



HOSHIZAKI

Instruction Manual

Direct Draw Equipment

Models

HDD-1-24 (-S)

HDD-2-59 (-S)

HDD-3-69 (-S)

HDD-3-80 (-S)

HDD-4-95 (-S)

WARNING

Only qualified service technicians should install and service the appliance. To obtain the name and phone number of your local Hoshizaki Certified Service Representative, visit www.hoshizaki.com. No installation or service should be undertaken until the technician has thoroughly read this Instruction Manual. Likewise, the owner/manager should not proceed to operate the appliance until the installer has instructed them on its proper operation. Failures to install, operate, and maintain the appliance in accordance with this manual may adversely affect safety, performance, component life, and warranty coverage. Proper installation is the responsibility of the installer. Product failure or property damage due to improper installation is not covered under warranty.

Hoshizaki provides this manual primarily to assist qualified service technicians in the installation, maintenance, and service of the appliance.

Should the reader have any questions or concerns which have not been satisfactorily addressed, please call, send an e-mail message, or write to the Hoshizaki Technical Support Department for assistance.

Phone: 1-800-233-1940; (770) 487-2331

Fax: 1-800-843-1056; (770) 487-3360

E-mail: techsupport@hoshizaki.com

HOSHIZAKI AMERICA, INC.
618 Highway 74 South
Peachtree City, GA 30269
Attn: Hoshizaki Technical Support Department

Web Site: www.hoshizaki.com

NOTE: To expedite assistance, all correspondence/communication **MUST** include the following information:

- Model Number _____
- Serial Number _____
- Complete and detailed explanation of the problem.

IMPORTANT

This manual should be read carefully before the appliance is serviced. Read the warnings and guidelines contained in this manual carefully as they provide essential information for the continued safe use, service, and maintenance of the appliance. Retain this manual for any further reference that may be necessary.

CONTENTS

IMPORTANT SAFETY INFORMATION.....	4
INSTALLATION.....	7
1.1 General information.....	7
1.2 Transport, handling, unpacking, location.....	7
1.3 Intended use and restrictions.....	8
1.4 Manufacturer's identification label description.....	8
1.5 Installation and assembly.....	9
1.6 Connections.....	9
OPERATION.....	10
2.1 General Information.....	10
2.2 Control Panel Description.....	10
2.3 Machine settings and programs.....	11
2.4 Analog Thermostat.....	12
2.5 Tower Installation.....	13
MAINTENANCE.....	15
3.1 General safety rules.....	15
3.2 Machine cleaning and maintenance routine.....	15
3.2.1 Cleaning the Condenser Coil.....	15
3.3 Machine Disposal.....	16
TROUBLESHOOTING CHART.....	17
4.1 Troubleshooting chart.....	17

IMPORTANT SAFETY INFORMATION

Throughout this manual, notices appear to bring your attention to situations which could result in death, serious injury, damage to the appliance, or damage to property.

⚠ WARNING Indicates a hazardous situation which could result in death or serious injury.


NOTICE Indicates a situation which could result in damage to the appliance or property.

IMPORTANT Indicates important information about the use and care of the appliance.

⚠ WARNING

The appliance should be destined only to the use for which it has been expressly conceived. Any other use should be considered improper and therefore dangerous. The manufacturer cannot be held responsible for injury or damage resulting from improper, incorrect, and unreasonable use. Failures to install, operate, and maintain the appliance in accordance with this manual will adversely affect safety, performance, component life, and warranty coverage.

To reduce the risk of death, electric shock, serious injury, or fire, follow basic precautions including the following:

