



**OPERATING MANUAL for
GEM MULTI DECK DISPLAY CABINETS**



This manual covers the Installation, Operation and Routine Maintenance requirements for the following products:



R - Series



M - Series

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

**The Williams GEM range has a temperature range of:
+3°C (37°F) / +5°C (41°F)**



INSTALLATION

Removal of Redundant Cabinets

Please ensure the old or redundant refrigeration cabinets and equipment are disposed of safely and legally. It is recommended that doors are removed prior to disposal to ensure safety.

Unpacking

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

Ventilation

The Multi Deck Display cabinet should be installed in a dry place, avoiding direct exposure to sunlight and sources of heat or draughts including air currents such as radiators, fans, air conditioning units and doors etc. It is essential to ensure that the room in which the equipment is installed is adequately ventilated. Multi Decks can generate considerable amounts of heat and if operated in small unventilated rooms, especially in warm weather, will quickly cause the room temperature to rise to excessive temperatures which can cause motor overheating and possible damage to the windings.

Ensure there is a gap at the back of the cabinet if positioned against a wall of at least 60mm for the condensing unit to operate effectively and efficiently. To ensure optimum operation of the refrigeration system, **DO NOT** stack boxes on top or in front of the unit.

Locking Castors

The cabinet is fitted with castors as standard, please ensure the cabinet is level and in a stable position for safe and efficient usage. When the cabinet has been positioned please ensure brakes have been activated by pressing the metal bar down. Remember to release the brakes before trying to move the cabinet.

Mains Connection

The cabinet comes fitted with a moulded plug for safety and must be earthed. If the plug or cable fail, please contact the spares office 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 1 hour before switching on.

Shelf/Slide Fitting

Ensure all shelves are fitted so they are in contact with back panel. To adjust the position of the trayslides insert the ends into the vertical support with the 'hooks' pointing downwards and slot downwards into position. Ensure trayslides are parallel and level after fitting.

Shelf Weight Distribution

Before loading, allow cabinet to reach normal operating temperature.

When loading the cabinet, please ensure the load is equally distributed throughout and ensure a gap of 60mm between products and the shelf above to ensure effective air circulation. (See Fig.1)

Locking Facility

On models fitted with a security shutter which has a locking facility it is recommended that the key be removed from the lock during normal working use. If the key is left in the lock it can be knocked causing it to bend or break in the barrel, making the lock inoperative.

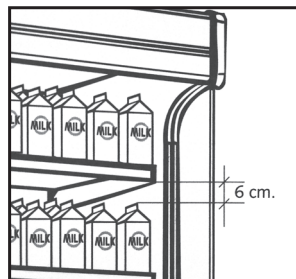


fig. 1

Thermometer

The controller is marked in Centigrade. The thermometer should be checked daily to ensure that the correct temperature is being maintained.

CONTROL PANEL

- SET:** To display target set point; in programming mode it selects a parameter or confirm an operation.
- (DEF):** To start a manual defrost.
- (UP):** To see the maximum stored temperature; in programming mode it browses the parameter codes or increases the displayed value.
- (DOWN):** To see the minimum stored temperature; in programming mode it browses the parameter codes or decreases the displayed value.

Initial Operation

Switch cabinet on by pressing and holding for 2 seconds the ON/OFF button.

We recommend the night blind or security shutter be used overnight or when the Multi Deck is not in use to save on electricity.

Adjusting the Operating Temperature

To access the parameters press the “**SET**” key, then select the required parameter in the following sequence:

- Press the “**SET**” key to display its value
- Use “**UP**” or “**DOWN**” keys to change its value
- Press “**SET**” to store the new value and move to the next parameter

To exit: If you press “**SET**”, “**fnc**” or a time of 15 seconds elapses, the last value displayed will be saved and the label “**SET**” will reappear on the display.

The set value is stored even when the procedure is exited by waiting for the time-out to expire. To adjust the operating temperatures, press and hold the **SET** key for more than 3 seconds, while the maximum or minimum temperature is displayed.

NB: All machines are preset at the factory, 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.

Defrost Operation

Push the “**DEF**” key once to activate a manual defrost.

IdF Interval between defrost cycles: (1/120h)
Determines the time interval between the beginning of two defrost cycles.

MdF Length for defrost: (0/255mins)
It sets the defrost duration.

