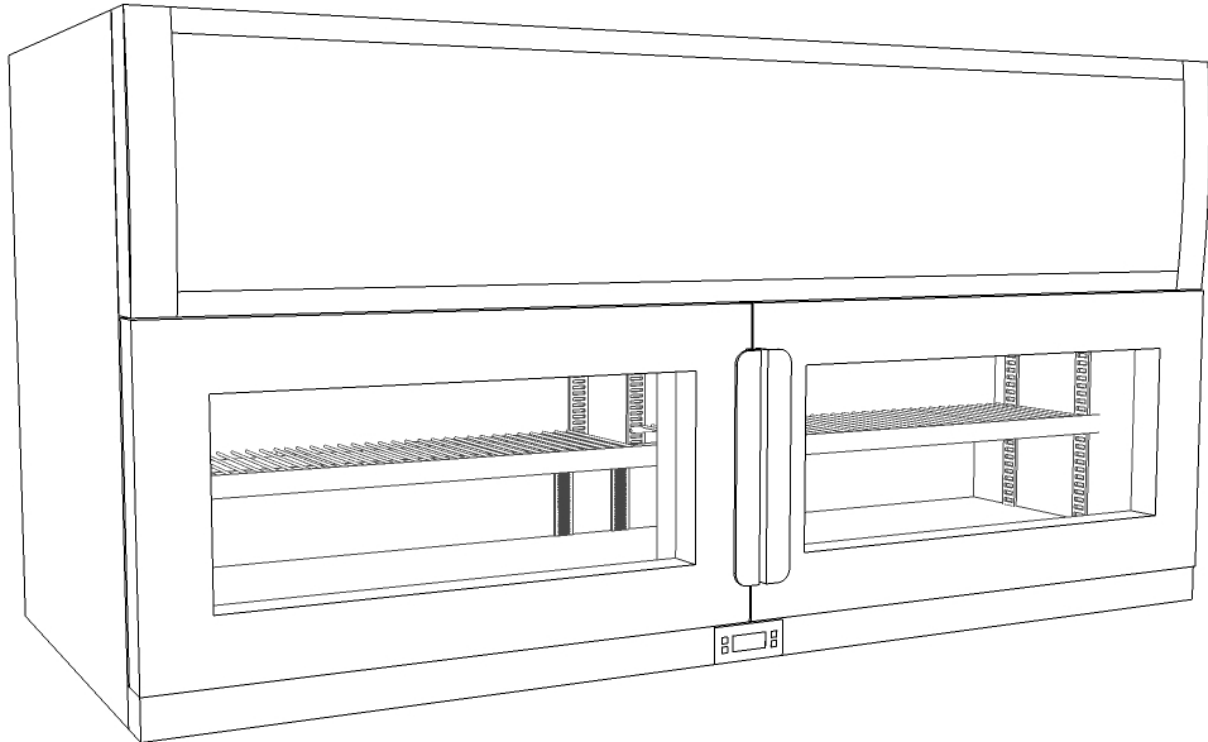


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DOUBLE DOOR FREEZER



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TECHNICAL SUPPORT: 1.888-685-8324
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Refrigerated P.O.P. Display Solutions

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SAFETY & PRECAUTIONS

Symbol Legend



CAUTION



TWO PEOPLE REQUIRED

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DANGER! - RISK OF CHILD ENTRAPMENT

PROPER DISPOSAL OF THE REFRIGERATOR

To avoid the possibility of child entrapment and suffocation, please take the following precautions before throwing away the refrigerator:

- Remove all doors from the unit.
- Leave the shelves in place so that children may not easily climb inside.
- Never allow children to operate, play with, or crawl inside the refrigerator.

REFRIGERANT DISPOSAL

All refrigeration products contain refrigerants, which under the Guidelines of Federal Law must be removed before disposal of product. It is the consumer's responsibility to comply with federal and local regulations when disposing of this product.

