DINEX®

Perfect•Temp

Users Guide

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DINEX®
INTERNATIONAL, INC.

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Thank you for purchasing the Dinex Perfect•Temp System.

For more than 35 years, Dinex has been the leader in contemporary, innovative products for healthcare foodservice.

Today, Dinex is the industry standard for healthcare systems, equipment and tray-top products throughout the United States and Canada.

The Dinex range of products extends from basic traytop ware and disposables to high-tech induction heating and cook-chill rethermalization systems.

We appreciate your business.

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Introduction
Perfect•Temp System Overview

The Perfect•Temp system consists of a walk-in or roll-in refrigerator, a Perfect•Temp rethermalization cart, an electronic controller, a set of serving trays with insulated covers, and an assortment of reusable and disposable dishware.

The purpose of this system is to permit cold plating of patient meals in advance so as to achieve maximum productivity from the kitchen staff. The cold plating of the meals enables the staff to prepare three meals per standard eight-hour shift, thus eliminating the evening shift that previously prepared the dinner meal. Plating the meals in advance allows the staff to prepare the next day's breakfast meal the day before, eliminating the need for the work shift to start at 5:30 or 6:00 a.m. Normal 7:00 to 3:30 work shifts are possible.

Principles of Operation

The front of the serving tray has two open compartments ("Classic or Classic II" server) into which a ceramic, reusable plastic or disposable dish is placed. The rear of the serving tray has a large cold compartment. These compartments are enclosed and separated from each other by either insulated tray covers or insulated domes, so no temperature transfer occurs. The open wing of the tray is used for silverware, condiments, and a frozen dessert or a hot beverage. The Classic tray style incorporates individual dome covers for the entrée dish and soup/cereal bowl and the Classic II uses insulated tray covers.

The ceramic, reusable plastic or disposable dishes protrude below the bottom of the serving tray. When the tray assembly is completed, an insulated cover is placed on the tray or domes on the soup and entree, and the whole assembly is then inserted into the Perfect•Temp cart. The dishes protruding from the tray automatically align with the individual heating pads.

When the Perfect•Temp cart has been filled with the desired number of trays, the cart is placed into a refrigerator to keep all the food on each tray at a safe temperature.

Approximately thirty-five minutes before the meal is to be served, the rethermalization cycle begins, activated either manually or automatically. During this cycle, the heater pads warm up and transfer their heat to the dishes. By the end of the cycle, the food in each dish will have reached 170°F. or higher.

The insulated cover (or dome) confines the transfer of heat to the entrée and soup, while the cold foods on the tray stay cold. The residual heat in the heater pads helps to maintain food temperatures during meal delivery.

Advantages of Cook-Chill

The Perfect•Temp meal delivery system is based upon cook-chill technology, which allows food to be prepared in advance of service, rapidly chilled, and held in chilled inventory (food bank). Patient meals are plated chilled and held under refrigeration. Just prior to service, foods to be served hot are rethermalized.

Advantages:

1. Rapid chilling and chilled storage techniques simplify handling to such an extent that fluctuations in daily workloads can be virtually eliminated.

2. Since all meals are prepared in advance, production can be scheduled to make the best use of equipment, space and staff. "Cook to order" is eliminated.

3. Chilled food's nutritional value, appearance and texture is better than that of food produced conventionally and held hot for long periods prior to service; and compared to frozen food, chilled food suffers only minimal storage effects.

4. Food can be purchased in bulk, resulting in lower food costs.

5. Waste decreases due to flexible stock control, recipe standardization, increased menu variety, and greater ability to respond to population fluctuations.

6. Staff working conditions are improved due to less peak mealtime tension. Daily tasks proceed at a more even pace and the staff can focus on the quality and appetizing appearance of food presented.

7. Labor costs are reduced. The success of cook-chill relies on the improved use of both skilled and unskilled labor. By concentrating food production, meal assembly, and meal delivery into self-sufficient, central units, each unit can operate at maximum efficiency. Production can occur on a five-day schedule, and meal assembly for breakfast, lunch and dinner can be done during a single, eight-hour shift. All of this means reduced labor costs.

8. Consolidation of production and assembly for several patient units into a single operation can further enhance the benefits of cook-chill.

9. Savings also can be achieved in costs associated with space.

Equipment

Equipment
The Perfect•Temp Cart

The Perfect•Temp rethermalization cart is the culmination of many years of development and testing. Its design has addressed the deficiencies of similar rethermalization systems on the market and has produced a rethermalization cart that surpasses the competition in appearance, flexibility, durability—and most importantly, performance.

Feature Highlights:

- Solid 3/8" aluminum top and bottom surfaces provide exceptional wear resistance and caster support.
- Aluminum extrusions provide maximum strength and durability while offering a clean, efficient appearance.
- Individual heater pad design eliminates sagging of the heater shelf and reduces costs and downtime when replacing heater pads.
- Nonstick heater pad surfaces improve sanitation and reduce cleaning time.
- The simple, effective selector switch to activate heater pads is not sensitive to tray motion during transit and does not require tray reversal for cold meals.
- The selector switch is available in two or three position versions so that any tray can hold a cold entrée (sandwich) but still hold hot soup and a side dish.
- Selector switch positioning makes it possible to change the heat program for any tray without removing the cart from the refrigerator.
- The "quick disconnect" electrical connection is at eye level, eliminating doubt about power connection to the cart and the need to run test sequences.
- A multi-function power controller provides maximum flexibility on rethermalization times, rethermalization duration, and hold cycles.
- Switch shields prevent tray slippage and eliminate accidental contact with selector switches.

The Perfect•Temp Cart Structure

The Perfect•Temp cart has a solid aluminum base, 3/8" thick, which has been machined to accept the aluminum corner extrusions. The top of the cart is the mirror image of the bottom, which securely locks the vertical corner extrusions into place.

The side panels of the cart incorporate a sandwich design consisting of an aluminum outer panel, a 3/8" thick, honeycomb panel, and another aluminum inner panel. All three components are bonded together, then secured in the channel raceway of the corner extrusion.

The side wall, which includes the tubular aluminum handle, is actually two walls with a hollow core. This core is used as a raceway to run the electrical wiring harness and to enclose the panel-mounted main electrical connection.

Along the side walls are track angles that support the trays when they are inserted into the Perfect•Temp cart. Each tray is slid along the tracks until it travels over the heater pads. A tray stop prevents misalignment of the tray, which would cause improper rethermalization.

Along the two open sides of the Perfect•Temp cart are large numerals that designate the number of the tray level. This serves as an aid when determining which tray levels are to be activated or deactivated by the selector switches.

At the top of the cart, centered between the tubular handles, is the electrical connection to the main controller. The main controller is supplied with a cable assembly that includes a 4- or 5-pin, quick disconnect bayonet plug. The plug connects directly to the receptacle on the cart to ensure a positive electrical connection. This connection must be made whenever the cart is to be used to rethermalize meals.

All vertical edges of the Perfect•Temp cart are capped with high-strength aluminum alloy extrusions. Each extrusion (6 total) includes an integral, replaceable PVC vinyl bumper, which runs the entire height of the cart for optimum performance.

Adjacent to the selector switch location, pivoting between the top and bottom plate, is the aluminum switch shield extrusion. When rotated to the "open" position, full access to the selector switches is possible. When "closed," the switch shield hides the selector switches from view, preventing accidental contact or tampering.

The switch shield also acts as a tray stop to prevent serving trays from sliding out of the cart during transport.

The Perfect•Temp insulated tray cover features the patented "cold cone," which promotes superior cold food temperatures, yet works to retain food temperature integrity when the tray is in transit. Since food trays will be delivered and served from the Perfect•Temp cart, hot food will actually stay hotter longer, since the heater pads are insulated and help reduce cool-down from below the dishes.

Tray presentation to patients is enhanced by the availability of insulated covers in a variety of colors with matching mugs, placemats and china dishware. The full cover in the

Classic II system permits the placing of salads, desserts, and so on, directly on the tray without cumbersome and unattractive plastic over-wraps. Patient perception is enhanced; convenience is improved for both patients and dietary staff; and clean-up is reduced. The ability to use disposable, reusable plastic, or china dishware interchangeably is helpful in fulfilling specific patient needs.

The limits of dietary staffing require staggering the delivery of Perfect•Temp carts to patient areas. The "Station Commander" controller enables the system to stagger completion times as needed, preset the frequency and duration of holding cycles, and run automatically or manually. An indicator on each controller verifies that the cart has been placed in the refrigerator, has been electrically connected, and is ready for the rethermalization cycle to begin. Once started, other indicators on the controller indicate rethermalization, holding, or ready status. A 10-second buzzer sounds at the end of every heating or hold cycle.

Perfect•Temp Cart Heater Pad Design

Each tray level on the Perfect•Temp cart is equipped with two heater pads. The small pad is primarily for the rethermalization of hot cereals and soups. The larger pad is for the entrée.

The heater pad assembly consists of an engineered resin casting, a computer-designed heating grid, a layer of insulation, thermostat and thermal fuse. The entire assembly is permanently sealed to prevent water penetration and eliminate potential residue build-up.

The heater pad fixture serves a dual purpose. First, it provides a protective shell into which the heater pad is assembled. Second, the casting is designed to be fastened mechanically in the cart, offering superior strength and durability.

The heater pad fixture is fabricated with a flanged end that mates to a box channel running the width of the cart at each tray level. All electrical wires run inside the box channel and connect to each heater pad. The heater pad casting is then secured with two screws that pass through the flange of the casting into the box channel.

The top surface of the heater pad is a layer of coated (nonstick) aluminum. A computer-designed heater grid is vulcanized to the underside of the aluminum. The design of the heater grid is specific to the heating requirements, which means that the grid pattern for each of the pads is different. The purpose of changing the grid pattern is to develop the thermal patterns necessary for each application. The needs of the soup or hot cereal heating pad are not the same as the needs for the entrée heating pad. Three different grid patterns resulted.

Beneath the top layer of aluminum and its bonded heater grid is fiberglass insulation to help direct the transfer of heat toward the dish and to shield the tray and cover below from unnecessary thermal conductivity.

The insulation is protected from moisture by the bottom of the heater pad fixture. The resulting assembly is then completely sealed with silicone sealant.

The design of the heater pad assembly offers the advantage of being field replaceable without affecting the adjoining heater pads. Separate pads also minimize heat conductivity to the Perfect•Temp cart body, reducing electrical loads and improving efficiency.

Heater Pad Control (On-Off)

Depending upon the cart model, each Perfect•Temp cart will have 16, 20 or 24 tray levels. Each tray level consists of two heater pads. Each level is controlled by one or two selector switches.

On the outside of the Perfect•Temp cart, along the vertical extrusion closest to the handles, are the selector switches. The toggle switches have three positions: all pads hot, all pads cold, or side dish pads hot. An optional two-position , two switch per server is available. This allows individual control of each heater pad.

