL, SOFT CHILL or FREEZE.

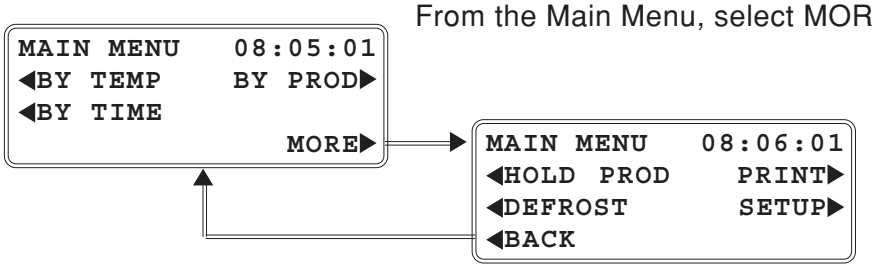
⊗ Select BY TEMP or BY TIME. Use the ↓ or ↑ keys to adjust the TARGET TEMP if BY TEMP is displayed, or to adjust the CYCLE TIME if BY TIME is displayed.

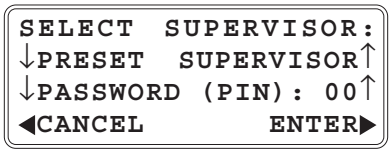
⊗ Select MORE and use the ↓ or ↑ keys to adjust the HOLD TEMP.

⊗ Press SAVE to keep the changes and return to SETUP PRODUCTS. (CANCEL returns to SETUP PRODUCTS without saving the changes. BACK returns to the previous screen).

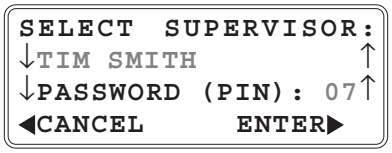
SETUP

From the Main Menu, select MORE and SETUP.



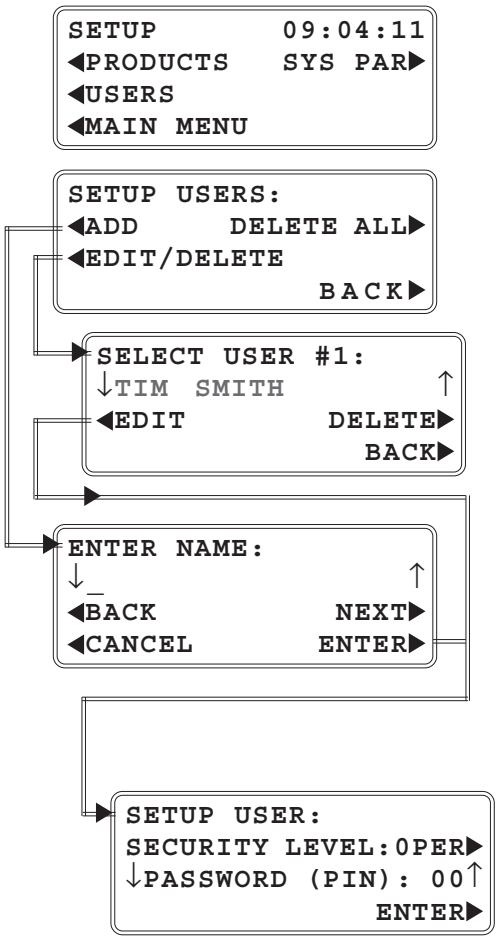


- When you first enter SETUP, only Preset Supervisor is available. On the PASSWORD (PIN) line, use the ↓ or ↑ keys until 57 is displayed as the Preset Supervisor's Personal Identification Number. Press ENTER.



- If users have already been setup, select the supervisor's name using the ↓ or ↑ keys. On the next line, use the ↓ or ↑ keys to enter their Password (or Personal Identification Number). Press ENTER.

USERS



- From Setup, select USERS.

  (MAIN MENU returns to the Main Menu.)

- Press ADD to add a user to the roster. The first user entered will automatically be given Supervisor status.

  (DELETE ALL removes all users from the roster.)

  (EDIT / DELETE allows a user's security level or PIN to be revised or the user removed from the roster.)

- To ENTER NAME: Press the ↓ or ↑ keys until the first letter of the user's name is entered; then, press NEXT to move the cursor one space to the right. Repeat this step until all letters of the user's name are entered. BACK moves the cursor one space to the left to edit.

- Press ENTER to save the user's name, as displayed.

  (CANCEL aborts the process.)

