# HUSSMANN®

# Glass Lids

for Low Temperature Single Deck Wall & Island Merchandisers



# **Upgrade Installation Manual**

# **IMPORTANT**

Keep in store for future reference!

P/N 0531456\_D October 2021

Spanish 0534094 D



# **BEFORE YOU BEGIN**

Read these instructions completely and carefully.



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)









Only qualified personnel should install and service this equipment. Servicing is only to be done by factory authorized personnel. 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 all precautions on tags, stickers, labels and literature attached to this equipment. Component parts shall be replaced with like components. Service is to be performed by factory-authorized service personnel, so as to minimize the risk of possible ignition due to incorrect parts or improper service. Contact your Hussmann representative to arrange servicing.

The safety of our customers and employees are 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, and follow OSHA standards for safety.

The definitions at right 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 four parts according to ANSI Z535 Series.

### **ANSI Z535.5 DEFINITIONS**



DANGER – Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.



 WARNING – Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.



- CAUTION Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.
  - NOTICE Not related to personal injury Indicates[s] situations, which if not avoided, could result in damage to equipment.

P/N 0531456\_D iv

# **REVISION HISTORY**

**Revision D** — Added new models

**Revision C** — Revised for new lids design September 2021

# **TOOL LIST**

# **Unloading From Trailer:**

Lever Bar (also known as a Mule, Johnson Bar, J-bar, Lever Dolly, and pry lever) Moving Dolly (two for 12-ft merchandiser)

# **Setting Merchandiser Line-Up:**

Level, 4 ft suggested
Ratchet
¼ in. Socket
5/16 in. Socket
½ in. Socket
Battery Drill/Screw Gun
Caulking Gun
10 in. Adjustable Crescent Wrench



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.

# INSTALLATION

### LOCATION

These glass lids are designed to be installed on top of merchandisers 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%. Placing refrigerated merchandisers in direct sunlight, near hot tables or near other heat sources could impair their efficiency.

Like other merchandisers, these are sensitive to air disturbances. Air currents passing around merchandisers will seriously impair their operation. Do NOT allow air conditioning, electric fans, open doors or windows, etc. to create air currents around the merchandisers. Product should always be maintained at proper temperature. This means that from the time the product is received, through storage, preparation and display, the temperature of the product must be controlled to maximize the life of the product.

Excel wall models have internal frames. A 3 inch (76 mm) space between the rear of the merchandiser and wall must be maintained for air circulation. However, in high ambient conditions, sweating may still occur. If this happens install a method of forced ventilation such as a fan ventilation kit.

# **Wide Island Fronts**

BE SURE TO POSITION WIDE ISLAND MERCHANDISER FRONTS PROPERLY.

The front of a wide island merchandiser is readily identified by the location of the serial plate. Since all electrical and refrigeration connections will be made at the front side, the fronts will need to be positioned according to the store plan layout.

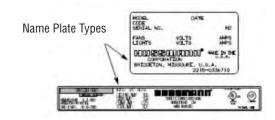
# SERIAL PLATE LOCATION

Direct a flashlight through the return air grille to locate the serial plate. A secondary serial number sticker is put on the exterior nosing on the discharge side. It provides the model, serial number and manufacture date.

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Consult the serial number and model number for parts and warranty claims.



### EXTERIOR LOADING

Do NOT walk on top of merchandiser, or damage to the merchandiser and serious personal injury could occur. They are NOT STRUCTURALLY DESIGNED TO SUPPORT EXCESSIVE EXTERNAL LOADING such as the weight of a person. Do not place heavy objects on the merchandiser's glass lids.



#### CASE LEVELING

Check that merchandisers are level before installing lids. Merchandisers must be installed level for the glass lids to correctly operate, to ensure proper operation of the refrigeration system and to ensure proper drainage of defrost water.

LINEUP LEVELING MUST START FROM THE HIGHEST POINT OF THE STORE FLOOR.

