



MULTI-DECK MERCHANDISER
INSTALLATION & OPERATIONS MANUAL

OSB-CT/BAKERY

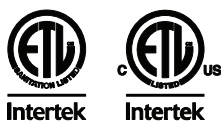
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To ensure proper functionality and optimum performance, it is **STRONGLY** recommended that Hillphoenix specialty cases be installed/serviced by qualified technicians who have experience working with commercial refrigerated display merchandisers and storage cabinets. For a list of Hillphoenix-authorized installation/service contractors, please visit our website at www.hillphoenix.com. **Hillphoenix cases are for commercial use only.**

IMPORTANT SAFETY INSTRUCTIONS (DANGER - READ ALL INSTRUCTIONS BEFORE USING!) SAVE THESE INSTRUCTIONS

Hillphoenix®
a **DOVER** company





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LIABILITY NOTICE

For Cases with Shelf Lighting Systems

Hillphoenix does NOT design any of its shelf lighting systems or any of its display cases with shelf lighting systems for direct or indirect exposure to water or other liquids. The use of a misting system or water hose on a display case with a shelf lighting system, resulting in the direct or indirect exposure of the lighting system to water, can lead to a number of serious issues (including, without limitation, electrical failures, fire, electric shock, and mold) in turn resulting in personal injury, death, sickness, and/or serious property damage (including, without limitation, to the display itself, to the location where the display is situated [e.g., store] and to any surrounding property). DO NOT use misting systems, water hoses or other devices that spray liquids in Hillphoenix display cases with lighted shelves.

If a misting system or water hose is installed or used on a display case with a shelf lighting system, then Hillphoenix shall not be subject to any obligations or liabilities (whether arising out of breach of contract, warranty, tort [including negligence], strict liability or other theories of law) directly or indirectly resulting from, arising out of or related to such installation or use, including, without limitation, any personal injury, death or property damage resulting from an electrical failure, fire, electric shock, or mold.

P079211M, REVO

Important

At Hillphoenix®, the safety of our customers and employees, as well as the ongoing performance of our products, are top priorities. To that end, we include important warning messages in all Hillphoenix installation and operations handbooks, accompanied by an alert symbol paired with the word "DANGER", "WARNING", or "CAUTION".

All warning messages will inform you of the potential hazard; how to reduce the risk of case damage, personal injury or death; and what may happen if the instructions are not properly followed.



Revision History

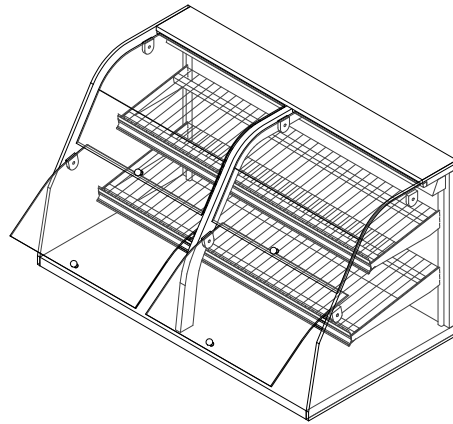
- new manual format_07/21
- technical reference_01/23
- requested compliance changes_07/24

OSB-CT

Self-Service Multi-Deck Countertop Merchandiser w/ Bins
1 & 2 Bin (Bakery)

GENERAL NOTES:

- "----" Indicates that the feature is not an option on this case model and/or the data is not yet available at this time.



SHIPPING WEIGHT	
Case	Weight
OSB-CT	----



ENGINEERED FOR STORES WITH AMBIENT CONDITIONS NOT TO EXCEED 75° AND 55% RELATIVE HUMIDITY. DUE TO ENGINEERING IMPROVEMENTS SPECIFICATIONS MAY CHANGE WITHOUT NOTICE. ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72 SPECIFICATIONS. NUMBERS ARE BASED ON STANDARD CASE SIZES. CONSULT ENGINEERING.