Cart Lexan Door Option

An optional set of Lexan doors is available for the Perfect•Temp rethermalization cart. The purpose of these doors is to enclose the tray areas of the cart to reduce or eliminate the need to over-wrap exposed plated foods. The doors also restrict incidental contact from unauthorized personnel or patients, reducing pilferage of food products from the patient trays.

Each Lexan door is secured along one vertical edge by an aluminum extrusion which provides rigidity and acts as the hinge. The remaining three edges of the door are chamfered to provide a smooth appearance and eliminate sharp edges.

When closed, the doors are held in place by the switch shield extrusion that encloses the switches, as well as the edge of the door. To rotate the switch shield, lift the plunger pin which is secured to the top plate of the cart.

When fully open, the two doors are nested, one in front of the other, against the front wall of the cart opposite the handle. Once again, release the plunger pin to nest or de-nest the doors.

Perfect•Temp Main Controller

The primary purpose of the main controller is to deliver consistent, precisely controlled electrical voltage to the heater pads. The controller accepts 200 to 240 VAC input and delivers the necessary output voltage and current to the pads.

The second function of the main controller is to time there rethermalization cycle. Once the cycle has started, a red digital display begins counting down from the programmed time. When the programmed time has elapsed, a signal will sound for 10 seconds.

If the main controller is not turned off at the completion of the rethermalization cycle, a hold cycle will begin which will apply heat to the food for two minutes. At the end of the two-minute heat cycle, the alarm will once again sound for 10 seconds. This sequence will repeat indefinitely until the main controller is turned off.

The last feature, which is standard on the model Station Commander controller, is a three-event, 24-hour, automatic timer. Once set for the start times of all three meals, the automatic timer will automatically start there rethermalization cycle at each mealtime. This feature eliminates the need for each rethermalization cycle to be started manually. This feature is especially suited to applications where multiple Perfect•Temp carts are in use and are to be started sequentially according to the serving schedule.

A safety system automatically disconnects power from the Perfect•Temp cart whenever the roll-in refrigerator door is opened.

The controllers also include a standard indicator light which illuminates whenever the rethermalization cycle is in process, as well as a “ready” light that lights whenever the cart has been plugged in and is ready to be activated.

Summary of Perfect•Temp Controller

Station Commander

- Flush mounted above door of roll-in refrigerators
- Input and output cables terminated in junction boxes mounted on top of refrigerator
- UL approved

PERFECT-TEMP STATION COMMANDER CONTROLLER – MODEL PT-SC SERIES OPERATION INSTRUCTIONS

Introduction

The PT-SC controller (Station Commander) is configured into two independent modules, the **Operator Module** and the **Power Module** which are linked together by an interconnecting, low-voltage cable.

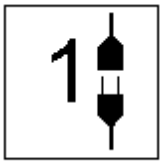
The software, or programming information, is entered and stored in the operator module which may be wall mounted or installed in a roll-in refrigerator bezel.

The electrical connection from the building electrical supply and the output to the Perfect-Temp cart(s) are done within the power module which is available as either a single cart version (Single Power Module) or a eight (8) cart version (Quad Power Module).

Programming Overview

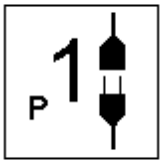
The Station Commander Operator Module is capable of being programmed to facilitate the following:

- Program for up to eight (8) Perfect-Temp carts.
- Automatic rethermalization start for breakfast, lunch and dinner.
- Ability to accept a second start time for a second cart at breakfast, lunch and dinner.
- Independent rethermalization cycle times for each meal.
- Automatic “hold” cycle at the completion of the rethermalization cycle. “Hold” cycles can be customized for each meal, by selecting “hold” cycle duration, heat, and no-heat sequencing.
- Keypad entered pass codes for entry into the programming menu or for manual starting of the rethermalization cycle.
- Programmable pass codes (2 levels).

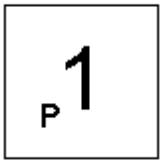


No meals programmed for this cart. This cart is unplugged.

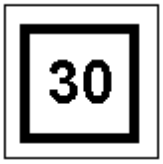
No meals programmed for this cart. Cart is plugged in.



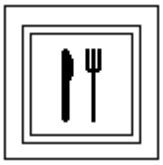
Meals are programmed for this cart. This cart is unplugged.



Meals are programmed for this cart. Cart is plugged in.



Cart is rethermalizing meal. Remaining time is shown in center of icon.



Meal is ready. Outer box area will blink.

Hold time is exceeded. Rethermalization has stopped.

Warning or informational message. This icon does not appear on the main screen, but accompanies message displayed as a result of main screen interactions.

Error. Indicates that there has been a user entry error or that the requested operation can not be performed at this time. This icon does not appear on the main screen, but accompanies message displayed as a result of main screen interactions.

Cart is being Stopped. This icon appears temporarily when a cart is manually stopped. This icon will remain for approximately one minute after disconnecting cart.

Programming Number of Carts Displayed and Speaker

1) Press the “PROGRAM” key

2) Display will prompt:
   Select:
   Program Meal Times
   Configure Unit

3) Use the “ ⇑ ⇓ “ keys to highlight “Configure Unit”.

4) Press the “YES” key to select.

5) Enter pass code “15037” on the keypad.

6) Display will prompt:
   Select:
   System Setup
   Set Meal Parameters
   Set Pass codes
   Set Time of Day
   Reset

7) Use the “ ⇑ ⇓ “ keys to highlight “System Setup”.

8) Press the “YES” key to select.

9) Display will prompt:
   System Setup
   Number of Carts: 8
   Alarm : ON/OFF
   Key Click: ON/OFF

10) Use the keypad to enter the number of carts to be displayed (1-8).

11) Use the “⇐ ⇒ “ keys to change the Alarm to ON/OFF setting.

12) Press the “SAVE” key to store the change(s).

13) Press the “CANCEL” key to exit programming.

Meal Parameters

The Station Commander operator module has the capability of programming the carts under its control for different rethermalization cycle lengths for each meal. This means that the breakfast meal rethermalization cycle could be less than the dinner and lunch cycles, should this be desirable.

In addition, an automatic hold cycle can be programmed to supply intermittent heating after the normal rethermalization cycle is complete. This allows carts to be held for a programmable period of time without significant loss of heat to hot food items.

The hold cycle is comprised of two parts, the "ready" time and "maintain" time. At the completion of the rethermalization cycle, the electrical power to the Perfect-Temp cart is switched "off". The duration of time that the power remains "off" is known as "ready" time. When the "ready" time duration expires, electrical power to the Perfect-Temp cart is switched "on". The duration of time that the power remains "on" is known as "maintain" time. At the expiration of the "maintain" time, the power again is switched "off" for another "ready" time. This sequence continues until the total elapsed time of both the "ready" and "maintain" time exceeds the programmed "hold" time.

When the duration of the programmed "hold time" is exceeded, the Station Commander automatically discontinues further activity with that particular cart and displays the "Hold Time Exceeded" symbol.

Programming Meal Parameters

1) Press the "PROGRAM" key

2) Display will prompt:
   Select:
   Program Meal Times
   Configure Unit

3) Use the " ⇑ ⇓ " keys to highlight "Configure Unit".

4) Press the "YES" key to select.

5) Enter pass code "15037" on the keypad.

6) Display will prompt:
   Select: System Setup
   Set Meal Parameters
   Set Pass codes
   Set Time of Day
   Reset

7) Use the " ⇑ ⇓ " keys to highlight "Set Meal Parameters".

8) Press the “YES” key to select.

9) Display will prompt:

	Retherm	Hold	Maintain(on)	Ready(off)
Breakfast	35	30	01	02
Lunch	37	30	01	02
Dinner	37	30	01	02

The retherm times depend on the type of dishes used. Fro example: HH Disposables average 37 minutes; HH Resuables average 38 minutes; china averages 40 minutes.

10) Use the “ ⇑ ⇓ ⇐ ⇒ “ keys to highlight the parameter you would like to change.

11) Use the keypad to enter the new parameters.

12) Repeat steps 26-27 to update additional parameters

13) Press the “SAVE” key to store the change(s).

14) Press the “CANCEL” key to exit programming

Pass Codes

Each operator module is equipped with three levels of pass codes to provide security and prevent tampering with cart rethermalization programming or initiation.

1) The Master pass code allows entry into the system. The Master pass code number is 15037.

2) The Supervisor pass code is a 4-digit pass code that permits access to mealtime programming. This code can be selected and changed at any time. See Programming Pass Codes section.

3) The User pass code is a 3-digit pass code and permits access to the manual start function. As with the Supervisor code, this code can be selected and changed at any time. See Programming Pass Codes section.

Programming Pass Codes

1) Press the “PROGRAM” key

2) Display will prompt:
Select:
Program Meal Times
Configure Unit

3) Use the " ⇑ ⇓ " keys to highlight "Configure Unit".

4) Press the "YES" key to select.

5) Enter pass code "15037" on the keypad.

6) Display will prompt:
Select: System Setup
Set Meal Parameters
Set Pass codes
Set Time of Day
Reset

7) Use the " ⇑ ⇓ " keys to highlight "Pass codes".

8) Press the "YES" key to select.

9) Display will prompt:
Change Pass codes
Supervisor: 4444
User 333
Note: These are the default factory settings.

10) Use the keypad to enter new pass codes.

11) Press the "SAVE" key to store the changes.

12) Press the "CANCEL" key to exit programming.

Programming Time of Day

Notes: 1. All programming is done in military time (0 to 2400) to reduce the chance of programming errors.
2. You must change the Station Commander manually for daylight savings time.

1) Press the "PROGRAM" key

2) Display will prompt:
Select:
Program Meal Times
Configure Unit

3) Use the " ⇑ ⇓ " keys to highlight "Configure Unit".

4) Press the "YES" key to select.

5) Enter pass code “15037” on the keypad.

6) Display will prompt:
Select: System Setup
Set Meal Parameters
Set Pass codes
Set Time of Day
Reset

7) Use the “ ⇑ ⇓ “ keys to highlight “Set Time of Day”.

8) Press the “YES” key to select.

9) Use the keypad to enter a new time.

10) Press the “SAVE” key to store the change(s).

11) Press the “CANCEL” key to exit programming

Resetting the Controller

Note: Resetting the controller will reset “Meal Parameters” to default factory settings and remove all “Meal Times”

1) Press the “PROGRAM” key

2) Display will prompt:
Select:
Program Meal Times
Configure Unit

3) Use the “ ⇑ ⇓ “ keys to highlight “Configure Unit”.

4) Press the “YES” key to select.

5) Enter pass code “15037” on the keypad.

6) Display will prompt:
Select:
System Setup
Set Meal Parameters
Set Pass codes
Set Time of Day
Reset

7) Use the " ⇑ ⇓ " keys to highlight "Reset".

8) Press the "YES" key to select.

9) Display will prompt:
Resetting the unit will
Destroy all programming information.
Do you wish to continue?

