



# MULTI-DECK FRESH PRODUCE CASES

CVW-EXA184 / CVW-EXA124

(H: 80 7/8", L: 96 3/8") / (H: 80 7/8", L: 144 5/8")

CVW-EXA284 / CVW-EXA224

(H: 84 7/8", L: 96 3/8") / (H: 84 7/8", L: 144 5/8")

## INSTALLATION & SERVICE MANUAL REMOTE TYPE DISPLAY CASE



2010

# Activity Safety Precautions

In order to prevent any injuries to person, equipment and/or damage to the SANYO Cases, sections requiring additional care to be undertaken will have one or all of the following safety reminders:



## **Red Safety Mark (Safety Mark A)**

Extreme caution and care must be exercised when conducting this operation to ensure personal and equipment safety, and to prevent product damage.

Failure to exercise extreme caution may result in severe personal injury and/or equipment and/or product damage.



## **Yellow Safety Mark (Safety Mark B)**

Caution and care should be exercised when conducting this operation to ensure personal and equipment safety, and to prevent product damage.

Failure to exercise caution may result in personal injury and/or equipment and/or product damage.



## **Hand Protection Required**

Activities to be undertaken require finger and palm protection equipment to prevent personal injuries.

## General Safety Precautions



## **Safety Equipment Required**

Any installation where there is overhead work being conducted simultaneously where a SANYO Case is being unloaded and/or set/aligned, proper safety equipment including headgear is required to ensure personal safety.

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# 1 Specifications

## 1.1 CVW-EXA284 (H: 84 7/8", L: 96 3/8") / CVW-EXA224 (H: 84 7/8", L: 144 5/8")

Model Name		CVW-EXA284		CVW-EXA224			
<b>General</b>							
Application:		Medium Temperature (Fresh Produce)		Medium Temperature (Fresh Produce)			
Cooling Capacity:		1224 BTU/h/ft. (2,880W)		1224 BTU/h/ft. (4,321W)			
Discharge Air:		34°F (1.11°C)		34°F (1.11°C)			
Evaporator Temperature:		28°F (-2.22°C)		28°F (-2.22°C)			
<b>Defrost (Off-cycle)</b>		<i>Medium Temperature</i>		<i>Medium Temperature</i>			
Frequency: (times per day)		6, once every 4 hours		6, once every 4 hours			
Termination Temperature:		50.0°F		50.0°F			
Failsafe/Duration:		30 minutes		30 minutes			
<b>Electrical</b>		1-phase 120V		1-phase 120V			
Anti-condensation Heater:		N/A		N/A			
Fan Motor	Standard:	195W	2.28A	285W	3.42A		
	High Efficiency:	84W	1.29A	126W	1.93A		
Lights	Exterior:	2 Rows of Lamps	110W	0.94A	2 Rows of Lamps	166W	1.42A
	Interior:	Top Panel	N/A	N/A	Top Panel	N/A	N/A
		Handrail	N/A	N/A	Handrail	N/A	N/A
	Total:	Standard	110W	0.94A	Standard	166W	1.42A
<b>Components</b>							
Anti-condensation Heater		N/A		N/A			
Fan Motor	Standard:	SPFBE141 x 3		SPFBE141 x 3, SPFBE91T x 2			
	High Efficiency:	SSC2B12CNHVB1 x 3		SSC2B12CNHVB1 x 3, SSC2B12BVHVB1 x 2			
Fan Blade Pitch:		Inside: #128 x 2, Outside: #128 x 1		Inside: #128 x 3, Outside: #117 x 2			
Illumination:		FO32/XP (T8) (Output 32W)		FO32/XP (T8) (Output 32W)			
Pipe Diameter:		Liquid 3/8", Suction 3/4"		Liquid 3/8", Suction 3/4"			
<b>Measurements</b>							
Outer Dimensions:		84 7/8" (H) x 42 1/2" (W) x 96 3/8" (L)		84 7/8" (H) x 42 1/2" (W) x 144 5/8" (L)			
Open Space:		61 1/2"		61 1/2"			
Display Area:		73.4 sq.ft.		110.1 sq.ft.			
Effective Capacity:		72.0 cu.ft.		108.0 cu.ft.			
Weight:		620.5 lbs		892.0 lbs			
Waste Outlet Dimensions:		1 1/2"		1 1/2"			

- Standard Ambient Conditions: Indoor temperature 75°F (24°C), relative humidity 55%, wind speed under 39.4 fpm.
- All specifications are based upon temperature, humidity, and wind speed values equal to or less than Standard Ambient Conditions.
- SANYO Cases described in this manual are designed for indoor use only. SANYO Cases should not be exposed to direct sunlight.
- Fan Motors are available in Standard-type (AC Fan Motors) or High Efficiency-type (DC Fan Motors).
- Display Area Effective Capacity data specification based on 4 (four) 20" shelves set at 0° (flat). Any variations from this specification will affect overall data.

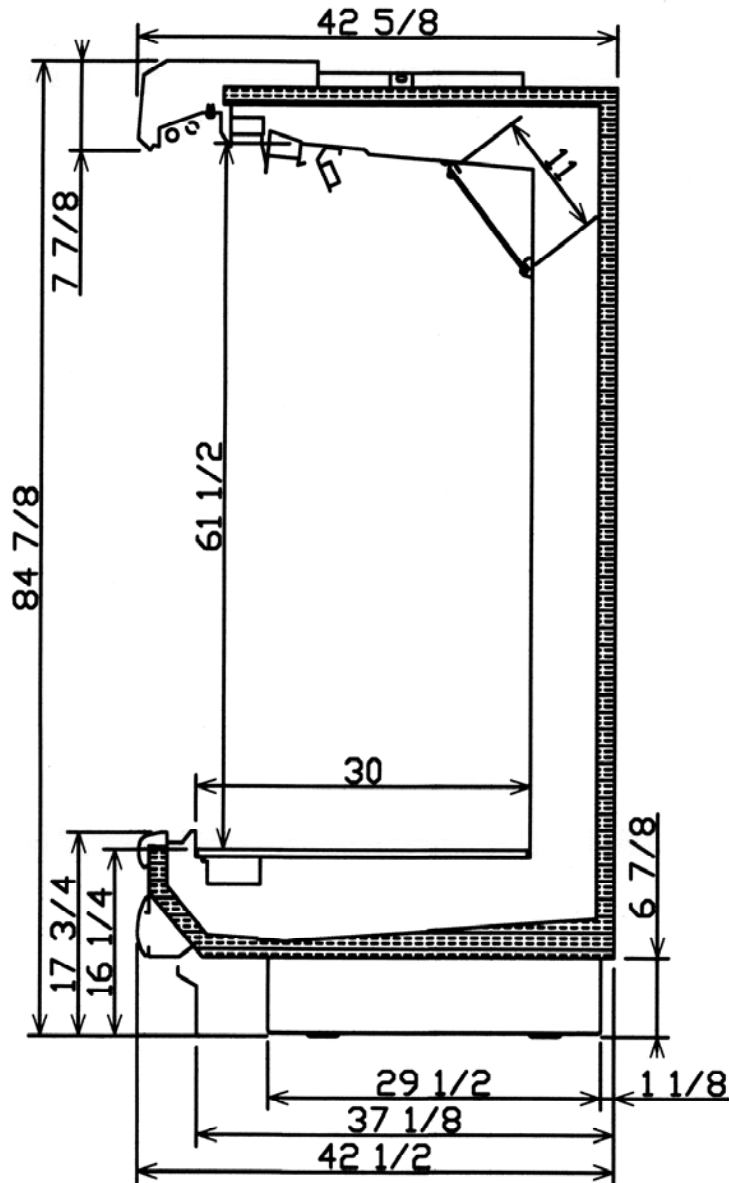
1.2 CVW-EXA184 (H: 80 7/8", L: 96 3/8") / CVW-EXA124 (H: 80 7/8", L: 144 5/8")

Model Name	CVW-EXA184			CVW-EXA124			
<b>General</b>							
Application:	Medium Temperature (Fresh Produce)			Medium Temperature (Fresh produce)			
Cooling Capacity:	1146 BTU/h/ft. (2682W)			1146 BTU/h/ft. (4195W)			
Discharge Air:	34°F (1.11°C)			34°F (1.44°C)			
Evaporator Temperature:	28°F (-2.22°C)			28°F (-2.22°C)			
<b>Defrost (Off-cycle)</b>	<i>Medium Temperature</i>			<i>Medium Temperature</i>			
Frequency: (time per day)	6, once every 4 hours			6, once every 4 hours			
Termination Temperature:	50.0°F			50.0°F			
Failsafe/Duration:	30 minutes			30 minutes			
<b>Electrical</b>		1-phase 120V			1-phase 120V		
Anti-condensation Heater		N/A	N/A		N/A	N/A	
Fan Motor	Standard:	195W	2.28A		285W	3.42A	
	High Efficiency:	84W	1.29A		126W	1.93A	
Lights	Exterior:	2 Rows of Lamps	110W	0.94A	2 Rows of Lamps	166W	1.42A
	Interior:	Top Panel	N/A	N/A	Top Panel	N/A	N/A
		Handrail	N/A	N/A	Handrail	N/A	N/A
	Total:	Standard	110W	0.94A	Standard	166W	1.42A
<b>Components</b>							
Anti-condensation heater	N/A			N/A			
Fan Motor	Standard	SPFBE141 x 3		SPFBE141 x 3, SPFBE91T x 2			
	High Efficiency:	SSC2B12CNHVB1 x 3		SSC2B12CNHVB1 x 3, SSC2B12BVHVB1 x 2			
Fan Blade Pitch	Inside: #128 x 2, Outside: #128 x 1			Inside: #128 x 3, Outside: #117 x 2			
Illumination	FO32/XP (T8) (Output 32W)			FO32/XP (T8) (Output 32W)			
Pipe Diameter	Liquid 3/8", Suction 3/4"			Liquid 3/8", Suction 3/4"			
<b>Measurements</b>							
Outer Dimensions	80 7/8" (H) x 42 1/2" (W) x 96 3/8" (L)			80 7/8" (H) x 42 1/2" (W) x 144 5/8" (L)			
Open Space	60"			60"			
Display Area	73.4 sq.ft.			110.1 sq.ft.			
Effective Capacity	72.0 cu.ft.			108.0 cu.ft.			
Weight	609.0 lbs			875.0 lbs			
Waste Outlet Dimensions	1 1/2"			1 1/2"			

- Standard Ambient Conditions: Indoor temperature 75°F (24°C), relative humidity 55%, wind speed under 39.4 fpm.
- All specifications are based upon temperature, humidity, and wind speed values equal to or less than Standard Ambient Conditions.
- SANYO Cases described in this manual are designed for indoor use only. SANYO Cases should not be exposed to direct sunlight.
- Fan motors are available in Standard-type (AC fan motors) or High Efficiency-type (DC fan motors).
- Display Area Effective Capacity data specification based on 4 (four) 20" shelves set at 0° (flat). Any variations from this specification will affect overall data.