- Never clean refrigerator parts with flammable fluids. The fumes can create a fire hazard or explosion.
- **DO NOT** store or use gasoline or any other flammable vapors and liquids in the vicinity of this or any other refrigerator. The fumes can create a fire hazard or an explosion.

HOW TO CONNECT ELECTRICITY

- This refrigerator should be properly grounded for your safety.
- If the outlet is a standard 2-prong outlet, it is your responsibility and obligation to have it replaced with the properly grounded 3-prong wall outlet. The power cord of this refrigerator is equipped with a three-prong plug which mates with standard three prong wall outlets to minimize the possibility of electrical shock. **DO NOT**, under any circumstances, cut or remove the third ground prong from the power cord supplied.
- The cord should be secured behind the refrigerator and not left exposed or dangling to prevent accidental injury.



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HOW TO MAINTAIN YOUR MTL COOL FREEZER / REFRIGERATOR TO ACHIEVE THE MOST EFFICIENT AND SUCCESSFUL OPERATION

WARNING!

Use this appliance for its intended purpose as described in this Owner Manual.

SAFETY PRECAUTIONS

- Before using this freezer/refrigerator, it must be positioned and installed in accordance with the Installation Instructions.
- **DO NOT** allow children to climb, hang or stand on the shelves in the freezer/refrigerator. Serious damage could be caused to both the children and the unit.
- **DO NOT** touch the cold surfaces in the freezer compartment when hands are damp or wet. Skin may stick to these extremely cold surfaces.
- **DO NOT** use or store gasoline or other flammable vapours and liquids in the area of this or any other appliance.
- Keep fingers out of “pinching” areas; spaces between doors and between the doors and cabinet are necessarily small. Be careful when closing the doors.
- Before cleaning or making any repairs, unplug the freezer/refrigerator.



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- Repair or replace immediately all power cords that have become frayed or otherwise damaged.
- **DO NOT** use a cord that shows cracks or abrasion damage along its length or at either end.
- Never unplug the refrigerator by pulling the power cord.
- Always grip the plug firmly and pull straight out from the receptacle.
- **DO NOT** use an extension cord with this appliance. If the power cord is too short, have a qualified electrician or service technician install an outlet near the appliance. Use of an extension cord can negatively affect the performance of the unit. The refrigerator should always be plugged into its own individual electrical circuit (unless specified otherwise), which has a voltage rating that matches the rating plate.
- When removing the refrigerator from the wall, be careful not to roll over or damage the power cord.

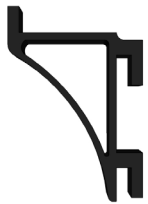
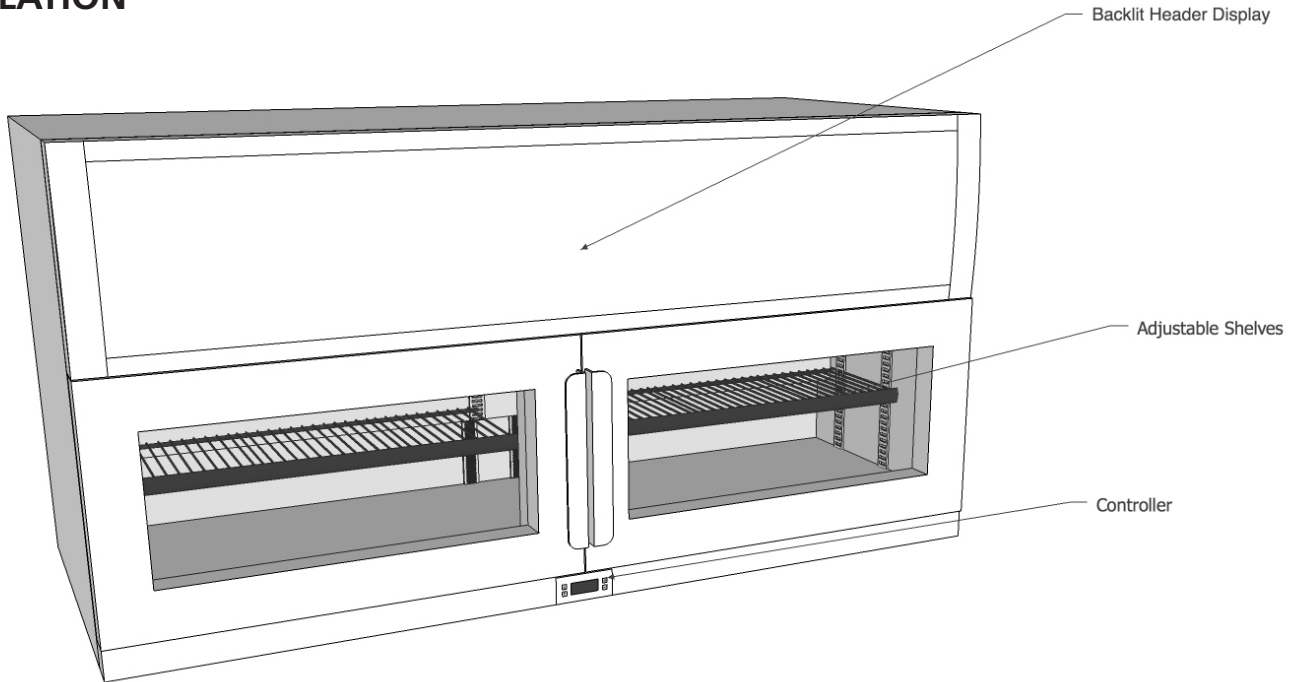