Use a 48 inch (1220 mm) or longer level for end-to-end leveling. The discharge nosing of the merchandiser is a good location for the level at the rear of the merchandiser (center of wide island), and the handrail or return nosing is a good location for the level at the front of the merchandiser. For leveling the merchandiser front-to-rear, a 24 inch (610 mm) level should be placed on the flange of the merchandiser end frame.

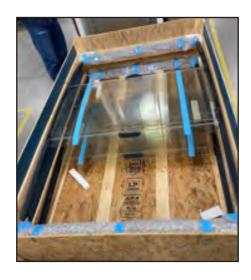
If the cases need other installation work or if the cases need to be relocated, please download the frozen food case instruction manual (PN 3151475).

### URL:

https://www.hussmann.com/ns/Technical-Documents/PN 3151475 IO Single Deck Wall Island Glass Lids EN.pdf

### UNPACKING LIDS FRAMES

Unpack the frame assembly parts, and save the packing materials that protects them. Remove all separately packed assessories, such as light kits, glass frames, and price tag trim, and check for any damage.



#### NOTE:

2-sided frames should always be installed after all refrigeration and electrical work is completed.

Use the cardboard packaging as protection on the floor in order to avoid scratches or damage. Wet glass can be slippery. Use caution when handling glass.

### CHECK LIDS FOR SHIPPING DAMAGE

All equipment should be thoroughly examined for shipping damage before and during unloading. This equipment has been carefully inspected at our factory. 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 request to the carrier for inspection, within 15 days. Improper handling may cause damage to the glass lids when unloading.



Use caution when handling glass. Wear safety Wear safety glasses, gloves, protective boots or shoes, long pants, and a long-sleeve shirt when working with this equipment and while handling glass. Wet glass can be slippery.

# **CLEANING SLIDING GLASS LIDS (after installation)**

After the new lids are installed be sure to clean them before loading product.

Glass and sliding track should be cleaned weekly. Clean tracks with a soft cloth and a mild detergent. Never use high pressure water, abrasive cleaners, solvents, ammonia, chloric acid, or oil-based products. Clean glass with a soft cloth and non-ammonia glass cleaner.

# SERVICING INTERNAL CASE COMPONENTS

### **CLEAN MERCHANDISER RAILS**

All rail surfaces should be cleaned before installing the lid frames. This helps provide a smooth, clean surface to attach the adhesive frames.

Use non-abrasive cleaning materials, and always polish with grain of the steel. Use warm water or add a mild detergent to the water and apply with a cloth. Always wipe rails dry after wetting.

Use alkaline chlorinated or non-chlorine containing cleaners such as window cleaners and mild detergents. Do not use cleaners containing salts as this may cause pitting and rusting of the stainless steel finish. Do not use bleach. Clean frequently to avoid build-up of hard, stubborn stains. A stainless steel cleaning solution may be used periodically to minimize scratching and remove stains.

Rinse and wipe dry immediately after cleaning. Never use hydrochloric acid (muriatic acid) on stainless steel.

# **↑** WARNING

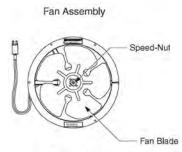
— LOCK OUT / TAG OUT —
To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

# REPLACE FAN BLADES FAN BLADES MUST BE REPLACED BEFORE INSTALLING GLASS LIDS!

Refer to the case data sheet for each model to identify the general location of the fan blades. These data sheets are available at Hussmann.com. See data sheet cross section for location of evaporator fans. Be certain that the fan blades are replaced correctly.

For access to evaporator fans:

- 1. Remove Product from case, and placein cooler. Turn off power.
- 2. Remove wire racks and display pans from the compartment being serviced.
- 3. Disconnect fan from wiring harness.
- 4. Remove fan blade.
- 5. Replace fan blade.
- 6. Reconnect fan to wiring harness.
- 7. Turn on power.



Note: Plenum length and number of fans will vary with model.

