



Installation, Operation, and Service Manual

IM64CD- EC/IM64EC-EC

P/N 3239598 Rev B
January 2026

Models Covered
IM64CD8EC, IM64CD12EC,
IM64ED6EC

Certifications



Intertek



Intertek

WARNING:

If the information in these instructions are not followed exactly, a fire or explosion may result, causing property damage, personal injury, or death. Installation and service must be performed by a qualified installer or service agency.

READ THE ENTIRE MANUAL BEFORE INSTALLING OR USING THIS EQUIPMENT.

The equipment can be configured to use a variety of refrigerants during the ordering process. Different refrigerants have unique characteristics to be aware of, including potential toxicity of R-744 (CO₂) in high concentrations. If a leak is present or suspected, do not allow untrained personnel to attempt to find the cause and observe all warnings contained within this document.

Equipment is limited to use in an altitude of 6,562 ft (2 km) or less.

FAILURE TO ABIDE BY THIS WARNING COULD RESULT IN AN EXPLOSION, DEATH, INJURY, AND PROPERTY DAMAGE.

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

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User Safety and Product Information

Legal Disclaimer

Review all safety warnings on the case and in this manual before attempting start-up. Hussmann shall not be liable for any repair or replacement made without the written consent of Hussmann, or when the product is installed or operated in a manner contrary to the printed instructions covering installation and service which accompanied such product. Please note that failure to follow the instructions in this document may void your factory warranty.

As used herein, “appliance”, “unit”, and “equipment” each refer to IM64CD-ED/IM64EC-EC unless otherwise stated

or contextualized and “system” means a set of things working together as parts of an interconnecting network.

ANSI Z535.5 Definitions

The definitions below are used to clarify the magnitude and urgency of harm and damage, considering problems arising from misuse. Relative to their potential danger, the definitions are divided into five parts according to ANSI Z535 Series.



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to personal injury.



SAFETY INSTRUCTIONS (or equivalent) signs indicate specific safety-related instructions or procedures.

Proposition 65



This warning does not mean that Hussmann products will cause cancer or reproductive harm, or is in violation of any product-safety standards or requirements. As clarified by the California State Government, Proposition 65 can be considered more of a ‘right-to-know’ law than a pure product safety law. When used as designed, Hussmann believes that our products are not harmful. We provide the Proposition 65 warning to stay in compliance with California State law. It is your responsibility to provide accurate Proposition 65 warning labels to your customers when necessary. For more information on Proposition 65, please visit the California State Government website.

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User Safety and Product Information

Serial Label Location

The serial label is located on the left back panel. The serial label contains all pertinent information such as model, serial number, amperage rating, refrigerant type, and other important installation and safety information.

UL/ETL Listing

These merchandisers are manufactured to meet ANSI / UL 60335-2-89 and CSA C22.2 standard requirements for safety. Proper installation is required to maintain this listing. This appliance is to be installed in accordance with the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15.

NSF/UL EPH/ETL Sanitation Listing

These merchandisers are manufactured to meet ANSI / NSF-7 standard requirements for sanitation. Proper installation is required to maintain this listing. See page 37 for details.

Climate Class and Ambient Conditions

The test room climate class for this appliance is Climate Class 8. Climate Class 8 means the equipment has been tested for ambient of 75° F (23.9° C) dry bulb and 55% relative humidity.

Ambient conditions that equipment is designed for may exceed 75° F (23.9° C) and 55% relative humidity in some cases. Consult the labeling on the equipment for the maximum ambient temperature and humidity in which the equipment can be installed. Do not exceed the listed ambient conditions.

Federal / State Regulation

These merchandisers, at the time they are manufactured, meet all federal and state/provincial regulations. Proper installation is required to ensure these standards are maintained. Near the serial label, each case carries a label identifying the environment (temperature and relative humidity) in which the case was designed to be used.

Additional Important Symbols

The symbols below indicate specific types of information on the equipment.



High Pressure



Grounding Connection Location

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User Safety and Product Information

General Safety Instructions

SAFETY INSTRUCTIONS

This manual was written in accordance with originally prescribed equipment that is subject to change. Hussmann reserves the right to change or revise specifications and product design in connection with any feature of our products.

Personal Protection Equipment (PPE) is required. Wear safety glasses, gloves, protective boots or shoes, long pants, and a long-sleeve shirt when working with this equipment and while handling glass.



The safety of our customers and employees is paramount. The precautions and procedures described in this manual are intended as general methods for safe use of this equipment. Please be sure to comply with the precautions described in this manual to protect you and others from possible harm. Always follow OSHA standards for safety.

Only qualified personnel should install and service this equipment. Personal Protection Equipment (PPE) is required. Wear safety glasses, gloves, protective boots or shoes, long pants, and a long-sleeve shirt when working with this equipment and while handling glass.

Observe the refrigerant type the equipment is designed to work with and any and all precautions on tags, stickers, labels and literature provided and referenced for this equipment. Use only Hussmann approved parts approved through the Hussmann Performance Parts Website. Verify that all repair parts are identical models to the ones they are replacing. Do not substitute parts such as motors, switches, relays, heaters, compressors, power supplies, or solenoids. Read all safety information regarding the safe handling of refrigerant and refrigerant oil, including the Material Safety Data Sheet. MSDS sheets can be obtained from your refrigerant supplier. Service is to be performed by factory-authorized service personnel, so as to minimize the risk of possible injury due to incorrect parts or improper service.

Contractors must strictly adhere to specifications provided by the Engineer of Record (EOR), as well as US EPA regulations, OSHA regulations, and all other federal, state, and local codes. There are numerous hazards, not limited to, but including: high pressures, toxic substances, electrical arcs and shocks, very heavy equipment with specific lift points and structural constraints, public safety, noise, and possible environmental damage.

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User Safety and Product Information



Before Working with All Refrigerant Types

The following apply to ALL REFRIGERANT TYPES. Refrigerant specific warnings and safety information are present in the following sections. Do not attempt to install, service, or perform maintenance on any equipment without reading and understanding ALL applicable warnings related to the equipment.

READ THE ENTIRE MANUAL AND ALL WARNINGS BEFORE INSTALLING OR USING THIS EQUIPMENT.

- Installation and use of this appliance includes numerous hazards, not limited to, but including: burns due to high temperatures, high pressures, toxic substances, electrical arcs and shocks, very heavy equipment with specific lift points and structural constraints, food and product damage or contamination, public safety, noise, and possible environmental damage.
- This appliance shall only be connected to another appliance suitable for the same refrigerant.
- Be aware that refrigerants may not contain an odour.
- Excessive ambient conditions may cause condensation and sweating on doors. Facility operators are responsible for monitoring doors and floor conditions and ensuring the safety of all persons present. Installation and service must be performed by a qualified installer or service agency only as recommended by the manufacturer.
- If a leak is present or even suspected, do not allow untrained personnel to attempt to find the cause.
- A hand-held leak detector ("sniffer") will be used before any repair and/or maintenance.
- WARNING: Keep clear of obstruction, all ventilation openings in the appliance enclosure or in the structure for build-in.
- WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- WARNING: Do not damage the refrigerating circuit.
- WARNING: Do not use electrical appliances inside the food/ice storage compartments unless they are the type recommended by the manufacturer.
- Do not use any means to clean, other than those recommended by the manufacturer.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn refrigerant piping.
- Do not store items or flammable materials atop the unit. Do not walk on case.
- Do not store explosive substances, such as aerosol cans with flammable propellant, in this appliance.
- This 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 supervised to ensure that they do not play with the appliance.

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User Safety and Product Information

WARNING

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- Any insulation shall be suitable for use with the material being insulated.
- Protection devices, piping, and fittings shall be protected as far as possible against adverse environmental effects, for example, the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris.
- Piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ANSI/ASHRAE 15, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed. Mechanical connections made in accordance shall be accessible for maintenance purposes.
- The installation of pipe-work shall be kept to a minimum.
- Provision shall be made for expansion and contraction of long runs of piping.
- Piping in refrigeration systems shall be so designed and installed to minimize the likelihood of hydraulic shock damaging the system.
- Flexible pipe elements shall be protected against mechanical damage, excessive stress by torsion, or other forces, and that they should be checked for mechanical damage annually.
- Precautions shall be taken to avoid excessive vibration or pulsation of the refrigerant piping.
- LOCK OUT / TAG OUT — To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.
- To reduce the risk of fire, electrical shock or injury when cleaning this merchandiser:
 - Unplug the merchandiser before cleaning.
 - Keep all liquids away from electrical and electronic components.
- Merchandiser must be grounded. All wiring must be in compliance with NEC and local codes.
- The appliance shall not be installed in public corridors or lobbies.
- All servicing of this appliance shall be performed only as recommended in this manual.
- Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
- Ensure that the apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

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User Safety and Product Information

WARNING

- Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times, the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.
- During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- Component parts shall be replaced with like components, and servicing shall be done by qualified service personnel only.
- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
- After completion of field piping for split systems, the field pipework shall be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging, according to the following requirements:
 1. The minimum test pressure for the low side of the system shall be the low side design pressure and the minimum test pressure for the high side of the system shall be the high side design pressure, unless the high side of the system cannot be isolated from the low side of the system in which case the entire system shall be pressure tested to the low side design pressure.
 2. The test pressure after removal of pressure source shall be maintained for at least 1 hour with no decrease of pressure indicated by the test gauge, with test gauge resolution not exceeding 5% of the test pressure.
 3. During the evacuation test, after achieving a vacuum level specified in the manual or less, the refrigeration system shall be isolated from the vacuum pump and the pressure shall not rise above 1,500 microns within 10 min. The vacuum pressure level shall be specified in the manual, and shall be the lessor of 500 microns or the value required for compliance with national and local codes and standards, which may vary between residential, commercial, and industrial buildings.
- Solenoid valves shall be correctly positioned in the piping to avoid hydraulic shock.
- Solenoid valves shall not block in liquid refrigerant unless adequate relief is provided to the refrigerant system low pressure side.

FAILURE TO ABIDE BY THESE WARNINGS COULD RESULT IN AN EXPLOSION, DEATH, INJURY, AND PROPERTY DAMAGE. READ ALL WARNINGS PRIOR TO INSTALLING, PERFORMING MAINTENANCE, OR SERVICING THE EQUIPMENT IN ANY WAY.

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User Safety and Product Information



Before Working with R-744 (CO₂) Refrigerant

- WARNING: The refrigeration system is under high pressure. Do not tamper with it. Contact qualified service personnel before disposal.
- R-744 (CO₂) systems have similar safety concerns with all conventional refrigerants, in that it displaces oxygen, is heavier than air and will concentrate closer to the floor if there is a system leak. R-744 should be monitored for leaks similar to other refrigerants.
- If the refrigeration system is de-energized, venting of the R-744 through the pressure regulating relief valves on the refrigeration system can occur. In such cases, the system might need to be recharged with R-744, but in any case, the pressure regulating relief valve(s) shall not be defeated or capped. The relief setting shall not be altered.
- A sufficient number of pressure relief and pressure regulating relief valves might need to be provided based on the system capacity and located such that no stop valve is provided between the relief valves and the parts or section of the system being protected.
- A pressure relief device shall be installed in the high-pressure side of the refrigeration system between the motor-compressor and the gas cooler. There shall be no shut off devices or other components except piping between the motor-compressor and the pressure relief device that could introduce a pressure drop.
- The pressure relief device shall be mounted so that any refrigerant released from the system during its operation cannot cause harm to the user of the appliance. The aperture shall be located so that it is unlikely to be obstructed in normal use.
- The installed pressure relief device shall have no provisions for setting by the end user.
- The pressure setting of the installed pressure relief device shall be no higher than the design pressure of the high-pressure side.
- Confirm operation of leak detectors (e.g., by exhaling near the sensor), audible / visible alarms, and machine room ventilation before operation.
- Ventilate adjacent enclosed areas to prevent the formation of dangerous concentrations of carbon dioxide.
- Avoid contact of the skin or eyes with solid carbon dioxide (dry ice) or objects cooled by solid carbon dioxide.
- Additional information on the safe use and handling of carbon dioxide can be found in Standards from the Compressed Gas Association Standard (www.cganet.com).
- The following checks shall be applied to installations:
 - a. The actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed.
 - b. The ventilation machinery and outlets are operating adequately and are not obstructed.
 - c. If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
 - d. Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
 - e. Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

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User Safety and Product Information

WARNING

- Replacement parts must be compatible with the specific equipment's maximum design pressure as shown on the equipment labeling. For example, if the equipment has been designed to meet 1,305 psig (90 bar) maximum design pressure then any replacement part must be 1,305 psig (90 bar) compatible.
- Never apply heat directly to piping containing CO2. Rapid thermal expansion of CO2 can cause the pipe to burst.
- Pressure transducers / leak detectors / warning lights / sounders/buzzers / and plant room ventilation must all be operational prior to charging with CO2.
- Pressure relief devices / check valves must be located anywhere that liquid CO2 can be trapped. Trapped CO2 at -40° F (-40° C) will double in volume if allowed to rise to 86° F (30° C).
- Under no circumstances add Schrader valves to or remove Schrader valves from the system.
- Observe all warnings and labels on the unit being installed or serviced such as the one below indicating high pressure.

Asphyxiation

- R-744 is odorless, heavier than air, and is an asphyxiant gas. If sensor reading is maxed out or non-responsive assume an unsafe level of CO2 and ventilate the room prior to entering.
- Practical limit of R-744 is 0.006 lb/ft3 (56,000 ppm).
- Personnel including rescue workers should not enter areas in which the carbon-dioxide content exceeds 3% (30,000 ppm) by measurement unless wearing an SCBA or supplied-air respirator.
- A leak of R-744 could result in a concentration exceeding the practical limit in an enclosed, occupied space such as a cold room. Precautions must be taken to prevent asphyxiation. These include the use of permanent leak detection, which activates an alarm in the event of a leak.
- The practical limit is defined in ASHRAE 34 but may vary depending on regional regulations. The table below summarizes the effect of R-744 at various concentrations in the air.

PPM of R-744 (CO2)	Effects
442	concentration in atmosphere
5,000	long-term exposure limit (8 hours)
15,000	short-term exposure limit (10 minutes)
30,000	discomfort, breathing difficulties, headache, dizziness, etc.
100,000	loss of consciousness, followed by death
300,000	quick and immediate death

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User Safety and Product Information



CO2 Quality

- CO2 that is purchased for use in refrigeration systems should be of a purity level high enough to prevent accumulation of non-condensable gases and moisture. A build-up of these gases can block small orifices (such as expansion valves) or lead to high discharge pressure, reducing operation or causing the system to become inoperable.
- CO2 is commercially available at several different purity levels. The common names and percent purity are listed below. Hussmann recommends using “Refrigeration Grade” (99.99% purity) CO2.
- Mixing of higher purity grades of CO2 is acceptable. Lower grades of CO2 contain higher levels of contaminants and water and will decrease system performance. Higher levels of moisture may react with the CO2 and form carbonic acid that can degrade component integrity. Hussmann recommends keeping enough refrigeration grade CO2 on-site to charge the system.
- Medical grade CO2 should not be used, due to the outlet pressure regulators typically present on tanks.
- Bone-Dry grade is the minimum acceptable purity to ensure proper operation of the equipment and is pure enough to technically prevent accumulation of non-condensable gases in the system.
- R-744 (CO2) purity:

R-744 (CO2) Grade	Purity
Industrial and Medical Grade	99.5%
Bone Dry (minimum acceptable)	99.8%
Anaerobic Grade	99.9%
Refrigeration Grade (recommended)	99.99%
Coleman/Instrument Grade	99.99%
Research Grade	99.999%
Ultra-Pure Grade	99.9999%

CO2 Leak Detector

Leak detectors are required anywhere that CO2 gas may leak or be vented. Leak detectors provide an alarm if CO2 is detected at an amount that exceeds the maximum allowable CO2 concentration. Leak detectors are not provided with the case. Consult local safety codes for exact requirements.