OSB-CT

Rev. Date	Rev. #	Rev. Title
03-15-22	3	ENDVIEW UPDATE
07-28-21	2	ENDVIEW UPDATE

Clearvyant[™]
LED SYSTEM

Hillphoenix
a  company

OSB-CT

Self-Service Multi-Deck Countertop Merchandiser w/ Bins
1 & 2 Bin (Bakery)

LIGHTING DATA						
		Light Length	Clearvoyant 4 LED Lighting (Per Light Row)			
			Standard Power (Cornice or Shelf)		High Power (Cornice)	
			120 Volts		120 Volts	
			Amps	Watts	Amps	Watts
1 Bin	1	2'	0.03	3.1	0.06	7.8
2 Bin	1	4'	0.05	5.9	0.12	14.9



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OSB-CT

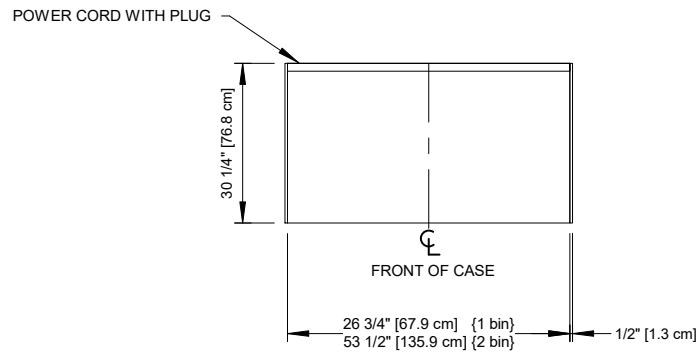
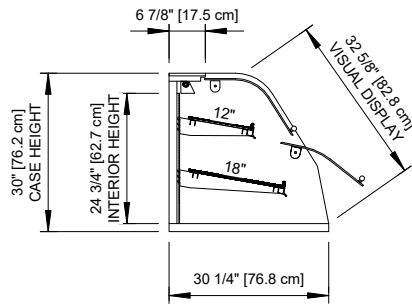
Rev. Date	Rev. #	Rev. Title
03-15-22	3	ENDVIEW UPDATE
07-28-21	2	ENDVIEW UPDATE

Clearvoyant[®]

Hillphoenix
a **DOVER** company

OSB-CT

Self-Service Multi-Deck Countertop Merchandiser w/ Bins
1 & 2 Bin (Bakery)



ENGINEERED FOR STORES WITH AMBIENT CONDITIONS NOT TO EXCEED 75° AND 55% RELATIVE HUMIDITY. DUE TO ENGINEERING IMPROVEMENTS SPECIFICATIONS MAY CHANGE WITHOUT NOTICE. ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72 SPECIFICATIONS. NUMBERS ARE BASED ON STANDARD CASE SIZES. CONSULT ENGINEERING.

OSB-CT

Rev. Date	Rev. #	Rev. Title
03-15-22	3	ENDVIEW UPDATE
07-28-21	2	ENDVIEW UPDATE



Thank you for choosing Hillphoenix for your food merchandising needs. This handbook contains important technical information and will assist you with the installation and operation of your new Hillphoenix specialty cases. By closely following the instructions, you can expect peak performance; attractive fit and finish; and long case life.

We are always interested in your suggestions for improvements (e.g. case design, technical documents, etc.). Please feel free to contact our Marketing Services group at the number listed below. Thank you for choosing Hillphoenix, and we wish you the very best in outstanding food merchandising.

CASE DESCRIPTION

This manual specifically covers the OSB-CT bakery application self-service multi-deck countertop merchandiser with bins.

SHIPPING CASES

Transportation companies assume all liability from the time a shipment is received by them until the time it is delivered to the consumer. Our liability ceases at the time of shipment.

RECEIVING CASES

Examine fixtures carefully and in the event of shipping damage and/or shortages, please contact the Service Parts Department at the number listed below.

CASE DAMAGE

Claims for obvious damage must be 1) noted on either the freight bill or the express receipt and 2) signed by the carrier's agent; otherwise, the carrier may refuse the claim. If damage becomes apparent after the equipment is unpacked, retain all packing materials and submit a written request to the carrier for inspection within 14 days of receipt of the equipment.

Failure to follow this procedure will result in refusal by the carrier to honor any claims with a consequent loss to the consumer.

If a UPS shipment has been damaged, retain the damaged material, the carton and notify us at once. We will file a claim.

LOST/MISSING ITEMS

Equipment has been carefully inspected to insure the highest level of quality. Any claim for lost/missing items must be made to Hillphoenix within 48 hours of receipt of the equipment. When making a claim please use the number listed below.

CASE CERTIFICATION

The certification of the commercial display does not include the products that are on display. These certifications are only in regard to the display case(s) itself.