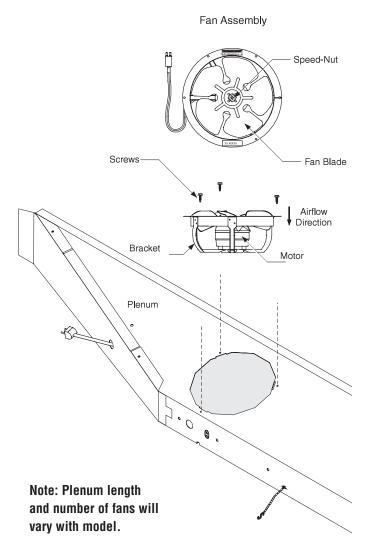
- 8. Verify that motor is working and blade is turning in the correct direction.
- 9. Replace display pans and wire racks. Bring merchandiser to operating temperature before restocking.

# REPLACING FAN MOTORS

Some lids retrofit may require a change in the fan motors to energy efficient fan motors. Follow the steps below to change the fan motors prior to installing the glass lids.

For access to evaporator fans:

- 1. Turn off power.
- 2. Remove wire racks and display pans from the compartment being serviced.
- 3. Disconnect fan from wiring harness.
- 4. Remove fan blade.
- 5. Remove screws holding fan motor/bracket assembly to plenum and remove assembly.
- 6. Replace fan motor/bracket assembly and reinstall screws.
- 7 Reinstall fan blade
- 8. Reconnect fan to wiring harness.
- 9. Turn on power.
- 10. Verify that motor is working and blade is turning in the correct direction.
- 11. Replace display pans and wire racks. Bring merchandiser to operating temperature before restocking.





– 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

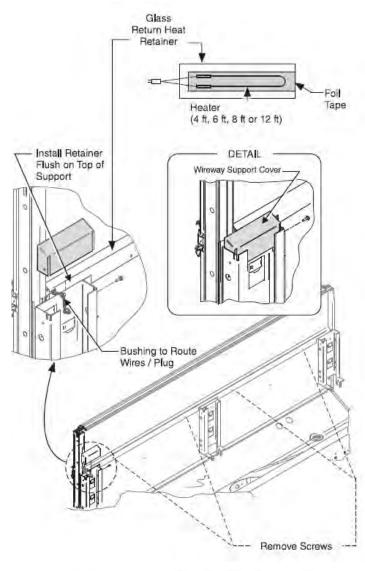
replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

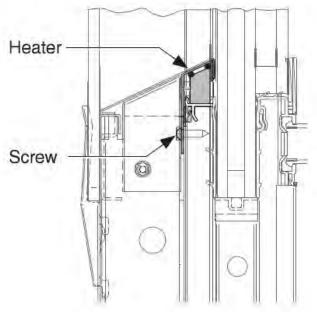
### REPLACING RETURN AIR HEATER

To replace the heater:

- 1. Turn OFF the power to the merchandiser.
- 2. Remove return grilles, package guard and interior panel from the compartment being serviced.
- 3. Remove screw and wireway cover.
- 4. Unplug existing return air heater. The return air heater plug is routed on RH side from front of merchandiser (end opposite the main serial plate).
- 5. Remove screws and retainer.
- 6. Remove the foil tape and heater from the retainer.
- 7. Clean thoroughly. Remove all adhesive and residue. Wipe surface with alcohol to ensure new heater tape will adhere properly.
- 8. Install new heater and tape in retainer as shown.
- 9. Reinstall retainer, routing plug to jumper harness; plug in.
- 10. Reinstall wireway cover, interior panel, package guard, return air grilles, display pans and wire racks.
- 11. Turn on power to merchandiser and check for proper operation.



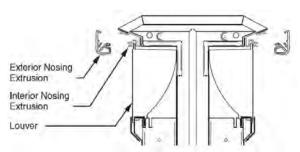




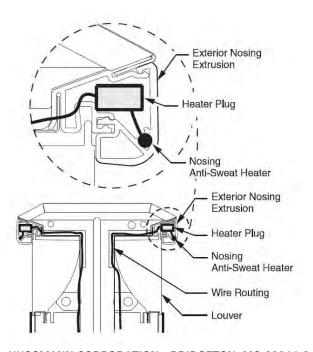
# REPLACING NOSING ANTI-SWEAT HEATER

To replace the heater:

- 1. Turn OFF the power to the merchandiser.
- 2. Remove a louver from one end. It doesn't matter which end.
- 3. Remove exterior nosing extrusion by placing fingers at the back end of the extrusion and pulling forward until it separates from the interior nosing extrusion.

