



OPERATING MANUAL

GEM SANDWICH CHILLER SC900 & 1200

GEM PASTRY CHILLER PC900

To achieve the optimum performance and reliability of your Chiller please read and follow these installation, operating, cleaning and maintenance instructions. Failure to do so may affect the warranty of your equipment.

Temperature parameters are set as:

Sandwich Chiller +2°C (36°F) / +5°C (41°F)

Pastry Chiller +5°C (41°F) / +8°C (47°F)

Declaration of Conformity References:

Low Voltage Directive 2006/95/EC

Machinery Directive 2006/42/EC

Electromagnetic Compatibility Directive 2004/108/EC

Pressure Equipment Directive 97/23/EC

Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC

Restriction on Use of Certain Hazardous Substances Directive (RoHS) 2002/95/EC

Refrigerant Designation	Global Warming Potential
HFC - R134a	1300
HFC - R404a	3260

CFC Free Refrigerant

We declare that all products manufactured by Williams Refrigeration comply with the above directives where applicable and as such are declared to be in conformity with the provisions of the above legislation.

Model No.:

Serial No.:



INSTALLATION

Removal of Redundant Cabinets

Please ensure that old or redundant refrigeration cabinets and equipment 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.

Ventilation

It is essential to ensure that the room in which the unit is to be installed has adequate ventilation. Refrigerators generate a considerable amount of heat and, if operated in a small unventilated room in warm weather, these will quickly cause the room temperature to become excessive. This could cause the motor to overheat and possibly damage the windings. At the very least such an installation will cause the unit to use an excessive amount of electricity. The SC1200 Sandwich Chiller generates 2850W of heat, the SC900 2450W and the PC900 Pastry Chiller 715W.

In addition to ventilation in a room, please ensure that the Chillers have 200mm clearance between the back of the Chiller and the wall 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.

Castors

The Chiller should stand level to ensure correct operation and proper drainage of condensate from the evaporator.

It is important that Display Chillers are positioned on a level platform / floor. When in position ensure the brakes have been activated by pressing the metal bar down. Remember to release brakes before trying to move the chiller.

Loading with Food

Sandwich and Pastry Display Chillers are not designed to cool food from ambient temperature. It is essential that all products placed in the display chiller have been chilled to $+2/+5^{\circ}\text{C}$ (for the Sandwich Chiller) and $+5/+8^{\circ}\text{C}$ (for the Pastry Chiller) before being placed inside. The unit should be allowed 30 minutes with the night blind pulled down to pull down to temperature before loading (Sandwich Chillers only).

Mains Connection

The cabinet comes fitted with a 13 Amp fused plug and must be earthed. If the plug or cable should fail please contact the Williams Spares Department on +44 (0)1553 817017 for a replacement.

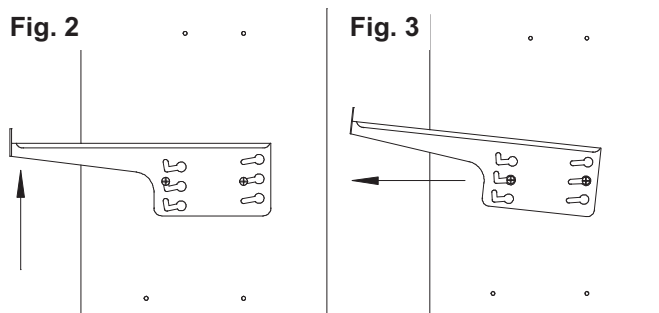
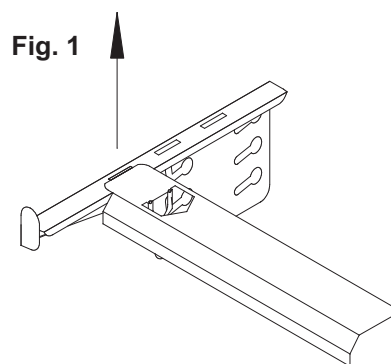
If the cabinet has been laid on its back or tipped, DO NOT switch on immediately. Leave in an upright position for at least one hour before switching on.

Shelf Fixing and Adjustment

Shelving is fitted in the central position as standard with 25mm adjustment up or down in a horizontal position.