10) Press the "YES" key to complete the resetting process.

11) Press the "CANCEL" key to exit programming.

Meal Times

The meal times programmed are the actual meal times that the Perfect-Temp cart is expected to be ready for meal service.

When mealtime is programmed, the Station Commander will automatically calculated the correct rethermalization start time based upon the programmed length of there thermalization cycle.

For example, if the Perfect-Temp cart is to be ready for meal delivery at 11:00 a.m., and a rethermalization cycle of 35 minutes is programmed. Then 11:00 is programmed as the mealtime and the controller automatically starts the rethermalization cycle at 10:25 a.m. (11:00 minus the 35 minute rethermalization cycle).

A second cart may be programmed for any cart location for breakfast, lunch or dinner. Some consideration should be given to the programming of the second cart time. The rethermalization time for the cart and the amount of time needed to change out the carts needs to be considered.

For example, if the rethermalization time is 35 minutes and you need 5 minutes to get the carts changed out, Then the second cart meal time should be at least 40 minutes after the first (35 minute rethermalization cycle plus 5 minutes for changing carts).

Programming Meal Times

1) Press the "PROGRAM" key

2) Display will prompt:
Select:
Program Meal Times
Configure Unit

3) Use the " ⇑ ⇓ " keys to highlight "Program Meal Times".

4) Press the “YES” key to select.

5) Enter pass code “4444” on the keypad.

6) Display will prompt:
Select:
Program Meals
Copy Meals

7) Use the “ ⇑ ⇓ “ keys to highlight “Program Meals”.

8) Press the “YES” key to select.

9) Display will prompt:
Select Cart:
1 2 3 4 5 6 7 8

10) Use the “ ⇐ ⇒ “ keys to highlight the cart you would like to program.

11) Press the “YES” key to select.

12) Display will prompt:

	Meal	2nd Cart
Breakfast	--:--	--:--
Lunch	--:--	--:--
Dinner	--:--	--:--

13) Use the keyboard to enter meal times. The cursor will automatically jump from field to field. Use the “ ⇑ ⇓ ⇐ ⇒ “ keys for extra mobility. The “NO” key may be used to remove existing meal times.

14) Press the “SAVE” key to store the change(s).

15) Press the “CANCEL” key to exit programming or repeat steps 6-14 for the next cart.

IMPORTANT: The Perfect Temp cart must be hooked up to the drop cord 15 minutes prior to the start of the cycle. Failure to do so may cause the Station Commander to not recognize that the cart is plugged in, and may not start.

Copy Meal Times

The “Copy Meals” command can be very convenient if multiple carts have the same “Meal Times”. This command copies the meal times from one cart to another.

1) Press the “PROGRAM” key

2) Display will prompt:
   Select:
   Program Meal Times
   Configure Unit

3) Use the “ ⇑ ⇓ “ keys to highlight “Program Meal Times”.

4) Press the “YES” key to select.

5) Enter pass code “4444” on the keypad.

6) Display will prompt:
   Select:
   Program Meals
   Copy Meals

7) Use the “ ⇑ ⇓ “ keys to highlight “Copy Meals”.

8) Press the “YES” key to select.

9) Display will prompt:
   Copy Cart Programming:
   From: 1 1 2 3 4 5 6 7 8
   To: 1

10) Use the “ ⇐ ⇒ “ keys to highlight the cart from which you would like to copy “Meal Times”.

11) Use the “ ⇓ “ key to move down to the next line.

12) Display will prompt:
   Copy Cart Programming:
   From: 1
   To: 1 1 2 3 4 5 6 7 8

13) Use the “ ⇐ ⇒ “ keys to highlight the cart you would like to copy “Meal Times” to.

14) Press the “YES” key to copy meal times.

15) Display will prompt:
Cart Copied.
Press Yes to Continue.

16) Press the “YES” key to continue.

17) Repeat steps 9-16 to copy information to additional carts.

18) Press the “CANCEL” key to exit programming.

Manual Starting of Carts

Regardless of what has been programmed, any Perfect-Temp cart may be manually started to begin rethermalization at any time. The Station Commander display will confirm that a Perfect-Temp cart has been properly plugged in.

1) Press the “MANUAL” key.

2) Enter pass code “333” on the keypad.

3) Display will prompt:
Select Cart:
1 2 3 4 5 6 7 8

4) Use the “ ⇐ ⇒ “ keys to highlight the cart you would like to manually start.

5) Press the “YES” key to select.

6) Display will prompt:
Select Meal:
Breakfast
Lunch
Dinner

7) Use the “ ⇑ ⇓ “ keys to highlight the meal you would like to thermalize

8) Press the “YES” key to start the meal.

9) Repeat steps 3-5 until you have started all carts you need to start.

10) Press the “CANCEL” key to exit programming.

Stopping Meal Rethermalization

Warning!! *Meals should be stopped at the controller prior to disconnecting cart. Failure to do this will result in excess wear on cart plugs and receptacles.*

Use the " ⇐ ⇒ " keys to highlight the cart you would like to stop.

Press the "CANCEL" key.

Display will prompt:

Do you want to stop this meal?
Press YES or NO.

Press the "YES" key to stop rethermalization of meal.

Trays and Dishware

Perfect•Temp Trays and Dishware

The Perfect•Temp system uses two dish styles and two tray designs that will meet any requirement:

The Classic is a traditional, open style tray using individual dome covers. The Classic II is compartmentalized and has a full, insulated cover. This is ideal for satellite operations where trays must be stacked.

PERFECT•TEMP® Classic II

PERFECT•TEMP® Classic

For service ware with your Perfect•Temp tray system, you may choose ceramic or disposable designs. A full complement of mugs, juice cups and lids is also available.

Classic Server

Individual Dome Covers

The Perfect•Temp Classic server is a round entrée, open style, non-obstructive food service tray specifically designed to hold individual soup and entrée domes. The server consists of three compartments. Two are elevated above the server bottom and are dedicated to soup and entrée dishes. The round entrée dish accommodates the meat, starch and vegetable. The remainder of the tray has no use restrictions and includes an area for silverware, napkin and condiments. The elevated soup and entrée areas may be used with china or disposable entrée dishes and disposable soup bowls.

Construction**:**

- Injection molded, textured polysulfone with two handle grips
- Ringed area around soup compartment and elevated edge of the entrée dish to position and locate soup/entrée domes

Dimensions**:**

Length:	21-9/16”	Depth:	5/8” nominal
Width:	12-15/16”	Weight:	1.31 lbs.

Entrée Plate Size: 7-5/8” diameter

Colors: Ivory

Entrée Dome

The Perfect•Temp Classic series round dish thermalization system features a round entrée dome cover.

Construction**:**

- Polypropylene insulated dome molded in one piece with textured exterior and smooth interior
- Raised 2-1/4” diameter matching knob hot platten bonded to top recessed area

Dimensions**:**

Overall height:	3.0625”
Internal height:	2.4375”
Outside diameter:	8.25”
Internal diameter:	7.875”

Weight: 14.0 oz.

Colors: Teal, Midnight Blue, Cranberry

Soup Dome

The Perfect•Temp Classic series round dish thermalization system features a one-piece, insulated, rectangular soup dome.

Construction**:**

- Polypropylene insulated dome molded with an exterior texture that matches Classic entrée dome, while interior surfaces are smooth
- Recessed, injection molded knob hot platten bonded to the top of the soup dome

Dimensions**:**
Overall height: 2.0625”
Internal height: 1.750”

Overall width: 4.750”
Overall length: 5.9375”

Internal width: 4.4375”
Internal length: 5.625”

Weight: 5.0 oz.

Colors: Teal, Midnight Blue, Cranberry

Classic Server to Dishware Compatibility

Server Cavity	Sales Code	Description	Qty/Case
		Servers	
	PTCLS3	Ivory	20
		Dome Covers – Entrée	
	PTCLED10	Teal	20
	PTCLED12	Midnight Blue	20
	PTCLED17	Cranberry	20
		Dome Covers – Soup	
	PTCLSD10	Teal	20
	PTCLSD12	Blue	20
	PT-CLSD-8	Mauve	20
		China Entrée Dishes	
A	HHC10	Ivory	24
		High Heat Disposable Dishware	
B	HH20	Soup Bowl	1000
B	HH30	Soup Lid	1000
A	HH10	Entrée Dish	500
B & D	HH1	Side Dish – 1 compartment	2000
		Standard Disposable Dishware (Low Temp)	
	TT1	Side Dish – 1 compartment	2000
D & E	TT6	Dessert Dish	4000
D & E	TT40	Juice Cup	2500
	TT50	Juice Lid	2500
		Therma•Cite Side Dishes (Low Temp)	
B, D & E	4T1W	White Side Dish	72
B, D & E	3615/14	White Monkey Dish	24

Tray Mat

D & E	5312X122733	Whispering Floral Classic	1000
D & E	5312Z122733	Whispering Floral Classic II	1000

Insulated Mugs/Lids

E	4Mxx	Tradition Mug	48
E	TT59	Tradition Mug Lid	2000
E	1197/xxHT	Classic Mug	48
E	1194/8714	Classic Mug Lid	2000
E	4000/xxH	Heritage Mug	48
E	4000/8714	Heritage mug Lid	2000

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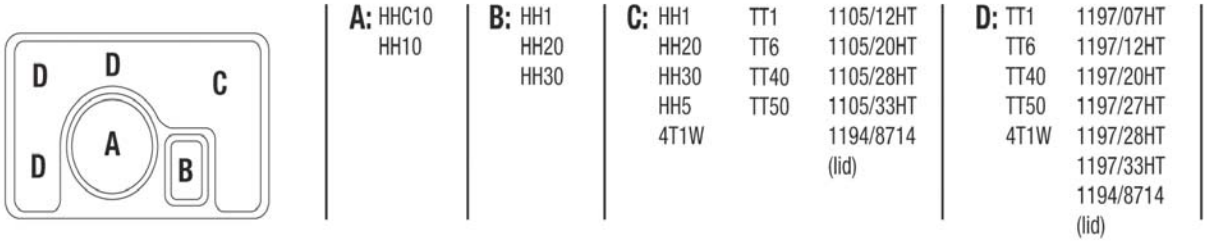

Classic Server Diagram

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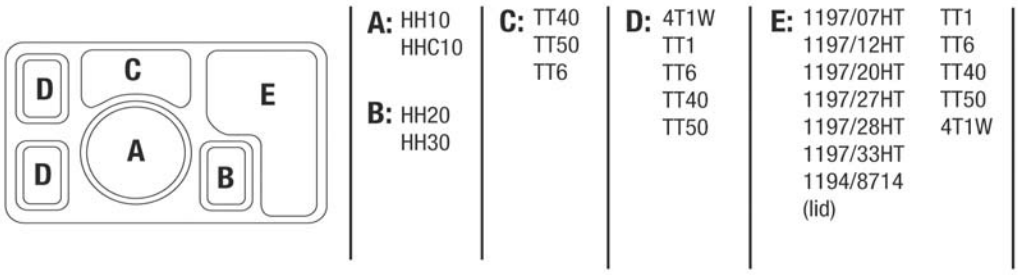


Classic II Server Diagram

Classic II Server

Server and Full Cover

Server

The Perfect•Temp Classic II server is a compartmented style, round entrée food service tray specifically designed for the Perfect•Temp rethermalization system. It incorporates individual soup, entrée and side dishware. The Classic II server consists of six compartments, two of which are cut through the server bottom and are dedicated to soup and entrée dishes. The round entrée is designed to accommodate the meat, starch and vegetable. The remainder of the tray has two cold dish compartments and includes an area for silverware, napkin and condiments. The soup and entrée areas are compatible for use with china or disposable soup bowls.