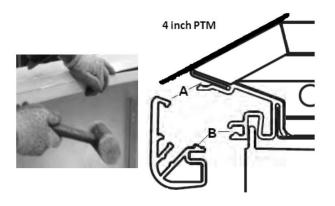


- 4. Unplug and remove existing anti-sweat heater. The anti-sweat heater plug is routed on RH side from front of merchandiser (end opposite the main serial plate).
- 5. Install new anti-sweat heater as shown and route plug to jumper harness; plug in.



6. Do the following to reattach exterior nosing extrusion to interior nosing extrusion: There are two joining locations "A" and "B" that must be fastened to the interior nosing extrusion. "A" can be positioned in place by hand. Use a rubber mallet to snap "B" into place at interior extrusion. A light to medium tap is all that is required.

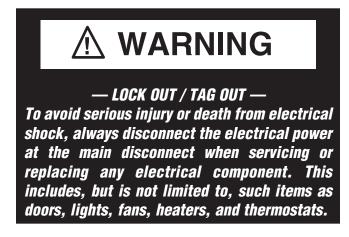
NOTE: It is easier to reinstall plastic extrusion if wide PTM is removed.



7. Replace discharge air louver, retainers and fasteners.



8. Turn on power to merchandiser, and check for proper orientation.



# LID FRAME CASSETTE INSTALLATION

## FRAME TYPES

The glass is already assembled in the frame cassettes. Case retainers are factory-installed around the perimeter rails of the case (handrails must be removed). The retainers fit and snap to the lid frames. All other parts are field installed. Below are the frames used for each case model. See table below.

#### **FW CASES**

3FT GL DOOR FW - Standard cassette for FW6 cases
3FT L GL DOOR FW - LH cassette only applies next to LH flat end for FW6 cases
3FT R GL DOOR FW - RH cassette only applies next to RH flat end for FW6 cases
MODULE-4FT GL DOOR FW - Standard cassette for FW4, FW8 and FW12
MODULE-4FT L GL DOOR FW - LH cassette only applies next to LH flat end for FW4, FW8 and FW12 cases
MODULE-4FT R GL DOOR FW - RH cassette only applies next to RH flat end for FW4, FW8 and FW12 cases
MODULE-4FT NAR WDO GL DOOR FW - This cassette only applies to FW4 with flat ends on both sides
MODULE-END CASE GL DOOR FW - Standard cassette for FWE cases

#### **F CASES**

MODULE-4FT GL DOOR F - Standard cassette for F8 and F12 MODULE-4FT L GL DOOR F - LH cassette only applies next to LH flat end for F8 and F12 cases MODULE-4FT R GL DOOR F - RH cassette only applies next to RH flat end for F8 and F12 cases

#### FI CASES

3FT GL DOOR FI - Standard cassette for FI6 cases
3FT L GL DOOR FI - LH cassette only applies next to LH flat end for FI6 cases
3FT R GL DOOR FI - RH cassette only applies next to RH flat end for FI6 cases
MODULE-4FT GL DOOR FI - Standard cassette for FI8 and FI12
MODULE-4FT L GL DOOR FI - LH cassette only applies next to LH flat end for FI6 and FI12 cases
MODULE-4FT R GL DOOR FI - RH cassette only applies next to RH flat end for FI6 and FI12 cases

#### **FN CASES**

3FT GL DOOR FN - Standard cassette for FN6 cases
3FT L GL DOOR FN - LH cassette only applies next to LH flat end for FN6 cases
3FT R GL DOOR FN - RH cassette only applies next to RH flat end for FN6 cases
MODULE-4FT GL DOOR FN - Standard cassette for FN4, FN8 and FN12
MODULE-4FT L GL DOOR FN - LH cassette only applies next to LH flat end for FN4, FN6 and FN12 cases
MODULE-4FT R GL DOOR FN - RH cassette only applies next to RH flat end for FN4, FN6 and FN12 cases
MODULE-4FT NAR WDO GL DOOR FN - This cassette only applies to FN4 with flat ends on both sides

FN-L and FN-GL use two glasses and are curved (2 sided).