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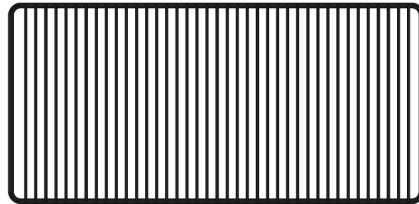
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DOUBLE DOOR FREEZER

INSTALLATION



Shelf Clips x16



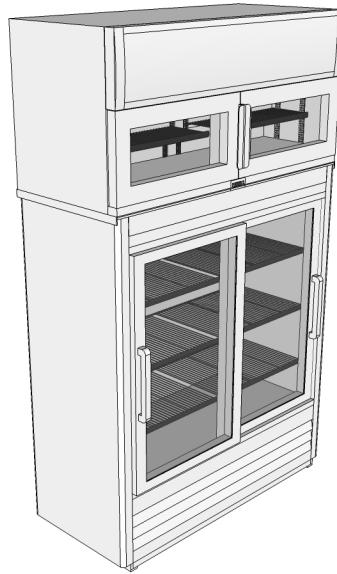
Shelves x2

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INSTALLATION

1) Pick up the DDF-90 and place it on top of the GDM41SL-54 unit.



2) Locate the Security Mounting Plate on the back of the DDF-90 freezer.

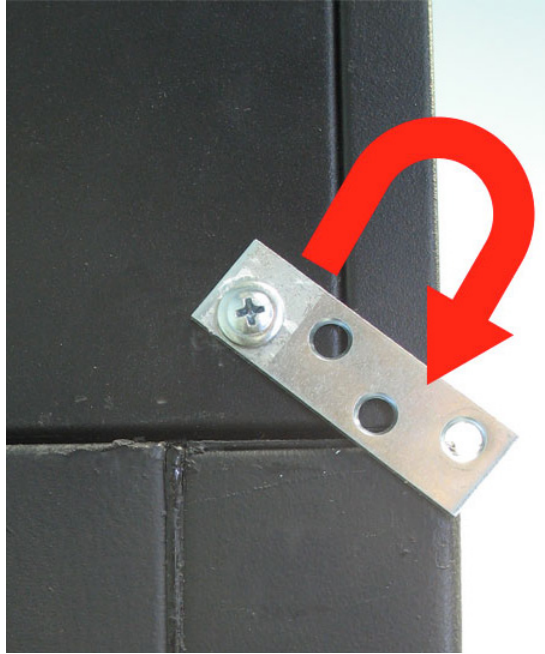


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DOUBLE DOOR FREEZER

3) Rotate the Security Mounting Plate so that half of the plate is covering the GDM41SL-54 unit.



