



*The Signature of Quality*®

**INSTALLATION & OPERATIONS INSTRUCTIONS**

*ITR: Self-Contained & Remote Refrigerated Models  
& ITD: Non-Refrigerated Displays*



**KEEP THIS MANUAL FOR FUTURE REFERENCE**

Engineering and technical data are subject to change without notice.

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# INTRODUCTION

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Thank you for purchasing a Federal Industries display case. This manual contains important instructions for installing and servicing the Refrigerated Self-Service Merchandisers. A repair parts list and wiring diagram are also included in the manual. Read all of these documents carefully before installing or servicing your case.



## NOTICE

**Read this manual before installing your case. Keep this manual and refer to it before doing any service on the equipment. Failure to do so could result in personal injury or damage to the case.**



## NOTICE

**Installation and service of the electrical components in the case must be performed by a licensed electrician.**

The portions of this manual covering components contain technical instructions intended only for persons qualified to perform electrical work.



## DANGER

**Improper or faulty hookup of electrical components in the case can result in severe injury or death.**

**All electrical wiring hookups must be done in accordance with all applicable local, regional, or national standards.**

## SERIAL NUMBER

Record the model and serial numbers of the case for easy reference. Always refer to both model and serial numbers in your correspondence regarding the case.

Case Model \_\_\_\_\_ Serial Number \_\_\_\_\_  
Condensing Unit Model \_\_\_\_\_ Serial Number \_\_\_\_\_

This manual cannot cover every installation, use, or service situation. If you need additional information, call or write us:

### WARRANTY/TECHNICAL SERVICE DEPARTMENT

**Federal Industries**

**P.O. Box 290**

**Belleville, WI 53508**

**Toll Free (800) 356-4206 / WI Phone (608) 424-3331**

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# WARNING LABELS & SAFETY INSTRUCTIONS

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This is the safety-alert symbol. When you see this symbol on your case or in the manual, be alert to the potential for personal injury or damage to your equipment.

Be sure you understand all safety messages and always follow recommended precautions and safe operating procedures.



## NOTICE TO EMPLOYERS

**You must make sure that everyone who installs, uses, or services your case is thoroughly familiar with all safety information and procedures.**

Important safety information is presented in this section and throughout the manual. The following signal words are used in the warning and safety messages:

**DANGER:** Severe injury or death will occur if you ignore the message.

**WARNING:** Severe injury or death can occur if you ignore the message.

**CAUTION:** Minor injury or damage to your case can occur if you ignore the message.

**NOTICE:** This is important installation, operation, or service information. If you ignore the message, you may damage your case.

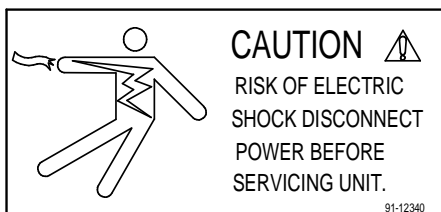
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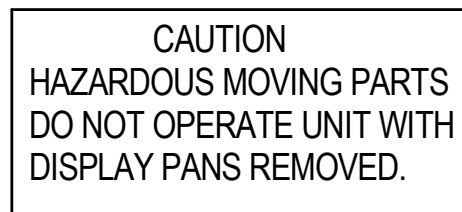
The warning and safety labels shown throughout this manual are placed on your Federal Industries case at the factory. Follow all warning label instructions. If any warning or safety labels become lost or damaged, call our customer service department at 1(800) 356-4206 for replacements.

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*This label is located on the back of the display case.*



*This label is located below the display pan.*

# GENERAL ELECTRICAL & GROUNDING



**DANGER:** Improper or faulty hookup of electrical components in the display case can result in severe injury or death.

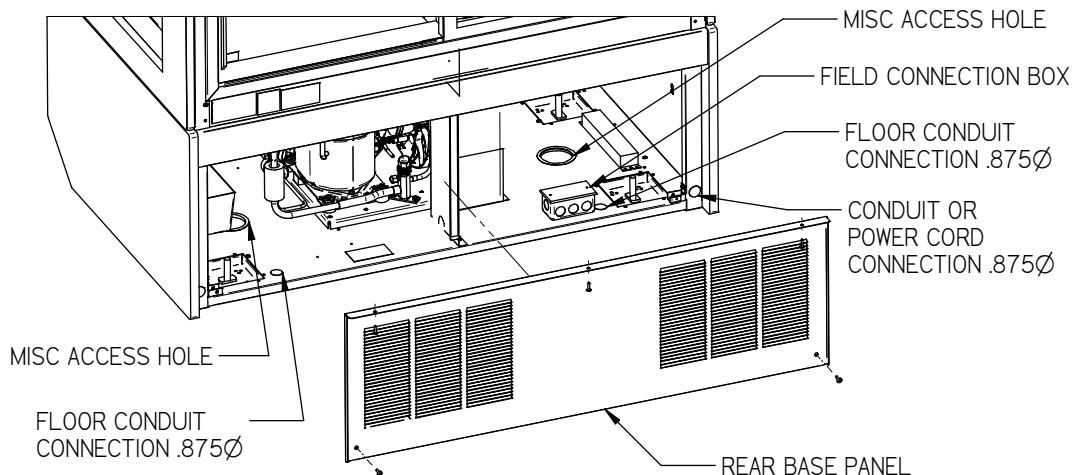
SELF CONTAINED			
MODEL	VOLTAGE	PERMANENT CONNECTED AMPS	CORD CONNECT AMPS/CORD PLUG
ITR3626 & ITR3634	120V/60H/IPH	MIN CIRCUIT AMPACITY 13.9/ MAX FUSE SIZE 20	TOTAL AMPS 8.7 / 5-15
ITR4826 & ITR4834	120V/60H/IPH	MIN CIRCUIT AMPACITY 16.9/ MAX FUSE SIZE 20	TOTAL AMPS 10.7 / 5-15
ITR6026 & ITR6034	120V/60H/IPH	MIN CIRCUIT AMPACITY 17.3/ MAX FUSE SIZE 20	TOTAL AMPS 11.0 / 5-15

REMOTE		
MODEL	VOLTAGE	PERMANENT CONNECTED AMPS
ITR3626 & ITR3634	120V/60H/IPH	MIN CIRCUIT AMPACITY 15/ MAX FUSE SIZE 15
ITR4826 & ITR4834	120V/60H/IPH	MIN CIRCUIT AMPACITY 15/ MAX FUSE SIZE 15
ITR6026 & ITR6034	120V/60H/IPH	MIN CIRCUIT AMPACITY 15/ MAX FUSE SIZE 15

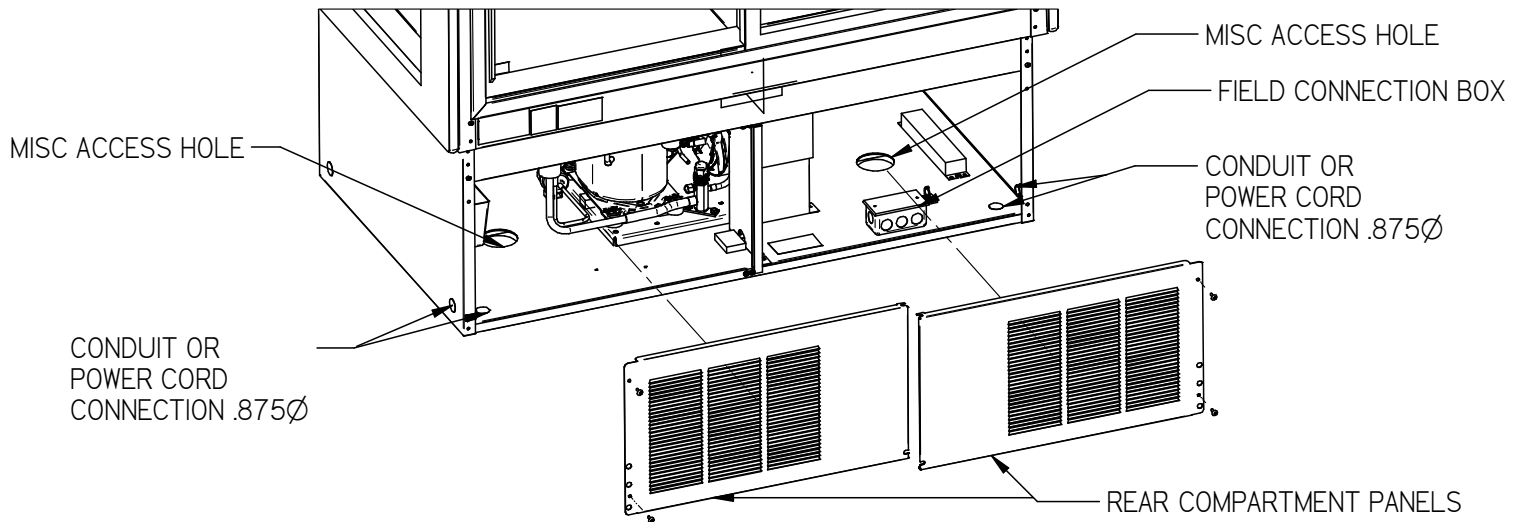
## Permanent Connected

- Only a licensed electrician must perform all case electrical connections.
- All electrical wiring hookups must be done in accordance with all applicable local, regional, or national electrical standards.
- A separate circuit for each display case is required to prevent other appliances on the same circuit from overloading the circuit and causing malfunction.
- The electrical service must be grounded upon installation.
- See the electrical data plate located at the rear of the case for proper circuit size and wire ampacity.
- The electrical connection box is accessible from the rear of the case with rear grill removed. See grill removal section of this manual for grill removal procedure.

## Floor Models:



## Counter Models:



### **Cord Connected (OPTION)**

- A factory installed optional power cord is properly sized to the amperage requirements of the case. See the electrical data plate located on the rear exterior of the case for the proper circuit size for each case.
- The cord is factory installed protruding from the rear corner of the case.
- A separate circuit for each display case is required to prevent other appliances on the same circuit from overloading the circuit and causing malfunction.



**CAUTION** Risk of Electric Shock. If the cord or plug becomes damaged, replace only with a cord and plug of the same type".

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# REFRIGERATION

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**Self Contained Models** Use pressure gauges to set pressure control.

MODEL	CHARGE	REFRIGERATION
ITR3626 & ITR3634	18 OZ	1/2HP 3021 BTUH@90F/20F
ITR4826 & ITR4834	20 OZ	1/2HP 3750 BTUH@90F/20F
ITR6026 & ITR6034	24 OZ	1/2HP 3750 BTUH@90F/20F

The self-contained models are shipped from the factory with a completely operational 134A refrigeration system and require no modifications or adjustments upon installation. Case must be installed as per the installation section of this manual to provide proper condensing air cooling.

## Self Contained Refrigeration Operation

The unit temperature is controlled by an electronic control that senses air temperature and turns refrigeration on off as required to maintain proper temperature.

The electronic control will also sense a frosted coil that requires a shutdown defrost cycle and shuts down refrigeration until defrost is complete. There are may also a defined number of daily defrosts that will also shut the refrigeration solenoid to insure a full defrost occurs. The solenoid will remain off until the either the off time is reached or until the electronic control senses low temperature set point

## Remote Models

MODEL	REFRIGERANT	REFRIGERATION	PRESSURE CUT IN	PRESSURE CUT OUT
ITR3626R & ITR3634R	RI34A	1/2HP 3021 BTUH@90F/20F	32#	0 #
ITR4826R & ITR4834R	RI34A	1/2HP 3750 BTUH@90F/20F	32#	0 #
ITR6026R & ITR6034R	RI34A	1/2HP 3750 BTUH@90F/20F	32#	0 #

Use pressure gauges to set pressure control

## Remote Refrigeration Operation

The remote models are designed to use 134A refrigerant and shipped from the factory with the evaporator coil, expansion valve, drier filter, sight glass and refrigerant solenoid valve. The required high-low-pressure control and remote condenser can be provided as a factory option and will be required to be charged with 134a refrigerant after installation.

The unit temperature is controlled by an electronic control that senses air temperature and opens and closes the refrigerant solenoid valve as required to maintain proper temperature.

Once proper temperature is reached the solenoid valve closes and shuts off the refrigeration flow to the unit and initiates a pump down cycle. This will allow the remote low pressure switch to open and shut off remote compressor. The solenoid will remain off until the either the off time is reached or until the electronic control senses that low temperature set point has been reached.

