



Cabinet Blast Chillers and Freezers

operating instructions

GB

Operating instructions



Positioning/Unpacking

1 Positioning

Important:

Ensure a minimum clearance of 6" (150mm) above cabinets and adequate ventilation for efficient operation. Where possible, ensure that cabinet is not adjacent to a heat source.

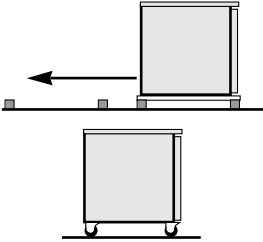
Unpacking

The cabinet is mounted on a pallet and shrinkwrapped. Keys and wiring diagram are supplied in a clear pocket stuck to the front of the cabinet. Carefully remove the shrink-wrapping. Make sure that any sharp instrument used does not damage the cabinet.

Remove protective plastic film from cabinet body. For clean removal, carefully run a sharp blade along joint and edges. Remove quality stickers and plastic cover strip from the back door trims.

Removal of Pallet

Remove fittings from inside the cabinet. Carefully lay the cabinet on its back on suitable wooden blocks. Remove the pallet by unscrewing the securing bolts. Fit the castors or legs as appropriate into the vacated bolt holes. In the case of cabinets fitted with castors fit the lockable castors to the front. This should not be attempted without assistance.



2 Legs/Castors

These are boxed with the shelves and shelf supports inside the cabinet.

Castors

These models are normally fitted with 75mm swivel/braked castors. The front castors are lockable.

NB. Ensure that castors are securely tightened on installation.

Check level of the cabinet with a spirit level.

Cabinet levels may be adjusted by inserting spacer washers between the appropriate castor and the base of the cabinet.



Legs

Some cabinets are fitted with legs (adjustable from 100mm to 150mm in height).

Achieve cabinet levels by adjusting the foot at the end of the leg.



3 Unit Compartment Cover

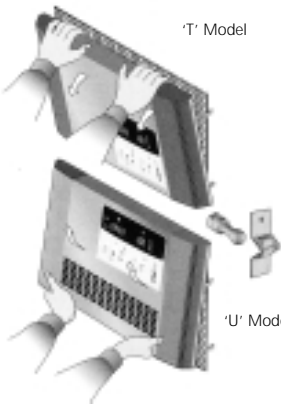
Removal

The unit compartment cover is slotted into position. To remove pull forward to release from spring clips.

Drawings show 'T' model, 'U' model and Counter model with spring clip details and positions each side.

'T' Model

'U' Model



4 Doors

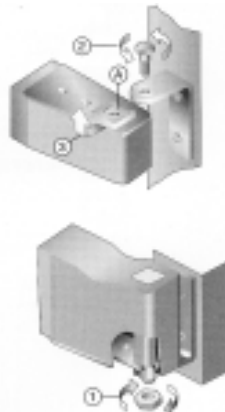
Removal

Narrow site access may require door removal. On 'T' models it is necessary to remove the unit compartment cover to gain access to the top door hinge.

a) Remove unit compartment cover as stated
b) Remove the locknut from the bottom hinge bracket See 1. left.

c) Remove the threaded pin from the top hinge bracket (See 2. left)

d) The door is then free to be pulled clear of the top hinge bracket along the line of the groove in the hinge pin bush A and then lifted clear of the bottom hinge bracket. (See 3 left).



5 Counters



Removal

Unscrew the two screws holding the bottom hinge bracket. A

This will allow the door to be pulled away from the hinge pin in the top hinge bracket B.

6 Shelving



Removable shelf support uprights

To remove unscrew retaining studs at top and bottom of upright, this will allow the vertical support to be lifted away.

The retaining studs are held in position in the vertical support by means of a collar and groove arrangement shown at A.

A sharp tug on the stud will disengage it from the collar so that it and the end plug B can be removed if necessary i.e. for cleaning purposes.

NB. before replacing vertical supports and/or trayslides, trays and shelves, wipe the counter with a cleaner approved for food contact surfaces. Ensure the retaining studs in the vertical supports are tight.

