



# OPERATING MANUAL FOR OVERNIGHT THAW CABINETS

## IMPORTANT INFORMATION (PLEASE RETAIN THIS DOCUMENT)

This Manual covers the installation, operation and routine maintenance requirements for the following Williams Refrigeration products:

### Overnight Thaw Cabinets Ruby Overnight Thaw Cabinets

Please read this Manual carefully before connecting the appliance.

Provided the instructions in this Operating Manual are read and implemented correctly, the optimum performance and reliability of your equipment should be maintained.

We assume the installer, user and service provider are appropriately trained, skilled and competent to properly and safely carry out the work, and will use the necessary safety equipment, and take the necessary precautions required of their intended work.

### Temperature parameter is set as follows:

Overnight Thaw                    +0°C(32°F) / +4°C (39°F)

### General Regulations Declaration of Conformity:



Refrigerant Designation	Global Warming Potential
HFC - R134a	1430
HFC - R404a	3922

Williams Refrigeration declares that all products manufactured by Williams Refrigeration comply with the directives applicable to those products, and those products are therefore declared to be in conformity with the provisions of the legislation.

Model No.: .....

Serial No.: .....



# INSTALLATION

## REMOVAL OF REDUNDANT APPLIANCES

Refrigeration appliances contain refrigerant and gases in their insulation and must be disposed of professionally by a licensed waste management contractor.

Please ensure that old or redundant refrigeration appliances are disposed of safely and legally. It is recommended that doors are removed prior to disposal in order to ensure safety.

## UNPACKING

Remove all external and interior packing and accessories. Ensure all such material is disposed of safely.

Check that no damage has occurred to the appliance, power cable and plug top during transit. If damage has occurred do not use the appliance.

The appliance should be installed in a well ventilated room on a flat and level floor.

## PROTECTIVE COATING

The polished stainless steel surfaces are protected during manufacturing and transport by an adhesive plastic coating.

This should be removed prior to placing your appliance into use. Carefully peel away to reveal the polished stainless steel surface. Care should be taken to ensure that no adhesive residue remains on the surface. Any stubborn or tough adhesive marks can be removed by following the advice on Page 4.

## VENTILATION

Refrigerators generate a considerable amount of heat and, if operated in a small unventilated room will quickly cause the room temperature to become excessive. This could cause the motor to overheat and possibly damage the compressor. At the very least, such an installation will cause the unit to use an excessive amount of electricity.

In addition to ventilation in a room, please ensure that cabinets with top-mounted systems have 500mm clearance between the cabinet top and the ceiling for engineer access and ventilation. For all other cabinets, please ensure a minimum clearance of 50mm is provided around the unit to ensure efficient and effective performance.

**Do not block vents by stacking boxes on top or in front of the unit as this could affect performance and give rise to safety risk.**

## LEVELLING (CASTORS/FEET)

The appliance should stand level to ensure the correct operation of self-closing doors and proper drainage of condensate from the evaporator.

Models fitted with castors are non-adjustable. Therefore a level platform / floor should be provided where the appliance is to be located. Where swivel and brake castors are fitted and it has been positioned, please ensure its brakes have been activated by pressing the metal bar down. Remember to release the brakes before trying to move it.

On models fitted with legs, levelling may be achieved by adjusting the bottom section. For marine specification models with flanged feet for deck and bulkhead fixing, installation should be carried out by a specialist marine company.

## MAINS CONNECTION

**Commercial kitchens and foodservice areas are environments where electrical appliances may be located close to liquids, or operate in and around damp conditions or where restricted movement for installation and service is evident.**

Great care must be exercised at all times when installing, operating, or servicing this appliance.

For appliances fitted with a moulded plug for safety, ensure that the mains power cable is extended free from the refrigeration system to avoid entanglement. If a plug or mains cable requires replacement, contact the Williams Spares Office on +44(0)1553 817017.

The installation of a fixed appliance and periodic inspection should only be undertaken by a qualified, skilled, and competent electrician; and connected to the correct power supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements to the local electrical wiring regulations and any electrical safety guidelines.

All appliances rely upon a suitable connection to earth to ensure safe operation. If in doubt, contact a qualified, skilled, and competent electrician before using the appliance.

