



Instruction Manual

Heated Display Cases

Models: HFT



124 Norfinch Dr. Toronto, ON. M3N 1X1
Tel : 416-663-3051 Fax : 416-663-5793
Toll Free : 1-888-408-8819

 **IGLOO**
REFRIGERATION LTD.

Contents

Contents	2
1 UNLOADING	3
2 PROPERTIES OF THE UNIT.....	3
2.1. Purpose	3
2.2. Description of the unit.....	3
2.3. Technical data.....	5
3. PREPARING THE DEVICE FOR START UP	5
3.1. Installation requirements	5
3.2. Unit location	6
3.3. Connection and start-up.....	6
4. UNIT START UP	8
4.1 Water level in bain-marie tank	8
4.2. Temperature regulation	9
5. MAINTENANCE	9
5.1 Cleaning and maintenance	10
6. SERVICE.....	11
6.1. Faults identification and repair	11
6.2 Service.....	11

List of Figures

Figure 1 “HFT” overview	4
Figure 2 Layout of cross-bars under containers.....	4
Figure 3 Layout of containers	5
Figure 4 Permanent connection	6
Figure 5 Caster wheels.....	6
Figure 6 Assembly of glass elements and aluminum lamp	7
Figure 7 Control panel	7
Figure 8 Bain-marie tank.....	9
Figure 9 Front glass disassembly	10

List of Tables

Table 1 Cross-bars under containers.....	4
Table 2 Technical data	5

1 UNLOADING

The unit should be transported in vertical position, and it should be properly secured and packed. The manufacturer ships the equipment on a skid secured with cardboard angle sections and foil.

2 PROPERTIES OF THE UNIT

2.1. Purpose

“HFT” display cases are used to display and short-lasting storage of previously prepared hot dishes in containers before serving them. These units constitute basic elements of equipment in mass feeding facilities. Scope of water temperature regulation in tank chamber ranges between +30°C/+90°C.

2.2. Description of the unit

“HFT” is a water bain-marie. Containers are placed over the water bath heated with electrical heaters placed directly in bain-marie tank. The display case is equipped with mechanical temperature regulator, fluid level regulator and front glass hot air inlet. Depending on its purpose, the display cabinet is manufactured in stationary and moving version. Our equipment is manufactured according to modern technologies and all have certificates required by law.

The description in this box signifies important information for user security and for proper operation of the device.