Shelf/Tray Supports

To fit trayslides insert the bottom projection into the vertical support and twist the trayslide with an upward motion to engage the top projection. Ensure the trayslides are parallel and level after fitting.

7 Switching On

NB. If cabinet has been laid on its back during installation do not switch on immediately (leave in upright position for at least 30 minutes).

Before Loading

Wipe the cabinet interior with a cleaner approved for food contact surfaces before loading food.

Warning - Electrical at work regulations 1989 (UK)

Before commencing any testing on this appliance for conformity with the Electricity at Work Regulations refer to the supply dealer for guidance on testing.

Some equipment is furnished with low voltage electronic components, which may be irreparably damaged if incorrect testing is applied. Foster Refrigerator (UK) Ltd accepts no responsibility for failures resulting from inappropriate testing.



Cleaning/Maintenance

8 Cleaning/Maintenance

NB. Before internal cleaning, switch off power supply.

WARNING

High alkaline cleaning agent or those containing bleaches, acids and chlorines are very harmful to stainless steel. Corrosion and pitting may result from accidental or deliberate application.

If any of these liquids should come into contact with your cabinet during general cleaning, wipe down the affected area immediately with mild soapy water and rub dry.

Never use wire wool or scouring powders on stainless steel or aluminium surfaces.

Stubborn staining of steel surfaces can be removed with non-abrasive cream cleaner or, in extreme cases, gently rubbing with 'Scotchbrite' in the direction of the grain.

IMPORTANT:

CLEANING INSTRUCTIONS

Cared for correctly, stainless steel has the ability to resist corrosion and pitting for many years.

We recommend daily cleaning with:

- a spray cleaner of bactericide approved for stainless steel surfaces.
- hot soapy water followed by wiping down with lint free towelling.

Always clean with the grain of the metal.

These methods are also suitable for aluminium surfaces.

NB. Do not use ammonia-based cleaners on aluminium.

Internal Surfaces

Remove all contents and fittings at least once a month for thorough cleaning of shelves, floor and walls, using a mild disinfectant. Dry all surfaces and allow cabinet to reach storage temperature before reloading. Check guards are secure.

NB. All foodstuffs must be stored in back up store during the cleaning period. Any spillages must be wiped clean immediately.

Drain lines and internal drip trays (when fitted):

Check monthly and remove any obstructions, flush out with warm water and wipe dry.

Condenser (sited in unit compartment):

Check monthly and keep dust free with stiff (not wire) brush. NB. Switch off power before doing this.

Door gaskets:

Clean monthly and replace if not sealing correctly. This is a good time to check operation of mullion heaters (cabinets below 0°C). Door surround should be warm and ice free.

Castors: Check monthly to ensure secure fixing.

Hot pipes and fans in the unit compartment constitute a hazard. Keep guarded at all times.

Do not touch interior with warm damp hands - skin can 'freeze' to metal.

Safeguard children when disguarding an old cabinet by breaking off door latches, locks and hinges.

Protect the ozone layer: refrigerant gases should be reclaimed for safe disposal at time of major service work or scrapping of old cabinet.

Before calling in a service engineer check:

- Power failure (power may be off at source).
- Plug may be loose or pins bent, preventing contact.
- Blown fuses
- Low voltage in line

When requesting a service call quote serial no. (E-) and model no. from silver label fitted to the inside liner wall.

operating instructions

1.5 Mk4 Blast Chiller Controller Outline Operating Guide



12 12.1 Controller Operation - Basic Functions



Sleep/
Standby
Mode



Defrost
Mode



Chill / Freeze Program Start / Stop
(Green LED illuminates during Program and Hold modes).



End of Cycle Alarm Mute Button
(Red LED illuminates once audible End of Cycle alarm has been muted).



Print Data
(Press once to print data / Press and Hold for 3 seconds to clear memory).

12 12.2 Controller Operation - User Setting Procedure

Change Program (program changes from A >B, B>C and C>A. Appropriate Program LED's illuminate)

Change Program Parameters (Press and Hold for 3 seconds)

● Minutes display flashes - increment minutes value save parameter value

● Hours display flashes - increment hours value save parameter value

● Probe Temp. flashes* - increment temp. value save parameter value

● Air Temp. flashes - increment temp. value save parameter value

● Hold Temp. flashes - increment temp. value save parameter value

● Select Hard/Soft Chill - toggle parameter value save parameter value

● Set Print Sample rate - increment parameter value save parameter value and exit setting mode.