To adjust:

- Isolate power supply before commencing with shelf removal.
- Remove glass shelves before shelf adjustment begins.
- Place glass shelves carefully on a suitable surface to avoid damage.
- Unplug power lead from the three shelf lights.
- Lift the glass supports and remove from the Chiller (**Fig. 1**).
- To remove the shelving brackets loosen the retaining screws. Lift the front of the bracket (**Fig. 2**) and pull gently towards the front of the cabinet (**Fig. 3**). The bracket should now detach freely.
- Repeat this process in reverse to refit the shelves.
- Brackets must be set at equal heights for each side of the shelf.
- Light supports can be placed in any of the three slots depending on where you require the light.



Lighting Removal

- Slide the light fitting back until it is clear of the first mount (**Fig. 4**).
- Slide it back out over the mount and continue until light fitting is removed (**Fig. 5**).
- Reverse process to refit.

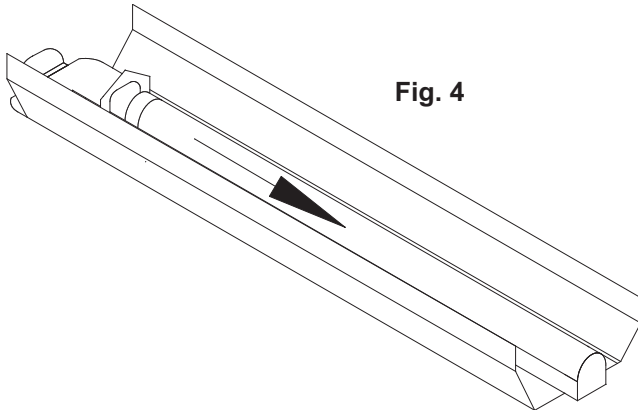


Fig. 4

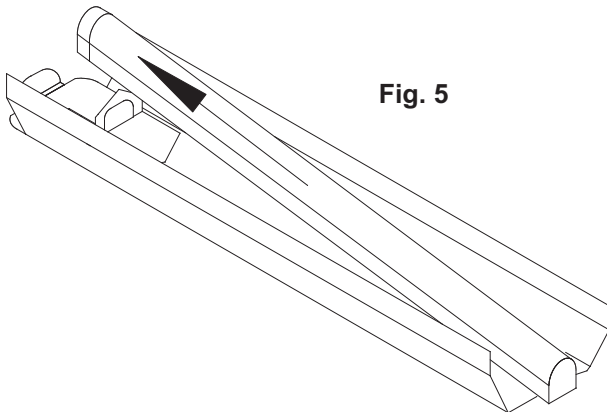


Fig. 5

Curved Glass Screen (Pastry Chiller Only)

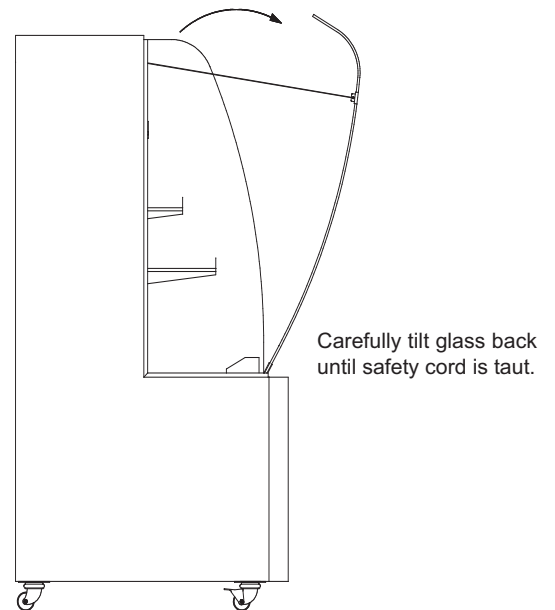
The curved glass front of the Pastry Chiller should be opened for cleaning. To do so stand in front of the unit and slowly pull towards you until the safety chains become taut. (**Fig. 6**).

Do not leave the chiller unattended with the screen in the open position. If the glass is required to be opened for an increased period of time then it should be removed for safety reasons.

Removal of curved glass front:

- Two people are required.
- One person should ensure the glass is held in place while the other removes the screws attaching the cables to the Chiller.
- Standing with one person each side of the glass, open fully and lift straight up to remove from the securing angle at the base of the glass.
- Place glass shelves carefully on a suitable surface to avoid damage.

Fig. 6



OVERNIGHT OPERATION

Night blind must be closed overnight with the magnet in the blind attached to the surround of the sneeze screen (**Fig. 7**) and **NOT** to the front of the condenser cover (**Fig. 8**), as this will cover the vent and impair performance.