Startup and Shut Down

If the refrigeration system is de-energized, venting of the R-744 (CO2) through the pressure regulating relief valves on the refrigeration system can occur. In such cases, the system may need to be recharged with R-744 (CO2), but in any case, the pressure regulating relief valve(s) are not to be defeated or capped. The relief setting shall not be altered.

Provisions must be made for startup and shutdown to prevent excessive pressures. Consult the pumping station instructions and local codes for requirements.

It is imperative that the case piping is clean and dry prior to charging the system with CO2. All tubing **MUST** be rated with a minimum design pressure at or above the rating of the equipment. Consult equipment labeling to confirm pressure rating (e.g., 1,305 psig [90 bar]) before installation.

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User Safety and Product Information

CAUTION

- Do not use hot/warm water on cold glass surfaces. This can cause the glass to shatter and could result in personal injury. Allow glass fronts to warm before applying hot/warm water.
- Do not allow cleaning agent or cloth to contact food product.
- Product will be degraded and may spoil if allowed to sit in a non-refrigerated area.

NOTICE

- Merchandiser must operate for 24 hours before loading product.
- Regularly check merchandiser temperatures.
- Do not break the cold chain. Keep products in cooler before loading into merchandiser.
- Merchandisers are designed for loading ONLY pre-chilled products.

Model Description

The IM-64 is an extension of the ISLA platform for multi-deck self-service cases with a higher pack-out than the current ISLA offering.

Husmann Product Control

Serial number and shipping date of all equipment is recorded in Husmann's files for warranty and replacement part purposes. All correspondence pertaining to warranty or parts ordering must include the serial number of each piece of equipment involved. This is to ensure the customer is provided with the correct parts.

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Installation Information

Equipment Inspection / Shipping Damage

Upon delivery of the equipment, verify that the correct equipment has been received by comparing the information on the equipment serial label with the ordering and submittal documents. All equipment should be thoroughly examined for shipping damage before and during unloading. Equipment has been carefully inspected at our factory prior to shipment. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection reports and/or claim forms.

Apparent Loss or Damage

If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim.

Concealed Loss or Damage

When loss or damage is not apparent until after equipment is uncrated, retain all packing materials and submit a written response to the carrier for inspection within 15 days.

Unloading, Moving, and Transporting Case

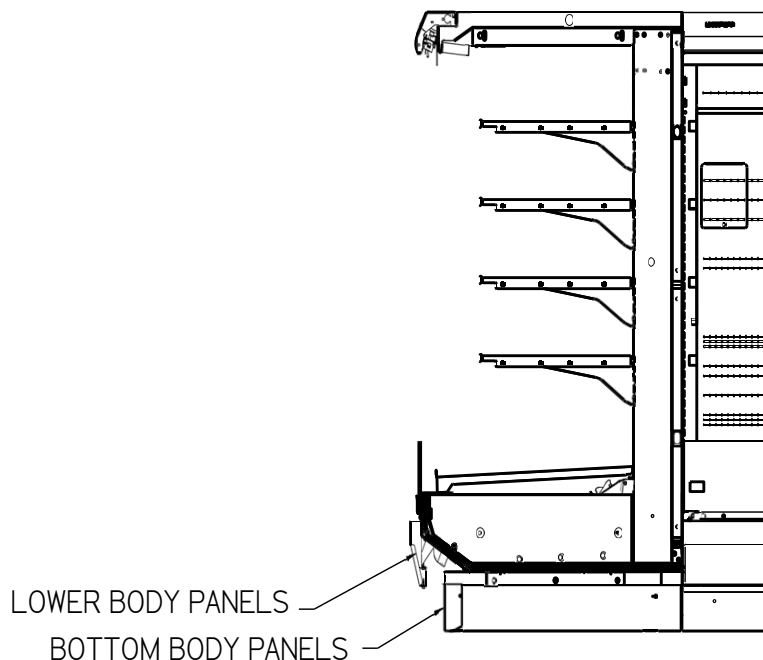
Do not remove shipping braces until the merchandiser is positioned for installation.

Move the merchandiser as close as possible to its permanent location and remove all packaging. Check for damage before discarding packaging. Remove all separately packed accessories such as kits and shelves.

Improper handling may cause damage to the merchandiser when unloading. To avoid damage do not drag the merchandiser out of the trailer. Use a Lever Bar (also known as a Mule, Johnson Bar, J-Bar, Lever Dolly, or Pry Lever) where applicable.

ISLA Transportation Guidelines

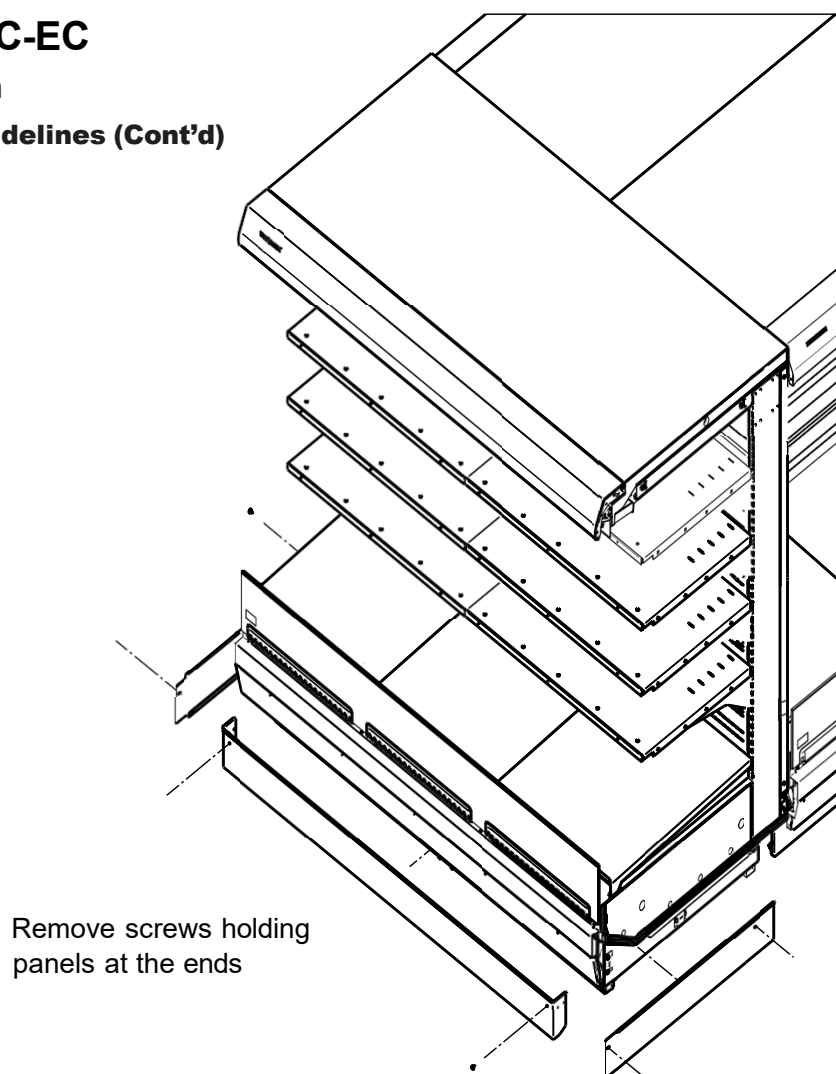
1. Do Not Push, Pull, Adjust, or Manipulate the ISLA case by any glass component .
 - Doing so will result in severe damage to such components
 - Glass Breakage may result in serious injury
 - See lifting and transport instructions for proper moving technique
2. Never stand on the ISLA Top, Deck, or any Shelves for any reason. These surfaces are not steps and are not designed to support such loads.
 - Misusing these surfaces as steps will result in damage to the case
 - Misusing these surfaces as steps may result in serious injury to the user
 - These surfaces are intended for the storage and merchandising of food products
 - Use a ladder or designed structure to work above the case



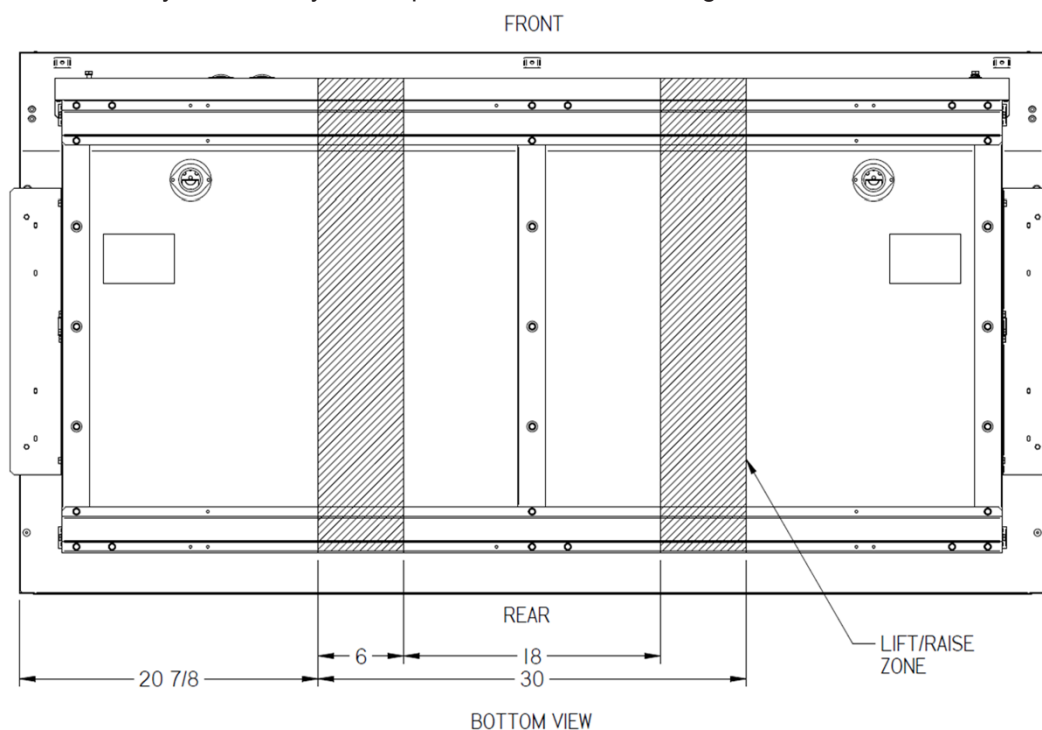
IM64CD-EC/IM64EC-EC

Installation Information

ISLA Transportation Guidelines (Cont'd)



1. The ISLA can be lifted by a forklift only at the specified location in the diagram

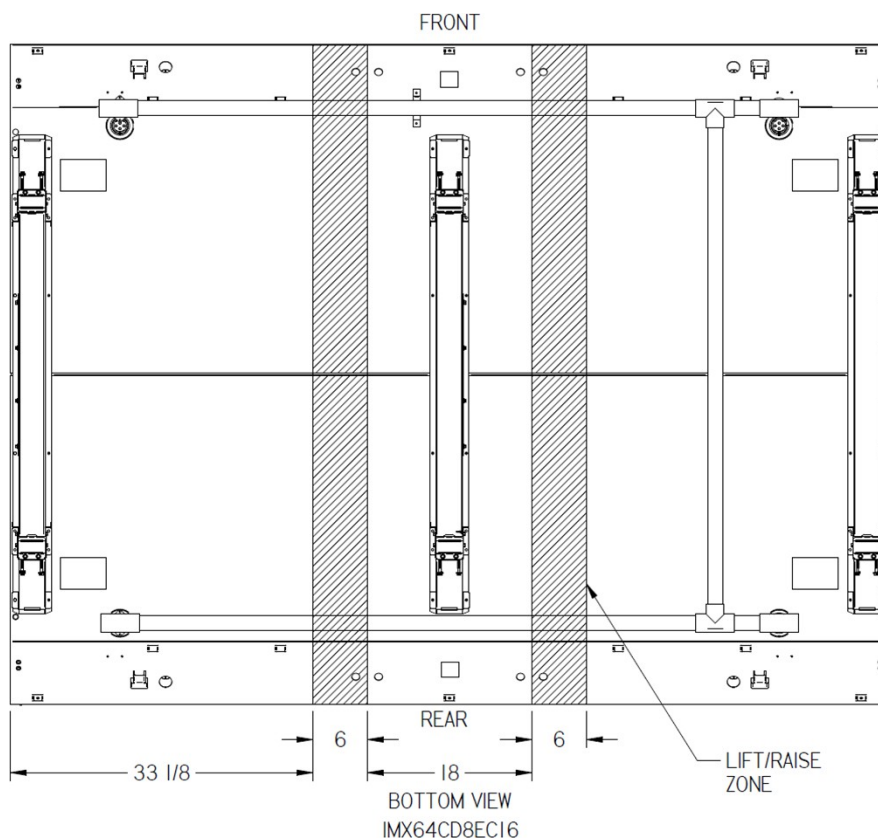


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Installation Information

ISLA Transportation Guidelines (Cont'd)