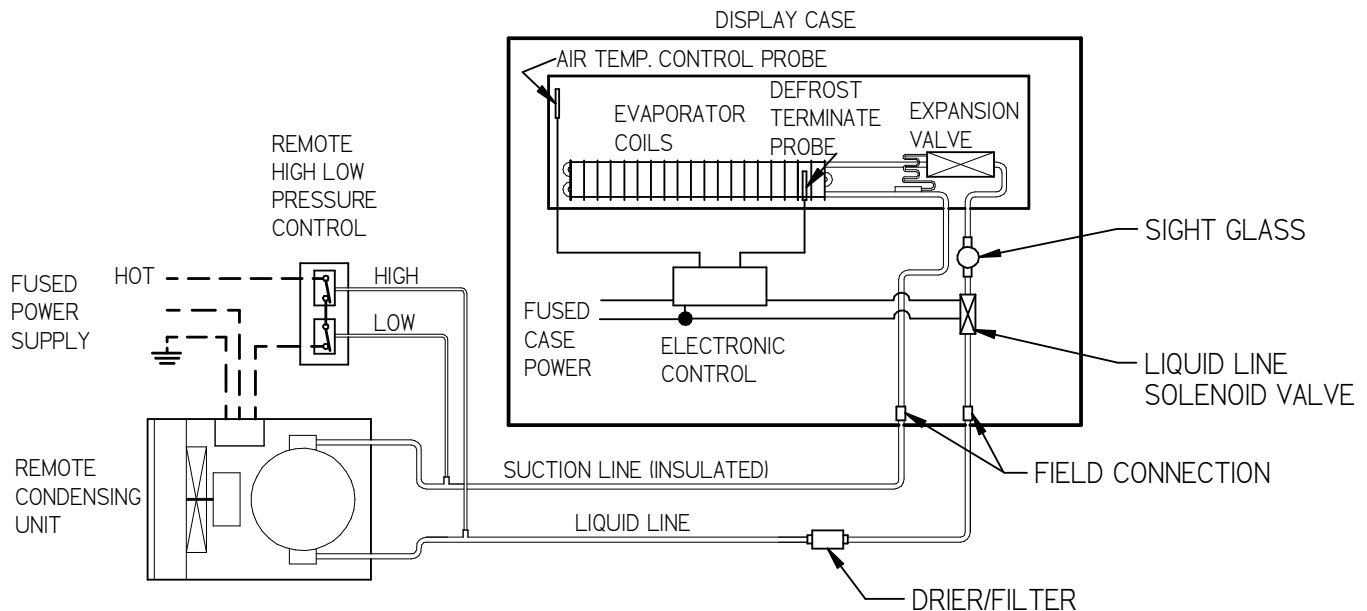
The electronic control will also sense a frosted coil that requires a shutdown defrost cycle and closes solenoid until defrost is complete. There are may also a defined number of daily defrosts that will also shut the refrigeration solenoid to insure a full defrost occurs. The solenoid will remain off until the either the off time is reached or until the electronic control senses low temperature set point.



## Remote Refrigeration Instruction

The condensing unit and pressure control are optionally supplied from the factory for remote location installation. A remote high low pressure switch must be mounted and wired by the installer. The high low pressure switch must be wired in series with the compressor power supply as shown in diagram below.

1. Mount condensing unit indoors as close to the remote display case as practical. The refrigeration line should be as short as possible and must not exceed 30 feet.
2. All refrigeration and/or electrical materials between the condensing unit and display case are to be supplied by installing contractor.
3. Route properly sized and designed refrigeration lines from the condensing unit to the cabinet. Horizontal suction lines should be pitched downward towards the condensing unit at least  $\frac{1}{2}$ " per 10' run to aid the oil drainage. A "P" trap must be installed in the suction line at the foot of every riser to insure oil return. Dry nitrogen must be used to flow through tubing while brazing refrigeration lines.
4. Suction line must be insulated the entire length with Armaflex (or equivalent). Do not run liquid line inside insulation with suction line.
5. The remote high/low-pressure control must be mounted, wired and set pressures by the installer.
6. Leak check condensing unit, cabinet, and all connecting tubing. Cabinet and condensing unit tubing should be checked to insure no leaks occurred during shipping or from rough handling. Make certain all refrigeration valves are opened and evacuate system to 500 microns. Charge the system with refrigerant type specified on the data plates.



## **Condensate Evaporator Pan and Pump**

### **Condensate Evaporator (Standard Self Contained Models)**



**NOTICE:** During normal defrost cycles, steam from the condensate evaporator may be visible around the case.

The standard Self Contained case is furnished with an electric condensate evaporator. Plumbing connections are not required.

The condensate evaporator can be removed from the case and the condensate drain can be plumbed to a drain to conserve energy if desired. Disconnect the condensate evaporator wires at the condensate evaporator to remove. This must be done by a qualified electrician.

Make sure that the drain line has not been dislodged during shipment and that the drain trap terminates properly over the water reservoir.

### **Condensate Pump (Standard Remote, optional Self Contained)**

**NOTICE:** This unit could be shipped with an optional condensate pump. The pump has a float that turns the pump on automatically when needed. The pump is mounted in the base compartment. The pump should be cleaned and inspected every 3-4 months.

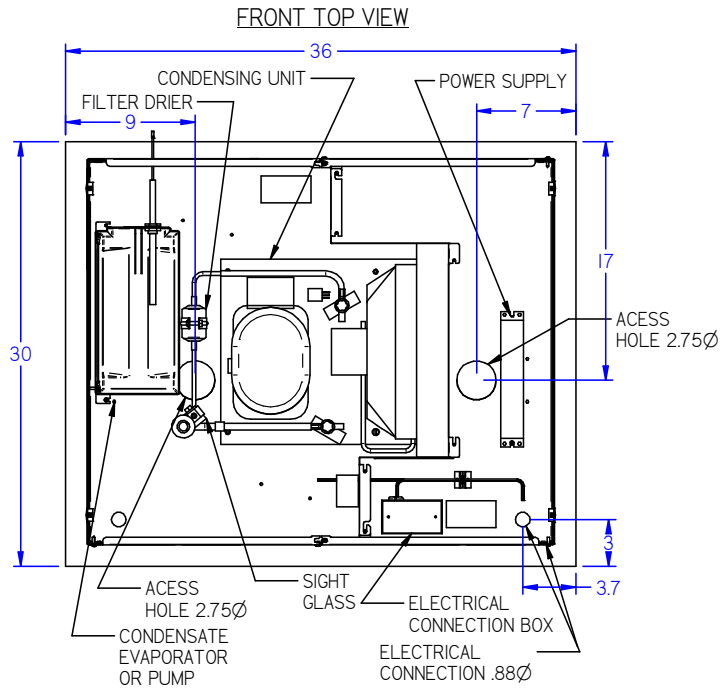
When unit is shipped with a condensate pump a condensate discharge hose is supplied from factory. This hose must be run to a nearby drain. When the condensate pan is full the pump will turn on and pump water out condensate drain hose. Note Drain hose can be run in verticle direction but must not exceed height of 15 feet

**Note:** There is a piece of cardboard that has to be removed from the side of the pump to free up the float. If this is not done, the pump will not turn on and the pan will overflow.

