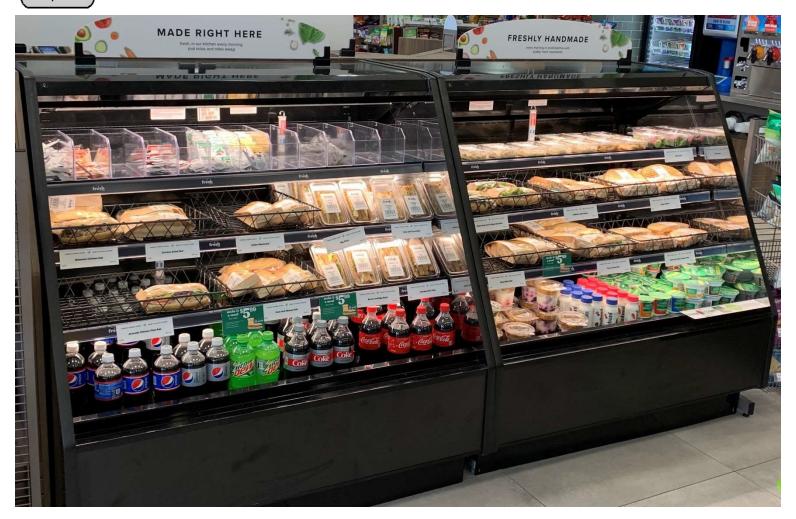
# HUSSMANN®

DOE 2017
Energy
Efficiency
Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.



DZC-SS

# BAKERY SELF-SERVICE MERCHANDISER

# USER MANUAL

DZC-SS-048-R

DZC-SS-057-R

DZC-SS-075-R

DZC-SS-096-R

DZC-SS-144-R

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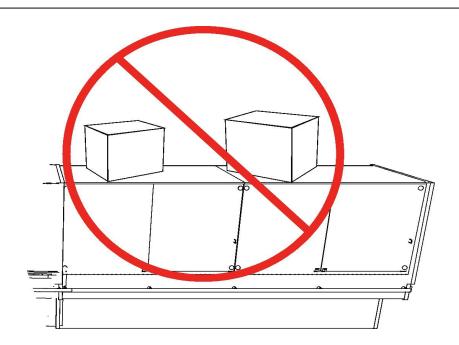
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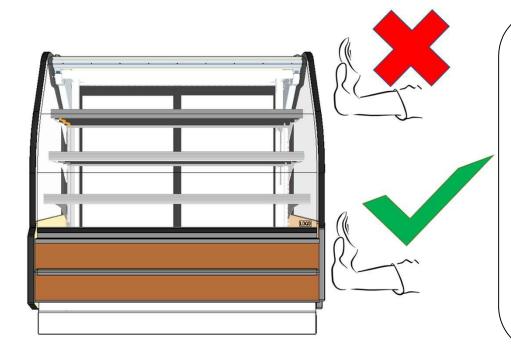
# **Notice**



-DO NOT Load or stand over the top of the case. Glass breakage may occur if precautions are disregarded.

\*Broken glass can cause lacerations, cuts, and puncture wounds which may result severed arteries or tendons, amputations, eye injuries, or exposure to disease.





### **IMPORTANT**

-DO NOT ATTEMPT TO MOVE THE MERCHANDISER BY APPLYING FORCE TO THE CANOPY AREA (EVEN IF WOODEN BRACES OR END PANELS ARE PRESENT).

-APPLY PUSHING FORCES NEAR THE LINER / TUB AREA IN ORDER TO BRING MERCHANDISERS CLOSER TOGETHER DURING JOINING.

# **General Information**

### **Case Description:**

Description: Refrigerated Self-Service Bakery Merchandiser

Shipping Damage: All equipment should be thoroughly examined for shipping damage before and during unloading. This equipment has been carefully inspected at our factory and the carrier has assumed responsibility for safe arrival. If damaged, either apparent or concealed, claim must be made to the carrier Immediately.

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. The carrier will supply necessary claim forms.

Concealed Loss or Damage: When loss or damage is not apparent until after all equipment is uncrated, a claim for concealed damage is made. Make request in writing to carrier for inspection within 15 days and retain all packaging. The carrier will supply inspection report and required claim forms.

Shortages: Check your shipment for any possible shortages of material (See Parts List page 18). If a shortage should exist and is found to be the responsibility of Hussmann Chino, notify Hussmann Chino. If such a shortage involves the carrier, notify the carrier immediately, and request an inspection. Hussmann Chino will acknowledge shortages within ten days from receipt of equipment.

Hussmann Chino Product Control: The serial number and shipping date of all equipment have been recorded in Hussmann'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, in order to provide the customer with the correct parts.

Location/Store Conditions: The DZC-SS-R refrigerated merchandiser has been designed for use only in air-conditioned stores where temperature and humidity are maintained at or below 75°F Dry bulb and 55% relative humidity. DO NOT allow air conditioning, electric fans, ovens, open doors or windows (etc.) to create air currents around the merchandiser, as this will impair its correct operation.

Keep this booklet with the case at all times for future reference.

HUSSMAnn\*/CHINC

A publication of HUSSMANN® Chino
13770 Ramona Avenue • Chino, California 91710
(909) 628-8942 FAX

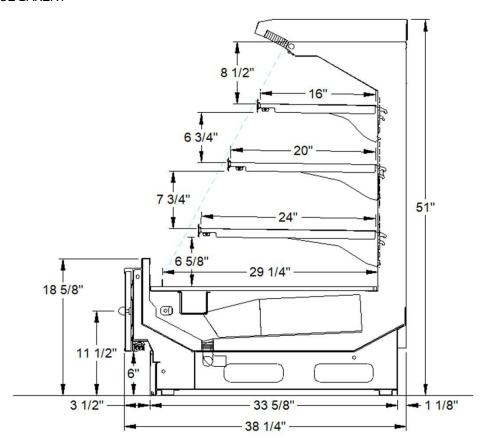
(909) 590-4910 (800) 592-2060



This equipment is to be installed to comply with the applicable NEC, Federal, State, and Local Plumbing and Construction Code having jurisdiction.

# **Case Sections**

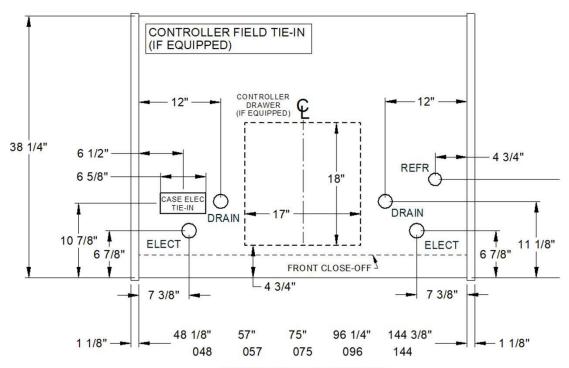
**DZC-SS-R** SELF SERVICE BAKERY



# **Case Plan Views**

REAR OF CASE (SERVER SIDE)

DZC-SS--R



FRONT OF CASE (CUSTOMER SIDE)

# Installation - Preparation

# **Receiving Case and Preparing for Installation**

# **IMPORTANT**

- -DO NOT REMOVE FOAM BLOCK FROM SHELVES UNTIL THE MERCHANDISER IS POSITIONED FOR INSTALLATION
- -LEAVE WOOD BRACING IN PLACE UNTIL CASES ARE READY FOR JOINING AND HAVE BEEN TAKEN OFF TRANSPORTATION DOLLIES
- -PLASTIC WRAP MAY BE REMOVED TO ACCESS PARTS, WARNINGS, AND INSTRUCTIONS

WARNINGS AND IMPORTANT INFORMATION ON END PANELS OR SIDES

LOOSE TO JOB ITEMS PACKAGED AND PLACED ON DECK LEVEL



BODY LENGTH
EXTERIOR PANELS
ATOP CASE

PLASTIC WRAP

CANOPY STRUCTURE REINFORCED WITH LUMBER BRACES

MERCHANDISER WILL BE ON A PALLET OR SKIDS

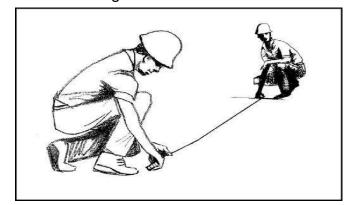
FOAM BLOCKS INSERTED BETWEEN SHELVES

### Prepare By:

- Inspect equipment for damage. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection/claim form. If there is 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.
- 2. Read instructions and warnings on handling and transportation. Ensure the proper transportation equipment is being used.
- 3. Survey and mark out the installation area and plan footprint. Snapping chalk lines is recommended.

### Snapping Chalk Lines

Mark floors with Chalk snap lines where cases are to be located. Chalk lines are to run along the base or legs of cases.

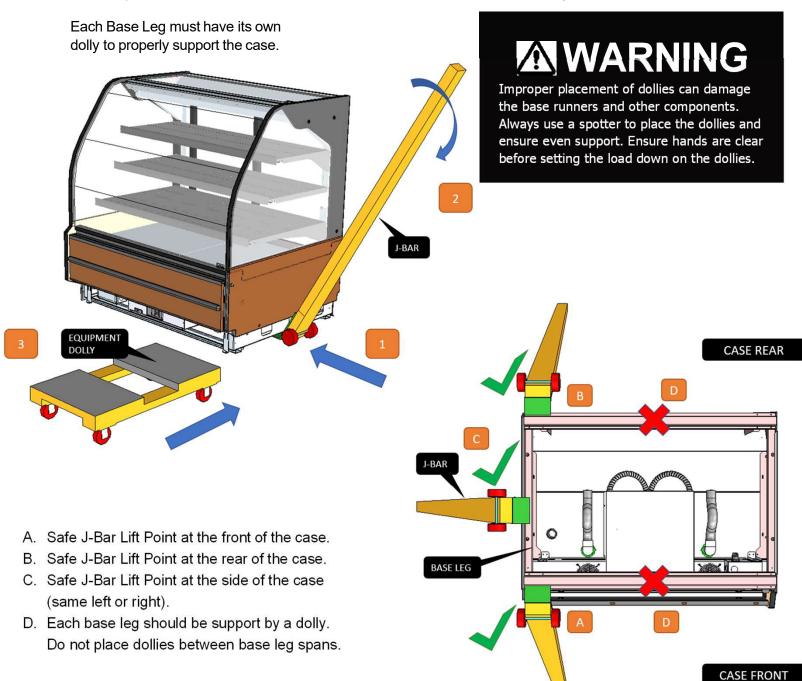


# Installation – Lifting and Transportation – Using J-Bars and Dollies

### **DZC Transportation Using Dollies**

Using J-Bars to get the merchandizer onto Dollies for transportation is the preferred and recommend technique for getting the case to its final location.