**We recommend:-**

- **Supplementary electrical protection with the use of a residual current device (RCD)**
- **Fixed wiring appliances incorporate a switch disconnector for purposes of safe isolation to meet the specification requirements of IEC 60947**

**If the appliance has been laid on its back or tipped, DO NOT switch on immediately. Leave in an upright position for at least 3 hours before switching on.**

Food placed inside the unit should be packed in such a way as to encourage thawing. For example, a cardboard box full of frozen hamburgers could take days to thaw out if placed into the unit within the cardboard box. However, if the hamburgers are unpacked, loaded onto trays and placed inside the unit they will thaw in a matter of hours.

For fastest thawing, food should be uncovered as any type of covering will insulate food.

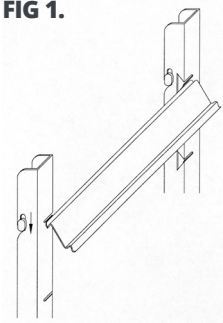
**NB: Since the unit partially utilises the food to lower the temperature, it is recommended that the unit be operated fully loaded whenever possible for maximum efficiency.**

**CONNECTION TO A MAIN DRAIN**

The Overnight Thaw requires connection to a main drain with a standard 1 1/2" fitting.

**SHELF/SLIDE FITTING**

When positioning slides on standard cabinets and counters, present slide to tacking by holding it in the opposite hand to the side of the cabinet to that which they are to be applied. Present slide at 45° angle (See Figure 1). When in place, let slide drop into position to create a horizontal ledge on which the shelves will sit.

**FIG 1.****LOADING / SHELF DISTRIBUTION**

**Before loading, allow the appliance to reach its normal operating temperature.**

When loading the appliance, please ensure that its load is equally distributed throughout and ensure air can circulate around and through stored products. Ensure all items are covered and that raw and cooked foods are stored separately.

Care should be taken when loading the appliance. Do not obstruct the air ducts. Take care of any parts with possible sharp edges.

# CONTROLLER

## CONTROLLER / DISPLAY

The display should be checked daily to ensure that the correct temperature is being maintained.

## CONTROLLER



### General Operation

The Overnight Thaw Cabinet is designed to control the thawing of frozen food. The principle of the unit is that it is loaded with frozen food the afternoon prior to the day the food is required. The unit must be loaded in such a way as to encourage thawing. Products should be in single trays and removed from their packaging.

The unit has two functions, firstly it is a refrigerator with a temperature range of 0°C to +4°C, secondly it is a heating unit with a temperature range of -1°C to +2°C.

The refrigeration circuit operates immediately the unit is switched on and the temperature will reduce until it is within the safe storage range, 0°C to +4°C.

When frozen food is placed inside the unit, the unit temperature will drop to below -1°C which will switch on the heating circuit.

As the temperature reaches +2°C the heating circuit will turn off and the cold food will again reduce the temperature to -1°C causing the cycle described to be repeated.

The refrigeration / heating cycle is repeated until the temperature of the food is incapable of reducing the unit temperature to -1°C.

At this stage no further heat is required from the electric heaters and just the heat from the fan(s) will be sufficient to continue the thawing process. However if at any time the temperature goes up to +4°C, the refrigeration cycle will come back in place and reduce it to +1°C, thereby avoiding any possibility of the food temperature rising to an unsafe level.

**Please note: due to the special operation of the equipment the standby button on the controller is disabled.**

## ADJUSTING THE OPERATING TEMPERATURE

The thermostat is built in to the controller and is adjustable between factory set parameters.

To adjust the operating temperature;

Press and hold

Use keys to adjust

All units are factory pre-set, however conditions on site will vary compared with test conditions and it may be necessary to perform the following adjustments in order to obtain a perfect temperature cycle.

### Probe Fail Safe Feature

The controller features a fail-safe condition. In the event of a temperature probe failure, the compressor will alternate at 5 minute intervals indefinitely between 'running' and 'not running' and E1 or E2 will be displayed. Normal compressor function will only be restored when the probe fault has been repaired.