- Only qualified service technicians should install and service the appliance.
- The appliance must be installed in accordance with applicable national, state, and local codes and regulations.
- Appliance is heavy. Use care when lifting or positioning. Work in pairs when needed to prevent injury or damage. Do not lift using the top section or the doors.
- To reduce the risk of electric shock, do not touch the plug or power switch with damp hands.
- Make sure the power switch is in the “OFF” position before plugging in or unplugging the appliance the risk of electric shock.
- Before servicing, move the power switch to the “OFF” position. Unplug the appliance from electrical outlet.
- This appliance requires an independent power supply of proper capacity. See name plate for electrical specifications. Failure to use an independent power supply of proper capacity can result in a tripped breaker, blown fuse, damage to existing wiring, or component failure. This could lead to heat generation or fire.
- **THE APPLIANCE MUST BE GROUNDED:** The appliance is equipped with a NEMA 5-15 three-prong grounding plug  to reduce the risk of potential shock hazards. It must be plugged into a properly grounded, independent 3-prong wall outlet. If the outlet is a 2-prong outlet, it is your personal responsibility to have a qualified electrician replace it with a properly grounded, independent 3-prong wall outlet. Do not remove the ground prong from the power cord and do not use an adapter plug. Failure to follow these instructions may result in death, electric shock, or fire.

⚠ WARNING, continued

- The appliance is designed only for storage and display of non-potentially-hazardous beverage kegs only. Employ sanitary methods. Use for any other purposes (for example, storage of chemicals or medical supplies such as vaccine and serum) could cause deterioration of stored items.
- Do not use an extension cord.
- Do not use an appliance with damaged power cord. The power cord should not be altered, jerked, bundled, weighed down, pinched, or tangled. Such actions could result in electric shock or fire. To unplug the appliance, be sure to pull the plug, not the cord, and do not jerk the cord.
- The GREEN ground wire in the factory-installed power cord is connected to the appliance. If it becomes necessary to remove or replace the power cord, be sure to connect the power cord's ground wire.
- Do not splash, pour, or spray water directly onto or into the appliance. This might cause short circuit, electric shock, corrosion or failure.
- Do not make any alterations to the appliance. Alterations could result in electric shock, injury, fire, or damage to the appliance.
- The 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 properly supervised around the appliance.
- Do not climb, stand, or hang on the appliance or doors or allow children or animals to do so. Do not climb into the appliance or allow children or animals to do so. Death or serious injury could occur or the appliance could be damaged.
- Be careful not to pinch fingers when opening and closing the doors when children are in the area.
- Open and close the doors with care. Opening the doors too quickly or forcefully may cause injury or damage to the appliance or surrounding equipment.
- Do not use combustible spray or place volatile or flammable substances in or near the appliance. They might catch fire.
- Keep the area around the appliance clean dirt, dust or insects in the appliance could cause harm to individuals or damage to the equipment.
- Do not throw anything onto the shelves or load any single shelf with more than 100 lb (45 kg) of product they might fall off and cause injury
- Do not block air inlets or outlets, otherwise cooling performance may be reduced.
- Do not tightly pack the cabinet. Allow some space between items to ensure good air flow. Also allow space between items and interior surfaces.

NOTICE

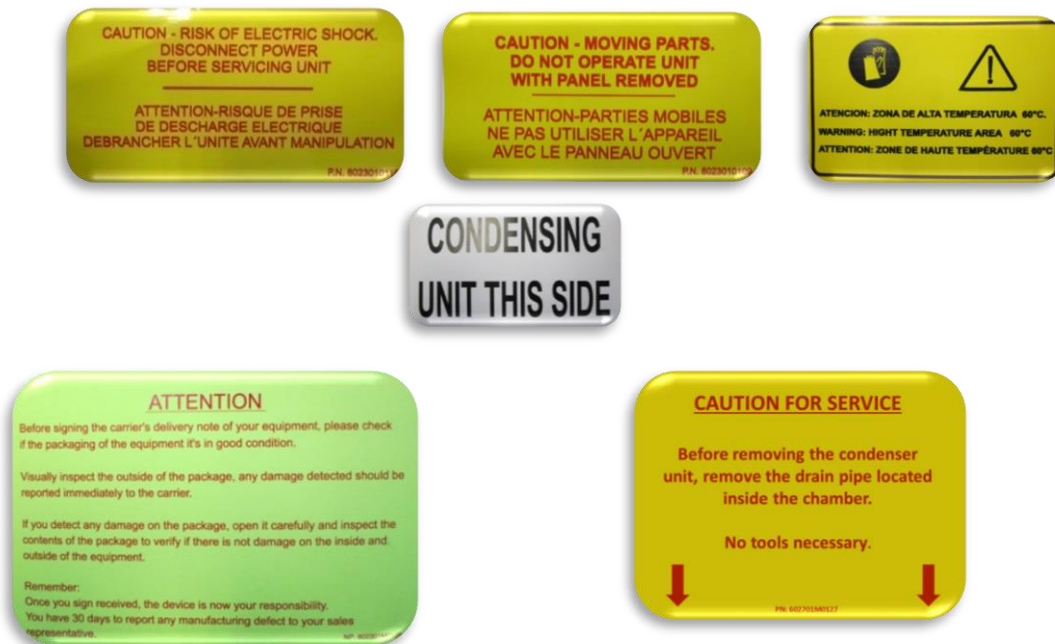
- Protect the floor when moving the appliance to prevent damage to the floor.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction. Blockage of airflow could negatively affect performance and damage the appliance.
- Do not allow the appliance to bear any outside weight.
- To prevent deformation or cracks, do not spray insecticide onto the plastic parts or let them come into contact with oil.
- To avoid damage to the gasket, use only the drawer handle when opening and closing.
- To avoid damage to the top seal, do not lift the appliance by the top panel or remove the top panel.
- Do not leave the doors open.

