

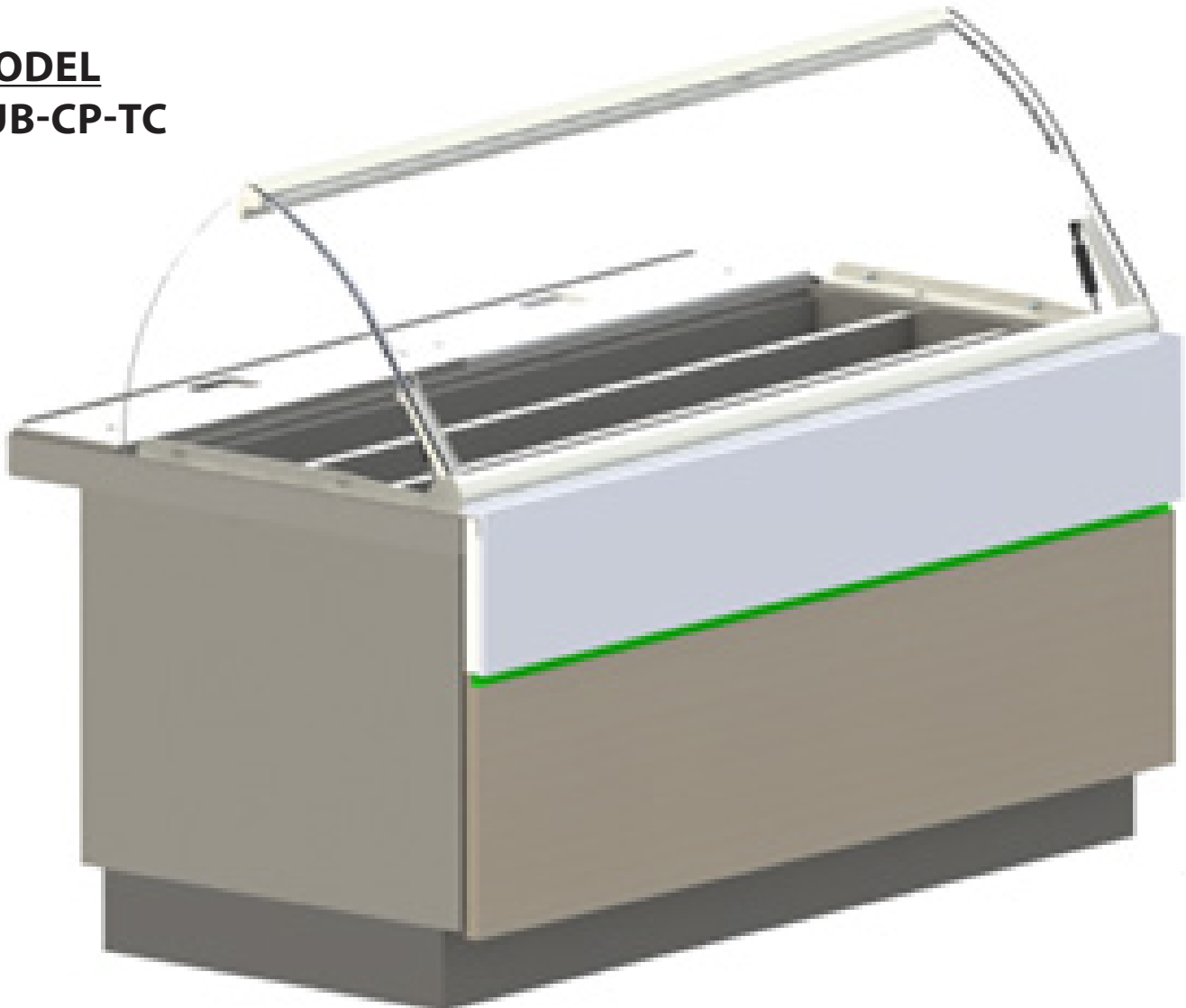


Your Solutions Partner

# Installation and Operation Manual

## TRI-CHANNEL COLD PAN

**MODEL**  
**SUB-CP-TC**



**CAUTION:** Please read this manual completely before attempting to install, operate or service this equipment

 **WARNING for CA residents: go to [www.dukemfg.com/prop65](http://www.dukemfg.com/prop65) for prop 65 warning**

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**P/N 529109  
REV J 07/21/2021**

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## IMPORTANT SAFETY INSTRUCTIONS

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the equipment.



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



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



**Indicates Important Information**



**Indicates electrical shock hazard which, if not avoided, could result in death or serious injury and/or equipment damage.**



**Indicates hot surface which, if not avoided, could result in minor or moderate injury.**



**Electrical shock hazard . Do not wash with water jet or hose.**



**Indicates risk of fire or explosion. Flammable refrigerant used which, if not avoided, could result in death or serious injury.**

## IMPORTANT SAFETY INSTRUCTIONS

*In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.*



Climate Class 4 – These SUB-CP-TC Models are marked with Climate Class 4. Per ISO 2395-3 this indicates an ambient of 30°C dry bulb temperature, 55% relative humidity, a Dew Point of 20°C, and a water vapour mass in dry air of 14.8 g/kg. When tested to IEC 60335-2-89, the Input, Heating, Electric Strength and Leakage

Current tests were conducted in an ambient temperature of  $32 \pm 2$  °C.

- **WARNING:** Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.
- **WARNING:** Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- **WARNING:** Do not damage the refrigerant circuit.
- **WARNING:** Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- **WARNING:** Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. (North America Models) Do not attempt to remove or disconnect the grounded connector.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to remove or disconnect the grounded connector.
- Install or locate the equipment only for its intended use as described in this manual.
- Do not use corrosive chemicals on this equipment.
- Do not operate this equipment if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact the nearest Duke authorized service facility for adjustment or repair.
- Do not block or cover any openings on the unit.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.
- Turn the unit off, disconnect the power source and allow unit to cool down before performing any service or maintenance on the unit.
- The procedures in this manual may include the use of chemical products. You must read the Material Safety Data Sheets before using any of these products.

## IMPORTANT SAFETY INSTRUCTIONS

- The unit should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with dedicated electrical lines, protected by fuses or circuit breaker of the proper rating, in accordance with all applicable regulations.
- Disposal of the unit must be in accordance with local environmental codes and/or any other applicable codes.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



### DISPOSAL

- All servicing and disposal of equipment must be performed by technicians specifically trained in the safe handling of flammable and hydrocarbon refrigerants.
- Do not discharge into an area where product can form an explosive mixture with air. Recover any remaining refrigerant from the appliance in accordance with the evacuation requirements of the installation market.
- Waste gas should be flared through a suitable burner with flashback arrestor. Do not discharge into a place where accumulation could be dangerous. Contact supplier if guidance is necessary



***ELECTRICAL SHOCK HAZARD UNIT MUST BE SAFETY GROUNDED, EARTHED.  
DO NOT MODIFY, DEFEAT ELECTRICAL CONNECTIONS OR ALTER PLUG.***

### ELECTRICAL CONNECTIONS

***⚠ WARNING BEFORE CONNECTING THE UNIT TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE AND PHASE OF THE POWER SOURCE ARE IDENTICAL TO THE VOLTAGE AND PHASE INFORMATION ON THE DATA LABEL.***

***⚠ WARNING THE SUPPLY CONNECTION MUST INCORPORATE ALL POLE DISCONNECT IN THE FIXED WIRING IN ACCORDANCE WITH LOCAL WIRING CODES.***

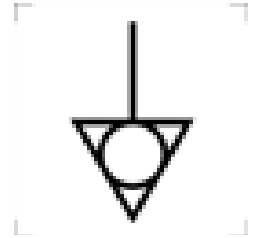
### EARTHING INSTRUCTIONS

1. (Norht America Models) THE UNIT MUST BE GROUNDED. Grounding reduces risk of electric shock by providing an escape wire for the electric current if an electrical short occurs. This unit is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into a receptacle that is properly installed and grounded.
2. Consult a qualified electrician or service agent if grounding instructions are not completely understood, or if doubt exists as to whether the unit is properly grounded.

3. DO NOT USE AN EXTENSION CORD. If the product power cord is too short, have a qualified electrician install a three-slot receptacle (or the country specific receptacle for International Units). This unit should be plugged into a dedicated circuit with the electrical rating as provided on the product data plate.

**EXTERNAL EQUIPOTENTIAL BONDING TERMINAL (EXPORT ONLY)**

4. This equipment has supplemental bonding terminal. The terminal provides an external bonding connection used in addition to the earthing prong on the plug. The terminal provides a connection for bonding to the equipment enclosure. The external equipotential bonding terminal located on the rear outside surface of the unit, the terminal is marked with the symbol to the right.



