

Glass Door Merchandiser Refrigerators

Service, Installation and Care Manual

Swinging Door Models

- EGM-13B
- EGM-13W
- EGM-23B
- EGM-23W
- EGM-36B
- EGM-36W
- EGM-50B
- EGM-50W
- EGM-75B
- EGM-75W

Sliding Door Models

- ESM-36B
- ESM-36W
- ESM-42B
- ESM-42W
- ESM-50B





Please read this manual completely before attempting to install or operate this equipment. Notify carrier of damage! Inspect all components immediately.



Service & Installation ManualContents & Specifications

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THESE UNITS ARE FOR A COMMERCIAL KITCHEN THAT IS NOT TO EXCEED 75 DEG F AND HAS LESS THAN 60% RELATIVE HUMIDITY. IF THESE CONDITIONS ARE NOT MET AND YOU HAVE AN ISSUE WITH YOUR UNIT IT WILL NOT BE COVERED UNDER WARRANTY.

Refrigeration units should be placed in position and left unplugged for at least 24 hours prior to start-up. This is due to the unit moving around during shipment, and the unit needing to settle prior to placing into use.



Service & Installation ManualSafety Precautions

To ensure proper use, please thoroughly study these **SAFETY PRECAUTIONS** before operating the unit.

- The purpose of the safety precautions in this manual is to ensure safe and correct use of the unit to minimize risks that could cause serious damage and injury to you or other persons. The safety precautions are divided into **WARNINGS** and **CAUTIONS**. Cases where improper handing of the unit could lead to death or serious injury are listed under the "A WARNING" heading. However, the cases listed under the "A CAUTION" heading could also lead to serious results. To ensure the safety, adhere strictly to both types of safety precautions.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged at 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The A-weighted emission sound pressure level is below 70 dB(A).
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The appliance shall be disconnected from its power source during cleaning or maintenance and when replacing parts.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

A CAUTION Improper handing of the unit could lead to serious results depending on the circumstances.

- Text set off by the exclamation mark contains information that should be strictly adhered to.
- After reading the instruction manual, store it an easily accessible place where the user(s) of this product can easily find it.



The symbol is a warning and indicates the refrigerant and insulation blowing gas are flammable.

Warning: Risk of fire / flammable materials.

- Warning Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Warning When positioning the appliance, ensure the supply cord is not trapped or damaged.
- Warning Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.
- Warning The refrigerant and insulation blowing gas are flammable. When disposing of the appliance do so only at an authorized waste disposal centre. Do not expose to flame.



Service & Installation ManualSafety Precautions

◆ PRECAUTIONS FOR INSTALLATION



WARNING



Installation should be performed only by the dealer or a qualified expert. Attempting to install the unit yourself could result in water leakage, refrigerant leakage, electrical shock, or fire.

◆ PRECAUTIONS FOR USE

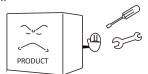


WARNING



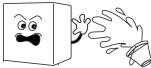
All repairs, disassembly and modifications should be performed only by qualified technicians. Attempting to perform these yourself

could result in a fire, malfunction, and injury.



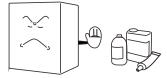


Never splash water directly onto the product or wash with water as short-circuit and electrical leakage could result.





Never put flammable or volatile substances into the unit as explosion and fire could result.





Do not damage, modify, excessively bend, strain, twist or bundle up the power cord. Also, placing heavy objects the power cord or squeezing it in a tight place could damage

it, possible resulting in electrical shock or fire.





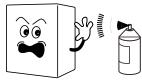
Use a dedicated wall outlet. Do not use extension cords or convenience receptacles as this could result in electrical shock, overheating and a fire.





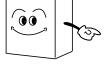
Never use flammable spray cans or leave flammable substances near the unit. Sparks from electrical switches could result

in explosion and fire.





The cooler is intended for storage and display of beverages for sale. Do not use for other purpose than intended as this could adversely affect items placed in the unit.







Never attempt to insert fingers, sticks, etc. Into the cold air suction outlet as a circulation fan is rotating at high speed inside the outlet. Injury, electrical shock and improper

operation could result.



Service & Installation Manual Safety Precautions

◆ PRECAUTIONS FOR USE



WARNING



For indoor use only. Using the unit in a location exposed to rain could result in electrical leakage and electrical shock.