Initiate Manual Defrost in Standby / Hold Mode: (Red LED illuminates during defrost)

* Hours / Minutes parameter values set to 00:00

12 12.3 Controller Operation - Displays and Indications

Compressor LED

Evap. Fan LED

8888
Time Display

-88
Temp Display

Probe Temp. LED

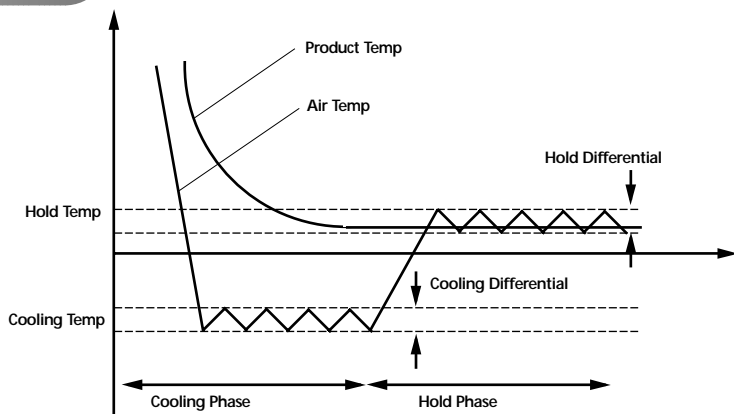
Air Temp. LED

Hold Function LED

'Hard' Chill LED

'Soft' Chill LED


Program LED's



13 Temperature Control Operation

When a preset programme is initiated, the controller will enter the Cooling Phase and cause the air temperature within the counter/cabinet to fall dramatically in order to rapidly chill or freeze the stored product. The duration of the Cooling Phase may be controlled in two ways, through actual product temperature measurement using the food probe or by setting a fixed Cooling Time. Upon completion of the Cooling Phase the controller will enter the Hold Phase and the air temperature within the counter/cabinet will rise in order to prevent further chilling or freezing and hold the product at the desired storage temperature.

Whilst in the Hold mode the controller will perform automatic defrosting, after every four hours of operation. Defrosting of the evaporator coil will occur for a period of between six to twelve minutes (dependent upon model), after which moisture from the coil is allowed to drain away for a further five minutes. The Temp display will show food probe temperature. Following this period, the refrigeration cycle will commence, evaporator fans will also re-start. The Temp display will now revert to showing air temperature.


Defrosting may be initiated manually by holding down the  key. See Operation Flowchart.

13.1 Alarm Functions (Hold Phase)

The Hold alarm may be cancelled by operation of the fascia panel Alarm Mute key.

Hold Alarm

The controller output will sound on entry to the Hold Phase to indicate completion of the Chill Phase. The Hold

Alarm will stay on for two minutes. Alternatively, the Hold Alarm may be muted by operation of the  key.

Food Temperature

The controller will calculate the temperature of the stored product during the Hold Phase through monitoring internal air temperature.

13.2 Additional Features

Hard/Soft Chilling

To minimise surface damage to delicate products, the Soft Chill function raises the Air Temperature during the latter part of the Cooling Phase. The Air Temperature during the Cooling Phase while Soft Chilling is active, rises to -2°C. Under a Cooling Time Control Programme, Soft Chill becomes active after 70% of the preset cooling time has elapsed.

Under a Food Temperature Control Programme, Soft Chill becomes active when +5°C, measured by the food probe is reached.

Surface Protection cannot be selected if the Programme Settings - Food temperature, Cooling Air Temperature or Hold Air Temperature are below -5°C.

If Hard Chilling is selected the cabinet will continue to cool maximum capacity until the Chill Program has completed.