FAULT DIAGNOSIS

Fault/Display	Possible Cause	Action
Cabinet not Operating	No Power Supply	Check fuse or power source Ensure that the general switch is on
Cabinet not maintaining temperature	1. Dirty Condenser	Clean
	2. Air circulation restricted	Remove Restriction
	3. Check that shelves and goods are properly installed and loaded	
	4. Check that the cabinet is not near draughts or heat sources	
	5. Check that the air return or the air curtain is not blocked	

MAINTENANCE AND CLEANING

Routine Maintenance

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

Cleaning

If cabinet 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 cabinet in same direction as the grain. Never use abrasive materials or cleaners, or chemical cleaners. These can damage the surface and cause corrosion. Occasionally, the exterior surface, if stainless steel finish, should be polished with a good stainless steel polish to protect it. Do not wash the cabinet with a hose or spray. (Fig.2)

Shelving can be removed for easy cleaning, cabinet interior should be cleaned regularly with warm soapy water and a soft cloth. Dry thoroughly afterwards.

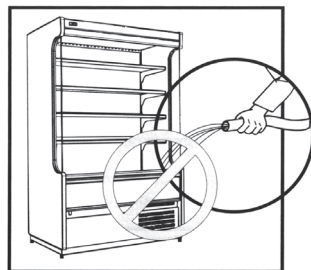


fig. 2

Condenser Cleaning

The condenser, which is part of the refrigeration unit, is sited in the unit compartment and requires cleaning, approximately every two months.

Disconnect the cabinet from the electrical supply by unplugging it then, to achieve access to the condenser you must remove front grill. (Fig. 3)

To clean the condenser, brush the fins vertically with a stiff brush, taking care not to damage the fins or push dirt or dust further in and vacuum away. **Remember to reconnect mains supply once finished.**

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.

Take care not to damage any electrical connections and cables during removing and the cleaning process.

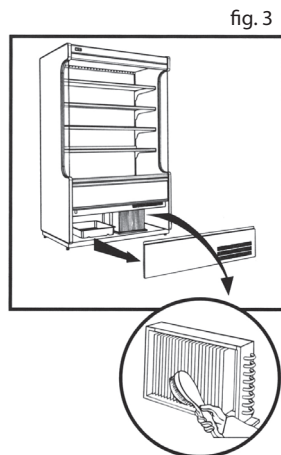


fig. 3

BREAKDOWN

In the event of a breakdown, please check thermostat setting and fuse before calling service engineer. When calling, please advise model and serial number. This information can be found on the identification plate. Please ensure any redundant parts are disposed of safely and legally.

PARTS & LABOUR WARRANTY POLICY – UK ONLY

Effective from 1st September 2012

Our Warranty applies to equipment manufactured by Williams Refrigeration and equipment bearing the Williams nameplate 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 incorrectly.

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.