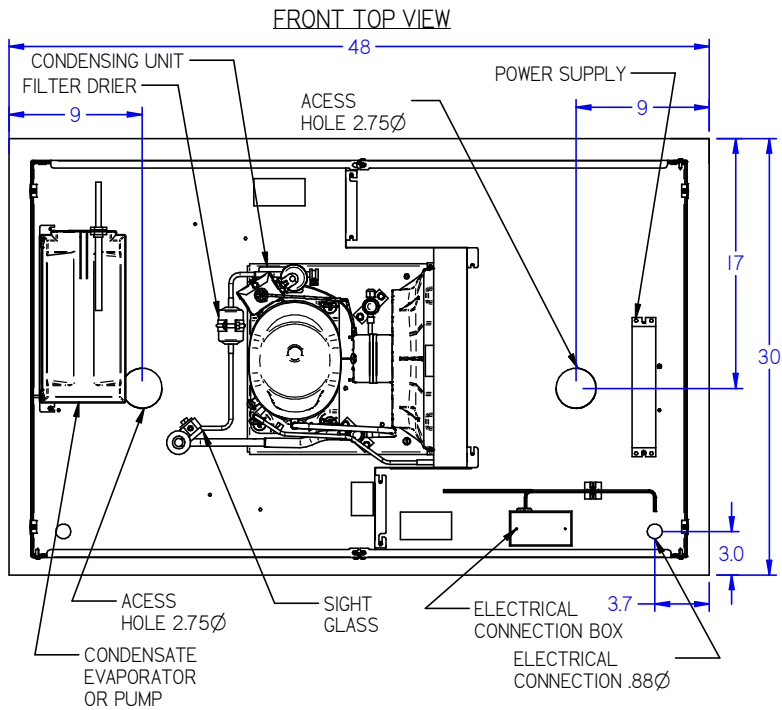
# BASE COMPONENT LAYOUTS

## Refrigerated Self Contained Models

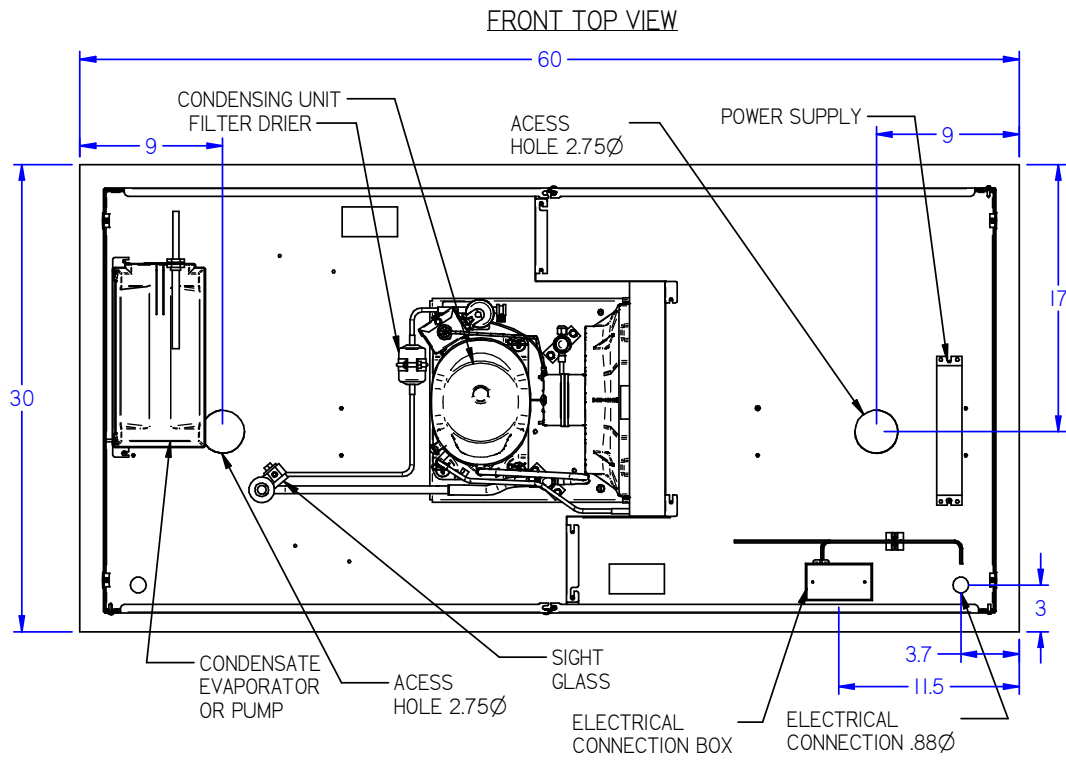
### Counter ITR36 Self Contained



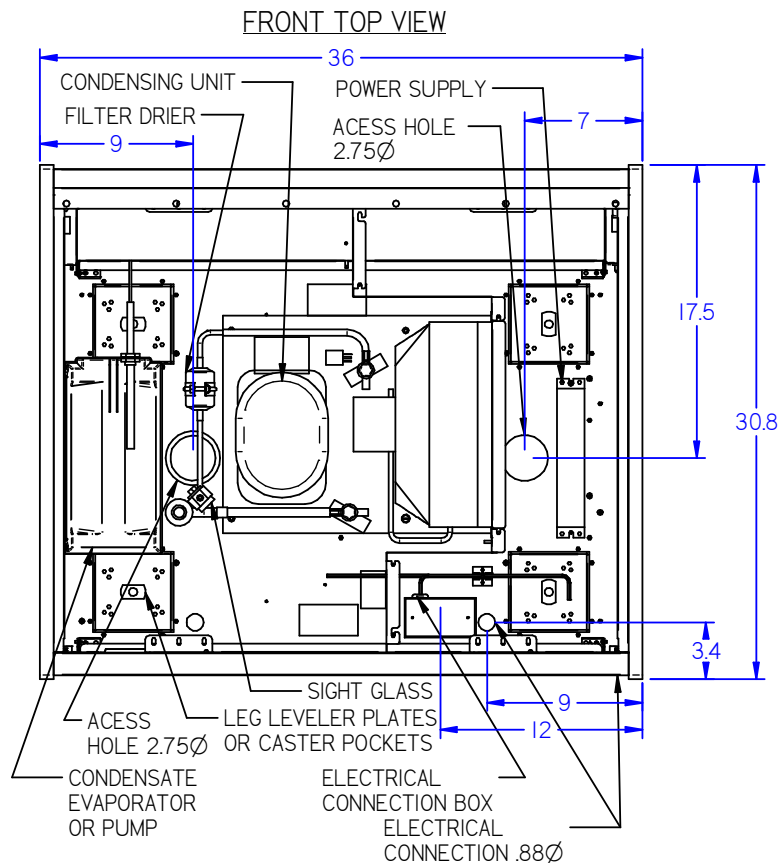
### Counter ITR48 Self Contained



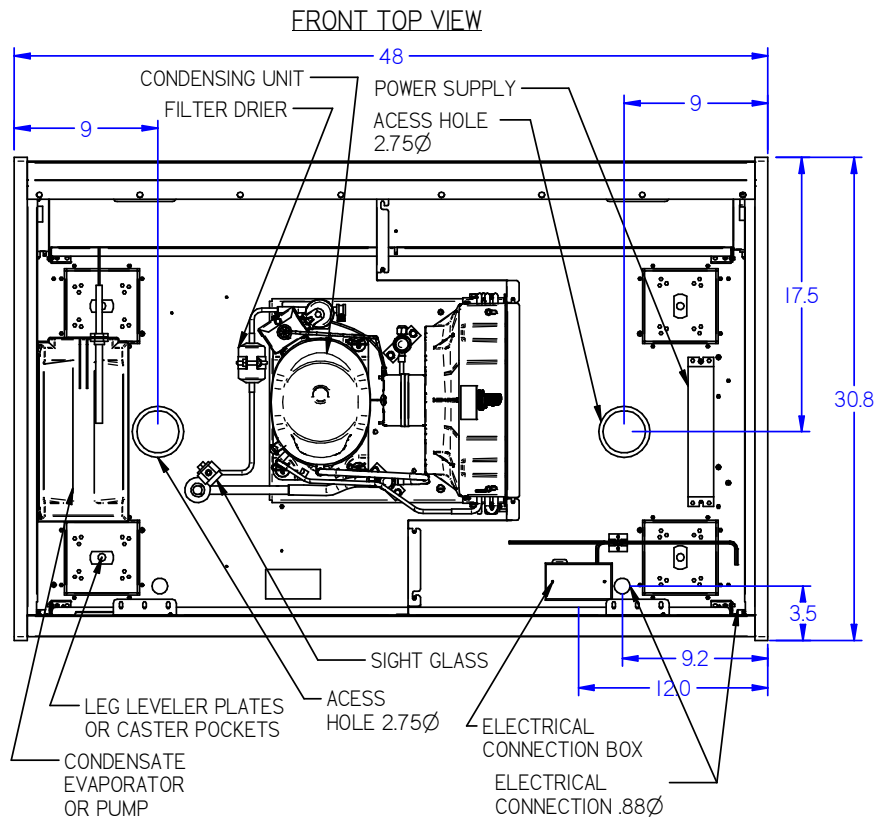
## Counter ITR60 Self Contained



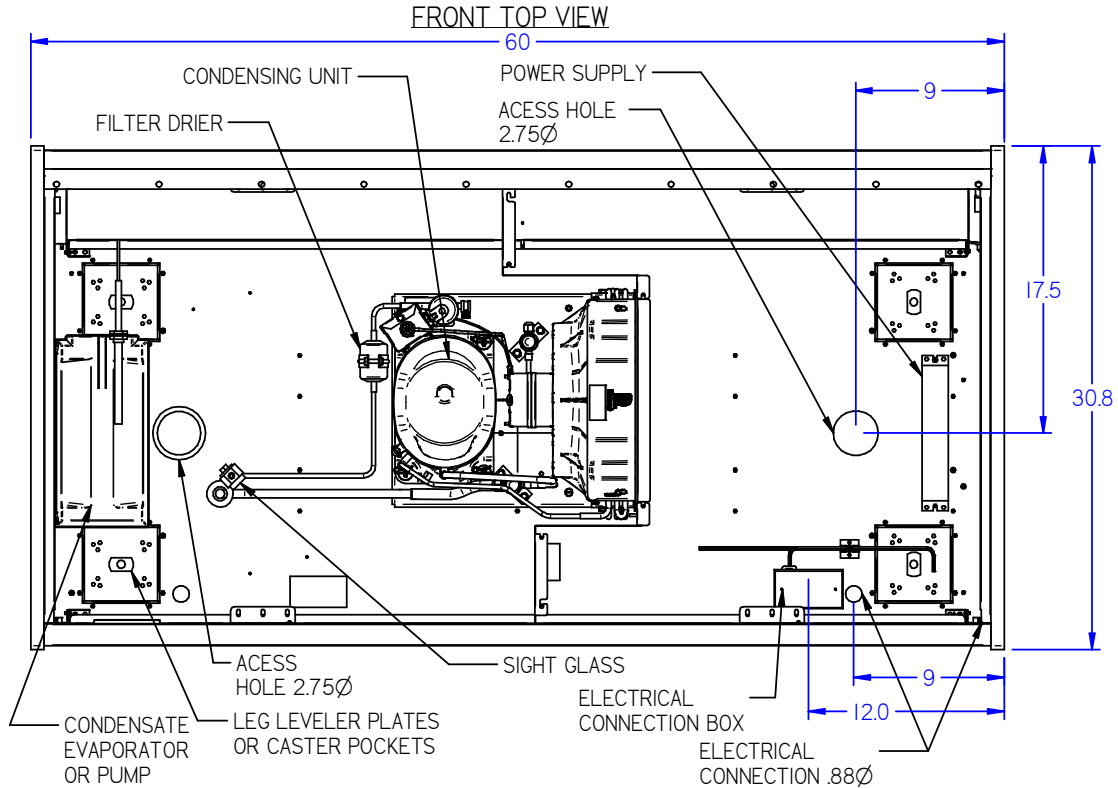
## Floor ITR36 Self Contained



## Floor ITR48 Self Contained



## Floor ITR60 Self Contained



## **Refrigerated Remote Models**

**Counter ITR36 Remote**

**Counter ITR48 Remote**

**Counter ITR48 Remote**

**Floor ITR36 Self Remote**

**Floor ITR48 Remote**

**Floor ITR60 Remote**



# **INSTALLATION INSTRUCTIONS FLOOR MODELS**

## **Inspection for Shipping Damage**

You are responsible for filing all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage is noted to shipping crates, cartons, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

## **Locating Display Case**

The case must be located where it is not subjected to the direct rays of the sun, heating ducts, grills, radiator, or ceiling fans, nor should it be located near open doors or main door entrances. Also, avoid locations where there are excessive air movement or air disturbances.

The case requires a minimum of 36" clearance on side of air intake or air discharge. Do not locate case with front or back tight against the wall.

No clearance is needed on sides of the unit.

## **Removing Case From Shipping Skid and General Installation**



**CAUTION: Do not push or pull against the top end glass, or door frames and do not pull on end panels when removing the case from the skid or moving the case. Case damage or glass breakage will result.**

1. Remove crate top and sides and note missing or damaged items as explained in the pre-installation procedures outlined above.
2. Move the case as near as possible to the final location and before removing it from the shipping skid.
3. Remove the (4) brackets that secure the case to the shipping skid.
4. Prepare cabinet according to instructions in this section that pertain to your model.
5. Lift the case off of skid and into required position. Only lift the case from under the front and rear lips on base of unit.
6. The case must be level for proper drainage of defrost condensate to the condensate evaporator or pump. Using the wrench provided level and square the case as needed by adjusting the leg leveler in each corner of base.
7. The leveled case must be sealed to the floor using a NSF Listed Sealant.

## **Additional Parts Shipped with Unit.**

Remove bubble wrap and packing material for all shelves and panels, brackets, etc. If it is necessary to remove tape residue from plastic materials, use cleaning compounds recommended in the cleaning section of this manual. Install panels and shelving as described proper section of this manual.

## **Cleaning**

For initial setup, clean the case as outlined in the "Weekly Cleaning" section of this manual.

# **INSTALLATION INSTRUCTIONS COUNTER MODELS**

## **Inspection for Shipping Damage**

You are responsible for filing all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage is noted to shipping crates, cartons, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

## **Locating Display Case**

The counter units are designed to be placed on or into the top of a cabinet counter. The cabinet that the case is to be used with must be located where it is not subjected to the direct rays of the sun, heating ducts, grills, radiator, or ceiling fans, nor should it be located near open doors or main door entrances. Also, avoid locations where there are excessive air movement or air disturbances.

The refrigerated cases require special consideration of cabinet design to allow condenser air to enter intake and discharge from cabinet space. The requirements for specific cases outlined in this section must be followed. Failure to follow these instructions will void warranty.

## **Removing Case From Shipping Skid and General Installation**



**CAUTION: Do not push or pull against the top end glass, or door frames and do not pull on end panels when removing the case from the skid or moving the case. Case damage or glass breakage will result.**

2. Remove crate top and sides and note missing or damaged items as explained in the pre-installation procedures outlined above.
8. Move the case as near as possible to the final location and before removing it from the shipping skid.
9. Remove the (4) brackets that secure the case to the shipping skid.
10. Prepare cabinet according to Cabinet Mounting Counter Models instruction in next section that pertain to your model.
11. The counter cases are shipped with end glass removed and lifting handles are provided on each side of case. Using lifting handles lift the case off of skid and into required position. Once case is placed into position remove lifting handles and install end glass as described in End Glass Installation Section
12. The counter top that the case is being placed on must be level for proper drainage of defrost condensate to the condensate evaporator or pump.
13. The case must be sealed to the counter using a NSF Listed Sealant.

## **Additional Parts Shipped with Unit.**

Remove bubble wrap and packing material for all shelves and panels, brackets, etc. If it is necessary to remove tape residue from plastic materials, use cleaning compounds recommended in the cleaning section of this manual. Install panels and shelving as described proper section of this manual.

## **Cleaning**

For initial setup, clean the case as outlined in the “Weekly Cleaning” section of this manual.

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# CABINET MOUNTING COUNTER MODELS

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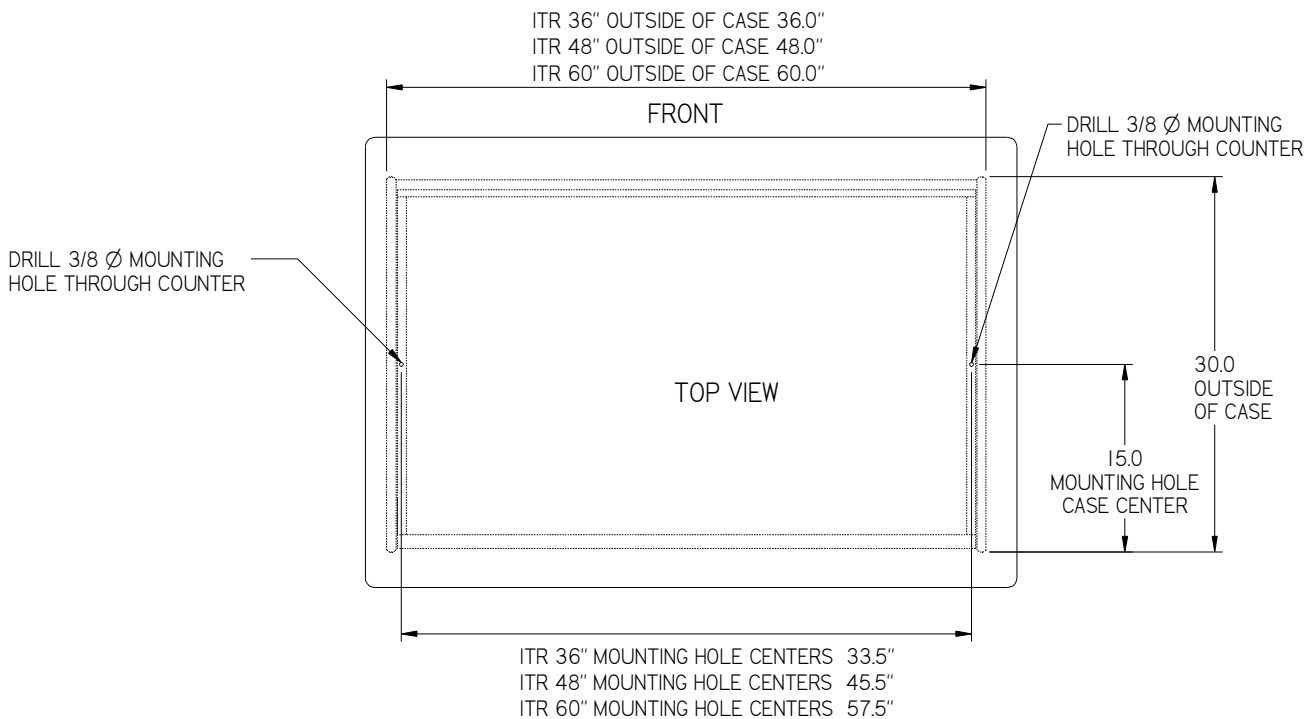
## ITD Non-Refrigerated Model Mounting

### **Cabinet Preparation**

The ITD models set directly on top of counter. The Case must be attached and sealed to top of counter to prevent counter from moving. Counter will require (2) 3/8" dia. holes to be drilled through the counter top surface to attach case to counter. Use the diagram below for hole location.

Place case on to counter and fasten from under cabinet with (2) 10-32 screws and washers provided. The case must be sealed to the counter using a NSF Listed Sealant.

**IMPORTANT:** When placing cases in a line up the number of end panels used will be different. The cut out and hole placement dimension will need to be adjusted for each particular line up circumstance. See LINE UPS INSTALLATION section of this manual.