Construction**:**

- Injection molded, textured polysulfone with two handle grips
- Ringed area around soup compartment and the two cold side dish compartments to position and interlock the full insulated cover and ensure temperature integrity

Dimensions**:**

Length: 21-9/16" Depth: 11/16" nominal
1-3/16" at top edge of compartments
Width: 12-15/16" Weight: 1.31 lbs.

Entrée Plate Size: 7-5/8" diameter

Colors: Ivory

Insulated Cover

Construction**:**

- Two-piece matching, thermoformed, textured ABS with urethane foam core
- Mirrors configuration of server, providing isolated compartments for cold food, hot entrée and starch, hot soup or cereal
- Designed to stack cover on cover and also to interlock with server when tray is used in stacking configuration

Colors: Mauve
Styles: Full cover or partial cover with open "wing" area

Full Cover Dimensions**:**

Length: 21-1/2" Width: 12-13/16" Depth: 2-13/16" Weight: 2 lbs. 8 oz.

Partial Cover Dimensions**:**

Length: 18-3/4" Width: 12-13/16" Depth: 2-13/16" Weight: 2 lbs. 1 oz.

Classic II Server to Dishware Compatibility

Server Cavity	Sales Code	Description	Qty/Case
		Servers	
	PTCL2S3	Ivory	20
		Covers - Full	
	PTCL2C8D	Mauve	10
		Covers – Partial	
	PTCL2PC8D	Mauve	10
		China Entrée Dishes	
A	HHC10	Ivory	24
		High Heat Disposable Dishware	
B	HH20	Soup Bowl	1000
B	HH30	Soup Lid	1000
A	HH10	Entrée Dish	500
		Standard Disposable Dishware	
D & E	TT1	Side Dish – 1 compartment	2000
D & E	TT6	Dessert Dish	4000
D & E	TT40	Juice Cup	2500
D & E	TT50	Juice Lid	2500
		Therma•Cite Side Dishes	
D & E	4T1W	White Side Dish	72
D & E	3615/14	White Monkey Dish	24
		Insulated Mugs	
E	4Mxx	Tradition Mug	48
E	TT59	Tradition Mug Lid	2000
E	1197/xxHT	Classic Mug	48
E	1194/8714	Classic Mug Lid	2000
E	4000/xxH	Heritage Mug	48
E	4000/8714	Heritage mug Lid	2000

Menus and Plating Recommendations

Menus

When planning a menu for use on a Perfect•Temp cart, remember these basic rules to obtain the best results:

- Use "oven frying" instead of deep fat frying to eliminate the release of fats during rethermalization. If you must deep fry some foods, it is preferable to bread the product and avoid batter. Deep fry at controlled temperatures, and drain food well on wire racks to decrease fat absorption.

- It is recommended that bone in meats be removed from the menu. Sauces and/or gravies will aid the conduction of heat. A four- to five-ounce portion will yield the best results.

- Determine the number of hot items on the menu with the tray design in mind. For example, if a soup or hot cereal is not being served, you can easily add a hot side dish or a warm dessert.

- Grilled sandwiches are not recommended for rethermalization, as the sandwich bottom tends to get soggy. However, a sheet of foil placed between the sandwich and the dish often will produce satisfactory results.

- Avoid waffles, as they do not rethermalize properly. They tend to lose the nice, dry feel.

- Most foods rethermalize very well, but if you have a particular menu item that is giving you a problem, we will be happy to help you devise a way to present it satisfactorily.

Garnishes and Sauces

Garnishes

Nothing dresses up a meal more than an attractive garnish. Since the garnish is subject to rethermalization, it is preferable to use items which will not detract from the food by contributing foreign odor or by wilting due to exposure to heat. The garnish should be clean and edible, and it should enhance the food being served. Following are some suggestions:

Garnishes	Use on
Canned applesauce	Pork
Mandarin oranges	Fish, pork
Carrot curls	All meats and poultry
Lemon wedges	Fish, lamb
Orange wedges	Eggs, lamb
Grapefruit wedges	Lamb
Broccoli flowerettes	Poultry, beef, veal, fish
Cauliflower flowerettes	Poultry, beef, veal, fish
Radish slices	Poultry, beef, veal, lamb
Green pepper rings	Poultry, beef, veal
Almonds, toasted	Fish, poultry
Cherry Tomato	Fish, beef, veal
Glazed carrot sticks	Poultry, lamb, fish
Spiced apples	Pork, lamb
Prunes	Beef, veal
Melon balls	Fish, lamb
Applesauce, souffle cup	Pork, lamb
Currant jelly	Poultry, lamb
Pineapple rings	Pork, fish
Mint jelly, souffle cup	Lamb
Whole cranberries	Poultry, lamb
Baby carrots	Beef, veal, fish
Tomato slices	Beef, veal, fish
Capers	Poultry, fish
Dill seed	Fish
Chives	Fish

Sauces

Pineapple	Pork
Raisin and pineapple	Pork
Cheese	Lamb, fish
Dill	Fish
Tomato	Fish, lamb
Lemon	Fish
Sweet and sour	Pork
Mornay	Eggs, fish
Veloute	Poultry
Bechamel	Chicken, beef

Another suggestion is to dress up gravies with carrots, peppers, tomato pieces, mushrooms, celery and/or pimento to give them a colorful look instead of the flat look you get from most gravies.

Plating Recommendations

Proper plating of foods will ensure that satisfactory temperatures will be reached during the heating cycle. Plating is really a matter of using these common sense guidelines:

- The greater the area of food on the dish that comes in contact with the heater pad, the better the results.
- If you are using disposables, line personnel must recognize the difference between the standard and high heat dishes.
- For hot sandwich service, place meat directly on the dish with the bread angled over the meat. Place hamburgers, hot dogs and fish fillets flat on the dish with the bun forming an umbrella over the top.
- With the full cover, do not over-wrap cold items as they will get soggy when refrigerated.
- Place poached eggs in a side dish, then place side dish on the entrée dish.
- Soft Cooked eggs are not recommended.
- When serving creamed items with biscuits, place the biscuit on the side rather than putting the creamed product over it.
- Cut baked potatoes in half lengthwise and place on dish open side down.
- The portion size of lasagne or other dense casseroles should not exceed 10 oz. Ensure that the height of the product is less than two inches. Be generous with sauce to aid heating.
- Most frozen convenience foods will rethermalize very satisfactorily. Temper them slowly in a refrigerator, then handle as you would any chilled food product.
- Sauces and gravies are very helpful, as they act as heat conductors and provide moisture.
- Keep frozen desserts in the freezer until meal delivery time. Place them on the wing portion of the tray after rethermalization.

General Plating Guide and Procedures

Use proper portion sizes to ensure that the food is heated to the proper temperature. Follow this guide to obtain the best results:

Dish	Food	Maximum Weight
Rectangular Bowl	Cereals and Soup	6 oz.
High Heat Side Dish	Vegetables	4 oz.
Rectangular Entrée	Meat, Starch, Casserole	12 oz.
Round Entrée	Meat, Starch, Vegetable Casserole	12 oz.
Side Dish	Salad, Dessert, Rolls	4 oz.

All foods should be in a thawed condition with temperatures not over 40°F.

Soups, salads and desserts should be pre-plated and held under refrigeration. Many frozen vegetables will only be thawed and plated with no processing required. Other vegetables may require blanching.

Plating Recommendations for High Heat Disposables

High heat disposables are available for the Perfect•Temp system.

Plating is basically the same as it is for china or disposable plastic. Lunch and dinner menus require no plating procedures that differ from china or disposable plastic.

Breakfast is normally a lighter meal consisting of foods that are less dense and thus heat faster. It is suggested that eggs be put into a high heat side dish, then placed on the entrée dish. The same applies to omelets.

For pancakes and French toast, spray the entrée dish with a non-stick cooking spray to prevent crusting on the bottom. Home fries and breakfast meats perform very well. Foods rethermalized on disposables will have slightly higher temperatures at the end of the cycle.

Production Specifics

Breakfast Foods

Hot Cereals – Increase water for recipe by 15%. Hold 1/3 of water required for recipe until cooking is complete. Then add reserved water as ice or ice water. After rethermalization, cereal will be at the desired consistency, not overly thick.

French Toast – Prepare as usual. When toast is placed on grill, add extra egg mixture to top side until it won't absorb any more liquid. Cool as usual. When plating, put the side with the extra egg mixture toward the plate. This can be done with regular and modified egg mixtures. For frozen French toast, cut diagonally and "shingle" the halves.

Scrambled Eggs –

Egg Mixture: Replace any milk with a medium cream sauce using a modified starch. Cream sauce should be no more than 15% of the weight of eggs used per recipe. As a variation, use a medium cheese sauce instead of cream sauce.

Cooking Procedure—Steamer Method: Place beaten eggs only in 2" pans. Steam at 5 PSI for 7 minutes. Remove from steamer, add warm cream sauce, and mix well. Replace in steamer for another 7 minutes. Finished product should be loose but have no free moisture. Blast chill as usual.

Cooking Procedure—Skillet Method: Spray skillet surface with nonstick coating. Cook beaten eggs only until slightly thickened. Add warm cream sauce and cook until all free moisture is picked up. Product should be loose. Blast chill as usual.

Pancakes – Cook as usual. Spray plate with nonstick coating prior to plating. Frozen pancakes should be completely thawed before plating.

Bacon – Cook until crisp, drain fat.

Ham, Canadian Bacon – Place cooked meat directly on plate.

Toast – Toast bread and leave unbuttered. Cut diagonally. If placing directly on plate, wrap toast loosely in aluminum foil wrap and place shiny silver side toward plate. If placing on top of food, shingle toast halves over food.

Omelets – Thaw frozen omelets completely, then plate. Cook fresh omelets as usual, then blast chill.

Vegetables

General Instructions

Vegetable preparation is determined by the desired softness or doneness. Since frozen vegetables are already blanched, they can be used in a thawed state for a crisp final texture.