SERVICE PARTS & TECHNICAL SUPPORT

For service parts questions regarding our cases, please contact our Service Parts Department at 1-844-HPX-PART (1-844-479-7278) or dfr-la-parts@doverfoodretail.com

For technical questions regarding our cases, please contact our Technical Support Department at 1-833-280-5714.

CONTACTING THE FACTORY

If you need to contact Hillphoenix regarding a specific fixture, be certain that you have both the case model number and serial number. (This information can be found on the data tag, located at the top-left interior, rear exterior panel or interior rear lower storage of the case. *Location may vary based on case design.*)

Hillphoenix Specialty Products
703 Franklin Street, PO Box 478
Keosauqua, IA 52565
Website: www.hillphoenix.com

CASE INSTALLATION & CONNECTIONS

LOCATION

This display case has been designed for displaying and storing perishable food product. It is engineered for air-conditioned stores with a maximum ambient of 75 °F and 55% relative humidity.

When selecting the location for placement of this case, avoid the following conditions:

Excessive Air Movement

1. Doors
2. Air-conditioned vents
3. Other air sources

Excessive Heat

1. Windows
2. Sun
3. Flood lamps 8 feet or less from the product
4. Other heat sources

FLOOR PREP & INSTALLATION

1. Ask the general contractor if your current copy of the building dimensions are the most recently issued. Also, ask for the points of reference from which you should take dimensions to locate the cases.
2. Using chalk lines or a laser transit, mark the floor where the cases are to be located for the entire lineup. The lines should coincide with the outside edges of the case feet.
3. Move case as close as possible to its permanent location. Remove all crating and shipping braces above the shipping pallet. Loosen the plastic dust cover from the pallet, but leave cover over the case to protect it while removing the case from the pallet.
4. Shipping braces, dependent on construction, can either have metal brackets that can be removed with a screw gun, or wood blocks that can be removed with a J-bar. A power cord's shipping braces (Fig. 1) are simple plastic clamps that can be removed with a screw gun. **Note: Shipping braces are normally located at each corner of the case. (Shipping braces used vary and are based on case design for best transport.)**
5. Remove dust cover. Installation hardware ships in a marked packet located inside the case. Remove dust cover. If applicable, installation hardware ships in a marked packet located inside the case.
6. Locate base support positions (Fig. 2) and with a minimum two people, carefully lift the unit up and off the pallet. Place onto the surface it will be installed.
7. Prior to plugging in and starting up the case always check

the data tag located on the left end exterior panel or top interior of the case, as well as the voltage label found on the main power cord (Fig. 1) which can be found at the rear base panel. **Note: Check that the voltage of the receptacle you are going to use for power and the voltage required for the case match.**

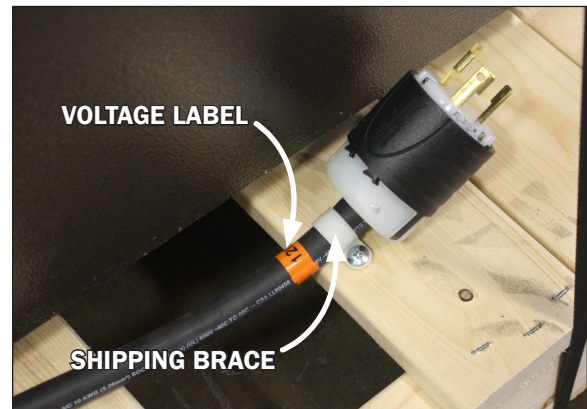


Fig. 1 Main power cord voltage label & shipping brace



CAUTION

Prior to plugging in and starting up the case.

Be certain that the voltage of the receptacle you are going to use and the voltage required for the case match. Failure to do so may result in case/system damage.



CAUTION

Be certain that all electrical connections are compliant with local codes.



DANGER

CAUTION, RISK OF ELECTRIC SHOCK. If the cord or plug becomes damaged, replace only with a cord and plug of the same type.

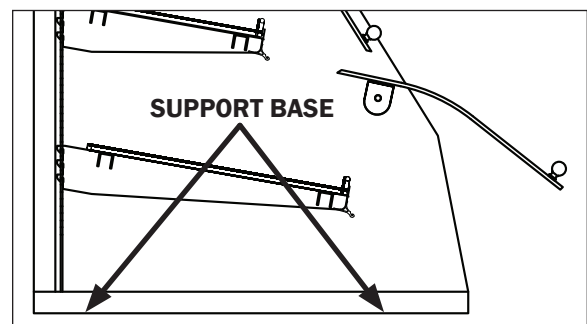


Fig. 2 Support Base

CAUTION

Locate the base supports under unit before removing from pallet. Failure to do so will damage the finished metal if correct lift points are not identified prior to removal.