INSTALLATION

- 1.1 General information
- 1.2 Transport, handling, unpacking, location.
- 1.3 Intended use and restrictions.
- 1.4 Manufacturer's identification label description.
- 1.5 Installation and assembly.
- 1.6 Connections (electric, gas, water)

1.1 General information

You can find the following symbols, or stickers to identify some type of warnings or useful information about your equipment.



1.2 Transport, handling, unpacking, location

Upon receiving your new appliance, check the package and the machine for any damage that may have occurred during transportation. Visually inspect the exterior of the package, if damaged, open and inspect the contents with the carrier. Any damage should be noted and reported on the delivering carrier's receipt.

In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier immediately. Notification should be made verbally as well as in written form. Request an inspection by the shipping company of the damaged equipment.

Retain all crating material until inspection has been made. Contact the dealer through which you purchased the unit.

Check the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.

1.3 Intended use and restrictions

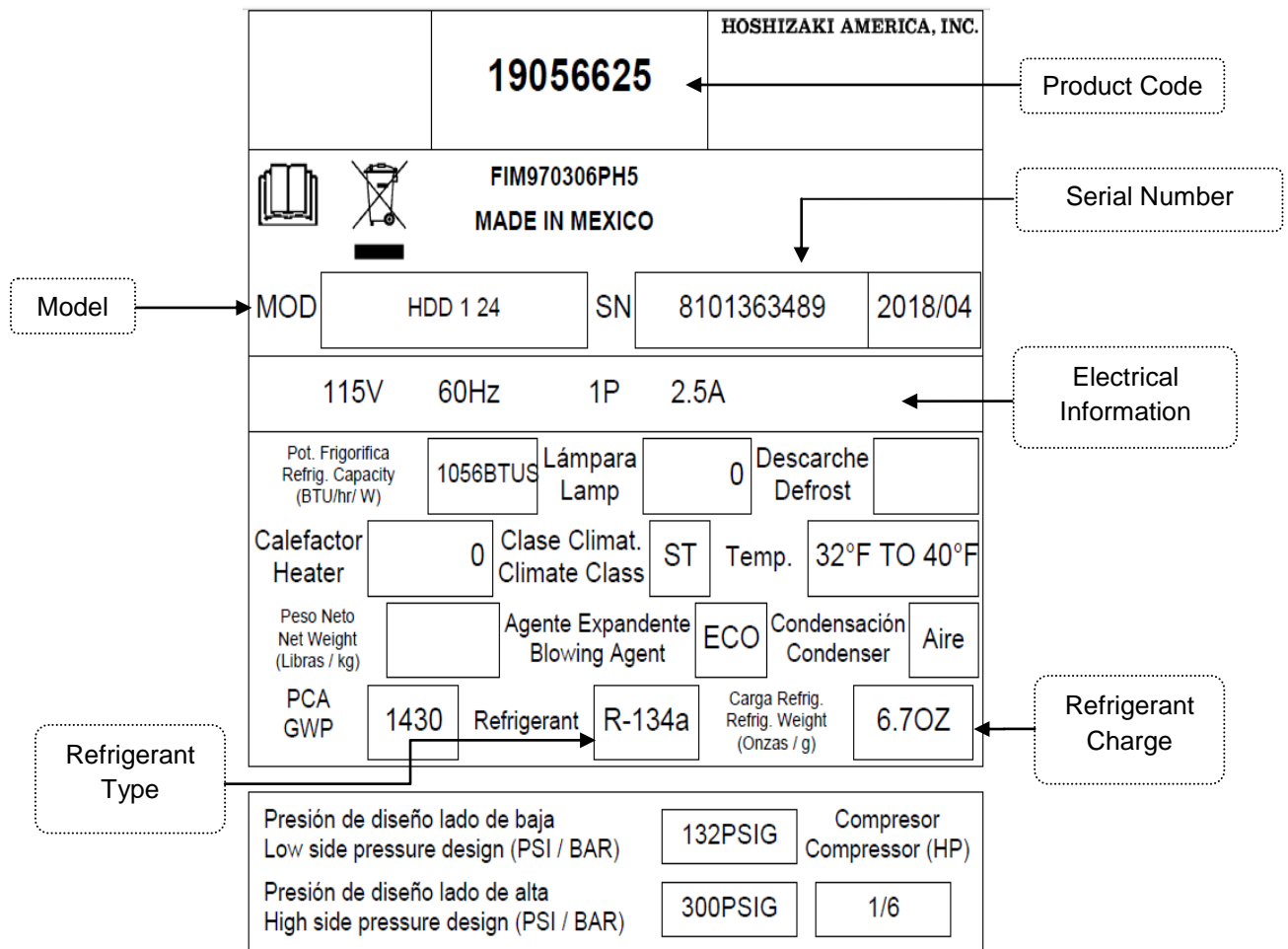
HOSHIZAKI equipment is not designed for personal, family, or household purposes, and its sale for such purposes is not intended. In the event the equipment is so used, this warranty shall be null and void, and the equipment is so used, this warranty shall be null and void, and the equipment shall be deemed to have been sold “as is-where is” without any warranty of any kind, including without limitation any warranty of title, non-infringement, merchant-ability or fitness for a particular purpose.