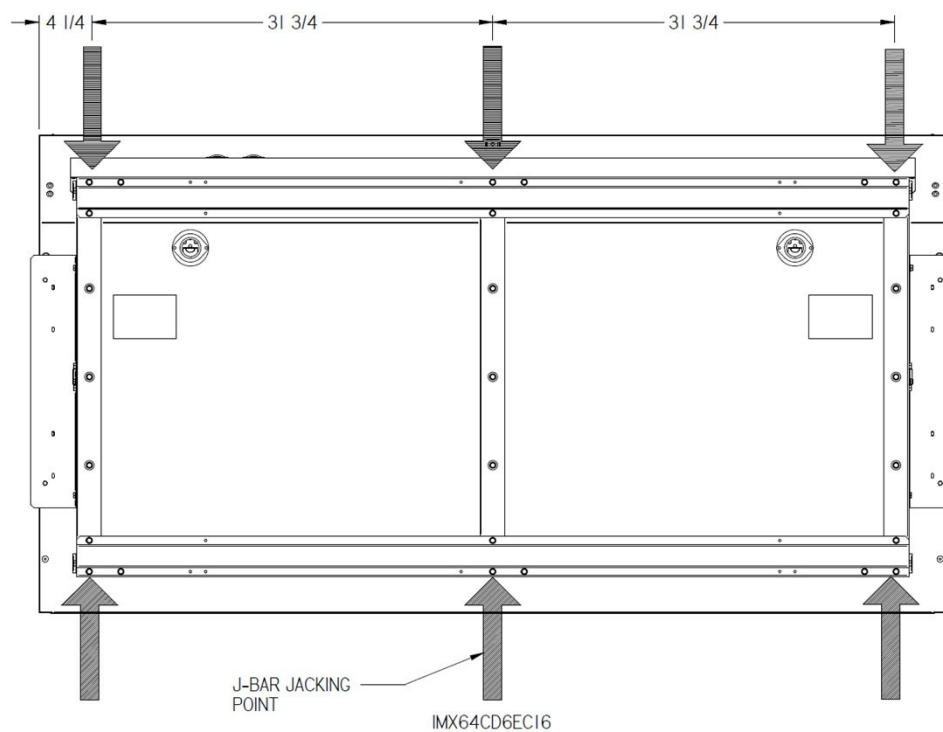
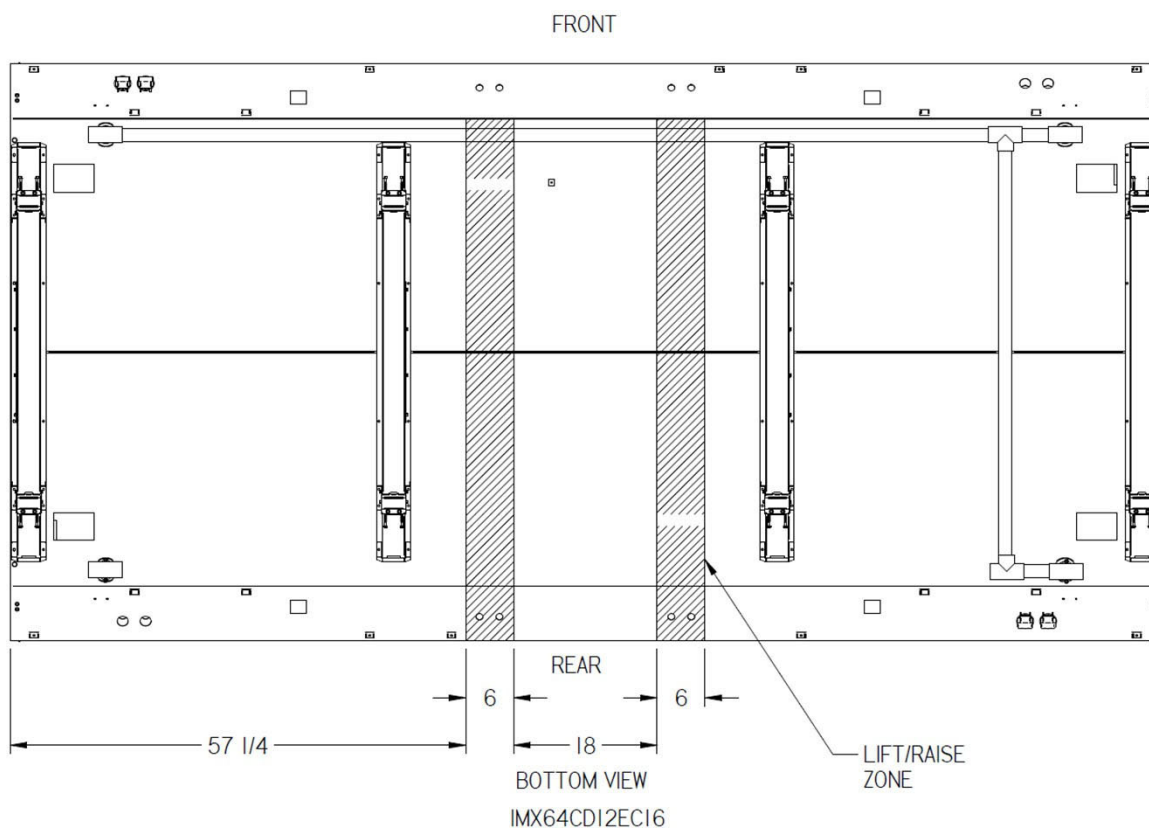
2. Remove close-offs and lower body panels before lifting with a fork. Serious damage will occur if the body panels are not removed.
 - Remove the end case lower and bottom panels first
 - Then remove the side case lower and bottom panels
 - A Phillips head screwdriver/drill is needed for lower and bottom panel removal
3. Make sure that fork spacing and width will not damage drain, piping, or electrical lines
4. Be sure that the forks are long enough to support beyond the center of the case. Check for proper balance before moving. A minimum fork length of 36" is recommended for 68" wide cases
5. The ISLA can be raised at one end with a forklift to allow the placement of rollers or dollies. See figure on page 13 for J-bar and jacking instructions
6. Never drag or push the ISLA by ANY COMPONENT including ANY GLASS COMPONENT. This will result in damage to the base, and possibly damage to other components
7. Evenly support the entire base structure on rollers or dollies before attempting to move.



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Installation Information

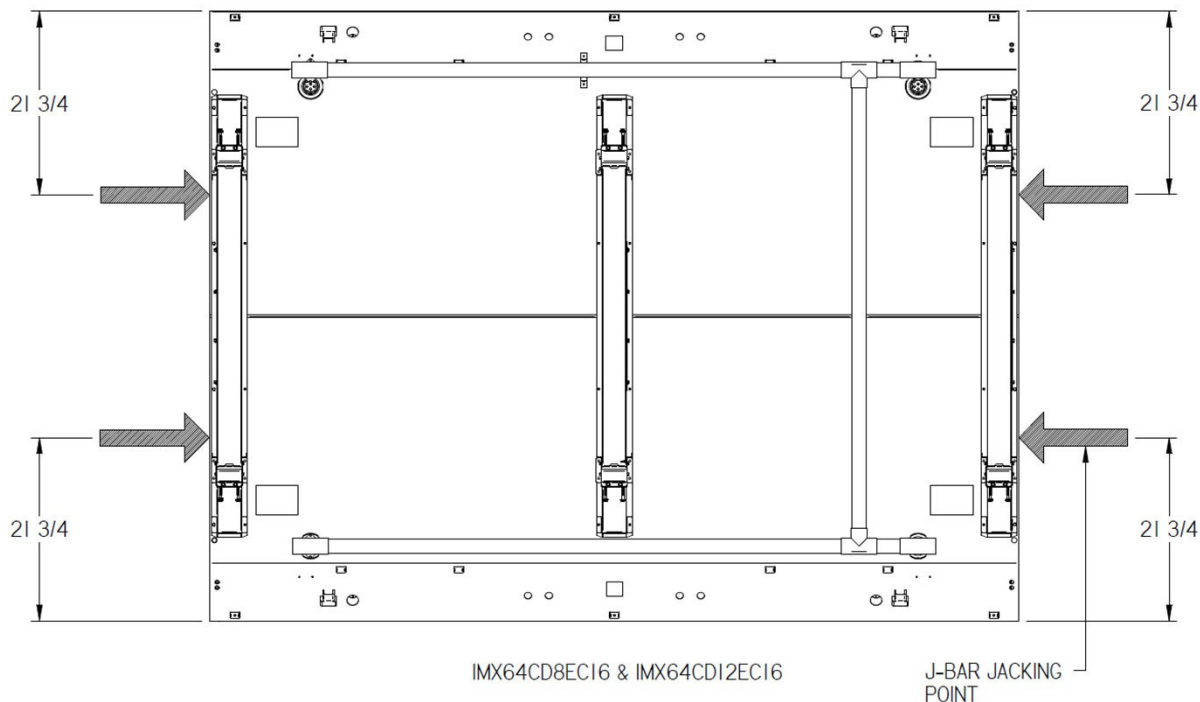
ISLA Transportation Guidelines (Cont'd)



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Installation Information

ISLA Transportation Guidelines (Cont'd)



8. If using J-Bars, use the specified jacking points to raise the case
- Raise one side of the case first.
 - Use as many J-Bars as possible to lift from the base channels
 - A minimum of 2 J-Bars is required
 - Place Dollies and chock wheels before lifting the other side. Be sure that the dollies are evenly spaced to carry to weight of the case

Exterior Loading

Do NOT walk on top of the merchandiser or damage to the merchandisers and serious personal injury could occur. Merchandisers are not structurally designed to support excessive external loading such as the weight of a person. Do not place heavy objects on the merchandiser.



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Installation Information

Location

These display cases are designed for displaying products in air-conditioned stores where temperature is maintained at or below the ANSI / NSF-7 specified level and relative humidity is maintained at or below 55%. Refer to the label located on the merchandiser for the recommended maximum ambient operating temperature and relative humidity. Do not exceed the listed ambient conditions.

Placing refrigerated display cases in direct sunlight, near hot tables, or near other heat sources could impair their efficiency. Like other display cases, these are sensitive to air disturbances. Air currents passing around display cases can seriously impair their operation. Do not allow air conditioning, electric fans, open doors or windows, etc., to create air currents around the display case.

Note: Under no circumstances should the top or rear of the case be in contact with elements (such as building structures, drywall, etc.) that may restrict airflow or impact operation. Consult listed clearances, or if uncertain, contact a Hussmann representative prior to installation.

Leg Information

See pages 15-17.

Leveling Case

Be sure to position merchandisers properly, then level all four corners. Merchandiser(s) must be installed level to ensure proper operation of the refrigeration system, and to ensure proper drainage of defrost water. This merchandiser must be installed level (from back to front, and side to side) to allow maximum draining. Choose a level area to install case.

IMPORTANT! IT IS IMPERATIVE THAT CASES BE LEVELED FROM FRONT TO BACK AND SIDE TO SIDE PRIOR TO JOINING. A LEVEL CASE IS NECESSARY TO ENSURE PROPER OPERATION, WATER DRAINAGE, GLASS ALIGNMENT AND OPERATION OF THE HINGES SUPPORTING THE GLASS. LEVELING THE CASE CORRECTLY WILL SOLVE MOST HINGE OPERATION PROBLEMS.

^A Approximate charge based on normal operating conditions

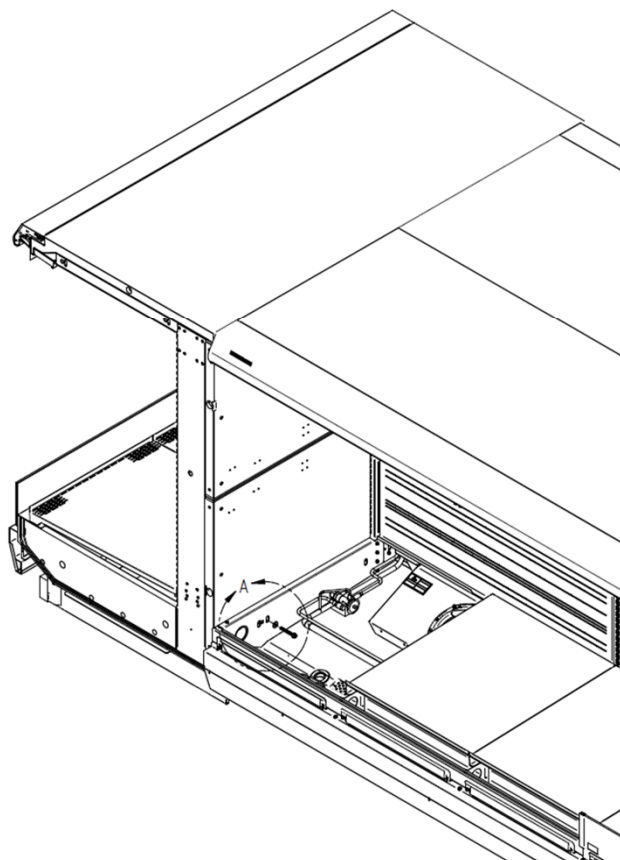
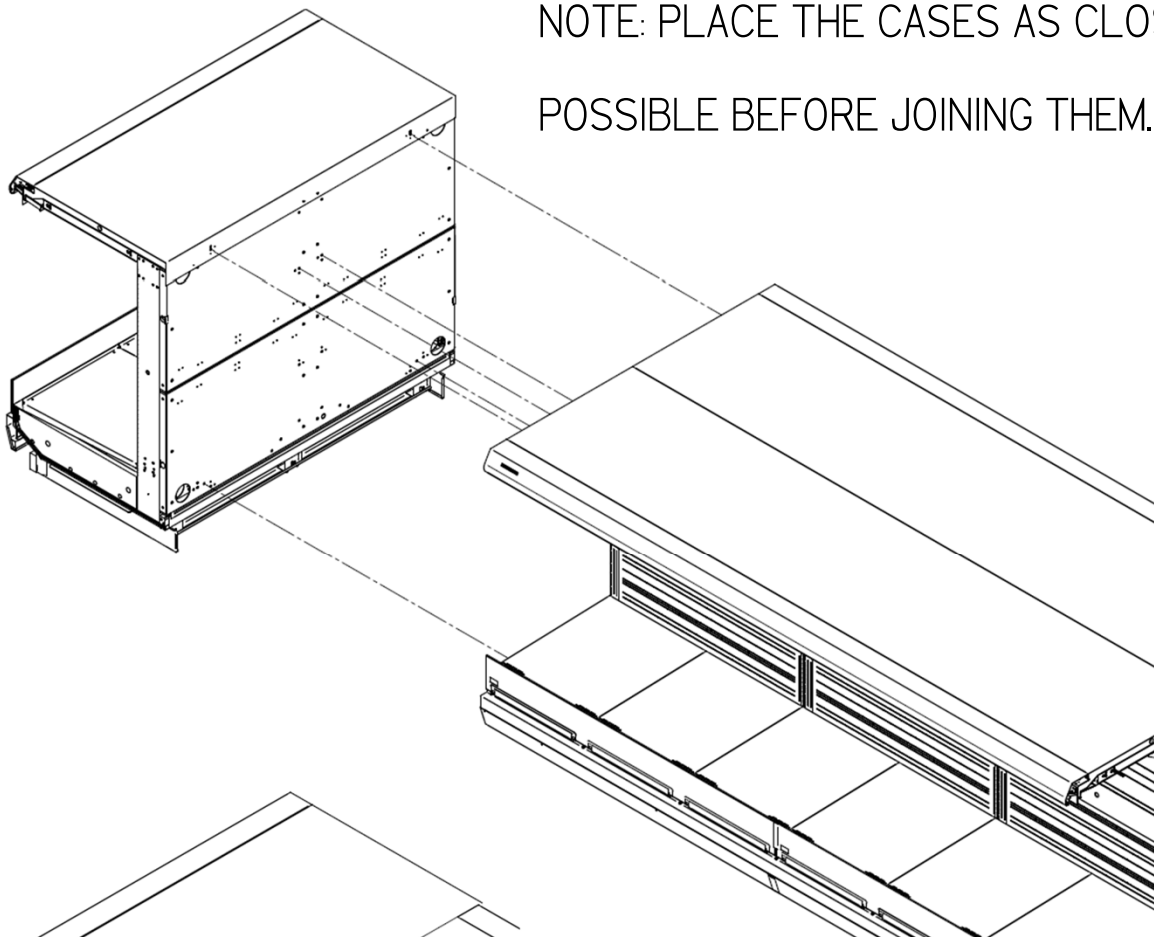
IM64CD-EC/IM64EC-EC

Installation Information

Case Joining

NOTE: DO NOT MOVE THE CASES AFTER JOINING

NOTE: PLACE THE CASES AS CLOSE AS POSSIBLE BEFORE JOINING THEM.

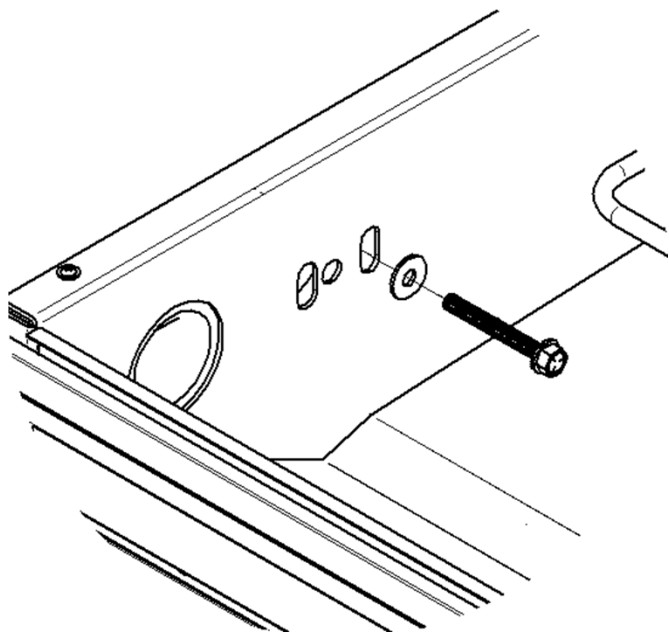


STEP 1: REMOVE THE DECK PAN FROM CASE TO ACCESS THE JOINT POINT & SCREW THE CENTER CASE TO THE END CASE USING 5/16" X 2 1/2" SCREWS. REINSTALL THE DECK PAN AFTER THIS STEP.