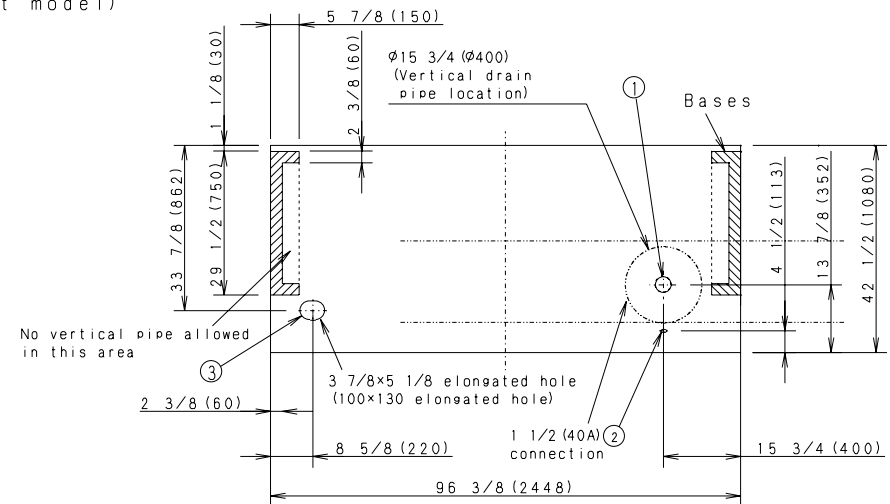
## 2 Dimensions

### 2.1 External Dimensions

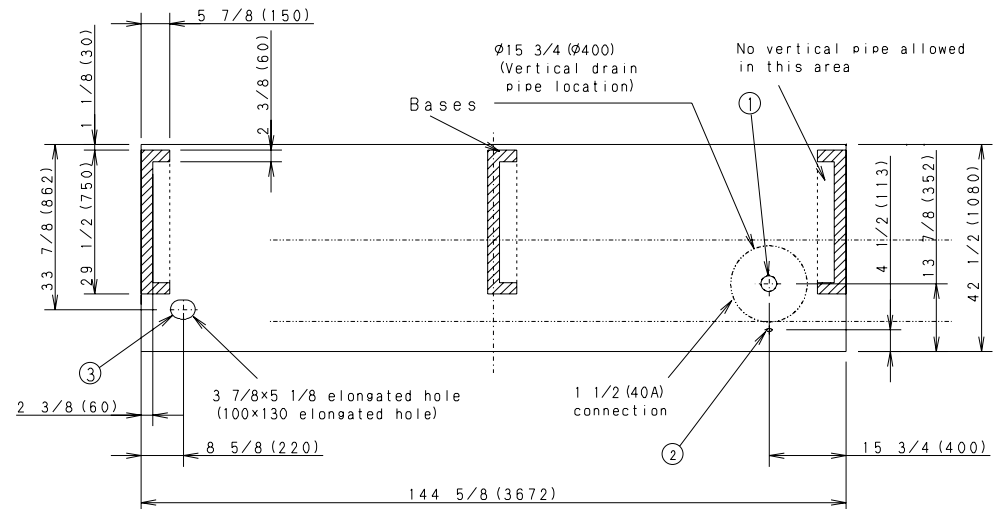


### 2.2 Footprint

(8-ft model)



(12-ft model)



\* Dimensions given in inches and millimeters (mm in parentheses).

- ① Waste Outlet
- ② Electrical Connection
- ③ Refrigeration Outlet





## 3 Unloading and Carpentry Procedures

### 3.1 NSF Certification

The SANYO Cases described in this manual are built to meet the requirements of American National Standard/NSF International Standard 7. Each SANYO Case bears a nameplate identifying the type of application for which it was certified:

Type I display refrigerator/freezer: Intended for use in an area where the environmental conditions are controlled and maintained so that the ambient temperature typically does not exceed 75°F.

### 3.2 Location

As noted above, the SANYO Cases described in this manual are design for the display of products in interior spaces with climate control, with ambient conditions typically maintained below 75°F and 55% relative humidity. Proper SANYO Case performance cannot be guaranteed when ambient temperature and/or humidity exceed this level.

SANYO Cases should not be exposed to direct sunlight or other sources of heat.

SANYO Cases should not be exposed to strong air currents, as these may disrupt the dual air curtains used to maintain proper temperature inside the merchandiser display area.

### 3.3 Shipping Damage

All SANYO Cases and peripheral equipment should be examined for shipping damage prior to and during offloading. All SANYO Cases and peripheral equipment goes through outgoing inspection upon leaving our warehouse, and the carrier assumes responsibility for the safe arrival of our merchandisers.

APPARENT DAMAGE: Any obvious loss or damage should be noted immediately at the time of receipt on the freight bill or express receipt and signed by the carrier's agent. Failure to do so may lead to rejection of the claim by the carrier.

CONCEALED DAMAGE: If damage that is not apparent during unloading is found after unpacking, retain all packing materials and submit a written request to the carrier for inspection within 15 days.

LOST ITEMS: Any claims related to lost or missing items must be made to SANYO North America Corporation, Commercial Solutions Division within 48 hours of receipt of equipment.

### 3.4 Unloading Instructions & Precautions



#### WARNING

SANYO Cases are heavy and bulky, and require at least **two** people for unloading, moving, and installation.

Do not remove the wooden beam from the bottom front edge of each SANYO Case until the cases have been moved into place in the store lineup.

Do not walk on the top of the SANYO Cases. Walking on the top of the SANYO Case may lead to serious injury and/or damage to the SANYO Case.

Do not place anything on the top of the SANYO Case or use the top of any SANYO Case for short- or long-term storage.

Recommended Practices for Unloading Merchandisers:

1. Use a J-Bar (Johnson Bar) to lift one end of the SANYO Case.
2. Insert one or more dollies under the base leg.
3. Lift the other side with the J-bar.
4. (Optional) Insert one or more dollies.
5. Move the SANYO Case out of container.
6. Use dollies on both ends of the SANYO Case to move to lineup location after unloading from container.

### 3.5 Aligning Cases

#### **WARNING**

SANYO Cases are heavy and bulky, and require at least two people for unloading, moving, and installation.

Do not walk on the top of the SANYO Cases. Walking on the top of the SANYO Case may lead to serious injury and/or damage to the SANYO Case.

Do not place anything on the top of the SANYO Case or use the top of any SANYO Case for short- or long-term storage.

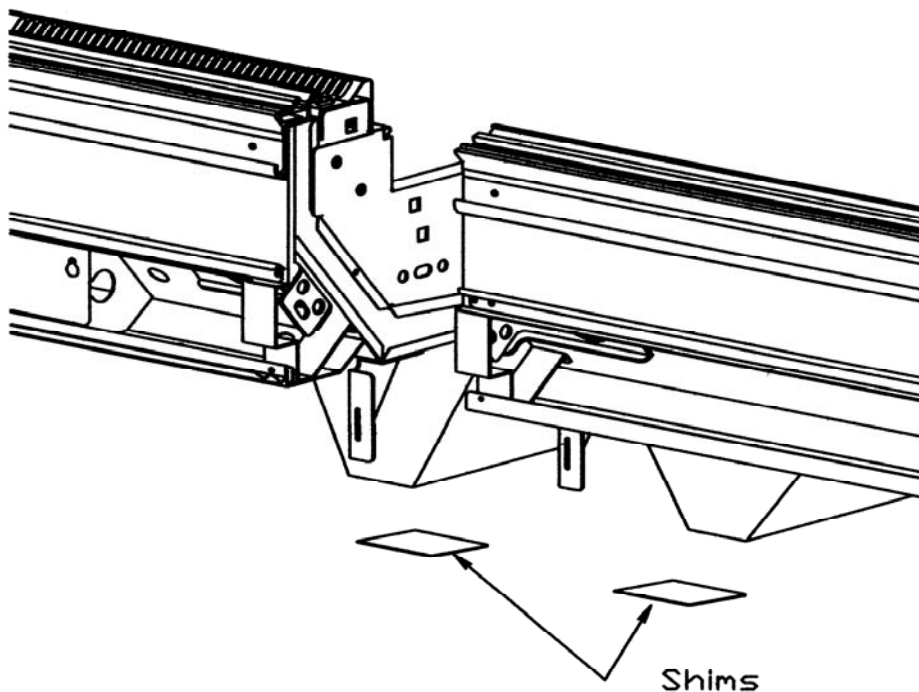
1. Review layout drawings for spaces where SANYO Cases are to be installed.
2. Based on the layout drawings and the SANYO Case footprint drawings, mark the floor to indicate the exact locations of the base legs (back edge and front edge) on each merchandiser. Multiple SANYO Cases should be aligned based upon the position of the base legs.
3. Snap chalk lines for the front and rear positions of the legs on each row of SANYO Case.
4. Mark the location showing the outside edge of each base leg on each SANYO Case.