**INSTALLATION CODES AND STANDARDS**

**In the United States**, the Unit must be installed in accordance with the following:

1. State and local codes.
2. National Electrical Code (ANSI/NFPA No. 70, latest edition) available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.
3. Vapor Removal from Cooking Equipment, (NFPA-96, latest edition) available from NFPA.
4. Sealed to the counter upon which the equipment is placed per NSF/ANSI 4 standard.

**In Canada**, the Unit must be installed in accordance with the following:

1. Local codes.
2. Canadian Electrical Code (CSA C22.2 No. 3, latest edition) available from the Canadian Standards Association, 5060 Spectrum Way, Mississauga, Ontario, Canada L4W 5N6.

**For CE Units**, the Unit must be installed in accordance with the following:

1. Local codes.
2. European (IEC/CENELEC) Electrical Code

**ELECTRICAL CONNECTIONS**

The Tri-Channel Cold Pan is available as permanently connected equipment per the Identification tag on the unit. Refer to Electrical and Refrigeration specification section to see available configurations. All electrical connections should be performed by a certified electrician and should comply with local electrical codes for your municipality.

REFER TO THE ELECTRICAL SPECIFICATIONS, LOCAL / NATIONAL CODE PRIOR TO PERFORMING INSTALLATION. A PROTECTED CIRCUIT OF THE CORRECT VOLTAGE AND AMPERAGE MUST BE RUN FOR CONNECTION OF THE SUPPLY CORD OR PERMANENT CONNECTION TO THE UNIT. THE SUPPLY CONNECTION MUST INCORPORATE AN ALL MAINS DISCONNECT. SEE WIRING DIAGRAM FOR FIELD CONNECTIONS LOCATED IN UNITS RACEWAY.

Remove Field Connection Cover Plate  
to access terminals



# Inspection for Damage and Unpacking

## UNPACKING UNIT

- Inspect the shipping carton and/or container, carefully noting any exterior damage on the delivery receipt
  - Note any damage not evident on the outside of the shipping container (concealed damage). Contact the carrier immediately and file a damage claim with them.
  - Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and are not covered by the warranty.
  - Report any dents or breakage to source of purchase immediately.
  - **Do not attempt to use unit if damaged.**
  - Remove all materials from unit interior.
  - Remove unit from Skid
  - If unit has been stored in extremely cold area, wait a few hours before connecting power.
1. Remove shrink wrapped bag from the unit. (It is stapled to the crate at both ends.)
  2. Remove strapping and protective cardboard from around the unit.
  3. The feet are set into V-shaped wedges for shipping. Remove all wood pieces from the pallet before trying to lift it off.

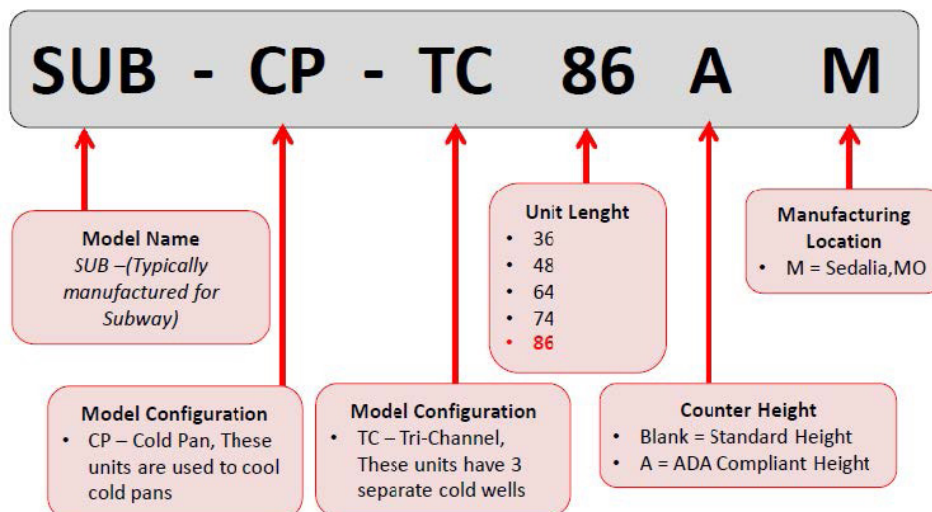
**Note:** For 60" units remove two (2) shipping brackets in center front and back of unit.

4. Each unit will come with a kickplate carton. Unpack the box of kickplates.

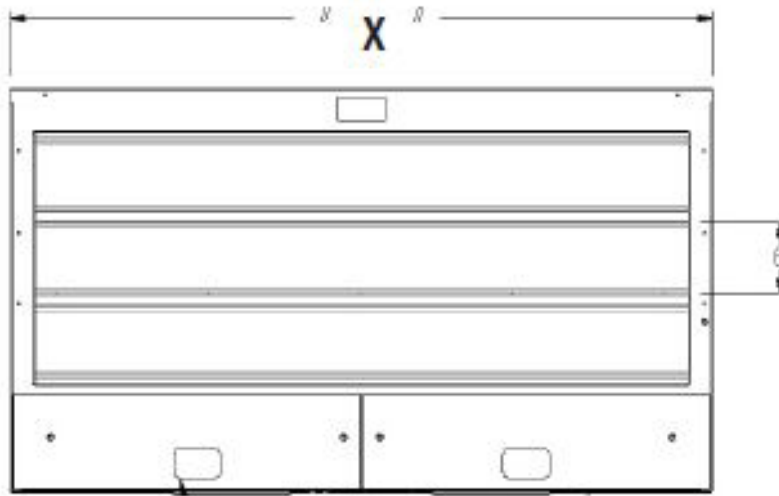
**NOTE:** Kickplate instructions are packed with kickplates.



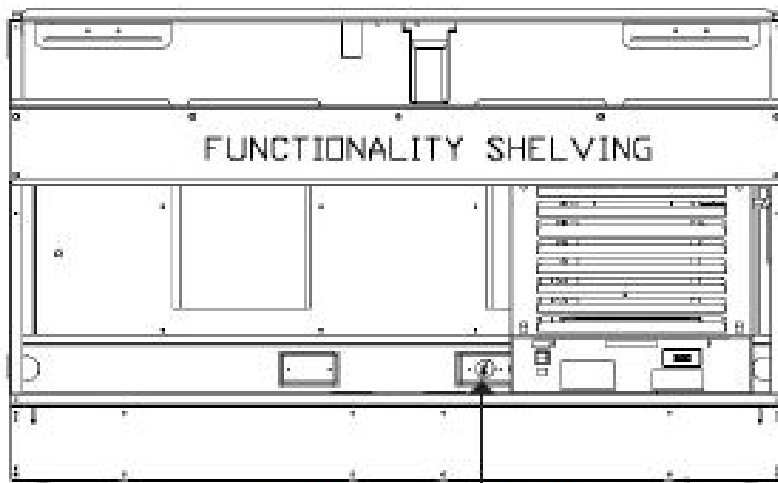
## Model Description



# SPECIFICATIONS

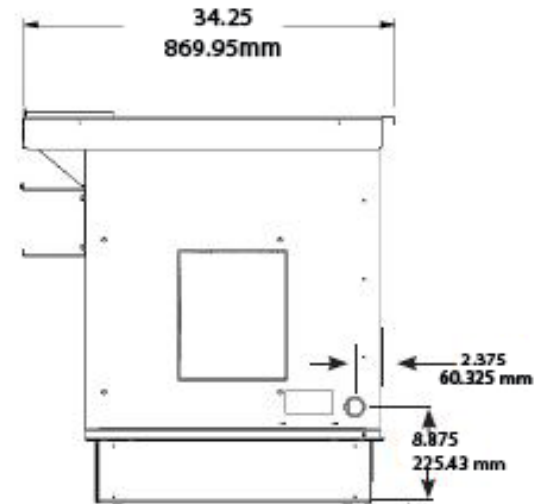


TOP VIEW



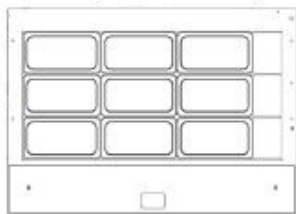
FRONT VIEW

Electrical Outlet

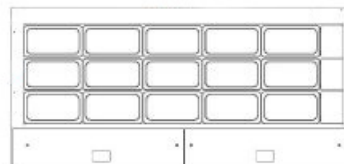


SIDE VIEW

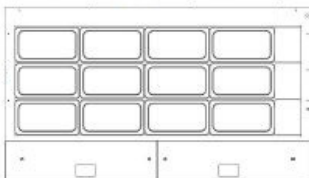
## TRI-Channel Pan Capacity



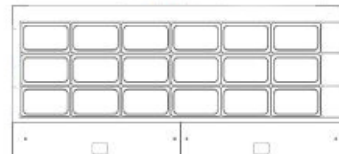
48" TRI-Channel Cold Section  
Capacity: 9, 1/3 Size pans  
3, Custom Size Sauce Bottle  
Holders (12 Sauce bottles)