IM64CD-EC/IM64EC-EC

Installation Information

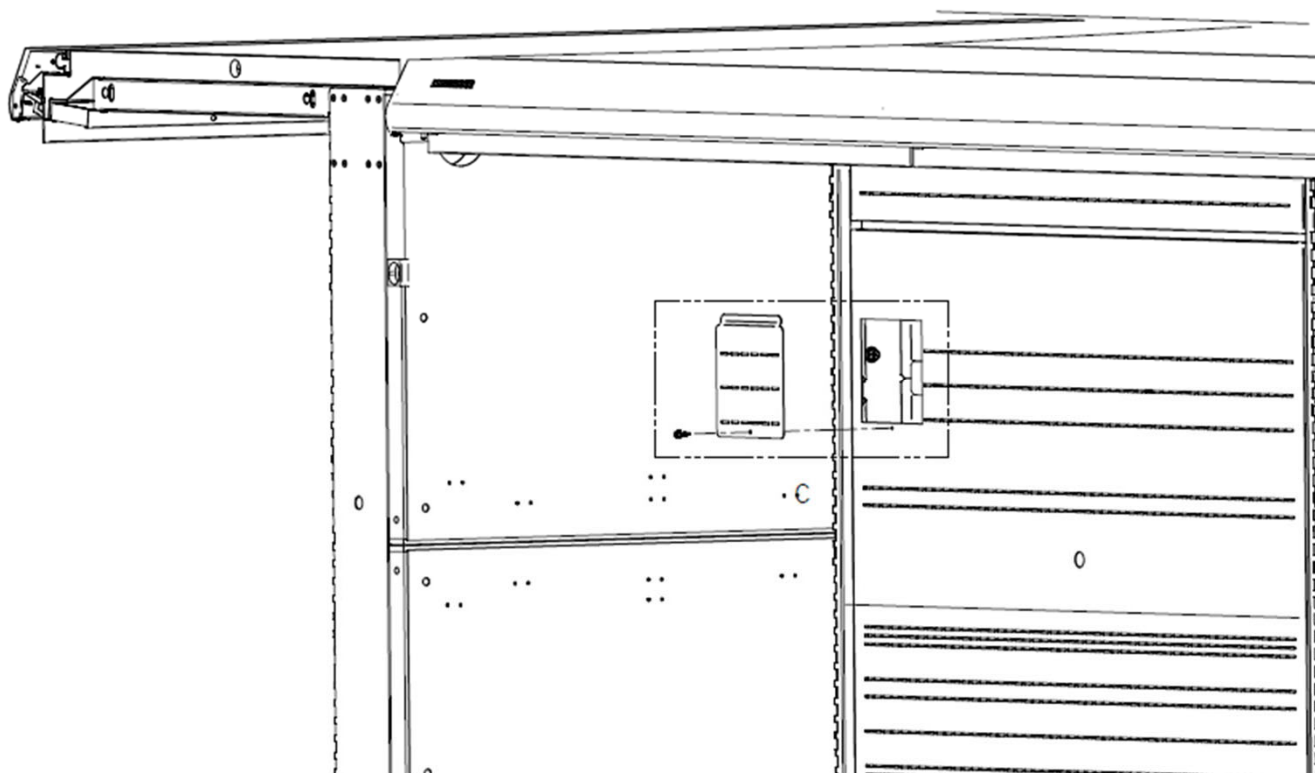
Case Joining (Cont'd)



USE A 5/16" FLAT ZINC WASHER & 5/16" X 2 1/2" SCREW TO JOIN THE CENTER CASE TO THE END CASE.

NOTE: THE STEPS SHOWN MUST BE FOLLOWED ON BOTH SIDES OF THE CENTER CASE..

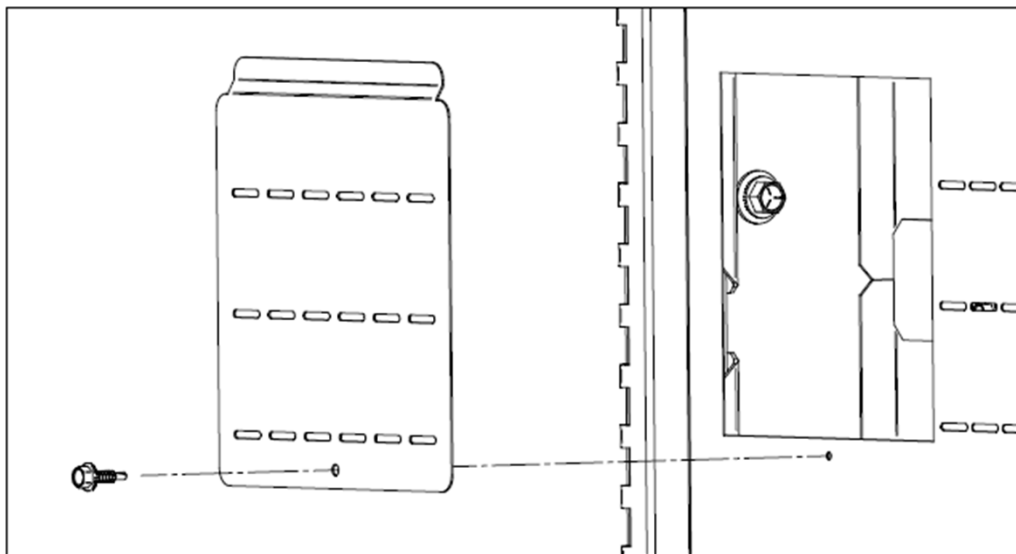
STEP 2: REMOVE THE BACK PANEL TO ACCESS THE JOINT POINT & SCREW THE CENTER CASE TO THE INSERT NUT LOCATED ON THE END CASE BACK PANEL USING 5/16" X 2 1/2" SCREWS. REINSTALL THE BACK PANEL AFTER THIS STEP.



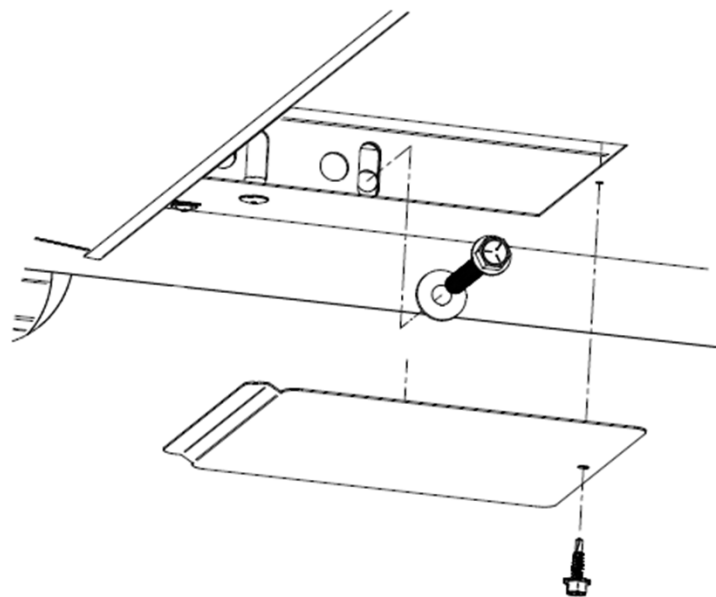
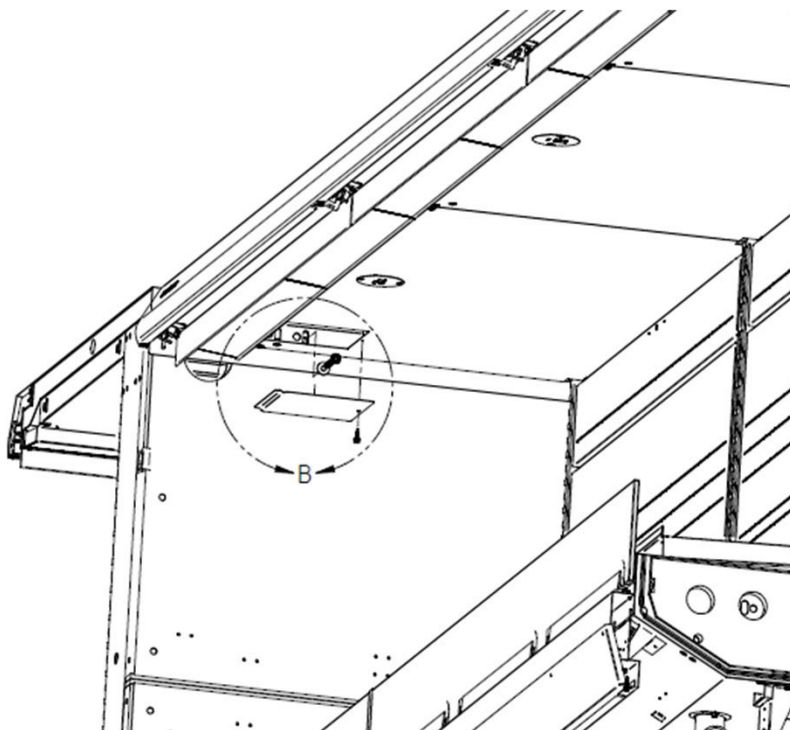
IM64CD-EC/IM64EC-EC

Installation Information

Case Joining (Cont'd)



STEP 3: REMOVE THE COVER FROM THE TOP PANEL TO ACCESS THE JOINT POINT & SCREW THE CENTER CASE TO THE INSERT NUT LOCATED ON THE END CASE BACK PANEL USING 5/16" X 2 1/2" SCREWS. REINSTALL THE COVER AFTER THIS STEP.

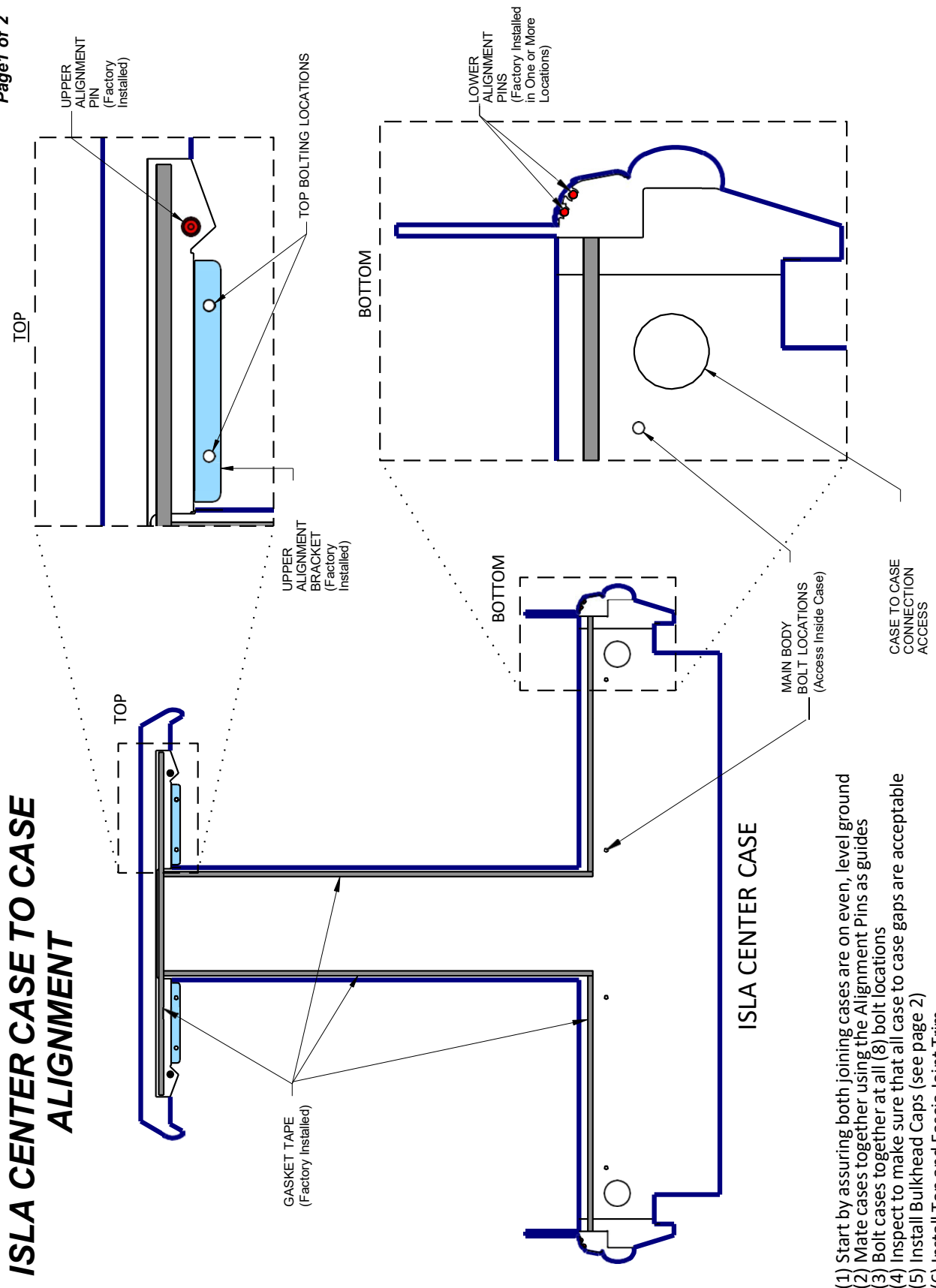


IM64CD-EC/IM64EC-EC

Installation Information

Case Joining (Cont'd)

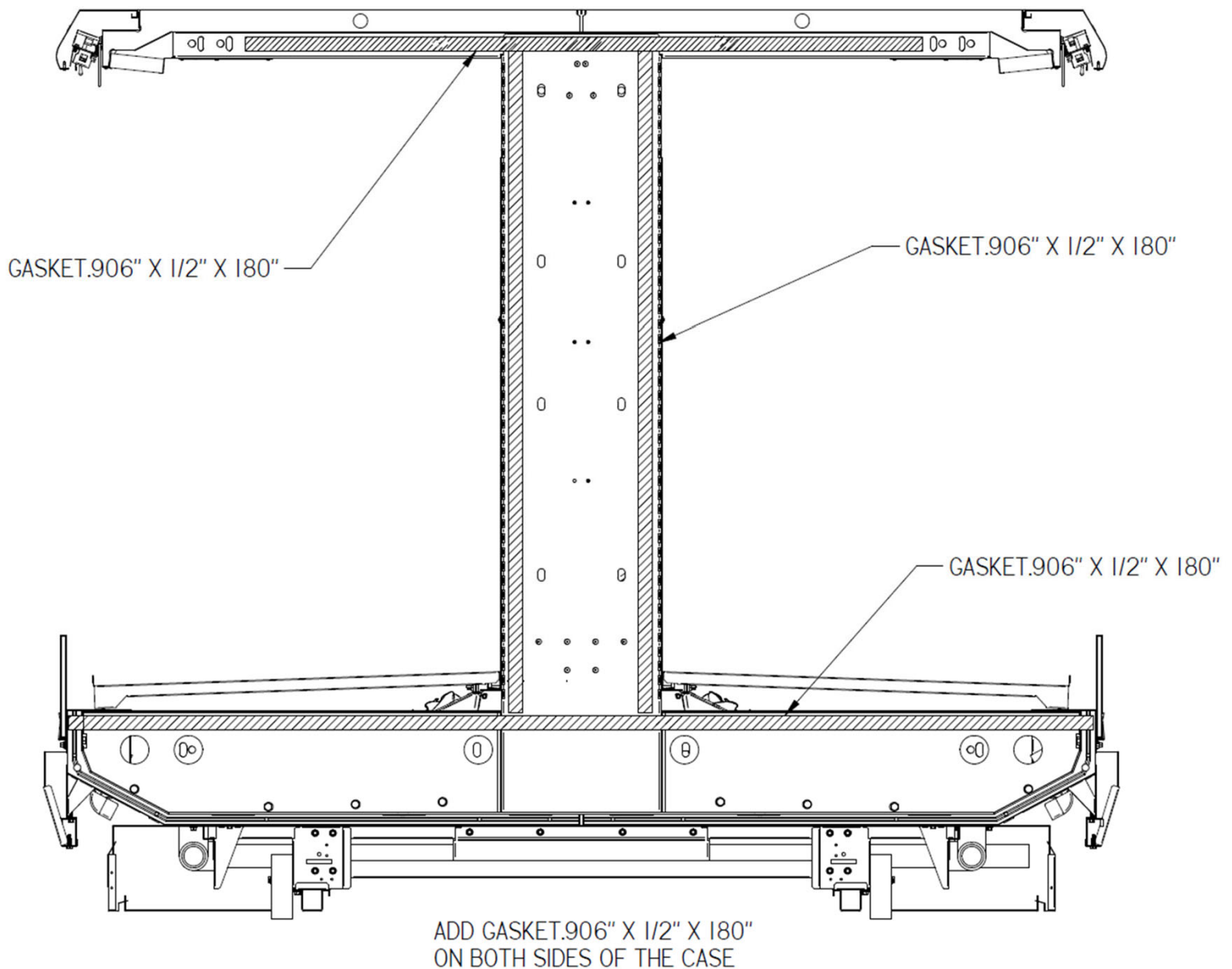
Page 1 of 2



IM64CD-EC/IM64EC-EC

Installation Information

Case Joining (Cont'd)