- 1. The DZC-SS can be lifted with a J-Bar high enough to place furniture dollies under each base leg.
- 2. Engage the DZC-SS from the points illustrated in the Graphic Below.
- 3. Remove lower body panels before lifting with a J-Bar to prevent damage.
- 4. Ensure the case is balanced before attempting to place on dollies. Reposition J-Bar if necessary.
- 5. Lift the case only as high as necessary to place a dolly.
- 6. Repeat the procedure at the other end and in the center as necessary.
- 7. 048 and 057 cases require 2 dollies. 075 and 096 cases require 3 dollies. 144 cases require 4 dollies.
- 8. Evenly support the entire base structure on rollers or dollies before attempting to move.

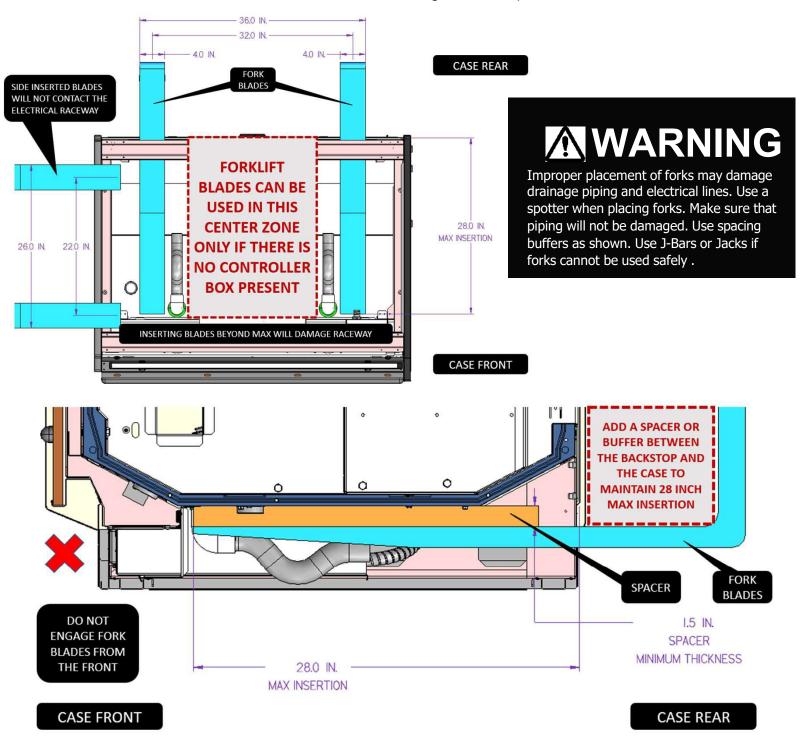


# Installation - Lifting and Transportation - Fork-Lift Guidance

### **DZC Transportation using Fork-Lifts**

Using J-Bars and Dollies are the preferred technique, but a Fork-Lift can be used if the special requirements stated below are met

- 1. Remove lower body panels before lifting with a forklift to prevent damage
- 2. Lift from the rear of the case if the forklift is to support all the weight. See Graphic Below.
- 3. Do Not Engage Forklift from the Front of the Merchandizer. This will damage the case.
- 4. Add a spacer block to the forks. See Graphic below.
- 5. Add a buffer between the fork backstop and merchandiser to maintain max insertion distance.
- 6. The case can be raised at one end under the base leg to allow for placement of dollies.



# Installation – Recommended Sequence for Setting Lineups

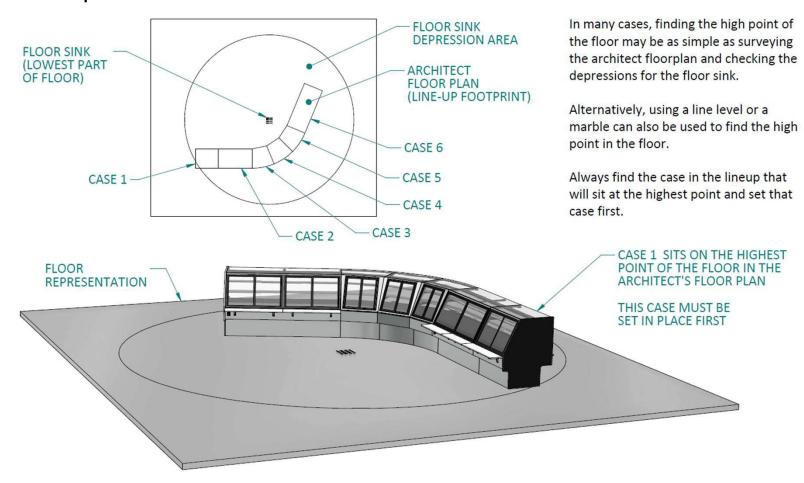
The following sequence is Hussmann's recommendation for setting DZC lineups. Each lineup will be different, have different adjoining cases, and may require small deviations in order to complete. Plan lineups accordingly.

- 1. Level Adjoining Cases
- Page 10 for Guidance on Uneven Floors
- Page 11 for Leveling Method
- 2. Join Cases
- Page 12 for Joining Preparation and Bolting
- Page 14 for Bolting and Sealing Details
- 3. Adjust Canopy Upward or Downward
- Page 16 for Canopy Arm Vertical Adjustment
- 4. Bolt Cases Together
- Page 13 for Bolting Sequence
- Install Joint Trim
- Page 17 for Joint Trim Installation
- 6. Install Body Panels
- Page 18 for Body Panel Installation

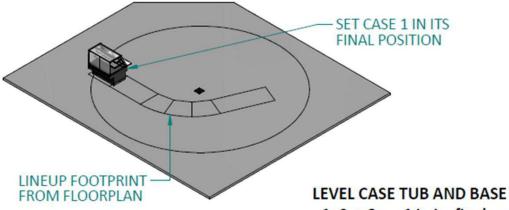
Note: Some preparation work will be required for each step. Read through all sections prior to installation in order to understand what must be done in each step of the process

# Installation – Guidance for Lineups and Uneven Floors

# Examine the Floor Plan and Determine which case to set in place first. See the following example



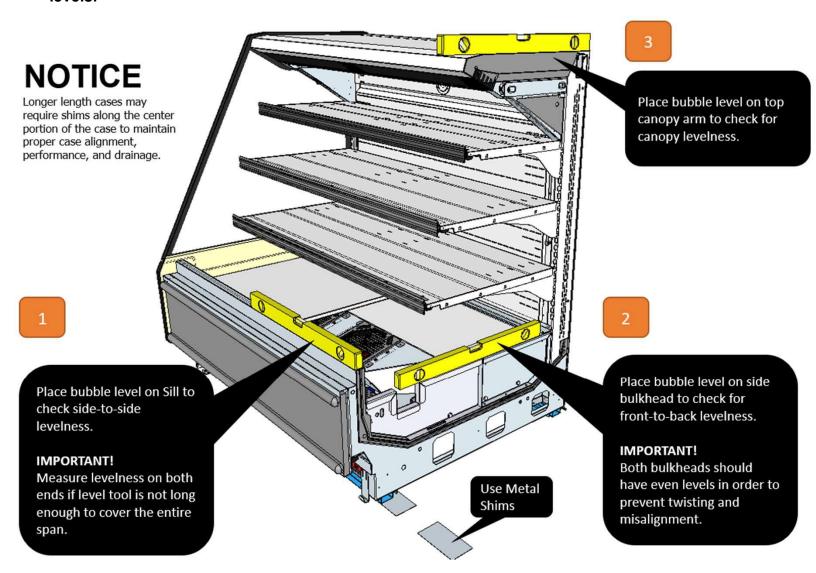
Set the first case in the lineup into its final position, then level. Once level, the adjacent case can be leveled, joined, and finally bolted and adjusted based on this case. Each subsequent case will depend on the level position of the previous case. See Joining, Bolting and Adjustment instructions for additional details.



- 1. Set Case 1 in its final position according to the floorplan
- 2. Place a Torpedo Level on the left and right bulkhead
- 3. Level Case front-to-back (Check Level on Each Bulkhead)
- 4. Place a Torpedo Level across the front ledge and rear ledge
- 5. Level Case left-to-right (Check Level on Front and Rear Ledge)

# Installation – Method for Leveling DZC-SS Merchandizers

Important: See the suggestions for setting cases on uneven floors before setting lineups and leveling cases. Using this suggestion will result in the fewest required adjustments to case levels.



# Level the Case sequentially, Using Metal Shims

- 1. Check levelness left-to-right first (This usually requires the most correction on a single side)
- 2. Adjust front-to-back levelness after ensuring left-to-right levelness (Shims normally inserted in pairs during this check)
- 3. Canopy Levelness should be the last check. The canopy levelness should be adjusted after the cases are joined, and prior to bolting. See 'Canopy Arm Adjustment' section on page 15.

Important: Always level the first case in the lineup. All other cases should be driven from its levels. See "Uneven Floor Guidance" for details.