4) Screw in the Security Mounting Plate to the GDM41SL-54 unit using the screw found in the plastic bag located inside the DDF-90 freezer.

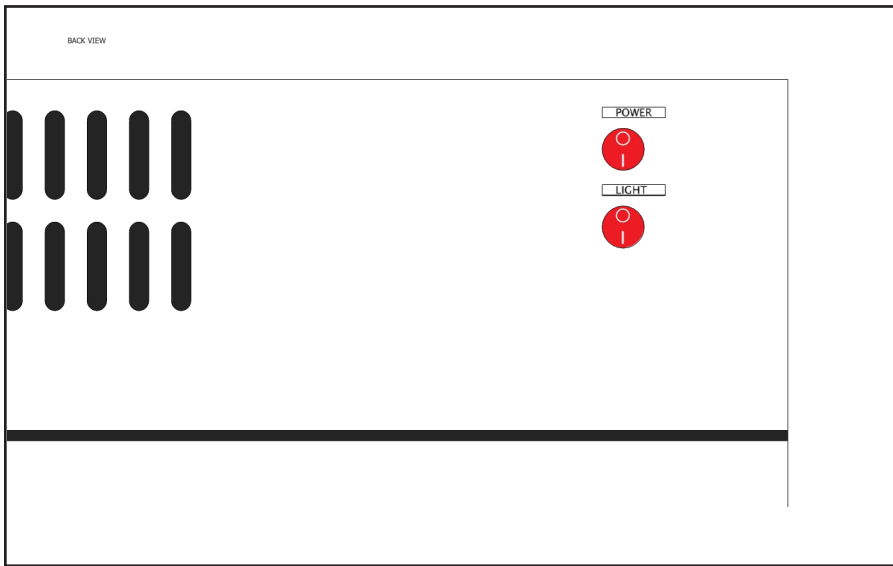


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DOUBLE DOOR FREEZER

5) Plug the unit in to the designated power outlet.

6) If the unit does not turn on, locate the POWER and LIGHT switches on the back of the unit and set them to the on position.



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DIGITAL CONTROLLER FUNCTIONS & SETTINGS

MAIN FUNCTIONS AND FEATURES

- Control modes among refrigeration, defrost and fan.
- User menu and administrator menu are separately set, convenient for operation and provide enough space for the adjustment of high-level management.
- Return difference to control temperature; switch between °C and °F; Resolution of temperature display is 0.1.
- Multi-protection and alarming mode optional.

MAIN TECHNICAL PARAMETERS

- Temperature measuring range: -50 ~ 248°F
- Temperature controlling range: -50 ~ 248°F
- Power supply: 110VAC
- Relay capacity of compressor: 30A/110VAC
- Relay capacity of fan and defrost: 30A/110VAC
- Digital display: Three-digit LED + Minus digit + Status indicator light (Set; Refrigeration; Defrost; Fan)

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1. INDICATOR LIGHTS

INDICATOR LIGHT	STATUS	MEANING
REFRIGERATION	OFF	Compressor stop
	FLASH	Compressor delay
	ON	Compressor work
	QUICK FLASH	Enforced refrigeration
DEFROST	OFF	Defrost stop
	FLASH	Defrost draining
	ON	Defrost work
	QUICK FLASH	Enforced to defrost
FAN	OFF	Fan stop
	FLASH	Fan delay
	ON	Fan work
SET	OFF	Normal work mode
	ON	Under setting mode