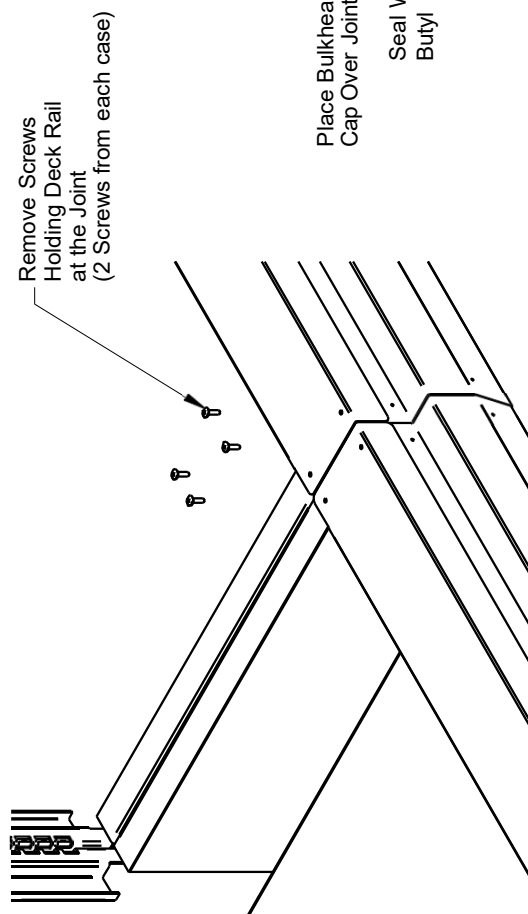
IM64CD-EC/IM64EC-EC

Installation Information (If Equipped)

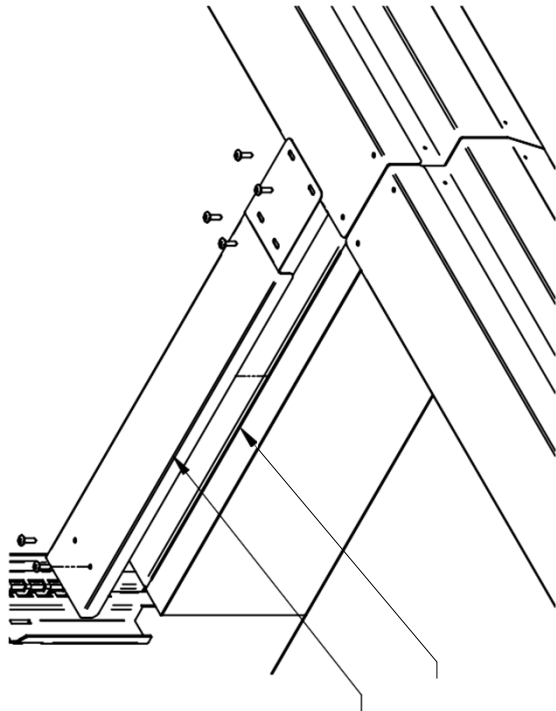
Case Joining (Cont'd)

Page 2 of 2

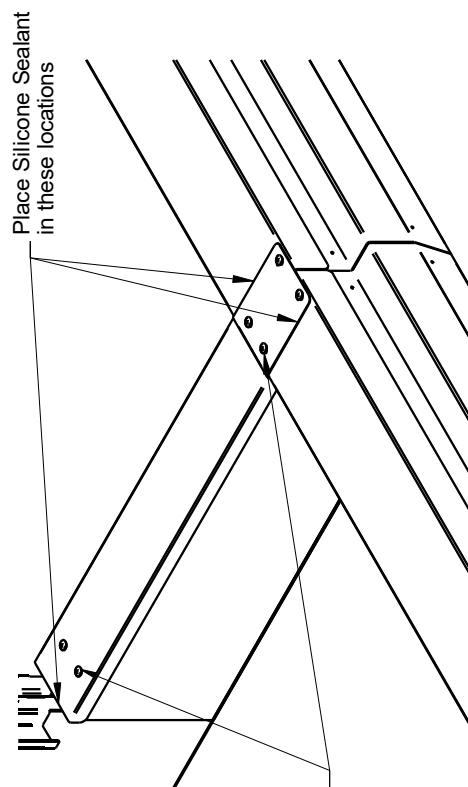
ISLA CENTER CASE TO CASE ALIGNMENT Bulkhead Cap Installation



FIRST



NEXT



FINALLY

- Replace Deck Rail Screws
- Add 2 Screws to Secure the Inner Section

IM64CD-EC/IM64EC-EC

Installation Information

Piping Overview

Important: Since Hussmann has no direct control over the installation, providing freeze-burst protection is the responsibility of the installing contractor.

System design must conform to all local and national codes, laws, and regulations applying to the site of installation. In addition, the safety code for mechanical refrigeration (ASME B31.5) should be followed as a guide for installation and operation practice.

Refrigerant line sizes and piping techniques should be obtained from the ASHRAE guide or equivalent reference. Under no circumstances should the refrigerant connection size of the equipment be used as the basis for sizing the lines.

The horizontal suction line should slope away from the equipment toward the compressor. Vertical suction risers may require a trap at the bottom of the riser for proper oil return.

Installing Drip Piping

Poorly or improperly installed drip pipes can seriously interfere with the merchandiser's operation and result in costly maintenance and product losses.

Optional drip pipe arrangements are shown on the next page. It is the installing contractor's responsibility to consult local agencies for local code requirements. Assemble the components using field-supplied PVC primer and glue according to the manufacturer's direction.

Please follow the recommendations listed below when installing drip pipes to ensure proper installation.

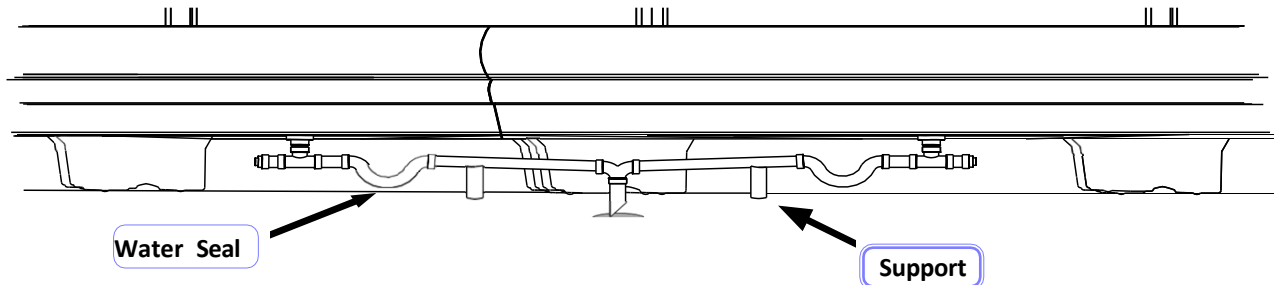
1. When connecting drip piping, the "water seal" must be used as part of the drip piping to prevent air leakage or insect entrance. Never use two water seals in series in any one drip pipe. Double water seals in series will cause an air lock and prevent draining.
2. Pitch the drip piping in the direction of flow. There should be a minimum pitch of $\frac{1}{4}$ " per ft (20 mm per 1 m).
3. Avoid long runs of drip piping. Long runs make it impossible to provide the pitch necessary for good drainage.
4. All connections must be watertight and sealed with the appropriate PVC or ABS cement.
5. Ensure that drip piping is supported to relieve any stress on drip pipe connectors and drain hub. Drip piping **MUST** be supported no
6. Provide a suitable air break between flood rim of the floor drain and outlet of drip pipe. To meet code on low base merchandisers, it may be necessary to install a field-supplied drip pipe reducer. An alternative is to cut the last section of drip pipe at an angle.
7. Prevent drip pipes from freezing: Do not install drip pipes in contact with uninsulated suction lines. Suction lines should be insulated with a nonabsorbent insulation material. Where drip pipes are located in dead air spaces, such as between merchandisers or between a merchandiser and a store wall, provide means to prevent freezing.

IM64CD-EC/IM64EC-EC

Installation Information

Installing Drip Piping (Cont'd)

Drip Piping Example for Standard Case Height (Not for Ultra Low Front Cases)



Never use drip piping smaller than the nominal diameter of the pipe or water seal supplied with the merchandiser.

CO2 Piping

Piping

Any piping material that meets all pressure and temperature ratings, material compatibility requirements and state and local building codes may be used for pumped liquid CO₂ applications. The design pressure of the system is labeled on the unit. Any connected components must meet the system design pressure (e.g., 1,305 psig [90 bar]).

Approved joining methods must be used for all piping and fittings to ensure the pipe's maximum pressure rating is maintained without reduction. The use roll-stop couplings for straight line pipe joints are recommended. Swaging of pipe joints is not recommended. Swaging weakens the copper at the swage point, reducing the maximum operating pressure rating.

CO2 Piping Material

- Piping—minimum design pressure greater than system design pressure (e.g., 1,305 psig [90 bar])
- Fittings—Mueller Streamline XHP CuFe 1,885 psig (130 bar)
- Braze joints with alloy containing 15% silver (minimum)
 - Flux materials must contain no zinc and must also be water soluble
 - All field piping must be purged with nitrogen while brazing
- Schedule 40 carbon steel pipe or stainless-steel pipe
 - Must protect exterior from corrosion

Insulation

Insulation should be used in secondary system piping to reduce the heat transfer to ambient air and to maintain subcooling in the CO₂ liquid supply line to the case. The insulation should be sized to allow for the worst-case conditions of heating from store lighting and ambient temperatures. Pipe should be insulated according to local codes and customer specifications and manufacturer specifications.

When installing piping that has not been pre-insulated, there are several options for insulation. Closed-cell elastomeric insulation is extremely popular in refrigeration applications. This type of insulation can also be used in secondary system applications.

The manufacturer's internal case piping valves and components are insulated to prevent frost from building. Sufficient insulation is required on piping into the display case to eliminate frost on tubes and to minimize temperature rise of CO₂.

IM64CD-EC/IM64EC-EC

Installation Information

Check Valves

Check valves are required wherever there is a possibility of trapping liquid CO₂ between valves that may be shut off, including solenoid valves, service valves, and balancing valves. Check valves must be installed to vent high pressure CO₂ back to the system. Hussmann recommends reverse return tubing instead of the use of shutoff valves for balancing purposes, but if shutoff valves are used, they must be relieved to the system through check valves.

WARNING—Trapping of liquid CO₂ can result in extremely high pressure and must be avoided to prevent damage to equipment and personal injury.

Solenoid, check, ball valves, and ball valves with integrated pressure relief must be qualified for CO₂ applications, with a minimum design pressure equal to or greater than the equipment design pressure (e.g., 1,305 psig [90 bar]).

Additional Piping Installation Requirements

- Installation shall include protection from physical damage in operation and service and be in compliance with national and local codes and standards, such as ANSI/ASHRAE 15, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- The installation of pipework shall be kept to a minimum.
- A brazed, welded, or mechanical connection shall be made before opening the valves to permit refrigerant to flow between the refrigerating system parts.
- Mechanical connectors used indoors shall comply with ISO 14903 or UL 207 or CSA C22.2 No. 140.3. When mechanical connectors are reused indoors, sealing parts shall be renewed. When flared joints are reused indoors, the flare part shall be refabricated.
- Refrigerant tubing shall be protected or enclosed to avoid damage. Flexible refrigerant connectors (such as connecting lines between an indoor and outdoor unit) that might be displaced during normal operation shall be protected against mechanical damage.
- Mechanical connections shall be accessible for maintenance purposes.
- Provision shall be made for expansion and contraction of long runs of piping.
- Protection devices, piping, and fittings shall be protected as far as possible against adverse environmental effects, for example, the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris.
- Piping in refrigeration systems shall be so designed and installed to minimize the likelihood of hydraulic shock damaging the system.
- Steel pipes and components shall be protected against corrosion with a rustproof coating before applying any insulation.
- Flexible pipe elements shall be protected against mechanical damage, excessive stress by torsion, or other forces, and they should be checked for mechanical damage annually.
- Precautions shall be taken to avoid excessive vibration or pulsation of the refrigerant piping.

IM64CD-EC/IM64EC-EC

Installation Information

- Look for the room area label on the equipment to identify the minimum room size. The information in this manual can also be used as an estimate. Always confirm the exact value on the equipment before installation.
- After completion of field piping for split systems, the field pipework shall be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging, according to the following requirements as detailed by UL safety standard. Pressures may come from equipment data label or from customer specification.
 1. The minimum test pressure for the low side of the system shall be the low side design pressure and the minimum test pressure for the high side of the system shall be the high side design pressure, unless the high side of the system cannot be isolated from the low side of the system in which case the entire system shall be pressure tested to the low side design pressure.
 2. The test pressure after removal of the pressure source shall be maintained for at least 1 hour with no decrease of pressure indicated by the test gauge, with rest gauge resolution not exceeding 5% of the test pressure.
 3. During the evacuation test, after achieving a vacuum level specified in the manual or less, the refrigeration system shall be isolated from the vacuum pump and the pressure shall not rise above 1500 microns within 10 min.
- Field-made refrigerant joints indoors shall be tightness tested according to applicable codes and requirements. The test method shall have a sensitivity of 0.18 oz (5 g) per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure. No leak shall be detected.
- Equipment piping in the occupied space shall be installed in such a way to protect against accidental damage in operation and service.
- Any solenoid valves shall be correctly positioned in the piping to avoid hydraulic shock or pressure.
- Insulation shall be suitable for use with the material being insulated.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

Line Connection Sizes

Line Connection Sizes						
Case Model	Standard DX Line Connections Sizes		CO2 DX Line Connections Sizes		CO2 DX Line Connections Sizes	
	liquid	Suction	liquid	Suction	Supply	Return
IM64CD6EC	3/8"	5/8"	3/8"	5/8"	5/8"	5/8"
IM64CD8EC	3/8"	5/8"	3/8"	5/8"	5/8"	5/8"
IM64CD12EC	3/8"	5/8"	3/8"	5/8"	7/8"	7/8"

Waste Outlet/Drain Line

The drain piping shall be installed and supplied by installation personnel. Only PVC tees and water traps are included with the case..

IM64CD-EC/IM64EC-EC

Installation Information

Refrigeration

IMX64 Refrigeration System

The IMX64 is available with two refrigeration configurations: **Glycol Cooling** and **Direct Expansion (DX)** using refrigerants **R404A, R448A, or R449A**. Each option includes its own set of components and connection requirements.

Glycol System

The IMX64 can be configured with bottom piping into or top piping into connections. Both configurations incorporate heat exchangers.

Main Glycol Components:

- Auto-balancing valve
- Strainer with integrated ball valve
- Solenoid valve
- Ball valve

Auto-Balancing Valve Settings

Each balancing valve is factory pre-set according to the specific configuration and application. The glycol flow rate (GPM) is predetermined during manufacturing, based on the store's refrigeration design requirements. Field adjustment is generally not required unless the store's refrigeration specifications have changed.