Should a probe failure occur please contact Williams Refrigeration Engineering Office on +44 (0) 1553 817000 for a replacement part stating the unit's serial number.

### Defrost Operation

When defrosting is in progress, a defrost indicator on the controller will become illuminated and **df** will appear in the LED display.

Defrost is automatic and the appliance will go through a cycle at pre-set intervals. The defrost operation does raise the cabinet temperature slightly for a short period but does not affect product stored inside.

# APPLIANCE ROUTINE MAINTENANCE / CLEANING

## ROUTINE MAINTENANCE

Safely disconnect the appliance from the power supply before cleaning, servicing or undertaking general maintenance.

We recommend that you undertake regular preventative maintenance using a qualified service provider in order to get the best from your equipment.

## CLEANING

Always wear appropriate personal protective equipment (PPE) when cleaning the appliance. Care should be taken for parts with possible sharp edges.

Stainless steel is naturally corrosion-proof and needs no additional protective coating to maintain its gloss and usability for a long time.

Abrasive or corrosive cleaning agents should never be used. These can damage surfaces and cause corrosion. They include:

- Cleaners containing chloride;
- Bleaches containing hypochlorite (if accidentally spilled on stainless steel, rinse off with water immediately and thoroughly);
- Silver polish

If the cabinet exterior is looked after correctly it will retain an "as new" finish for many years. A damp cloth is usually sufficient for wiping away light dirt, food debris and finger marks and normal day to day cleaning should be carried out with a soft cloth and soapy water.

Dry thoroughly afterwards and where possible remove all racking, shelving and drawer fittings to aid the process.

Kitchen fats, oils and greases can also cause brown spots or staining to appear on the stainless steel surface.

For stainless steel with visible polishing grains, clean the steel with the grain - not against the grain. When water has been used for cleaning or rinsing, wipe the surface dry to prevent water from drying and forming watermarks, especially in areas with hard water. Avoid this type of watermark by using distilled water.

For tougher spots, creamy polishes like CIF original cream can be effective. Light pressure should be used when cleaning with the grain. The cleaning process should be repeated in order to prevent any dirt becoming lodged in the surface grain again.

CIF original cream cleaner can also be used for wiping off water spots and can alleviate discoloration. Remove this type of residue by rinsing with clean, preferably distilled water and wipe away any remaining streaks of polish or watermarks.

Tough grease or oil marks can also be removed using denatured alcohol or acetone. There is no risk of corroding stainless steel by using such solvents. For ease of use limit the amount of solvent used. Wash more than once using a pure solvent on a clean soft rag until all traces of the greasy residue are removed.

## Specialist Stainless Steel Cleaners - Non food contact surfaces only

Innosoft B570 is a special deep cleaner that is suitable for the intensive cleaning of contaminated stainless steel surfaces, and removes stains and oxides in a single operation.

Innoclean B580 completely removes any residues left after the use of Innosoft B570 and passivates the surface which helps to prevent further corrosion.

## SHELF / SUPPORT/ RACKING REMOVAL

First remove the shelves, then remove the shelf supports by grasping firmly in the centre and lifting slightly. Turn the shelf support towards the interior of the cabinet by pushing it in the centre as you twist the support through 90°. The shelf support will be released. (NB: the supports are designed to be anti-tilt and you may therefore experience some resistance at first which will be overcome with practice). When all shelves have been removed, remove the racking by lifting up and over the nylon retaining blocks.

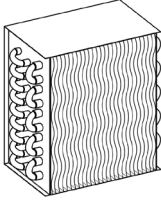


### CONDENSER CLEANING

Regular maintenance should be carried out on a regular basis by competent / trained personnel. The condenser is part of the refrigeration unit and is located in the unit compartment.

Brush fins vertically with a stiff brush, taking care not to damage them or to push dirt / dust further in, and then vacuum away.

**FIG 3.**

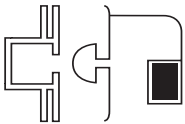


The condensing unit and refrigeration equipment can be accessed from above or in some cases behind. Remove fixings in the top and bottom edges of the unit cover and pull the unit cover away from the cabinet and retaining clips.