2. KEY-PRESS FUNCTION AND SET MODE

KEY OPERATION	FUNCTION 1 NORMAL MODE	FUNCTION 2 USER MODE	FUNCTION 3 ADMINISTRATOR MODE	REMARK
SET		Into parameters setting	Save parameter and return to set interface	
SET3s	Into user setting	Quit from setting	Quit from setting	
SET+▼10s	Into administrator setting			Press SET, hold on, and then press ▼
▼	Def. Temp. checking	Menu item checking	Parameter calibration	
▼3s	Def. Temp. checking	Menu item goes forward	Parameter calibration	
▲		Menu item checking	Parameter calibration	
▲3s	Enter/exit forced refrigeration	Menu item goes backwards	Parameter calibration	
❄3s	Into forced defrost			
▲ + ▼10s	Key-Lock switch			

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3. PARAMETER LIST

MENU	MENU ITEM	PARAMETER RANGES	DEFAULT	REMARK
USER MENU	F1	Min. temp. setting~Max. temp. setting	0.0°F	Temp. parameter setting
ADMIN MENU	F2	1°F ~ 25°F	4.0°F	Return difference setting
	F3	0 ~ 255 Min.	30	Defrost time
	F4	0 ~ 120 Hr.	6	Defrost Cycle
	F5	-50°F ~ F1	-5.0°F	Min. temp. setting
	F6	F1 ~ 230°F	5.0°F	Max. temp. setting
	F7	14°F ~ 50°F	0.0°F	Room temp. calibration
	F8	14°F ~ 50°F	0.0°F	Def. temp. calibration
	F9	0 ~ 50 Min.	4.0	Compressor delay time
	F10	0 ~ 255 Min.	45	Room probe error compressor work time
	F11	0 ~ 255 Min.	15	Room probe error compressor stop time
	F12	0: °C 1: °F	1	Temperature displayed in Celcius or Fahrenheit
	F13	0: Electric-heating 1: Thermal	1	Defrost type
	F14	-50°F ~ 58°F	50.0°F	Defrost termination temp.
	F15	0: Normal display of room temp. 1: Defrost start-up temp. 2: Display set point 3: Display DEF	1	Display mode when defrost
	F16	0 ~ 255 Min.	5	Display delay after defrost
	F17	0 ~ 255 Min.	2	Draining time after defrost
	F18	0: Immediate 1: After defrost	1	Whether to defrost or not at first start-up
	F19	0 ~ 24 Hr.	0	Defrost delay after enforced refrigeration
	F20	0: Start/stop with compressor, OFF when defrost 1: Continuous work, OFF when defrost 2: Start/stop with compressor, ON when defrost 3: Continuous work, ON when defrost	0	Fan operation mode
	F21	0 ~ 255 Min.	2	Fan delay after defrost
	F22	32°F ~ 122°F	20.0°F	Enforced start-up of the difference between fan's room temp. and evaporator's temp.
	F23	F24 ~ 230°F	25.0°F	Alarm temp. upper limit
	F24	-50°F ~ F23	-15.0°F	Alarm temp. lower limit
	F25	0 ~ 255 Min.	30	Temp. alarm delay
	F26	0 ~ 24 Hr.	3	Temp. alarm delay after electrified
	F28	0 ~ 255 Min.	0	Probe error delay
	F29	-50°F ~ 58°F	40.0°F	Fan stop temp.

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FUNCTIONS

Functions of compressor:

A. Under electric-heating defrost mode:

Start-up condition: Relay of compressor connects when meet both a) and b) or both a) and c).

- a) Compressor delay time exceeds the set delay time.
- b) Enforced refrigeration starts when Room temp. is higher than Set temp.
- c) Under non-defrost mode, Room temp. is higher than Set temp. + Return difference.

Stop condition: Relay of compressor disconnects when meet any of the following conditions.

- Room temp. is lower than Set temp.
- At start-up of defrost.
- Enforced refrigeration stops.

B. Under thermal defrost mode:

Start-up condition: Relay of compressor connects when meet both a) and b) or both a) and c) or both a) and d).

- a) Compressor delay time exceeds the set delay time.
- b) Under non-defrost mode, Room temp. is higher than Set temp. + Return difference.
- c) Enforced refrigeration starts when Room temp. is higher than Set temp.
- d) When defrost.