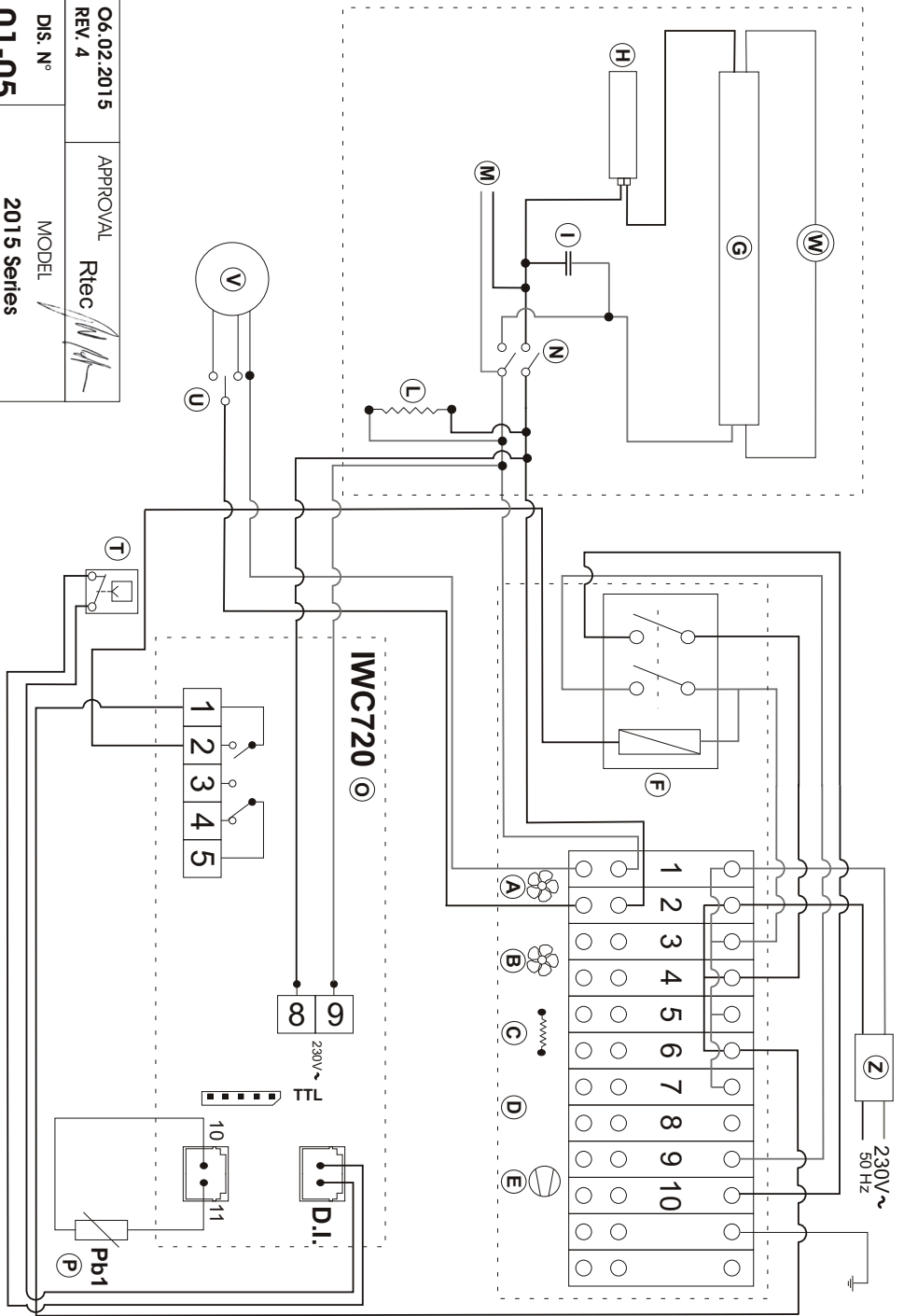
To ensure your Extended Warranty Policy remains valid, at least one maintenance / service visit per year must take place in years 2, 3, 4 and 5.