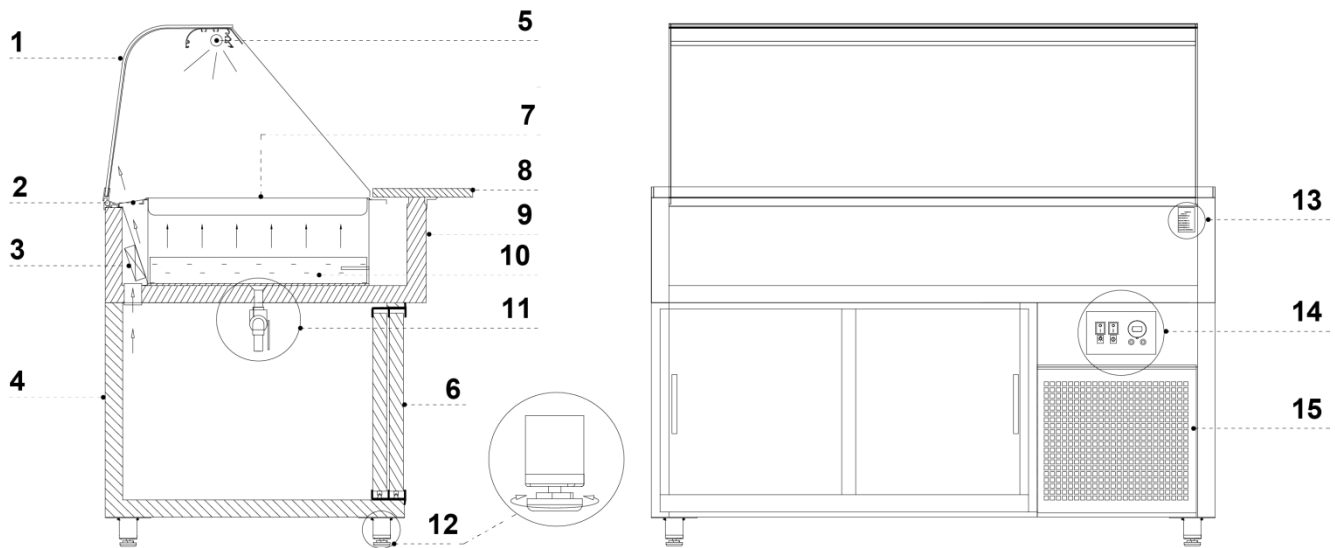


Figure 1 "HFT" overview

- 1 – Curved front glass
- 2 – Front glass hot air inlet
- 3 – Ventilator
- 4 – Basis
- 5 – LED lamp
- 6 – Lifted or sliding reservoir doors
- 7 – Containers
- 8 – Working top made of stainless steel - insulated
- 9 – Body of the unit
- 10 – Lower part of bain-marie tank filled with water
- 11 – Water outlet ball valve
- 12 – Leveling legs
- 13 – Serial plate
- 14 – Control panel
- 15 – Air louver

Figure 2 Layout of cross-bars under containers

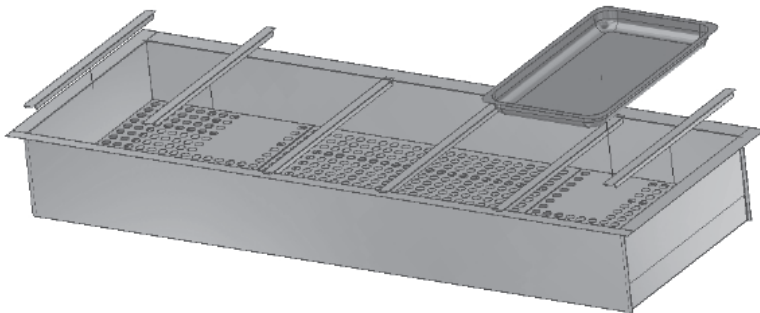
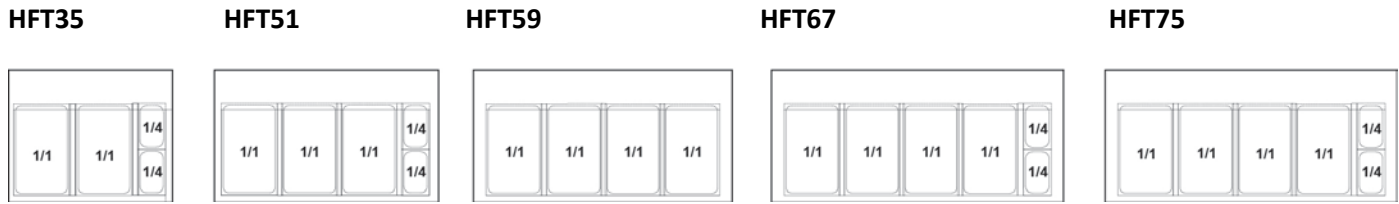


Table 1 Cross-bars under containers

Model	HFT35	HFT51	HFT59	HFT67	HFT75
Number of cross-bars	2	3	3	4	4

Figure 3 Layout of containers



2.3. Technical data

Table 2 Technical data

Model	Voltage [V/Hz/Ph]	Rated Current [A]	Optimal water volume [l]	Weight [lbs/kg]
HFT35	115/220/60/1	13 (max.fuse:15)	26	154/70
HFT51	115/220/60/1	13 (max.fuse:15)	36	176/80
HFT59	115/220/60/1	13 (max.fuse:15)	42	198/90
HFT67	115/220/60/1	13 (max.fuse:15)	48	231/105
HFT75	115/220/60/1	20 (max.fuse:30)	-	-

3. PREPARING THE DEVICE FOR START UP

The unit must be properly installed and located in accordance with the installation instructions before it is used.

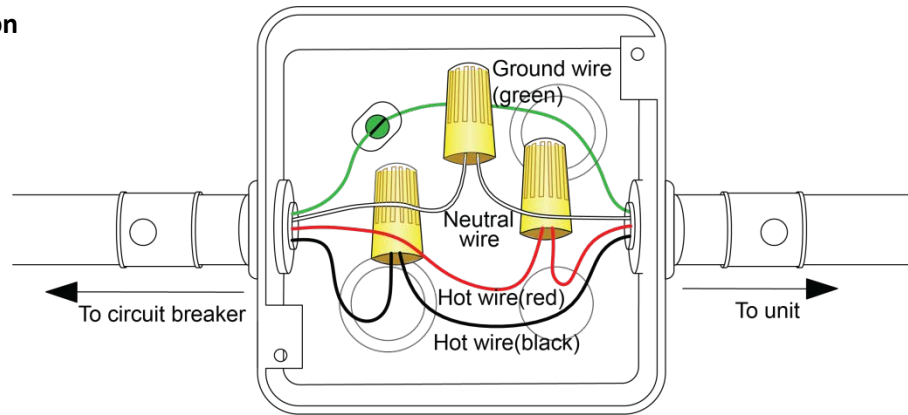
3.1. Installation requirements

- Always use a dedicated circuit with the amperage stated on the unit.
- Do not overload the circuit.
- Do not use extension cords.
- Never use adapters.
- Never plug in more than one unit per electric circuit.
- If in doubt, call an electrician.