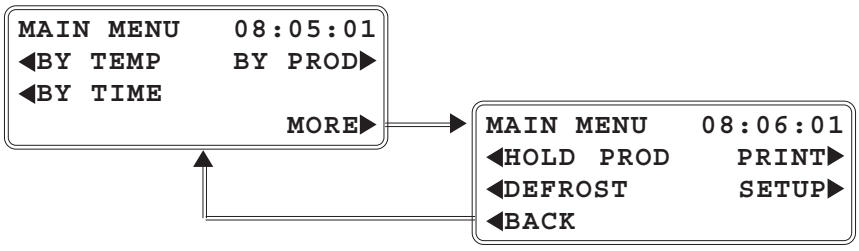
- Press ▶ to change the security level from OPER to SUPV or from SUPV to OPER. See above, operator level security is only available after the first user is entered.

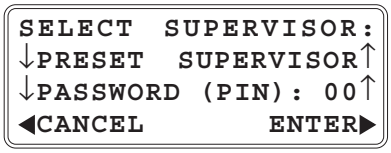
- Use the ↓ or ↑ keys to select the user's PASSWORD (PIN).

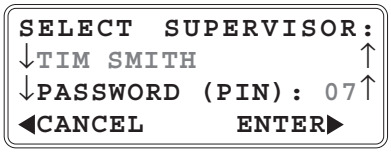
- Press ENTER to save the user's security level and PIN. Return to SETUP USERS.

SYS PAR

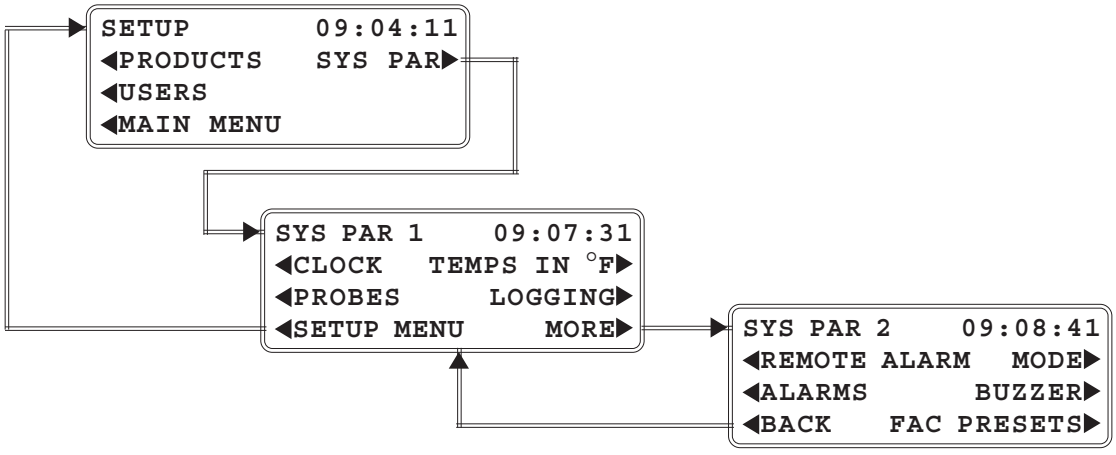
- From the Main Menu, select MORE and SETUP.





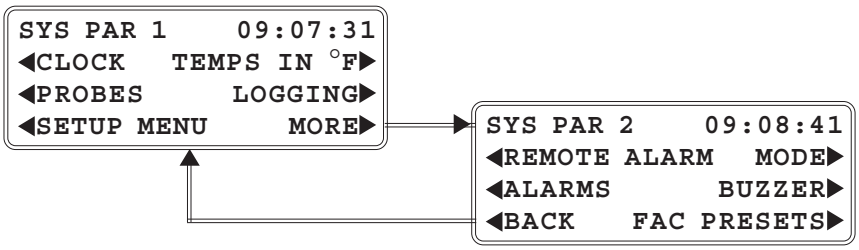


- When you first enter SETUP, only Preset Supervisor is available. On the PASSWORD (PIN) line, use the ↓ or ↑ keys until 57 is displayed as the Preset Supervisor's Personal Identification Number. Press ENTER.
- If users have already been setup, select the supervisor's name using the ↓ or ↑ keys. On the next line, use the ↓ or ↑ keys to enter their Password (or Personal Identification Number). Press ENTER.
- From Setup, select SYS PAR.
- Refer to the diagram below to access Sys Par settings (pages 22 – 29).



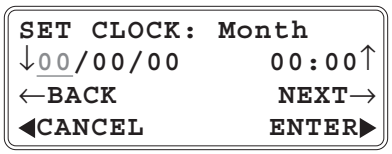
- From Sys Par 1, select MORE to access Sys Par 2.

- Access the Sys Par 1 menu as shown on page 21.

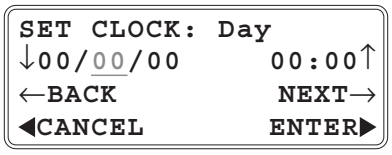


- From Sys Par 1, select CLOCK.