F-L, and F-GL wall cases use curved-two sided frames.



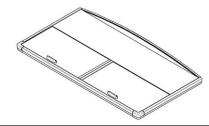
FW-L, FW-GHL & FW-GL use three glasses and are curved (2 sided).



FI-L and FI-GL use three glasses and are curved (2 sided).



FWEL and FWEGL use three glasses.



See installation steps on the next page. See separate data sheets for list of parts.

#### NOTE:

Hussmann does not recommend using a power drill. If using a power drill, Do NOT use more than 2 N/m torque.

# **INSTALLING LID FRAMES:** For cases with flat ends

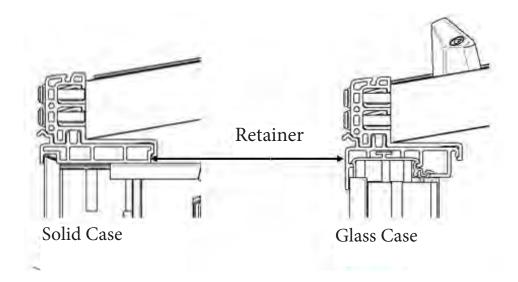
1. Clean the retainer(s) (solid or glass) on the island merchandisers thoroughly before installing the frames.

- 2. MAKE SURE THE ISLAND CASES ARE LEVELED. If merchandisers are not leveled, see page 1-7 for leveling instructions.
- 3. Remove wrapping materials from the frame assembly. Clean the frame assemblies thoroughly.
- 4. Start the lids installation at the end of the case lineup first. Lengths for cassettes are different. See table (previous page) for picking the correct cassette for each case. Install the first cassette. Center the frame on top of the case, and seat the frame(s) on the case retainer(s).



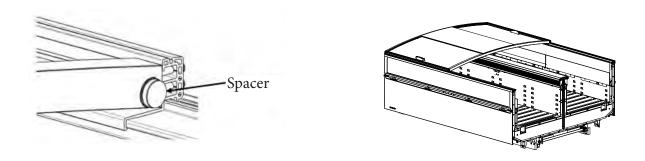
# **↑** CAUTION

AVOID SERIOUS PERSONAL INJURY. Use caution when handling glass. Always wear protective eye wear and gloves when handling glass. Wet or damp glass may be slippery.