For more institutional users, the following is recommended:

Cook from thawed state, then blast chill:	**Blanch from thawed state, then blast chill:**	**Thaw only:**
Sliced carrots Cauliflower Broccoli spears Brussels sprouts Potatoes	Mixed vegetables Cut green beans Broccoli cuts Large peas Asparagus	Baby peas Corn French green beans Spinach Mashed squash Zucchini Summer squash Kale Collards Turnip Greens

Starches

Pasta and Rice – Cook as usual to desired doneness and blast chill. Before plating, toss product in ice water and top with sauce, if desired.

Biscuits (to serve with beef stew or Chicken a la King) – Cut biscuit in half and plate with cut end up. Place entrée or sauce over biscuit.

Tater Tots, French Fries, Nuggets – Thaw completely. Place on sheet pan in 350°F. oven for 5-10 minutes, then blast chill.

Condensed Soups

Follow these guidelines to facilitate proper heating of condensed soup and ensure serving an acceptable product:

Broth-type soups – Reconstitute with hot water and chill. This ensures that the fats go into solution so the product is evenly distributed when portioned.

Cream-type soups – Reconstitute, bring to a boil, then chill. Since these are basically emulsions and contain flour, starch and/or gums, the free moisture must be incorporated in order for the soup not to "break" during thermalization.

Miscellaneous

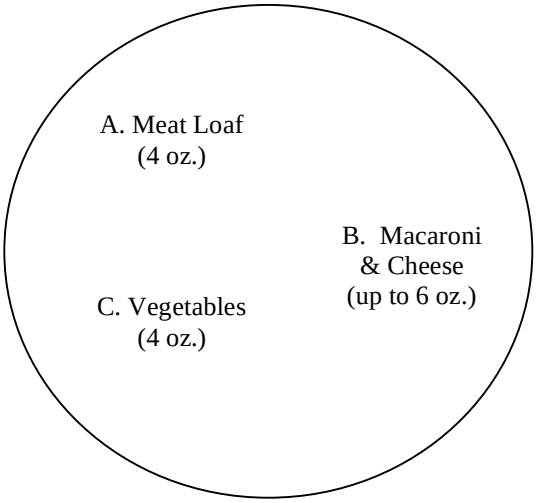
Nonstick Cooking Spray – Coating the entire plate is recommended for:

- Unbreaded fish products
- Vegetable lasagna without sauce
- Stiff macaroni and cheese
- Pancakes

Variation on Mashed Potatoes – If mashed potatoes are to be used atop an entrée dish such as shepherds pie, brown the mashed potatoes in a 350°F. oven before blast chilling.

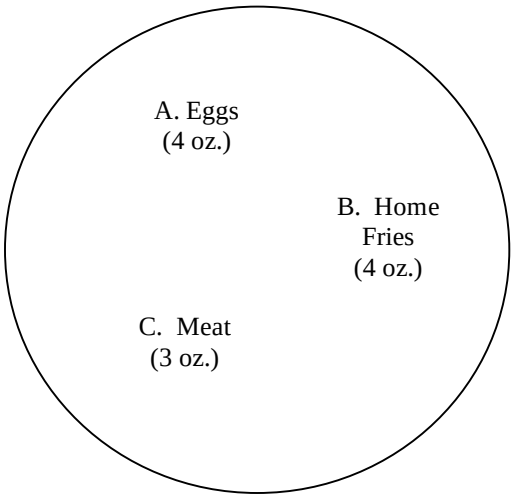
English Muffin Sandwich (eggs, ham and egg, egg and cheese) – Toast muffins as usual in split form. Place uncooked ham on plate with cooked egg on top of it. Then place half the English muffin on top of the egg. Place the other half of the English muffin on the plate with the bottom toward the plate, then put cheese on top.

Meatloaf, Macaroni & Cheese and Vegetables



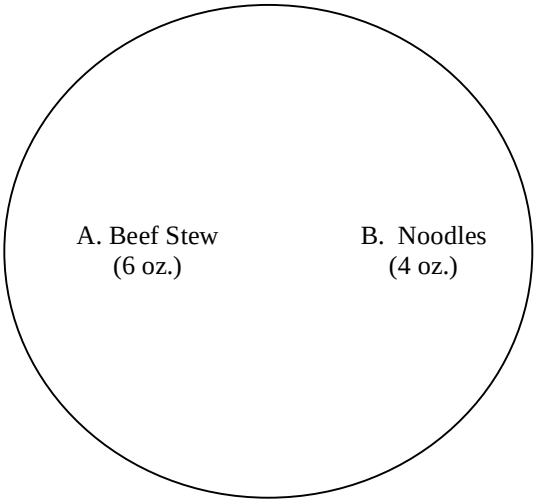
A. Place meat flat on dish, add gravy if desired.
B. Spread macaroni and cheese on dish.
C. Add vegetables on dish (Classic, Classic II).

Scrambled Eggs, Home Fries and Meat (Ham, Bacon or Sausage)



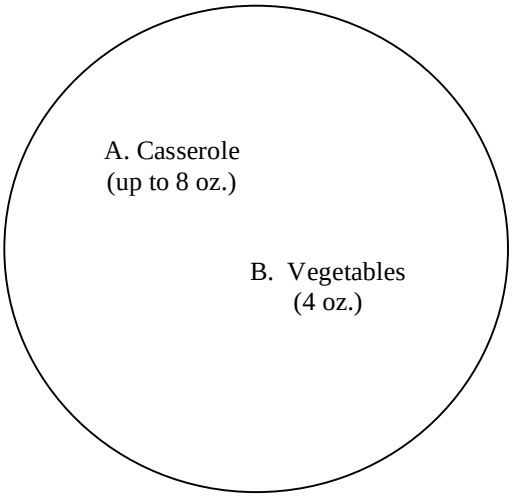
A. Spread eggs on dish.
B. Spread home fries on dish.
C. Place meat or bread on dish.

Beef Stew with Noodles Entrée Dish



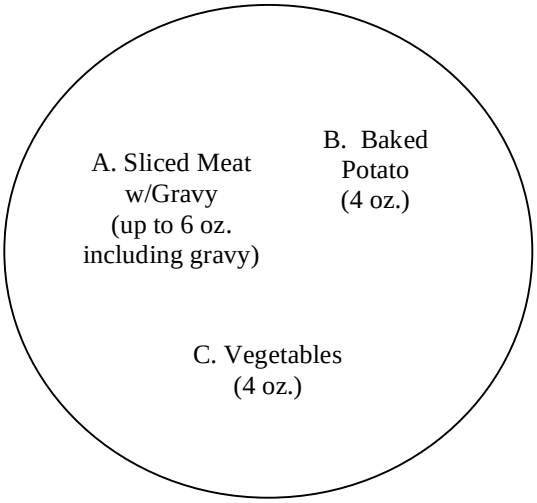
A. Portion stew on plate and spread.
B. Spread noodles alongside stew and add gravy, if desired.

Casserole and Vegetables



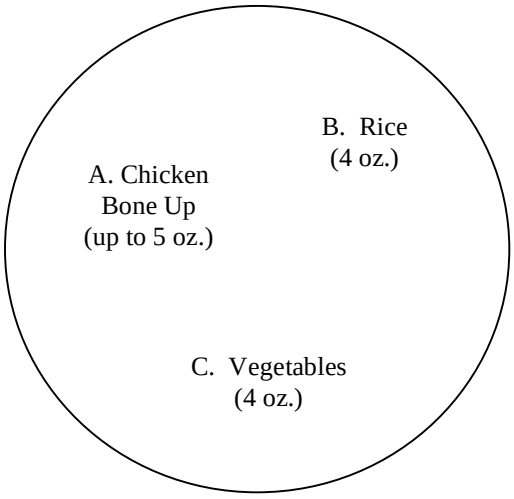
A. Spread casserole on plate.
B. Add vegetables to plate (Classic, Classic II).

Sliced Meat with Gravy, Baked Potato and Vegetables



A. Place meat directly on plate, add gravy.
B. Cut potato in half and lay on plate, skin side up.
C. Place vegetables on plate (Classic, Classic II).

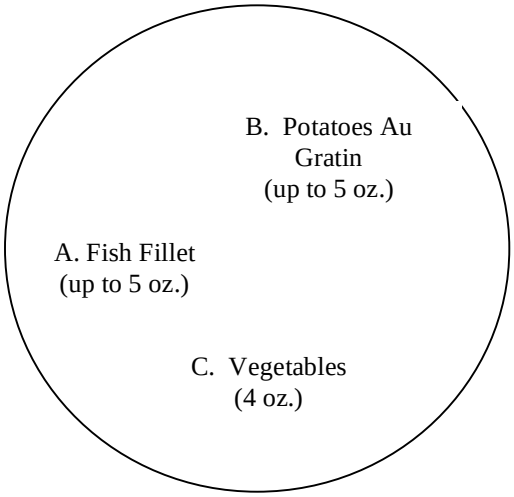
Baked Chicken, Rice and Vegetables



A. Place chicken* flat on dish, bone up.
B. Spread rice.
C. Place vegetables on dish (Classic, Classic II).

*A small amount of gravy or sauce on the chicken will result in higher temperature.

Fish Fillet, Potatoes Au Gratin and Vegetables
(Butter/Lemon Sauce)



A. Put 1 oz. butter/lemon sauce on dish. Lay uncooked, thawed fillet flat and top with 1 oz. butter/lemon sauce.
B. Spread potatoes au gratin on dish.
C. Place vegetables on dish (Classic, Classic II).

Meal Assembly and Delivery

Meal Assembly and Delivery

Tray Assembly

A one-shift trayline operation offers two options:

- Early starting, which will tray breakfast, lunch and dinner
- Late starting, which will tray lunch, dinner and next day's breakfast

Personnel designated for tray assembly during the eight-hour shift should be responsible for setting up, operating, breaking down, pre-portioning soups, cereals and special items. Salads and desserts should be done by cold production personnel.

Proper cold food temperature maintenance is a must when using a cook-chill rethermalization system.

Since there is no need to turn trays for hot or cold meals, the tray is always placed in the same position on the line. Therefore, the foods plated for rethermalization can be assembled on the same side.

Refrigeration Temperature Holding Guidelines
Always refer to your HACCP guidelines for further information.

I. Cook-Chill Products – Entrees, Soups, etc.

Long-term cook-chill products (over 5 days) = 28° - 33°F.
Short-term cook-chill products (less than 5 days) = 33° - 38°F.

To make certain proper temperatures are maintained during tray assembly, follow these guidelines:

- Place food in 2"-deep pans so that cold air can penetrate food more readily.
- Use chilled food tables for all food prepared and held under storage.
- Store loaded cold food tables in a walk-in refrigerator during long delays in tray assembly or between meals (i.e., restaurant-style menu).
- Load cold food tables before tray assembly and store them under refrigeration to ensure proper temperatures.