IGLOO will not warranty any equipment that is connected to an extension cord or adapter plug.

The equipment may be turned on after confirmation of the fire protection efficiency with results of measures performed according to binding regulations!

Figure 4 Permanent connection

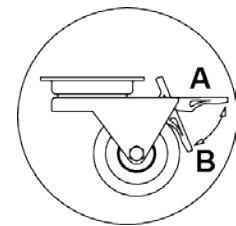


3.2. Unit location

- Install the unit on an even and hard base. Then level the unit with the levelling legs. For mobile versions, use wheel brake to immobilize the unit during operation. (Figure 5)

Figure 5 Caster wheels

- A – Moving position
- B – Brake



- To ensure proper operation the unit must be leveled from front to back and left to right with the leveling legs.
- Unit may malfunction if improperly leveled.
- Be sure there is sufficient ventilation around the entire unit
- Select a location away from heat and moisture generating equipment.
- Avoid installation in a high ambient or humid location.
- Humidity may cause rust, condensation around the glass or stainless and decrease the efficiency of the unit.

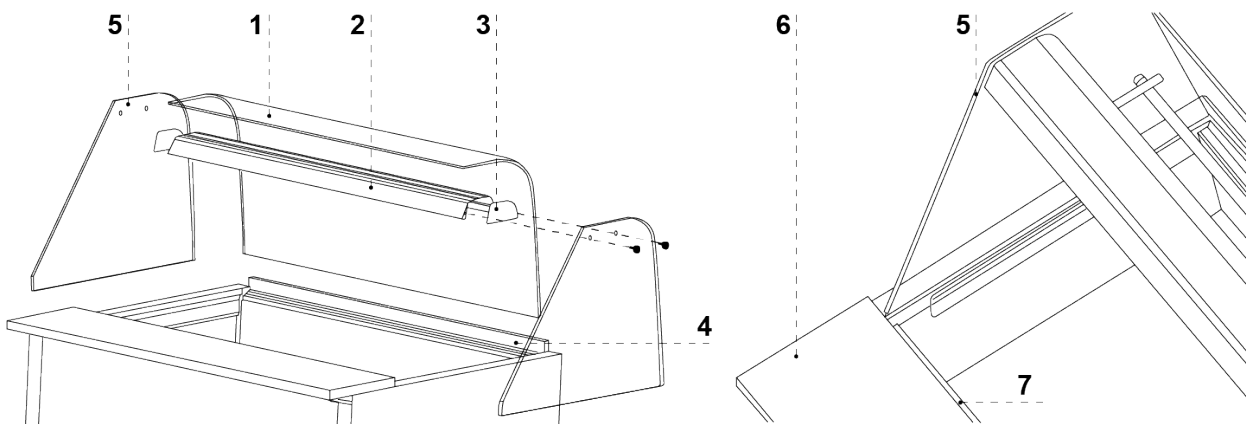
3.3. Connection and start-up

- Remove the protection foil from the elements of the unit (e.g. from the inside of the unit and working top)
- To securely transport the equipment, the unit may be shipped partially disassembled. If the user received the unit partially disassembled, perform the following operations:
 1. Mount glass sides (Figure 6/8)
 2. Mount aluminum lamp and light on glass sides (Figure 6/2)
 3. Mount front glass, basing it on the lamp and glass sides (Figure 6/1)
- Check whether the water outflow ball valve is closed (Figure 1/11)
- Fill bain-marie tank with proper amount of clean water (Figure 7/2)
- Place heater screens in bain-marie tank (Figure 8/1)
- Place cross-bars under containers on the bain-marie tank (Figure 2)
- Place empty containers in the chamber according to (Figure 3)
- Place the plug of the connecting cable directly in plug-in socket (it is forbidden to connect the device by means of extension cords or dividers!)
- Turn on the main switch (Figure 7/1) which activates the electric heaters of bain-marie tank
- Set the temperature on thermostat panel. (Figure 7/3)
- Turn on the light switch. (Figure 7/2)

- The first cleaning of the equipment should be done right after unpacking, and before turning the unit on. The unit should be cleaned with warm water at a temperature not exceeding 40°C with a neutral detergent. For washing and cleaning the equipment it is prohibited to use products containing chlorine and sodium varieties, which destroy the protective layer and components of the equipment! Any residue of adhesives or silicone on metal elements should be removed only with extraction naphtha (not applicable to items made of plastic!). Do not use other organic solvents.