Fig. 7

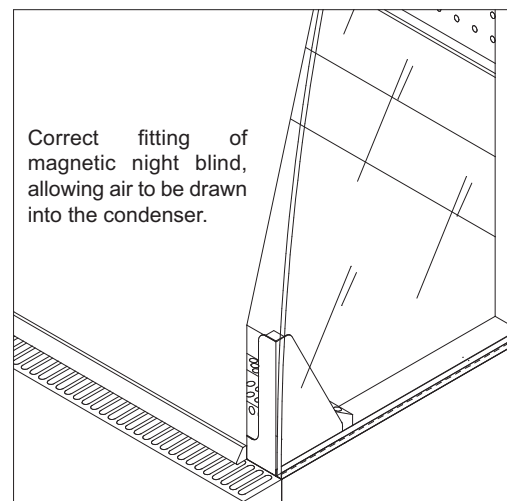
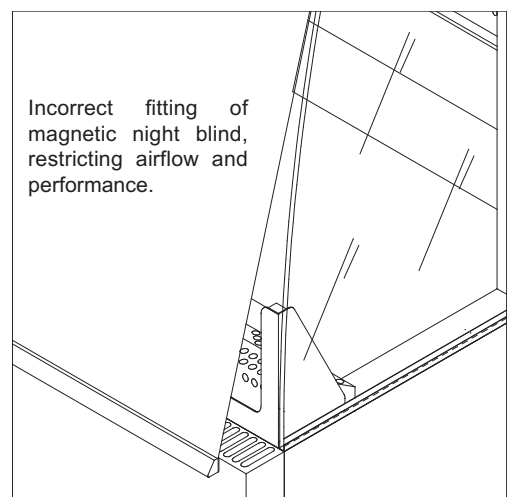




Fig. 8



SET UP OF CONTROL PANEL






LED Display

- Normal cabinet temperature displayed in LED window
- Probe 1 (air) failure (E1)
- Probe 2 (evaporator) failure (E2)
-  LED shows red to indicate unit running
-  LED illuminates red to indicate Evaporator is running

Initial Operation

Your cabinet is delivered ready to run. Plug into mains and cabinet is ready to use. '- -' will appear and the temperature will be displayed. Wait until cabinet has reached normal operating temperature (indicated on control panel) before loading.

Adjusting the Operating Temperature

To adjust operating temperature, press and hold  key for 3 seconds. Use   keys to adjust.

NB: All machines are factory preset, however conditions on site will vary compared with test conditions and it may be necessary to perform the above adjustments several times 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 condition and **E1** or **E2** will be displayed. Normal compressor function will only be restored when probe fault has been repaired.

Defrost Operation

When defrosting is in progress, the defrost indicator on the control panel will become illuminated and **dF** will appear in the LED display. Defrost is automatic and the Chiller will go through an automatic defrost cycle at preset intervals. The defrost operation does raise the Chiller temperature slightly for a short period but does not affect the product stored inside.

Light Operation

Low voltage shelf lighting is controlled by a single switch on the control panel. The switch will become illuminated when the lights are on.

FAULT DIAGNOSIS/DISPLAY CONDITIONS

Fault/Display	Possible Cause	Action	
Cabinet not operating	No power supply	Check fuse or power source	
	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	
Cabinet not maintaining temperature	6. Coil frozen	Call engineer	
	Faults displayed by control	E1 or E2 - Control probe failure	Call engineer
		hi or Lo - High/low temperature alarm	Call engineer
		do - door open alarm	Shut door
	Flashing condenser Clean LED	Condenser requires cleaning Air-cooled version	Remove cover and clean condenser fins with clean brush

ROUTINE MAINTENANCE

All maintenance should be carried out by a competent, qualified person. We recommend regular preventative maintenance using a qualified service provider in order to get the best from your equipment.

CLEANING

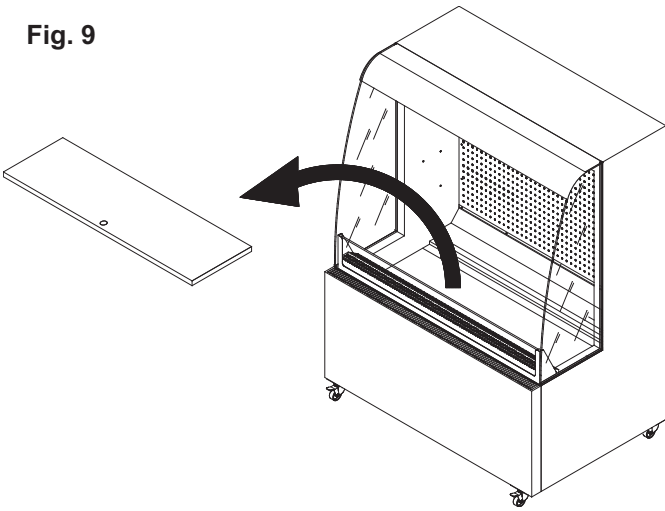
Exterior: If the Chiller exterior is looked after correctly it will retain an "as new" finish for many years. Normal day to day cleaning should be carried out with a soft cloth and soapy water. For a stainless steel finish, always wipe the Chiller in the same direction as the grain. Whilst stainless steel is robust, the satin smooth finish can be spoilt by wiping against the grain. Never use abrasive materials or chemical cleaners. These can damage the surface and cause corrosion. The exterior surface should be cleaned occasionally with a good quality stainless steel polish, to protect it.