CLOCK

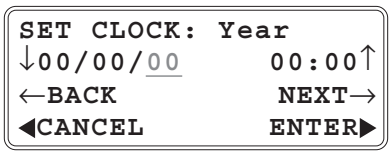


- Set the Month using the ↓ or ↑ keys.
- Select NEXT to move to the Day field.

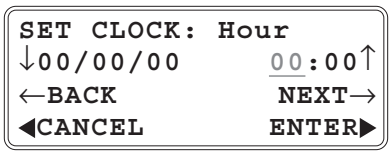


- Set the Day using the ↓ or ↑ keys.
- Select NEXT to move to the Year field.

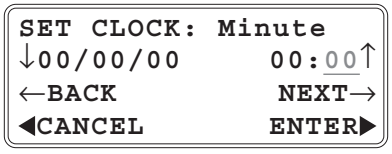
  (BACK returns to the previous screen.)



- Set the Year using the ↓ or ↑ keys.
- Select NEXT to move to the Hour field.



- Set the Hour using the ↓ or ↑ keys.
- Select NEXT to move to the Minute field.

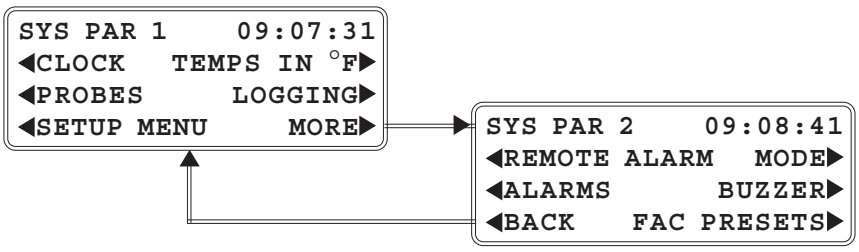


- Set the Minutes using the ↓ or ↑ keys.

  (NEXT returns to the Month field.)

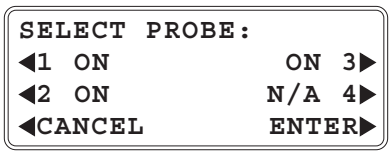
  (CANCEL returns to Main Menu without saving.)
- Press ENTER to save the clock settings.

- Access the Sys Par 1 menu as shown on page 21.



- From Sys Par 1, select PROBES.

PROBES



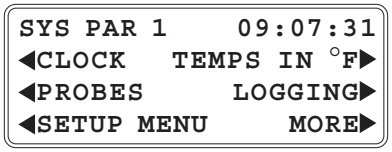
(Probe #'s 1 – 3 should be ON.)

(Probe 4 is marked N/A; Not Available.)

- Select any probes marked OFF to turn them ON.
- Select ENTER to save any changes.

  (CANCEL returns to SYS PAR 1 without saving any changes.)

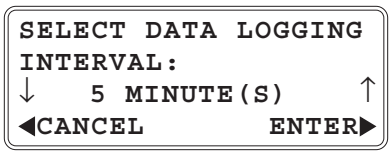
TEMPS IN °F



- From Sys PAR 1:

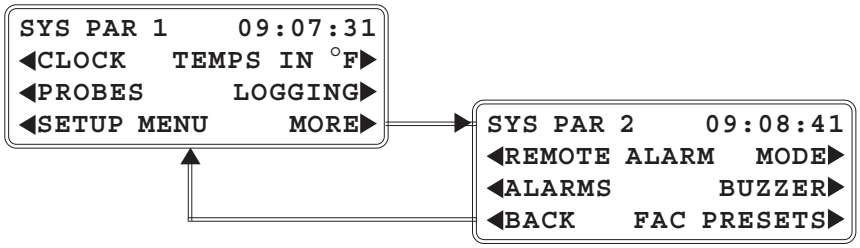
  (TEMPS IN °F indicates the control uses Fahrenheit temperatures.)
- If TEMPS IN °C is displayed, select it to change the control from Celsius to Fahrenheit temperatures.