74" TRI-Channel Cold Section  
Capacity: 15, 1/3 Size pans  
3, Custom Size Sauce Bottle  
Holders (12 Sauce bottles)



60" TRI-Channel Cold Section  
Capacity: 12, 1/3 Size pans  
3, Custom Size Sauce Bottle  
Holders (12 Sauce bottles)



86" TRI-Channel Cold Section  
Capacity: 18, 1/3 Size pans  
3, Custom Size Sauce Bottle  
Holders (12 Sauce bottles)

## SPECIFICATIONS - continued

### Electrical and Refrigerant:

Model	Section	Refrigerant	Amount ozs. / grms.	Volts	"Frequency (Hz)"	Amps	"Watts (Label)"
SUB-CP-TC36	2	R448a	15/425	120	60	7.3	
SUB-CP-TC36	2	R404a	13 / 369	220	60	3.3	730
SUB-CP-TC48	3	R448a	18/510	120	60	7.3	
SUB-CP-TC48	3	R404a	14 / 397	220	60	3.3	730
SUB-CP-TC48	3	R290	3.18/90	220	60	3.2	750
SUB-CP-TC48	3	R290	3.17/90	230	50	3.2	735
SUB-CP-TC60	4	R448a	23/652	120	60	7.3	
SUB-CP-TC60	4	R404a	15 / 425	220	60	3.3	730
SUB-CP-TC60	4	R290	3.88/110	220	60	3.2	705
SUB-CP-TC60	4	R290	3.9/110	230	50	3.2	735
SUB-CP-TC74	5	R448a	22/624	120	60	7.3	
SUB-CP-TC74	5	R404a	16 / 454	220	60	4.8	1060
SUB-CP-TC74	5	R290	3.88/110	220	60	4.8	1060
SUB-CP-TC74	5	R290	3.9/110	230	50	4.8	1100
SUB-CP-TC86	6	R448a	25/709	120	60	7.3	
SUB-CP-TC86	6	R404a	16 / 454	220	60	4.8	1060
SUB-CP-TC86	6	R290	4.94/140 Emerson 4.23/120 Tecumseh	220	60	4.8	1060
SUB-CP-TC86	6	R290	4.23/120	230	50	4.8	1100

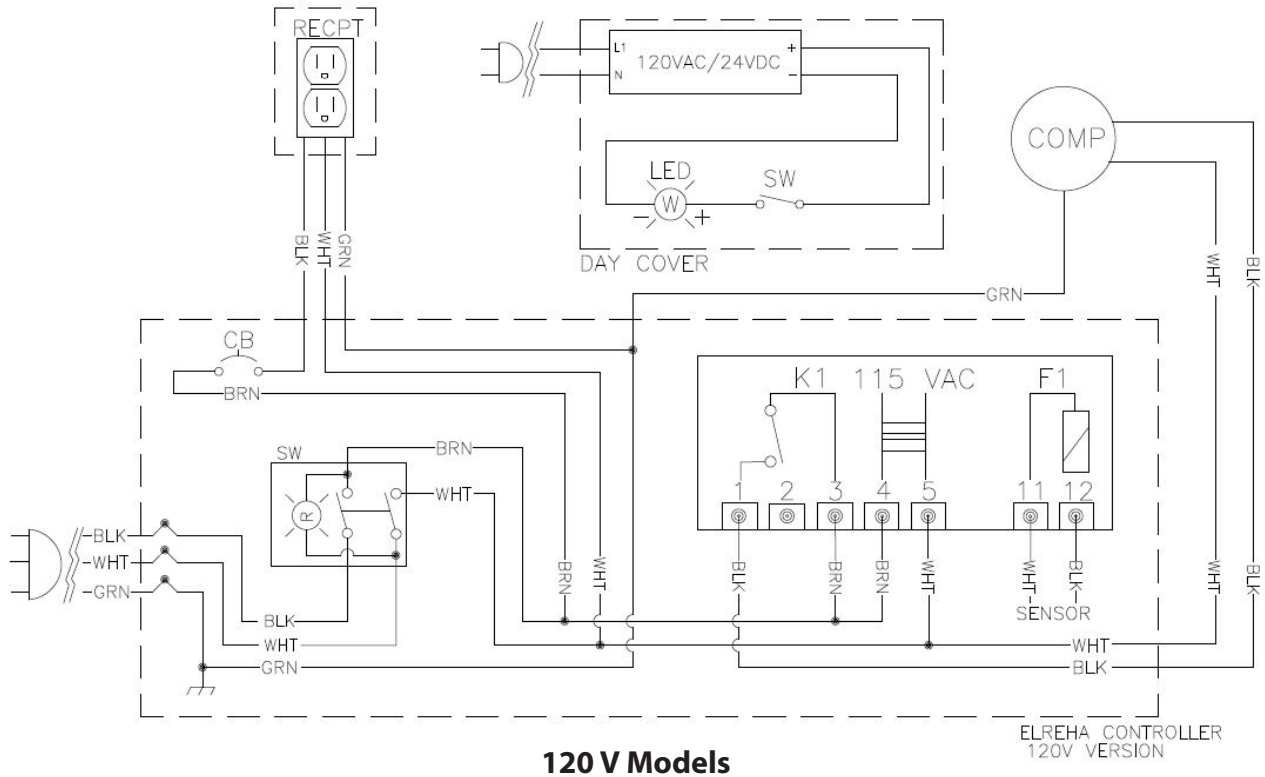
This appliance has a Climate Class 4 rating and is intended for use in a location where the environmental conditions are controlled such that the ambient temperature does not exceed 32°C.

### DIMENSIONS:

Model #SUB-CP-TCXX M - (XX will be replaced with size of units (ie. Model# for 48" TRI-Channel would be SUB-CP-TC48 M)