# ITR Refrigerated Self Contained Models

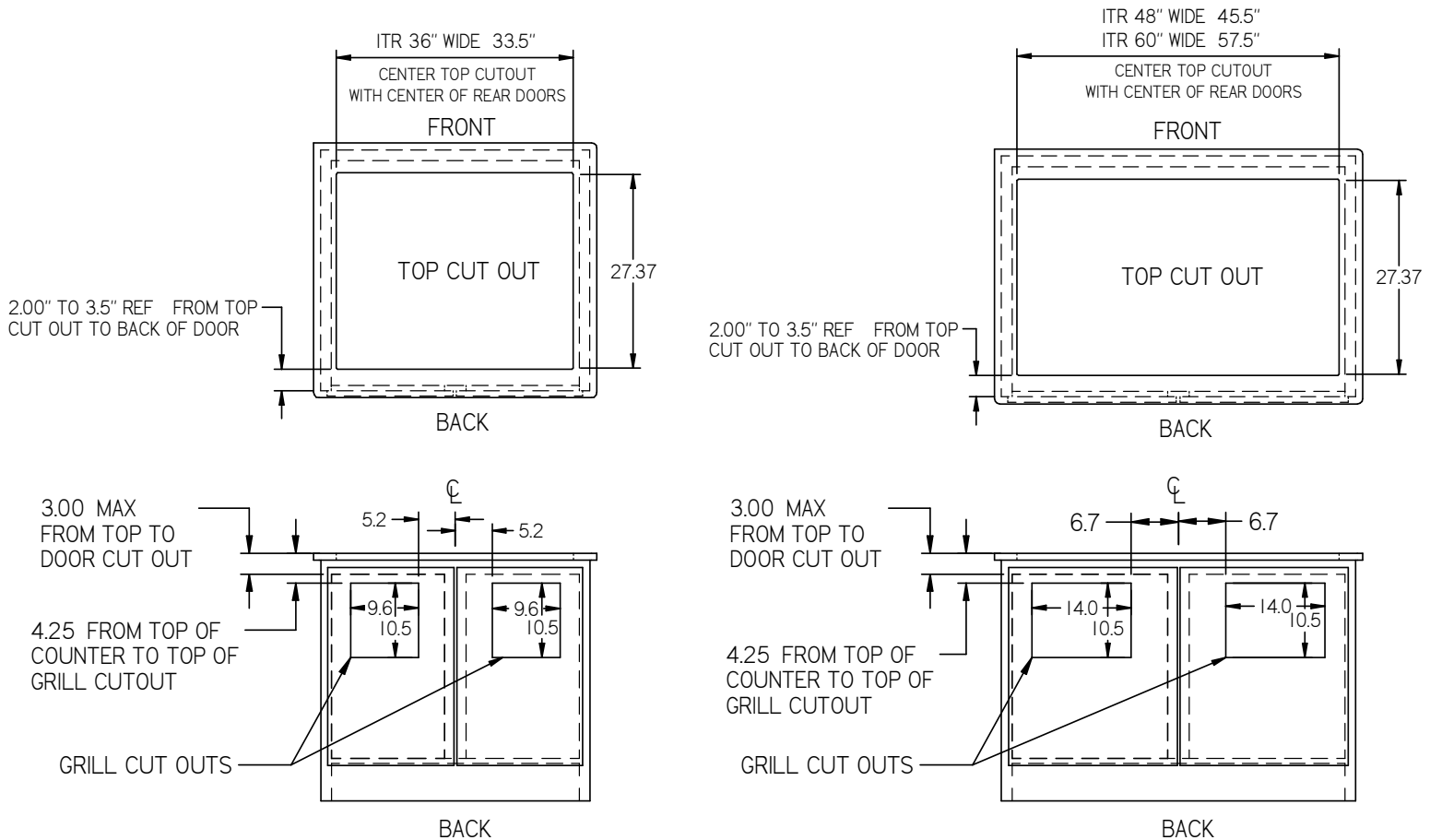
## Cabinet Preparation

The ITR Self Contained models have a large condenser compartment hanging from the bottom of case that contains the condenser and condensate evaporator unit. This compartment hangs inside the cabinet compartment. The interior of the cabinet must be open to allow space for this compartment.

## Cabinet Cutout

The countertop must be cut to allow the case's base and condenser compartment to drop into the cabinet interior. Use the diagram below for cutout dimensions.

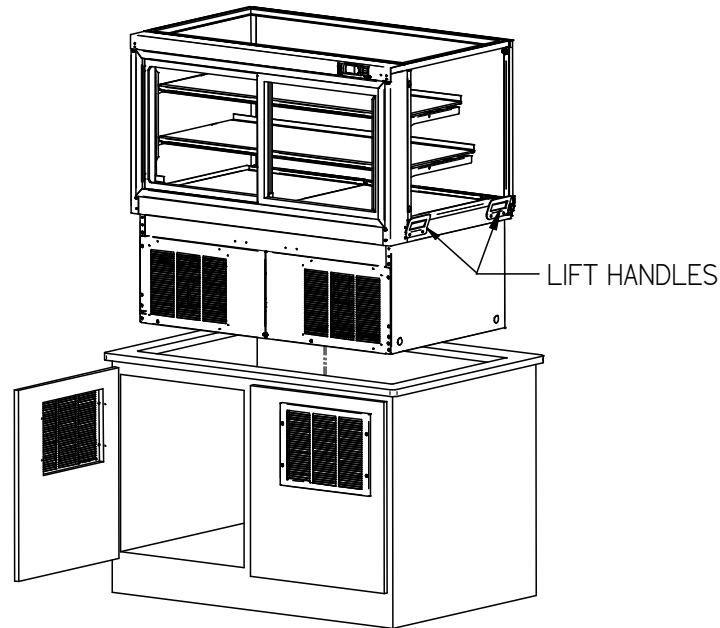
**IMPORTANT:** When placing cases in a line up the number of end panels used will be different. The cut out and hole placement dimension will need to be adjusted for each particular line up circumstance. See **LINE UP INTALLATION** section of this manual.



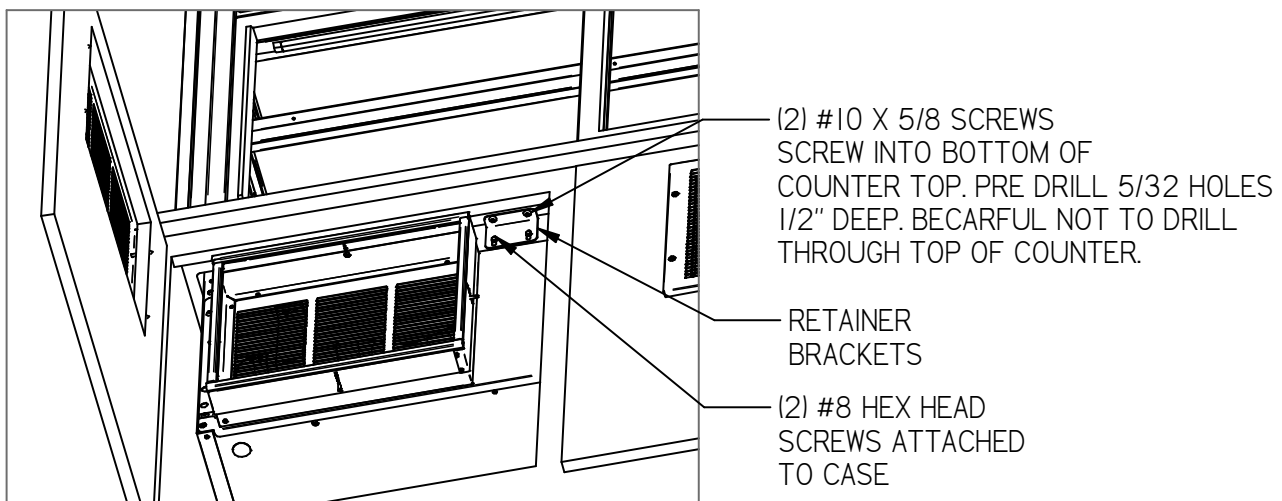
## Case Install

The Inner Outer Duct Assemblies and Retainer Brackets are shipped attached to the case refrigeration compartment. The Duct Assemblies and Retainer Brackets must be removed before setting case into cabinet opening. To disassemble remove the (8) screws holding each Duct Assembly to the louvered panel also remove the (2) screws holding each Retainer Bracket.

The case is shipped without end panels to provide handles to lift case into cabinet. Once case is placed into cabinet remove the (4) handles and install side glass as described in End Panel Installation section of this manual.



Once case is in place it must be secured to prevent it from moving during use. Reattach the Retainer Brackets that were previously removed in same location using the #8 hex head screws. Push bracket up tight to bottom of counter top and tighten screws. Pre-drill (4) 5/32 holes 1/2" deep into the counter top. (Be careful not to drill through top of counter)



## Condenser Air Duct

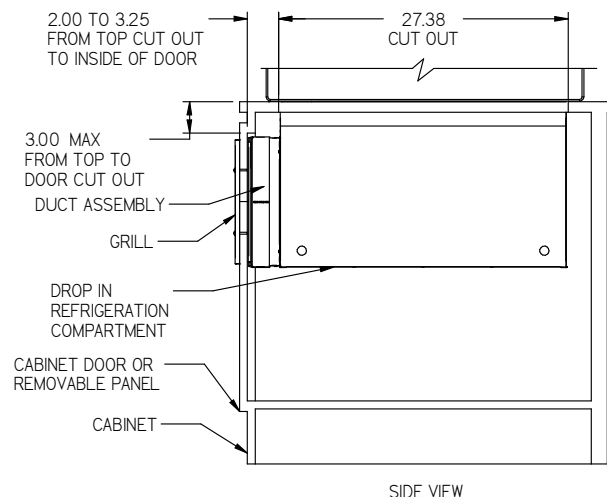
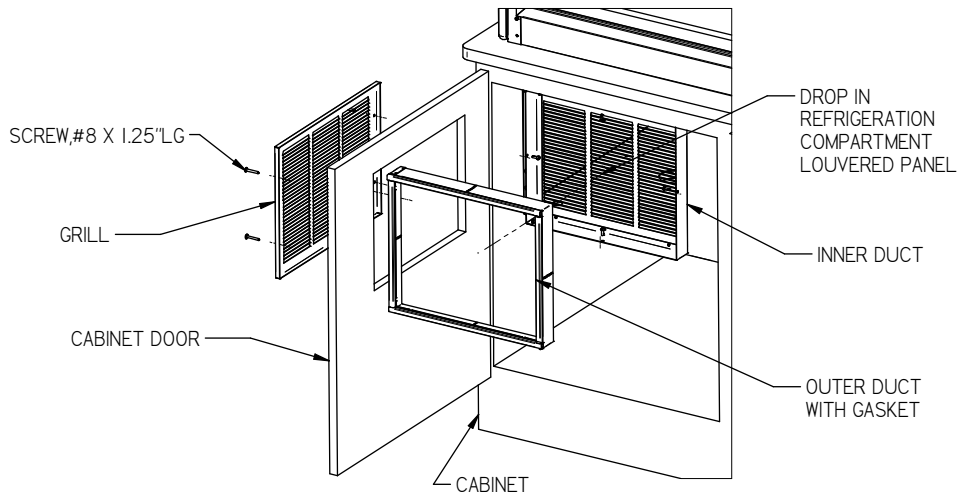
**IMPORTANT: Federal Industries reserves the right to deny warranty if the cabinet is not ducted to allow proper condenser air intake and discharge or if the cabinet louvers are not installed properly or if condenser air intake and discharge air is blocked or located near a source of heat.**

The condenser air intake and discharge must be separated and vented out of the cabinet compartment for case to operate. The required louver grills and expandable ducts for both intake and discharge are provided with case.

Note: The intake and discharge louvered panels mounted to condenser compartment are located on the back of the compartment and solid panels are mounted to front of the compartment when shipped from factory. This set up is for air intake and discharge out of the back of the cabinet. The intake and discharge louvered panels can be moved to front of compartment and the solid panels moved to the back of compartment if air intake and discharge is required out of front of cabinet

The Outer Duct must be adjusted so that the gasket seals against the Cabinet Door. Remove the (4) screws located inside of the Outer Duct. There are multiple holes in the Outer Duct. Move Outer Duct to desired depth and reinstall (4) screws. CTest close door and be sure Gasket seals hits door

Center the supplied Grills on outside of Cabinet Doors and mark holes onto doors. Drill 1/8 holes into door in marked positions. With Grill flanges against door screw Grill to cabinet door with (4) supplied #8 x1-1/4 screws.



## **ITR Refrigerated Remote Models**

### **Cabinet Preparation**

The ITR Remote models have a large condensate evaporator compartment hanging from the bottom of case that contains the condensate evaporator pan. This compartment hangs inside the cabinet compartment. The interior of the cabinet must be open to allow space for this compartment. The countertop must be cut to allow the case's base and condenser compartment to drop into the cabinet interior. Use the diagram below for cutout dimensions.

Once the case is placed into cutout it must be secured to cabinet using brackets and wood screws provided.

**IMPORTANT:** When placing cases in a line up the number of end panels used will be different. The cut out and hole placement dimension will need to be adjusted for each particular line up circumstance. See LINE UP INTALLATION section of this manual.

The condensate air louvers are located on each side of the condensate evaporator compartment. Do not block these louvers. The louver panel provided with case must be installed in the cabinet to allow condensate moisture to vent. The louver can be placed on any side of cabinet, but must be as near to the top as possible. A 6" minimum clearance must be maintained from cabinet louver.

### **Connect remote refrigeration lines**

1. Remove the cover by removing the (4) screws on the bottom of case inside the cabinet compartment.
1. Connect remote refrigeration as described in the Remote Connection section in this manual. A 2-3/4 hole through the condensate evaporator compartment is provided.
2. Make sure that the drain line has not been dislodged during shipment and that the drain trap is located properly over the water reservoir of the condensate evaporator pan.
3. Reinstall evaporator condensate cover.