### CLEANING / REPLACING THE GASKET

Door gaskets should be checked and cleaned regularly and replaced if damaged. To clean the gasket, wipe with warm soapy water and a soft cloth, ensuring it is completely dry before closing the door.

**DO NOT** use a sharp knife to clean or scrape the gasket. Damaged gaskets do not seal correctly and can increase the amount of electricity consumed, seriously affecting the efficiency and performance of the appliance.



Damaged gaskets are easily replaced. Simply pull out the existing part and push the new gasket into the channel (gasket retainer) at the centre and work along, pushing gasket into channel.

### EVAPORATOR/DRAINLINE

Inspect periodically to ensure the drain hole is not blocked.

### BREAKDOWN

In the event of a breakdown, please contact Williams Refrigeration or your Service Provider

When calling, please advise model and serial number. This information can be found on the data plate inside the appliance. It should also be noted on the cover of this Manual. Please ensure that all redundant parts are disposed of safely and legally.

## TROUBLE SHOOTING INFORMATION AND ALARM CODES

<b>Fault Display</b>	<b>Possible Cause</b>	<b>Action</b>
Cabinet not operating	No power supply	Check fuse or power source
Cabinet not maintaining temperature	1. Dirty condenser	Clean
	2. Air circulation restricted	Remove restriction
	3. Defective fan motor	Call engineer
	4. Defector compressor relay	Call engineer
	5. Loose electrical connection	Call engineer
Faults displayed by control	E1 - Probe 1 Air Failure	Call engineer
	E2 - Probe 2 Evaporator Failure	Call engineer

### CHOOSING GENUINE SPARE PARTS

Choosing the correct spare parts is vital to the ongoing running of your appliance - that's why Williams Refrigeration offer a comprehensive network of servicing, support and spare parts all available directly from Williams.

Our spare parts are exactly the same quality and standard as we use to build your appliance and have been rigorously checked, tested and inspected to ensure the very best quality and exact fit.

You can contact us directly for everything from fault diagnosis to parts selection and ordering. Simply provide the serial number of your appliance and we will do the rest to ensure you receive the right part first time.

**For further information please call our Spares Department on 01553 817017  
or email [spares@williams-refrigeration.co.uk](mailto:spares@williams-refrigeration.co.uk)**

## PARTS & LABOUR WARRANTY POLICY - UK ONLY

Our warranty applies to equipment manufactured by Williams Refrigeration and equipment bearing the Williams name plate and serial number identification tag.

We undertake, in conjunction with the supplying agent, distributor or representative, to repair free of charge during our standard business hours any such piece of equipment or part thereof used which is found to be faulty in either materials or workmanship subject to the further conditions below:-

### WARRANTY TERMS AND PRODUCTS COVERED

We offer a **24 months Warranty** from our original date of sale with the following Williams equipment:

1. Garnet / Sapphire / Zircon / Jade / Amber (stainless) / Mobile Heated/ Mobile Refrigerated.
2. Reach-in Blast Chillers / Reach-in Blast Chiller Freezers.
3. Opal / Emerald / Onyx / Aztra / Salad Counters.
4. Crystal Bakery Cabinets and Counters.

We offer a **12 months Warranty** from our original date of sale for all other Williams equipment including:

1. All Modular Products (including coldrooms).
2. Remote Systems (including glycol).
3. Bottle Coolers.
4. Multidecks and merchandiser cases.
5. GEM product range.
6. Bottle Well / Meat Freezer Well.
7. Thermowell.
8. Non standard and other products.
9. Front of House display cases.
10. White Goods.

### WARRANTY TERMS

Our warranty is offered where the equipment has been installed correctly and has not been subject to misuse or abuse and is functioning correctly.

The equipment was purchased by the authorised supplying distributor direct from Williams Refrigeration and not through a wholesaler or other supplier whose warranty terms may be different.

The Warranty Policy shall be non-transferable.

Replacement of defective equipment can only be made with the approval of Williams Refrigeration.

Any repair under warranty will only be carried out with the product in its position of operation or in a suitable location on the customer's premises. If the product has to be removed for security or any other reason, this will be subject to additional charge (may include hydrocarbon charged equipment).