Note: The use of metal shims is recommended in order to prevent shim deterioration over time

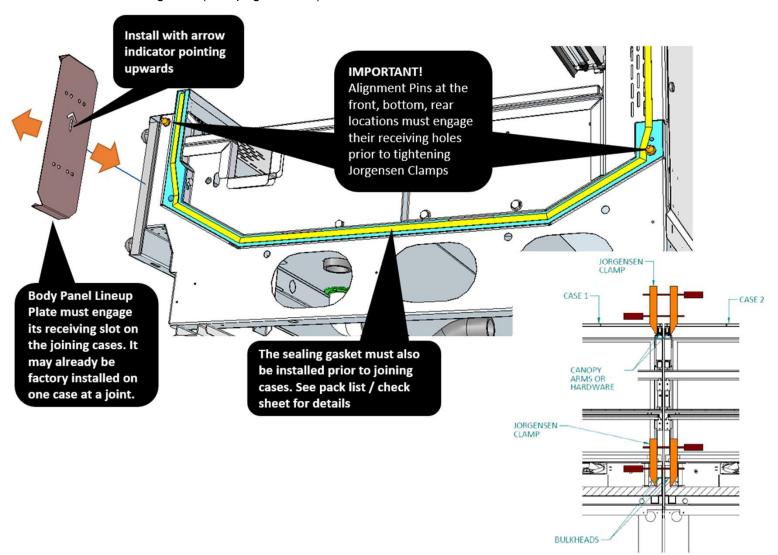
# Installation – Joining and Bolting

Important: See the suggestions for setting cases on uneven floors before setting lineups and leveling cases. Using this suggestion will result in the fewest required adjustments to case levels.

- 1. Install Body Panel Lineup Plate (See Graphic Below)
- 2. Install Sealing Gasket and Butyl (See page 14 for additional details)
- 3. Set the 2<sup>nd</sup> case approximately 2 inches away from the 1<sup>st</sup>
- 4. Bring the front, bottom, and top of cases into alignment

## Important: Use alignment pins/tabs and corresponding holes/slots as a guide

- 5. Push cases together and clamp (Use Jorgensen or similar clamp. See detail below)
- 6. Check levelness on the second case from front-to-back and side-to-side
- 7. Adjust front canopy arm up or down (See Page 15)
- 8. Bolt cases together (See pages 13-14)

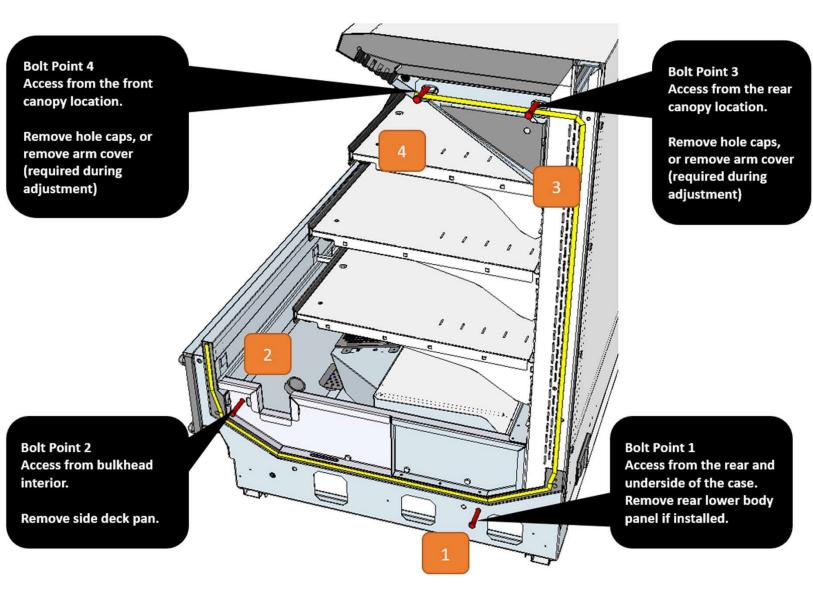


Note: Most of the clamping forces should be applied at the bulkhead or at the base legs if necessary.

The joining clamp at the top canopy may have to be installed loosely until the canopy arms can be adjusted and aligned. After alignment, tighten the clamp enough to allow bolting. Be careful not to overtighten.

# Installation - Joining and Bolting - Bolting Points and Sequence

Important: See previous step. Ensure Alignment pins are engaged. Ensure gasket and or sealant is installed. Clamps should be holding the case together while the bolts/nuts are started. Remove clamps only after all 4 bolting points are snug.

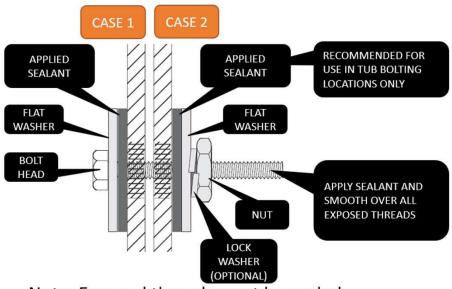


- 1. Bolt Sequence shown in the graphic above.
- 2. Start with the lower section first. Hand tighten
- 3. Check for alignment, Gasket pinching, or obstructions. Make corrections as necessary.
- 4. Engage canopy bolts. Adjust canopy levels (See Canopy Adjustment on page 15)
- 5. Hand Tighten Canopy Bolts
- 6. Return to bolt point 1 and start to snug in sequence using a wrench or ratchet.
- 7. Remove Clamps. Check Joint Gaps. Correct if required. Ensure joints are sealed prior to replacing canopy covers and deck pan.

Note: Use washers on all bolt head and nuts to distribute clamping force and prevent panel crushing.

# Installation – Joining and Bolting – Bolting / Sealing Detail

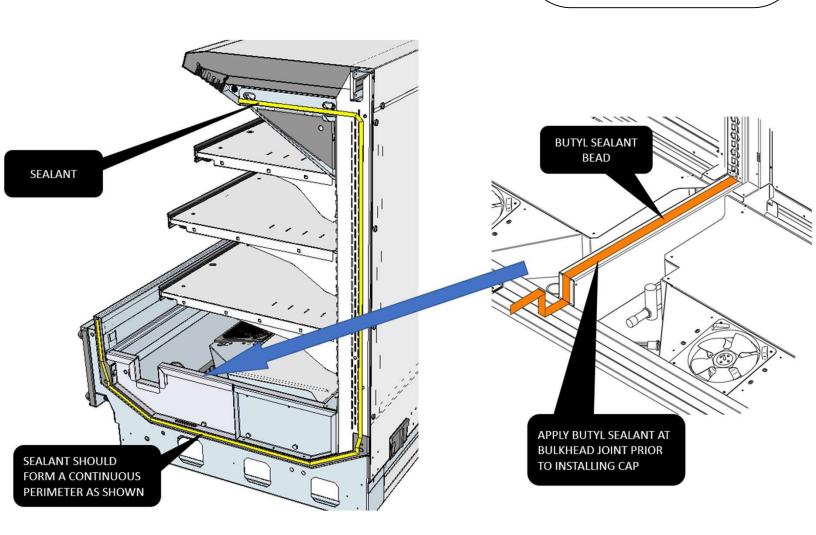
### Important: Use this information as a supplement to the previous section



Note: Exposed threads must be sealed smooth in product areas to maintain NSF compliance

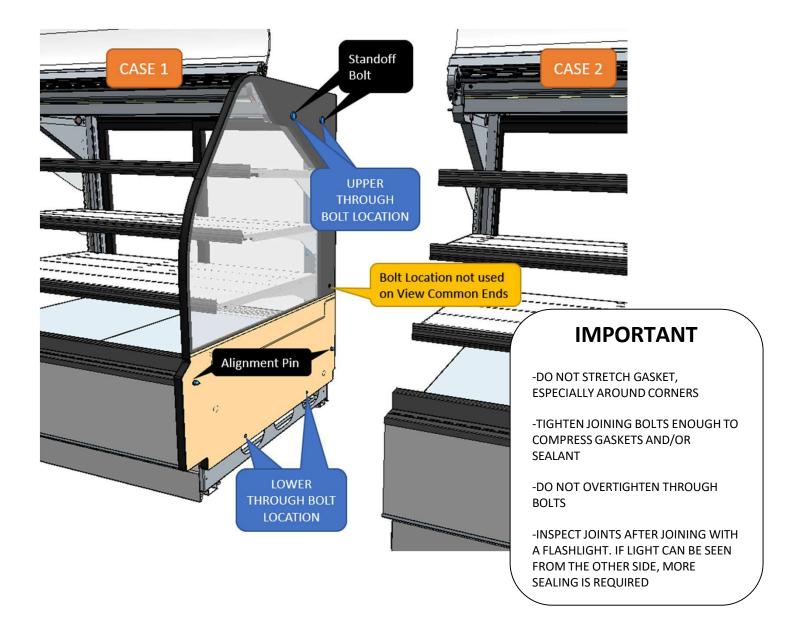
### **IMPORTANT**

- -DO NOT STRETCH GASKET, ESPECIALLY AROUND CORNERS
- -TIGHTEN JOINING BOLTS ENOUGH TO COMPRESS GASKETS AND/OR SEALANT
- -DO NOT OVERTIGHTEN JOINING BOLTS
- -INSPECT JOINTS AFTER JOINING WITH A FLASHLIGHT. IF LIGHT CAN BE SEEN FROM THE OTHER SIDE, MORE SEALING IS REQUIRED