LOGGING



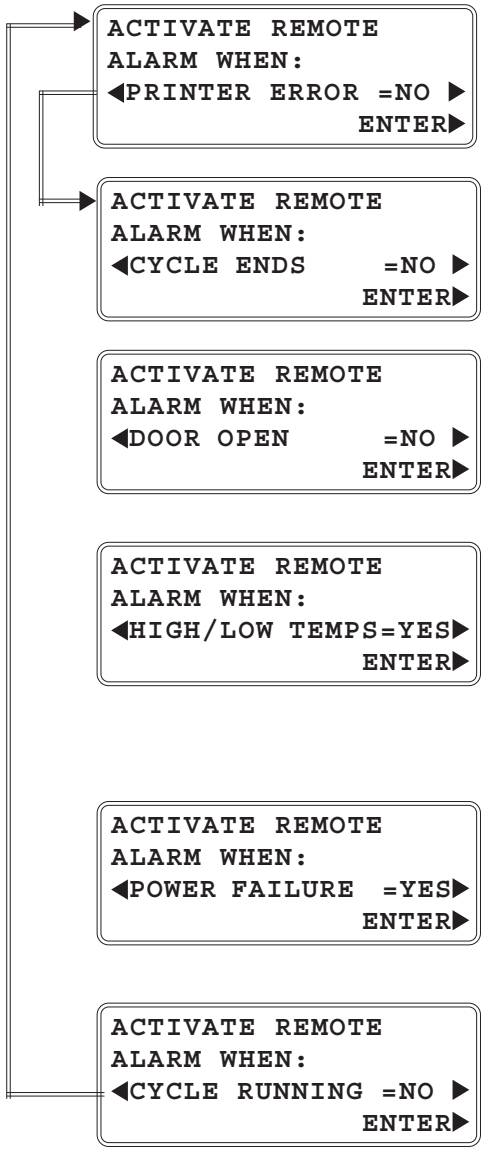
- From Sys Par 1, select LOGGING.
- Use the ↓ or ↑ keys to set the Data Logging Interval. This determines how often the data will be logged in memory. Range = 5, 10, 15, or 30 Minutes.
- ENTER accepts the change and returns to SYS PAR 1.
- CANCEL reverts back to the previously entered Data Logging Interval and returns to SYS PAR 1.

- Access the Sys Par 2 menu as shown on page 21.



- From Sys Par 2, select REMOTE ALARM.

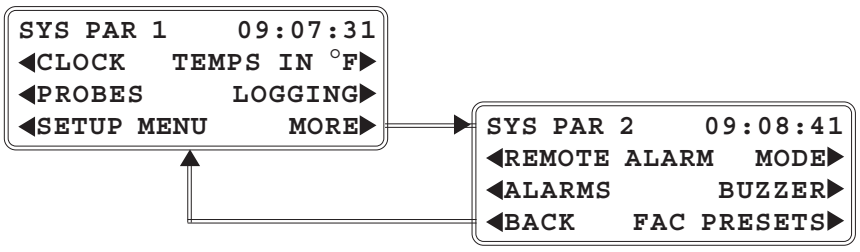
REMOTE ALARM



- Yes closes the Remote Alarm circuit in the event of a printer error. (Use ▶ to change No to Yes, etc.)
- Press ◀ to move to the next field.
- Yes closes the Remote Alarm circuit when the cycle ends. (Use ▶ to change No to Yes, etc.)
- Press ◀ to move to the next field.
- Yes closes the Remote Alarm circuit whenever the door is open for longer than the 'Door Open' alarm time setting on page 25. (Use ▶ to change No to Yes, etc.)
- Press ◀ to move to the next field.
- Yes closes the Remote Alarm circuit if temperature is sensed above the High Alarm Temperature limit or below the Low Alarm Temperature limit. (Use ▶ to change Yes to No, etc.) Refer to pages 26 and 28 to set the High Alarm and Low Alarm temperatures.
- Press ◀ to move to the next field.
- Yes closes the Remote Alarm circuit when power is restored after a power interruption. (Use ▶ to change Yes to No, etc.)
- Press ◀ to move to the next field.
- Yes closes the Remote Alarm circuit when a cycle is running. The Cycle Running option has a higher precedence and overrides all other remote alarm options, resetting them to NO. (Use ▶ to change Yes to No, etc.)

  (Pressing ◀ returns to . . . Printer Error.)
- Select ENTER to keep any changes and return to SYS PAR 2.

- Access the Sys Par 2 menu as shown on page 21.

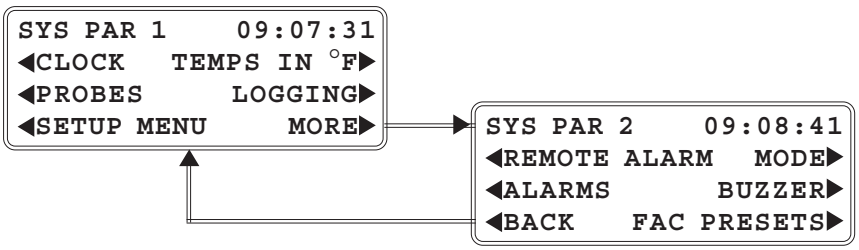


- From Sys Par 2, select ALARMS.