Warranty work will be covered by Williams Refrigeration or by one of its appointed service agents between the hours of 8.00am and 5.00pm Monday to Friday. Any works undertaken outside of these hours are chargeable.

### CLAIMS PROCEDURE

If a customer wishes to make a claim under the terms of this warranty, the following procedure should be observed:

1. Contact the supplying agent, representative or distributor.
2. Quote the equipment model, serial number and date of installation. The serial number is located on the product identification plate inside the cabinet, modular product door frame or similar location. It is recommended that operators should also record the serial number on the operating instruction booklet supplied with the product.
3. Contents risk and insurance responsibility remains at all times with the customer.

### EXCEPTIONS TO STANDARD WARRANTIES

1. The Standard warranty applies to equipment located in Mainland GB only and excludes locations subject to restricted or secure access, offshore and marine applications. Additional time and travel charges may be applied to the following locations – Isle of Wight, Channel Islands, Isle of Man, Northern Ireland and Scottish Isles.



2. Any fault that is not reported within 10 working days of being discovered.
3. Service calls to equipment under warranty, or service calls made under chargeable arrangements will be carried out in accordance with standard conditions of sale. Unless otherwise specified, a maximum of 15 minutes of administrative time, not spent directly carrying out servicing work, is provided for within the supply. Any requirement for staff attending the call to spend greater time than 15 minutes due to administrative requirements, such as on waiting time or security clearance, or health and safety risk assessments, will be chargeable at our prevailing rate. We reserve the right to apply Time Travel & Call out charges if no fault is found with the product or access is either restricted or denied to our attending engineer.
4. No claim shall exceed the original selling price.
5. Claims for Food and / or contents stored in the equipment supplied (including pharmaceutical or other items) and any consequential loss how so ever arising are excluded under our warranty terms.
6. Components including gaskets, doors, drawers, handles, shelves, tray slides, all internal fixings, plug and lead, connectors, the outer shell, castors / legs, food probes, refrigerant and blockages as well as consumable items such as (but not limited to) batteries, fuses, light bulbs, printer cartridges, keys, glass and paper roll.
7. Equipment manufactured to the customers' own design, Williams Refrigeration will not be liable for any defect, non performance or improper operation of the equipment arising from any drawing design or specification supplied by the customer, their representative or agent.
8. Second hand equipment.
9. The customer uses or installs the equipment in such a way that it exceeds its design envelope or operates the equipment at control parameters other than those provided as standard factory settings.
10. The customer fails to observe commonly accepted operating practices.
11. The customer has not properly cleaned or maintained the equipment or carried out necessary servicing, including cleaning of the condenser, in accordance with instructions, literature or directions issued by Williams Refrigeration. (Operating Instructions are supplied with all equipment but also available at [www.williams-refrigeration.co.uk](http://www.williams-refrigeration.co.uk)).
12. Equipment fails through improper installation by others, misuse, abuse, accidental damage, power loss or fluctuations, fire, flooding or acts of god.
13. Any third party item(s) connected to the equipment that may affect performance.
14. The customer permits persons other than those authorised by Williams Refrigeration to perform or affect repairs or adjustments to the equipment.
15. If authorised representatives of Williams Refrigeration are denied full and free rights of access to the equipment for inspection during normal business hours as previously stated.
16. If Repairs are made using spare parts or replacement items not supplied or preauthorised by Williams Refrigeration.
17. The initial equipment supply date shall apply for warranty validity for the subsequent supply of replacement of parts or products.

### EXTENDED WARRANTY

Extended Warranty offers the opportunity to protect your equipment (subject to conditions outlined) for an additional period of up to 5 years inclusive of original warranty periods.

Should you require Extended Warranty, state on your order or notify the Dealer or Williams Sales Manager at the time of purchase and they will be able to arrange it for you.

To ensure your Extended Warranty Policy remains valid, at least one maintenance / service visit per year must take place in years 2, 3, 4 and 5.

**For further information or clarification please call 01553 817000 or email to [info@williams-refrigeration.co.uk](mailto:info@williams-refrigeration.co.uk) or write to Williams Refrigeration, Bryggen Road, King's Lynn, Norfolk, PE30 2HZ**







## Design Excellence : Cool Technology

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