Piping Location

The glycol supply and return connections are located beneath the case.

To locate them:

1. Identify the electrical box.
2. The piping connections are located on the same side of the case, but at the opposite end.
3. All suction lines should be insulated to prevent condensation and dripping outside of the case..

Glycol Loop Notes:

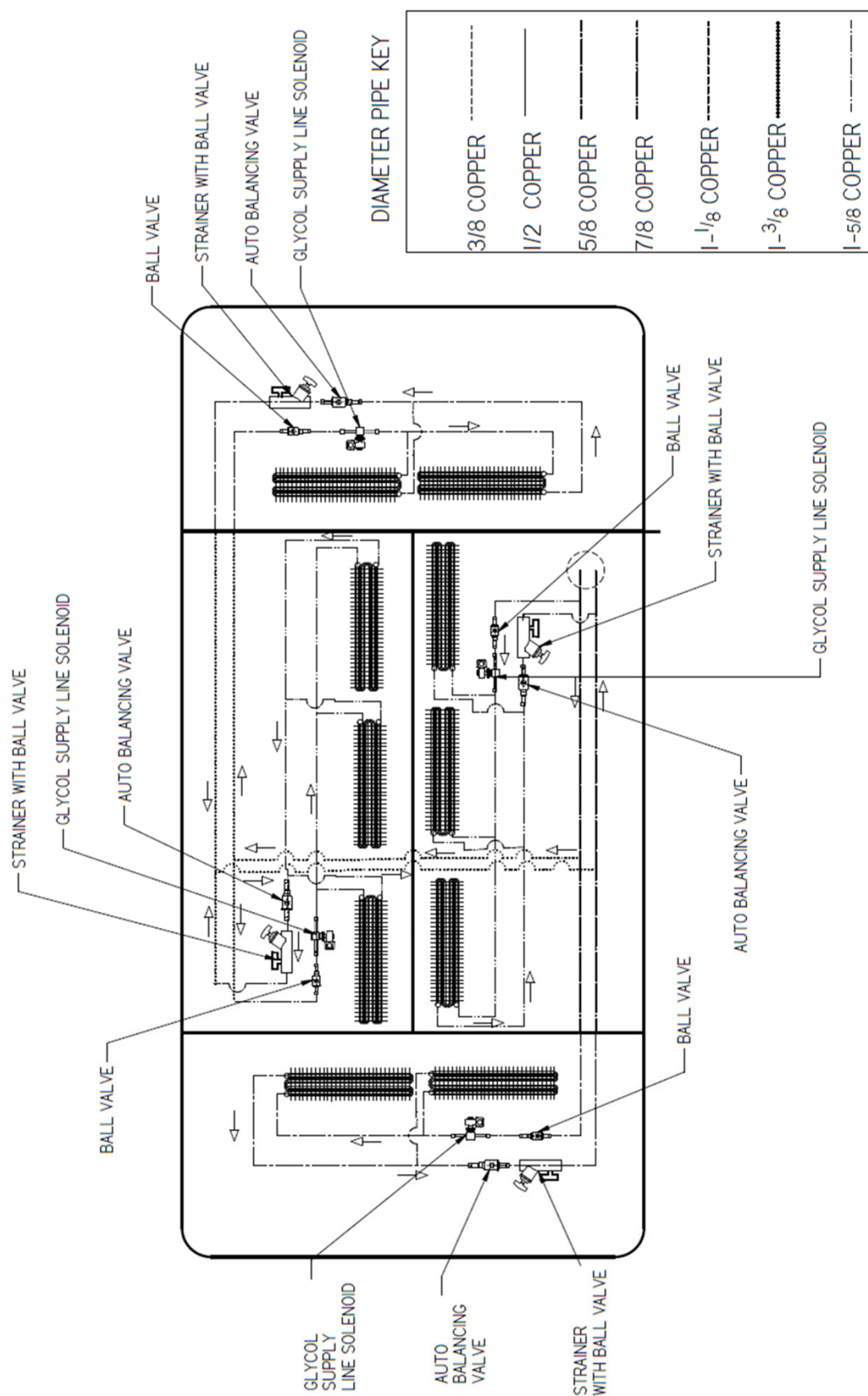
- Maintain correct glycol percentage (typically 30–35% propylene glycol for food applications) to ensure freeze protection.
- Inspect strainers regularly to prevent debris accumulation that could reduce flow.

- Solenoid valves should be checked for proper operation during scheduled maintenance.

IM64CD-EC/IM64EC-EC

Installation Information

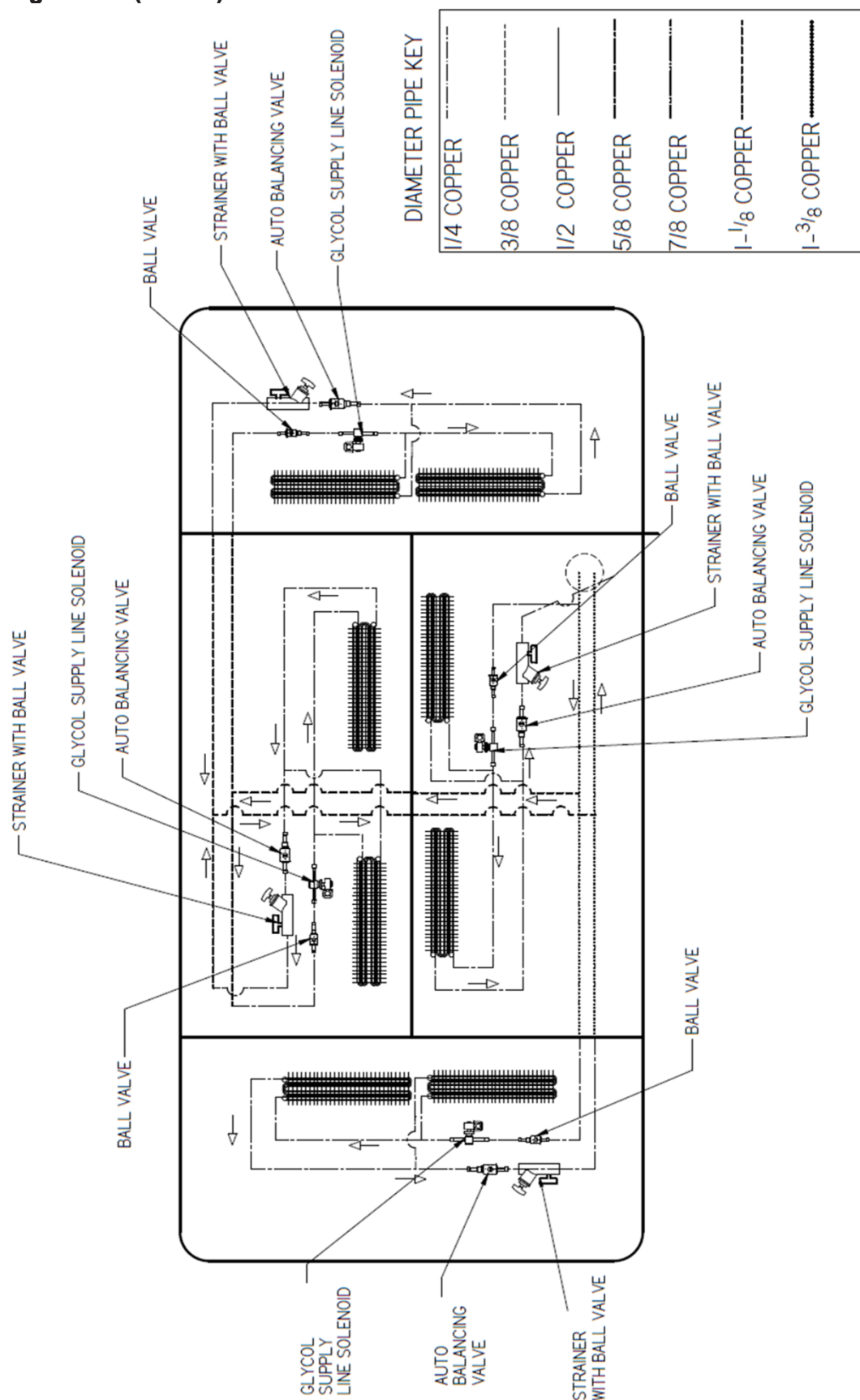
Glycol Refrigeration (Cont'd)



IM64CD-EC/IM64EC-EC

Installation Information

Glycol Refrigeration (Cont'd)



IM64CD-EC/IM64EC-EC

Installation Information

Refrigeration (Cont'd)

DIRECT EXPANSION (DX) SYSTEM

The IMX64 is also available in **bottom piping intco** or **top piping intco** configurations, both with integrated heat exchangers.

Piping Guidelines:

- Refrigerant line outlets are located beneath the case.
 - Locate the electrical box.
 - The outlets are on the same side of the case, at the opposite end.
- Insulate all suction lines to prevent condensation.
- **Minimize pressure drop:**
 - Keep refrigerant lines as short as possible.
 - Use the minimum number of elbows.
 - When elbows are required, use long-radius elbows only.
- Follow the **refrigeration legend** provided by the store for correct line sizing.

Access to Electronic Expansion Valves (EEVs) and Drain Lines

- The EEV master and slave cylinders are located inside the electrical access panel(s) at the rear of the case.
- Deck panels lift up and out for access.
- Sensors for EEV operation are installed on the coil inlet, coil outlet, and discharge air. Some supermarket applications require a fourth sensor in the return air.
- The case controller is located in the electrical raceway or under the case.

EEV Control and Adjustment

- The IMX64 uses only electronic expansion valves.
- No manual valve adjustment is required; superheat and valve modulation are automatically controlled by the case controller.
- Supported controller models: CC200, KE2, and

- Each controller is factory-programmed for the case application. For programming and troubleshooting, refer to the specific controller's user manual.

Superheat Measurement (for diagnostic purposes)

While EEVs are automatically controlled, superheat can still be measured to verify system performance:

1. Connect an accurate pressure gauge to the suction service port at the evaporator outlet.
2. Using a refrigerant pressure–temperature chart, determine the saturation temperature for the measured suction pressure.
3. Measure the suction gas temperature near the EEV bulb sensor location (or coil outlet for EEV systems).
4. Subtract the saturation temperature from the suction gas temperature to obtain the operating superheat.

Control Settings

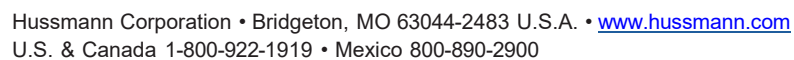
- Controller setpoints are pre-configured to maintain consistent product temperature.
- Any adjustments to setpoints should be performed only by qualified personnel following store requirements and food safety standards.

SAFETY NOTES

- Only qualified refrigeration technicians should perform installation, adjustment, or maintenance.
- Disconnect electrical power before servicing. Follow lockout/tagout procedures.
- Use appropriate personal protective equipment (PPE), including gloves and eye protection.
- Always release system pressure before opening any refrigerant lines.
- For glycol systems, ensure the solution is non-toxic and food-grade when used in food service environments.
- Follow all local codes and regulations for refrigerant handling and disposal.

Sporlan S3C

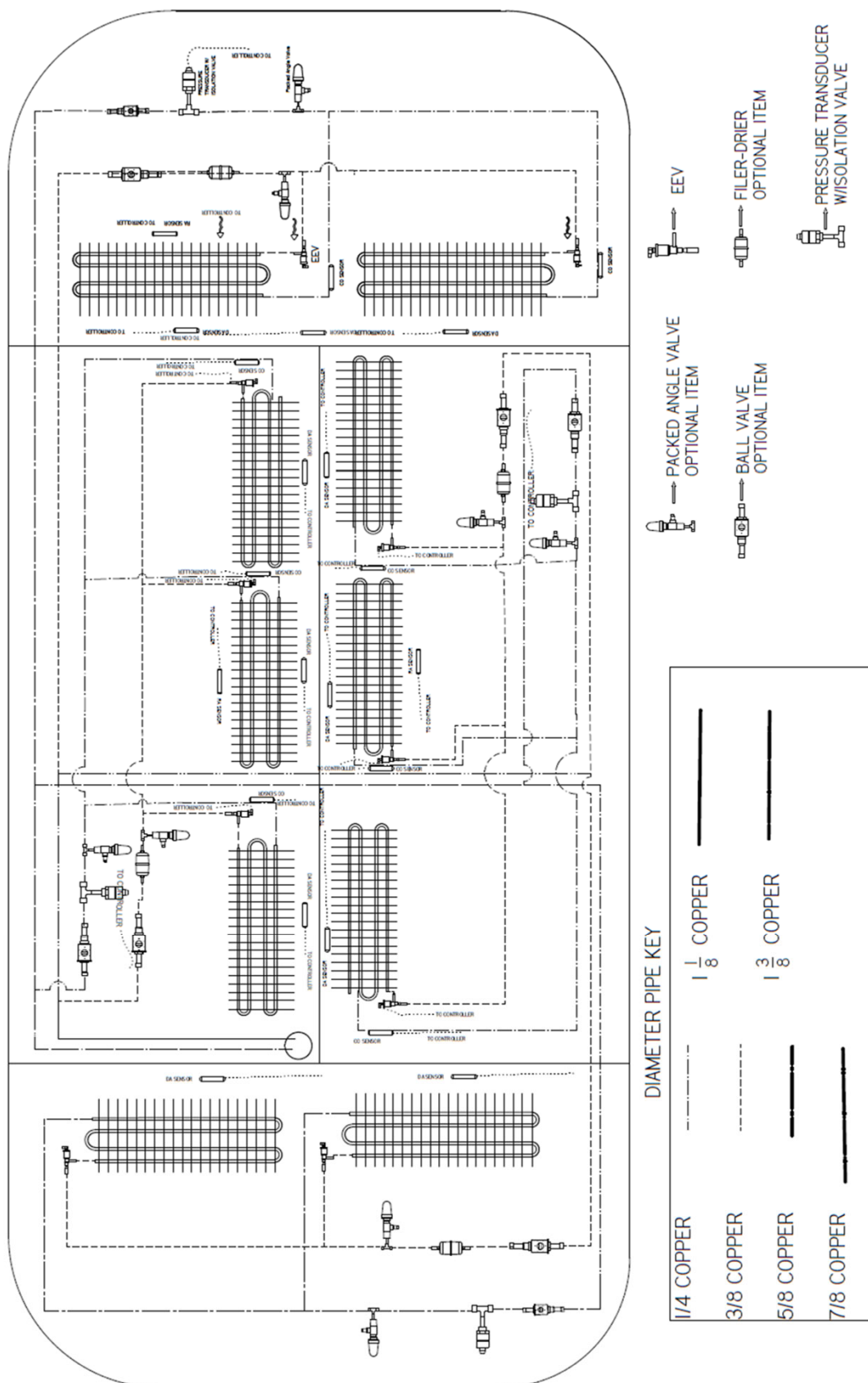
DX Refrigeration (Cont'd)



IM64CD-EC/IM64EC-EC

Installation Information

DX Refrigeration (Cont'd)



IM64CD-EC/IM64EC-EC

Installation Information

Electrical Information

Refer to the serial label located on the left back panel to determine MCA and MOPD and to verify input voltage before making any electrical connections.

Merchandisers require dedicated electrical circuit(s) with ground. 14 AWG is the minimum sized acceptable wire. Consult equipment datasheet or equipment serial label for additional electrical specifications. Always use a dedicated circuit with the amperage stated on the equipment. Where components of multiple units are required to be wired to a single circuit, ensure that the load is distributed properly and proper disconnect locations are used. Do not overload the circuit.

It is necessary to allow for disconnection of the appliance from the supply power after installation. Disconnect power before servicing merchandisers.

If in doubt, consult an electrician.