When cleaning the unit, do not use water jet. The unit should be cleaned with a moist cloth.

Figure 6 Assembly of glass elements and aluminum lamp

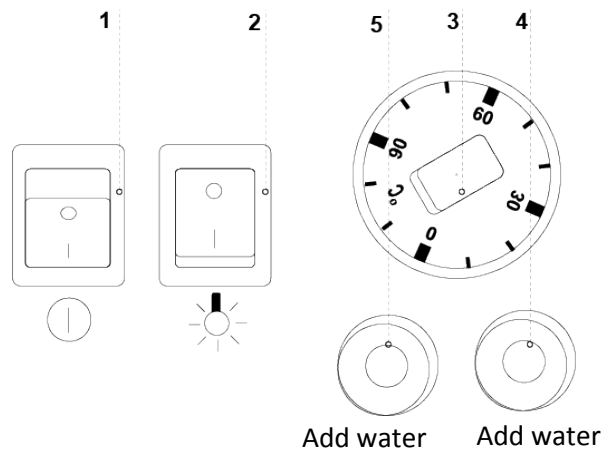


- 1. Curved front glass
- 2. Aluminum lamp
- 3. Aluminum lamp end panel
- 4. Upper aluminum profile (lift guide)

- 5. Glass side panel
- 6. Working countertop
- 7. Night screen guide

Figure 7 Control panel

- 1 – Main switch (turns on/off bain-marie heaters)
- 2 – Lighting switch
- 3 – Temperature regulator knob
- 4 – Green diode – signals low water level
- 5 – Red diode – signals very low water level



4. UNIT START UP

Temperature of the heated display space may vary. It depends on numerous factors, such as amount and temperature of products placed in the device and temperature of the surroundings. The equipment should be placed in a dry and well ventilated place.

Remarks and indications

- ***Before placing hot products in the display case, an empty display case should operate until the desired working temperature shall be obtained***
- ***Do not block any ventilation holes, as this could hinder the front glass hot air inlet (Figure 1/2)***
- ***Do not place cold products in the unit***

4.1 Water level in bain-marie tank

Before connecting water to the bain-marie it is essential to check the closure of ball valve located below the display case body (Figure 1/11) and fill the tank with proper amount of clean water. We pour the water directly into the bain-marie tank (ex. With rubber hose) to avoid flooding the electric part!

To ensure proper operation of the bain-marie, it is essential to complete the water in the tank, to ensure constant immersion of water level sensors. The level of poured cannot be too high, as this can prolong the water heating time.

Apart from the above, the water may not reach the proper, high temperature, and heaters may work continuously, which will cause greater power consumption and quicker wear and tear of the heaters.

To ensure minimal electric energy consumption, it is essential to:

- Add water of highest possible temperature in order to shorten the actuation time
- When the unit is operating, please cover the bain-marie tank with containers in order to decrease water evaporation and shorten the water heating time

Bain-marie is equipped with SPW-4 water level regulator used to control and manage tank water level. This regulator is equipped with sound and light signaling (Figure 8/4, 5) illustrating bain-marie operating condition.

Green diode – signals low water level, the heating function is still active – pour the water into the tank, until the diode will be off.

Red diode – signals very low water level in the tank, the heating function is still active (until sound signaling will be activated) – it is absolutely necessary to pour the water until the red diode, and then the green diode will be off.