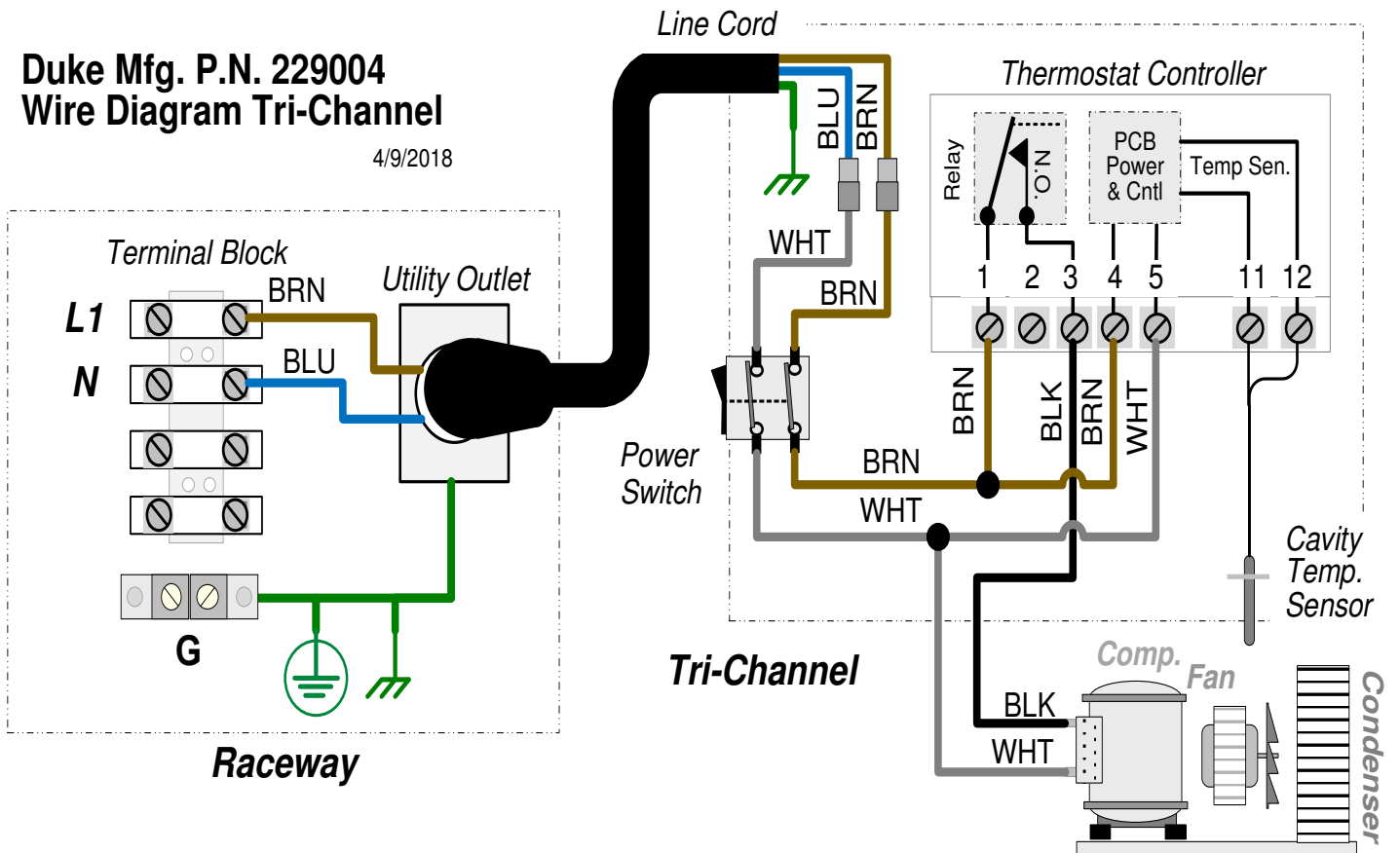
	Overall Width "X"		Overall Height		Overall Depth		TRI-Channel Top Cutout Dimensions				Liner Depth		Pans	Cubic Ft. Crated	Weight	
	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm			lbs	kg
	RS021637	48	121.92	35.75	90.80	34.25	87	43	109.22	21.375	54.29	21.3	54.10	9 - 1/3 size	71	310
RS020498	60	152.40	35.75	90.80	34.25	87	55.8	141.73	21.375	54.29	21.3	54.10	12 - 1/3 size	87	420	190.51
RS021652	74	187.96	35.75	90.80	34.25	87	68.6	174.24	21.375	54.29	21.3	54.10	15 - 1/3 size	108	548	248.57
RS021496	86	218.44	35.75	90.80	34.25	87	81.4	206.75	21.375	54.29	21.3	54.10	18 - 1/3 size	127	636	288.48
RS040921	48	121.92	35.75	90.80	34.25	87	43	109.22	21.375	54.29	21.3	54.10	9 - 1/3 size	71	310	140.61
RS040923	60	152.40	35.75	90.80	34.25	87	55.8	141.73	21.375	54.29	21.3	54.10	12 - 1/3 size	87	420	190.51
RS041819	74	187.96	35.75	90.80	34.25	87	68.6	174.24	21.375	54.29	21.3	54.10	15 - 1/3 size	108	548	248.57
RS041821	86	218.44	35.75	90.80	34.25	87	81.4	206.75	21.375	54.29	21.3	54.10	18 - 1/3 size	127	636	288.48
RS021641	48	121.92	35.75	90.80	34.25	87	43	109.22	21.375	54.29	21.3	54.10	9 - 1/3 size	71	310	140.61
RS021500	60	152.40	35.75	90.80	34.25	87	55.8	141.73	21.375	54.29	21.3	54.10	12 - 1/3 size	87	420	190.51
RS021655	74	187.96	35.75	90.80	34.25	87	68.6	174.24	21.375	54.29	21.3	54.10	15 - 1/3 size	108	548	248.57
RS021638	86	218.44	35.75	90.80	34.25	87	81.4	206.75	21.375	54.29	21.3	54.10	18 - 1/3 size	127	636	288.48