Never place heavy objects or items containing water on top of the unit. Objects could fall down and cause injury and spilled water could deteriorate the insulation of electrical

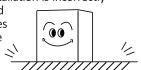
insulation of electrical components and result in electrical leakage.





Install the unit in a location where the floor is sturdy enough to support the load of the unit. If the floor is not sturdy enough or installation is incorrectly

performed, the unit could tip over and falling shelves and products could cause personal injury.





If you find gas leakage, please don't touch the appliance. Turn it off and open the doors and windows for ventilation.

Gas leakage could cause explosion, fire, and fire injury.





Store the unit in a location where it is not exposed to rain. Using a unit that has been exposed to rain could result in electrical leakage

and electrical shock.





Keep away from hot air sources cooling performance is reduced if the unit is placed near heat sources

such as hot plates and stoves and if it is exposed to direct sunlight.





Leave disassembly and disposal of the unit to qualified experts.

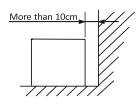




Should the unit need temporary storage make sure not to store the unit in a location where children play and take precautions so that the door cannot be completely closed. This will minimize the risk that a child becomes trapped inside the compartment.

WELL VENTILATED PLACE

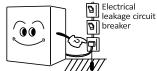
Please make sure there is more than 10cm space between UPRIGHT COOLER and the wall. If there is no space, cooling capacity can drop down.





If installation in a damp location is unavoidable, also install an electrical leakage circuit breaker. If no electrical leakage circuit breaker is installed, electrical

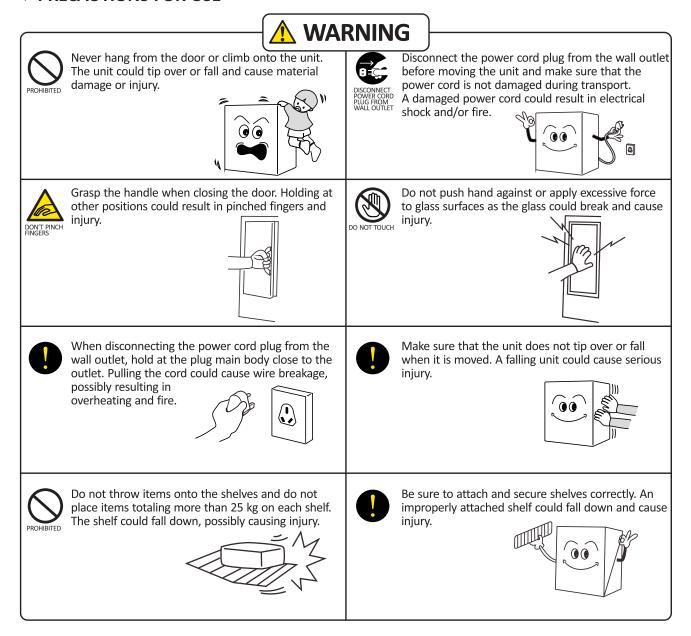
shock could result.





Service & Installation Manual Safety Precautions & How to Use

◆ PRECAUTIONS FOR USE



HOW TO USE

BEFORE USE

- Remove shipping package, tape, etc, and leave doors open. Ventilate for a while.
- The unit is cleaned before shipment. However, clean the compartment interior after delivery.
- Please insert power supply, plug into the wall outlet, single-phase to correct voltage.
- Allow the unit to operate for about 1 hour to cool the compartment before placing items in the cooler.

WAIT 5 MINUTES OR MORE BEFORE RE-STARTING

• Restarting the unit immediately after it has been turned off may cause fuses to blow and activate the circuit-breaker, the compressor may be overloaded, and/or other damage may occur.



Service & Installation Manual How to Use

TEMPERATURE ADJUSTMENT

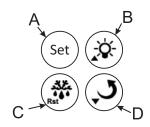


- •The electronic controller has been factory set to cool the beverages to lowest temperature approximately 32-50 Fahreenheit.
 - Should you wish to alter the temperature set point, please adopt the following procedure.
- Manually forced operation

In the status of temperature measuring and controlling, press for 3 seconds to force the switch between refrigeration, defrost, defrost dripping.