II. Cold Food – Desserts, Beverages, Salads, etc.

It is equally important to keep foods that are to be served cold at proper temperatures. Many factors will affect the final serving temperature, but first and foremost is the initial temperature of the food. To deliver cold foods within the proper temperature range, follow these guidelines:

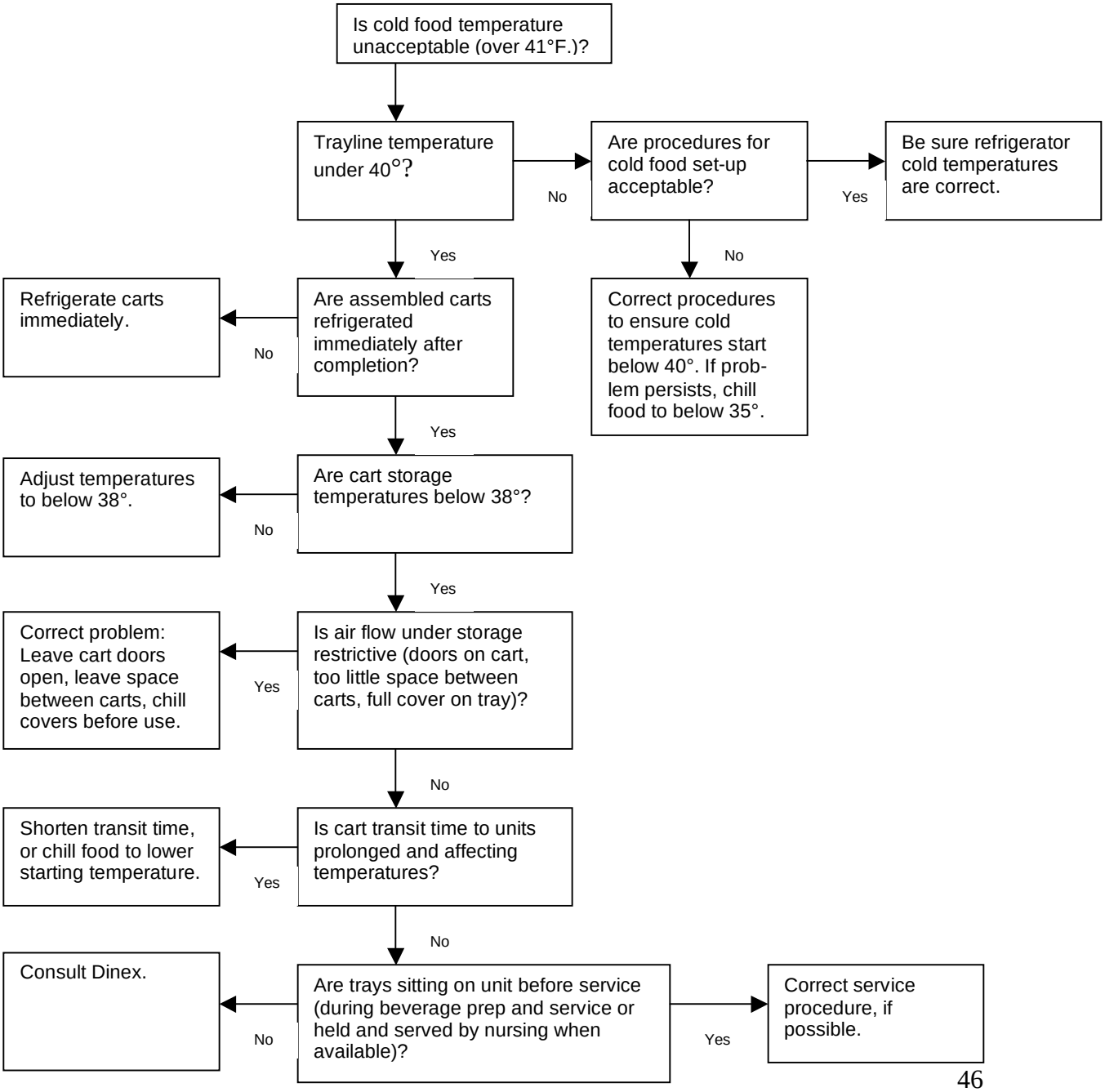
- Hold all cold foods below 40° before tray assembly. 35° is even more desirable.
- Store cold food in refrigerated units on the trayline (e.g., air screen refrigerators) that are routinely checked.
- During long delays in tray assembly, store cold food in walk-in refrigerators (28° - 33°).

- Set up cold food in air screen refrigerators before tray assembly, and store it in walk-in refrigerators.
- Once a Perfect•Temp cart is fully loaded, place it under refrigeration immediately.

If cold food temperatures are unacceptable at the time of service, start by checking the temperatures of cold food on the trayline. If these appear acceptable (under 40°F.), check the temperature of cold food under refrigeration before and after rethermalization.

Follow the procedure outlined in the following flow chart:

Cold Temperature Improvement Procedure



Specific Tray Assembly Considerations for Classic II Full Cover

Since the cover places a limitation on the maximum height of tray components, and the individual compartment heights vary, it is recommended that sample trays be prepared, and various possible configurations tried, prior to actual trayline assembly. This will save much time and frustration in handling tray covers that do not close properly.

Items to be Evaluated

- Bowl packaged cereals
- Juice cups of 4 oz. or larger
- Squat cups 4 oz. or larger
- Milk, iced tea
- Fresh fruit
- Tall desserts, such as pies with meringue or whipped cream
- Canned beverages, such as sodas or supplements (See below.)
- Any other foam or plastic beverage cups

Canned Beverages

Since canned beverages will not fit under the cover, a system needs to be established to handle these items.

Suggestions:

If you are using 24 capacity carts and all of the tray slides are not being used, you may want to designate one shelf on each side of the cart for holding miscellaneous items. A 13" x 21" tray can be placed on these slides. During trayline assembly, the individual placing canned beverages will put the item required on the trayline next to the proper tray. When the tray reaches the checker/loader, the beverage can either be marked with a marker to associate it with that tray and placed on the miscellaneous tray on the Perfect•Temp cart, or it can simply be placed on the miscellaneous tray unmarked. In the latter case, tray passers will need to check the menus carefully at service time.) As trays are passed, the tray passer will mate the proper tray with the requested canned beverage. The beverage can be placed on top of the cover until the cover is removed.

If there is enough space on the Perfect•Temp cart to allow spaces to be left between trays, canned beverages can be placed on top of the trays requiring them.

If none of the above suggestions are workable, canned beverages may need to be placed on top of each Perfect•Temp cart in a suitable container (e.g., plastic 4" – 6" pan).

Hot Beverages

Hot beverages are added to trays at time of service. However, since they cannot be added directly to each individual tray prior to cover removal, a method for handling hot beverages at the unit level needs to be established. Again, the use of an extra, miscellaneous tray on each side of the cart is suggested. A beverage tally (See Form 9 in the Implementation Manual.), prepared by the diet office before tray assembly and sent along with each cart, will greatly facilitate beverage preparation and service at the unit level (or in the kitchen for centralized rethermalization). In either case, once beverages are poured, they can be placed on the miscellaneous tray and mated with the proper patient tray at service time.

For Trays of All Styles:

When a "hot" compartment is vacant (e.g., no soup), it should be filled with an empty dish. With the Classic tray, the soup dome should also be used. This will prevent heat escaping from the vacant compartment and affecting the surrounding environment, such as the insulated cover, cold food, or refrigerator temperature.

Rethermalization

The completed tray is loaded into the cart, starting from the bottom and working up.

The loader then puts the switch in either the hot or cold position, according to the meal being served.

The assembled cart is then placed into the refrigerator, and the power cord is plugged into the cart.

Approximately thirty-five minutes before meal service, the cart is energized by the controller.

The controller can be programmed for all three meals so it will activate automatically at the same time every day, or the controller can be switched to manual operation. This will require an employee to activate the system by turning the start key.

Before the end of the heating cycle, the hot beverage is portioned to be placed on the cart when it is removed from the refrigerator. Since beverage preparation can take between 10 and 20 minutes, the pouring and covering of beverages should be timed for completion by the end of the rethermalization cycle.

Upon completion of the cycle, the buzzer sounds. At this point, the controller goes into a hold cycle until the stop button is pushed.

If you need to remove only a few trays while keeping the rest of them in the hold cycle, do not push the stop button. Simply open the door, unplug the cart, remove the desired trays, replug the cart, and close the door. The hold cycle will continue until you push the stop button. *When rethermalization occurs inside a walk-in refrigerator, do not unplug the cart to remove the needed trays.*

Upon removal of the cart, place the hot beverage on the wing of the tray. There is no need to remove the tray, as ample head space has been provided to place the mug.

With the full cover tray, hot beverages need to be placed in an alternate location until the cover is removed. Place them on an extra tray set in the middle or on top of the cart. (A 13" x 21" tray will fit the slides.)

In order to do a quick test of whether the entrée and/or soup were heated, simply touch the bottom of the tray near the entrée plate and soup bowl. They will be warm to the touch. If one or the other is cold, check the switch placement. Using the three-position switch: if the switch is up, both entrée and soup should be hot; if the switch is in the middle, both entrée and soup should be cold; if the switch is down, the soup should be hot and the entrée plate cold. With the two-position switch, each pad has its own control: UP is on, DOWN is off. If you find something other than the above, mark the shelf in question and pull the cart out of service for further evaluation. (Refer to the Perfect•Temp Equipment Operation and Maintenance Manual.)

Sanitation

Trays and Dishware

Following meal service, soiled trays and other reusable components are returned to the dishroom for warewashing. It is recommended that suspended or stacking carts be used for soiled tray collection, if possible, to keep the Perfect•Temp carts from being exposed to soiled trays and enable their return to the dietary department sooner. (This may allow trayline personnel to assemble trays onto Perfect•Temp carts instead of suspended or stacking carts.) If Perfect•Temp carts are used for soiled tray retrieval, instruct employees to take extra care to avoid spillage and place trays back into carts gently.

Warewashing must be timed to allow for adequate drying so that trays and dishware are available for the next meal. The drying racks we specify are designed to allow for adequate drying and are mobile for transportation to and from dishroom and tray assembly areas.

It is imperative to train employees in the proper stacking of trays, domes and covers. These must be stacked on their sides to drain and air dry properly.

Standard ware washing and sanitation policies and procedures must be followed. Proper dish machine temperatures and ware washing chemical titrations are critical to tray and dishware sanitation. However, all plastics are susceptible to staining. A timely response is critical. The longer the stain is allowed to set, the more difficult it will be to remove. Remove stained trays or dishware from service on a routine, daily basis.

Products such as Dip-It by Economics Laboratories, or Nuware by Dubois Chemicals are commercially available. Directions for proper formulization and use are provided by the manufacturer.

Perfect•Temp Cart Sanitation and Cleaning

The Perfect•Temp cart has been designed to withstand mild detergent cleaning and other non-steam-generating wash operations.

Regardless of the cleaning system used, all detergents and sanitizing agents must be selected carefully to assure compatibility with aluminum and silicone materials.

After completing the washing operation, allow the Perfect•Temp cart to air dry thoroughly before returning it to food service. If air drying (either passive or forced) is inappropriate, then a complete hand wiping with a clean, soft cloth is recommended.