# WIRE DIAGRAMS



## Duke Mfg. P.N. 229004 Wire Diagram Tri-Channel

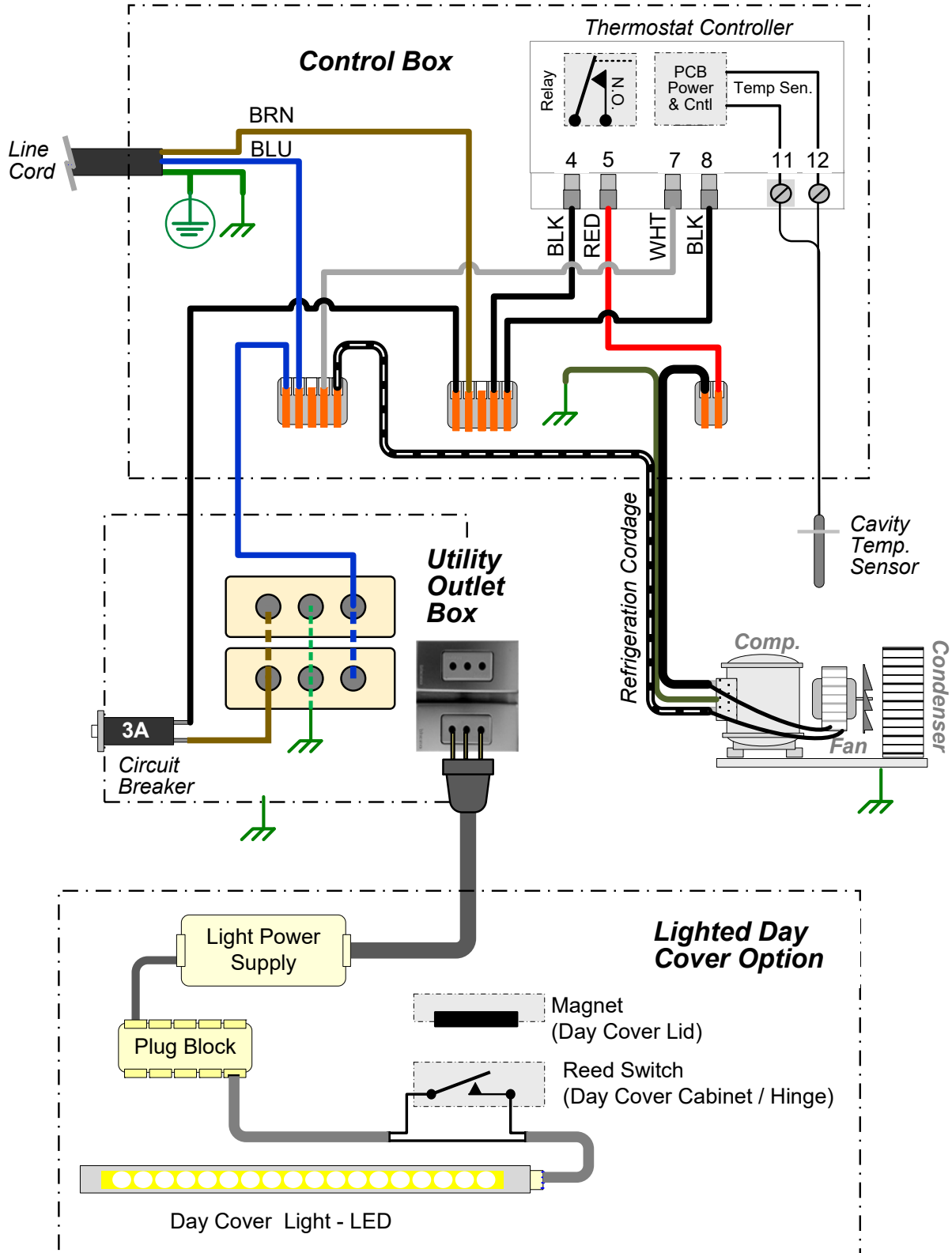
4/9/2018



220 - 230 Models w/o Daycover

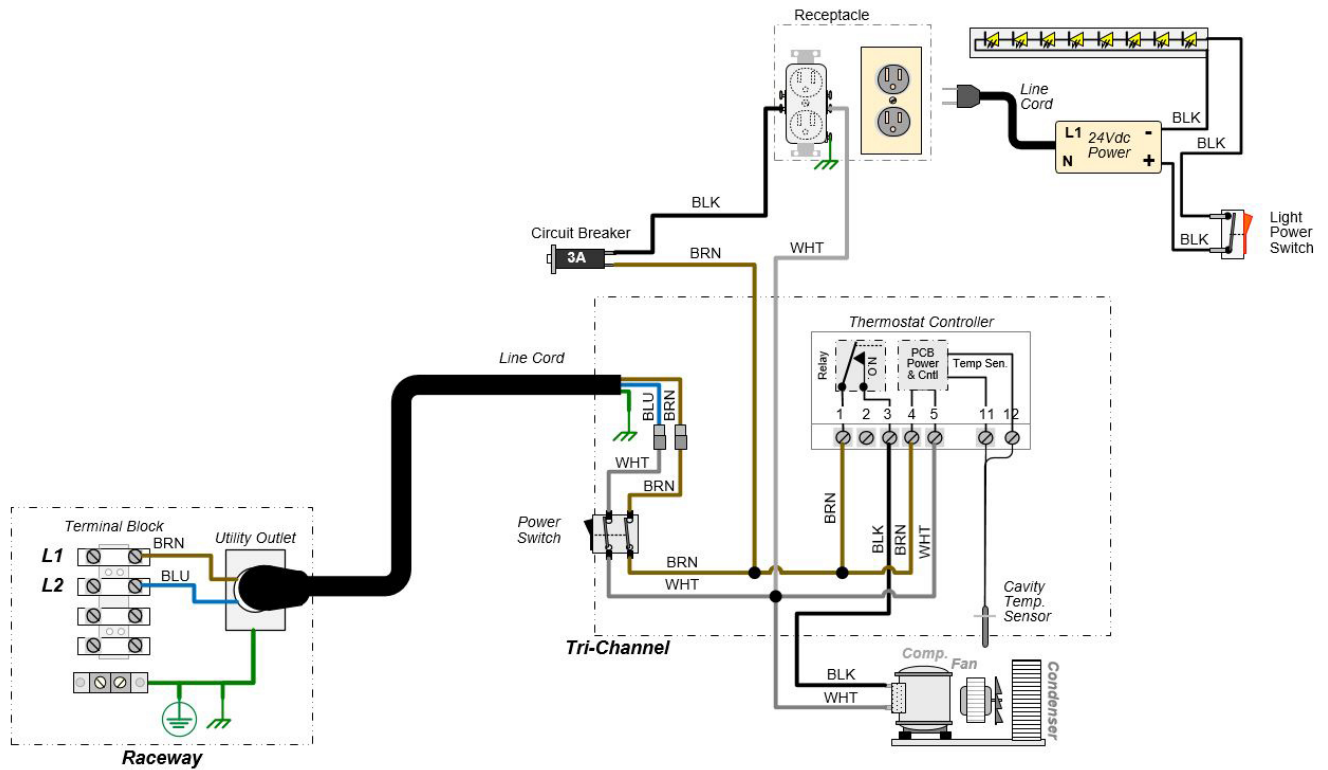
# Wire Diagram

## Wire Diagram - Tri-Channel 220V -230V Propane - R290 (ELC0395 Rev B)



230 Models with Daycover

# WIRE DIAGRAMS



220 and 230 Models with Daycover

## Tools and Parts Needed for Installation

### Tools Needed - not included



Phillips Screw Driver



7/16" Wrench



Cordless Drill



Caulk Gun/  
Silicone



Socket set with  
5/16 socket



Adjustable  
Pliers



13mm Wrench



3/32 Allen  
Wrench

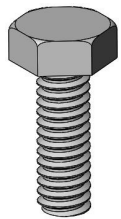


Level

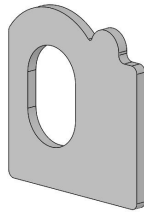


Wire Cutters  
-Strippers

### Parts and Hardware Included



223424 Hex  
Head Bolt  
10-24X1/2" 4ea.



2501061  
Stainless  
Washer 4ea.



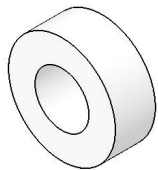
523030 Bolt  
1/4-20 X 1"  
2ea.



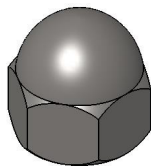
223108 Bolt  
1/4-20X3/4"  
2ea.



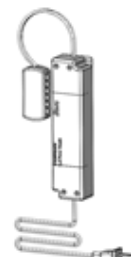
223398  
Plastic  
Washer 4ea.



524100  
Plastic Spacer  
4ea.



223390  
1/4-20  
Cap Nut 4ea.



524414 (120V)  
524417 (240V)  
Power Supply



226115  
End Glass 1ea.



225035 Gaskets 2ea.



216576  
Silicone Sealant



2501693 Plastic  
Wrench 1ea.

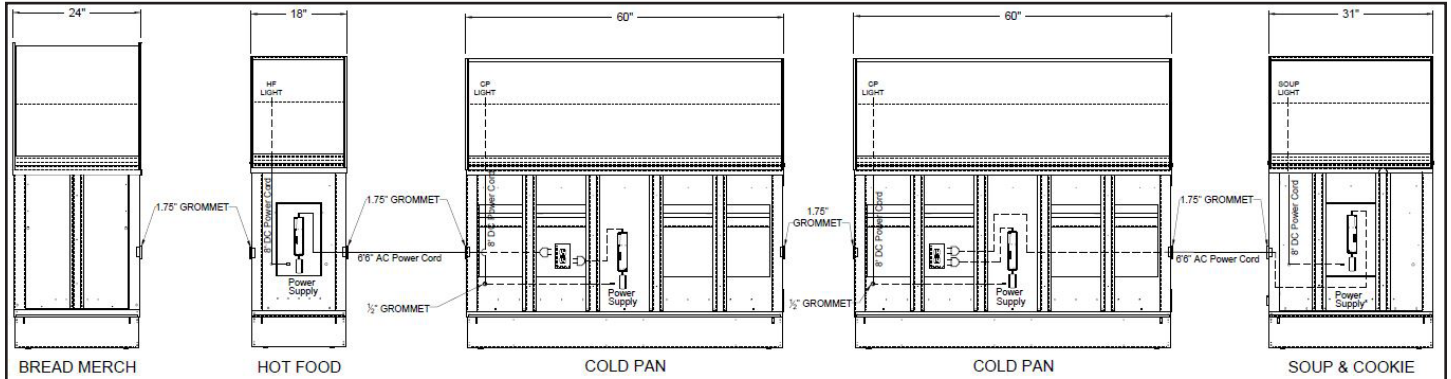
# Installation - Tri-Channel Cold Pan

## I. Unit Placement and Adjustment

The designation of a LEFT or RIGHT lineup for all Subway Front Counters is determined by the location of the HOT food section. From the Operator's side of the counter, if the HOT food section is on the operator's LEFT, it is a Left-handed lineup. If the HOT food section is on the operator's RIGHT it is a Right-handed lineup.

### Step 1

Line up unit with front counter equipment. Unit to be installed next to hot food unit.



Basic Store Line Up

### Step 2

Make sure to level the cold pan unit first.

**NOTE:** When installing full line up make sure all units are level with cold pan.

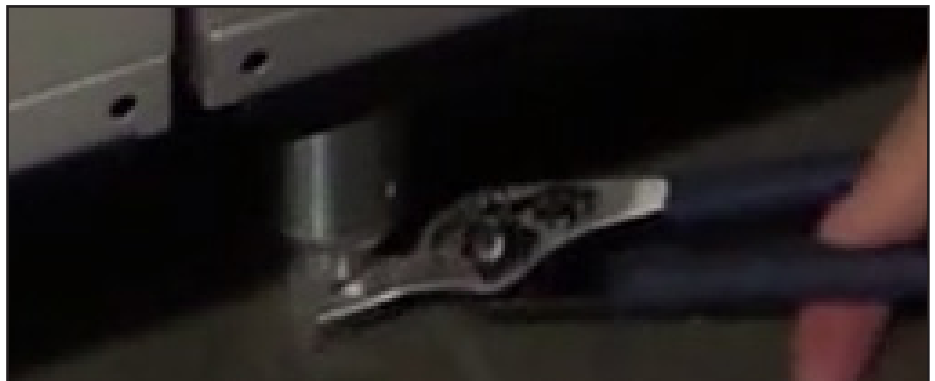
### CAUTION

Failure to complete this step could result in Decor Panels not lining up.



### Step 3

Adjustment can be made by turning the legs using adjustable pliers.



## Installation - Tri-Channel Cold Pan - continued

### II. INSTALLATION AND ADJUSTMENT OF END GLASS (adjacent units)

**NOTE:** When two cold pans are installed side-by-side, the day covers should be bolted together with only ONE end glass pane in between.

**TOOLS REQUIRED:** Phillips screw driver, 3/32 allen wrench, 7/16 wrench



1. After two base units are bolted together and leveled, place **PLASTIC SPACER** in **END GLASS** and install **END GLASS** between two **GASKETS** and **MOUNTING ANGLES**. Align the mounting holes.

