

# **MIB** MASTER-BILT<sup>®</sup> *Refrigeration Solutions*

## **Horizontal Freezers**



<b>MSC30</b>	<b>MSF30</b>
<b>MSC41</b>	<b>MSF41</b>
<b>MSC52</b>	<b>MSF52</b>
<b>MSC70</b>	<b>MSF70</b>

## **Installation & Operations Manual**

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## **INTRODUCTION**

Thank you for purchasing a Master-Bilt cabinet. This manual contains important instructions for installing, using and servicing a **MSC/MSF** case. A parts list is included in with this manual. Read all these documents carefully before installing or servicing your equipment.

## **STORE CONDITIONS**

The **MSC/MSF** case are designed to operate in the controlled environment of an air-conditioned store. The store temperature should be at or below 75°F and a relative humidity of 55% or less. At higher temperature or humidity conditions, the performance of these cases may be affected and the capacity diminished. It is not uncommon in a newly constructed store for the temperature and humidity to be above design conditions. These excessive conditions may produce sweating in the case until the store is operational and the ambient environment is more desirable.

## **SAFETY INSTRUCTIONS**

### **General Recommendations**



This symbol is the safety-alert symbol. When you see this symbol on your cabinet or in this manual, be alert to the potential for personal injury or damage to your equipment.

- **Read this manual before installing your cabinet. Keep the manual and refer to it before doing any service on the equipment. Failure to do so could result in personal injury or damage to the cabinet.**
- **Improper or faulty hook-up of electrical components of the refrigeration units can result in severe injury or death.**
- **All electrical wiring hook-ups must be done in accordance with all applicable local, regional or national standards.**
- **Installation and service of the refrigeration and electrical components of the cabinet must be performed by a refrigeration mechanic and/or a licensed electrician.**

The portions of this manual covering refrigeration and electrical components contain technical instructions intended only for persons qualified to perform refrigeration and electrical work.

This manual cannot cover every installation, use or service situation. If you need additional information have the serial number at hand and call or write us:

Customer Service Department  
Master-Bilt Products  
Highway 15 North  
New Albany, MS 38652  
Phone (800) 684-8988  
Fax (800) 684-8988

## General Recommendations

- When unpacking avoid tipping unit more than 45 degrees to prevent contamination of compressor oil cooling system.
- Do not expose the equipment to heat sources such as stoves, ovens, green houses, hot walls and solar radiation.
- The equipment must be installed in a space with good air circulation and ventilation to maintain the performance of the freezer.
- Not recommended to installation in areas with high relative humidity, for example, a laundry.
- Should be kept a minimum distance of 4 inches from the side and rear walls. If the equipment is covered, you must also observe a distance of 4 inches at the top. The freezer should be perfectly level to prevent damage to the refrigeration unit.
- The freezer may not be installed in narrow corridors, only secure locations with easy access.