WARNING

Be certain that your hands are out of the way before lowering the case. Failure to do so may result in serious injury.

8. Once the unit is ready to be plugged in the the power and lighting can then be checked.
9. If necessary, after positioned in desired location on a countertop/surface, a clear caulk or sealant can be applied to the connection points surrounding the base of the unit where it meets the countertop surface. This will help to better set it in its final placement.
10. Install case shelves and reconnect lights. Be aware that differing shelf configurations will affect case performance.
11. The lighting system has an ON/OFF switch located in the inside back of the case. Once a case has been properly positioned in the store and the shelving installed the lights may be turned on to verify that they are connected and functioning properly.

CAUTION

These cases are not designed for excessive external weight. Do not walk on top or inside of cases. Doing so may result in case damage and/or personal injury.

CAUTION

Installation of 3rd-party materials may result in diminished case performance.

DANGER

CAUTION, RISK OF ELECTRIC SHOCK.

DANGER - To reduce the risk of electric shock. When using an electrical display, basic precautions should always be followed, including the following: Read all instructions before using (this display).

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical display, basic precautions should always be followed, including the following: Read all instructions before using (this display).

1. Keep the cord away from heated surfaces.
2. Never operate this display if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Contact our service parts and/or technical support.
3. Use this display only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.
4. Never drop or insert any object into any opening.
5. Do not use outdoors.
6. **WARNING** - Risk of Injury - Do not operate this display with a remote control or app on a smart device.
7. **WARNING** - Risk of Injury to Persons. Do not use this display to support video equipment such as televisions or computer monitors.

GROUNDING INSTRUCTIONS

For a grounded, cord-connected product rated max 15 amperes and intended for use on a nominal 120-volt supply circuit: This product is for use on a nominal 120-volt circuit and has a grounding plug. Make sure that the product is connected to an outlet having the same configurations as the plug. No adapter should be used with this product.

GENERAL LIGHTING INFORMATION

Hillphoenix cases are equipped with LED luminaires and feature specially designed light reflectors in the cornice to improve the illumination of products. LED power supplies operate both the cornice and shelf lights and are located above the cornice reflectors.

The lighting system has an ON/OFF switch located at the inside back of the case. Once a case has been properly positioned in the store, the lights may be turned on to verify that they are connected and functioning properly.

To ensure peak performance, it is advisable to run the lighting systems only when the store climate control is on. **Note: It is highly recommended that the ambient store temperature not exceed 80°F.**



DANGER

SHOCK HAZARD

Always disconnect power to case when cleaning, servicing or configuring components of the lighting system. Failure to do so may result in serious injury or death.



WARNING

Using improper DC power supplies may damage the luminaires, resulting in sub-standard operation and increased chances of safety issues/injury.



WARNING

Never replace a 24V DC power supply with a T8 or T5 ballast of any kind! Ballasts use alternating current (AC) instead of direct current (DC) and operate at a much higher voltage than is used by this LED system. Doing so will damage the LED system and increases the chance of safety issues/injury.



CAUTION

Be sure to avoid contact of the lamp, lampholder and reflector with any combustibles. These items include, but are not limited to; plastic, paper goods and similar materials.

LED DRIVER/POWER SUPPLY ACCESS

To gain access to the LED driver or power supplies locate the removeable panel found at the upper interior, inside back of the unit. This driver panel can be located at the customer left hand side of the case.

REPLACING LED LIGHTS

Once store power is connected and the light circuit is energized, the Clearvoyant LED system should operate without the need for any significant maintenance for several years. Should a power supply need to be removed and/or replaced, turn off the power to the case before proceeding. Be certain to replace the power supply with genuine Hillphoenix parts or a comparable UL-listed Class-2 rated regulated 24V DC power supply with 100W output capacity.

LED LUMINAIRES

Removing LED luminaires:

1. The LED lighting is hardwired so begin by unplugging the power cord at the end of the light.
2. Remove the screws from the light clamps (Fig. 3) while keeping ahold of the light. Once the screws are removed the light rod will come away from the case with the clamps still holding to the light.