ALARMS

- Use the ↓ or ↑ keys to adjust the DOOR OPEN setting. Range = 0, 30, 60, 90, 120, 150, 180, 210, 240 seconds. Refer to page 24.
- Use the ↓ or ↑ keys to adjust the CLEAN COIL setting. Range = 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90 days. The CLEAN COIL setting determines how many days the compressor will run before a display appears to remind you to clean the condenser coil.
- Select ENTER to accept the displayed values and return to SYS PAR 2.

- Access the Sys Par 2 menu as shown on page 21.



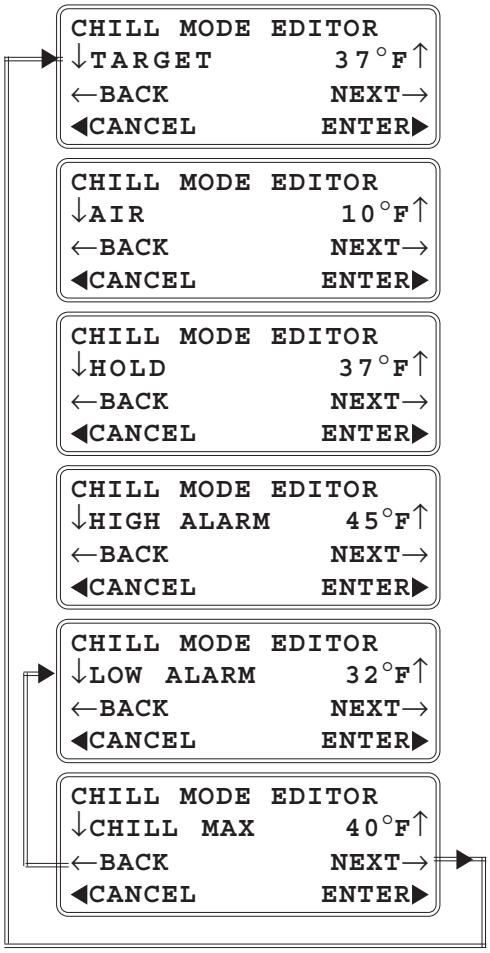
- From Sys Par 2, select MODE.

MODE

- From Mode Parameters, select CHILL.

  (BACK returns to SYS PAR 2.)

CHILL



- Set the TARGET Temp using the ↓ or ↑ keys.
  Range: [33°F to 40°F].
- Select NEXT to move to the next field.

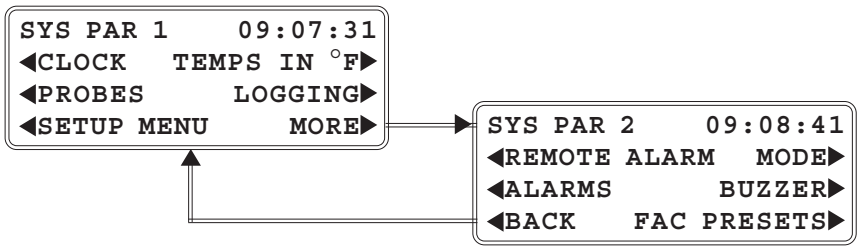
  (BACK returns to the previous field.)
- Set the AIR Temp using the ↓ or ↑ keys.
  Range: [10°F to 40°F].
- Select NEXT to move to the next field.
- Set the HOLD Temp using the ↓ or ↑ keys.
  Range: [10°F to 40°F].
- Select NEXT to move to the next field.
- Set the HIGH ALARM Temp using the ↓ or ↑ keys.
  Range: [35°F to 60°F].
- Select NEXT to move to the next field.
- Set the LOW ALARM Temp using the ↓ or ↑ keys.
  Range: [–30°F to 34°F].
- Select NEXT to move to the next field.
- Set the CHILL MAX Temp using the ↓ or ↑ keys.
  Range: [40°F to 55°F].

  (NEXT returns to the TARGET TEMP screen.)
- Select ENTER to keep any changes and return to Mode Parameters.

  (CANCEL retains the previous settings and returns to Mode Parameters.)

NOTE: To extend the Target Temp range for Chill and Soft Chill modes, first change the CHILL MAX value. Then change the Target Temp. The Target Temp range can be extended to as high as 55°F.

- Access the Sys Par 2 menu as shown on page 21.