NOTE: Discoloration of cart finish is not the basis for a warranty claim. Final liability for detergent/sanitizer selection remains entirely with the customer.

Minimum daily cleaning recommendations are to hand wipe specific spill areas and hand dry.

Minimum weekly cleaning recommendations are to hand wash completely with both detergent and sanitizer and dry thoroughly.

Cleaning of nonstick heater pad coatings should be limited to soft cloth wipedown. Abrasive cleaners or cloths will scratch the nonstick surface and compromise the effectiveness of the coating.

The use of scrapers, scratchers or sharp items not only will affect the appearance of the Perfect•Temp cart, but also may void the warranty. Use of a soft nylon brush is strongly recommended.

Perfect•Temp Roll-in Refrigerator Cleaning

1. Use proper detergent, i.e., a sanitizer or mild detergent (neutral or mildly alkaline) recommended for metal surfaces. Follow with a sanitizing rinse solution. Quats are usually the best sanitizing agents. Always follow label directions when using these products.

CAUTION: Do not use abrasive cleaning solvents. Never scour any part of your refrigerator.

2. Prior to initial use, it's advisable to wash the interior of the refrigerator. Wash with a mild detergent and water solution; rinse with clear water and sanitizing solution. Allow cabinet to air dry.

3. Clean and sanitize exterior surfaces daily. Dip cellulose sponge into cleaning solution, wipe down surfaces, and polish with a clean, soft cloth. Wipe in direction of grain.

4. Use a stainless steel cleaner/polish weekly to maintain a shining surface.

5. Interior surfaces can be cleaned weekly. Follow procedure for initial cleaning. (See No. 2 above.)

Perfect•Temp Door Option Cleaning

Proper cleaning procedures and use of chemically compatible cleaners are important to maintain door appearance.

Cleaning Procedures:

- Wash doors with mild soap or detergent and lukewarm water. (See list of compatible cleaning agents below.)
- Gently wash doors with soft cloth or sponge to loosen dirt and grime. DO NOT SCRUB.
- Rinse well with clear water.
- Dry thoroughly with a chamois or cellulose sponge to prevent water spotting.

NOTE: A squeegee can be used ONLY on the initial pass over the door surface that is "dripping wet." A soft cloth or sponge should be used to remove the remaining water streaks and spots, not a squeegee.

Cleaning Agents Found to Be Compatible Under Laboratory Conditions:

Aqueous solutions of soaps and detergents:

- Windex
- Top Job
- Joy
- Mr. Clean
- Fantastik
- Formula 409

Organic solvents:

- Aliphatic hydrocarbons
- Petroleum spirits
- Neleco-Placer
- Kerosene
- Hexcel, F.O. 554
- Turco 5042
- Naphtha (VM&P grade)

Alcohols:

- Methanol
- Ethanol (denatured)
- Isopropyl

CAUTIONS:

- Do not use abrasive or highly alkaline cleaners. Never scrape with razor blades or other sharp instruments.
- Never use Benzene, leaded gasoline, acetone or carbon tetrachloride.
- Do not clean in hot sun or at elevated temperatures.

Satelliting

Cook-chill production systems are the perfect choice for facilities that are required to send food to other facilities. The ability to satellite food, and so to consolidate food production and labor costs into one facility, may be a deciding factor in whether to venture into cook-chill production.

Bulk food prepared at a central kitchen can be held in a food bank and sent to outlying facilities as required in bulk. At each satellite facility, bulk food can then be used for patient trays and/or cafeteria service.

Another alternative is to send some bulk food to satellite facilities for cafeteria use and assemble all trays for patients at the central facility, thus consolidating tray assembly and trayline cold production labor. Dinex has one tray style that can be used to satellite assembled trays to other facilities: the Classic II with Full cover.

Suggested Methods for Use in Satellite Operations

1. Trays assembled in the central facility are loaded onto stacking carts and placed under refrigeration until delivery.
2. Trays are secured on stacking carts with adjustable belts.
3. Stacking carts are then loaded onto a refrigerated truck for delivery.
4. At the satellite unit, trays are unloaded and placed into Perfect•Temp carts. At this time, switches are set by the employee loading trays. (A system should be devised for indicating the switch position on each menu using an easily readable symbol, such as red = up, blue = middle, and orange = down.)
5. Perfect•Temp carts are now ready for placement in the central rethermalization refrigerator or roll-in refrigerators.
6. The truck driver picks up trays, covers and other dishware used from previous meals at this time and returns them to the central kitchen.

Areas of Consideration

1. *Delivery schedule and trayline assembly schedule.* These must be considered together so that assembled trays can be delivered to satellites with enough time to be unloaded, set in Perfect•Temp carts, and held under refrigeration for at least 45 minutes before rethermalization.

2. *Tray, cover and ware washing.* Decisions need to be made on the use of reusable dishware at satellite units and where these will be washed. In any case, the tray and cover washing location needs to be established. Both of the above considerations will affect the number of complements of trays, covers and dishware that will need to be purchased at the outset and the schedules for dishwashing at back unit. (In addition, dish machine capacities need to be evaluated carefully.)

3. *Transporting assembled trays and soiled trays at one time.* In the event that all trays, covers, etc. are washed at a central facility, some thought should be given to the transporting of soiled and assembled trays so that cross-contamination does not occur. You may need to contact your local health department to see if this is a concern.

Suggestions:

- Thermal covers for assembled tray carts
- Partitioning of cargo area of truck

4. *A system for handling diet changes and late trays at the satellite needs to be established.*

Suggestions:

- Gather data on the number and types of trays required by meal.
- If feasible, establish a late tray and diet change policy within the facility that delineates cut-off times for hot food and when diet changes will take effect.
- Establish just a few standard late trays, i.e., regular, modified, texture controlled.
- Send the number of trays needed at each delivery as determined by the information gathered.
- Before rethermalization, segregate all trays that will not be needed due to changes for use as back-up.
- Keep a supply of food items on hand that can be used to assemble emergency trays if needed. (Items should correspond to "standard" types of late and diet change trays.)

System Troubleshooting

Problem	Probable Causes	Suggested Remedies
Foods did not rethermalize	Cart not plugged in	Review procedures to start rethermalization
	Cart switch not properly set	Review switch setting procedure
	No power to cart	Check power source
	Refrigerator door open	Close refrigerator door
	Defective heater pad	Change heater pad
	Controller improperly programmed	Correct controller programming
	Circuit breaker on cart tripped	Reset circuit breaker
Hot food overdone	Not enough food on plate	Check portion control
	Incorrect plating	Check plating procedure
	Too high temperature prior to rethermalization	Check trayline cold food temperatures to be sure they are between 33-40°F.
Hot food hot, but cold items not cold enough	Improper refrigerator temperature	Readjust thermostat on refrigerator
	Insufficient time within refrigerator	Correct plating techniques and schedules
	Cold items not cold enough to begin with	Correct timing
Cold food cold, but hot items not not enough	Improper plating techniques	Correct plating techniques
	Poor food selection	Select foods suitable for rethermalization
	Refrigerator temperature too low	Reset refrigerator thermostat
	Low voltage	Check power source
Refrigerator temperature too high	No power to refrigerator	Check power source
	Improperly set thermostat	Reset thermostat
	Loss of freon	Recharge refrigerator
	Incorrect temperature display	Replace temperature display
	Door left open	Reinforce importance of closing door w/staff
Refrigerator temperature too low	Improperly set thermostat	Readjust thermostat
	Improper Freon charge	Check Freon charge, adjust as necessary
Digital displays not illuminated	No power to controller	Check available power source
	Power switch off	Turn key switch to “on” position
	Program selector not set to “0”	Set program selector switch to “0” position
Clock display not illuminated	No power to controller	Check available power source
	Power switch off	Turn key switch to “on” position
	Program selector not set to “0”	Set program selector switch to “0” position
	Unit defective	Return to factory for repair
Incorrect rethermalization	Unit improperly programmed	Reprogram controller
Unit begins rethermaliaztioncycle cycle at wrong time	Unit improperly programmed	Reprogram cycle start times; reprogram correct time into clock

Problem	Probable Cause(s)	Suggested Remedies
Perfect•Temp cart does not rethermalize at all although controller appears to be functioning properly	Cart not connected properly	Check that cart is properly connected
	Controller circuit breakers tripped	Reset circuit breakers on back of controller
	Relays within controller defective	Defective unit—return to factory
	Refrigerator door left open	Close door
	Refrigerator door switch broken	Fix switch
	Cart circuit breaker(s) tripped	Reset circuit breaker on cart
One side of Perfect• Temp cart does not rethermalize	Controller circuit breaker tripped	Reset circuit breakers on rear of controller
	All switches on that side of cart have been set to “cold”	Reset correctly
	Broker wire/connection within cart at main power connection	Inspect internal wire harness on cart
	Defective relay contacts within controller	Return unit to factory for repair
	Input power changed from 200-240VAC to 120VAC	Check power source
	One cart circuit breaker tripped	Reset circuit breaker on cart
One specific shelf does not rethermalize	Defective selector switch	Replace switch
	Broken wire/connection within cart	Inspect/repair wire/harness connection
One specific heater pad does not rethermalize	Defective heater pad	Replace heater pad
	Bad electrical connection between heater pad and wire harness	Check/correct wire connection
	Improperly replaced heater pad has damaged feed wires	Inspect wires for signs of crimping or damaged insulation

For further equipment troubleshooting guidelines, please refer to the Perfect•Temp Equipment Operation and Maintenance Manual.

Product Warranties and Service

Consolidated Product Warranty—Disposable Products

WARRANTY SCOPE

These Warranties cover the following Dinex International, Inc. ("Dinex") products (the "Warranted Products"):

- Dinex® Brand Disposable Lids
- Dinex® Generic Disposable Lis
- High Heat Disposable Dishware
- Perfect Temp® Disposable Dishware
    - Disposable Dishware
    - Tray Covers and Placemats
    - Napkins
    - Menu Forms
    - Dietary Meal Kits

Warranted Products also includes any other lids, disposable dishware, diet meal kits and decorator paper products identified on the Dinex website (www.dinex.com) from time to time.

Standard Warranty. Except as indicated otherwise below, Dinex warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and shall substantially conform to Dinex's written specifications for the Warranted Product (as such specifications exist on the date Warranted Products are shipped) (the "Product Specifications"). In addition, Dinex warrants that Dinex® brand Disposable Lids will fit Dinex® brand traytop ware products. This warranty is available only to end-users (the "Customers") that purchase the Warranted Products from Dinex or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex after its good faith investigation.

Supplies, Accessories and Related Products. Dinex's warranty for its supplies, accessories or related products to the Warranted Products is covered by a separate warranty statement, which is available at www.dinex.com.