Field Wiring

Components are wired as completely as possible at the factory with all work completed in accordance with the National Electrical Code (NEC). All deviations required by governing electric codes will be the responsibility of the installer. All wiring must be in compliance with governing electrical codes.

Field wiring must be sized for component amperes stamped on the serial label. Actual ampere draw may be less than specified. When multiple display cases are on the same defrost circuit, the defrost termination thermostats are wired in series.

WARNING: Always check the serial label for component amperes.

Based on the full load amps of the system, select the largest connectible wire size (based on no more than three wires in the wireway and 86° F (30° C) environment per NEC).

Electrical Connections

All wiring must be in compliance with NEC and local codes. All electrical connections are to be made at a terminal block, in the electrical wireway, or in a handy box.

Lighting

This case features pre-installed LED lighting mounted in the canopy raceway. Refer to the equipment datasheet for wiring diagrams related to standard and optional lighting.

WIRING COLOR CODE	CODIGO DE COLOR PARA LOS CABLES	CODE DE COULEUR DE CABLAGE
Leads for all electric circuits are identified by a colored plastic band: neutral wire for each circuit has either white insulation or a white plastic sleeve in addition to the color band.	Los conductores de todos los circuitos eléctricos están identificados con una banda plástica de color, el cable neutro de cada circuito tiene ya sea aislamiento blanco o un manguito plástico de blanco, además de la banda de color	Les cables de tous les circuits électriques sont identifiés par une bande de plastique de couleur, le fil neutre de chaque circuit comporte une isolation blanche ou un manchon de plastique blanc en plus de la bande de couleur.
PINK LIGHT BLUE DARK BLUE PURPLE BROWN GREEN ORANGE/TAN MARRON YELLOW RED	ROSA CELESTE AZUL OSCURO MORADO CAFE VERDE NARANJA/TOSTADO MARRON AMARILLO ROJO	ROSE BLEU CLAIR BLEU FONCE VIOLET BRUN VERT ORANGE DU BEIGE MARRON JAUNE ROUGE
REFRIG THERM LOW TEMP REFRIG THERM NORM TEMP DEFROST TERMINATION THERM CONDENSATE HEATERS FAN MOTORS GROUND LIGHTS RECEPTACLES DEFROST HEATERS 120 V DEFROST HEATERS 206 V	THERMOSTATO REFRIG. TEMP BAJA THERMOSTATO REFRIG. TEMP NORMAL THERMOSTATO TERMINACIÓN DESHIELO RESISTENCIAS CONDENSADO MOTORES VENTILADOR CONEXIÓN A TIERRA ILUMINACIÓN TOMA CORRIENTES RESISTENCIAS DE DESHIELO, 120 V RESISTENCIAS DE DESHIELO, 206 V	THERM. DE FAIBLE TEMP. DE REFRIG. THERM. DE TEMP. DE REFRIG. NORM. THERM. D'ARRÊT DE DEGIVRAGE CHAUFFAGE ANTI-CONDENSATION MOTEURS DU VENTILATEUR MISE A LA TERRE ECLAIRAGE PRISES DE COURANT CHAUFFAGE DE DEGIVRAGE, 120 V CHAUFFAGE DE DEGIVRAGE, 206 V
ELECTRICIAN NOTE: Use copper conductor wire only. Case must be grounded.	NOTA PARA EL ELECTRICISTA: Utilizar solamente cable con conductor de cobre. El mueble debe de estar conectado a tierra.	REMARQUE A L'ELECTRICIEN: Utilisez uniquement du fil électrique avec des conducteurs de cuivre. Le réfrigérateur doit être mis à la terre.
		0399798

IM64CD-EC/IM64EC-EC

Installation Information

Refrigerant Charging Procedure

Only the specified refrigerant type can be used.

The triple evacuation method should be used to achieve a leak-free, dry system. For the first evacuation, the system should be pulled down to 1,000 microns. The second evacuation should be pulled to 500 microns. The final evacuation should be pulled down to at least 300 microns. A dry, leak-free system is when the system holds a vacuum of 300 microns for 24 hours with the vacuum pump de-energized and valved off. Between each evacuation, break the vacuum with dry nitrogen.

When connecting hoses between the refrigeration system, manifold gauges, and refrigerant cylinder, ensure that the connections are secure and there are no potential sources of ignition nearby. Ensure that contamination of different refrigerants does not occur when using charging equipment.

Use dedicated hoses to service the type of refrigeration system being serviced (e.g., R-454C equipment for an R-454C system). Hoses or lines should be as short as possible to minimize the amount of refrigerant contained in them.

Ensure that the refrigeration system is properly grounded prior to charging the system with refrigerant, to avoid the potential for static build-up.

In addition to conventional charging procedures, the following requirements shall be followed:

- a. Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- b. Cylinders shall be kept in an appropriate position according to the instructions.
- c. Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- d. Label the system when charging is complete (if not already).
- e. Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.

Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Extreme care must be taken not to overfill the refrigeration system. After charging, carefully disconnect the hoses, attempting to minimize the quantity of refrigerant released. Further leak check the service ports, hoses, refrigerant tanks.

Refrigerant Charge Label

After charging is complete, note the refrigerant type and charge amount using permanent marking on the refrigerant charge label affixed to the unit.

Refrigerant	Charge
R- _____	_____ lbs

IM64CD-EC/IM64EC-EC

Installation Information

Thermostatic Expansion Valve (TXV) Adjustment

Expansion valves must be adjusted to fully feed the evaporator. Before attempting any adjustments, make sure the evaporator is either clear or very lightly covered with frost, and that the fixture is within 10°F of its expected operating temperature.

NSF Compliant Sealing of the Case to The Floor

When the appliance is designed to be sealed to the floor or countertop the following procedure must be followed to establish proper sanitary operation. First, ensure the floor area is clean and free from debris. Begin by positioning the appliance in its designated installation spot, ensuring sufficient clearance on the back and sides according to the specified "Clearances" for proper ventilation. Next, level the appliance from front to back and side to side, as described in "Method for Leveling." Once level, outline the base of the appliance on the floor. Then, lift and support the front of the appliance. Apply a bead of NSF-approved sealant to the floor, positioned about 1/2 inch (13 mm) inside the front part of the outline. The bead should be substantial enough to cover the entire appliance surface when lowered onto it. Afterward, raise and support the rear of the appliance and apply the sealant to the floor along the remaining three sides. Finally, carefully lower the appliance and inspect it to ensure a complete seal around the entire perimeter and clean off any extra sealant as necessary. Once the appliance is sealed in accordance with these procedures, the result is intended to prevent liquid spillage on adjacent surfaces of the floor or countertop from passing under inaccessible portions of the equipment.

Shelf Installation

After the cabinet is leveled, the shelves may be installed.

Load Limits

Exceeding this load can cause damage to the shelves, case, damage to store products, and potentially create a hazardous condition for customers and store personnel. Product must be within designated load limit to ensure proper refrigeration and air curtain performance. Product shelves should be loaded so that the product does not extend over the front edge of the shelf. Product loaded over the edge will interfere with air circulation in the cabinet. It is also desirable to leave a small space between the rear interior wall and the product on the shelves, to allow air to enter the cabinet interior through the perforations in the rear wall.

Depth of Shelf	Maximum Load Limit
22 in (559 mm)	250 lbs. (113.4 kg)

Product Stocking

In addition to the prior recommendations for spacing, product should always be maintained at proper temperature. This means the temperature of the product must be controlled from the time the product is received through storage, preparation, and display to maximize the life of the product.

Product should not be placed inside the merchandisers until merchandisers are at proper operating temperature. Allow merchandiser 24 hours to operate before loading product. Proper rotation of product during stocking is necessary to prevent product loss. Always bring the oldest product to the front and set the newest to the back.

Do not use non-approved shelving, baskets, display racks, or any accessory that could disrupt air curtain performance.

IM64CD-EC/IM64EC-EC

Controller

Controller Function

The equipment may be equipped with one of the following controllers for use with any of the approved refrigerants:

- CC200
- KE2
- S3C

The controller is in the electrical enclosure at the bottom of the unit, on each side of the island. Immediately underneath the controller, within the same electrical enclosure, you will find the specific wiring diagram for that unit. The controller's display is mounted on the canopy, at the upper-right corner of each side of the unit.

CC200

Units of 8 ft and 12 ft lengths are equipped with two controllers plus expansion modules, depending on the number of valves to be managed. Units of 6 ft length are supplied with one controller plus one module. Included in the configuration are discharge-air sensors, defrost termination sensors, and return-air sensors. Manuals for the controller and expansion modules can be found at the following link:

<https://www.copeland.com/es-mx/shop/810-3180#pdp-filterablelist>

Main advantages:

- Modular design allowing flexible control of multiple evaporator coils.
- Simplified wiring and plug-and-play installation.
- Energy-efficient operation through adaptive defrost and superheat control.
- Bluetooth® connectivity for easy setup and troubleshooting via the Copeland mobile app.
- Compatible with multiple refrigerants and temperature applications.

KE2

The KE2 controller provides significant advantages: it offers energy savings through precise temperature and super-heat control, frost-reduction strategies, fan cycling, and advanced communications capability (including remote monitoring). For further details, refer to the manufacturer's literature here:

<https://ke2therm.com/literature/literature-ke2-evap-oem/>

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Controller

Controller Function (Cont'd)

S3C

The S3C controller from Sporlan (a division of Parker) is designed to provide local control of each refrigerated display case (or evaporator), while also supporting peer-to-peer and networked communication with other controllers and higher-level systems.

Key advantages include:

- Localized control that allows one unit to continue operating independently even if another unit or rack fails.
- Connectivity options including RS-485, BACnet, and Modbus, facilitating integration into building-automation systems.
- Advanced inputs and outputs for controlling valves (e.g., electronic expansion valves or EVRs), fans, lighting, defrost heaters, and for monitoring sensors (coil outlet, discharge air, return air, humidity, pressure transducers, drain sensors) to maintain optimal case performance.

Manuals for the S3C controller and its expansion modules can be found at:

<https://www.parker.com/content/dam/Parker-com/Literature/Sporlan/Sporlan-pdf-files/Sporlan-pdf-100/100-50-9.1-S3C-Case-Control.pdf>

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Maintenance and Service



READ ALL WARNINGS AND PROCEDURES IN THIS MANUAL AND ON THE EQUIPMENT BEFORE SERVICING OR PERFORMING MAINTENANCE ON THIS EQUIPMENT.

FAILURE TO ABIDE BY THESE WARNINGS COULD RESULT IN AN EXPLOSION, DEATH, INJURY, AND PROPERTY DAMAGE.

Checks and Repairs for R-744 (CO2) Equipment

- Replacement parts must be compatible with the specific equipment's maximum design pressure as shown on the equipment labeling. For example, if the equipment has been designed to meet 1,305 psig (90 bar) maximum design pressure then any replacement part must be 1,305 psig (90 bar) compatible.

Checks and Repairs for All Equipment

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment, so all parties are advised. Initial safety checks shall include:
 - i. Ensure that capacitors are discharged—this shall be done in a safe manner to avoid the possibility of sparking.
 - ii. Ensure that no live electrical components and wiring are exposed while charging, recovering, or purging the system.
 - iii. Ensure that there is continuity of earth bonding.
- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
- LOCK OUT / TAG OUT — To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.
- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.
- To reduce the risk of fire, electrical shock or injury when cleaning this merchandiser:
 - Unplug the merchandiser before cleaning.
 - Keep all liquids away from electrical and electronic components.

IM64CD-EC/IM64EC-EC

Maintenance and Service

Maintenance Heading

Care and Cleaning

Long life and satisfactory performance of any equipment are dependent upon the care given to it. To insure long life, proper sanitation and minimum maintenance costs, the refrigerator should be thoroughly cleaned frequently. SHUT OFF FAN DURING CLEANING PROCESS. It can be unplugged within the case, or shut off entire case at the source. The interior bottom may be cleaned with any domestic soap or detergent based cleaners. Sanitizing solutions will not harm the interior bottom, however, these solutions should always be used according to the Husmann's directions. It is essential to establish and regulate cleaning procedures. This will minimize bacteria causing discoloration which leads to degraded product appearance and significantly shortening product shelf life.

Soap and hot water are not enough to kill this bacteria. A sanitizing solution must be included with each cleaning process to eliminate this bacteria.

Stainless Steel Cleaning and Care

There are three basic things, which can break down your stainless steel's passivity layer and allow corrosion.

- 1. Mechanical Abrasion**

Mechanical Abrasion means those things that will scratch the steels surface. Steel Pads, wire Brushes, and Scrapers are prime examples.

- 2. Water**

Water comes out of our tap in varying degrees of hardness. Depending on what part of the country you live in, you may have hard or soft water. Hard water may leave spots. Also, when heated, hard water leaves deposits behind that if left to sit, will break down the passive layer and rust your stainless steel. Other deposits from food preparation and service must be properly removed.

- 3. Chlorides**

Chlorides are found nearly everywhere. They are in water, food and table salt. One of the worst perpetrators of chlorides can come from household and industrial cleaners.

Don't Despair! Here are a few steps that can help prevent stainless steel rust.

- 1. Use the Proper Tools**

When cleaning your stainless steel products, take care to use non-abrasive tools. Soft Clothes and plastic scouring pads will NOT harm the steel's passive layer. Stainless steel pads can also be used but the scrubbing motion must be in the same direction of the manufacturer's polishing marks.

- 2. Clean With the Polish Lines**

Some stainless steels come with visible polishing lines or "grain". When visible lines are present, you should ALWAYS scrub in a motion that is parallel to them. When the grain cannot be seen, play it safe and use a soft cloth or plastic scouring pad.

- 3. Use Alkaline, Alkaline Chlorinated or Non-chloride Containing Cleaners**

While many traditional cleaners are loaded with chlorides, the industry is providing an ever increasing choice of non-chloride cleaners. If you are not sure of your cleaner's chloride content contact your cleaner supplier. If they tell you that your present cleaner contains chlorides, ask for an alternative. Also, avoid cleaners containing quaternary salts as they also can attack stainless steel & cause pitting and rusting.

- 4. Treat your Water**

Though this is not always practical, softening hard water can do much to reduce deposits. There are certain filters that can be installed to remove distasteful and corrosive elements. Salts in a properly maintained water softener are your friends. If you are not sure of the proper water treatment, call a treatment specialist.

IM64CD-EC/IM64EC-EC

Maintenance and Service

Maintenance Heading (Cont'd)

5. Keep your Food Equipment Clean

Use alkaline, alkaline chlorinated or non-chlorinated cleaners at recommended strength. Clean frequently to avoid build-up of hard, stubborn stains. If you boil water in your stainless steel equipment, remember the single most likely cause of damage is chlorides in the water. Heating cleaners that contain chlorides has a similar effect.

6. RINSE, RINSE, RINSE

If chlorinated cleaners are used you must rinse, rinse, rinse and wipe dry immediately. The sooner you wipe off standing water, especially when it contains cleaning agents, the better. After wiping the equipment down, allow it to air dry for the oxygen helps maintain the stainless steel's passivity film.

7. Never Use Hydrochloric Acid (Muriatic Acid) on Stainless Steel

8. Regularly Restore/Passivate Stainless Steel

Cleaning Coils

Never use sharp objects around coils. Use a soft brush or vacuum brush to clean debris from coils. Do not puncture coils! Do not bend fins. Contact an authorized service technician if a coil is punctured, cracked, or otherwise damaged.

Do NOT use chlorine or ammonia-based cleaners to clean aluminum coils.

ICE in or on the coil indicates the refrigeration and defrost cycle is not operating properly. Contact an authorized service technician to determine the cause of icing, and to make adjustments as necessary. To maintain product integrity, move all product to a cooler until the unit has returned to normal operating temperatures.

Cleaning Glass and Mirrors

Only use a soft cloth and mild glass cleaner for cleaning any glass or mirrored components. Be sure to rinse and/or dry completely.

Never use hot water on cold glass surfaces! It may shatter and cause serious injury! Allow glass surfaces to warm first.