# Installation – Joining and Bolting – Common and Division Ends

# Important: Use this information as a supplement to the previous sections



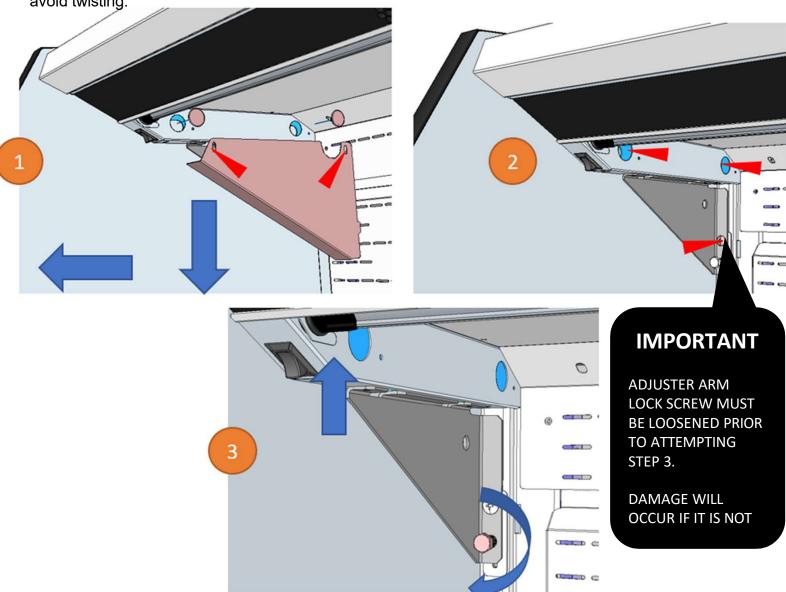
- 1. The common/division end panel will always be attached to one case (Case #1 in this diagram)
- 2. Ensure gaskets are installed on Case 2 (See page 14 for details)
- 3. Gain access to the Upper Through Bolt locations on both cases by raising the glass and removing the bolt hole caps (See page 14 for details)
- 4. Gain access to the Lower Through Bolt locations on both cases by removing the front and rear lower body panels and splashguards (if applicable) (See page 22 for details)
- 5. Remove the standoff bolts and discard (Note: A solid division end may be bolted from the inside)
- 6. Bring the cases together and engage the alignment pins from the panel to Case #2
- 7. Join using through bolts provided in the joining kit (See page 14 and 23 for details)
- 8. Make glass adjustments prior to snugging upper bolts (See pages 17-19)

.

# Installation – Joining and Bolting – Canopy Arm Angle Adjustment

# Gaining access to the Canopy Arm adjustment hardware may require removing shelves.

Settling and shifting during transportation could require that canopy levelness be adjusted. Always check for canopy levelness, and always adjust all arms of the case simultaneously to avoid twisting.

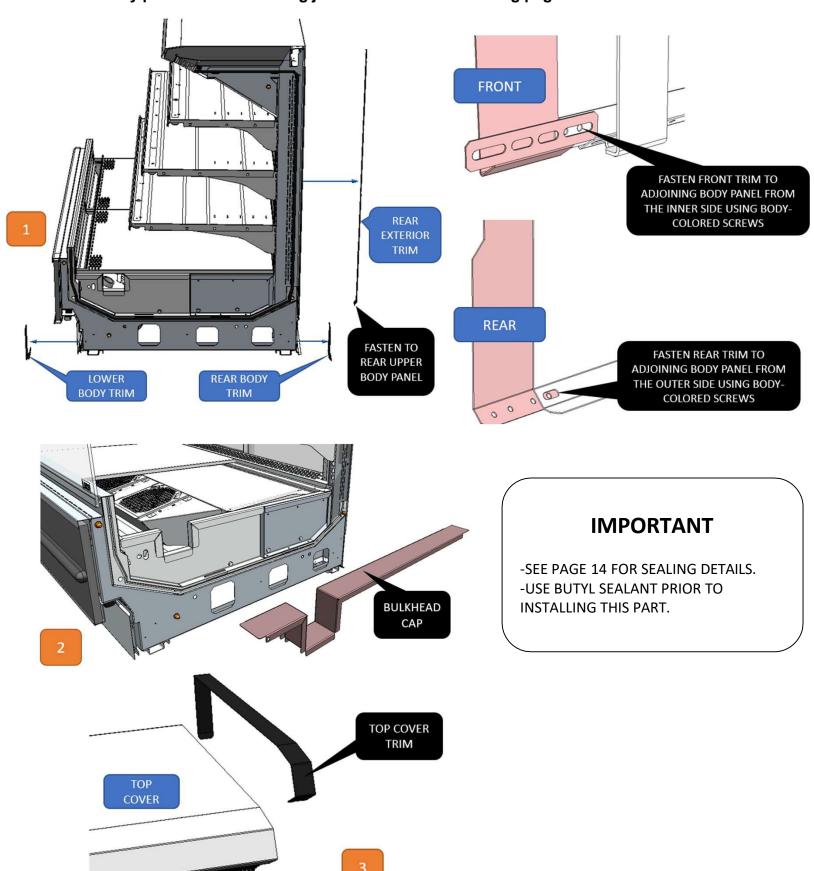


- 1. Remove hole caps and screws from adjuster bracket cover, then remove the adjuster bracket cover.
- 2. Loosen the (2) upper joining bolts [or end panel bolts], and (1) adjuster bracket lock screw
- 3. Turn adjuster bolt Clockwise to raise the canopy. Adjust left and right canopy brackets simultaneously.
- 4. After adjustment, tighten (1) adjuster bracket lock screw, and (2) end panel fastening bolts
- 5. Replace hole caps and adjuster bracket covers
- 6. For Lineups: Adjust all canopies at the same time. Ensure levelness across entire lineup. Tighten all lineup bolts, starting with the first case.

Note: Hex adjuster screw will require a 15mm (or 9/16") socket or open-ended wrench. A deep socket with extension is recommended so that levels can be observed while adjustments are made.

# Installation – Joint Trim – Shipped Loose to Job Items

Cases in lineups have been shipped with a Loose to Job vacuum packed kit. Locate that kit and identify parts before installing joint trim. See the following page.



# Installation – Installing Body Panels

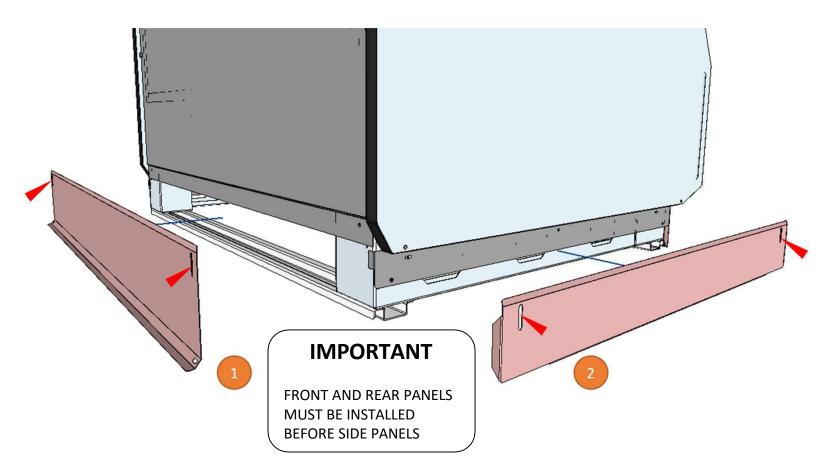
# **Installing Front Body Panel**

No tools will be required in order to install front body panels

See the section of this manual titled "Access to J-Box / Controller Box / Drains" on page 23 for front body panel installation instructions.

# **Installing Rear and Side Body Panel**

A Philips Screwdriver / Drill bit will be required in order to install or remove Rear and Side Body Panels Fasten at indicated locations



- 1. Rear Body Panel
- 2. Side Body Panel (For Lineups, these parts are installed only on the end cases)

Fasten with Panel-colored self-tapping screws

HUSSMANN REV D 09/14/2022

# Loose to Job Pack list / Check sheet

DOCUMENT DETAILS: PART # CS00035 Z U H/J KL\* EXTERIOR COLOR: INTERIOR COLOR: SALES ORDER# 1/1 KL\* INSPECTOR: 9 Σ 8 ft JOINT TRIM-LOWER FRONT BODY PANEL LINE UP PLATE-CASE TO CASE JOINT TRIM-REAR EXTERIOR JOINT TRIM-REAR CLOSEOFF

BOLT, 3/8-16 X 2 1/2"

300-03-0870

CASE WITH END PANEL (COMMON, DIVISION, & FLOW-THRU)

(NO END PANEL) CASE TO CASE

WASHER, 5/16" DRAIN SCREEN

300-03-1315

**9** 0

NUT, 3/8 - 16

300-03-1370

GASKET SEAL TAPE

2H11847650

0462289

STANDARD PART

Σ

BOLT, 3/8 - 16 X 2 1/2" BOLT, 3/8 - 16 X 1"

300-03-0870

0000416

ALIGNMENT PIN

0376408

G

3108239

REAR C/OFF COLOR

STAINLESS

3108238

FRNT PNL COLOR

STAINLESS

# **DZC-SS-R SLTJ DOCUMENT**

JOINT TRIM-BULKHEAD CAP

3122960

POWDERCOAT: BLK

3108235

POWDERCOAT: BLK

3141935

REAR EXT COLOR

PART#

JOINT TRIM - TOP COVER

3141936

TOP EXT COLOR STAINLESS

LINE UP ONLY

0

INDICATES CASE BOLTING/ALIGNMENT POINT \*SEE INSTALLATION GUIDE

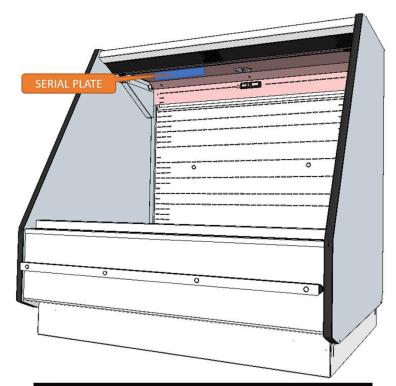
# Refrigeration

# Refrigerant

The correct type of refrigerant will be stamped on each merchandiser's serial plate. See the following graphic for serial plate location.

The case refrigeration piping is pressurized with a nitrogen holding charge, leak tested, and factory sealed.

Before making refrigeration connections, depress universal line valve (Shraeder Valve) to ensure that coils have maintained pressure during shipment. If system pressure was not maintained, contact your Hussmann Service Technician for further assistance.