The appliance complies with **UL471** and **NSF-7(DISPLAY II) STANDARDS**.

If you want know more about other restrictions about your equipment see the warranty that is located in the final part of your manual.

1.4 Manufacturer’s identification label description

The nameplate is located inside the cabinet, near the top front, left corner. Under no circumstances should the nameplate be removed from the unit. The nameplate is essential to identify the particular features of your appliance and it is of great benefit to installers, operators, and maintenance personnel. It is recommended that, in the event the nameplate is removed, you copy down the essential information in this manual for reference before installation. Removal of nameplate will void the warranty.



1.5 Installation and assembly

This appliance is intended for indoor use only. Be sure the location chosen has a floor strong enough to support the total weight of the unit and contents. For the most efficient operation, be sure to provide good air circulation inside and outside of the unit.

INSIDE CABINET

The first cleaning must be made when you unpack the unit and before switching it on. Clean it with water and a mild detergent. When it is clean and dry, insert the accessories in the appropriate places, for the best use of the user.

OUTSIDE CABINET

Be sure the unit has good air circulation around it. Avoid hot corners and locations near stoves and ovens. It is recommended the unit be installed no closer than 2" from any wall. Place in a clean area to avoid clogging the condenser, which can cause low performance and failures.

The unit should not be installed in ambient temperatures higher than 100°F. If the relative humidity is higher than 60%, condensation may form around the door frame. This is not a malfunctioning of the unit.

1.6 Connections

Refer to the amperage data on the nameplate and your local code or the National Electrical Code to be sure unit is connected to the proper power source. Verify correct incoming voltage according to the nameplate information.

A protected circuit of the correct voltage and amperage must be run for connection of the power cord. Unit must be grounded and connected in accordance with NEC Article 422 Appliances.