Plexiglass and Acrylic Care

Clean with plenty of nonabrasive soap (or detergent) and luke warm water, using the bare hand to feel and dislodge any caked-on dirt. A soft, grit-free cloth, sponge or chamois may be used, but only as a means of carrying the water to the plastic. Dry with a clean damp chamois or clean soft cloth such as cotton flannel. Hard, rough cloths or paper towels will scratch the acrylic and should not be used.

Waxing

If after removing dirt and grease, the acrylic can be waxed with a good grade commercial wax. This will improve the appearance of the surface by filling in most minor scratches. Wax should be applied in a thin even coat and brought to a high polish by rubbing lightly with a dry clean soft cloth, such as a cotton flannel. Excessive rubbing may cause scratching and/or buildup an electrostatic charge which attracts dust and dirt to the surface. Blotting with a clean damp cloth is recommended to remove charge.

Antistatic Coatings

For acrylic used indoors, antistatic coatings successfully prevent the accumulation of an electrostatic charge for periods of several months - if the surface is not washed or wiped down with a wet cloth. Between applications of the antistatic coatings, the parts need only be dusted with a soft clean cloth to maintain a good appearance. In use, liquid antistatic coatings should be applied in a very thin even coat. If beads appear as it is applied, the coat is too thick and the excess should be removed with another cloth. Allow the coating to dry, then bring to a high gloss with a soft cloth.

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Troubleshooting

Problem	Possible Cause	Possible Solution
Case temperature is too warm.	Ambient conditions may be affecting the case operation.	Check case position in store. Is the case located near an open door, window, electric fan or air conditioning vent that may cause air currents? Case must be located minimum 15 Ft away from doors or windows. Cases are designed to operate at 55% Relative humidity and a temperature of 75-80°F.
	Discharge air temp is out of spec.	Check evaporator fan operation. Check electrical connections and input voltage.
		Fans are installed backwards. Check airflow direction.
		Fan blades are installed incorrectly. Make sure fan blades have correct pitch and are per specification.
		Check to see that fan plenum is installed correctly. It should not have any gaps.
	Case is in defrost.	Check defrost settings. See Technical Specifications section.
	Product is outside of the load limit area, blocking airflow.	Redistribute product so it does not exceed load limit. There is a sticker on the inside of the case indicating what the maximum load line is.
	Coil is freezing over.	Return air is blocked, make sure debris is not blocking the intake section.
		Coil close-offs are not installed. Inspect coil to make sure these parts are on the case.
	Condensing coil or evaporator coil is clogged or dirty.	Clean coil.
Case temperature is too cold.	The t-stat temp is set too low.	Check settings. See Technical Specifications section.
	Ambient conditions may be affecting the case operation.	Check case position in store. Is the case located near an open door, window, electric fan or air conditioning vent that may cause air currents? Case must be located minimum 15 Ft away from doors or windows. Cases are designed to operate at 55% Relative humidity and a temperature of 75-80°F.
Condensation on plex / glass.	Ambient conditions may be affecting the case operation.	Check case position in store. Is the case located near an open door, window, electric fan or air conditioning vent that may cause air currents? Case must be located minimum 15 Ft away from doors or windows. Cases are designed to operate at 55% Relative humidity and a temperature of 75-80°F.

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Troubleshooting (Cont'd)

Problem	Possible Cause	Possible Solution
Water has pooled under case.	Case drain is clogged.	Clear drain.
	PVC drains under case may have a leak.	Repair as needed.
	Case tub has unsealed opening.	Seal as needed.
	If the case is in a line-up, case to case joint is missing or unsealed.	Install case to case joint and seal as needed.
	Evaporator pan is overflowing (if applicable).	Check electrical connection to evaporator pan. Check float assembly, it should move freely up and down the support stem. Clear any debris.
Case is not draining properly.	Case is not level.	Level the case.
	Drain screen is plugged.	Clean drain screen and remove any debris.
	Drain or P-trap is clogged.	Clear any debris.
Frost or ice on evaporator coil.	Evaporator fans are not functioning.	Check electrical connections.
	Defrost clock is not functioning.	Case should be serviced by a qualified service technician.
	Coil is freezing over.	Return air is blocked, make sure debris is not blocking the intake section.
		Coil close-offs are not installed. Inspect coil to make sure these parts are on the case.

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Maintenance and Service

Refrigerant Removal, Evacuation, and Recovery

WARNING: Always use a pressure regulator when operating nitrogen tanks.

WARNING: Never trap liquid refrigerant between closed valves as this could cause a hydraulic explosion.

When breaking into the refrigerant circuit to make repairs—or for any other purpose—conventional procedures shall be used. The following procedure shall be adhered to:

- a. Safely remove refrigerant following local and national regulations
- b. Purge the circuit with inert gas
- c. Evacuate
- d. Purge with inert gas
- e. Open the circuit by cutting or brazing

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. The system shall be purged with oxygen-free nitrogen to render the appliance safe for refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

Refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

Nitrogen and moisture will remain in the system unless proper evacuation procedures are followed. Nitrogen left in the system may cause head pressure problems. Moisture causes EEV ice blockage, wax build up, acid oil, and sludge formation.

Do not simply purge the system. This procedure is expensive, harmful to the environment, and may leave moisture and nitrogen behind.

Do not run the compressors to evacuate. This procedure introduces moisture into the compressor's crankcase oil and does not produce adequate vacuum to remove moisture from the rest of the system at normal temperatures.

Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

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Maintenance and Service

Recovery Procedure

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available.

All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (i.e., special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

The evacuation process shall be carried out prior to returning the compressor to the supplier. Only electric heating to the compressor body shall be employed to accelerate this process.

When oil is drained from a system, it shall be carried out safely.

Leak Detection (all refrigerants)

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. Do not unplug any device if a leak is detected or suspected. A halide torch (or any other detector using a naked flame) shall not be used. The following leak detection methods are deemed acceptable for all refrigerant systems:

- Electronic leak detectors may be used to detect refrigerant leaks, but might need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is suitable for the refrigerant used. Leak detection equipment shall be calibrated to the refrigerant employed.
- Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipe-work.

Note: Examples of leak detection fluids are bubble method and fluorescent method agents.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to the Refrigerant Recovery section provided.

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Maintenance and Service

Component Replacement

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times, the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

Replacement Parts List

IM64 REPLACEMENT PARTS				
DESCRIPTION	PART NUMBER	6 FT	8 FT	12 FT
GLASS- VIEW END	3185172150	X		
GLASS FRONT 6FT	1H27314150	X		X
GLASS FRONT 8-12FT	1H27900150		X	
ACRYLIC TOP 3FT ISLA	3127091	X		X
ACRYLIC TOP 4FT ISLA	3127092		X	X
SPLASHGUARD-SIDE LH 8IN	3231388			
SPLASHGUARD-SIDE RH 8IN	3231389			
SHELF -22X36 IN	3145093	X		
PTM DECK PAN 3FT	3191743	X		
PRICE TAG- 3FT	0562505	X		
PRODUCT STOP 2INCH 3FT	3049298	X		
PRODUCT STOP 3INCH 3FT	3049299	X		
SHELF- 22X48 IN	3145094		X	X
PTM DECK PAN 4FT ISLA	3191744		X	X
PRICE TAG- 4FT	0562506		X	X
PRODUCT 2INCH 4FT	3049295		X	X
PRODUCT 3INCH 4FT	3049296		X	X
PAN-BOTTOM LH	3232872	X	X	X
PAN-BOTTOM RH	3232873	X	X	X
THERMOMETER-RECT SOLAR BLK	0517730	X	X	X
NIGHT CURTAIN 6 FT	1H60807800	X		
NIGHT CURTAIN 8FT	1H60809800		X	X
LED-48IN 3000K CNPY	3181552		X	X
LED-48IN 3500K CNPY	3181558		X	X
LED-48IN 4000K CNPY	3181565		X	X
LED-36IN 3000K CNPY	3181551	X		
LED-36IN 3500K CNPY	3181557	X		
LED-36IN 4000K CNPY	3181564	X		
LED-36IN 3000K SHELF	3180896	X		
LED-36IN 3500K SHELF	3169153	X		
LED-36IN 4000K SHELF	3180897	X		
LED-48IN 3000K SHELF	3180898		X	X
LED-48IN 3500K SHELF	3169152		X	X
LED-48IN 4000K SHELF	3180899		X	X
POWER SUPPLY	3117871	X	X	X
HARNESS MOTOR 6-8 FT	3218689	X	X	
HARNESS MOTOR 12 FT	3218690			X
HARNESS SHELVES	0501237	X	X	X

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Maintenance and Service

Replacement Parts List (Cont'd)

REFRIGERANTS 448, 449 & 404				
COIL 6 FT	0534322	X		
COIL 8 & 12 FT	0534323		X	X
EVAPORATOR MOTORS	3218679	X	X	X
PACKED ANGLE VALVES	0475613000	X	X	X
VALVE-BALL 0.375"	0417379000	X	X	X
VLV BALL .625 "	0303933002	X	X	X
TRANSDUCER- 0 TO 150 PSI	3102549	X	X	X
TRANSDUCER-200 PSI	3072542	X	X	X
FILTER	17S507	X	X	X
CONTROLLER-CC200 DX 12 FT	3234147			X
CONTROLLER-CC200 DX 8 FT	3234148		X	
CONTROLLER-CC200 DX 6 FT	3234149	X		
SENSOR -COIL CC200	0529190	X	X	X
SENSOR- TEMP CC200	0529189	X	X	X
SENSOR- RETURN AIR CC200, KE2	0418813	X	X	X
CONTROLLER-KE2 DX 12 FT	3235288			X
CONTROLLER-KE2 DX 8 FT	3235289		X	
CONTROLLER-KE2 DX 6 FT	3235290	X		
SENSOR-TEMPERATURE KE2	3082465	X	X	X
CONTROLLER-S3C DX 12 FT	3235291			X
CONTROLLER-S3C DX 8 FT	3235292		X	
CONTROLLER-S3C DX 6 FT	3235293	X		
SENSOR DEFROST-S3C	0523645	X	X	X
SENSOR DISCHARGE AIR-S3C	0523646	X	X	X
SENSOR COIL OUTLET-S3C	0523647	X	X	X
VALVE- ELEC EXP 0.375 X .500 SPW32	3090860	X		
VALVE- ELEC EXP 0.375 X .500 SPW3	3090861		X	X
SOLENOID COIL VALVE	3090863	X	X	X
CABLE PULSE	3205057	X	X	X

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Maintenance and Service

Replacement Parts List (Cont'd)

REFRIGERANT GLYCOL				
COIL 6 FT	0534293	X		
COIL 8 & 12 FT	0534289		X	X
EVAPORATOR MOTORS	3218679	X	X	X
VALVE- STRAINER .5	3227311	X	X	
VALVE- STRAINER .75	3230121			X
VALVE-BALL .5 C X C	225016995	X	X	
VALVE-BALL .750 C X C	1H35133500			X
CONTROLLER-CC200 GLYCOL 8FT &12 FT	3232549		X	X
CONTROLLER-CC200 GLYCOL 6 FT	3232550	X		
SENSOR- TEMP CC200	0529189			
SENSOR- DEFROST CC200	0529191	X	X	X
SENSOR- RETURN AIR CC200	3013761	X	X	X
CONTROLLER-KE2 GLYCOL 8FT & 12 FT	3231824		X	X
CONTROLLER-KE2 GLYCOL 6 FT	3231825	X		
SENSOR-TEMP KE2 COIL	3083470	X	X	X
SENSOR- TEMP KE2	3082465	X	X	X
CONTROLLER-S3C GLYCOL 8FT & 12FT	3232551		X	X
CONTROLLER-S3C GLYCOL 6 FT	3232552	X		
SENSOR-DISCHARGE AIR S3C	0523646	X	X	X
SENSOR-DEFROST TERMINATION S3C	0523645	X	X	X
SENSOR-COIL OUTLET TEMPERATURE S3C	0523647	X	X	X
SOLENOID VALVE 5/8	0551454	X	X	
VALVE-SOL 0.875	0551448			X
VALVE COIL- GLYCOL	0533843	X	X	X
VALVE-AUTO BAL .5 3GPM 6FT	3227307	X		
VALVE-AUTO BAL .5 4GPM GLYCOL 8FT	3227308		X	
VALVE-AUTO BAL .75 5GPM GLYCOL 12FT	3230112			X

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Maintenance and Service

Replacement Parts List (Cont'd)

REFRIGERANT CO2				
CONTROLLER-CC200 C02 6FT	3234149	X		
CONTROLLER-CC200 C02 8FT	3234148		X	
CONTROLLER-CC200 C02 12FT	3234147			X
SENSOR COIL INLET-CC200	0529190	X	X	X
SENSOR TEMP-CC200	0529189	X	X	X
SENSOR AIR RETURN-CC200, KE2	0418813	X	X	X
CONTROLLER-KE2 C02 6FT	3235290	X		
CONTROLLER-KE2 C02 8FT	3235289		X	
CONTROLLER-KE2 C02 12FT	3235288			X
SENSOR TEMP- KE2	3082465	X	X	X
SENSOR COIL INLET- KE2	3083470	X	X	X
CONTROLLER-S3C C02 6FT	3235293	X		
CONTROLLER-S3C C02 8FT	3235292		X	
CONTROLLER-S3C C02 12FT	3235291			X
SENSOR DEFROST-S3C	0523645	X	X	X
SENSOR DISCHARGE AIR-S3C	0523646	X	X	X
SENSOR COIL OUTLET-S3C	0523647	X	X	X
COIL CO2 6FT	3218607	X		
COIL CO2 8-12FT	3218606		X	X
TRANSDUCER-KE2, S3C	0523648	X	X	X
TRANSDUCER-CC200	3203497	X	X	X
VALVE-ELEC EXP SPW-2	3090860	X		
VALVE-ELEC EXP SPW-3	3090861		X	X
SPW CABLE	3091751	X	X	X
PWC-1E SPW SOLENOID WITH DIN CONNECTION	3090863	X	X	X
FILTER DRIER 90 BAR	3009399	X	X	X
PACKED ANGLE VALVE	3170365	X	X	X
BALL VALVE WITH CHECK VALVE 3/8"	3068567	X	X	X
BALL VALVE WITH CHECK VALVE 5/8"	3068569	X	X	X

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Decommissioning

Decommissioning Process

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its details. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample should be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

- a. Become familiar with the equipment and its operation.
- b. Isolate the system electrically.
- c. Before attempting the procedure, ensure:
 - i. Mechanical handling equipment is available, if required, for handling refrigerant cylinders.
 - ii. All personal protective equipment is available and being used correctly.
 - iii. The recovery process is supervised at all times by a qualified, competent person.
 - iv. Recovery equipment and cylinders conform to the appropriate standards.
- d. Pump down refrigerant system, if possible.
- e. If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f. Make sure that cylinder is situated on the scales before recovery takes place.
- g. Start the recovery machine and operate in accordance with instructions.
- h. Do not overfill cylinders (no more than 80% volume liquid charge).
- i. Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j. When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k. Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.

Equipment shall be labeled stating that it has been decommissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating which refrigerant the equipment contains.

Warranty

To obtain warranty information or other support, contact your Hussmann representative or visit:

<https://www.hussmann.com/services/warranty>.

Please include the model and serial number of the product.

For questions about your equipment, please contact our Technical Support Team at 1-866-785-8499

For general support or service calls, contact our Customer Support Call Center at 1-800-922-1919

For ordering aftermarket warranty parts, call 1-855-HussPrt (1-855-487-7778) or email the following address:

Hussmann_part_warranty@hussmann.com

Revision History

Revision A: Initial Release.

Revision B: Added French manual part number.



Scan the QR code on your mobile device to access additional product information or order parts using equipment serial number.

Parts may also be ordered at:

parts.hussmann.com

Call toll free: 1.855.487.7778

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.