Here are the direct instructions on how to adjust the set point on the ECS-180 temperature controller:

- •Locate the set button (button A). First, press and hold that button for 3 seconds until the letters "St" will appear and release.
- •Press set (A) and release one more time to access the set point.
- •To change its value, use the "B" button to raise it and the "D" button to lower it*. When the desired set point is reached, press "set" (A) again one more time to confirm the change and allow 15 to 20 seconds until the controller saves the change and will go back to the temperature display on itself.



*:Please note that this machine has an internal temperature differential that works as a protection for the compressor. The way the differential works is that at whatever temperature the unit will be set at, the compressor will work and cool the cabinet down until it reaches the chosen set point then it will shut itself up. It will allow a differential of 4 degrees before starting its operation back.

The reason is to protect the compressor from doing short cycles (on / off) repetitively. Doing so can burn out the compressor, the same as flickering a light switch very fast, it will burn the light bulb. The compressor works exactly the same so it should be considered when adjusting the set point.

DRAIN TRAY

- Defrosting is performed automatically and drain water is collected in the drain tray.
- Water in the drain tray is evaporated automatically. In humid environments, there will be a large amount of water in the drain tray, so please throw away drain water once a day.

EFFICIENT USE

- To prevent cold air from escaping, open and close the door quickly and keep the door opened for as short a time as possible.
- Please install the unit in a place which is well-ventilated.

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Service & Installation Manual How to Use & Cleaning

SHELF HEIGHT ADJUSTMENT

- The shelf height can be adjusted.
- Arrange the shelves in accordance with the dimensions of the items to be placed in the cooler.

PLACING ITEMS IN THE SHOWCASE

This showcase employs a forced circulation of cold air system. If circulation of cold air is obstructed, the items will not be adequately refrigerated. Pay attention to the following points:

- Do not let items obstruct the cold air inlet and suction outlet.
- Place items so that they do not protrude from the shelves. The gap between the shelves and the door is used for circulation of cold air.
 - Place items evenly on all shelves.
 - Commercial refrigeration display cooler.
- This equipment is intended for the storage and display of non-potentially-hazardous bottled or canned products only.

CLEANING



To prevent any electrical shock hazards or injury by rotating circulation fan, always disconnect the power cord plug from the wall outlet before cleaning.

1 EXTERIOR AND COOLER COMPARTMENT

Wipe with a soft, dry cloth. If very soiled, wipe with a cloth that has been moistened with a detergent. Then wipe with a cloth that has been dipped in water.



Do not splash water directly onto the cooler and do not wash with water. Short-circuit and electrical shock could result.

- Clean the cooler regularly to keep it clean at all times.
- Never use polishing powder, soap powder, benzine, oil or hot water as there will damage the painting and plastic components.



2 CHECKS

To ensure the safety, perform the following checks after cleaning.

- Is the power cord plug firmly inserted into a dedicated wall outlet? Confirm that the plug is not abnormally hot.
- Check the power cord for cracks and damage. Should the slightest irregularity be observed, contact the dealer from whom you purchased this unit or our customer's service.

IN CASE OF THE FOLLOWING

1 POWER FAILURE

Keep opening and closing of the door to a minimum.

Avoid placing new items in the cooler as this will raise the temperature inside the compartment.



Service & Installation Manual

In Case of the Following & Before Requesting Service

2 WHEN NOT USED FOR A LONG PERIOD

Remove all items from the compartment and disconnect the power cord plug from the wall outlet. Clean the compartment interior and wipe away all water.

To prevent mold formation and bad smell, leave the door open to dry the compartment completely.

3 TRANSPORTATION

Disconnect the power cord plug from the wall outlet.

When moving the cooler, make sure that the feet do not damage the power cord.

Do not let the feet hit against floor steps, thresholds, etc.

4 TEMPORARY STORAGE

Affix a piece of wood, etc. Between the door and main unit to prevent complete closing of the door. Make sure not to store the unused cooler at a location where children play.

Should a child enter the compartment and the door is closed, the child may not be able to open the door from the inside.

BEFORE REQUESTING SERVICE

Please check the following items if you encounter problems with the unit. If the problem continues after taking the proper remedial actions, disconnect the power cord plug from the wall outlet. Transfer the items stored in the cooler to a box or other container. Then contact the dealer from whom you purchased this unit and be ready to provide information as listed in "REQUIRED INFORMATION" below.