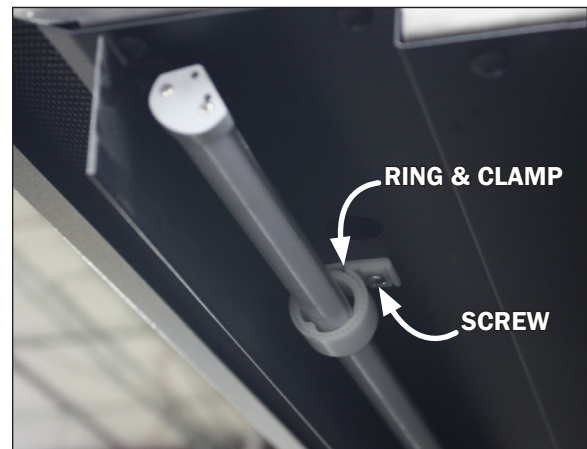


Fig. 3 LED light & ring/clamp

3. Remove the closed clamps and inner rings (Fig. 4) by unclipping the clamp ends located above the screw opening. This will release the grip around the inner ring (Fig. 5) and allow for the two pieces to be separated from one another.

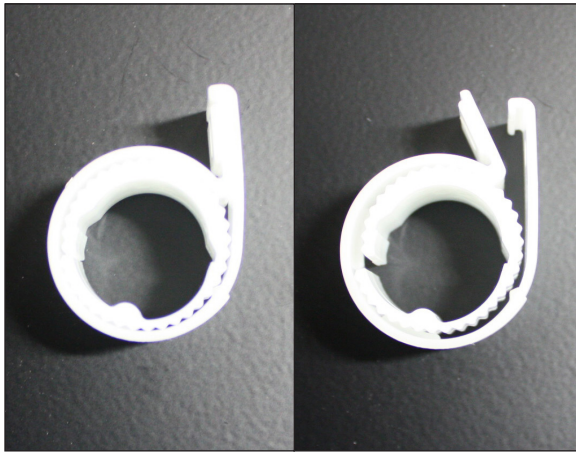


Fig. 4 Closed clamp

Fig. 5 Open clamp



CAUTION

Luminaires are not intended for use on/ in aquariums and/or installation in plastic cabinets.

4. Carefully remove the inner rings from around the light rod.



CAUTION

Too much tension on the inner clamp rings while removing them from an LED light rod may cause breakage. Use only enough tension for removal.

Re-installing LED luminaires:

1. Place a ring (Fig. 6) around each end of the light rod and rotate until both edges of the rod line-up and snap ahold to the ridges in the ring.
2. Slide a clamp (Fig. 6) over each ring and close them tight around the rings by clipping together the clamp ends located above the screw opening.



Fig. 6 LED ring and clamp

3. Line-up the closed clamps (Fig. 4) and light rod with the existing screw holes on the case and re-attach.
4. Rotate the light rod into desired position after the clamps are firmly re-attached.

PRE-POWER CHECKLIST

Before powering-up the case, be certain that all of the steps listed below have been completed to ensure proper case functionality, safety and compliance with warranty terms.

- ☐ **Have you thoroughly examined the case for shipping damage? (see pg. 5)**
- ☐ **Have you checked the horizontal level of the case? (see pg. 6)**
- ☐ **Have you applied the clear caulk/sealant (if applicable) to the connection points surrounding the base of the unit where it meets the countertop surface? (see pg. 6)**
- ☐ **Have you installed the shelves? (see pg. 6)**

After powering-up the case, be certain that all of the steps listed below have been completed to ensure proper case functionality, safety and compliance with warranty terms.

- 1. Check all lights to ensure they are all functioning properly.**

PRODUCT LOAD

Hillphoenix cases provide maximum product capacity within the refrigerated air envelope. Please keep products within the appropriate load limit.

It is important that you do not overload the food product display (Fig. 7). Overloading will cause case malfunction.

For loading always put heavier items at the bottom and not near the top in order to help prevent the possibility of the display tipping over, if applicable.