## Refrigeration Compartment Panel Removal

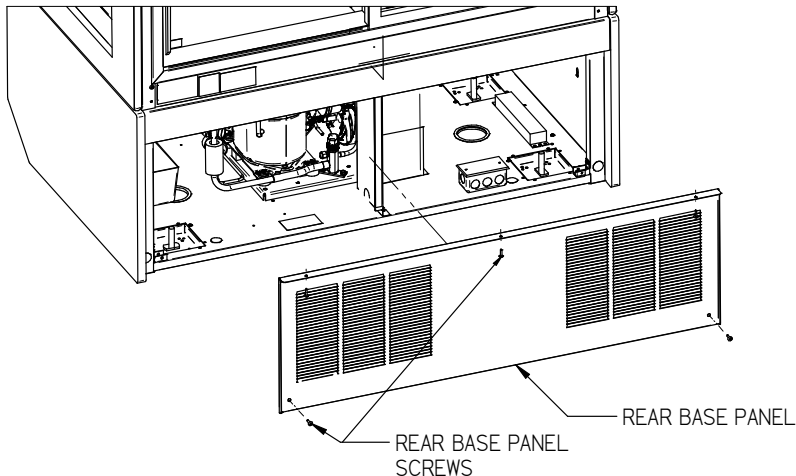
### Floor Models



**DANGER: Electric shock hazard. Do not operate unit with panels removed.**

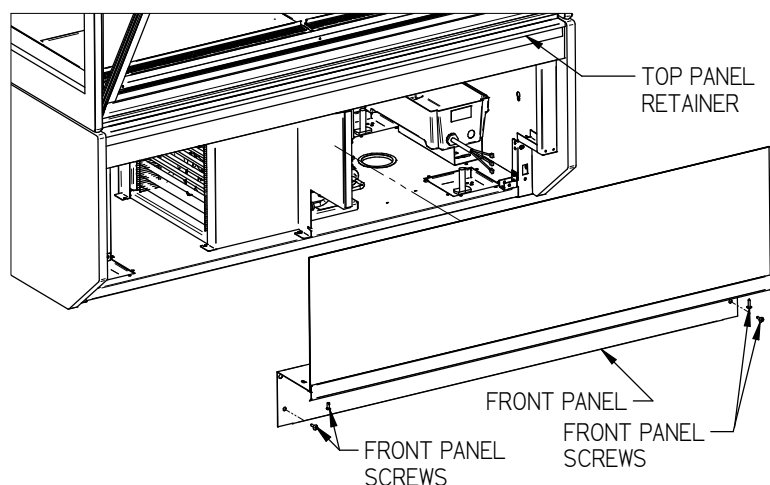
Panels must be in place when operating the case.

### Back Panel



1. Disconnect power to Display Case.
2. Remove Philips head screws located in each lower corner of panel.
3. Remove Philips head screws located on top of panel under the base cross member.
4. Pull top of panel outward until lip on bottom of panel clears bottom of base and remove from case.

### Front Panel



1. Disconnect power to Display Case.
2. Remove (2) front panel phillips head screws from each lower corner of front panel (1) is located on front of panel and the other under the recess behind trim strip. Do not remove the screws holding trip strip to front panel.
3. Slide the front panel down until it slides out of the top panel retainer lip at the top of the panel.
4. Install panel in reverse order.

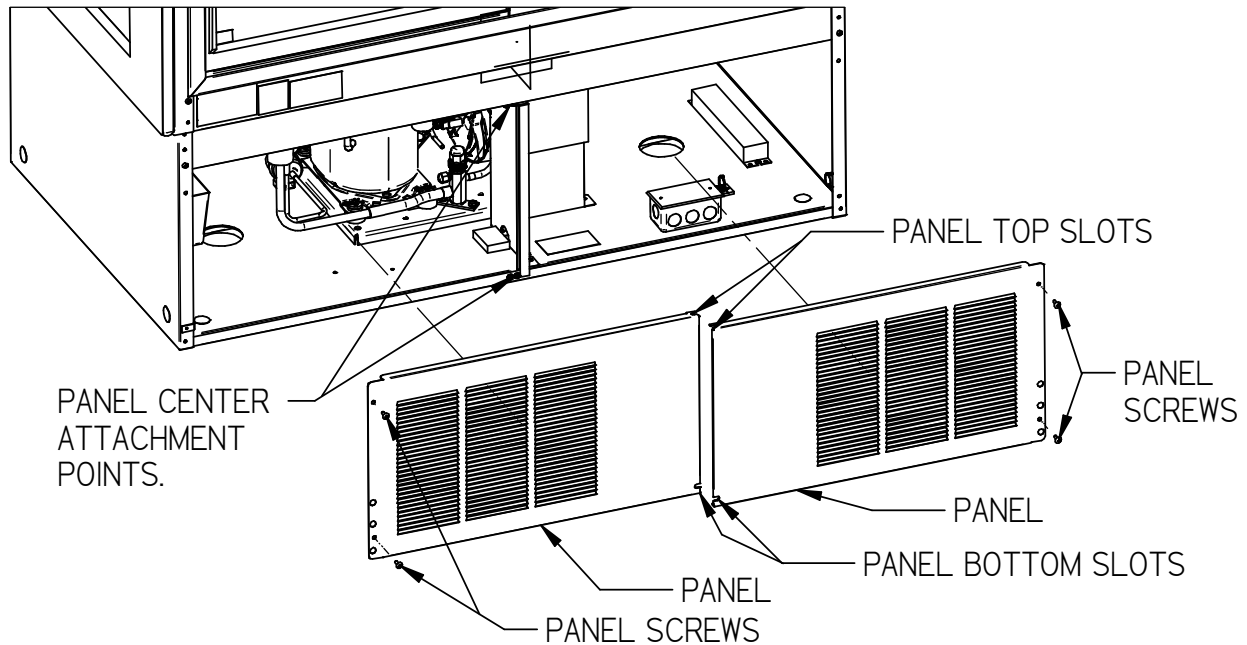


## Counter Models



**DANGER: Electric shock hazard. Do not operate unit with panels removed.**

Panels must be in place when operating the case.



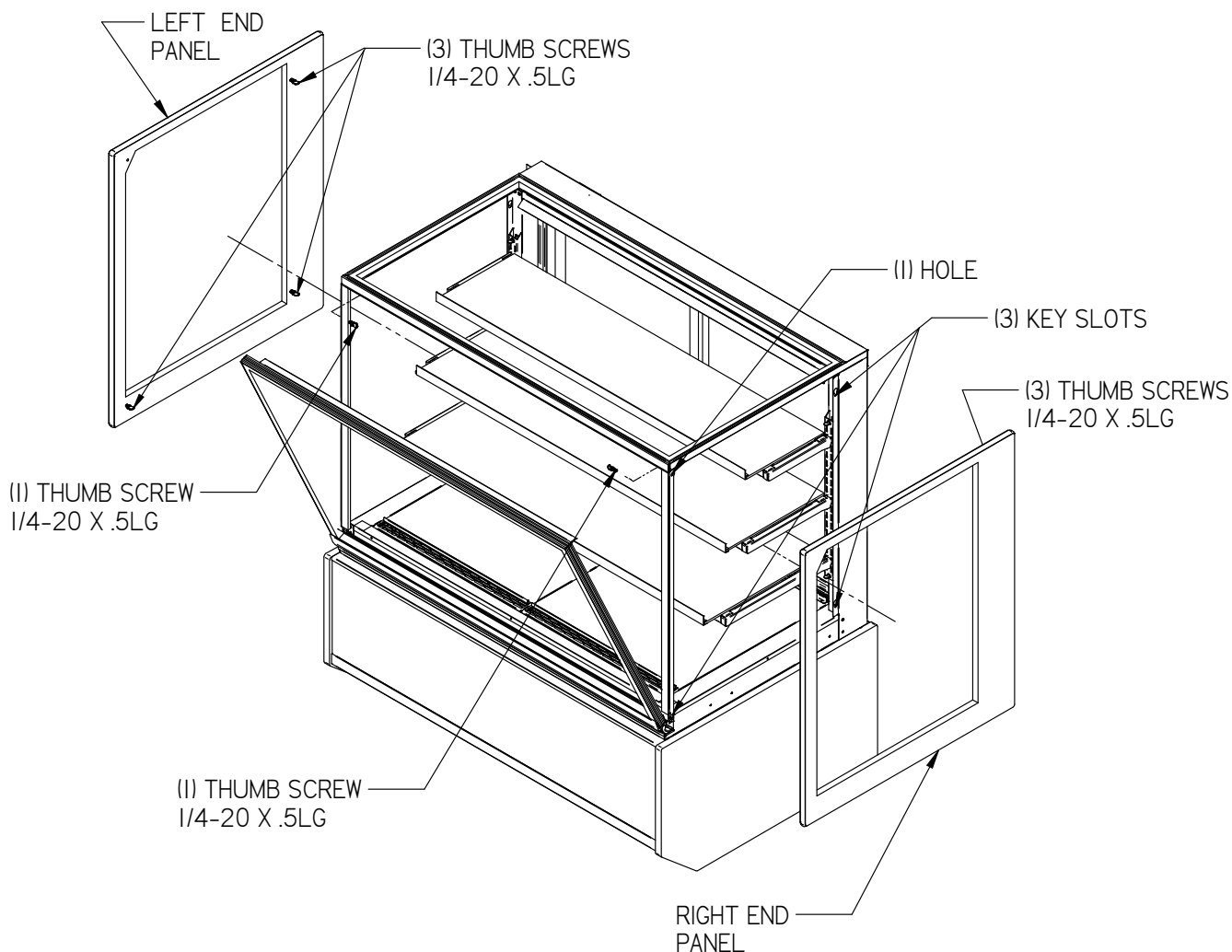
On counter drop in models, the panels are split to allow panel to easily be removed out of swinging cabinet doors that may have a center post.

Also note that unit is shipped with louvered panels on back of case and solid panels on front. This allows air flow for condenser to be in and out of the back of cabinet. These louvered panels can be switched with solid front panels to allow air flow in and out front of cabinet. They can also be mixed with one louver panel in front and one in back to allow front condenser air in or out of front and rear air in or out back. This must be determined before placing unit into counter and cabinet must be prepped to allow desired air flow. See cabinet prep section of this manual. When removing and installing panels be sure panels are reinstalled in correct location to allow condenser air flow.

Note: The front and back panels instruction are identical.

1. Disconnect power to Display Case.
2. Open cabinet door to allow access to condenser compartment.
3. Remove (2) panel screws in outside upper and lower corners of panel.
4. Slide slotted end of panel out of center attachment point and remove from case. Note: Do not remove screws from center attachment point.

# END PANEL INSTALLATION



-End Glass is shipped installed on Floor model units.

-End glass is shipped loose on counter drop in units and will need to be installed after unit is placed in to counter and lift handles are removed.

When placing cases in a line up, the number of end panels and end panel type may vary.

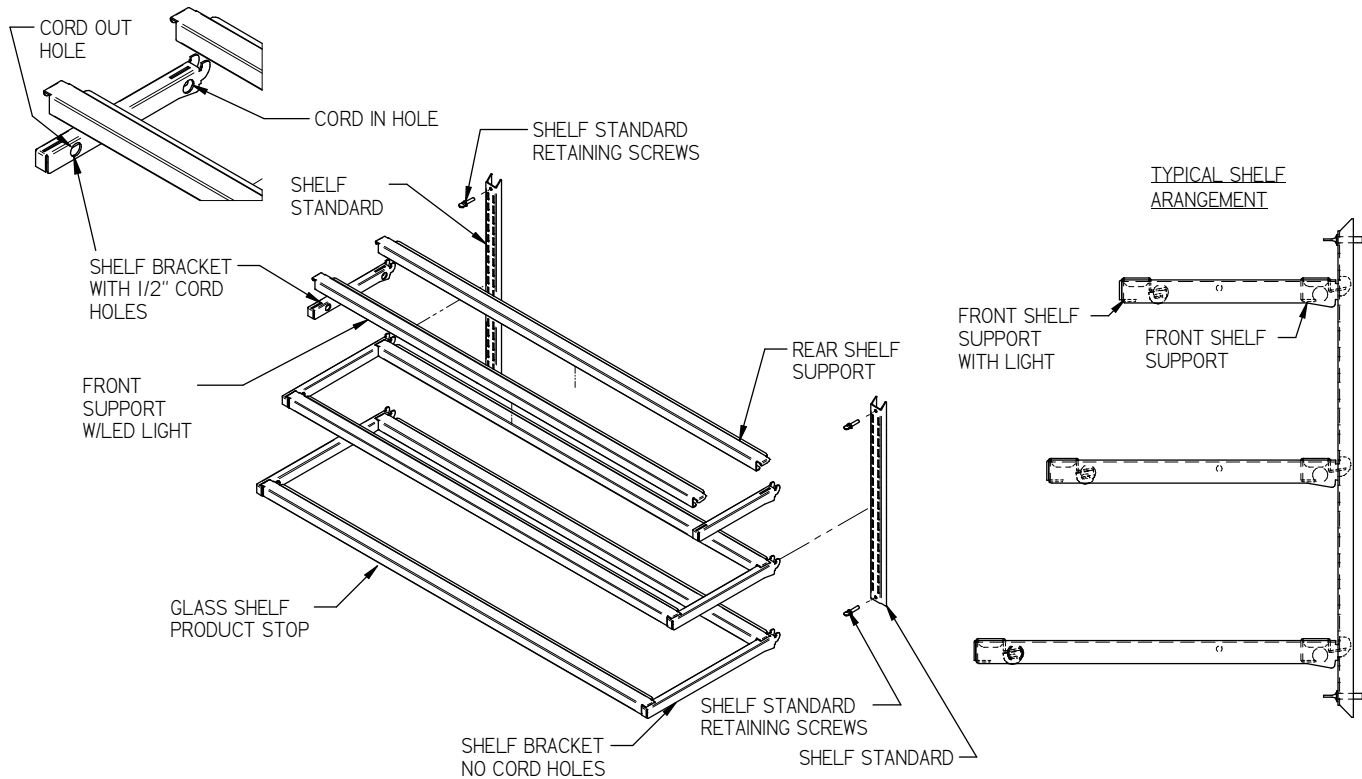
See Case Line Up Installation section of this manual.