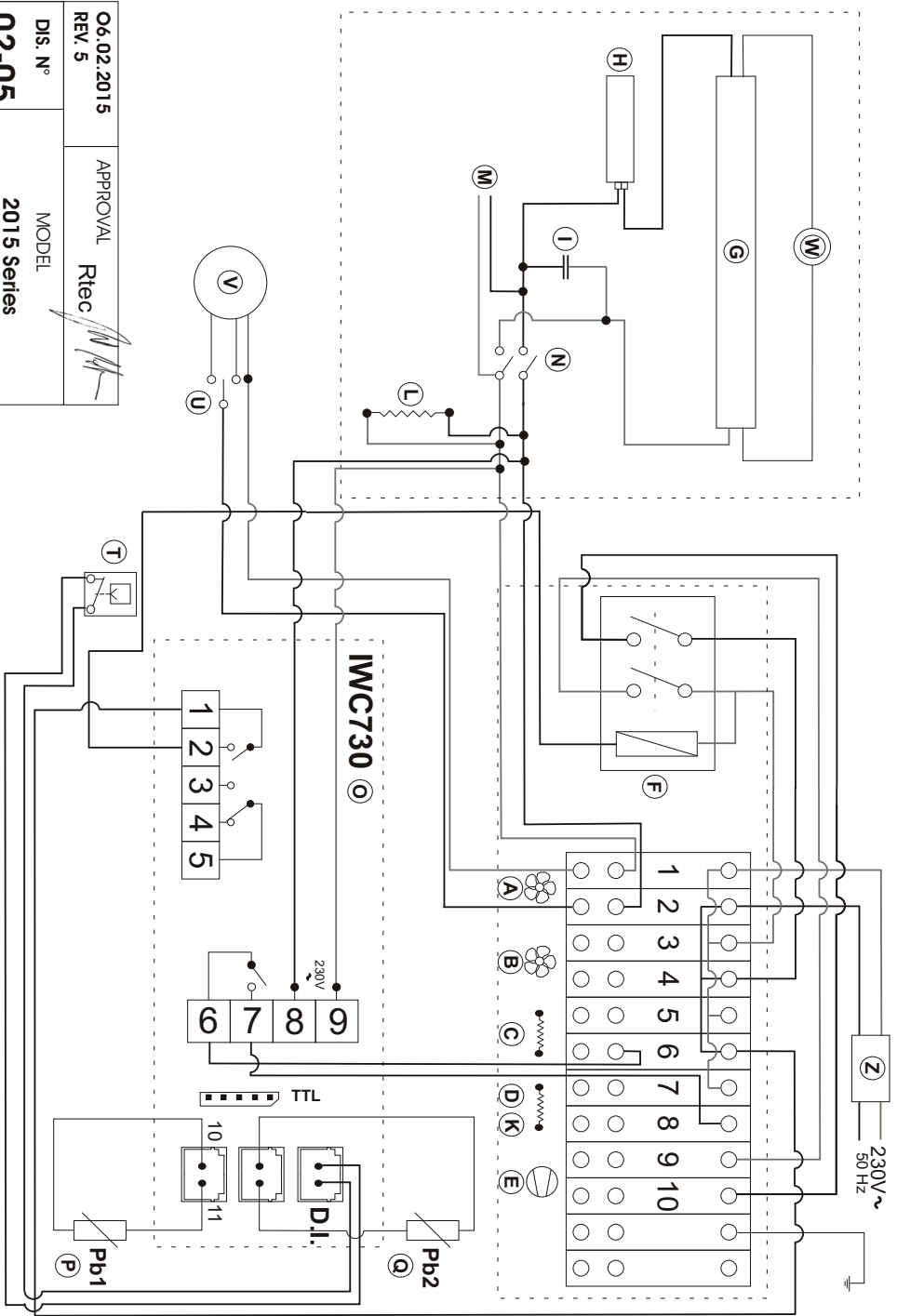
All –Inclusive Parts & Labour Warranty

An all inclusive 2 year Parts & Labour Warranty, subject to the Warrant Policy terms, is available from your Williams Dealer. Contact your dealer for further details.

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

O6.02.2015		APPROVAL	
REV. 4		Rtec	
DIS. N°		MODEL	
01-05		2015 Series	
		Defrost by time	





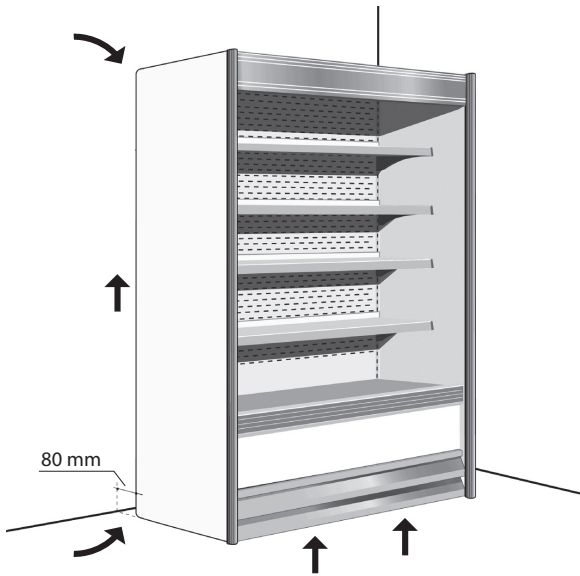
06.02.2015 APPROVAL
 REV. 5 Rtec *[Signature]*
 DIS. N° MODEL
02-05 **2015 Series**
 Electric defrost