# **Refrigeration Piping**

The refrigerant line connections are at the right side of the case (as viewed from the front) under the deck-pans. The merchandiser will have a through-hole in the tub liner that allows lines to exit the merchandiser for liquid and suction line connections. After connections have been made, make certain to seal this outlet thoroughly (if not sealed at factory already). Seal both the inside and outside. We recommend using an expanding polyurethane foam insulation to fill large gaps, then finishing the seal with a Silicone type sealant to prevent any water leaks.

# **Line Sizing**

Refrigerant lines should be sized as shown on the refrigeration legend that is furnished for the store or according to the ASHRAE guidelines.

# Oil Traps

Oil traps must be installed at the base of all suction line vertical risers on refrigerated cases.

# P-Traps

P-TRAPS must be installed at the base of all refrigerated cases. The 1  $\frac{1}{2}$ " P-TRAP and threaded adapter must be installed to prevent air leakage and insect entrance into the fixture.



It is the contractor's responsibility to install case(s) according to local construction and health codes.

# **WARNING!**

Do NOT apply thread sealer to ABS P-Trap.



09/13/22

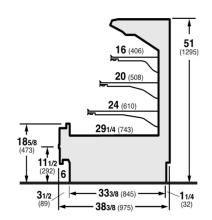


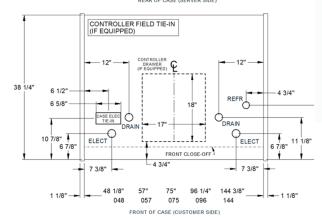


DOE 2017 Energy Efficiency Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

REAR OF CASE (SERVER SIDE)





### **REFRIGERATION DATA:**

CASE LENGTHS	CASE USAGE	CAPACI (BTU/H	1	EMPERA	VELOCITY (FT/MIN)			
(IN)		RATING CO	NOITION	EVAPORATOR		DISCHARGE AIR ** (°F)	(	
		NSF 7	AHRI 1200	NSF 7	AHRI	NSF 7	NSF 7	
048, 057, 075, 096, 144	BAKERY	710	710	22	22	30~32	175~225	

CASE LENGTH	20°F GLYCOL 6° RISE				
S	GPM	PSI			
048	1.06	2.7			
057	1.24	4.1			
075	1.61	6.5			
096	2.03	2.9			
144	2.96	5.8			

- \* WEDGE CAPACITY IS IN TOTAL BTU/HR
- \*\*FRONT DISCHARGE AIR MEASURED INSIDE AIR CURTAIN HONEYCOMB
  \*\*\*REFRIGERATION NOTES:
- 1) BTU'S INCLUDE CANOPY LIGHTS. ADD 10 BTUS/SHELF/FT FOR EACH SHELF (LIGHT)
- 2) INCREASE BTUH BY 6% IF CASE IS CONFIGURED WITH 2 ROWS OF SHELVES
- 3) AHRI 1200 RATING POINT FOR ENERGY CONSUMPTION COMPARISON ONLY
- 4) USE DEW POINT FOR HIGH GLIDE REFRIGERANTS. CARE SHOULD BE TAKEN TO USE THE DEW POINT IN P/T TABLES FOR MEASURING AND ADJUSTING SUPERHEAT. ADJUST EVAPORATOR PRESSURE AS NEEDED TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SHOWN.
- 5) RATING CONDITION IS NSF TYPE I, 75°F/55% RH

<b>REFRIGERA</b>	TION DATA	CONTINUED:

	ELEC. THERMOS	TTINGS		DEFROST		DEFROST	TERM.	DRIP	DEFROST
	USAGE	CUT IN (°F)	CUT OUT (°F)	TYPE	TIME (MIN)	FREQUENCY (#/DAY)	(°F) COIL ONLY	TIME	WATER (LBS/DAY/FT)
[	BAKERY	30	26	OFF TIME	30	6	48	N/A	4.2

ENI	WIDTH KEY	
# OF END PNLS	END PNL WIDTH (IN.)	TOTAL ADDED LENGTH (IN.)
1	1.125	1.125
2	1.125	2.25

### ELECTRICAL DATA:

STANDARD FANS, LED LIGHTS (115 VOLT)

		E	EVAPORATOR	CANOPY LE		OPTION SHELF			D LOAD OPTIONS)		
CASE LENGTH	# OF EVAP FANS	BLADE DIA. (IN.)	BLADE PITCH	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
048	2	6.7	20	0.2	16	0.18	20	0.36	41	0.54	62
057	2	6.7	25	0.2	16	0.23	27	0.36	41	0.59	68
075	3	6.7	25	0.2	16	0.31	36	0.53	61	0.84	96
096	3	6.7	25	0.4	24	0.35	41	0.72	82	1.07	123
144	4	6.7	30	0.5	32	0.53	61	1.08	124	1.61	185

 OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)							
CASE LENGTH	CANOPY LIGHTS H.O. LED		OPTIONAL	LSHELF	MAX. H.O. LED LOAD		
	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	
048	0.18	20	0.53	61	0.71	81	
057	0.23	27	0.53	61	0.76	88	
075	N/A	N/A	N/A	N/A	N/A	N/A	
096	0.35	41	1.06	122	1.41	162	
144	0.53	61	1.59	183	2.12	244	

**Optional outlets** 

CONVENIENCE OUTLETS					
# OUTLETS	VOLTS	AMPS			
1	115	15			
1	115	15			
1	115	15			
1	115	15			
1	115	15			

# **Electrical**

### **Merchandiser Electrical Data**

Technical data sheets are shipped with this manual. The data sheets provide merchandiser electrical data. Refer to the technical data sheets and merchandiser serial plate for electrical information.

### **Electrical Connections**

All wiring must comply with NEC and local codes. All electrical connections including both supply circuits are to be made in the electrical J-Box.

ALWAYS CHECK THE SERIAL PLATE FOR COMPONENT AMPERES

### **Field Wiring**

Field wiring must be sized for component amperes stamped on the serial plate (refer to page 19 for location). Actual ampere draw may be less than specified.

### Identification of Wiring

Leads for all electrical circuits are identified by colored plastic bands. These bands correspond to the color code sticker (shown below) located inside the merchandiser's wireway cover.



--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.

# STANDARD CASE WIRE COLOR CODE CODIGO DE COLORES DE LOS ALAMBRES PARA LAS VITRINAS ESTANDAR CODE COULER POUR FILS DE BOITIER NORMALISE

COLOR DESCRIPTION DESCRIPCION DESCRIPTION

GROUND TIERRA MASA MASSE

ANTI-SWEAT ANTICONDENSACION ANTI-SUINTEMENT

LIGHTS LUCES ECLAIRAGE

RECEPTACLES ENCHUFES PRISE DE COURANT

▼ T-STAT/SOLENOID 230VAC
 ▼ T-STAT/SOLENOID 230VAC
 ▼ T-STAT/SOLENOID 115VAC
 ▼ T-STAT/SOLENOID 115VAC
 ▼ T-STAT/SOLENOID 115VAC
 ▼ T-STAT/SOLENOID (230VAC)
 ▼ SOUPAPE A SOLENOID (115 VAC)

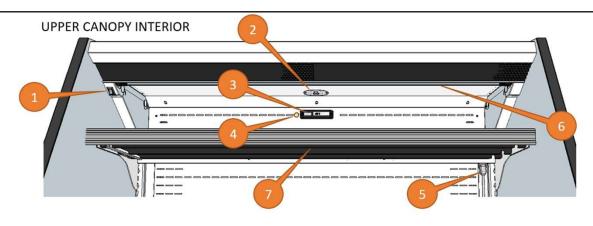
▼ T-STAT/SOLENOID 24VAC TERMOSTATO/SOLENOIDE (24VAC) SOUPAPE A SOLENOID (24 VAC)

■ FAN MOTORS VENTILADORES VENTILATEUR

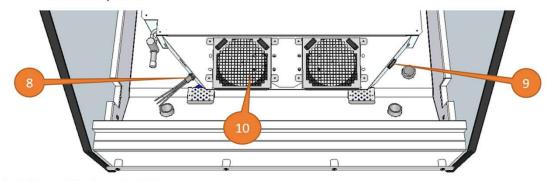
BLUE CONDENSING UNIT UNIDAD DE CONDENSACION UNITE DE CONDENSATION

USE COPPER CONDUCTORS ONLY
UTILISEZ LES CONDUCTEURS DE CUIVRE SEULEMENT
UTILICE LOS CONDUCTORES DE COBRE SOLAMENTE
430-01-0338 R101003

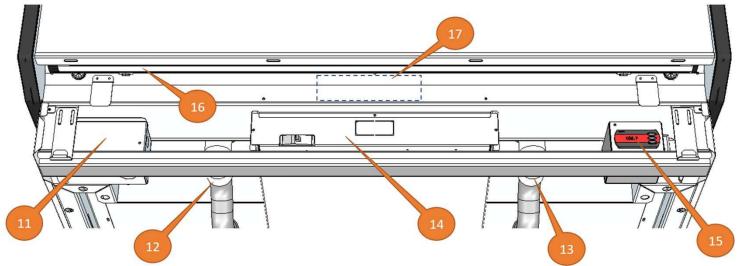
# **Electrical Component Locations**



### INTERIOR LINER / UNDER DECK PANS



### BEHIND FRONT LOWER BODY PANEL



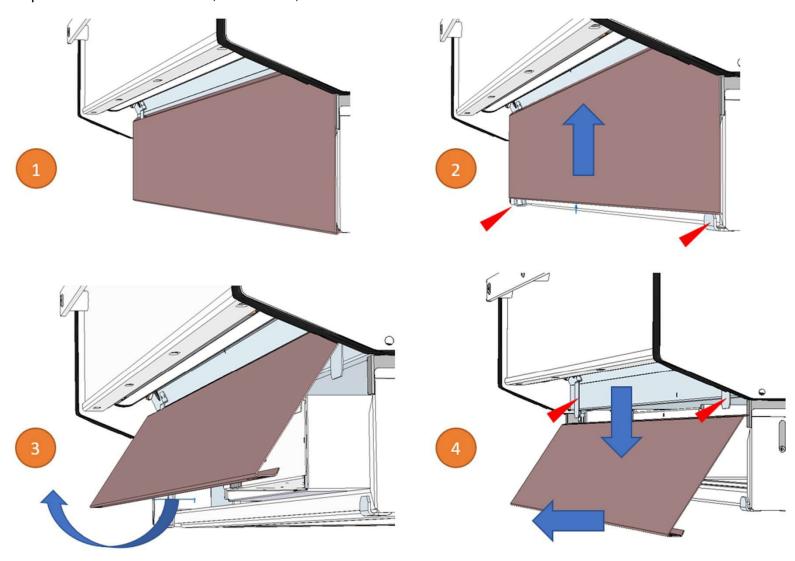
- 1. Light Switch
- 2. Sensor (On Removable Disc Panel)
- 3. Thermometer
- 4. Defrost Indicator Light (if Equipped)
- 5. Shelf Light Disconnect
- 6. Canopy Light Fixture
- 7. Shelf Light Fixture
- 8. Evaporator Fan Harness Disconnect
- 9. Shutoff Switch for Cleaning (if Equipped)