### 3.6 Case Leveling

SANYO Cases must be installed level in order to ensure proper performance and drainage.

1. For each lineup of SANYO cases to be joined, use a level (preferably a laser level) to find the highest point on the front and rear chalk lines marked in step 3 above (during Case Alignment).
2. Determine which of the two points marked on the line is higher. This is the highest point in the case lineup.
3. Estimate the number of shims needed for the four corners of each case position, in order to bring all positions to the same height as the highest point found in step 2.
4. For each row, place the first SANYO Case where it will sit over the highest point in the lineup. Ensure that the case is level, using shims as needed.

**NOTE:** Each base leg should rest on solid supports. Insert shims as needed if there are any gaps between the floor and each base leg.



5. Continue placing cases in the lineup, working outward to both sides from the position of the first case placed. Use shims to ensure that all cases in the lineup are level.

### 3.7 Joining Instructions

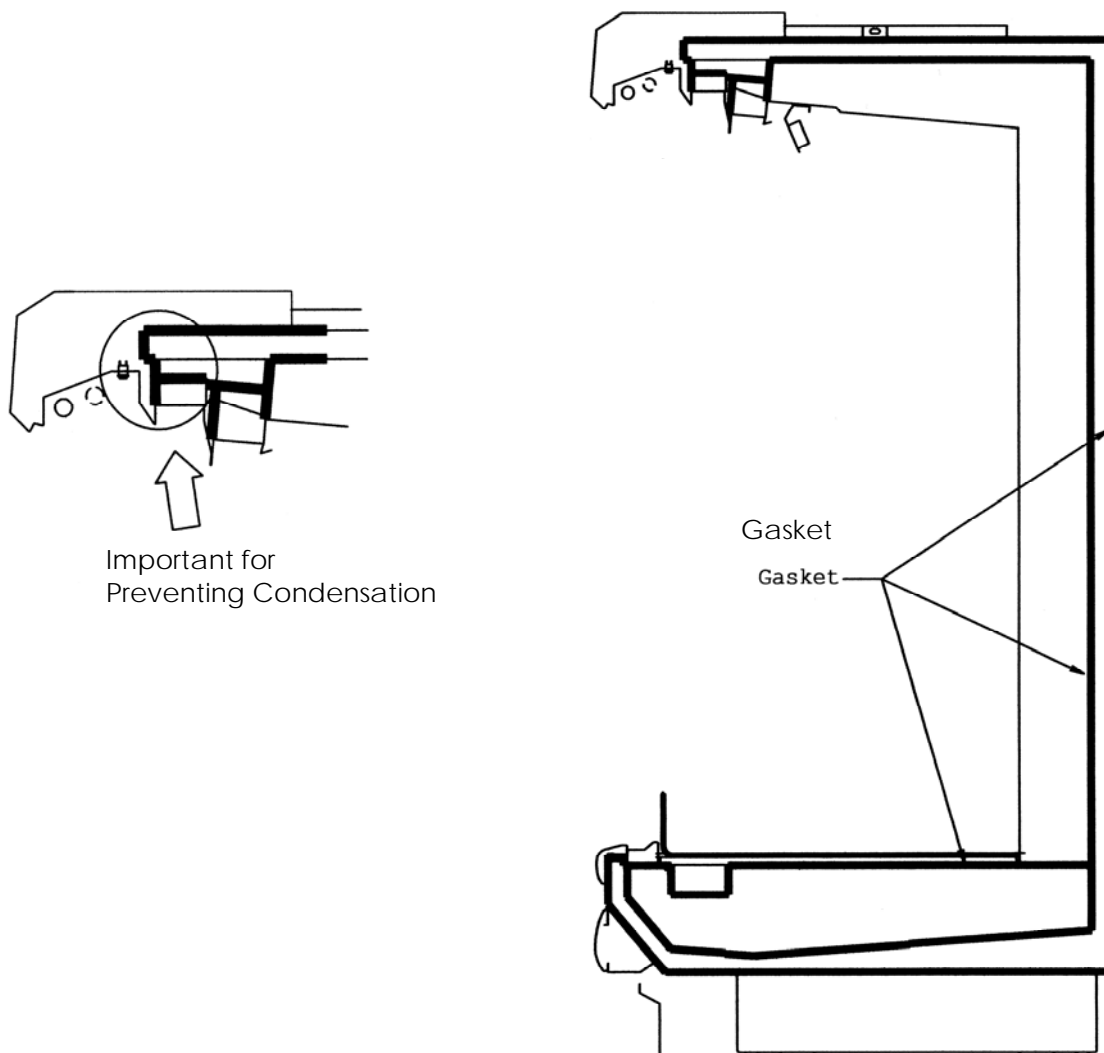
#### 3.7.1 Applying gasket (for connecting cases or installing side panels).

- ① Make sure that all SANYO Cases are resting level.
- ② Make sure that all required parts for joining are present (gasket, bolts, joint covers, nuts, etc.).
- ③ Remove all Rear Interior Panels, Wire Racks, Deck Pans, and Front Air Grilles from the far right and left ends of each case being joined.
- ④ Thoroughly clean all surfaces where the gasket will be placed to remove anything that might affect adhesion.
- ⑤ Place gasket along the areas shown in bold in the drawing at bottom. When connecting two cases, apply gasket to one case only.

#### CAUTION!

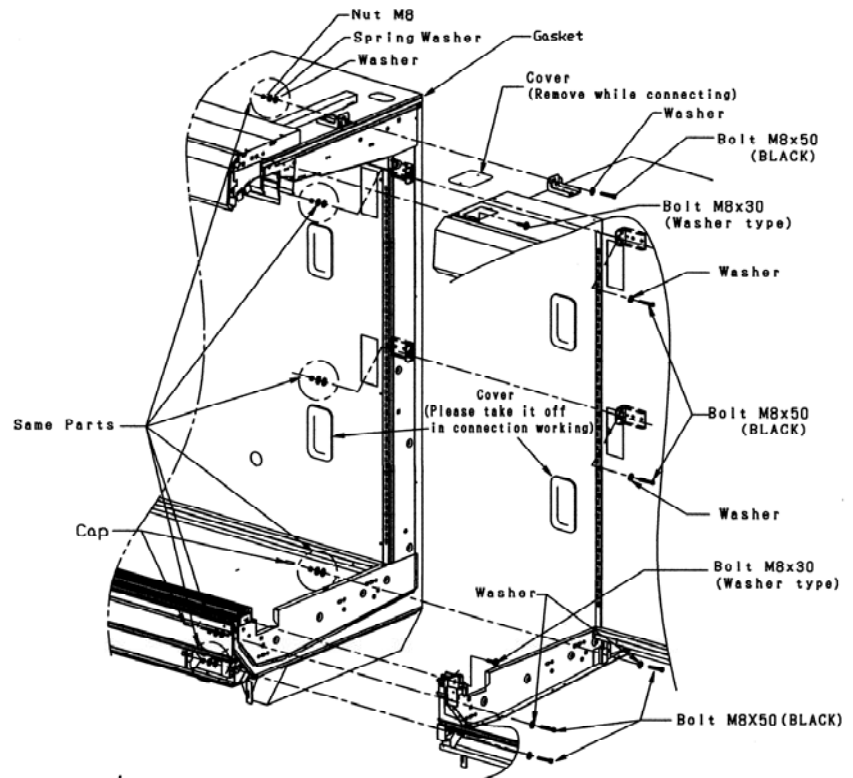
- Perimeter gasket is required by NSF.
- Do not stretch or twist gasket when applying.
- Do not leave gaps. Always overlap gasket rather than leaving gaps.
- Gasket ends that are open must be sealed off by applying silicone at the installation site.

Insufficient or improper sealing may lead to insufficient cooling and condensation.

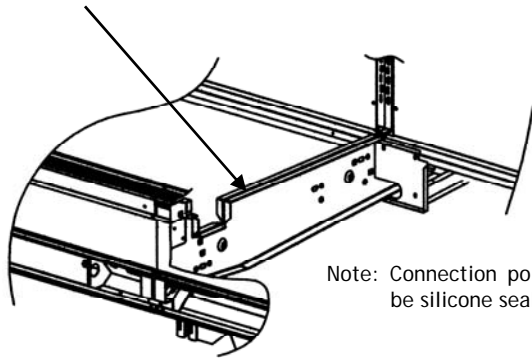


### 3.7.2 Connecting cases.

- ① Apply gasket as described above.
- ② Connect cases by using the attached bolts, joint covers, and nuts.



Silicone seal

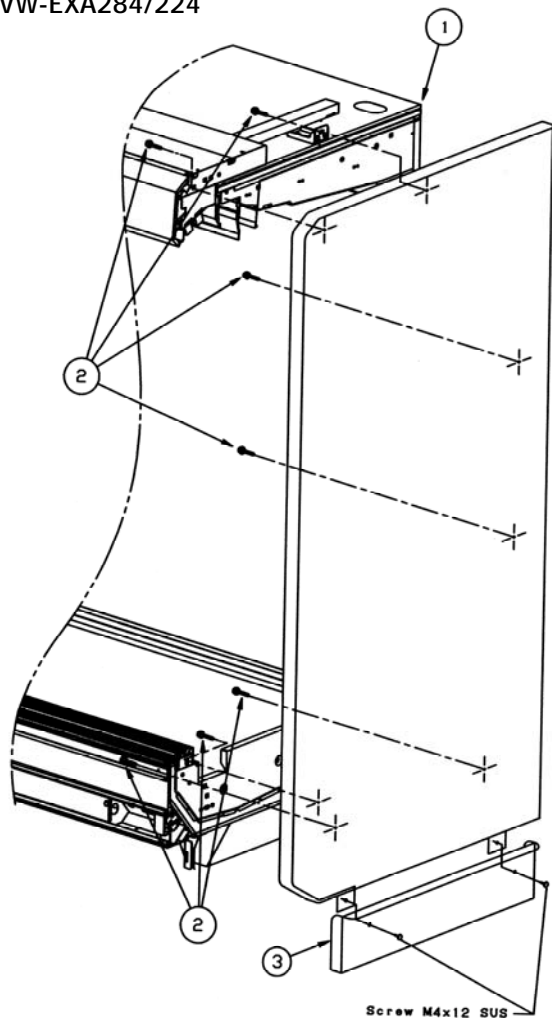


Note: Connection point must be silicone sealed.