**Note:** Glass must be bolted tight without gaps and centered between the two day covers. Loosen Hex bolts if needed.

2. Use **1/4-20 x 1" BOLT** and **1/4-20 CAP NUT** provided in kit to fasten end glass to the angle (2 places).

**NOTE:** Loosen HEX HEAD BOLTS if needed fastening angle to the top of the unit, to allow for adjustment.

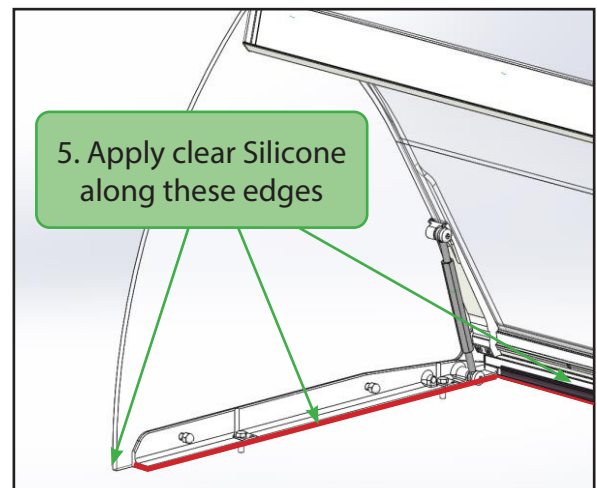
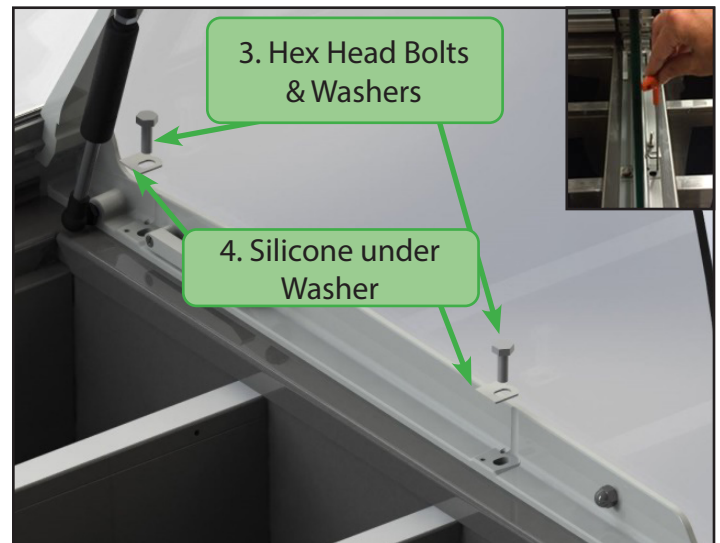
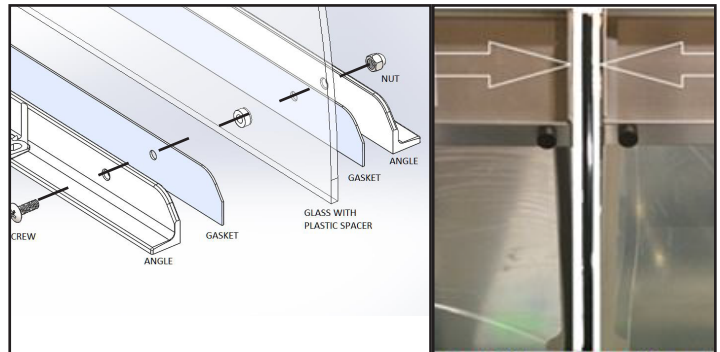
3. Tighten 4 hex bolts (2) on each side.

4. Apply a bead of silicone on bottom of stainless steel washers.

5. Apply a bead of clear silicone along bottom edge of the day cover as shown in diagram at right.



6. Repeat steps 1 through 6 for all adjacent units of the lineup.



## Installation - Tri-Channel Cold Pan - continued

### III. INSTALLATION AND ADJUSTMENT OF END GLASS (end of lineup)

**TOOLS REQUIRED:** Phillips screw driver, 3/32 allen wrench, 7/16 wrench



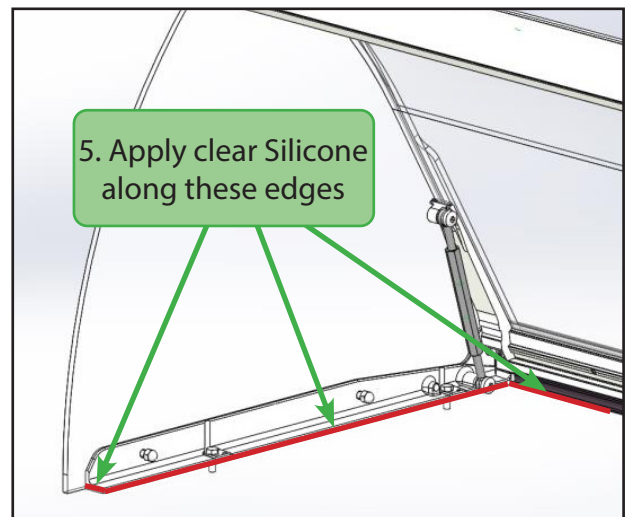
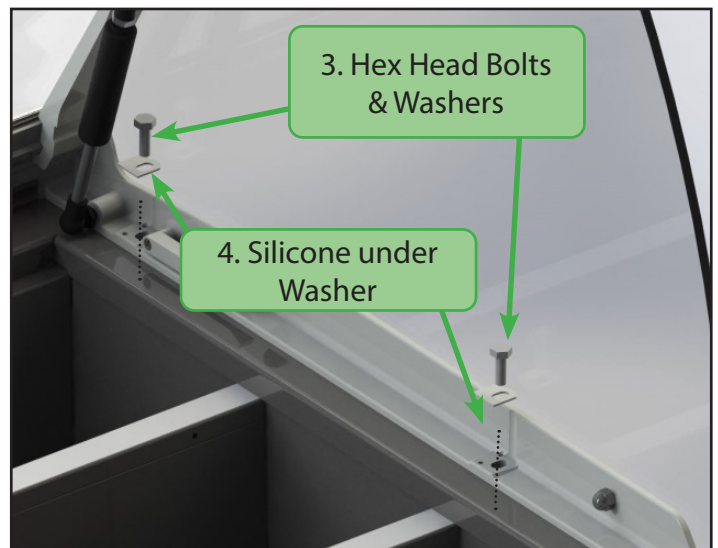
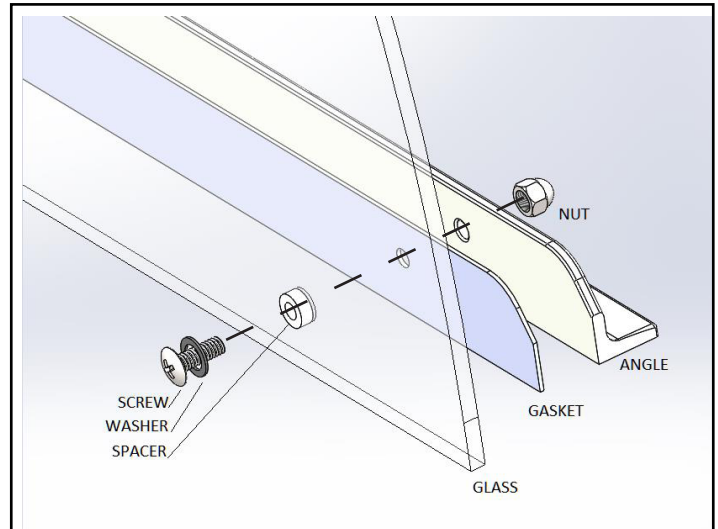
1. After the base units are installed and leveled, place **PLASTIC SPACER** in **END GLASS** on the outside of the **GASKET** and **MOUNTING ANGLE** and align the holes.
2. Use **1/4-20 x 3/4" BOLT** and **1/4-20 CAP NUT** provided in kit to fasten end glass to the angle (2 places).

**NOTE:** Loosen HEX HEAD BOLTS if needed fastening angle to the top of the unit, to allow for adjustment.

3. Tighten 4 hex bolts (2) on each side.
4. Apply a bead of silicone on bottom of stainless steel washers.



5. Apply a bead of clear silicone along bottom edge of the day cover as shown in diagram at right.



## Installation - Tri-Channel Cold Pan - continued

### IV. Adjusting Front Glass

**TOOLS REQUIRED: Adjustable pliers, 13mm wrench**

#### a.) FIXED DAY COVER - Turnbuckle

1. If present, start alignment with a **FIXED** day cover. If necessary, rotate the turnbuckle left or right to achieve proper angular position of glass.