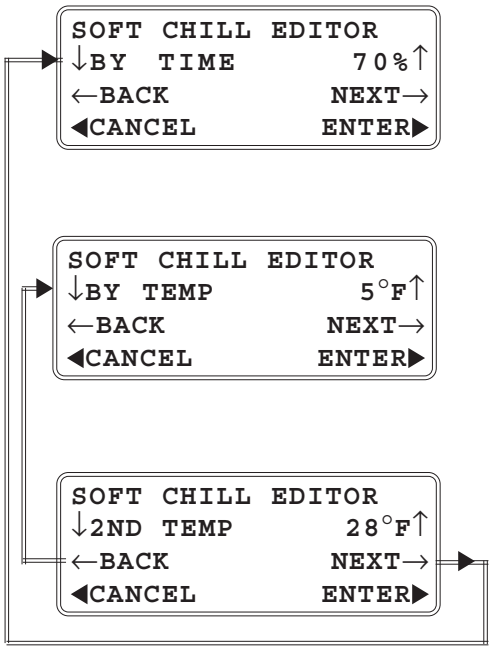
- From Sys Par 2, select MODE.

MODE

- From Mode Parameters, select SOFT CHILL.

  (BACK returns to SYS PAR 2.)

SOFT CHILL — *Assures against freezing by reducing air flow at end of cycle or by increasing air temp.*



[%] x Chill Time = Time when reduced air flow occurs.
Range: [10% to 90%].

- Set the By Time % using the ↓ or ↑ keys.
- Select NEXT to move to the next field.

[_°F] + Target Temp = Temp when reduced air flow occurs.
Range: [5 to 20 °F].

- Set the By Temp degrees using the ↓ or ↑ keys.
- Select NEXT to move to the next field.

  (BACK returns to the previous field.)

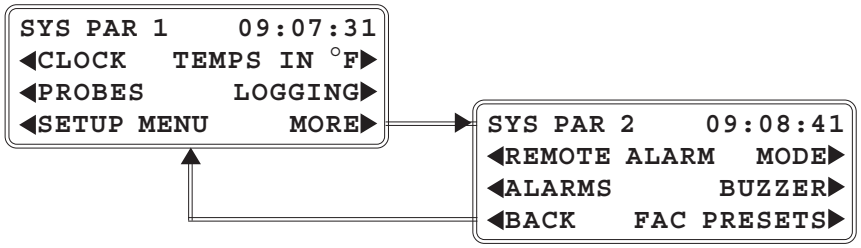
[2nd Temp] = Sets an alternate Air Temp during the Soft Chill cycle.
Range: [10°F to 40°F]. Normal Air Temp (regular chill cycle) = 10 °F.

- Set the 2nd Temp degrees using the ↓ or ↑ keys.

  (NEXT returns to the By Time field.)
- Select ENTER to keep any changes and return to Mode Parameters.

  (CANCEL retains the previous settings and returns to Mode Parameters.)

- Access the Sys Par 2 menu as shown on page 21.



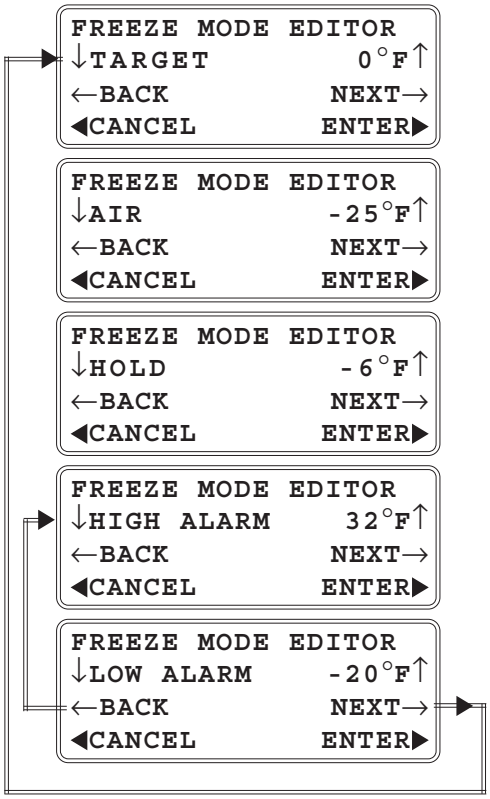
- From Sys Par 2, select MODE.

MODE

- From Mode Parameters, select FREEZE.

  (BACK returns to SYS PAR 2.)

FREEZE



- Set the TARGET Temp using the ↓ or ↑ keys.
  Range: [–22°F to 28°F].
- Select NEXT to move to the next field.
- Set the AIR Temp using the ↓ or ↑ keys.
  Range: [–32°F to 20°F].
- Select NEXT to move to the next field.