Note: Gasket ends that are open must be sealed off by applying silicone at the installation site.

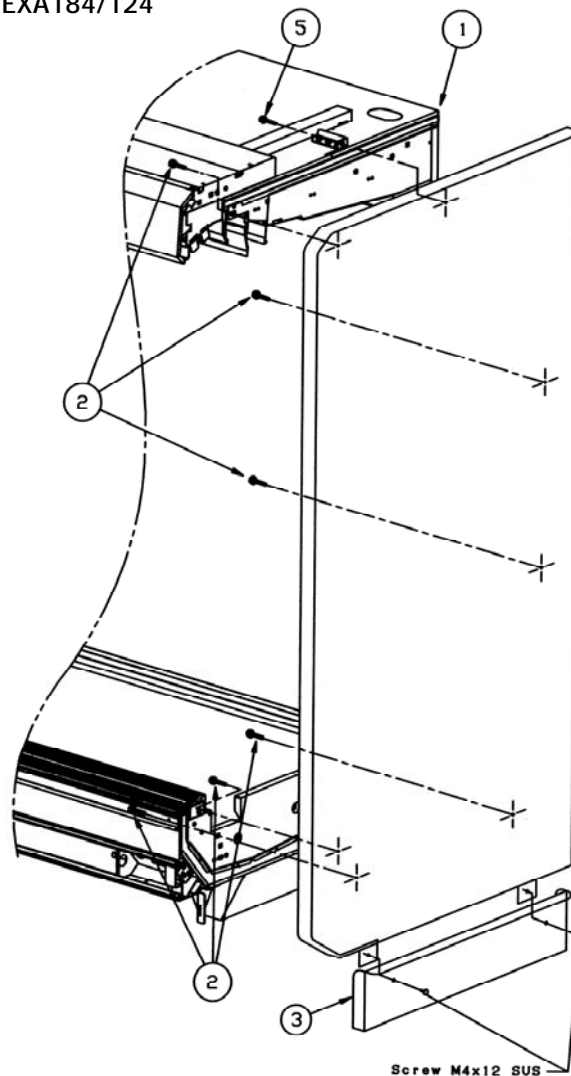
### 3.8 Installing Patch Ends

CVW-EXA284/224

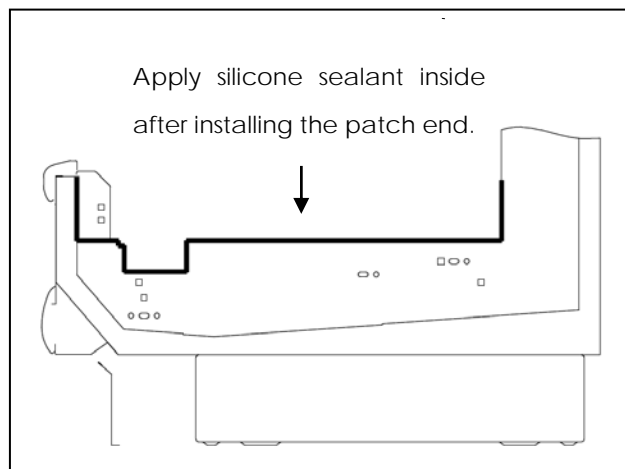


- ① Gasket
- ② M8 Bolts
- ③ Side Cover
- ④ Suction Lamp Cover Joint
- ⑤ M5 Bolts

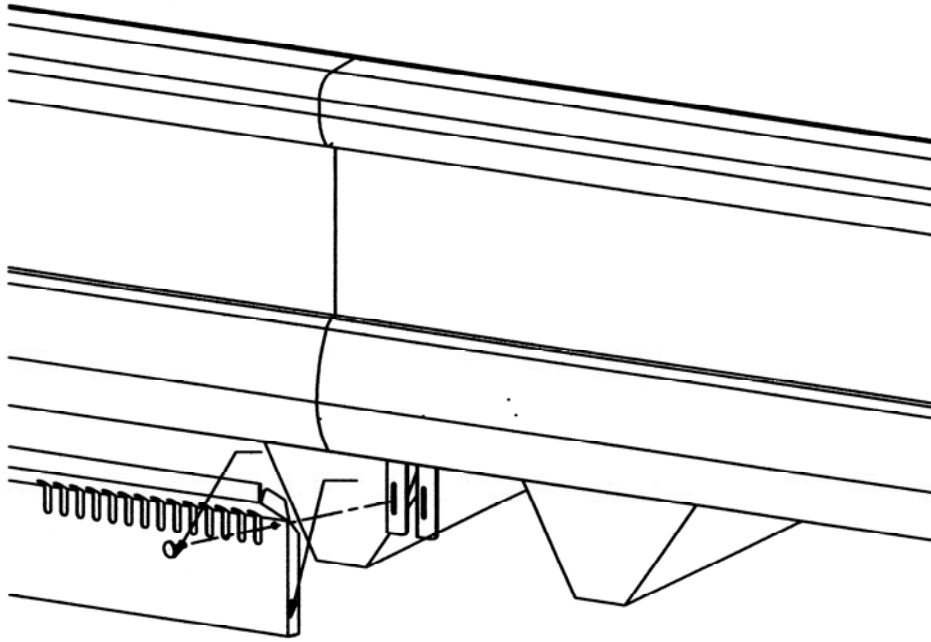
CVW-EXA184/124



1. Apply gasket to case body (per previous instructions).
2. If present, remove protective film from inside wall of Patch End.
3. Place Patch End to line up with bolt holes.
4. From inside unit ratchet in M8 & optional M5 bolt into Patch End until secure.
5. Apply Silicone sealant between inside of Patch End and lower frame (see drawing to the left for details).
6. Attach side cover (item 3 in above drawing)

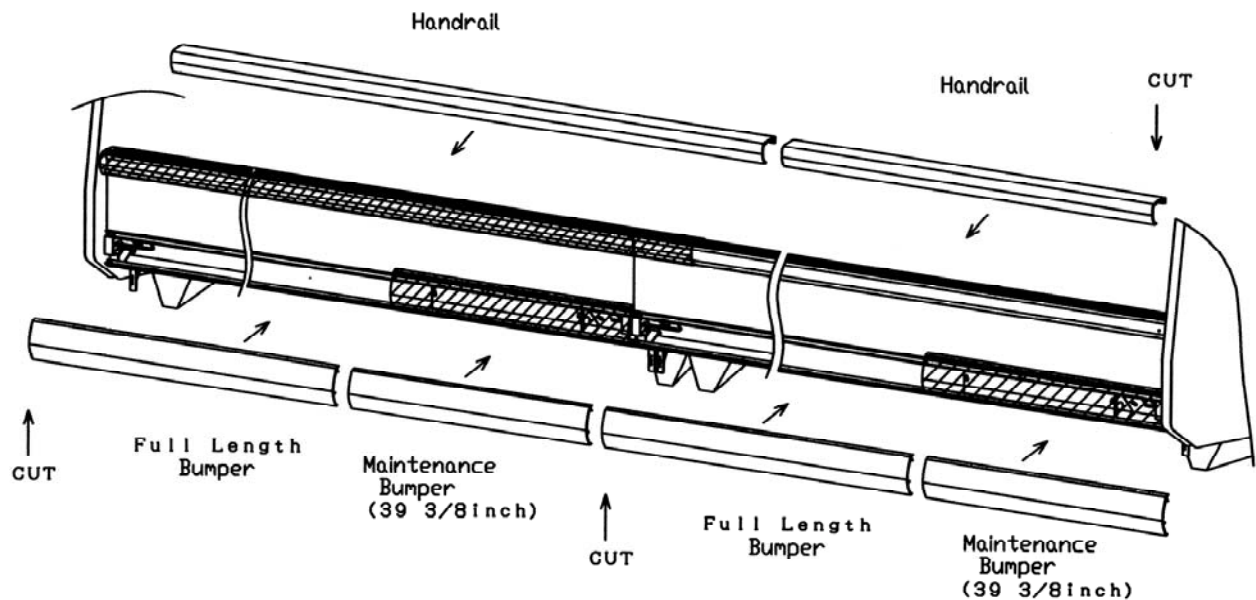


### 3.9 *Installing Kickplate*



1. Align the mounting hole in the Kickplate with the slot in the Kickplate Mounting Bracket on the SANYO Case and tighten accordingly.

### 3.10 Installing Handrail and Bumper



#### Attaching the Bumper

1. Attach Maintenance Bumper (length 39-3/8 inches) to Bumper Brackets over the electrical connection box ("Raceway") on each SANYO Case. The Raceway is located on the right end of each SANYO Case.
2. Attach Full-Length Bumpers between Maintenance Bumpers on separate SANYO Cases, and also between Maintenance Bumpers and Patch Ends.
3. Cut Full-Length Bumpers to size on-site. Cut to correct size so that no gaps remain between pieces.

#### Attaching the Handrail

1. Starting at one end of SANYO Case line-up, attach pieces of Handrail to Handrail Retainer, butting the pieces end-to-end without gaps.
2. When you reach the final piece of Handrail to be installed between the last SANYO Case in the line-up and the Patch End, cut that piece to length so there are no gaps between Handrails or between Handrails and Patch Ends.
3. Cut Handrail to size on-site. Cut to correct size so that no gaps remain between pieces.