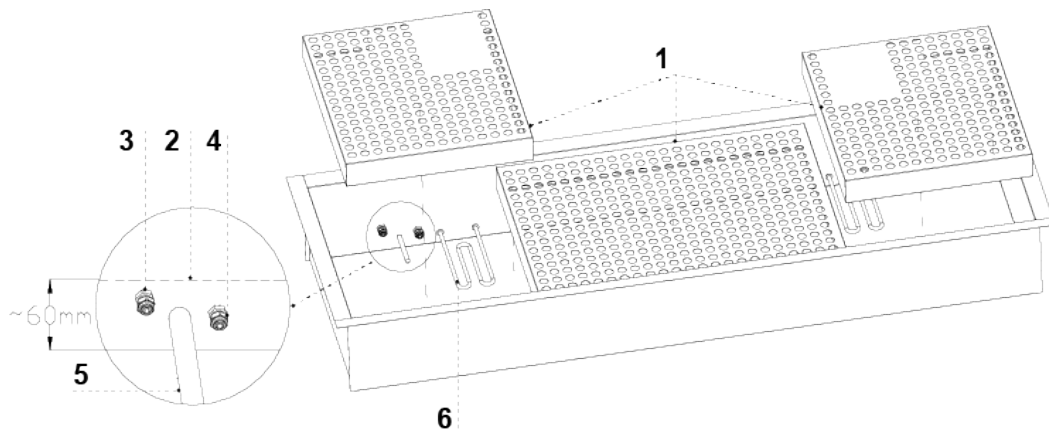


Figure 8 Bain-marie tank

- 1 – Heater screens
- 2 – Optimum fluid level required for proper bain-marie operation (diodes on the control panel are off)
- 3 – Optimum fluid level sensor (green diode shall illuminate when fluid falls below this level)
- 4 – Alarm level sensor – very low level of fluid in the tank (red diode signal), when fluid level falls below this sensor sound alarm is activated and heating function is simultaneously inactivated
- 5 – Temperature sensor
- 6 – Electric heaters

When the bain-marie tank is properly filled with water, the control panel diodes should not be illuminated at all.

4.2. Temperature regulation

Bain-marie is equipped with mechanical temperature regulator. Temperature sensor is located in the bain-marie tank. We set the desired water temperature in the tank (Figure 6/3) with the help of regulating knob by turning it and setting in proper position. Turning the knob clockwise increases the set temperature, and turning it in the opposite direction causes the decrease of temperature. Turning the knob left, until it reaches the final position turns off the heaters, despite the fact that **the power supply is activated.**

5. MAINTENANCE

- Do not use steel wool, abrasive cleaners, bleach or cleaners containing chlorine or sodium to clean the unit.
- Do not use a pressure washer or water-jet to clean the unit.
- The first cleaning of the unit should be done right after unpacking and before turning the unit on.
- The unit should be cleaned with warm water and mild soap.

5.1 Cleaning and maintenance

It is recommended to make a break in the exploitation of the device **once a week** in order to clean it's interior. Remove the dirty water from the tank by opening the water outflow ball valve placed below the body of the unit (Figure 1/11).

- ***All maintenance services need to be performed after disconnecting the unit from the power supply!***
- ***Protect electric installation against any damage or water spillage.***
- ***Do not use water stream to clean the equipment, only a moist cloth.***
- ***Do not use any sharp objects to remove dirt!***
- ***Devices with wheels cannot be used on uneven surfaces!***
- ***When cleaning inside the device, do not leave the front glass lifted in the aluminum profile. This may cause the damage to the glass and is not covered by the warranty. Please remove the glass during cleaning. (Figure 9)***

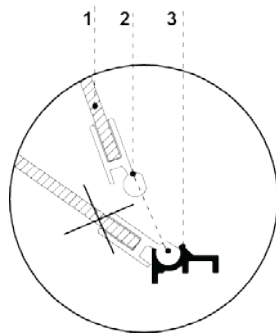


Figure 9 Front glass disassembly

- 1 – Front glass
- 2 – Upper aluminum profile (lift guide)
- 3 – Lower aluminum profile (catch)

Elements of equipment can corrode as result of improper use and maintenance. To prevent damage: Do not allow contact of the with substances containing chlorine and/ or baking soda in different varieties, which destroy the protective layer and components of the equipment (also includes various stainless steel)

6. SERVICE

6.1. Faults identification and repair

In case of any difficulties during actuation of the equipment or during its operation, please return to the chapters in this manual, which explain the performed operation. This aims to ensure the equipment is properly operated. If you still experience difficulties, the following might help you solve the problem.

The equipment is not working... – Make sure that:

- Voltage and frequency in the network are compliant with those recommended by the seller
- The unit is connected to the supply network
- The main switch on the control panel is turned on
- Temperature regulating knob is turned on

The equipment is operating, but the light is off... – Make sure that:

- Light switch is turned on.
- Lamp or starting switch of the equipment is not burnt.

The equipment does not reach the proper temperature, the light is on... – Make sure that:

- The main switch is on.
- Temperature setting on the thermostat is properly set.
- There is water in the tank and check its level

6.2 Service

IGLOO Refrigeration service

Telephone number: 416-663-3051 or (toll free) 1-888-408-8819

E-mail: service@igloo400.com

If after checking points described in chapter 6.1 “Faults identification and repair” and the unit still does not work properly,

Please contact Technical Service of the IGLOO Refrigeration.