- 10. Evaporator Fan Motor
- 11. Junction Box / Field Tie-in
- 12. Left Drain & Trap
- 13. Right Drain & Trap
- 14. EEV Controller Box (if Equipped)
- 15. RCU Controller & Display (if Equipped)
- 16. Ledge Light Fixture
- 17. LED Driver(s) (See LED Driver Access, page 25)

# **Electrical Component Locations**

# Access to J-Box / Controller Box / Drains

The merchandisers electrical access is located at the FRONT of the case. Follow the illustrated procedure to access J-Box, Controllers, and Drains



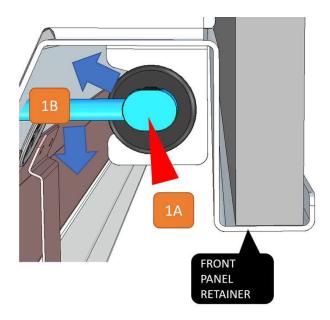
- 1. If Applicable, remove front splashguard or trim
- 2. Lift the Lower Front Body Panel straight upwards to clear the lower retention brackets
- 3. Rotate the Lower Front Body Panel from its bottom edge to sufficiently clear the lower brackets
- 4. After rotation, Lower the panel until it has been disengaged from the upper retention brackets
- 5. Move Panel Away from case

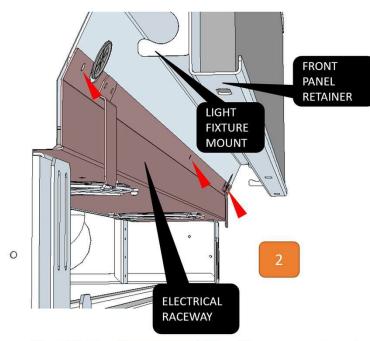
Re-assemble by reversing steps 1 - 5

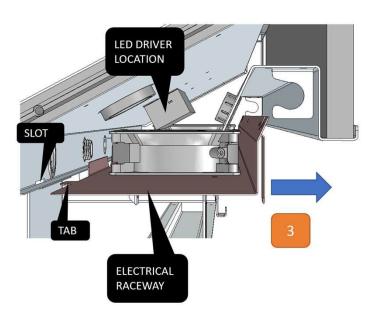
# **Electrical Component Locations**

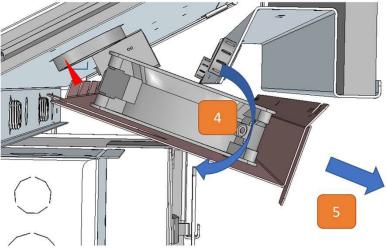
### **Access to LED Drivers**

The merchandisers LED Drivers are located behind the ledge light fixture location. To access this location, first remove the Lower Front Body Panel (procedure on page 24)



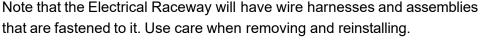






- 1. (A) Unplug ledge light fixture. (B) Roll fixture out of mount and remove.
- 2. Remove Raceway to Body Panel Retainer screws.
- 3. Pull the raceway assembly forward. Disengage rear tabs are from slots.
- 4. Rotate the assembly downward to clear the Front Panel Retainer.
- Gently Pull Assembly away from case.

that are fastened to it. Use care when removing and reinstalling.