#### **WARNING!**

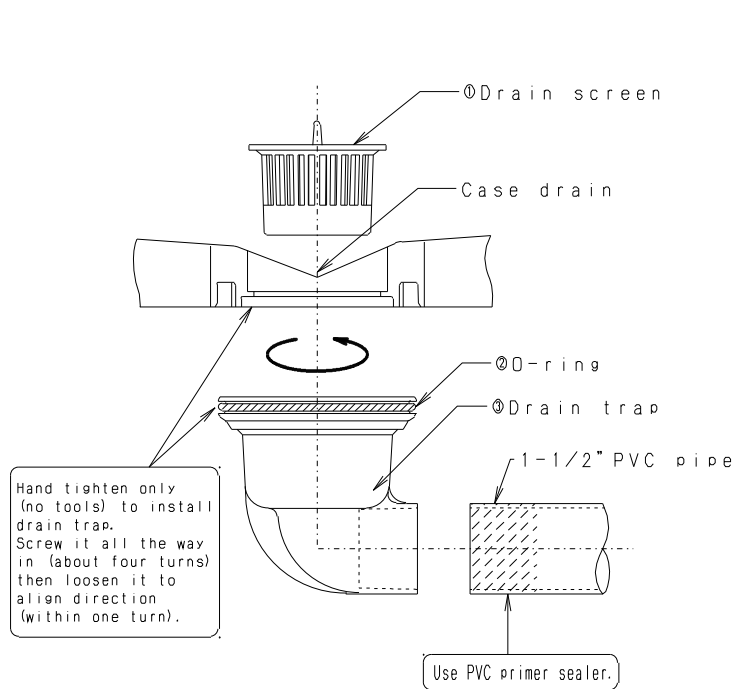
Wear appropriate eye and hand protection and exercise care when using powered tools to prevent personal injuries and damage to the case.

## 4 Refrigeration, Plumbing & Electrical Procedures

### 4.1 Piping (Plumbing, Refrigeration)

#### ● U-trap installation

Install U-trap referring to the drawing below.



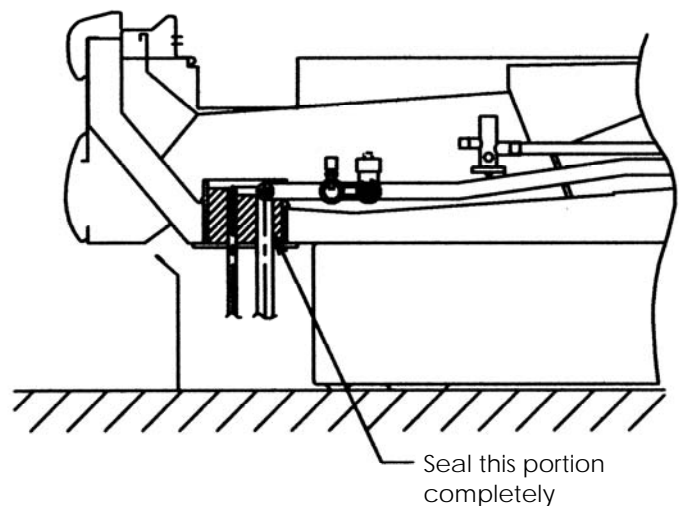
	Part Name	Part Number
①	Drain Screen	8FL2162000500
②	O-Ring	8FL2646000100
③	Drain Trap	8FL2658000200

#### ● Sealing the refrigerant pipe opening

Seal pipe completely.

Insufficient sealing may cause the following problems:

- Insufficient cooling
- Excessive frost
- Icing over
- Condensation on the bottom of case.





## 4.2 Electrical Data

Please refer to Specifications section and nameplate attached to merchandiser for electrical information.

## 4.3 Electrical - Guidelines & Precautions

All wiring and electrical field work must comply with the National Electrical Code ("NEC") and other applicable local codes. All electrical connections must be made inside the raceway area.

## 4.4 Wiring

### 4.4.1 Wiring Color Code

WIRING COLOR CODE	CORD 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.	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.
BLUE FAN MOTORS	BLEU MOTEURS DU VENTILATEUR
ORANGE.....LIGHTS	ORANGE.....ECLAIRAGE
YELLOW CONDENSATE HEATERS	JAUNE CHAUFFAGE ANTI-CONDENSATION
RED.....DEFROST HEATERS, 208V	ROUGE.....CHAUFFAGE DE DEGIVRAGE, 208V
GRAY DEFROST TERMINATION THERM	GRIS THERM D'ARRET DE DEGIVRAGE
GREEN.....GROUND	VERT.....MISE A LA TERRE
ELECTRICIAN NOTE Use copper conductor wire only. Case must be grounded.	REMARQUE A L'ELECTRICIEN Utilisez uniquement du fil électrique avec des conducteurs de cuivre. Le réfrigérateur doit être mis à la terre.

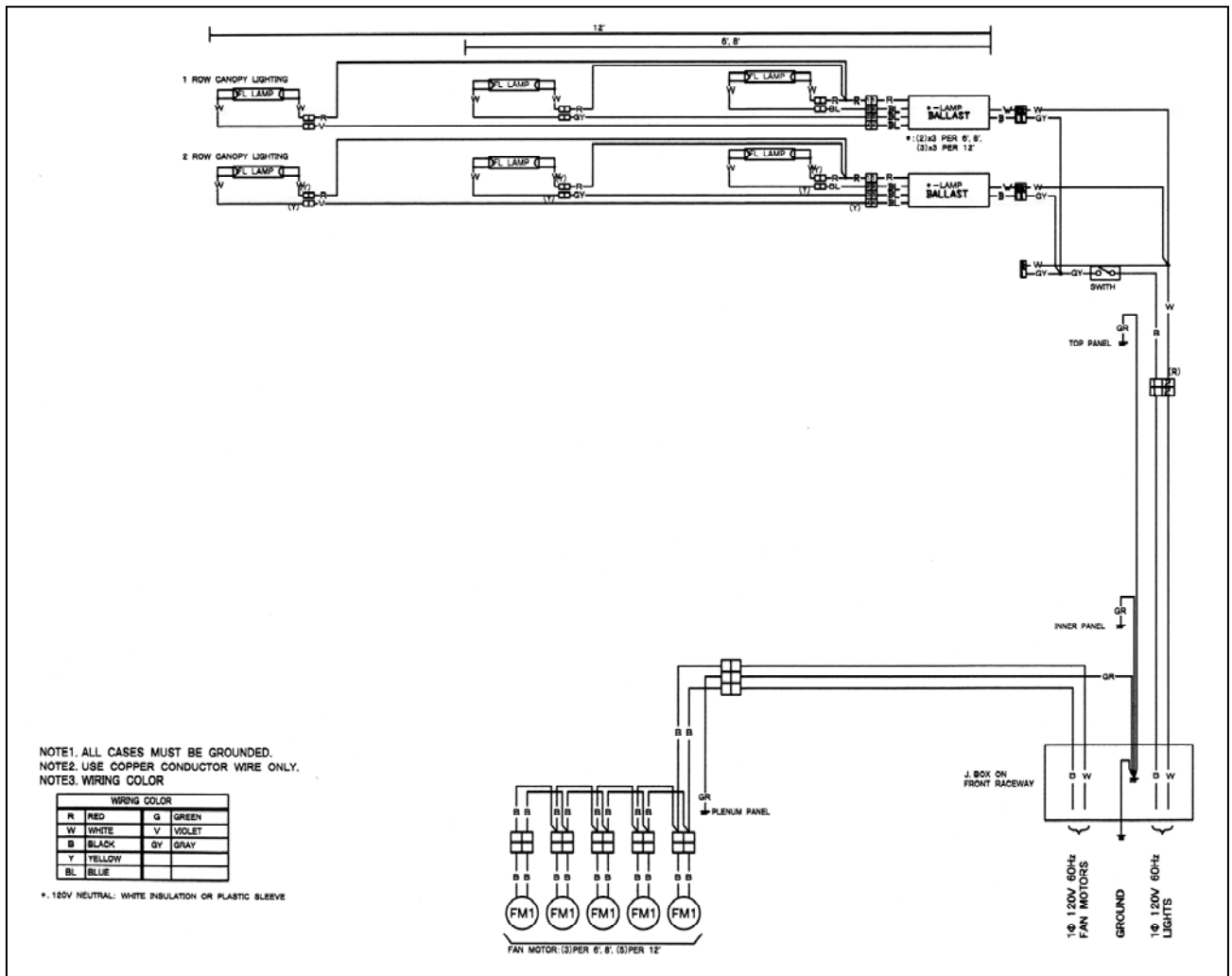


## WARNING!

While undertaking any electrical work, ensure that the case is not plugged-in and/or the power has been turned off at the source and that the source has been flagged appropriately to indicate that work is being conducted to prevent personal injuries and damage to the case.