1. On each side of case there are (3) keyhole mounting slots for easier installation of glass. There is (1) mounting hole in the front top corner of case to prevent glass from accidentally popping off of end of case.
2. Screw (3) thumb screw about half way into end panel in location of the keyholes in case as shown.
3. Align end panel thumb screws with keyholes and hook end panel on to case. Do not tighten thumb screws at this time.
4. Align the mounting hole in top front corner of case with top front hole in end panel and attach with 1/4-20 x .5LG thumb screw
5. Tighten all (4) thumb screws by hand.
6. Remove end panels in reverse order.

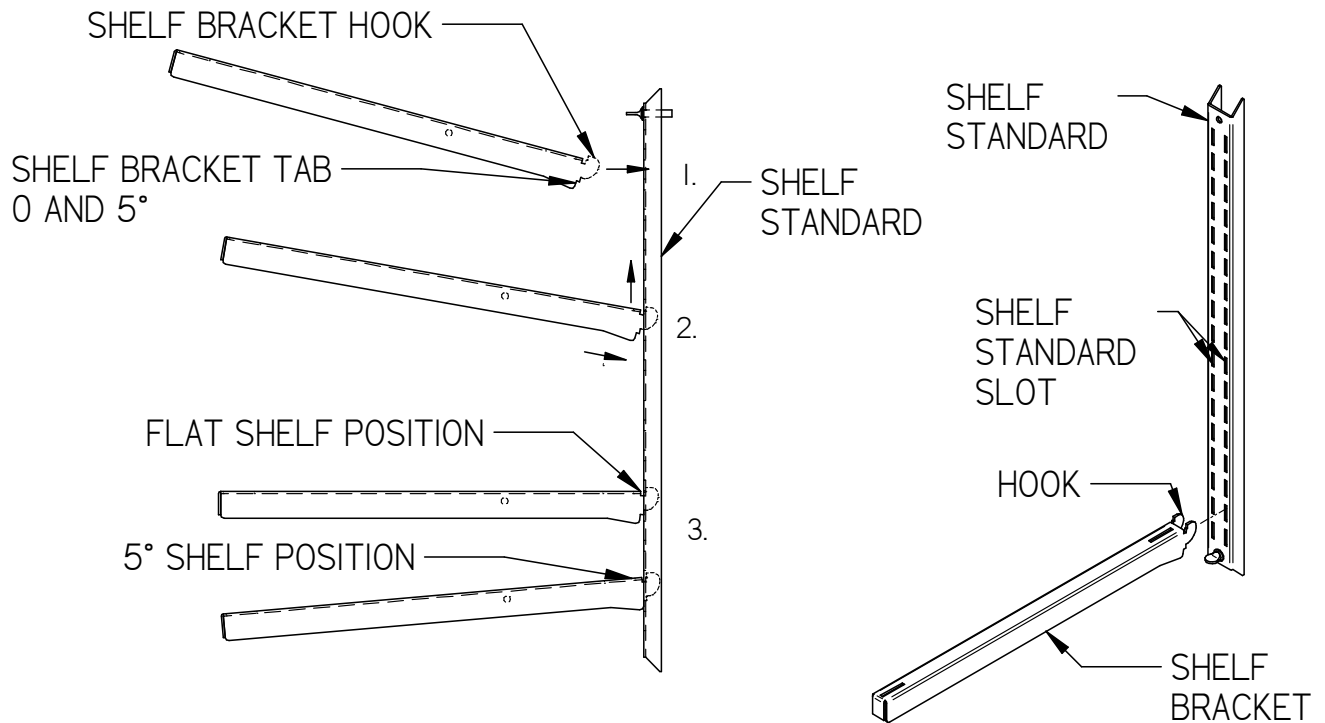
# SHELVING INSTALLATION & REMOVAL

## Shelf Bracket & Supports

NOTE: Different shelf sizes and quantities are optional from factory so shelf bracket quantity and size may vary, but procedure is the same.



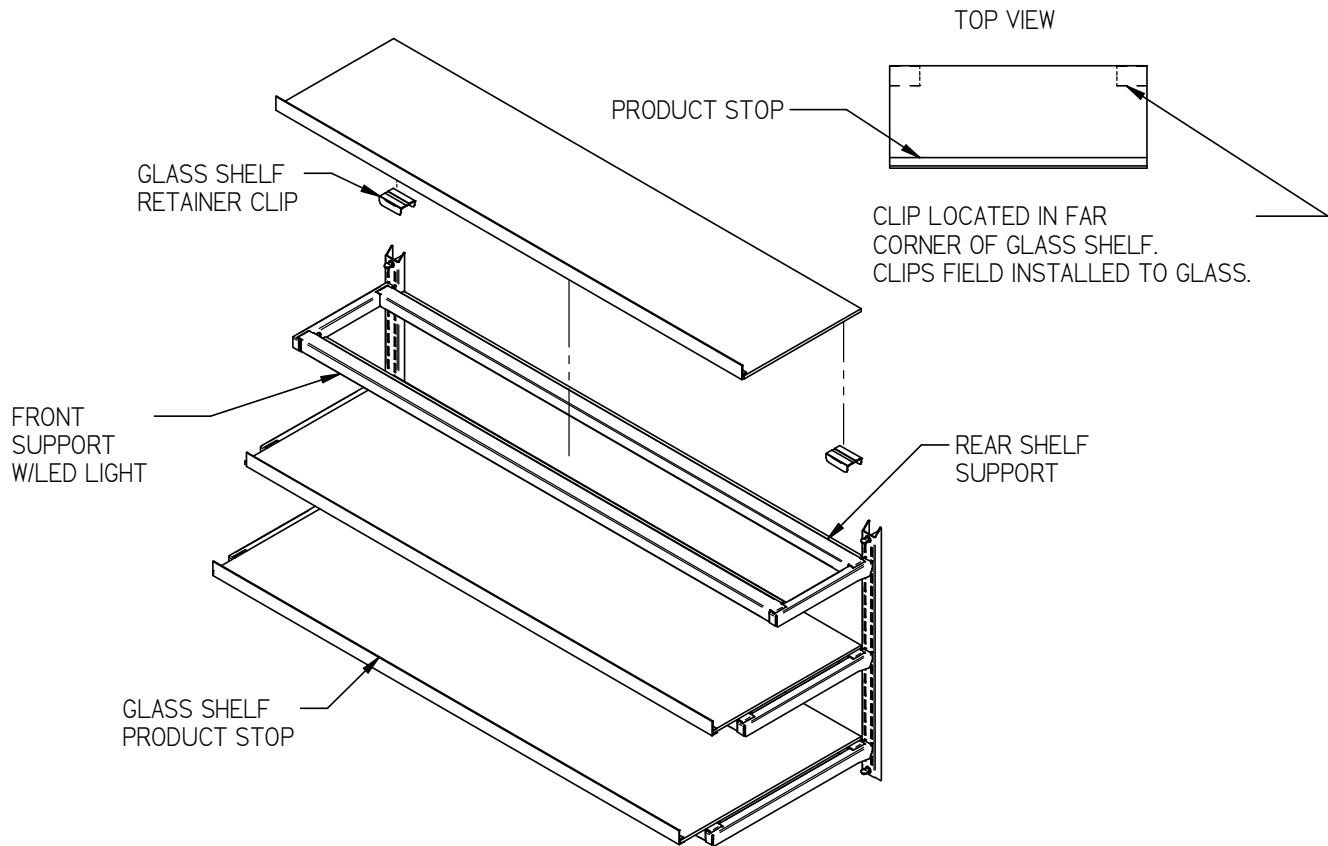
1. Turn the light switch to the off position. Remove rear doors as described in the "Rear Door Removal" section of this manual to allow access to interior of case.
2. Follow the instruction in the illustration below. Starting with the longest brackets for bottom shelf insert (1) of the (2) shelf brackets in the desired shelf standard slot on one side of the case. Place the long second shelf bracket in the same shelf standard slot on the opposite end of case. Important; The bracket with the 1/2 hole must be on the light cord side of case.
3. Repeat procedure for middle shelf brackets and the shortest top brackets. NOTE: Different shelf sizes and quantities are optional from factory so shelf bracket quantity and size may vary, but procedure is the same.
  1. Tilt shelf bracket upward and install shelf bracket hook into desired slot.
  2. Lift shelf bracket hook up behind back of shelf standard and rotate the shelf bracket downward until desired shelf bracket tab rests on front of shelf standard.
  3. Bracket can be either flat 0 degrees or an a 5 degree downward tilt as shown.



4. Once all shelf brackets are installed in desired position run each shelf light cord into  $\frac{1}{2}$  hole in back of shelf bracket and out the  $\frac{1}{2}$ " hole in the front of shelf bracket. The shelf light cord length can be adjusted by pulling out cord from cord grommet or pushing cord back into cord grommet.
5. Install front shelf supports with LED lights on to shelf brackets. All shelf supports with the lights are the same. The LED light must be facing towards back of case. Hook shelf support end flanges into front notch of shelf brackets on each side of case.
6. Install rear shelf supports with no lights on to shelf brackets. All shelf supports with no lights are the same. The flange on shelf support should be facing towards back of case. Hook shelf support end flanges into rear notch of shelf brackets on each side of case.
7. Push shelf light cords into end of LED light. NOTE: Do not plug cord in backwards. There are (2) humps on end of cord that must align with humps in end of LED light. Plugging in the cord upside down will Damage LED light strip.
8. Manage desired cord lengths by pulling out cord from cord grommet or pushing cord back into cord grommet.

NOTE: Cords always remain in case they are not removable.

## Glass Shelves

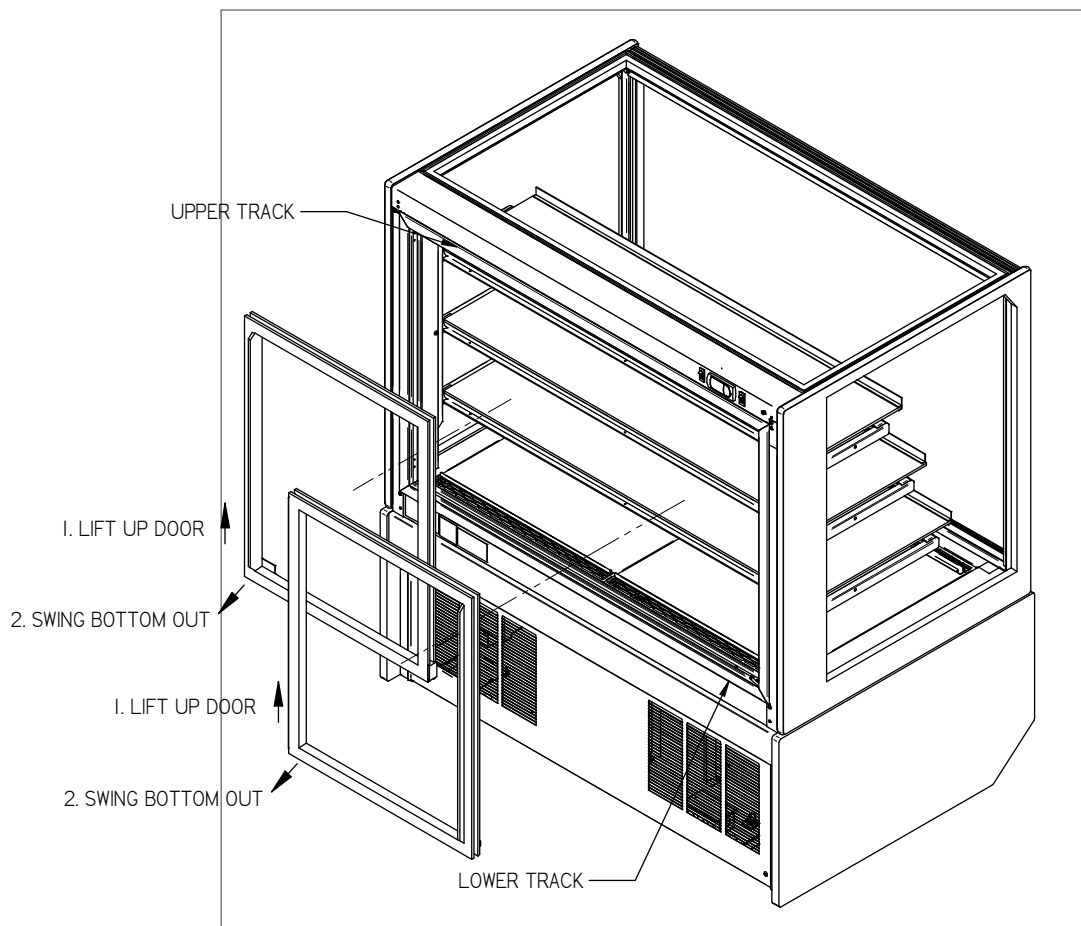


1. For first time installation attach (2) glass shelf retainer clips to each glass shelf in location shown in illustration. Clean area of glass where glass shelf holder is to be located with rubbing alcohol and let air dry before installing shelf glass holder. Remove backing from tape located on flat side of glass shelf holder. Position the glass shelf holders in the (2) far corners of glass. Repeat for each glass shelf.
2. Place front of glass
3. Set each glass shelf on to the shelf supports so that the glass shelf retainer clip straddles the rear support. The top glass should be the narrowest glass and the bottom glass shelf should be the widest.