OPERATION

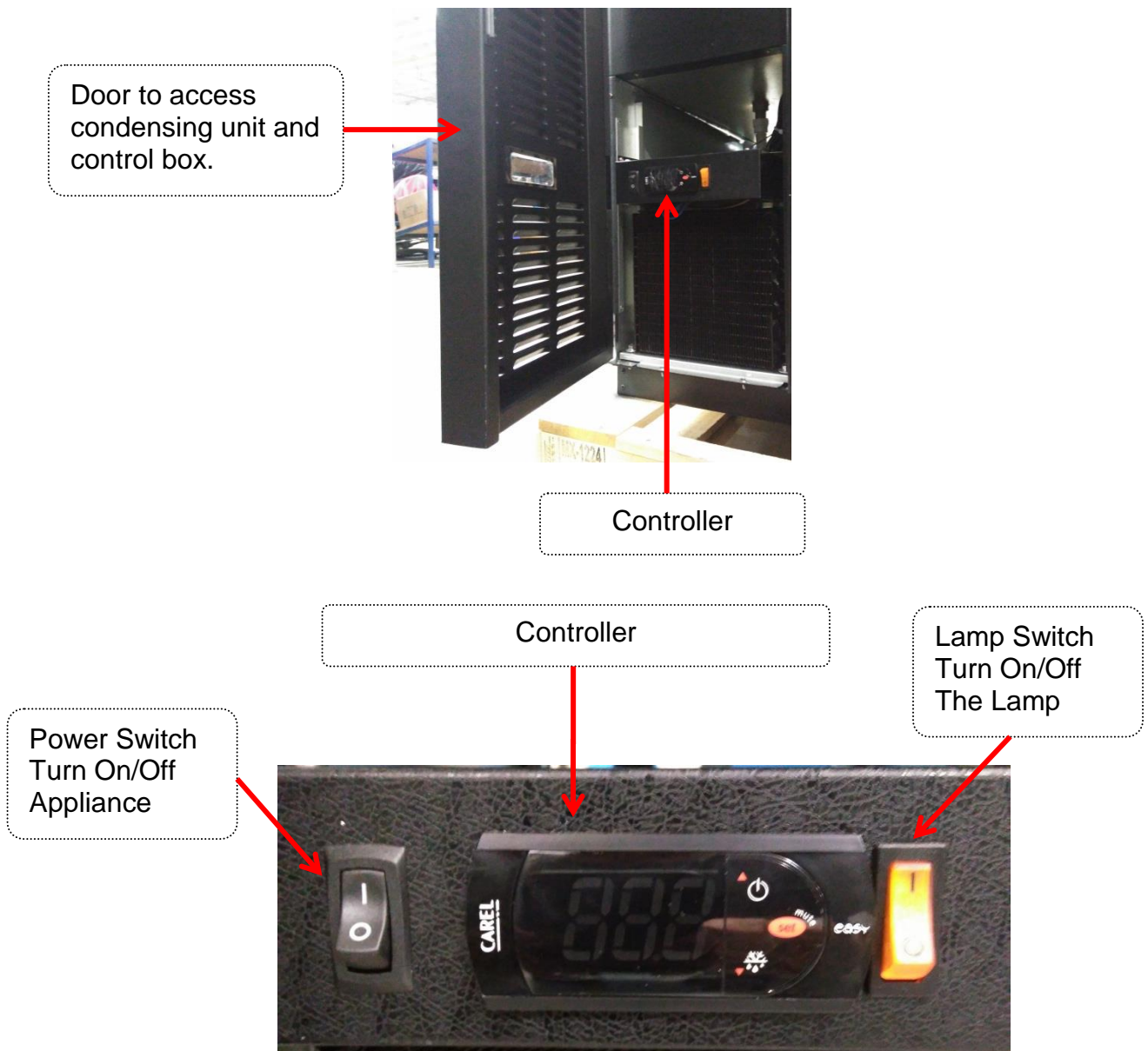
- 2.1 General information.
- 2.2 Control panel description.
- 2.3 Machine settings and programs.
- 2.4 Analog Thermostat.
- 2.5 Tower Installation

2.1 General Information

Good air flow inside the cabinet is critical. Do not block the air outlet or the evaporator fan grill. A minimum of 2 inches of space along the front, back, and sides is required for proper air flow.