Stop condition: Relay of compressor disconnects when any of the following conditions are met:

- Room temp. is lower than Set temp.
- At end of defrost.
- Enforced refrigeration stops and not to start immediate defrost

Defrost Function:

Relay of defrost connects when the following conditions are met:

- Defrost delay time meets the set delay time
- Defrost temp. is lower than defrost termination temp.
- Defrost cycle ends or enforced defrost starts

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Relay of defrost disconnects when any of the following conditions are met:

- Defrost duration time runs out
- Defrost probe temp. is higher than defrost termination temp.

Fan Function:

Relay of the fan disconnects when any of the following conditions are met:

- Defrost temperature is higher than Fan stop temperature and the difference between room temp. and evaporator temp. is higher than the set difference
- Operation mode “0” Compressor starts; Defrost probe temp. is lower than Fan stop temp.; Fan delay time after defrost exceeds the set value.
- Operation mode “1” Under non-defrost mode and the defrost temp. is lower than Fan stop temp.; Fan delay time after defrost exceeds the set value.
- Operation mode “2” When compressor or defrost is working, the defrost temp. is lower than Fan stop temp.; Fan delay time after defrost exceeds the set value.
- Operation mode “3” and the defrost temp. is lower than Fan stop temp.

Relay of fan disconnects when the following conditions are met:

- The defrost temp. isn higher than the Fan stop temp.; the differnece between room temp. and the evaporator temp. is less than the set difference.
- Operation mode “0” Compressor stops or defrost starts
- Operation mode “1” Defrost starts.
- Operation mode “2” Compressor stops.

Alarm Function:

- LED blinkingly displays alarming info when room temp. exceedsd alarm temp. upper limit or lower limit and runs out of the set alarm delay time.
- LED displays “HHH” when room temp. exceeds the measuring temp. upper limit or

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probe short-circuit and runs out of probe error delay time. LED displays “LLL” when room temp. is lower than the measuring temp. lower limit or probe short-circuit and runs out of probe error delay time.

Key Lock Function:

Under normal mode, simultaneously press ▲ and ▼ keys for 10 seconds to open/close the key lock. At this time, it will display the open or close mode of the keys. Loosen the key-press, LED displays normal temperature and all parameters can be checked but can not be modified.

STC-600-S Features with Start-Up Output Delay Function:

The default delay time is 1 minute.

Modified parameters may take into effect during the next working cycle.

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WARRANTY INFORMATION

ONE YEAR PARTS AND LABOR WARRANTY:

MTL Technologies, Inc. ("MTL Cool") warrants that every new MTL Cool refrigerated display cooler, the cabinet, and all parts shall not contain any defects in material or workmanship, under normal and proper use and maintenance service as specified by MTL Cool and upon proper installation and startup in accordance with the instructions provided with each MTL Cool unit. Except as otherwise set forth herein, MTL Cool's obligation under this warranty is limited to a period of one year from the date of original shipment.

Any parts covered under this warranty that MTL Cool determines to have been defective within the one year Warranty Period is limited to the repair or replacement, including labor charges of defective parts or assemblies. The labor warranty shall include standard straight time labor charges only and reasonable travel time as determined by MTL Cool.

MTL Cool must authorize all labor. All costs not covered under warranty will be the responsibility of the original purchaser.

Our obligation under this warranty shall be limited to repairing or replacing F.O.B. factory any of such products, which proves thus defective which our examination shall disclose to our satisfaction to be defective.

- Any part returned to the company under the terms of this warranty must be accompanied by a record of the cabinet model, the MTL Cool serial number located on the back of the unit, and a return authorization number, and such return shall be on the basis of TRANSPORTATION CHARGES PREPAID BY MTL Cool.
- Improper operation due to low or high voltage conditions, inadequate wiring, and accidental damage are not manufacturing defects and are strictly the responsibility of the purchaser.

NO CLAIMS CAN BE MADE AGAINST THIS WARRANTY FOR LOSS OF PRODUCT

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The term “original purchaser” as used herein shall be deemed to mean that person, firm, association or corporation for whom the Refrigeration Unit referred to herein is originally purchased. These warranties are in lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other obligation or liability in connection with the sale of said refrigeration units or any part thereof. This warranty shall not be transferred and shall be honored only in so far as to the original purchaser.