## 4.4.2 Wiring Diagram

CVW-EXA284/184  
CVW-EXA224/124



# 5 Operation

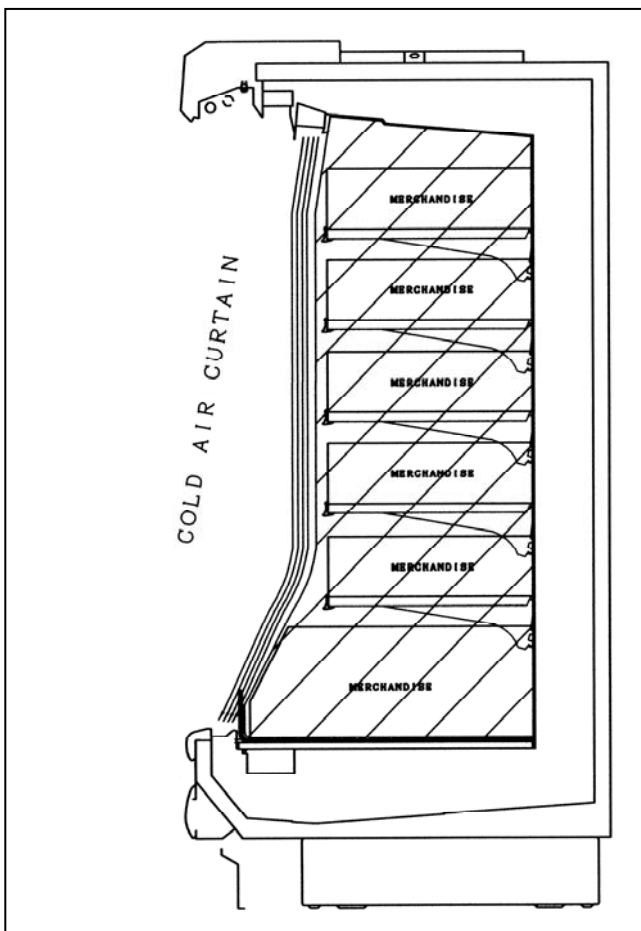
## 5.1 Load Limits

In order to maintain proper temperature and unit performance, the Dual Air Curtains in each SANYO Case must remain unobstructed:

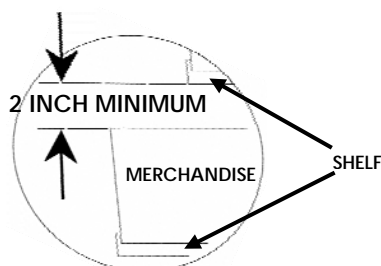
- Do not stock shelves beyond the marked load limits.
- Do not block Honeycombs or Return Air Grilles.
- Do not block airflow in any other way (with signs, tools, packages, etc.)

Failure to follow these precautions will lead to insufficient temperature control, airflow spoilage, merchandise compromise, and excessive frost.

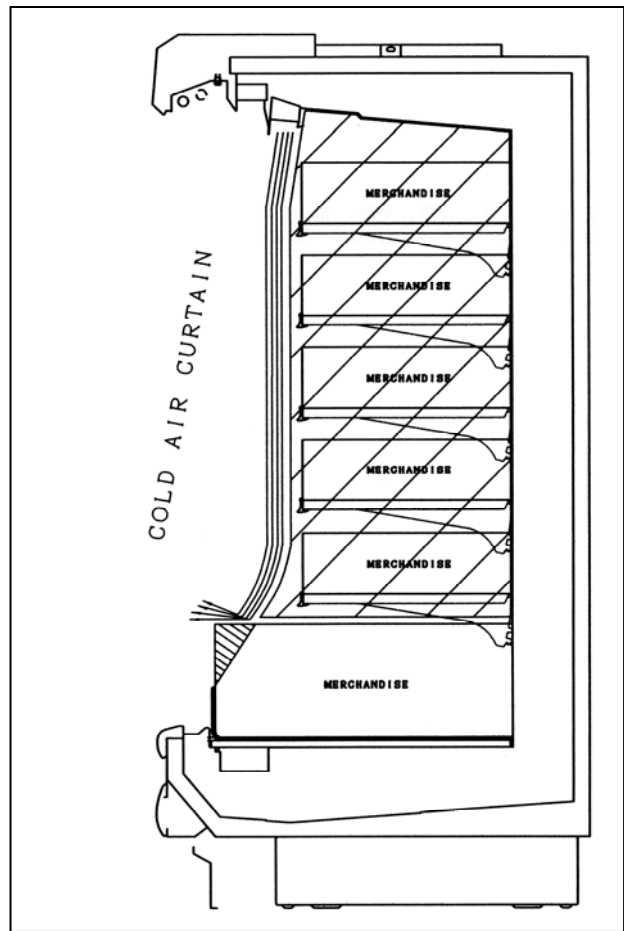
**CORRECT**



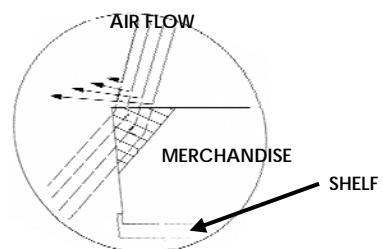
A minimum spacing of 2 inches must be maintained between the top of merchandise and the bottom of the shelf above it.



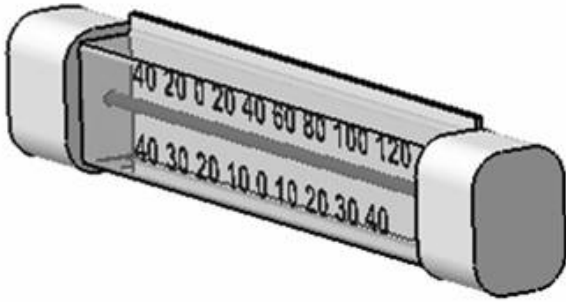
**INCORRECT**



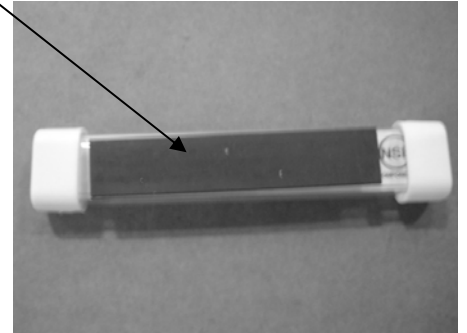
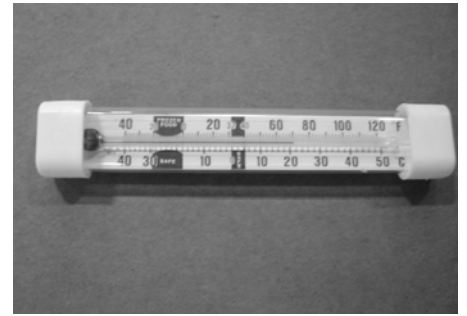
Loading merchandise beyond the maximum level will result in merchandise touching or entering the cold air curtain.



### Installing FDA/NSF Thermometer



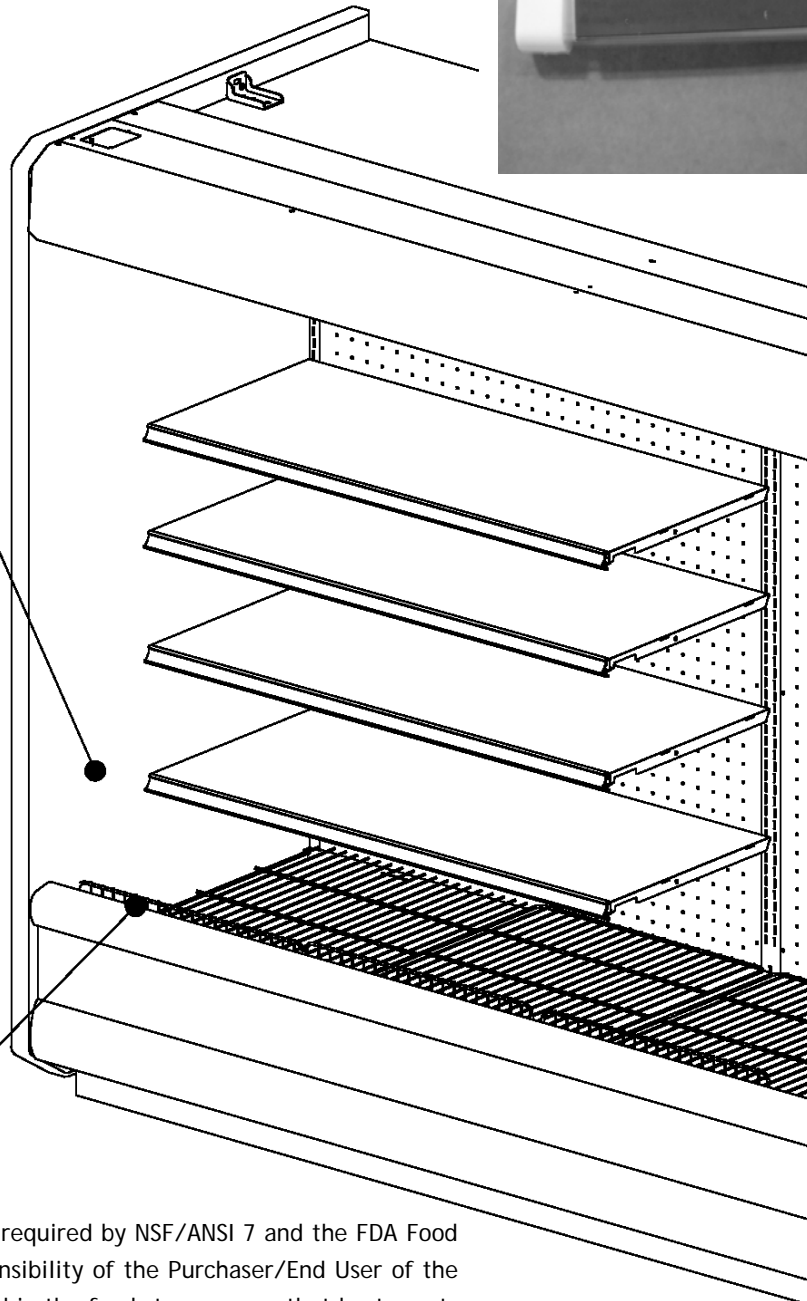
Magnet



Inside  
End Panel



Return  
Air Grill



Suggested locations for the thermometer required by NSF/ANSI 7 and the FDA Food Code are indicated above. It is the responsibility of the Purchaser/End User of the SANYO Case to determine the location within the food storage area that best meets these code requirements.