DURATION

Dinex provides a six (6) month warranty for all Warranted Products. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

REMEDIES

If Customer promptly notifies Dinex of Customer's warranty claim, Dinex will replace the defective or non-conforming Warranted Products. The foregoing remedy is Customer's exclusive remedy and Dinex's sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex remains willing to replace the defective or non-confirming Warranted Products within a commercially reasonable time after being notified of Customer's warranty claim.

LIMITATIONS

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESSED, IMPLIED OR STATUTORY. EXCEPT AS PROVIDED HEREIN, NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, WILL APPLY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT AND NO PRIOR STATEMENTS BY ANY OF DINEX'S

REPRESENTATIVES SHALL MODIFY OR EXPAND THESE WARRANTIES. DINEX AND DINEX'S AFFILIATES AND REPRESENTATIVES SHALL HAVE NO LIABILITY TO CUSTOMER FOR (1) ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE WARRANTED PRODUCTS, REGARDLESS OF WHETHER SUCH LIABILITY SHALL BE CLAIMED IN CONTRACT, TORT, EQUITY OR OTHERWISE, (2) ANY ASSISTANCE NOT REQUIRED UNDER DINEX'S QUOTATION OR (3) ANYTHING OCCURRING AFTER THE WARRANTY PERIOD ENDS.

DINEX'S STANDARD WARRANTIES ONLY APPLY TO END-USER-PURCHASERS LOCATED IN THE UNITED STATES AND CANADA. ANY SALE TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES AND CANADA WILL BE SUBJECT TO COMMERCIAL TERMS SPECIFICALLY AGREED BY DINEX AND THE END-USER-PURCHASER. DINEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES OR CANADA UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING.

These warranties do not apply to, and Dinex shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex; (iv) the use of the Warranted Product in combination with any hardware, equipment, supplies, accessories or any other materials or services, not furnished by Dinex or recommended in writing by Dinex; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex did not design or license it, or in violation of Dinex's recommendations or instructions on use; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product.

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications; and (ii) with respect to Dinex® brand Disposable Lids, such product's use with any products other than Dinex® brand traytop ware products.

Consolidated Product Warranty—Trays and Traytop Ware Products

WARRANTY SCOPE

These Warranties cover the following Dinex International, Inc. ("Dinex") products (the "Warranted Products"):

- Insulated Traytop Ware
- Insulated Domes, Bases and Underliners
- Induction Base Products
- Convection Rethermalization Ware
    - Beverage Servers
    - Washracks
    - Trays
    - Insulated Tray Systems
    - Reusable Dishware and Tumbler Products
    - High Heat Reusable Plastic Dishware

Warranted Products also includes any other trays or traytop ware products identified on Dinex's website (www.dinex.com) from time to time.

Standard Warranty. Except as indicated otherwise below, Dinex warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and shall substantially conform to Dinex's written specifications for the Warranted Product (as such specifications exist on the date Warranted Products are shipped) (the "Product Specifications"). In addition, Dinex warrants that Dinex® brand traytop ware products will fit Dinex® brand Disposable Lids. This warranty is available only to end-users (the "Customers") that purchase the Warranted Products from Dinex or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex after its good faith investigation.

Supplies, Accessories and Related Products. Dinex's warranty for its supplies, accessories or related products to the Warranted Products is covered by a separate warranty statement, which is available at www.dinex.com.

DURATION

Dinex provides a one (1) year warranty for the Warranted Products. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

REMEDIES

If Customer promptly notifies Dinex of Customer's warranty claim, Dinex will replace the defective or non-conforming Warranted Products. The foregoing remedy is Customer's exclusive remedy and Dinex's sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex remains willing to replace the defective or non-confirming Warranted Products within a commercially reasonable time after being notified of Customer's warranty claim.

LIMITATIONS

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESSED, IMPLIED OR STATUTORY. EXCEPT AS PROVIDED HEREIN, NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND QUIET ENJOYMENT, WILL APPLY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT AND NO PRIOR STATEMENTS BY ANY OF DINEX'S REPRESENTATIVES SHALL MODIFY OR EXPAND THESE WARRANTIES. DINEX AND DINEX'S AFFILIATES AND REPRESENTATIVES SHALL HAVE NO LIABILITY TO CUSTOMER FOR (1) ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE WARRANTED PRODUCTS, REGARDLESS OF WHETHER SUCH LIABILITY SHALL BE CLAIMED IN CONTRACT, TORT, EQUITY OR OTHERWISE, (2) ANY

ASSISTANCE NOT REQUIRED UNDER DINEX'S QUOTATION OR (3) ANYTHING OCCURRING AFTER THE WARRANTY PERIOD ENDS.

DINEX'S STANDARD WARRANTIES ONLY APPLY TO END-USER-PURCHASERS LOCATED IN THE UNITED STATES AND CANADA. ANY SALE TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES AND CANADA WILL BE SUBJECT TO COMMERCIAL TERMS SPECIFICALLY AGREED BY DINEX AND THE END-USER-PURCHASER. DINEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES OR CANADA UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING.

These warranties do not apply to, and Dinex shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex; (iv) the use of the Warranted Product in combination with any equipment, supplies, accessories or any other materials or services, not furnished by Dinex or recommended in writing by Dinex; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex did not design or license it, or in violation of Dinex's recommendations or instructions on use; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product.

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications; and (ii) with respect to traytop ware products, such product's use with lid products other than Dinex® brand Disposable Lids.

Consolidated Product Warranty—Equipment Systems

WARRANTY SCOPE

These Warranties cover the following Dinex International, Inc. ("Dinex") equipment products (the "Warranted Products"):

- Rethermalization Equipment Products
- Induction Heating System Products (excluding Induction Bases covered under separate warranty)
- Milk Cooler Products
- Ice Cream Freezer Products
- Air Curtain Refrigerator Products
- Blast Chiller Products
- Hot/Cold Food Counter Products
- Plate, Rack and Tray Dispenser Products
- Plate Heater Products
- Base Heater Products
- Drying and Storage Rack Products
- Starter Station Products
- Conveyer Products
- Tray and Other Cart Products

Warranted Products also includes any other Equipment System Products identified on the Dinex website (www.dinex.com) from time to time.

Standard Warranty. Except as indicated otherwise below, Dinex warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and service and will perform substantially in accordance with Dinex's written technical specifications for the Warranted Products (as such specifications exist on the date the Warranted Products are shipped) (the "Product Specifications"). This warranty covers both parts and labor and is available only to end-users (the "Customers") that purchase the Warranted Products from Dinex or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex after its good faith investigation.

Dinex Software. In addition to the other warranties set forth herein, with respect to Dinex licensed software, Dinex warrants that it has the right to license or sublicense the software to Customer for the purposes and subject to the terms and conditions set forth in Dinex standard terms and conditions.

Supplies and Accessories. Dinex warranty for its supplies and accessories that are shipped with Warranted Products is covered by a separate warranty statement, which is available at www.dinex.com.

Services. Dinex warrants that any service it provides to Customer will be performed by trained individuals in a workmanlike manner.

DURATION

Dinex provides a one year warranty for the Warranted Products. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

REMEDIES

If Customer promptly notifies Dinex of Customer's warranty claim and makes the Warranted Product available for service, Dinex will, at its option, either repair or replace (with new or exchange replacement parts) the non-conforming Warranted

Product or parts of the Warranted Product. With respect to Dinex licensed software, Dinex will, at its option, either correct the non-conformity or replace the applicable licensed software. Warranty service will be performed without charge from 8:00 a.m. to 5:00 p.m. EST, Monday-Friday, excluding Dinex holidays, and outside those hours at Dinex then prevailing service rates and subject to the availability of

personnel. With respect to the Dinex warranty for the services it provides to Customer, Customer's exclusive remedy shall be the re-performance of the services by Dinex. The foregoing remedies are Customer's exclusive remedies and Dinex sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex remains willing to repair or replace defective Warranted Products within a commercially reasonable time after being notified of Customer's warranty claim.

LIMITATIONS

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESSED, IMPLIED OR STATUTORY. EXCEPT AS PROVIDED HEREIN, NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, SYSTEM INTEGRATION AND DATA ACCURACY, WILL APPLY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT AND NO PRIOR STATEMENTS BY ANY OF DINEX'S REPRESENTATIVES SHALL MODIFY OR EXPAND THESE WARRANTIES. DINEX AND DINEX'S AFFILIATES AND REPRESENTATIVES SHALL HAVE NO LIABILITY TO CUSTOMER FOR (1) ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE WARRANTED PRODUCTS, REGARDLESS OF WHETHER SUCH LIABILITY SHALL BE CLAIMED IN CONTRACT, TORT, EQUITY OR OTHERWISE, (2) ANY ASSISTANCE NOT REQUIRED UNDER DINEX'S QUOTATION OR (3) ANYTHING OCCURRING AFTER THE WARRANTY PERIOD ENDS.

DINEX'S STANDARD WARRANTIES ONLY APPLY TO END-USER-PURCHASERS LOCATED IN THE UNITED STATES AND CANADA. ANY SALE TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES AND CANADA WILL BE SUBJECT TO COMMERCIAL TERMS SPECIFICALLY AGREED BY DINEX AND THE END-USER-PURCHASER. DINEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES OR CANADA UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING.

These warranties do not apply to, and Dinex shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex; (iv) the use of the Warranted Product in combination with any software, tools, hardware, equipment, supplies, accessories or any other materials or services, not furnished by Dinex or recommended in writing by Dinex; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex did not design or license it, or inconsistent with Dinex's recommendations or instructions on use including, but not limited to, power supply requirements identified in Product Specifications; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product.

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications, inadequate back-up or virus protection or any cause external to the Warranted Products or beyond Dinex's reasonable control, including, but not limited to, power failure and failure to keep Customer's site clean and free of dust, sand and other particles or debris; (ii) the payment or reimbursement of any facility costs arising from repair or replacement of the Warranted Products; (iii)

any adjustment, such as alignment, calibration, or other normal preventative maintenance required of Customer; and (iv) expendable supply items.

24/7 Service

Dinex offers 24/7 service via the Parts & Service Customer Service Hotline. This features 24-hour-a-day, 7-day-a-week phone monitoring and provides instant response to all service calls from our customers.

During normal business hours (8 a.m. to 5 p.m. Eastern Time), service calls to Dinex will be handled by Service Department staff. After hours on weekdays, and continuing through Saturday and Sunday, customer calls will be answered by the call center for Dinex Parts & Service. The state-of-the-art call center will document the details of each customer's request and queue the service call for immediate follow-up during normal business hours.

Customers who require immediate action will be patched directly through to the Service Manager or other staff representative for emergency response.

Customers calling after normal business hours will be asked to provide as much of the following information as possible:

- Name and address of facility
- Contact person's name and phone number at the facility
- Description and/or model number of the equipment
- Serial number of the equipment
- Detailed description of the problem or identification of part needed

Call the Dinex Service Hotline at 888-673-4639 anytime regarding any problems experienced with your Dinex products.