WARRANTY CLAIMS

All claims for labor or parts must be made directly through MTL Cool.

All claims should include: model number of the unit, the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect.

In case of a warranty claim relating to compressors, the compressor model tag must be returned to MTL Cool along with the above listed information.

TRANSPORTATION CLAIMS

In the event parts need to be sent back to MTL Cool, MTL Cool will accept parts under this warranty on the basis of transportation charges prepaid by MTL Cool.

WHAT IS NOT COVERED BY THIS WARRANTY

Except as otherwise set forth herein, MTL Cool’s sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

NO CONSEQUENTIAL DAMAGES

MTL Cool is not responsible for economic loss, profit loss, or special, indirect, or consequential damages, including without limitation, losses or damages arising from food or product spoilage claims whether or not on account of refrigeration failure.

WARRANTY IS NOT TRANSFERABLE

This warranty is not assignable and applies only in favor of the original purchaser / user to whom delivered. Any unauthorized assignment or transfer shall void all warranties, expressed or implied, including all warrant of merchantability or fitness for a particular purpose.

IMPROPER USAGE

MTL Cool assumes no liability for parts or labor coverage for component failure or other damages resulting from improper usage or installation, moving to another location, or failure to clean and/or

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maintain product as set forth in the warranty packet provided with the unit.

ALTERATION, NEGLIGENCE, ABUSE, MISUSE, ACCIDENT, DAMAGES DURING TRANSIT, INSTALLATION, MOVING TO ANOTHER LOCATION, FIRE, FLOOD, OR ACTS OF GOD
MTL Cool is not responsible for the repair or replacement of any parts that MTL Cool determines have been caused after the date of purchase by alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire flood, or act of God.

IMPROPER ELECTRICAL CONNECTIONS

MTL Cool is not responsible for the repair or replacement of failed or damaged components resulting from electrical power failure, the use of extension cords, low or high voltage, or voltage drops to the unit.

ITEMS THE WARRANTOR WILL NOT PAY FOR

- Service calls to correct the installation of your appliance, to instruct you how to use your appliance, to replace or repair fuses or to correct wiring or plumbing.
- Service calls to repair or replace appliance light bulbs or broken shelves. Consumable parts (such as filters) are excluded from warranty coverage.
- Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation not in accordance with electrical or plumbing codes, or use of products not approved by warrantor.
- Replacement parts or repair labor costs for units operated outside the U.S. or Canada.
- Repairs to parts or systems resulting from unauthorized modifications made to the display cooler.
- Expenses for travel and transportation for product service in remote locations.
- The removal and reinstallation of your display cooler if it is installed in an inaccessible location or is not installed in accordance with published installation instructions.

NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE: THERE ARE NO OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, EXCEPT THE one YEAR PARTS & LABOR WARRANTY AS DESCRIBED ABOVE. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTY AND MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE

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NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

OUTSIDE U.S.

This warranty does not apply to any warranty claims made on products sold or used outside of the United States and Canada.

LIMITATION OF LIABILITY

MTL Cool or their affiliates shall not be liable for any indirect, incidental, special or consequential damages, or losses of a commercial nature arising out of malfunctioning equipment or its parts or components thereof, as a result of defects in material or workmanship.

THE ORIGINAL OWNER'S SOLE AND EXCLUSIVE REMEDY AND MTL COOL'S SOLE AND EXCLUSIVE LIABILITY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF PARTS OR COMPONENTS CONTAINED IN THE EQUIPMENT IDENTIFIED ABOVE WHICH UNDER NORMAL USE AND SERVICE MALFUNCTION AS A RESULT OF DEFECTS IN MATERIAL OR WORKMANSHIP, SUBJECT TO THE APPLICABLE PROVISIONS AND LIMITATIONS STATED ABOVE.