**KNOWING YOUR EQUIPMENT**

- 1. BASKETS
- 2. THERMOSTAT
- 3. AIR VENTS
- 4. CASTERS W/BRAKES
- 5. SLIDING BLASS LIDS
- 6. CASTER
- 7. CABINET



**Curved Freezer**

- MSC30
- MSC41
- MSC52
- MSC70



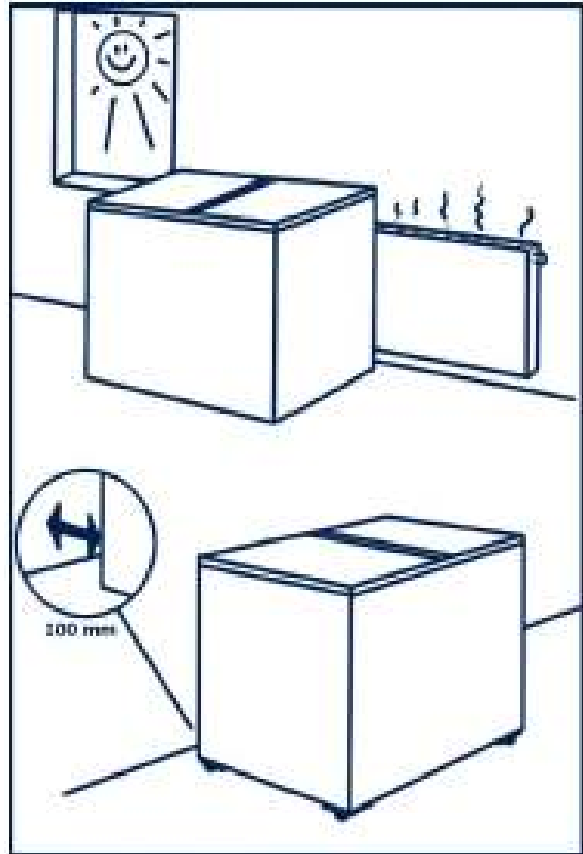
**Flat Freezer**

- MSF30
- MSF41
- MSF52
- MSF70



## INSTALLATION

- When freezer is received check carefully that it is not damaged. You should notify you dealer about any damage immediatel after delivery.
- The freezer must be installed in a dry room that is at a normal temperature and has adequate vetilation. Place the freezer so it will not at any time obstruct the circulation of air around it (allow at least 4 inches of free space)
- Do not place the freezer where it is exposed to direct sunlight. It must be installed on a level surface, and separated from any hot objects.
- If the freezer is stored or transported while cold, do not restart until the compressor has reached a temperature of at least +41°F. clean the freezer before turning it back on.
- If the label on the freezer indicates class 04, do not install in a place where the ambient temperature exceeds +86°F.
- Freezers class 4+ can withstand ambinet temperatures of +95°F, and Class 04 up to 104°F.
- While inoperation make sure sliding lids are always fully closed so that cold air cannot escape and the appropriate temperature is always maintained.



## **ELECTRICAL CONNECTION**

This appliance complies with EU requirements for radio electrical suppression in accordance with directive Standard 82/499/CEE.

The freezer should be plugged into an outlet that has the correct voltage and frequency.

These data are specified on the label located on the back of the freezer.

The standard voltage in the US is 115V/60Hz allowed voltage variation +/- 10%. The above variations may cause damage to the freezer and if so, the factory warranty would be invalid.

Protection measures must be taken in addition to using the freezer according to applicable electrical codes, even in the case of replacement of an existing freezer that had not been worth the extra protection needed. The aim of this additional protection is to protect users from dangerous electrical shock in case of failures.



- To protect your electrical, use a load center of 25Amps at 115Volts.
- If not possible to obtain the nominal voltage indicated by a variation of +/- 10% (power supply instability), install a voltage regulator (1500VA).
- Connect the equipment into a dedicated outlet.
- The installation must be made only if the outlet has the nominal output voltage with a tolerance +/- 10%. The caliber of the installation cables must follow the below table:

Caliber (mm <sup>2</sup> )	Distance	
	115V	220V
2,5 (12 AWG)	-	UP 91 METERS
4,0 (10 AWG)	UP 19 METERS	92 A 145 METERS
6,0 (8 AWG)	20 A 30 METERS	146 A 218 METERS
10,0 (6 AWG)	31 A 48 METERS	-

**\* The replacement of power cords should be performed by an authorized service provider\***

## **OPERATION**

Freezer temperature is manually controlled by the adjustable thermostat.

### **Adjusting the Thermostat**

- Turn the piece on the bottom of the protector vent to the left. Push up the latches located under the vent.
- Pull the bottom rack out and then down to remove. The thermostat is on the top left in the compressor compartment. To lower the temperature, turn the thermostat to the right (clockwise).
- The thermostat is factory set so that the temperature in the warmest area of the freezer does not exceed 0°F.

The ambient temperature of the room where the freezer is located has a great influence on the temperature inside the freezer. For this reason the unit should not be exposed to direct sunlight or installed near hot surfaces.



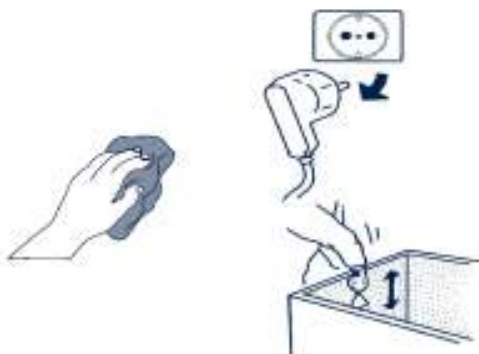
## **STORING FOOD**

- The freezer is intended solely for storage so it is not suitable for the initial freezing of food.
- This means putting only already frozen products into the freezer.
- Remember that you must load the freezer up to the load line or, if the load line is not visible, up to 4 inches below the bottom glass lid. This is to ensure a product temperature of at least 0° F.
- The temperature of the freezer depends mainly on environmental conditions. It is impossible to provide an exact setting for the thermostat, so you should adjust to the prevailing conditions.

## **DEFROST THE EQUIPMENT**

The formation of ice inside the freezer with the passage of time is a natural process, but when the ice reaches a thickness of about 1/4 to 3/8 in, it is necessary to defrost the freezer.

- Put the items stored in the freezer in a cool place or wrap with an insulating material.
- The freezer must be unplugged from the outlet.
- Keep the lid open or remove sliding lids and place them on the floor with care.
- Remove the ice on the walls of the freezer with a plastic or wooden utensil (never metal).
- The defrost process can be accelerated if you pour hot water in the freezer.
- Do not use sharp or pointed tools. After defrosting, clean the freezer. Once clean, dry thoroughly.