2.2 Control Panel Description

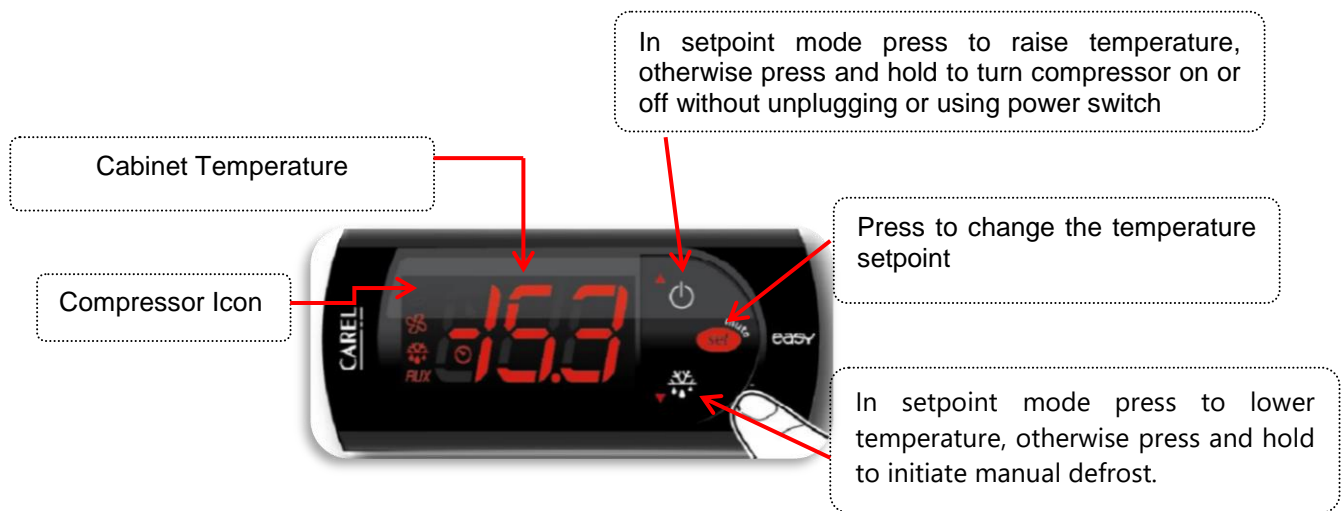
Models: HDD-2-59 (-S), HDD-3-69 (-S), HDD-3-80 (-S), HDD-4-95 (-S)



Controller

After connecting your unit, move the power switch located next to the controller to the “ON” position. The display will show the cabinet temperature. Also, the compressor and fan icons will flash for a period of three minutes. After this delay the unit will start cooling.

Verify you don't have any alarms on the controller. If after you turn ON the equipment the controller shows an alarm icon or an error code, please contact your local Hoshizaki certified service representative. They will help you fix the problem.



2.3 Machine settings and programs

Changing the temperature setpoint on the controller.

The unit comes with a factory default setpoint of 32°F. If setpoint needs to be changed, follow the steps below.

Press and hold the “SET” button for one second. You should see a flashing number. Release the button.



Press the “UP” or “DOWN” arrows to increase or decrease the setpoint. Then press the “SET” button to save the new setpoint.



Note:

The maximum value you can set in the controller is: 36°F.

If you wish to decrease the setpoint, press the “DOWN” arrow button until you reach the desired value. Release the button and then press the SET button to keep, and save, the new value.



Note:

The minimum value you can set in the controller is: 30°F.

Manual Defrost

To select manual defrost, press and hold the manual defrost button for 5 seconds. The snowflake icon will appear on the display. When this icon is solid it indicates that the equipment is in defrost mode.