## 6 Care and Cleaning Guidelines

In order to keep SANYO Cases sanitary and in good working order, we recommend thorough periodic cleaning as follows:

### 6.1 Exterior Panels (Daily Cleaning)



- Exterior panels should be cleaned with water only. Wet a soft cloth and wring it out to wipe down panels.
- If required, you may use a mild detergent and warm water to remove stains. You should follow by wiping down with water only in order to prevent discoloration.
- Take particular care to clean areas that may be exposed to salt or saline solutions.
- DO NOT use scrapers, blades or other sharp objects to remove adhesive, as you may damage panels. You may use rubbing alcohol to remove adhesive if water and mild detergents alone are insufficient.

### 6.2 Mirrors, Fluorescent Lamps, Drain Trap (Monthly Cleaning)

When cleaning mirrors and fluorescent lamps,

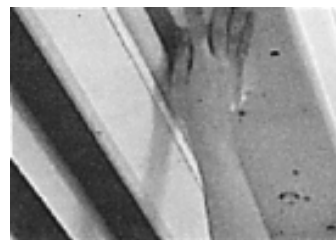
- Turn off the fluorescent lamps prior to cleaning.
- DO NOT place your weight on the shelves. If mirrors or lamps are difficult to reach, use a stepladder or other means to safely reach them.

Clean mirrors with a mild detergent and water, then dry with a non-abrasive cloth.



Wipe fluorescent lamps with a soft, dry cloth. If required you may use a water-dampened cloth that has been squeezed well to remove almost all moisture.

At this time you may also wish to check for lamps needing replacement.



Please make sure to check and clean the drain trap at least once a month. Remove any material that has gathered in the drain trap and dispose of it. Clean the drain trap and put it back in its original position.



### 6.3 Honeycomb Assemblies (at least every 3 months)

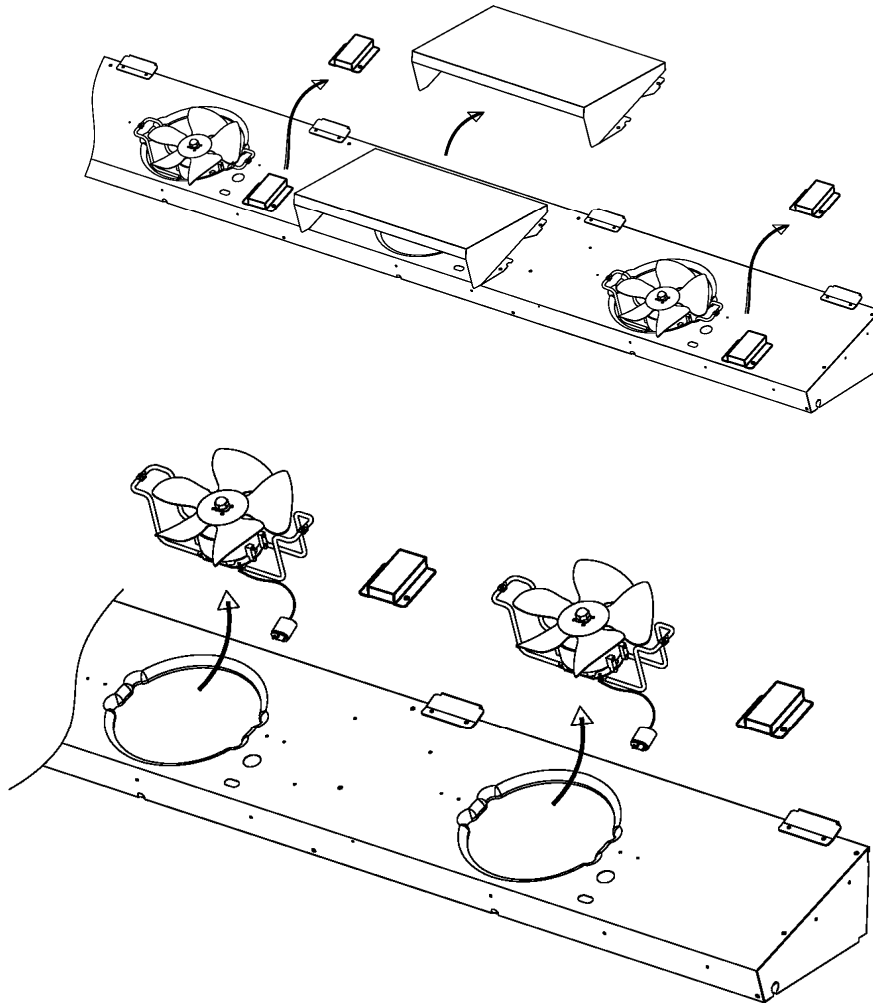
Because Honeycomb Assemblies may deform under pressure, DO NOT use vacuum cleaners to clean them.

- a. When merchandise is in place under the Honeycomb Assemblies, first cover the merchandise with a cloth or other material to keep dust from falling.
- b. Remove Honeycomb Assemblies by pulling down on the wire clips attached to the assemblies.
- c. Rinse Honeycombs in running water in order to flush out dust, etc. Dust is best removed by spraying/flushing from the cleaner side toward the dirtier side.
- d. After thoroughly shaking and drying rinsed Honeycomb Assemblies, replace them in their original positions in the SANYO Cases.



## 7 Service

### 7.1 Replacing Fan Motors and Blades



To replace the fan motors:

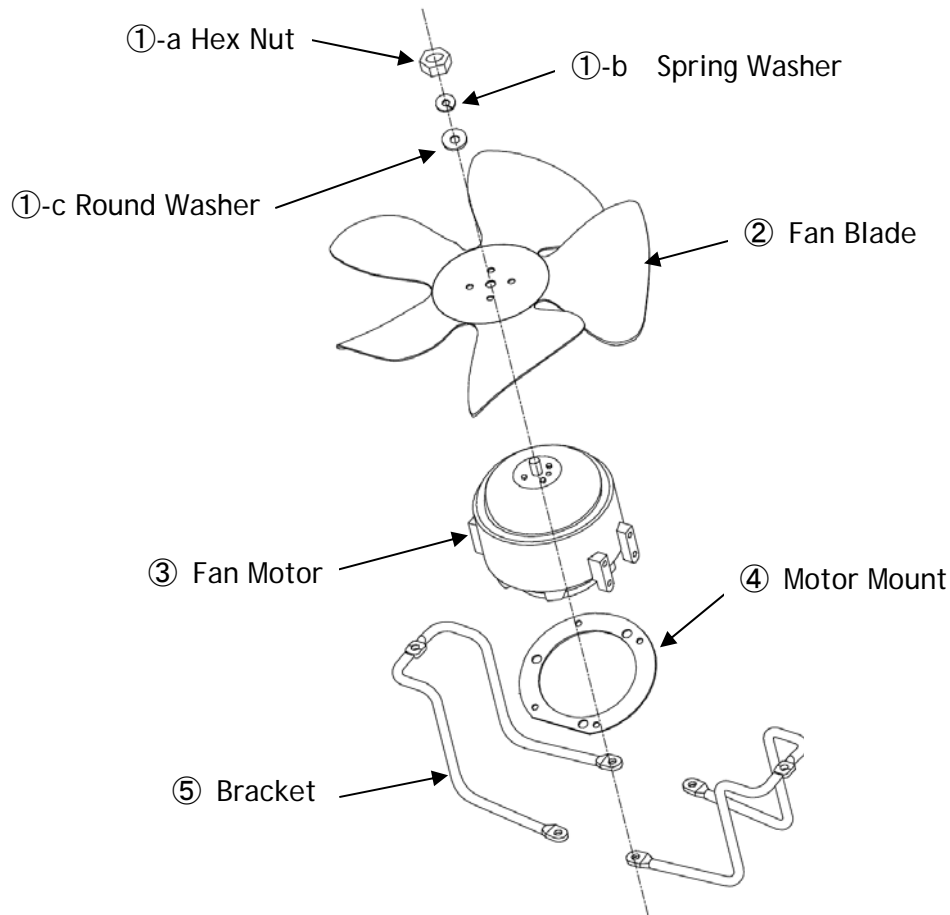
- ① Remove the outer Air Curtain Duct Cover and socket covers.
- ② Unplug the fan motor harness and push through hole in plenum.
- ③ Detach fan motor mounting bracket from plenum and pull up to remove.



### **HAND PROTECTION REQUIRED!**

Activities to be undertaken require finger and palm protection to prevent personal injuries.

## Fan Motor Assembly Part Numbers (Standard-Type Fan Motors)

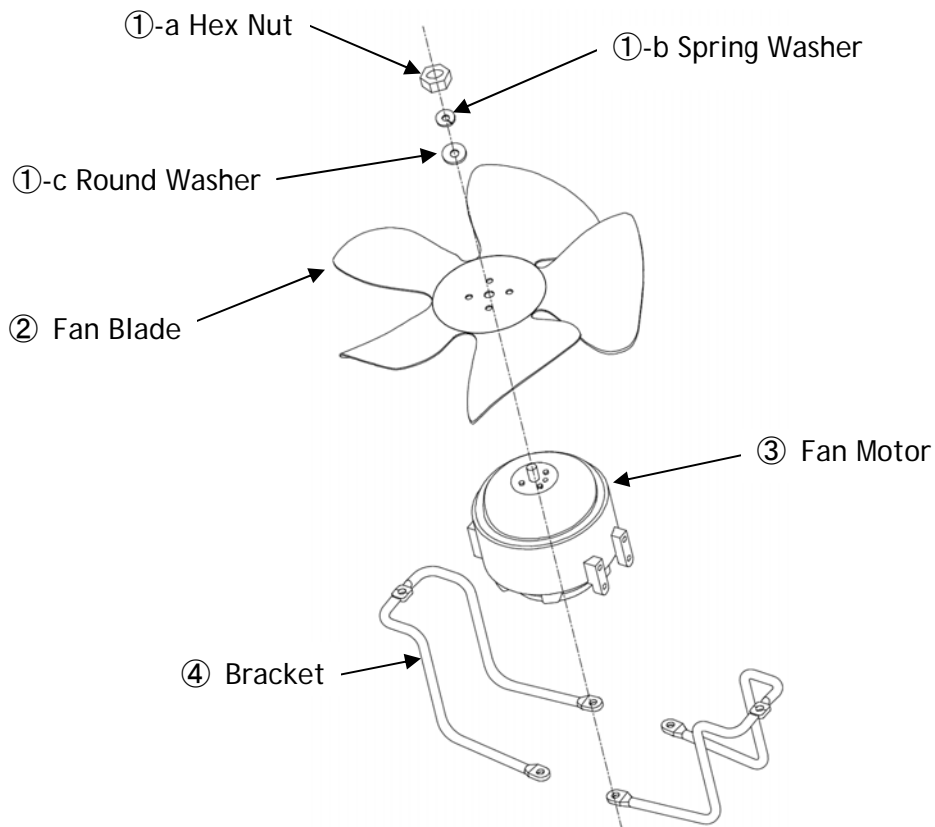


For models with Standard-type (AC) Fan Motors:

No.	Part Name	Model	Part Number	CVW-EXA124/224	CVW-EXA184/284
				Quantity	Quantity
①-a	Hex Nut	-	HN44162520U18	5	3
①-b	Spring Washer	-	SW49266225U18	5	3
①-c	Round Washer	-	WR75315125U18	5	3
②	Fan Blade	#128	9FL2423000100	3	3
		#117	9FL2423000200	2	-
③	Fan Motor	SPFBE141	8FC4M14000010	3	3
		SPFBE91T	8FC4M14000020	2	-
④	Motor Mount	-	9FL2814000100	5	3
⑤	Bracket	-	9FL2175000101	10	6



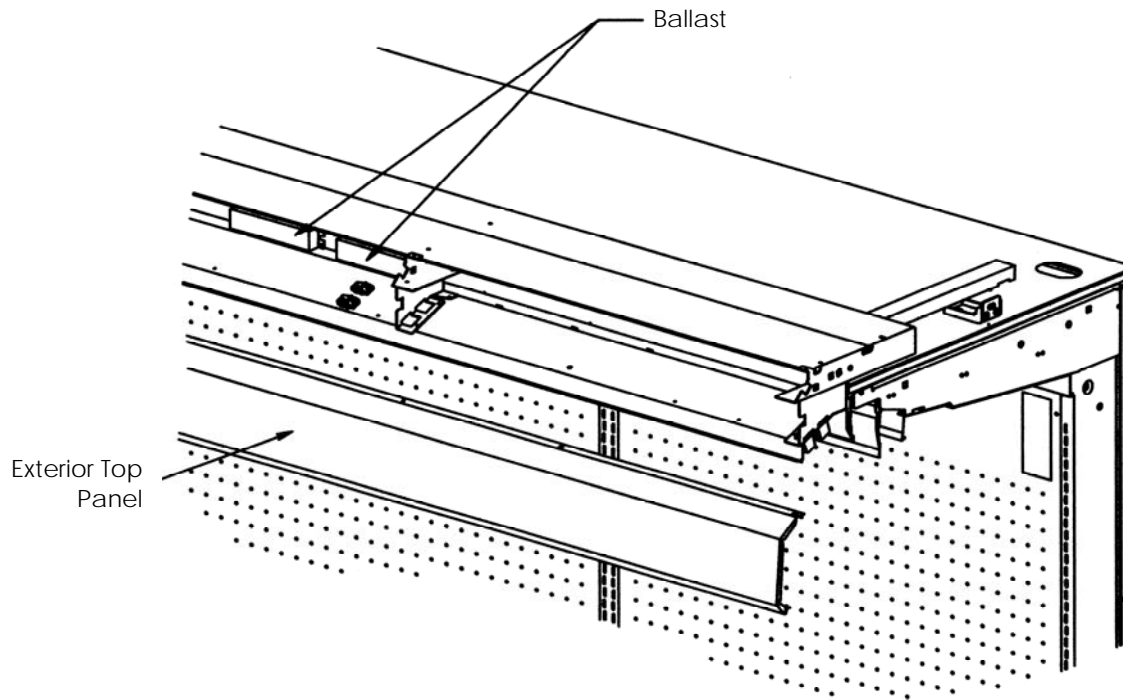
## Fan Motor Assembly Part Numbers (High-Efficiency-Type Fan Motors)



For models with high-efficiency-type (DC) fan motors:

No.	Part Name	Model	Part Number	CVW-EXA124/224	CVW-EXA184/284
				Quantity	Quantity
①-a	Hex Nut	-	HN44162520U18	5	3
①-b	Spring Washer	-	SW49266225U18	5	3
①-c	Round Washer	-	WR75315125U18	5	3
②	Fan Blade	#128	9FL2423000100	3	3
		#117	9FL2423000200	2	-
③	Fan Motor	SSC2B12CNHBV1	8FC4M11000010	3	3
		SSC2B12BVHBV1	8FC4M11000020	2	-
④	Bracket	-	9FL2175000101	10	6

## 7.2 Replacing Electronic Ballasts



To replace electronic ballasts:

- ① Remove the Exterior Top Panel.
- ② Unplug the Electronic Ballast Harness(es).
- ③ Remove the Electronic Ballast(s).

### Electronic Ballast Part Codes

Type	Model	Part Number	CVW-EXA124/224	CVW-EXA184/284
			Quantity used	Quantity used
3-lamp	QHE3X32T8/UNV ISN-SC-1-CC-B	8FC05400000301	2	-
2-lamp	QHE2X32T8/UNV ISN-SC-1-CC-B	8FC05400000201	-	2

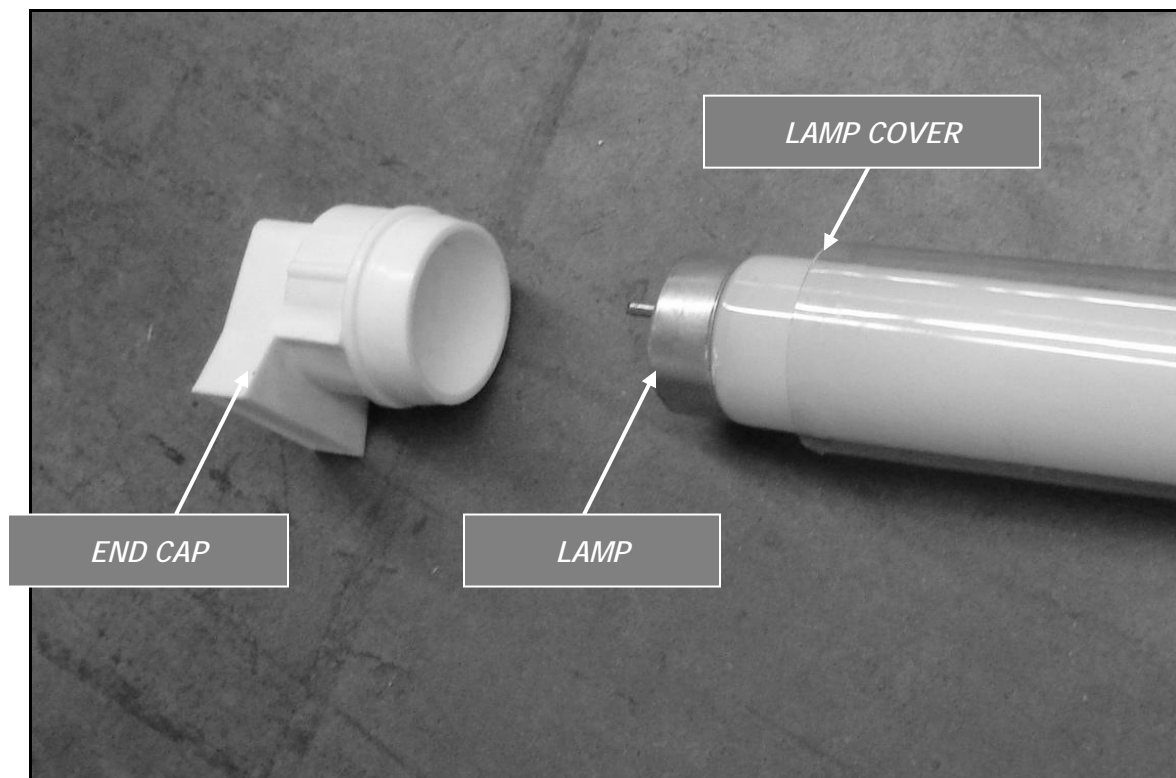


### WARNING!

Make sure that all Electronic Ballasts Harness plugs are placed firmly in their sockets to prevent damage to the ballast and/or the case.

### 7.3 Replacing Fluorescent Lamps

The unit comes with covers placed over each fluorescent lamp. Ensure that these covers are placed over the new lamps before reinstallation.



#### **CAUTION!**

Always use Sanyo lamp covers and end caps when replacing lamp covers and end caps. Using non-Sanyo brand replacement parts can result in decreased performance and/or part lifetime.

### 7.3 Expansion Valve

#### Danfoss

MODEL	Valve Body P.N.	Body Type	Refrigerant	Valve Orifice P.N.	Orifice Type
CVW-EXA124	9FT2450000110	TUAE 068U2287	R404A	9FT2450000100	TU7 068U1037
CVW-EXA224	9FT2450000610	TUAE 068U2237	R22/R422D	9FT2450000200	TU6 068U1036
CVW-EXA184	9FT2450000210	TUA 068U2285	R404A	9FT2450000200	TU6 068U1036
CVW-EXA284	9FT2450000710	TUA 068U2235	R22/R422D	9FT2450000200	TU6 068U1036

#### Sporlan

MODEL	Valve Body P.N.	Body Type	Refrigerant
CVW-EXA124	9FL2450000600	EGSE-2-C	R404A
CVW-EXA224	9FT2450001100	EGVE-2-C	R22
CVW-EXA184	9FL2450000700	EGS-1 1/2-C	R404A
CVW-EXA284	9FT2450001200	EGV-1 1/2-C	R22



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