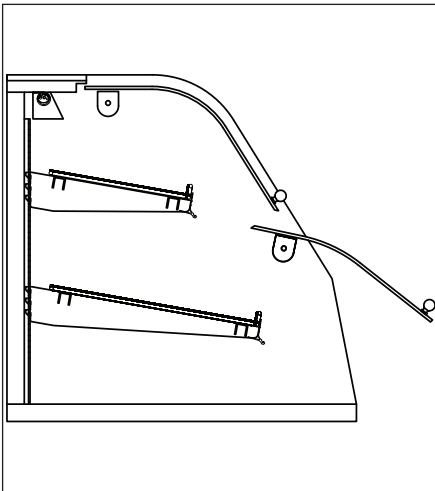


Fig. 7 Product load



CAUTION

The maximum load weight for each loadbearing surface is 150 lbs. Do not exceed this weight. Doing so may lead to case damage.

CASE CLEANING

CASE CLEANING

A periodic cleaning schedule should be established to maintain proper sanitation, insure maximum operating efficiency, and avoid the corrosive action of food fluids on metal parts that are left on for long periods of time. We recommend cleaning once a week. Further suggestions for case cleaning include the following:

- To avoid shock hazard, be sure all electrical power is turned off before cleaning. In some installations, more than one disconnect switch may have to be turned off to completely de-energize the case.
- To clean the LED luminaires, shut off the lights in the case, then wipe the luminaires down with a soft, damp cloth. Avoid using harsh or abrasive cleaners as they may damage the lights. Be certain that the luminaires are completely dry before re-energizing.
- Clean from top to bottom when cleaning the display case to avoid cross contamination.
- If any potentially harmful cleaners are used, be certain to provide a temporary separator (e.g., cardboard, plastic wrap, etc.) between those cases that are being cleaned and those that may still contain product.
- Avoid spraying any cleaning liquids directly on the electrical connections.



DANGER

SHOCK HAZARD

Always disconnect power to case when servicing or cleaning. Failure to do so may result in serious injury or death.



WARNING

CAUTION, RISK OF ELECTRIC SHOCK. To reduce risk of burns, fire, electric shock or injury to persons: Unplug from outlet before putting on or taking off parts.

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a **DOVER** company

Contact the Service Parts Department at:

1-844-HPX-PART (1-844-479-7278)

or

dfr-ia-parts@doverfoodretail.com

Provide the following information about the part you are ordering:

- **Model number and serial number*** of the case for which the part is intended.
- **Length of the part** (if applicable).
- **Color of part** (if painted) or color of polymer part.
- **Whether part is for left or right-hand application.**
- **Quantity**

***Data tag is located on the left end exterior panel or top interior of the case.**

If the parts are to be returned for credit, contact the Parts Department. Do not send parts without authorization.

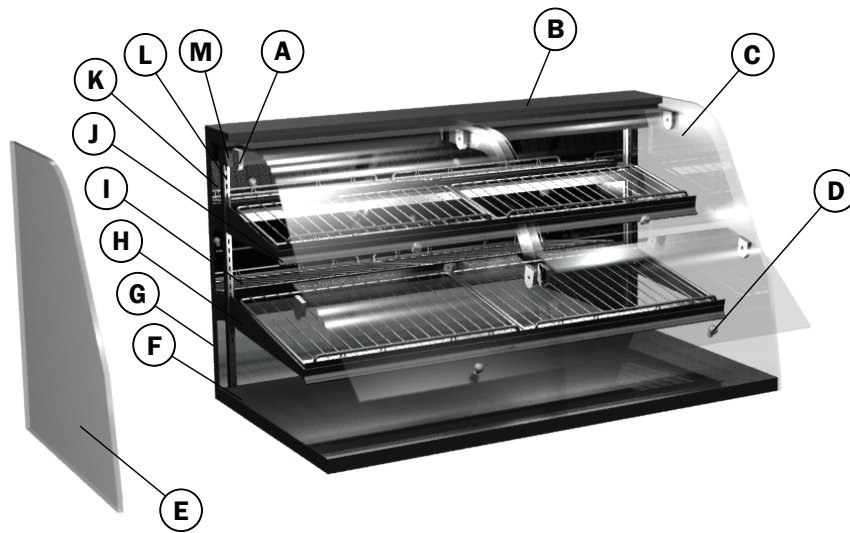
APPENDIX

A1	Wiring Information
B1	Parts List

A1: WIRING DIAGRAM

TBD

B1: PARTS LIST



- | | |
|----------|--|
| A | Front Lift Plex Bin Door Hardware |
| B | Case Top |
| C | Front Lift Self-Closing Plex Bin Door |
| D | Knob Pull |
| E | Plex End Panel |
| F | Bottom Deck |
| G | Outside Back |
| H | Adjustable Wire Shelf Bracket |
| I | Mirror Polished Stainless Steel Inside Back |
| J | Price Tag Molding |
| K | Driver Access Removeable Cover |
| L | Shelf Standard |
| M | Light Guard |