**CAUTION** Do not to scratch paint (use the plastic wrench included in kit).



**NOTE:** Use end glass as a guide for adjusting front glass. When adjusted correctly, the curve of the front glass is parallel to the edge of the end glass, at approximately 60° to top

#### b.) FOLD-DOWN DAY COVER - Gas Shock

1. Cut the wire ties holding the gas shocks in place during shipment.

2. In the **FOLD-DOWN** day covers, loosen the **ADJUSTMENT NUT** of the gas ram using 13mm crescent wrench

**Note:** If the gas shock needs to be removed use a small screw driver to remove the clip at the end of the Shock.

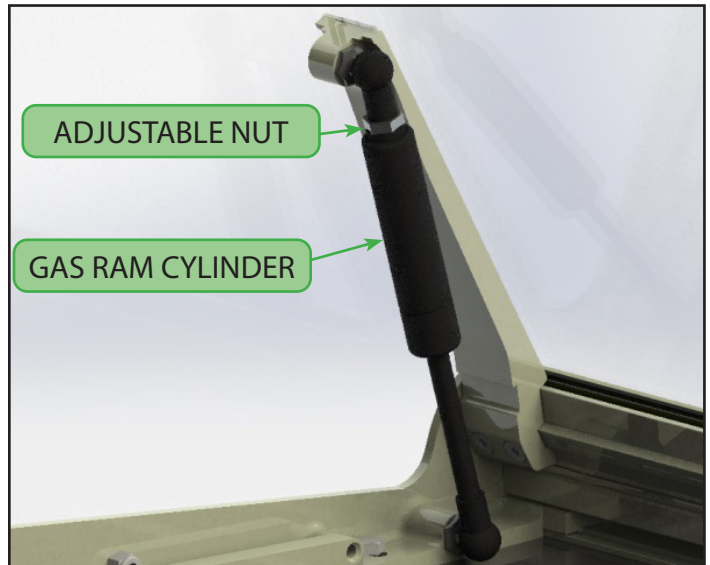
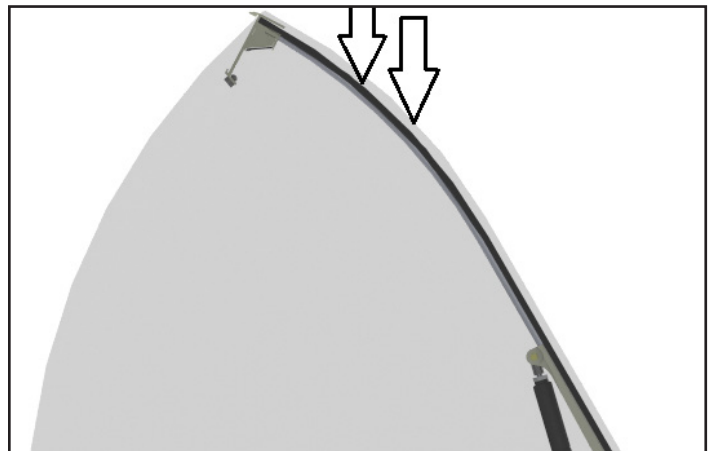
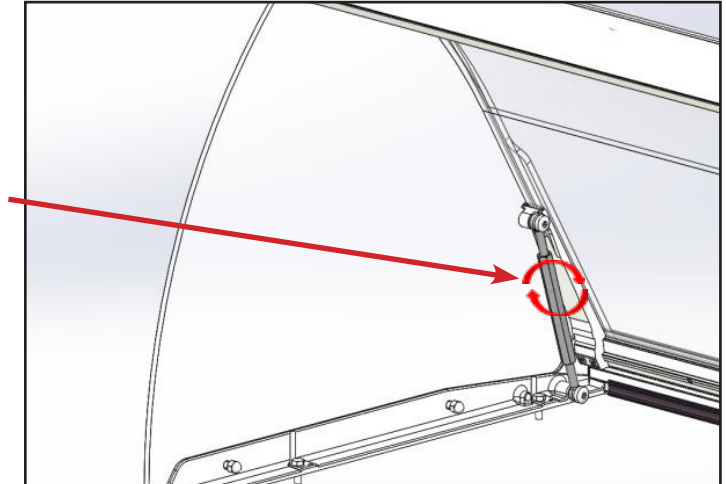


3. Using adjustable pliers, turn the **CYLINDER** of the gas ram to adjust the front glass to desired angle or until it is lined up with the adjacent unit.

**CAUTION** Do not to scratch paint (use a cloth or similar liner to wrap around the cylinder).

4. Tighten the adjustment nut against end fitting.

5. Repeat for the second gas ram.



## Operation Instructions

### **CAUTION**

To protect from possible severe electrical shock, this appliance is designed to be connected to a properly grounded electrical circuit.

For a cord connected appliance: In order to provide proper grounding, it is essential that the grounding prong of the plug be inserted into a properly grounded receptacle. If you do not know whether a receptacle is properly grounded, consult a licensed electrician.

Never insert the plug into a receptacle if the cord is frayed or damaged or if the plug has been altered or damaged.

### General Information

1. Always clean equipment thoroughly before first use. (See general cleaning instructions.)
2. Check rating label for your model designation & electrical rating.

### General Cleaning Instructions

1. Always clean equipment thoroughly before first use. Clean unit daily, use warm, soapy water or mild detergent.
2. A plastic scouring pad and a mild detergent may be used to remove hardened food.
3. Turn off unit at breaker before doing extensive refrigeration compartment cleaning or servicing.

**NOTICE:** Do not use steel wool.

### Polyethylene Cutting Boards

1. When high pressure cleaning equipment is not available, use hot water, a granular cleaner or detergent, and a stiff bristle brush. (Abrasive action is necessary. Simply wiping the board will not suffice.)
2. After scrubbing, rinse thoroughly with hot water.
3. Allow to lie flat and dry.
4. Several excellent germicidal cleansers are also available, including Calgon's, "Big Cat" and Johnson's "Break Up". Clorox is another good cleaner and it is USDA approved.

### **WARNING**

**Do not** use any highly caustic cleaners, acids or ammonia. These may cause corrosion and/or damage to the stainless steel top or the painted surfaces.

### General Operating Instructions

1. The cold pan needs to be pre-chilled for 30 minutes before product is loaded.
2. The thermostat is factory set at 38F/3.33C. To make the cold pan warmer or colder: a.) R404a - Domestic units press the up or down arrow on the thermostat. b.) R290 - International units, hold SET key more than 2 seconds until display starts blinking. Press the up or down arrow to change set point. After 3 seconds (R404a units) or 10 seconds (R290 units) the display stops blinking and returns to actual temperature.
3. The cold pan is design to hold pre-chilled (33°F/.56C to 40°F/4.4C) product, do not place warm product (above 40°F/4.4C ) in the cold pan as it is not designed to reduce the temperature of the product.
4. All product must be removed from the cold pan at the end of the day and the cold pan must be turned off. Wipe down all contact surfaces (See general cleaning instructions).