## MAINTENANCE

Consider the following recommendations when cleaning the freezer:

- Put the items stored in the freezer in a cool place or wrap with an insulating material.
- The freezer must be unplugged from the outlet.
- Keep the lids open or remove lids and place them on the floor with care.
- Clean the freezer with warm water and mild detergent.
- Do not use detergents containing bleach.
- Do not use sharp or pointed tools. Wipe the top of the freezer the same way as the inside.
- If the freezer includes a condenser and a fan in the bottom, it may accumulate dirt and dust in the cooling element.
- To clean, disconnect the power, remove the vent, located under the condenser and vacuum the cooling element using a soft brush.



## **DISPOSAL OF EQUIPMENT**

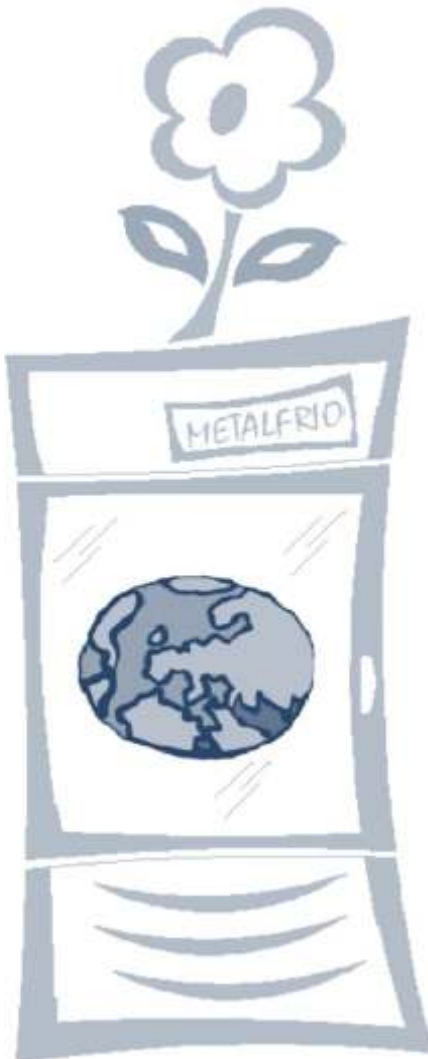
The owner of the freezer has a responsibility to dispose of it under all applicable rules.

When you dispose of a freezer, you must act safely and friendly to the environment.

Consider the applicable rules on waste treatment. There may be requirements and enforceable regulations.

You can get information about how to dispose of the unit from:

- Your dealer.
- State and local authorities
- Treatment of electrical and electronic products at the end of their life.



## **COMMITMENT TO THE ENVIRONMENT**

Metalfrío Solutions designs and manufactures refrigeration equipment with a strong commitment to the environment.

### **Important features:**

- Foam insulation that will not harm the ozone layer.
- Ecological refrigerant gas R134a or R404A according your model (see the compressor label) which do not damage the ozone layer.
- Lids made of tempered glass, low-e to avoid loss of cold air generated inside the unit reducing power consumption.

## **SPECIAL CONSIDERATIONS**

The information in this user manual is correct at the time of printing.

However due to our program of continuous product development, we reserve the right to make technical amendments to the freezer models mentioned in this manual. Naturally we will endeavor to keep the user manual constantly updated.

If in doubt about the proper use of the freezer you should contact your dealer who can provide additional assistance.

## **GUARANTEE**

Product misuse voids all warranties.

Misuse means using the product for a purpose other than originally intended, the failure to follow the instructions in this manual and transportation of the product in other than the original packaging.

In case any alteration is made on the freezer by unauthorized personnel, the manufacturer declines all responsibility in respect to damage or injury caused.

It is in your best interest to always contact the manufacturer for authorized personnel to carry out any alteration, repair or inspection.

The manufacturer reserves the right to make any changes in specifications without notice and without obligation as to the availability of spare parts.

## TROUBLESHOOTING

Read below before contacting a service technician:

Problem	Inspections	Possible causes	Procedures
Freezer not working	Turned off.	No power or switch off.	Confirm that the switch is on. Check for blown fuses or breakers not operating. If the switch is on and breakers are in order, if possible, transfer food to another freezer.
	Electric line.	No power.	Check fuses. Speak to an electrician.
High temperature	Thermostat knob.	Unintentional movement of knob.	Adjust the cooling level by turning clockwise for colder temperatures.
	Check frost build up.	Frost build up too thick.	Remove product, disconnect unit to thaw and perform freezer maintenance.
	Even with infrequent lid openings the unit does not reach the appropriate temperature.	Improper installation.	See item Installation.
Noisy freezer	The refrigerator is too noisy even when in operation for some time.	Improper installation.	See item Installation.
	After a period of down time the freezer makes a noise while re-starting.	This is a normal situation if the freezer was not used for some time.	