Hill PHOENIX, Inc.
Hereinafter Referred To As Manufacturer

LIMITED WARRANTY

GENERAL WARRANTY

Manufacturer's products are warranted to be free from defects in materials and workmanship under normal use and maintenance for fourteen months from date of shipment from manufacturer (the "Base Warranty Period"). In the event of a qualifying warranty claim, a new or rebuilt part to replace any defective part will be provided without charge. The replacement part is covered under this warranty for the remainder of the applicable Base Warranty Period. In order to be eligible for warranty coverage, customer must: (i) notify Manufacturer promptly upon discovery of a warrant defect, and (ii) comply with the warranty claim procedures provided by Manufacturer from time to time.

This equipment warranty does not include labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts.

The warranty shall not apply:

1. To any unit or any part thereof which has been subject to accident, alteration, negligence, misuse or abuse, or which has not been operated in accordance with the manufacturer's recommendations, or in conditions outside of Manufacturer's specifications, or if the serial number of the unit has been altered, defaced, or removed.
2. When the unit, or any part thereof, is damaged by fire, flood, or other act of God.
3. To products that are impaired or damaged due to improper installation.
4. When installation and startup forms are not properly completed or returned within two weeks after startup.
5. If the defective part is not returned to the Manufacturer.
6. To service, maintenance or wear and tear parts (such as lights, starters and ballasts)

MODIFICATIONS TO GENERAL WARRANTY

The following sets forth certain modifications to the General Warranty for specific products of Manufacturer:

DISPLAY CASE AND SPECIALTY PRODUCTS CLEARVOYANT® LED LIGHTING

The warranty period for Clearvoyant LED lighting components within the Clearvoyant lighting system is five years from date of shipment.

REMEDY LIMITATION/DAMAGES EXCLUSION

THE REMEDY OF REPAIR OR PROVISION OF A REPLACEMENT PART WITHOUT CHARGE SHALL BE THE EXCLUSIVE REMEDY FOR ANY WARRANTY CLAIM HEREUNDER. WITHOUT LIMITING THE FOREGOING, MANUFACTURER SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF PROFIT, LABOR COST, LOSS OF REFRIGERANT OR FOOD PRODUCTS.

EXCLUSIVE WARRANTY

THE FOREGOING WARRANTY IS THE EXCLUSIVE WARRANTY WITH RESPECT TO THE PRODUCTS. ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED. NO IMPLIED WARRANTY SHALL BE DEEMED CREATED BY COURSE OF DEALING OR USAGE OF TRADE. NO OTHER PERSON IS AUTHORIZED TO EXPAND OR CREATE ANY OBLIGATION GREATER THAN OR MORE EXPANSIVE THAN THE WARRANTY PROVIDED HEREIN.

Submit warranty claims to:

Hillphoenix Refrigeration & Power

Systems Division

2016 Gees Mill Road

Conyers, GA 30013

Warranty / Service

Phone: 1-833-280-5714

Hillphoenix Display Case Division

1925 Ruffin Mill Road

Colonial Heights, VA 23834

Warranty / Service

Phone: 1-833-280-5714

Hillphoenix Specialty Products Division

703 Franklin Street

Keosauqua, IA 52565

Warranty / Service

Phone: 1-833-280-5714

Warning

Maintenance & Case Care

When cleaning cases the following must be performed PRIOR to cleaning:

To avoid electrical shock, be sure all electric power is turned off before cleaning. In some installations, more than one switch may have to be turned off to completely de-energize the case.

Do not spray cleaning solution or water directly on fan motors or any electrical connections.

All lighting receptacles must be dried off prior to insertion and re-energizing the lighting circuit.

Please refer to the Use and Maintenance section of this installation manual.

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Hillphoenix Specialty Products
1-319-293-3777

703 Franklin Street, PO Box 478, Keosauqua, IA 52565

Due to our commitment to continuous improvement, all specifications are subject to change without notice.

Hillphoenix is a Sustaining Member of the American Society of Quality.

Visit our website at www.hillphoenix.com