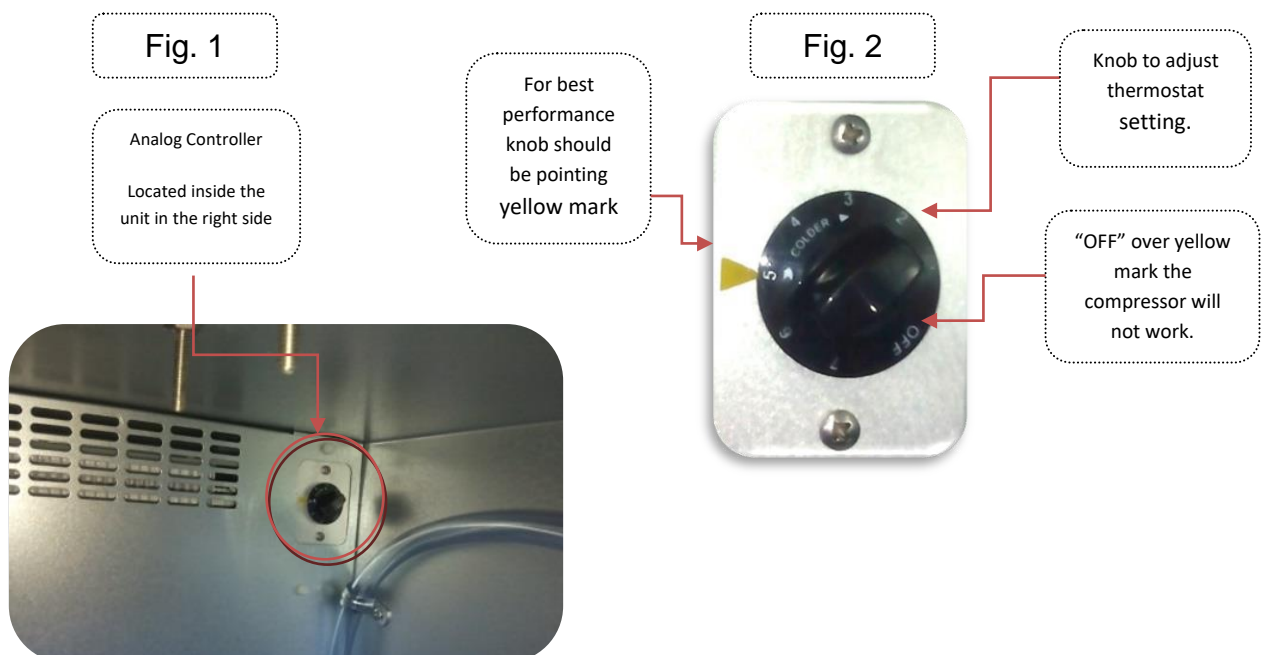
To exit manual defrost, hold the “DOWN” arrow button for 5-sec. The snowflake icon will turn off. Wait 3-min. for the compressor to energize.

2.4 Analog Thermostat

Model: HDD-1-24

Before connect the unit to the power supply, verify the analog thermostat is NOT in the OFF position (“OFF” over the yellow mark). If the dial is in the OFF position the compressor will not run but the evaporator fan will still power while the analog thermostat is in the OFF position.

The dial of the analog thermostat is to set the temperature and this is located inside the cabinet (fig. 1). Please be sure that the dial is pointing to the yellow arrow on 5, this is the position recommended by the factory to assure correct function (fig. 2). The warmest setting is 1 and the coldest setting is 7.



Defrost

Off-Cycle Defrost: the **HDD-1-24** refrigerator defrost naturally between run cycles.

2.5 Tower Installation

This procedure describes how to install the towers and the air hose needed to provide cold air directly into the towers.

Tools needed: Philips Screwdriver.

Step 1

Locate the gaskets and bolts included in with your Tower accessories kit. Place gasket over the pre-drilled holes on top and place the 4 screws thru the tower base. Align the tower with screws and gasket to the top as shown below while dropping the beer line(s) thru the hole on top of the unit.



Step 2

Tighten the screws using the nuts found in your tower accessories kit

Step 3

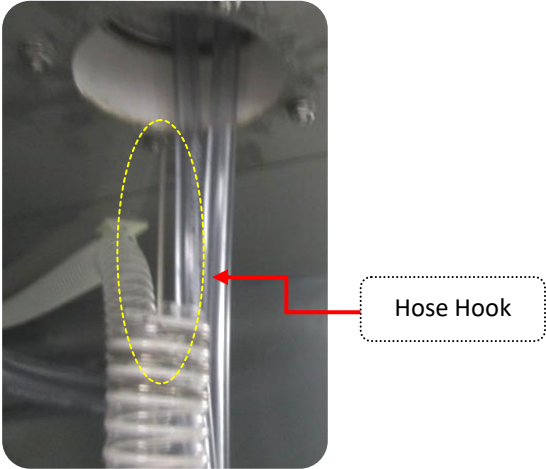
Identify the “WHITE HOSE CORRUGATED” which is found inside of the equipment.