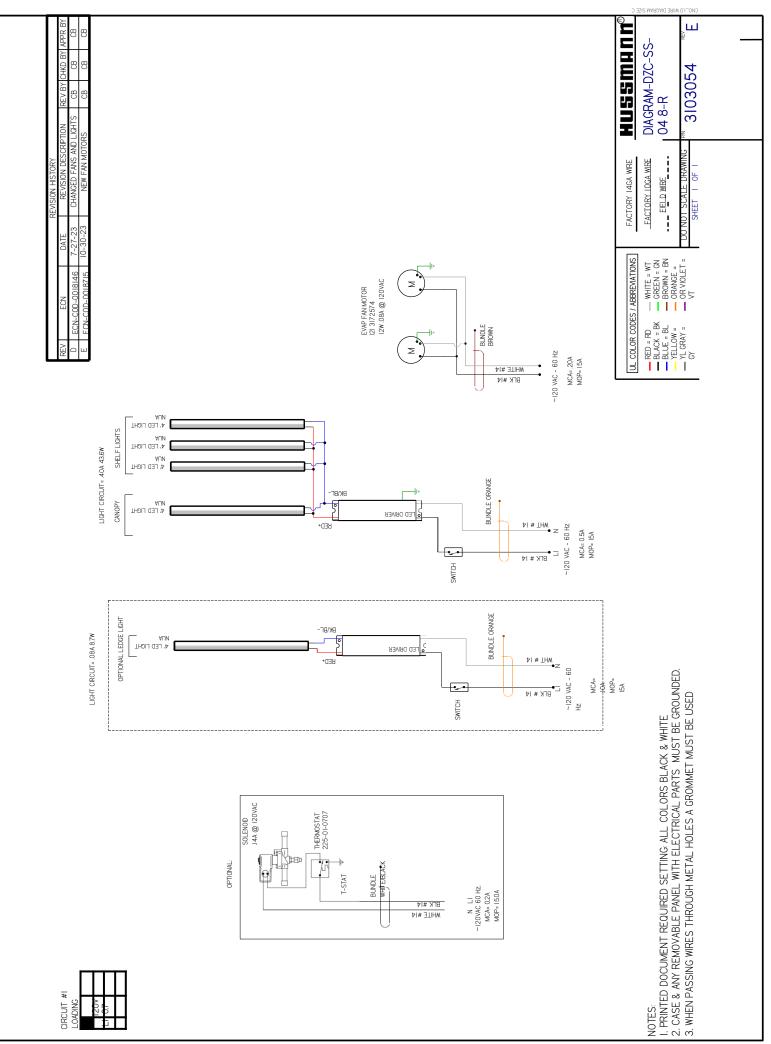


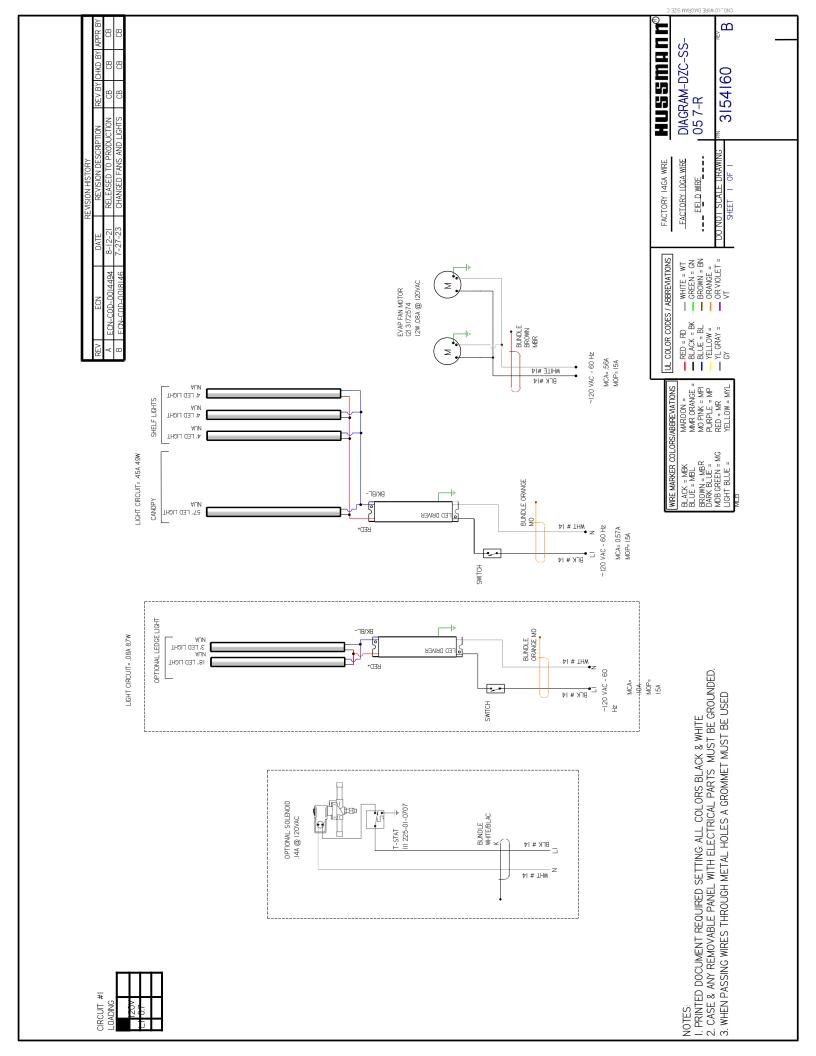
# **WARNING**

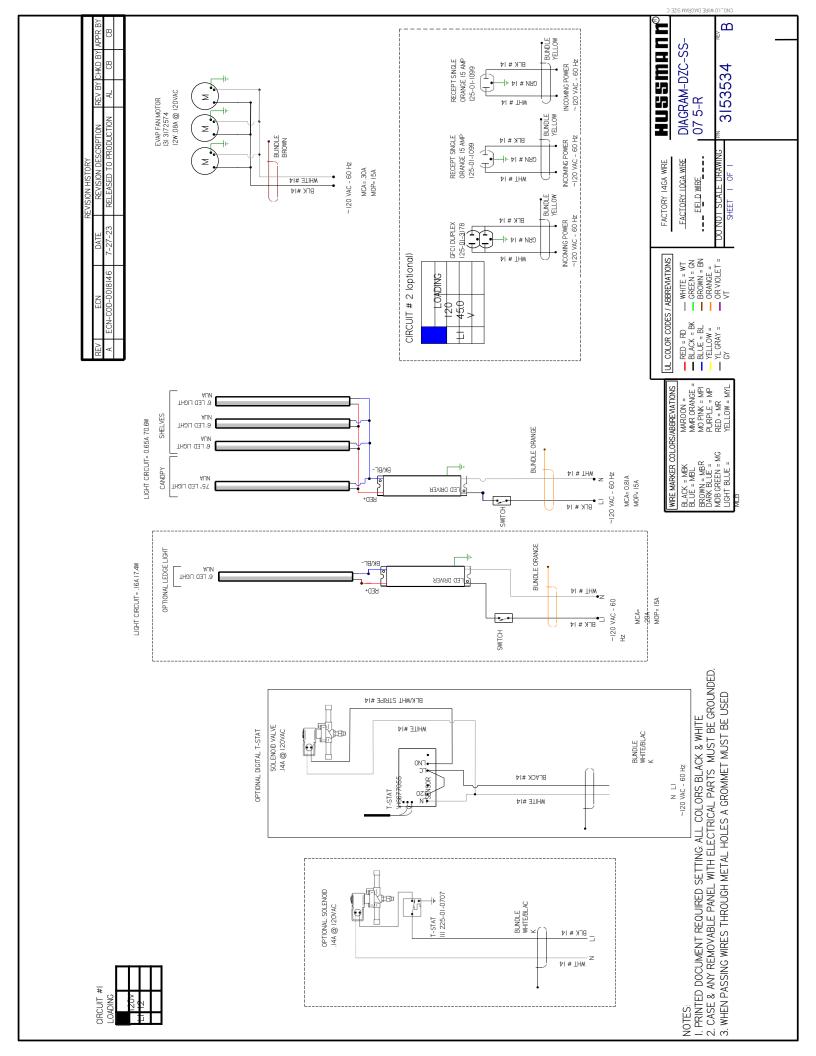
DO NOT WORK ON ENERGIZED PARTS.