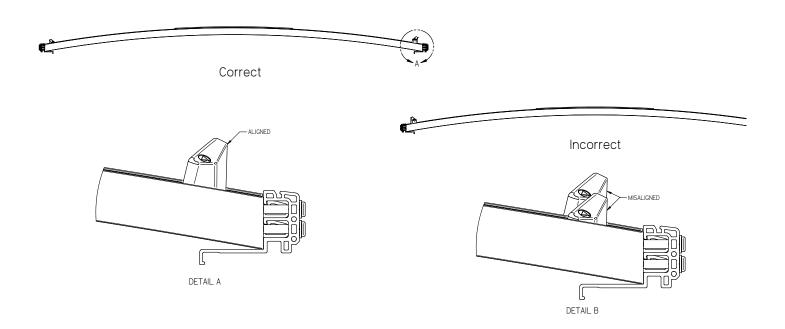


# **NOTE:**

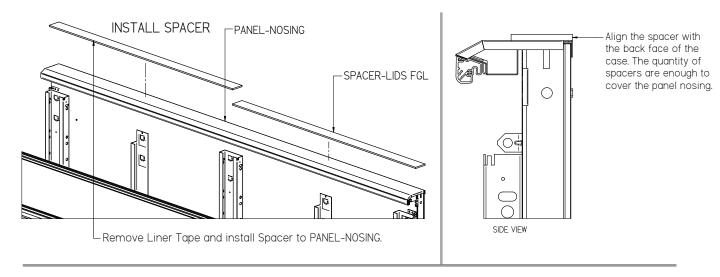
When installing more than one frame, a spacer is used on both sides. The spacer is packed out in the trim kit and is applied using adhesive. This does not apply for FWEL and FWEGL. Solid and glass cases have different retainers.



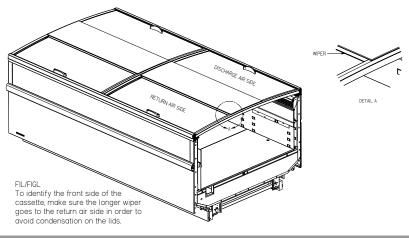
4a. When installing two or more cassettes, make sure that the handle doors of the cassettes are properly aligned as shown in the drawings below.



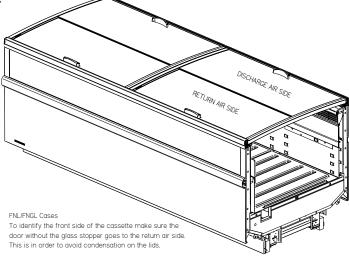
4b. This is an additional step only for **F-GL** cases. Install spacers to the PANEL-NOSING.

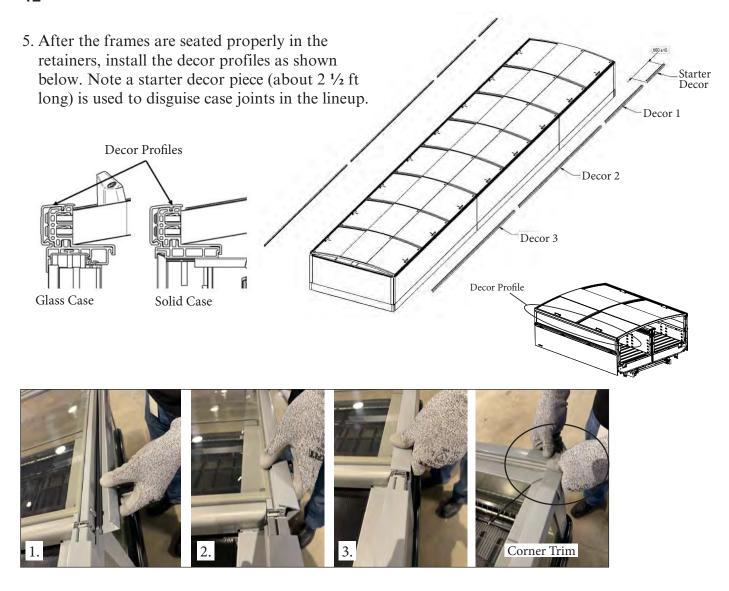


4c. This is an additional step only for **F-IL / FI-GL** cases. To identify the front side of the cassette, make sure the longer wiper goes to the return air side in order to avoid condensation on the lids.

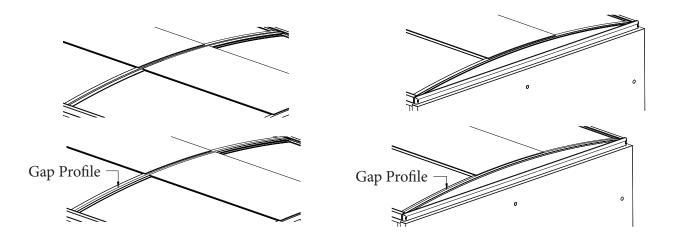


4d. This is an additional step only for FN-L / FN-GL cases. To identify the front side of the cassette, make sure the door without the glass stopper goes to the return air side in order to avoid condensation on the lids.