A	VENTILATORE EVAPORA CONDENSA (VENTILATORE CONDENSATORE SE: MOD. 71 x 1, MOD. 100 scroll x 1, MOD. 120, 150, 180 scroll x 2) SELF EVAPORATING SYSTEM FAN (CONDENSER VENTILATOR IF: MOD. 71 x 1, MOD. 100 scroll x 1, MOD. 120, 150, 180 scroll x 2) VENTILATEUR DU SYSTEME D'AUTOEVAPORATION (VENTILAT. DU CONDENSEUR SI: MOD. 71 x 1, MOD. 100 scroll x 1, MOD. 120, 150, 180 scroll x 2) WASSERVERDUNSTUNGSVENTILATOR (KONDENSATOR VENTILATOR WENN: MOD. 71 x 1, MOD. 100 scroll x 1, MOD. 120, 150, 180 scroll x 2)	
B	VENTILATORI EVAPORATORE EVAPORATOR FANS VENTILATEURS DE L'EVAPORATEUR VERDAMPFER VENTILATOR	K TERMOFUSIBILE THERMAL FUSE FUSIBLE TERMIQUE THERMOSICHERUNG
C	RESISTENZA EVAPORA CONDENSA (OPTIONAL) SELF EVAPORATING SYSTEM RESISTANCE (OPTION) RESISTENCE DU SYSTEME D'AUTOEVAPORATION (OPTION) WASSERVERDUNSTUNGSWIDERSTAND (ZUBEHÖHR)	T MINI PRESSOSTATO (OPTIONAL) MINI MANOSTAT (OPTION) MINI PRESSOSTAT (OPTION) MINI DRUCKSCHALTER (ZUBEHÖHR)
D	RESISTENZA EVAPORATORE (VERSIONE MT) EVAPORATOR RESISTANCE (MT VERSION) RESISTENCE DE L'EVAPORATEUR (VERSION MT) VERDAMPFERWIDERSTAND (MT VERSION)	U SELETTORE COMANDO TAPPARELLA/TENDINA MOTORIZZATA (OPTIONAL) SHUTTER/NIGHT BLIND MOTOR CONTROL SELECTOR (OPTIONAL) SELECTEUR DE COMMANDE MOTEUR RIDEAU A LATTES/RIDEAU DE NUIT (OPTION) WAHLSTEUERUNG FÜR MOTOR VON JALOUSIE/NACHTROLLO (ZUBEHÖHR)
E	UNITA' CONDENSATRICE CONDENSING UNIT UNITE' REFRIGEREE KONDENSATIONSEINHEIT	V MOTORE TAPPARELLA/TENDINA (OPTIONAL) SHUTTER/NIGHT BLIND MOTOR (OPTION) MOTEUR DU RIDEAU A LATTES/RIDEAU DE NUIT (OPTION) MOTOR FÜR JALOUSIE/NACHTROLL (ZUBEHÖHR)
F	MINI CONTATTORE MINI CONTACTOR MINI CONTACTEUR SCHUTZ	X INTERRUTTORE GENERALE (OPTIONAL) MAIN ELECTRICAL SWITCH (OPTION) INTERRUPTEUR COUPE TOUT (OPTION) HAUPTSCHALTER (ZUBEHÖHR)
G	TUBO FLUORESCENTE * FLUORESCENT LAMP TUBE FLUORESCENT O TUBE AU NEON FLUORIZIEREDE LAMPE	Y INTERRUTTORE VENTILATORI VANO REFRIGERATO (OPTIONAL) REFRIGERATED COMPARTMENT FANS SWITCH (OPTION) INTERRUPTEUR DES VENTILATEURS DE COMPARTIMENT REFRIGERE (OPTION) SCHALTER DER VENTILATOREN VOM KÜHLRAUM (ZUBEHÖHR)
H	REATTORE * BALLAST REACTEUR REACTOR	W STARTER * STARTER STARTER STARTER
I	CONDENSATORE DI RIFASAMENTO * PHASE ADVANCING CONDENSER CONDENSEUR DE REPHASAGE O COND. DE MISE EN PHASE PHASENSCHIEBERKONDENSATOR	Z FILTRO ANTI-INTERFERENZA ELETTROMAGNETICA ELECTRO-MAGNETIC INTERFERENCE FILTER FILTRE D'INTERFERENCE ELECTROMAGNETIQUE ELEKTROMAGNETISCHE INTERFERENZFILTER
L	CAVO RISCALDANTE HEATING CABLE CABLE ECHAUFFANTE HEIZKABEL	
M	ALTRI TUBI NEON (OPTIONAL) OTHER NEON LAMPS (OPTION) AUTRES TUBES AU NEON (OPTION) ANDERE NEON LAMPEN (ZUBEHÖHR)	* NEL CASO DI ILLUMINAZIONE TUBI LED, COMPONENTE NON INSTALLATO. * IN CASE OF LED ILLUMINATION, ITEM NOT INCLUDED. * DANS LE CAS D'ECLAIRAGE LED, IL COMPOSANT NE EST PAS INCLUS. * BEI LED ROHRENBLEUCHTUNG, DIE KOMONENTE NICHT ENTHALTEN.
N	INTERRUTTORE LUCI LIGHTING SWITCH INTERRUPTEUR ECLAIRAGE LICHTSCHALTER	
O	PANNELLO ELETTRONICO ELECTRONIC PANEL PANNEAU ELECTRONIQUE ELEKTRISCHES SCHALTPANEEL	
P	SONDA TEMPERATURA AMBIENTE AMBIENT TEMPERATURE PROBE SONDE TEMPERATURE AMBIANCE FUHLER THERMOSTAT	
Q	SONDA EVAPORATORE (VERSIONE MT) EVAPORATOR PROBE (MT VERSION) SONDE DE L'EVAPORATEUR (VERSION MT) FUHLER VERDAMPFER (VERSION MT)	