13.3 Programme Setting

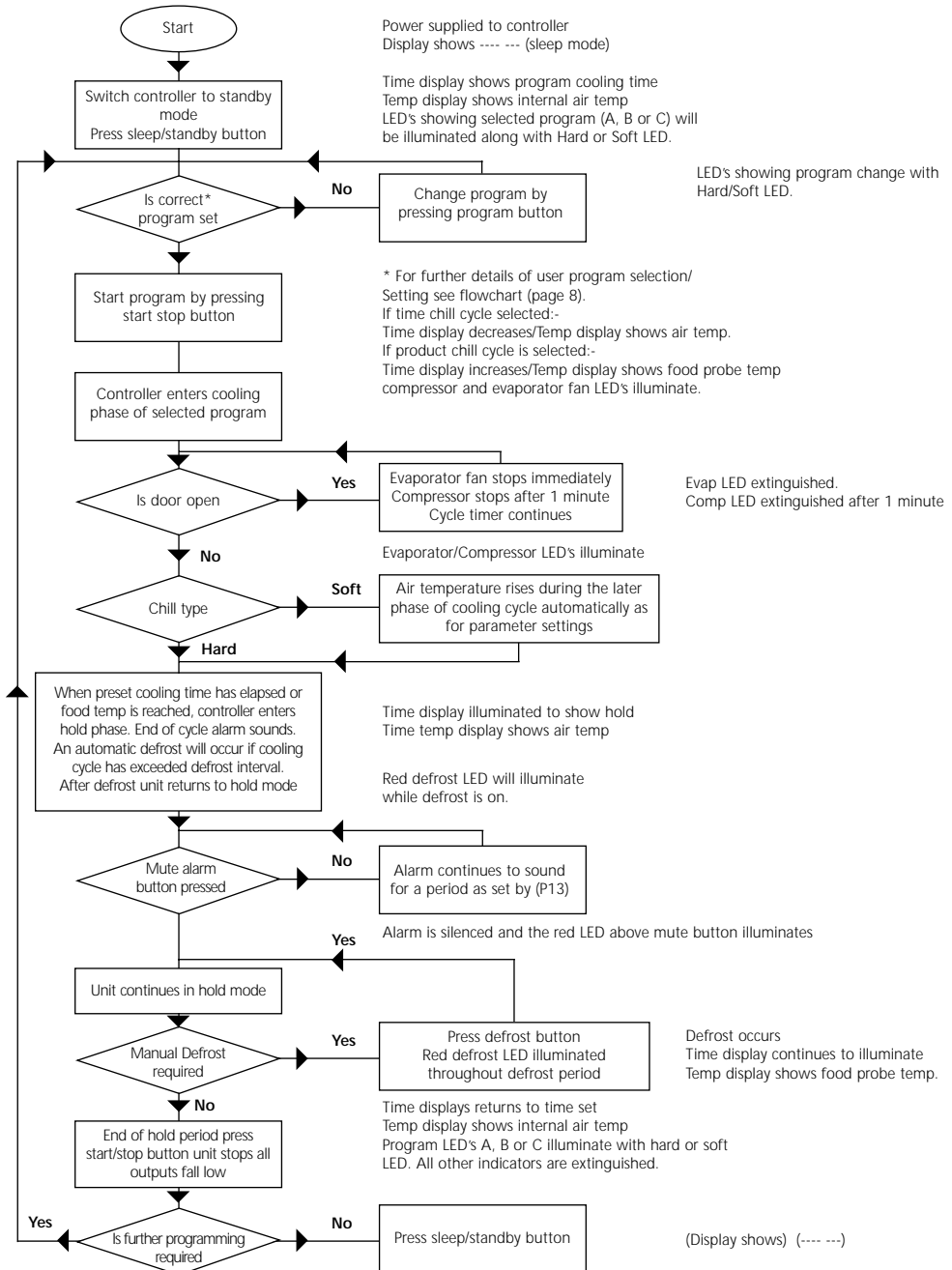
Power must be applied to counter/cabinet in the 'Standby' mode.

Seven bars ---- will be displayed in the Time and Temp displays while the Controller is in the sleep state. Pressing the I/O key will cause the Controller to switch 'on'. Programme time will be shown in the Time Display and Air temperature will be shown in the Temp Display. See Programme Setting Flowchart.