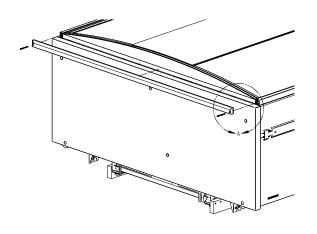


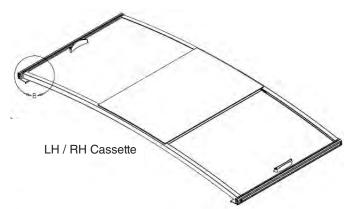
6. Gap profiles are installed between frame cassettes and between cassettes and ends. Before installing, make sure the gap profile is cleaned and the cassettes are cleaned and aligned.



# ATTACHING GABLES (FLAT CASE ENDS)

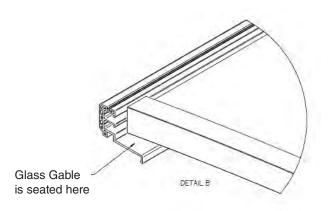
1. Glass gables are installed to close the space at the ends of the case for the lids. Clean all pieces before starting the installation. Seat the filler on the flat end, aligning it on both sides, and fix it in place with screws. (Remove the paper liner on the adhesive tape to set it in place correctly.)

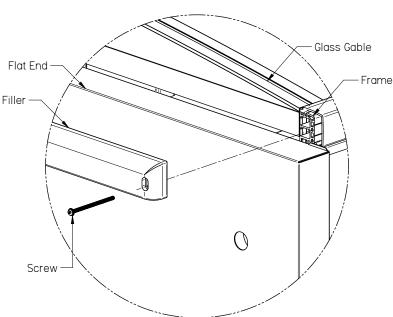


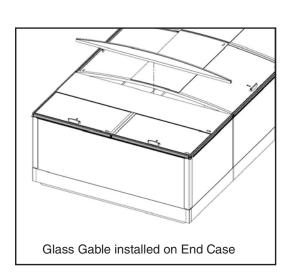


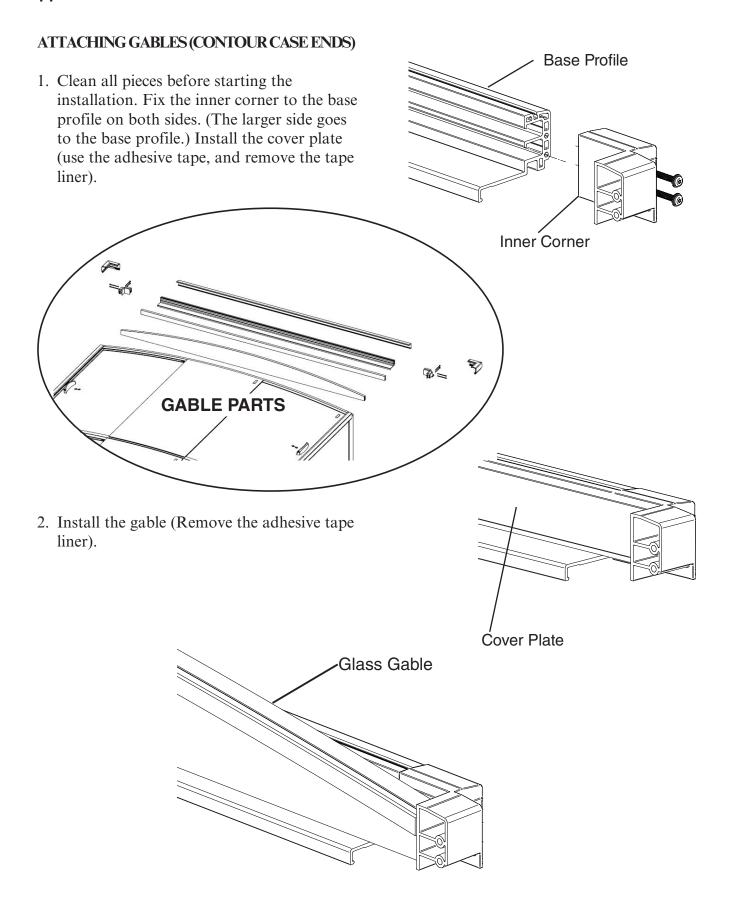
#### **IMPORTANT!**

Set the filler on top of the flat end. Use adhesive tape along the filler trim piece. Align it on both sides with the holes as shown, then screw the filler to the cassette. Make sure there is no gap between filler, flat end and cassette after it is installed.