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# REAR DOORS REMOVAL

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1. Start with the outer door and lift the door upward until the bottom edge of door clears the lower track and then swing the bottom of the door outward and down out of upper track.
2. After the outer door is removed repeat the procedure for the inner door.
3. Reverse this procedure for door reinstallation. The doors are not interchangeable.

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# OPERATING INSTRUCTIONS

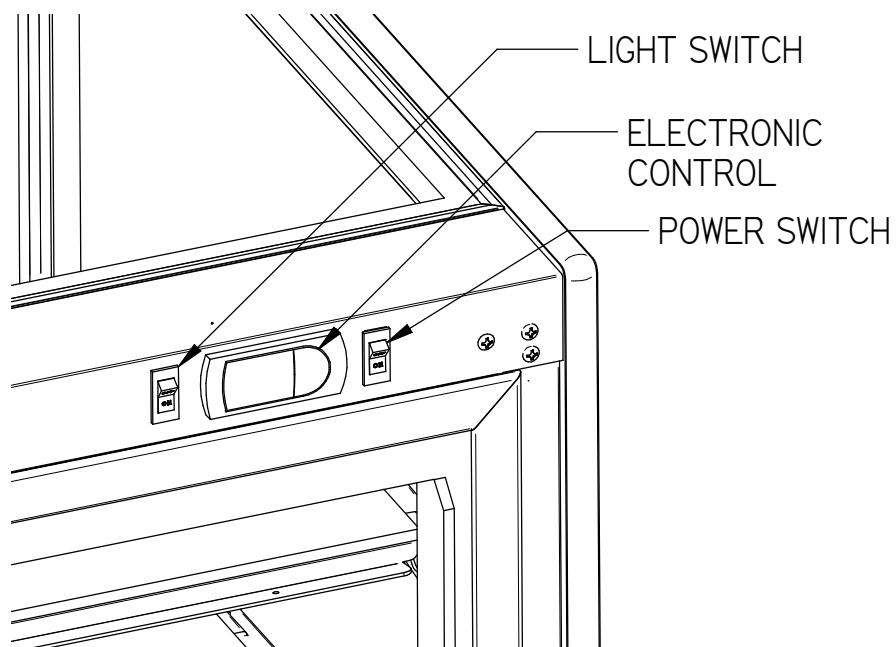
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## Control Description



**NOTICE:** This refrigerated display case is designed to operate in a maximum environment of 80 DEG. F and 55% relative humidity. Exceeding these limits will cause poor case performance and sweating of glass panels.



### **Power Switch**

The unit has a power switch that turns off power to the entire unit, including the condensate evaporator and the lights.

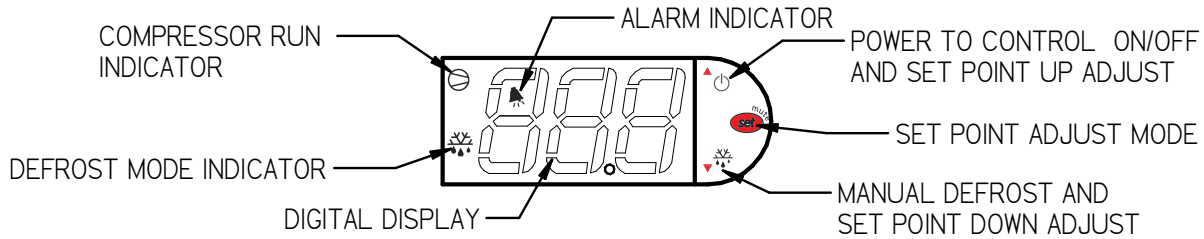
### **Light Switch**

The unit has a light switch that turns on and off the interior lights of unit.

### **Electronic Temperature Control (Refrigerated Models Only)**

The temperature control allows the user to adjust the temperature of the display merchandiser to their needs. When not in adjustment mode the read out shows relative interior case temperature.



## USING THE ELECTRONIC TEMPERATURE CONTROL (Refrigerated Models Only)





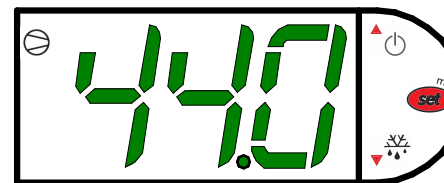
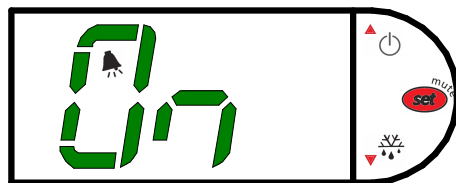
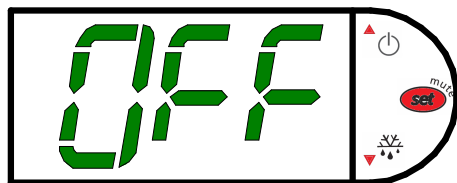
### Button Overview

	Press and hold this button for 3 seconds to turn system on (if off) or off (if on). Also used to adjust set point when in set point adjust mode
	Press to enter set point adjust mode, confirm set point changes, and mute alarms.
	Press and hold this button for 3 seconds to initiate a manual defrost (and cancel defrost if initiated), also adjusts set point down when in set point adjust mode

### Powering on control





To turn refrigeration control power on, press and hold  for approx. five seconds. The display will read “On” while the button is depressed. When the control powers on, the display will read the relative current case temperature (on initial startup this would be room temperature). The compressor run indicator  will illuminate on the display, meaning that the compressor is running. (Note: the control may already be in the on mode when shipped from factory).

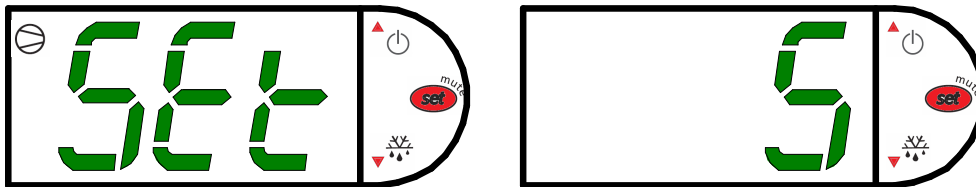
To turn refrigeration control power to off, press and hold  for approx. five seconds. The display will read “Off” while the button is depressed. When the control powers off the display will flash back and forth between the relative current case temperature and “Off”. The compressor run indicator  will be off on the display. When refrigeration control is in the off mode cabinet lights and evaporator fans will still operate, but the compressor will not turn on causing the case to gradually reach room temperature.









## Adjusting the set point

The set point is what determines how cold the display case will hold food and beverage. To adjust the set point press and hold the  button approx. 5 seconds until the display begins to flash a number. Then press the use the  button to scroll number up (colder) or press the  button to scroll number lower (warmer). There are nine (9) available set points numbers, the higher the number of the set point, the colder the display case will run, with setting “9” being the coldest and setting “1” being the warmest. Once you have chosen your desired setting press the  button again to confirm your choice.




## Entering manual defrost mode

In order to initiate a manual defrost press and hold the  button approx. 5 seconds. The control will read “dEF” while the button is being held. The defrost is initiated when the defrost mode indicator  illuminates on the display. The control display will then return to reading the case temperature. When the defrost mode indicator  turns off the defrost is complete and the compressor will turn back on illuminating the compressor run indicator  .



## Error codes

It is possible for error codes to be displayed on the control screen. In the event of a malfunction an alarm will sound and the alarm indicator  will be displayed on the display. An error code or codes will flash intermittently on the display. If there are multiple codes, the display will continuously cycle through them. The following photo shows error code “E0” as an example.



**Mute:** You may mute the alarm by pressing and releasing the wrench button. The red ringing bell and all error codes will still be displayed. When the fault is remedied the control will return to normal operation and will automatically clear the codes from the display.

## **INITIAL STARTUP**

After all the checks outlined in the installation section of this manual have been made, the case is ready to be put into service. Turn on the Power at the breaker box and flip the Power Switch and Light Switch on unit to the on position. Also ensure that the control is powered on as described above.

### **(Refrigerated Models Only)**

At start up from a warm unit, it is recommended that the temperature control is set to a warmer setting, such as 1. After the unit has gone through several cycles, adjust the control to a mid range setting, then to a colder setting if necessary to maintain desired product temperature. Allow refrigerated models to run for at least two hours before placing pre chilled product into unit

## **Placing Product into Case**

After completing shelving installation as outlined in “Shelving Installation and Removal” section of this manual you may begin placing product into the display case.

- Do not exceed 100 pounds of weight per shelf. Heavy product should be distributed evenly across the entire shelving area.
- Determine desired shelving location and angle before placing product in case. Product must be removed to readjust shelf location and angle.

### **(Refrigerated Models)**

- Do not overhang the front shelves with product. Product may overhang rear of shelf, but allow a minimum of 1-1/2” between product and rear door. Improper clearance in front and rear of shelf will block the refrigerated airflow and could cause product loss.
- Do not block the slots along the front or rear of the case display pan. Covering these slots will block the refrigerated airflow and could cause product loss.
- The display pan is removable for cleaning and can become dislodged in shipment. To ensure proper airflow and performance of the case, make sure that the display pan is pushed completely down into evaporation tub. Check that the pan is installed properly before placing product the display pans.

**-CASE SHOULD BE STOCKED WITH PRE-CHILLED PRODUCT ONLY.**

### **ATTENTION:**

**- This Federal refrigerated display case is designed to operate in a maximum environment of 80 DEG. F and 55% relative humidity. Exceeding these limits could cause poor case performance and sweating of glass panels.**

# MAINTENANCE

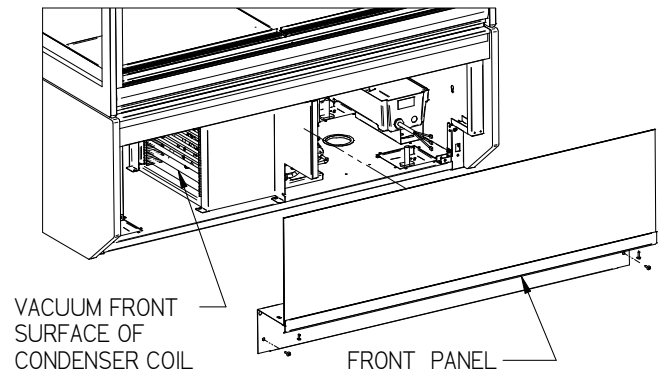
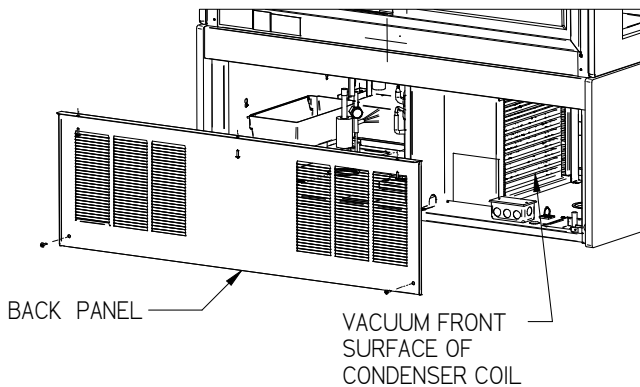
## Cleaning Condenser Coil (All Self Contained Refrigerated Units)



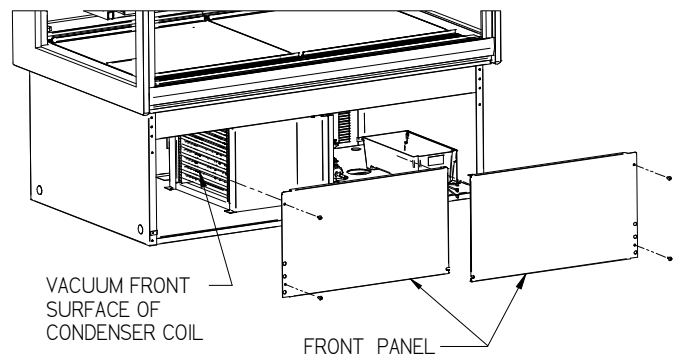
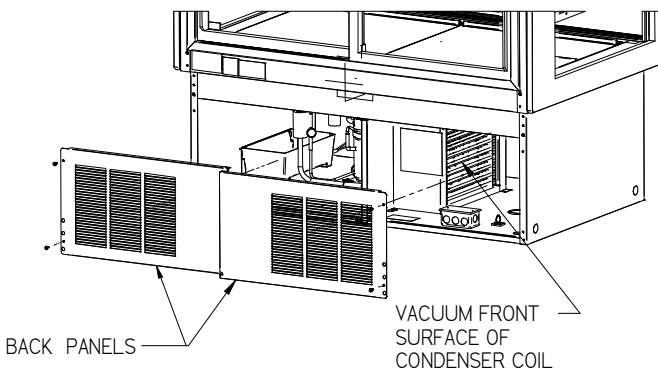
### NOTICE:

Condenser coil must be cleaned a minimum of twice per month to insure proper refrigeration performance and prevent compressor failure. Failure to clean condenser coil will void condenser warranty.

### FLOOR BASE ITR MODEL



### COUNTER ITR MODEL



It is very important that the Condenser coil is cleaned twice per month to insure proper refrigeration performance and to prevent compressor failure. Failure to clean condenser coil will void condenser warranty.

The condenser can be cleaned from either the front or the back of case depending on which is more accessible.

1. Disconnect power to the unit.
2. Remove the back or front panels located on the base or condenser compartment of unit. See Panel Removal section of this manual.
3. Carefully vacuum the front surface of condenser coil. Take care not to bend coil fins with vacuum cleaner nozzle.
4. Reinstall all panel and retaining screws and reconnect power.