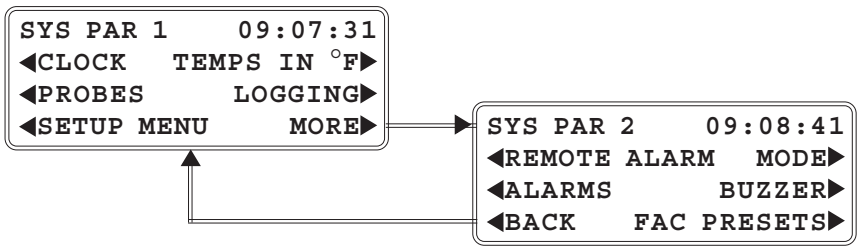
  (BACK returns to the previous field.)
- Set the HOLD Temp using the ↓ or ↑ keys.
  Range: [–32°F to 20°F].
- Select NEXT to move to the next field.
- Set the HIGH ALARM Temp using the ↓ or ↑ keys.
  Range: [1°F to 35°F].
- Select NEXT to move to the next field.
- Set the LOW ALARM Temp using the ↓ or ↑ keys.
  Range: [–30°F to 0°F].

  (NEXT returns to the TARGET TEMP field.)
- Select ENTER to accept the displayed values and return to Mode Parameters.

  (CANCEL retains the previous settings and returns to Mode Parameters.)

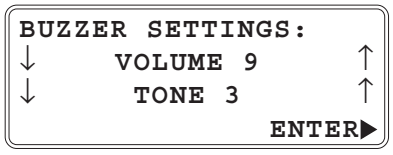
NOTE: Freeze Mode is only available on model HQCF45.

- Access the Sys Par 2 menu as shown on page 21.



- From Sys Par 2, select BUZZER.

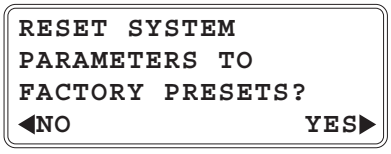
BUZZER



- Set the Volume [0 – 9] using the ↓ or ↑ keys.
- Set the Tone [1 – 8] using the ↓ or ↑ keys.
- Select ENTER to accept the displayed values and return to SYS PAR 2.

- From Sys Par 2, select FAC PRESETS.

FAC PRESETS



- Select YES to restore system parameters to the factory preset values and return to SYS PAR 2.
- Select NO to retain the present system parameters and return to SYS PAR 2.

GLOSSARY

Alarms — Sets the buzzer intervals after Door is Open or when to be notified that the Compressor needs to be Cleaned.

Buzzer — The control's buzzer can have its volume and tone adjusted in the System Parameters.

By Temp — Chill cycle that terminates when the probes reach the Target Temperature.

By Time — Chill cycle that terminates after a set amount of time has lapsed.

By Prod — Chill cycle that terminates after a particular product's specified chill parameters are met (the parameters can be set either By Temp or By Time with specific cut-offs for a particular product.

Chill — Chilling Cycle that may end with either Time or Temperature controlled events. (Also see Soft Chill or Freeze).

Clock — Allows the Date and Time to be entered so the system's clock correctly records chilling events.

Cycle # — The system assigns a consecutive number to each Chill Cycle.

Defrost — System Controlled Defrost occurs after six hours of chilling. The defrost will not begin during a chill cycle. The system waits until it is in Holding mode before starting the defrost cycle. The Defrost from the Main Menu is a manual defrost that will not run if selected and unneeded. The Defrost cycle requires about 20 minutes.

Fac Presets — Factory Presets are system parameters that are set at the factory but can be changed by the supervisor.

Freeze — This mode is only available on model HQCF45. It allows the product to be frozen down to a target temperature of 0°F (–18°C). The target temperature range available for freeze mode varies from –22°F to 28°F.

Hold Prod — After a chill mode has been done or when selected from the Main Menu, the chiller will act like a regular refrigerator (or freezer on model HQCF45).

Label — A condensed Chill Cycle Report that can be printed on adhesive-backed label stock by the optional second label printer.

Logging — The time interval at which Chill Cycle data (temperature vs. time) is logged into memory for record purposes. This time interval can be modified in Sys Par (System Parameters) by the supervisor. The range of settings available for this time interval is: 5, 10, 15 or 30 minutes.

Main Menu — The two initial menus available from the controller after the chiller is turned on.

Mode — Basic chiller operating parameters are available from Sys Par in Setup mode.

Chill mode parameters allow adjustment of the target temperature, the air temperature during chill mode, the hold mode temperature, the high alarm temperature, the low alarm temperature and the maximum chill mode target temperature.

Soft Chill mode parameters apply a modification of some of the Chill settings during the final portion of the chill cycle if Soft Chill is selected. Soft Chill provides additional protection against freezing of surfaces.

Freeze mode parameters (only available on model HQCF45) provide separate freeze settings that allow a direct hard freeze of product.

Oper — An Operator is a user who is allowed to operate the chiller and make reports of chill cycles performed.