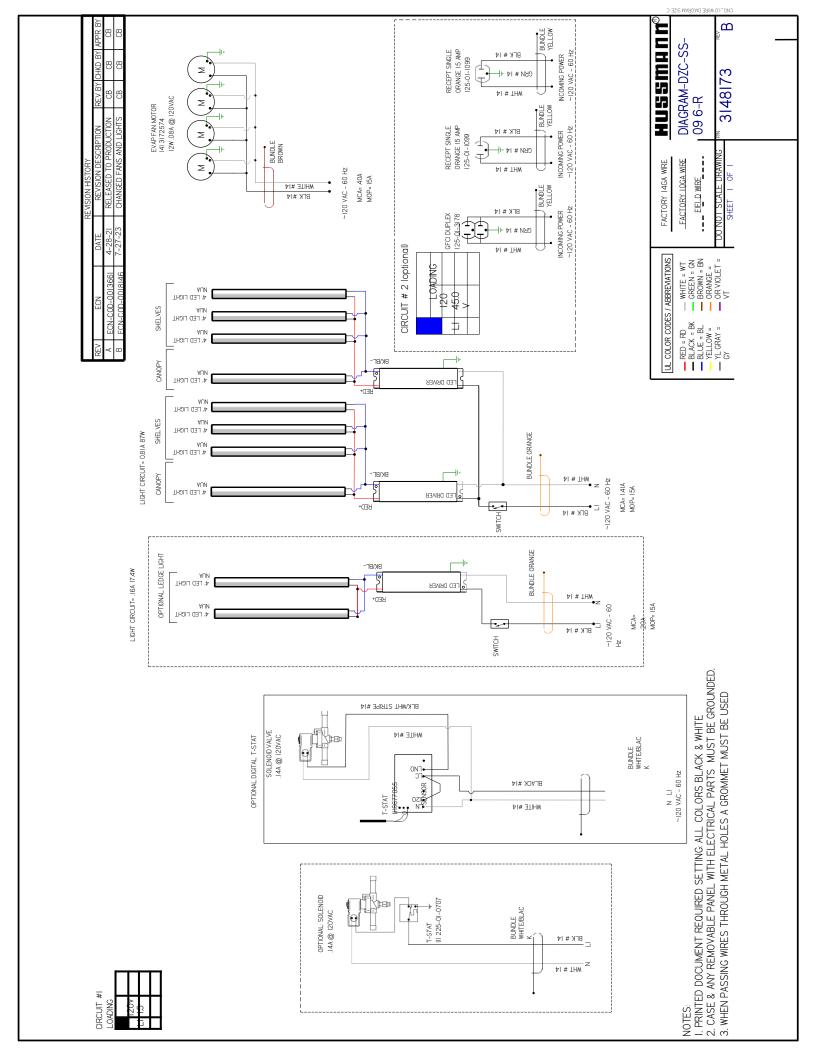
DISCONNECT POWER TO THE CASE **BEFORE PEFORMING THIS PROCEDURE** 

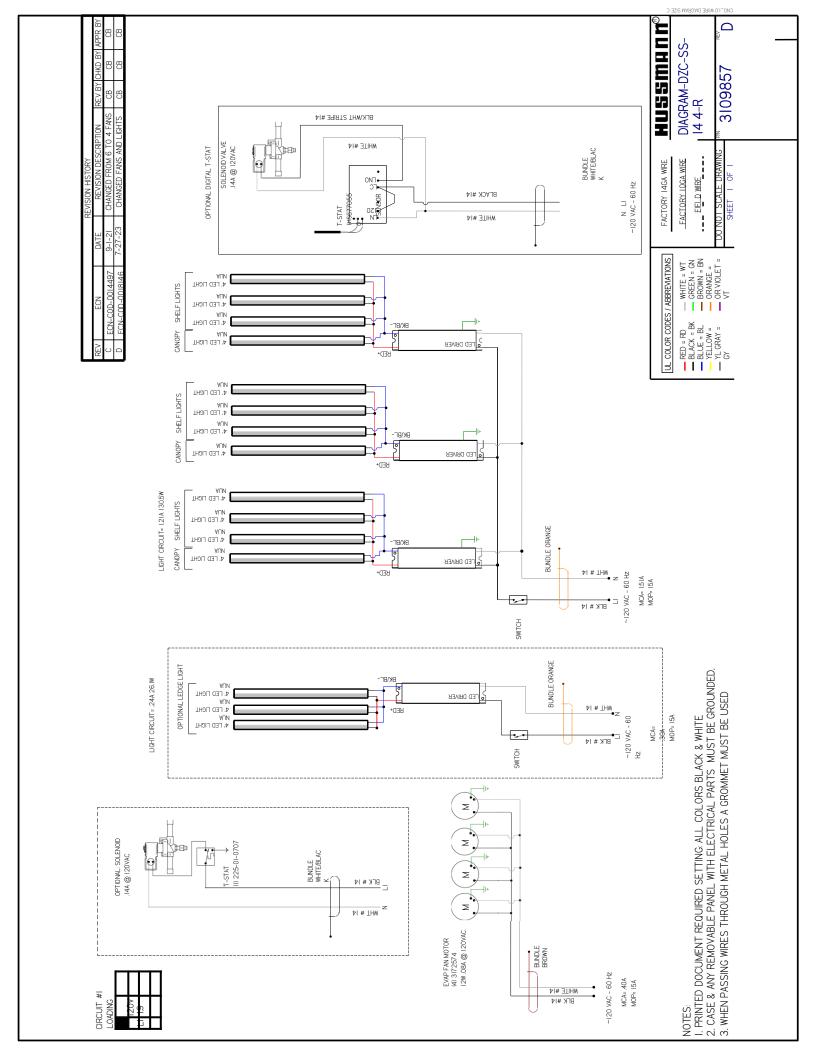
Re-assemble by reversing steps 1 - 5

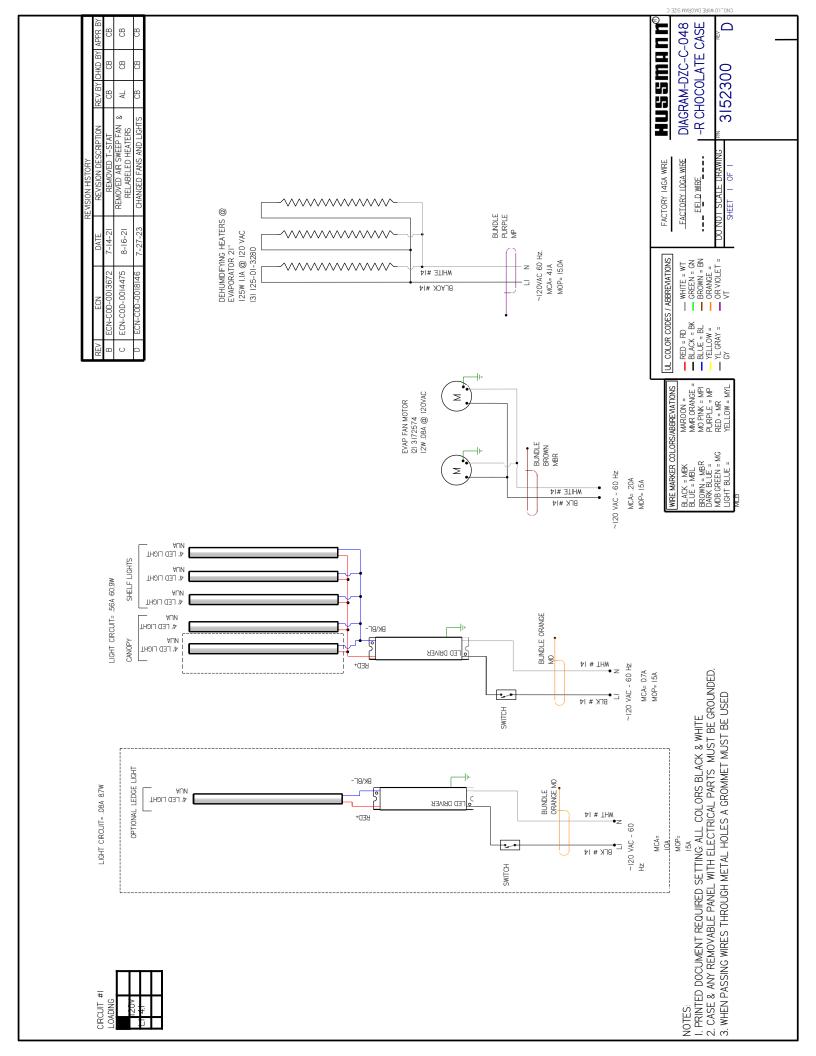












# **User Information**

### **Start Up**

See the merchandisers Data Sheet Set for refrigerant settings and defrost requirements. Bring merchandisers down to the operating temperatures listed on the Data Sheet.

See page 22 for electrical component locations



--LOCK OUT/ TAG OUT--

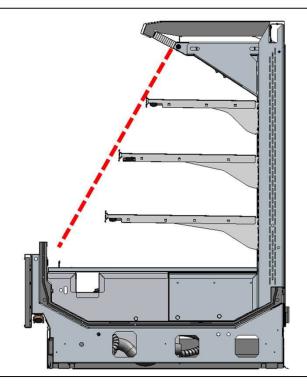
To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

### **Load Limit**

Each Merchandiser has a load limit. Shelf life of perishables will shorten if load limit is violated.

AT NO TIME SHOULD THE MERCHANDISER BE STOCKED BEYOND THE LOAD LIMITS INDICATED.

LOAD LIMIT	



# **Shelf Weight Limits**

DZC-SS merchandiser shelves are designed to support the maximum weight load limits as indicated in the table below.

Exceeding these maximum weight limits may cause damage to shelves, merchandiser, and products, and potentially create a hazardous condition for customers and staff. Exceeding the indicated maximum weight load limits constitutes misuse as described in the Hussmann Limited Warranty.

# Weight Limits for DZC Merchandiser Shelving

Nominal Shelf Depth	Maximum Load Limit
12 in. (305 mm)	125 lb (56.7 kg)
14 in. (357 mm)	125 lb (56.7 kg)
16 in. (406 mm)	150 lb (67.9 kg)
18 in. (457 mm)	150 lb (67.9 kg)
20 in. (508 mm)	150 lb (67.9 kg)
22 in. (559 mm)	150 lb (67.9 kg)
24 in. (610 mm)	150 lb (67.9 kg)

\*Shelf load limits at 0° tilt

# Maintenance

### **Case Cleaning**

Long life and satisfactory performance of any equipment are dependent upon the care it receives. To ensure long life, proper sanitation and minimum maintenance costs, the merchandiser should be thoroughly cleaned, all debris removed, and interiors washed down weekly.



### **Exterior Surfaces**

The exterior surfaces must be cleaned with a mild detergent without chloride and warm water to protect and maintain their attractive finish. NEVER USE ABRASIVE CLEANSERS OR SCOURING PADS.

### **Cleaning Bumpers**

Clean bumpers with household spray cleaners.

### **Cleaning Under Merchandiser**

Remove lower body panels. Use a vacuum with a long wand attachment to remove accumulated dust and debris from under the merchandiser.

### **Cleaning Stainless Steel Surfaces**

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

Use 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.

### **Interior Surfaces**

The interior surfaces may be cleaned with most domestic detergents, ammonia-based cleaners and sanitizing solutions that do not contain chloride with no harm to the surface.

## **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.

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 proper adjustments as necessary. To maintain product integrity move all product to a cooler until the merchandiser has returned to normal operating temperatures.

### Do Not Use:

- · Abrasive cleaners and scouring pads, as these will damage the finish.
- A hose on lighted shelves or submerge lighted shelves in water.
- Solvent, oil or acidic based cleaners on any interior surfaces.
- A hose on LED Lights or any other electrical component.

# Maintenance Cont'd

### Do:

- Remove the product and all loose debris to avoid clogging the waste outlet.
- · Store product in a refrigerated area such as a cooler during the cleaning process.
- Remove only as much product as can be taken to the cooler in a timely manner.
- First, turn off refrigeration, then disconnect electrical power to merchandiser.
- Thoroughly clean all surfaces with soap and hot water.
- Do not use steam or high-pressure water hoses to wash the interior.
- These techniques will damage sealing causing leaks and poor performance.
- · Avoid direct contact between fan motors and cleaning or rinse water.
- · Rinse with hot water, but DO NOT flood.
- Never introduce water faster than the waste outlet can drain.
- · Allow merchandiser to completely dry before resuming operation.
- LED lights are magnetized to each shelf and can be removed easily for any shelf cleaning.
- After cleaning has been completed, remember to restore refrigeration and power back to merchandiser.



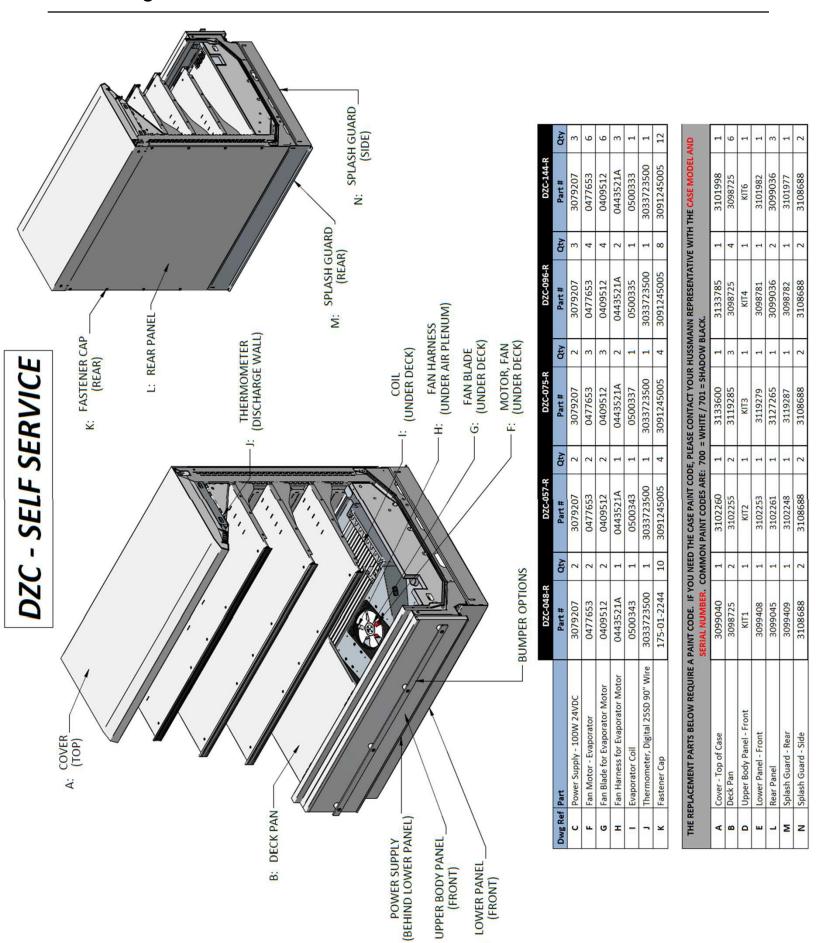
# Troubleshooting

Problem	Possible Cause	Possible Solution
	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°F.
		Check evaporator fan operation. Check electrical connections and input voltage.
		Fans are installed backwards. Check airflow direction.
	Discharge air temp is out	Fan blades are installed incorrectly. Make sure fan blades have correct pitch and are per specification.
	of spec.	Check to see that fan plenum is installed correctly. It should not have any gaps.
Case temperature is too warm.		Check suction pressure and ensure that it meets factory specifications.
	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. See page 30 for details.
	Coil is freezing over.	Return air is blocked, make sure debris is not blocking the intake section.
	Com to treezing ever.	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.
	The t-stat temp is set too low.	Check settings. See Technical Specifications section.
Case temperature is too cold.	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°F.
	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°F.
Condensation on	Inadequate air circulation.	Check if air sweep fans are functioning, check electrical connections.
glass.	There is not enough heat provided in the airflow.	Check if air sweep heater is functioning, check electrical connections.
	There are glass gaps on the side of the case.	See glass adjustment section.
	Glass is not completely shut.	Close glass correctly.

# 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.
Lights do not come on.	LED Driver / light socket wiring.	Check electrical connections. See Electrical Section and check wiring diagram.
	LED Driver needs to be replaced.	Case should be serviced by a qualified service technician. See Electrical Section.
	LED fixture socket / connection needs to be replaced.	Case should be serviced by a qualified service technician.
	LED Fixture needs to be replaced.	See Maintenance Section.
	Light Switch needs to replaced.	Case should be serviced by a qualified service technician.

# Parts Diagram and List



# HUSSMANN

To obtain warranty information or other support, contact your Hussmann representative. Please include the model and serial number of the product.

Hussmann Warranty / Technical Assistance (800) 592-2060

Hussmann Corporation, Corporate Headquarters: Bridgeton, Missouri 63044 2014