Interior: The Chiller's interior should be cleaned regularly with warm soapy water and a soft cloth. Before cleaning commences turn off at the mains and isolate the supply. Where possible remove all brackets, supports and shelving as well as the evaporator tray to aid the cleaning process.

To clean the evaporator tray:

Firstly remove its cover (Fig. 9). Remove any debris and clean with warm soapy water. Dry thoroughly afterwards.

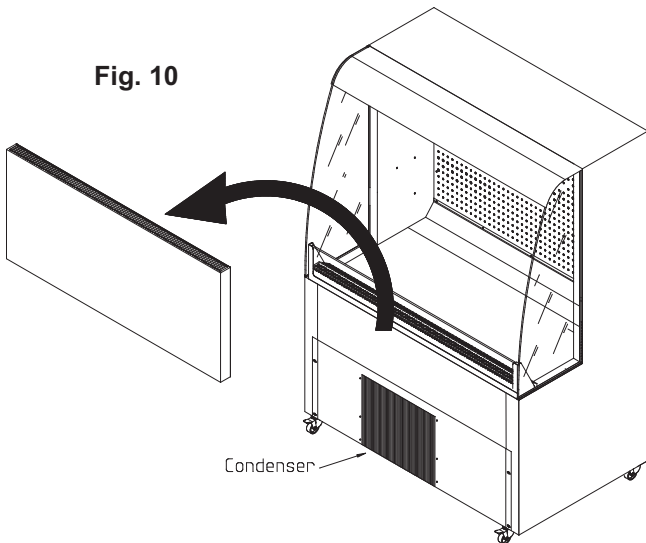
Fig. 9



Condenser Cleaning

The condenser is part of the refrigeration unit. To access the condenser for cleaning, carefully lift the front cover and then pull forward from the Chiller (Fig.10). It requires cleaning approximately four times per year or when the LED indicates.

Fig. 10



- **Disconnect mains supply before cleaning.**
- Brush fins vertically with a stiff brush, taking care not to damage them or to push dirt / dust further in, and then vacuum away..
- **Remember to reconnect mains supply once complete.**

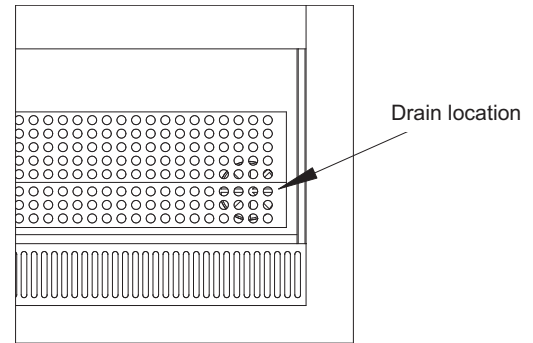
If there are further grease deposits still remaining on the condenser call your Service Provider to carry out a full service. **NOTE: Non-compliance may invalidate your Warranty.**

Replace the unit cover and plug the Chiller in after completing the cleaning process.

EVAPORATOR/DRAINLINE

The drain is located at the front right hand side of the chiller beneath the vented grill (Fig.11). Inspect this periodically to ensure drain hole is not blocked.

Fig. 11



BREAKDOWN

In the event of a breakdown, check the operating temperature setting and fuse before calling a service engineer. When doing so you will be asked to provide the model and serial number. This information can be found on the identification plate on the back of the Chiller. It should be noted on the cover of this booklet. Please ensure that all redundant parts are disposed of safely and legally.

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. Coral Wall Mounted Units.
9. Non standard and other products.
10. Front of House display cases.
11. 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).
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 or write to Williams Refrigeration, Bryggen Road, Kings Lynn, Norfolk, PE30 2HZ



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