WHITE HOSE
CORRUGATED

Step 4

Introduce the "WHITE HOSE CORRUGATED" into the tower's HOLE.



Be sure that the hose hook is correctly attached into the tower hole.

MAINTENANCE

- 3.1 General safety rules.
- 3.2 Machine cleaning and maintenance routine.
- 3.3 Machine disposal.

3.1 General safety rules

Neglecting the condenser coil cleaning procedures **WILL VOID YOUR WARRANTY** associated with the compressor or cost to replace the compressor!

To prevent corrosion and damage to stainless steel surfaces, use only products formulated for use on stainless steel appliances. Do not use steel wool, abrasive products, scrapers, or products containing sodium hypochlorite (chlorine bleach). Use a clean, soft cloth for cleaning.

3.2 Machine cleaning and maintenance routine

Cleaning solutions need to be alkaline or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners.

Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. There are also stainless steel cleaners available which can restore and preserve the finish of the steel's protective layer.

Never use an acid based cleaning solution! Many food products have an acidic content which can deteriorate the finish. Be sure to clean ALL food products from any stainless steel surface. Common items include peppers, tomatoes and other vegetables.

3.2.1 Cleaning the Condenser Coil

Move the power switch to the "OFF" position, then unplug appliance, remove front bottom panel and carefully slide out the condensing unit. The condenser coil requires regular cleaning; recommended every 30-60 days, depending of the accumulation of dust and grease. If the buildup on the coil consists of only light dust and debris the condenser coil can be cleaned with a simple brush. Heavier dust build up may require a vacuum or even compressed air to blow through the condenser coil. If heavy grease is present there are de-greasing agents available for refrigeration use and specifically for the condenser coils. The condenser coil may require a spray with the de-greasing agent and then blown through with compressed air.

Be sure all electrical and mechanical parts are dry before turning on the power. Never use a high pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil. Do not place filter material in front of condenser coil. This material blocks air-flow to the coil similar to having a dirty coil!

If you keep the Condenser clean you will minimize your service expense and lower your electrical costs. Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with dirty or clogged condenser coils can result in compressor failure.

To put back the condensing unit in its place, slide in the unit carefully. **BE SURE DRAIN PIPE IS LOCATED OVER THE PAN.** Replace front bottom panel, plug the appliance into the electrical outlet, then move the power switch to the "ON" position.

3.3 Machine disposal

The appliance contains refrigerant and must be disposed of in accordance with applicable national, state, and local codes and regulations. Refrigerant must be recovered by properly certified service personnel.

 WARNING
--

When preparing the appliance for disposal, remove the door to reduce the risk of children getting trapped. Leave the shelves in place so that children may not easily climb inside.

TROUBLESHOOTING CHART

4.1 Troubleshooting chart

Follow the next steps before requesting warranty service. Failure to do so may result in service charges for you and may void your warranty:

1) Refrigerator doesn't work:

- a. Check power supply on, plugged into electrical outlet, power switch on.
- b. Check that the ON/OFF switch is in the ON position.

2) Refrigerator doesn't reach temperature:

- a. Check that the controller doesn't display any alarm, if there is an alarm present, call technical service to receive assistance.
- b. Check the temperature setpoint on the controller. The default setpoint is 32°F.
On **HDD-1-24** Check the dial position. The default position is 5
- c. Check if the compressor is running.
- d. Ensure Equipment is placed in a ventilated place and is a minimum of 2 inches from any other appliance and away from any heat source. The maximum ambient temperature is 100°F.
- e. To ensure proper air flow, product must not be placed higher than the maximum level mark located on the internal wall of the unit.
- f. Check that the gasket is in good condition and door is sealed.
- g. Check that the evaporator fan is working.
- h. Allow the appliance to cool down prior to loading it with products.

3) There is water under the refrigerator:

- a. Check that the drain pipe is over the pan/check condenser compartment.
- c. Check that the cabinet is level.

WARNING

To ensure proper operation of equipment, it is recommended that the unit is on for 24 hours prior to the introduction of product.