To prevent any electrical shock hazards, do not disconnect the power cord plug from the wall outlet with wet hands.

No refrigeration at all	 Is the power supply interrupted? Is the power cord plug disconnected from the wall outlet? Are the shop's power fuses blown and/or the circuit breaker activated?
Inadequate refrigeration	 Is the temperature setting appropriate? Are items obstructing the cold air inlet and suction outlet? Are stored items packed too tight? Is the door open or is it opened and closed frequently? Is the condenser clogged?
Excessive noise	 Are all feet in firm contact with the floor? Is the rear panel of the cooler contacting the wall or other objects? Are other objects in contact with the cooler?
Condensation on cooler exterior	 Condensation may condense on the exterior and door during hot and humid days or depending on the place of installation. This occurs when the humidity is high and water particles in the air contact cold surfaces. This is normal. Wipe away condensation with a dry cloth.

Showcase sometimes stop running when thermostat turns off.



Service & Installation Manual Service Info & Temp Adjustment

- Nature of malfunction (as accurately as possible)
- ④ Customer's name, address, phone number

② Product number

On rating label On carton

- (3) Serial number
- J

S Year and date of purchase



This appliance contains flammable refrigerant within its sealed system and also within the insulation foam. It must be recycled by a professional, competent, authorised and regulated organisation with expertise in the handling of refrigeration appliances. For further information, please consult your local authority.

TEMPERATURE ADJUSTMENT

ECS-180 instructions

Here are the instructions to change Celsius Degrees to Fahrenheit degrees:

Step 1

To make the manipulations easier, refer to the buttons as following:

- 1. First, you need to press the "D" button for at least 10 seconds until "HO" appears. Then you need to press "D" again a couple times (to go down) until "H7" appears.
- 2. Then, press the "C" button to show "Dr". That means the change has been made from Celsius to Fahrenheit.
- 3. As soon as the setting has been changed, the "E2" alarm will appear, we will go in step 2 for the next step.

Step 2

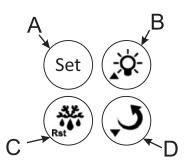
1. To cancel this alarm, press the "A" button for at least 3 seconds to enter settings ("St" will appear). At this point, press "A" again to change the value of temperature from 3 to 37 (in Fahrenheit degrees) and press set to save the change, it will bring you back to "St".

Then, press the "B" button (to go up) until you see "PO". Then press "A" and digits"00" will appear. At this step, the menu requires a password which is

Press "B" until it reaches the proper number and then press "A" to confirm, it will bring you back to "PO".

Then, to cancel the E2 alarm, press the "B" button until you see the settings

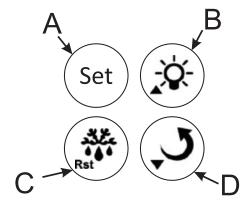






Service & Installation Manual Temperature Adjustment

ECS-180 instructions CONTINUED



"D1" then press "A" button to enter the settings and change the settings to "00" and confirm by pressing "A" and the alarm is canceled. It will bring you back do "D1". You need to go up to the settings "C1".

Here is a menu of what needs to be changed when you switch from Celsius to Fahrenheit, the rest remain the same.

- 1. Every time you get to a setting ("C1" as example), press the "A" button to access the value and use the "B" and "D" to go up (B) or down (D). After changing the value, always press "A" to save the change of values. You repeat the operation for all the settings included in the previous table and the rest is all default and doesn't need any change.
- 2. After all the changes were made, you just need to wait 10 to 15 seconds, and it will switch back to the temperature display. At that point, the changes have been made and will remain in the controller.

Reset parameter(others are default)				
Menu		Set Value	Unit	
ST	Tempreature set value(Lower limit - upper limit)	37	°F	
C1	Hysteresis value	7	°F	
C2	Compressor start Min.interval	1	Minute	
C3 C5	Compressor Initial Min.interval	2	Minutes	
C5	Tempreature set lower limit	32	°F	
C6	Tempreature set upper limit	50	°F	
d1	Evaporator sensor selection	0	/	
d4	defrost cycle	6	Hours	
d5	defrost status display	3	/	
d6	the maximum time of defrost	20	Minutes	
d10	time deplay after defrost start	2	Minutes	
cd1	condenser sensor selection	0	1	