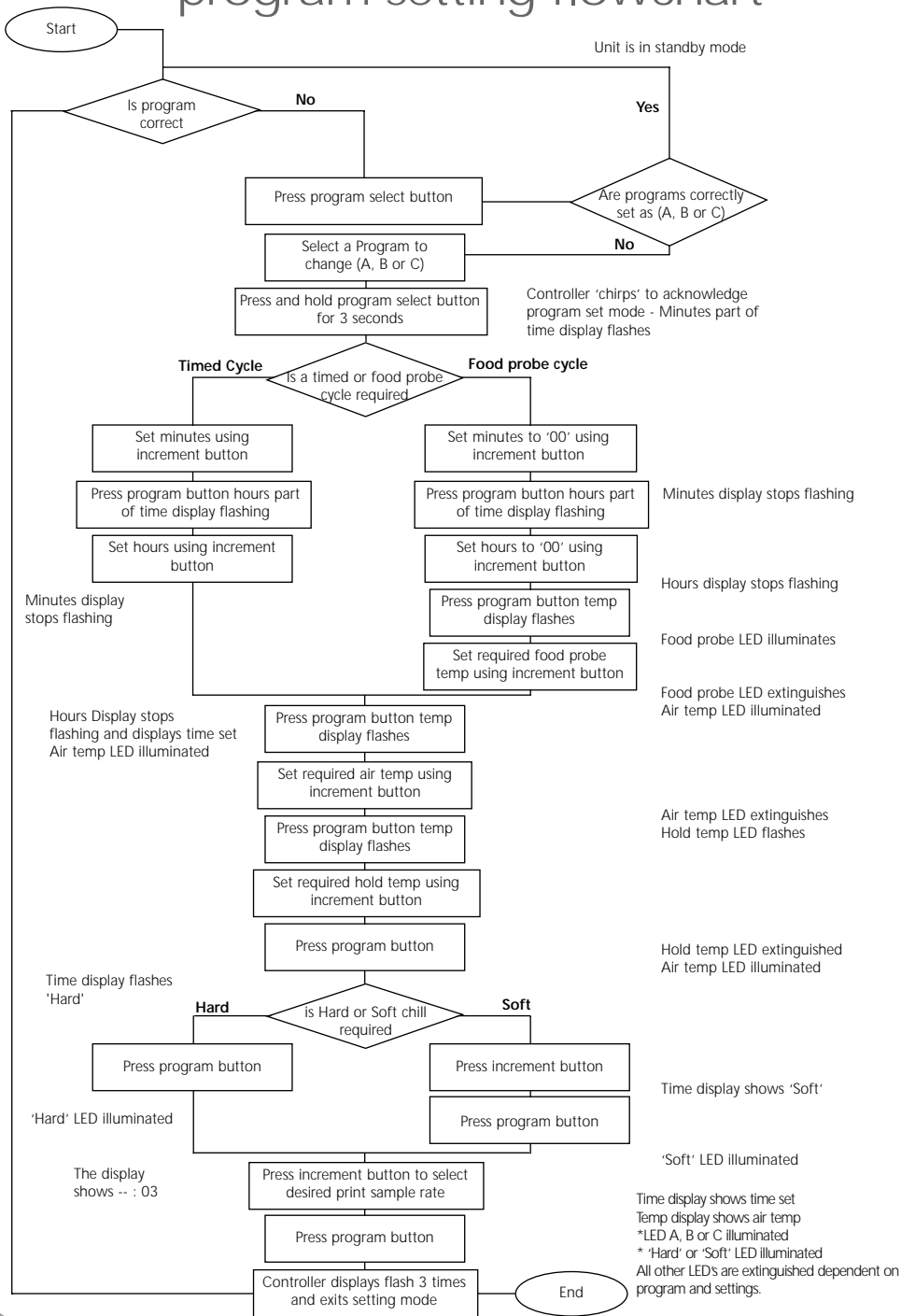
Note:

Where the mains lead is not supplied complete with mains plug, a means of all pole disconnection must be included in the mains supply chord.

Operation Flowchart



program setting flowchart



operating instructions

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