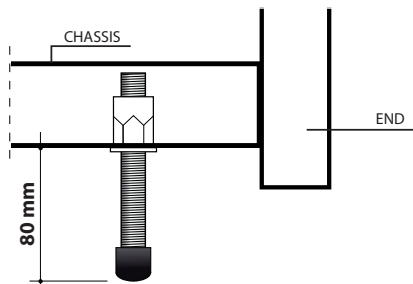
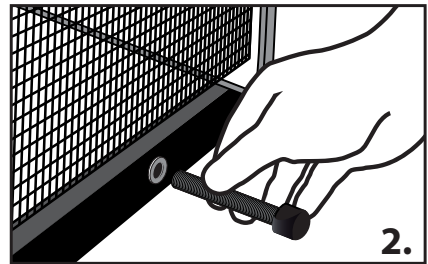
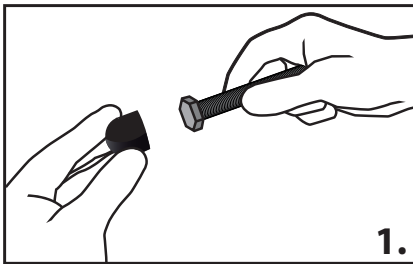
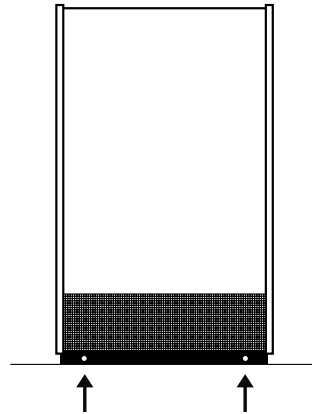


Spacers fixing

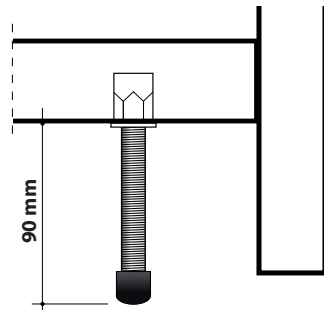
Before placing the refrigerated display cabinet be sure that the two spacers are fixed on the basement!



Condenser hot air outlet



STANDARD CABINET



ROLLER SHUTTER CABINET



WILLIAMS REFRIGERATION

Bryggen Road,
North Lynn Industrial Estate
King's Lynn, Norfolk PE30 2HZ
Sales Tel: +44 1553 817000 Fax: +44 1553 817111
Spares Tel: +44 1553 817017 Fax: +44 1553 817020
Email: info@williams-refrigeration.co.uk
Website: www.williams-refrigeration.co.uk

WILLIAMS REFRIGERATION SCOTLAND

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Email: sales@williams-scotland.co.uk

WILLIAMS REFRIGERATION CENTRAL

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Email: sales@williams-central.co.uk

WILLIAMS REFRIGERATION SOUTHERN

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Kent TN12 6BE
Tel: +44 1892 835525 Fax: +44 1892 835535
Email: sales@williams-southern.co.uk



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