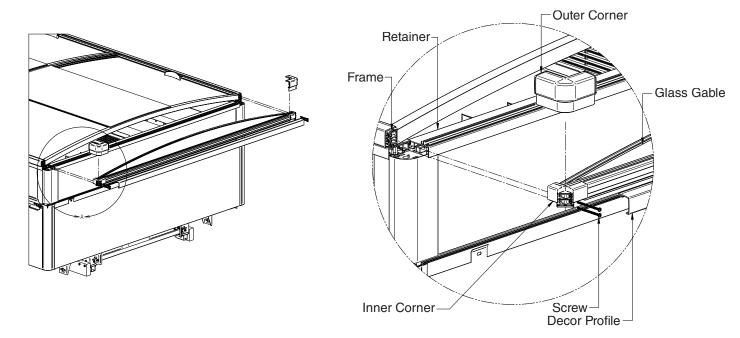






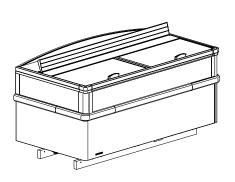


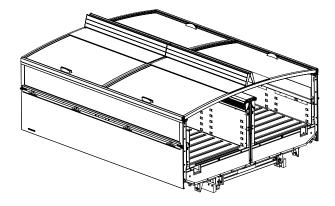
3. Seat the end decor profile into the retainers. Then, install the outer corner as shown in the illustrations below.



# **INSTALLING PTMs**

1. PTMs attach to the lid frames and are one-sided or two sided.





# START UP / OPERATION

### START UP

See the merchandiser's Data Sheet for refrigerant settings and defrost requirements. Bring the merchandiser down to the operating temperatures listed on the data sheet. Be sure to thoroughly clean the lids before loading product in the case(s).

# **STOCKING**

PRODUCT SHOULD NOT BE PLACED IN MERCHANDISERS UNTIL MERCHANDISER IS AT PROPER OPERATING TEMPERATURE.

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.

AIR DISCHARGE AND RETURN FLUES MUST REMAIN OPEN AND FREE OF OBSTRUCTION AT ALL TIMES to provide proper refrigeration and air curtain performance. Do not allow product, packages, signs, etc. to block these grilles. Do not use non-approved shelving, baskets, display racks, or any accessory that could hamper air curtain performance.

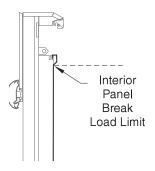
### LOAD LIMITS

Each merchandiser has a load limit decal.

### **LOAD LIMIT**

SHELF LIFE OF PERISHABLES WILL BE SHORT IF LOAD LIMIT IS VIOLATED. OVERSTOCKING WILL ADVERSELY AFFECT PRODUCT TEMPERATURE AND MERCHANDISER EFFICIENCY. THE LOAD LIMIT IS THE BOTTOM OF THE INTERIOR PANEL BREAK. RECOMMENDED LOAD LIMIT PROFILES ARE SHOWN ON THE NEXT PAGE.

THE LOAD LIMIT OF THE MERCHANDISER MUST ALWAYS BE MAINTAINED. IF THE MERCHANDISER IS OVER STACKED THE GLASSES WILL NOT CONDENSATE.



# **⚠** CAUTION

At no time should merchandisers be stocked beyond the load limits indicated. Improper stocking can cause poor performance that results in spoiled food.

# HUSSMAnn

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

Please include the model and serial number of the product.

Hussmann Corporation, Corporate Headquarters: Bridgeton, Missouri, U.S.A.