Print — Allows a report of any Chill Cycle and probe to be printed. Chillers equipped with the optional second printer can print the condensed 'Label' type of report. All Chillers can print the 'Record' type of report.

Probe # — Each probe is numbered and its temperature vs. time is recorded for each probe # during every chill cycle and the record can be printed, either at the end of the chill cycle or subsequently.

Product List — A list of products in system memory which can have individual chill parameters specifically set for each product (assuming that the product is already enabled). Refer to Setup Products.

Record — Type of report that can be printed by all chillers. This report provides a record of time vs. temperature for a specific Probe and Chill Cycle.

Remote Alarm — The chiller can be wired to a remote alarm which will close the remote alarm circuit in the event of one or more of the following situations: Printer Error, Cycle End, Door Open, High or Low Temperatures or Power Failure. If Cycle Running is chosen, the remote alarm circuit will close when a chill cycle is running and all other remote alarm settings are overridden (reset to NO). The supervisor can determine which events the remote alarm will signal by adjusting the settings in the Sys Par (System Parameters) section.

Setup — Specific control settings that can be set by the supervisor which determine how the chiller will operate.

Soft Chill — Type of chill process that moderates the temperatures and fan speed near the end of the chill cycle to provide less risk of freezing at the product's surface.

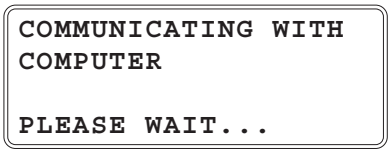
Supv — A Supervisor is a user who is allowed to identify the users and limit their access to system parameters, enable products to be selected, set specific product chill parameters and change system parameters.

Sys Par — System Parameters are control settings that determine how the chiller will operate. These settings can be adjusted by the supervisor in Setup mode.

Temps in °C — If so displayed on the Sys Par 1 screen, all temperatures will be recorded in °C (Celsius).

Temps in °F — If so displayed on the Sys Par 1 screen, all temperatures will be recorded in °F (Fahrenheit).

COMMUNICATION WITH SmartChill™



During communication with the SmartChill™ program on a PC, the screen at left displays.

MAINTENANCE

CLEANING

Wash, rinse and sanitize the product probes before and after use as you would any food-contact utensil that measures temperature.

Chiller surfaces of stainless steel should be wiped clean with a damp cloth or mild cleaning solution. DO NOT flush with running water. Avoid the use of solvents around plastic or painted areas; clean these with a damp cloth moistened with a solution of mild detergent and warm water. Clean hinge hardware with a chrome cleaner. Use a solution of warm water and baking soda to clean the gasket; then wipe with a soft cloth. Hinges may require occasional lubrication of the plastic cam. Do not use the top of the chiller for storage.

CONDENSER COIL

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING ANY PARTS OF THE UNIT.

The lower front compressor cover is attached with Velcro. Pull to remove.

Check the condenser coil weekly. Air must be able to freely circulate through the condenser. This surface must be kept free of dirt and grease for proper system operation. Carefully clean dirt and lint from the condenser coil using a vacuum cleaner, whisk broom or soft brush; do not use a wire brush. **CAUTION: Do not damage the condenser coil fins.** Replace lower front compressor cover. Reconnect electrical power supply.

EVAPORATOR COIL, CONDENSATE LOOP AND CONDENSATE REMOVAL PAN

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING ANY PARTS OF THE UNIT.

When needed, these components can be flushed with fresh water by a qualified service technician. This should be part of any routine maintenance program and can prolong the life of the equipment.

Condensate removal is provided at the lower right portion of the equipment cabinet and does not need a drain. Periodic cleaning of the condensate removal pan (Fig. 6) may be needed. To access the condensate removal pan, remove the lower front compressor cover which is attached with Velcro. Pull to remove. Clean the condensate removal pan by wiping with a clean damp cloth or sponge, using care with the condensate loop inside. Replace compressor cover. Reconnect electrical power supply.

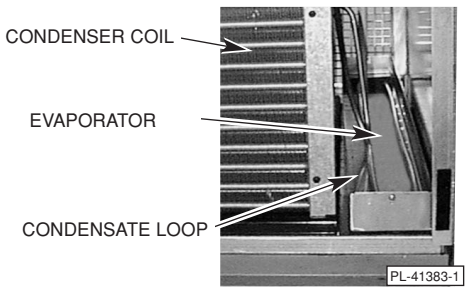


Fig. 6

ERROR MESSAGES

Contact your Hobart service technician if either of the following error messages appears: [COMPRESSOR FAILURE], [DEFROST NOT WORKING].

MAINTENANCE PROGRAM

For additional information or to discuss a maintenance program, contact your local Hobart authorized refrigeration service company.