## PREVENTIVE MAINTENANCE (120/220V)

### Cleaning the Condenser Coil

#### **⚠ WARNING**

**THE POWER MUST BE TURNED OFF AND DISCONNECTED AT ALL TIMES DURING MAINTENANCE OR REPAIR FUNCTIONS.**

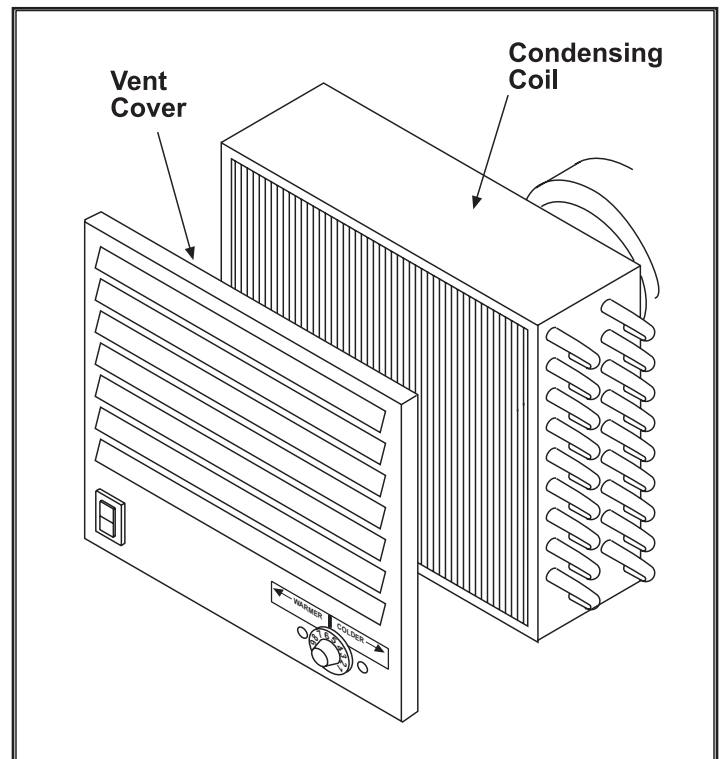
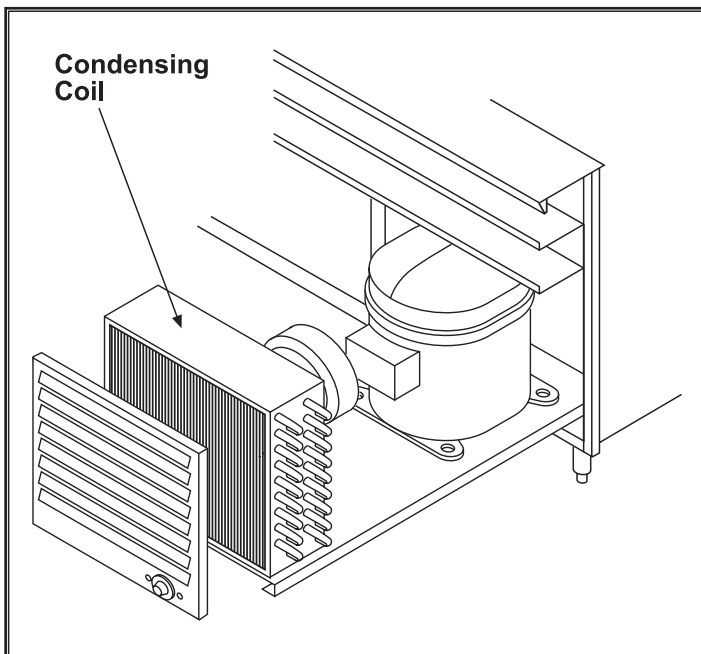
#### **⚠ CAUTION**

**To clean the condenser, never use a high-pressure water wash, which can damage electrical components located at or near the condenser coil.**

The condenser coil is located and accessed from the operators side of the unit. A vent cover protects the condenser from damage. The condenser coil requires regular cleaning and should be done every 60 days. However, if large amounts of dust and grease accumulate sooner, clean the condenser coil every 30 days.

For light dust, use a soft, non-wire brush. For heavier dust, use a vacuum or blow with compressed air.

For heavy grease, use a degreasing agent made specifically for condenser coils on refrigeration units. Spray the degreasing agent on the coil and then blow with compressed air. Never wash with high-pressure water, which can damage the electrical components located at or near the condenser coil.



**Location of Condensing Coil**

## PREVENTIVE MAINTENANCE (230V)

### Cleaning the Condenser Coil

CHECK COILS EVERY 3 MONTHS

#### **⚠️ WARNING**

**THE POWER MUST BE TURNED OFF AND DISCONNECTED AT ALL TIMES DURING MAINTENANCE OR REPAIR FUNCTIONS.**

#### **⚠️ CAUTION**

**Risk of fire or explosion. Flammable refrigerant used which, if not avoided, could result in death or serious injury.**

#### **⚠️ CAUTION**

**To clean the condenser, never use a high-pressure water wash, which can damage electrical components located at or near the condenser coil.**

#### **⚠️ CAUTION**

Failure to maintain a clean condenser coil can cause high temperatures and excessive run times. Check coils every 3 months. Continuous operation with dirty or clogged condenser coils can result in compressor failure. Neglecting the condenser coil cleaning procedures will void all warranties and repair or replacement costs associated with the compressor.

If any buildup is present take the following steps:

#### Step 1

Locate the filter panel cover from the operator's side. Lift panel up and swing outward on hinges to remove panel. See illustration below.

#### Clogged coils

#### Step 2

Clean coils based on how clogged they are.

- If the buildup on the coils consists of only light dust and debris, the condenser can be cleaned with a simple soft brush. Heavier dust build-up may require a vacuum with a soft brush.

#### **⚠️ CAUTION**

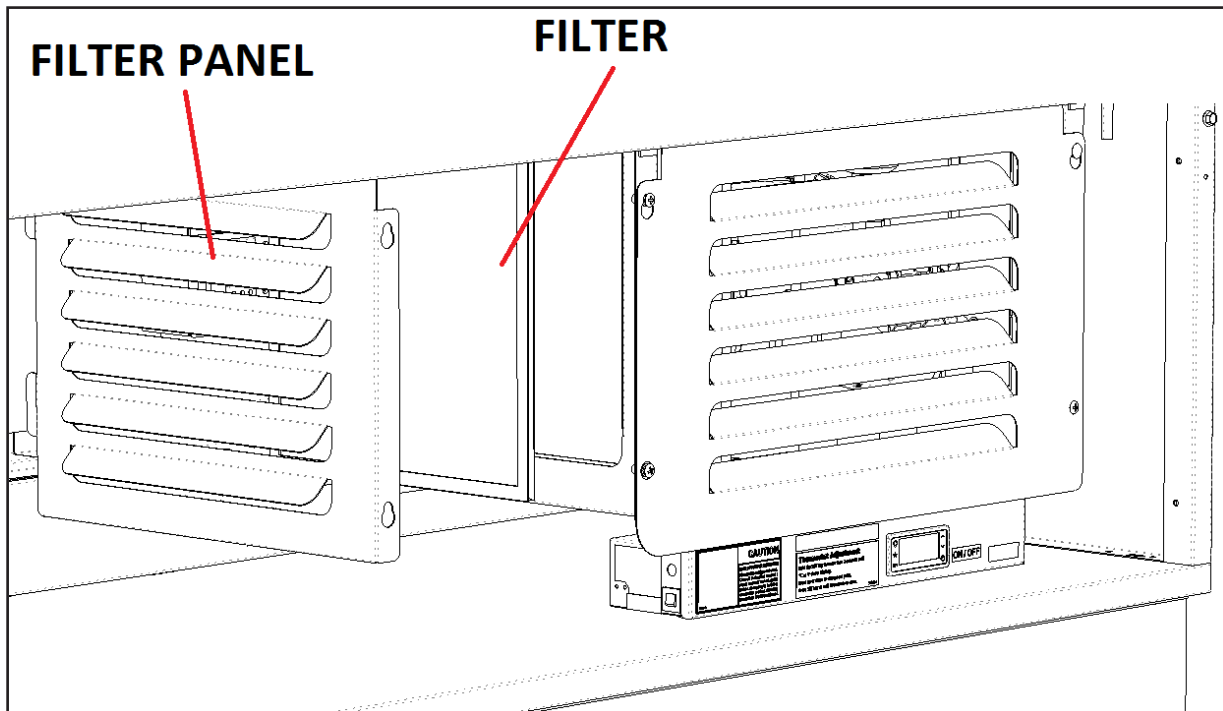
**Be careful not to bend the fins of the condenser. Do not use a pressure air or water to blow into the coil.**

#### Grease clogged coils

- If grease is present, cleaners are available for refrigeration use, and specifically for the condenser coils.

#### Step 3

Replace filter if needed and reinstall filter panel.



## TROUBLESHOOTING

SYMPTOM	CAUSE	REMEDY
Cabinet to warm	Unit not plugged in	Plug unit in
	Thermostat set too warm	Set thermostat to a higher number for a colder temperature
	Thermostat switch stuck open in coldest position	Replace thermostat
	Doors not sealing	Adjust doors
	Torn or damaged door gaskets	Replace gaskets
	Evaporator fan not running	Check and repair or replace motor
	Condenser fan motor not running	Check and repair or replace motor
	Dirty condenser coil or filter	Clean coil or filter
	Refrigerant leak	Find leak, repair and recharge
Replace thermostat	Thermostat set too cold	Set thermostat to a lower number for a warmer temperature
	Thermostat switch is stuck in the closed position	Replace thermostat
Water in bottom of unit	Drain hose plugged	Clear drain hose
	Drain hose loose or disconnected from drain pan	Tighten or connect drain hose

### For Customer Service

To aid in reporting this unit in case of loss or theft, please record below the model number and serial number located on the unit. We also suggest you record all the information listed and retain for future reference.

<b>MODEL NUMBER</b> _____	<b>SERIAL NUMBER</b> _____
<b>DATE OF PURCHASE</b> _____	
<b>DEALER</b> _____	<b>TELEPHONE</b> _____
<b>SERVICER</b> _____	<b>TELEPHONE</b> _____



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