## **ELECTRONIC CONTROL OPERATION (Refrigerated Models Only)**

### **Operation**

The control uses two sensors, one located in the air stream and one located on the evaporator coil. The sensor located in the air stream is referred to as the temperature control sensor. The sensor located on the evaporator coil is referred to as the defrost probe.

The temperature control sensor is located on the plastic tub behind the evaporator coil on the centerline of the display case in the cold air stream. The sensor location is critical for proper operation on the unit. Do not move or relocate this sensor.

The coil sensor is strapped to the evaporator coil. This sensor location is critical for proper operation of the unit. Do not move or relocate this sensor.

The temperature control is set to cut in at 38°F (3.3°C). The Temp control cuts out at 24°F (-4.4°C) at the coldest setting (“9”) and 32°F (0.0°C) at the warmest setting (“1”).

### **Defrost Cycle**

The control is programmed to initiate defrost via two different methods. There are 3 programmed defrost cycles in the case which will initiate a defrost cycle every 8 hours. The unit does not have a time clock so the defrost cycles cannot be set for any specific time of day.

The unit also has an ‘On demand’ defrost feature that will initiate a defrost when the temperature differential between the evaporator temperature and the air temperature is more than 18°F (-7.8°C) for 5 minutes into the refrigeration cycle (e.g. if the air stream probe measures 32°F/0°C or greater and the defrost probe measures 20°F/-6.7°C or lower for five minutes). Once initiated the defrost cycle will terminate when evaporator coil sensor reaches 43°F (6.1°C).

If a manual defrost is required, one can be initiated by pressing and holding the down arrow for approx. five seconds. This is typically unnecessary and should only be performed if special circumstances require it.

### **Control Parameters**

**Table 1 - Control Parameters**

Parameter Description	Control Setpoint →	1	2	3	4	5	6	7	8	9
Compressor Cut in [°F]		38.0								
Compressor Cut out [°F]		32.0	31.0	30.0	29.0	28.0	27.0	26.0	25.0	24.0
Compressor Min On Time		2 min								
Compressor Min Off Time		2 min								
Compressor Max Run Time		60 min								
Defrost Termination Temp [°F]		43.0								
Time to first defrost		8 hr								
Time to subsequent defrost		8 hr								
Defrost duration		30 min								
Defrost on demand differential [°F]		18.0								
Delay for defrost on demand		5 min								
Time delay to the next defrost on demand		30 min								

## Error Codes

Error codes may be encountered if either the controller or the display case is malfunctioning. The following is a list of error codes that may be encountered.

**Table 2 - Error Codes and Resolutions**

Code	Description	Cause	Resolution
<b>E0</b>	Temperature probe error	Probe signal is interrupted or short-circuited	<ol style="list-style-type: none"> <li>1. Check to ensure probe wires and quick disconnect are secure in control.</li> <li>2. Check probe resistance to table below. If 0 resistance is present check wiring insulation. If infinite resistance is present check for breaks in wiring (meter will likely read overload or very high in the mega-ohm range).</li> <li>3. Ensure that probes are wired per the wiring diagram provided.</li> <li>4. Replace probe if other remedies fail, or if probe resistance deviates from <b>“Error! Reference source not found.” Error! Reference source not found.</b></li> </ol>
<b>E1</b>	Defrost probe error	See E0	
<b>EE</b>	Unit parameter reading error	Operating conditions	<ol style="list-style-type: none"> <li>1. Remedy abnormal operating conditions. The control is rated to operate in a range of 14 to 122°F (-10 to 50°C) and less than 90%RH non-condensing.</li> <li>2. Replace control if problem persists.</li> </ol>
<b>EF</b>	Operating parameter reading error	See EE	

**Table 3 - Temperature Probe Common Resistance Chart**

Probe Temp	Maximum Resistance [ $\Omega$ ]	Normal Resistance [ $\Omega$ ]	Minimum Resistance [ $\Omega$ ]
<b>32°F (0°C)</b>	27.83	27.28	26.74
<b>77°F (25°C)</b>	10.1	10	9.9
<b>212°F (100°C)</b>	1	0.97	0.94

## **Top LED Light Replacement**

1. Turn power switch and light switch to off position.
2. Snap existing LED strip out of retaining clips.
3. Unplug 24v DC power wire from end of existing LED light strip.
1. Reattach the 24v DC power wire into end of the new LED light strip. NOTE: Do not plug cord in backwards. There are (2) humps on end of cord that must align with humps in end of LED light. Plugging in the cord upside down will Damage LED light strip.
4. Snap the new LED light strip into retainer clips.
5. Turn power switch and light switch to on position.

## **Shelf Light Bulb Replacement**

2. Turn power switch and light switch to off position.
3. Remove Shelf from display case.
4. Unplug 24v DC power wire from end of existing LED light strip.
5. Remove the shelf support with light from case.
6. Use a putty knife between the LED and the shelf support to cut the double sided adhesive holding LED light strip to case. Clean as much adhesive off of shelf support as possible.
7. Attach new LED light strip to shelf support using double sided adhesive.
8. Reinstall shelf support and shelf into case.
9. Reattach the 24v DC power wire into end of the new LED light strip. NOTE: Do not plug cord in backwards. There are (2) humps on end of cord that must align with humps in end of LED light. Plugging in the cord upside down will Damage LED light strip.
10. Turn power switch and light switch to on position.

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# CLEANING INSTRUCTIONS

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## Daily Cleaning

The case should be cleaned thoroughly, as described in the weekly cleaning section, before it is used for the first time.



**NOTICE:** Avoid splashing or soaking any electrical components with water to prevent electrical damage to the case.



**NOTICE:** Shut off lights and power switches and remove all product from case. Allow sufficient time for the unit to reach room temperature before proceeding with cleaning.



**NOTICE:** Remove all product from case before proceeding with cleaning procedure.



**NOTICE:** Acrylic front air deflector requires special washing procedures to prevent hazing and yellowing of material.



**NOTICE:** This case is not designed to be cleaned by flushing.

**Note:** For major spills or foreign material buildup use complete weekly cleaning instructions.

**Note:** Detergents are not recommended and do not use abrasive cleaners or pads to prevent scratching of surfaces.

1. Clean all foreign materials from the door opening.
2. Wipe complete interior areas of case using a damp cloth.
3. To allow easier access to clean interior tilt the front glass forward. Tilt the front glass out by grabbing the top edge of glass with finger tips and pulling it away from magnetic strips on case. Tilt glass until it stops at about 30 degrees angle. **IMPORTANT:** Hold on to the glass until it stops and do not let it free fall. Allowing glass may damage glass or hinge. The glass can then be cleaned with common window cleaners. Close the glass by pushing glass back up against magnetic gasket in closed position.
4. The remaining exterior surface should be wiped down using any ammoniated cleaners or soapy warm water.
5. **IMPORTANT:** Cleaning the clear acrylic plastic front air deflector require special care to prevent hazing and yellowing of material. Lightly dust (not wipe) surface with clean soft cloth. Then the surface can be wiped carefully with a soft, wet cloth or chamois. The cloth or chamois must be kept free of grit by frequently rinsing in clean water. Grease and oil can be removed with kerosene. Do not use window cleaners or kitchen scouring compounds. **DO NOT** use solvents such as Acetone, Benzene, Carbon Tetrachloride, and Lacquer Thinners. A spray wax such as Pledge or Maguire's polish can be applied and wiped with a clean soft cloth. The wax tends to fill in and hide small scratches.

## Weekly Cleaning

This procedure is recommended on a weekly basis. It may need to be performed more often if necessary to maintain a clean, sanitary case. The case should be cleaned to this procedure before using the first time.



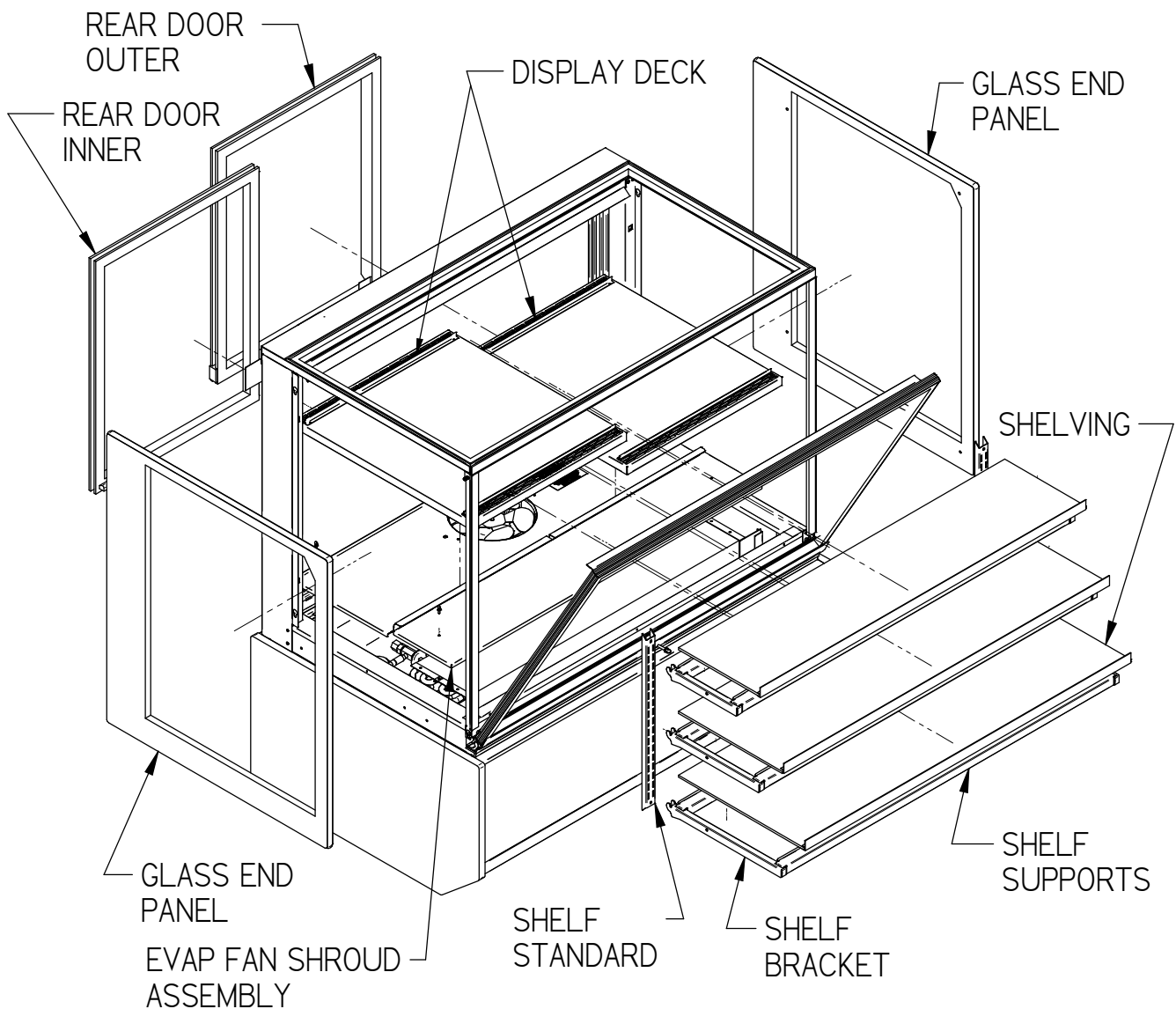
**NOTICE:** Avoid splashing or soaking any electrical components with water to prevent electrical damage to the case.



**NOTICE:** Shut off lights and power switches and remove all product from case. Allow sufficient time for the unit to reach room temperature before proceeding with cleaning.



**NOTICE:** Remove all product from case before proceeding with cleaning procedure.





1. Disconnect power to display case.
  2. Remove all interior shelving as described in the shelving installation and removal section of this manual.
  3. Remove both shelf standards from interior of case by removing thumb screws located at top and bottom of shelf standard.
  4. Remove end glass as described in end panel removal section of this manual.
- (Step 5 & 6 Refrigerated Models Only)**
5. Lift the Display Deck(s) up and out of evaporator tub and remove from case.
  6. Remove the evaporator fan shroud by removing the thumbscrews along the backside of evaporator fan shroud and the (2) thumb screws on each side of evaporator coil. Unplug fan(s) from wire harness and remove evaporator fan shroud with fan attached from case.
  7. Clean the entire interior of the case using warm soapy water. Wipe off all soapy water with a damp cloth and allow to dry.
  8. Clean all shelves, shelf support bars, shelf standards, shelf brackets, and display deck using warm soapy water and a brush. Rinse thoroughly and allow to dry.
  9. Clean behind front glass hing using warm soapy water and sweeping debris to each end and
  10. Clean all foreign material from inner and outer rear door tracks using warm soapy water and a brush. Apply a light film of lubricant such as PAM to make the doors operate smoother.
  11. Clean both sides of the doors, end glass and front glass using any common window cleaner.  
NOTE: Front glass can be tilted forward to simplify front glass cleaning. To allow easier access to clean interior tilt the front glass forward. Tilt the front glass out by grabbing the top edge of glass with finger tips and pulling it away from magnetic strips on case. Tilt glass until it stops at about 30 degrees angle. IMPORTANT: Hold on to the glass until it stops and do not let it free fall. Allowing glass may damage glass or hinge. The glass can then be cleaned with common window cleaners. Close the glass by pushing glass back up agaist magnetic gasket in closed position.
  12. Reassemble the case in reverse order.

### **Weekly Exterior Cleaning**

1. Clean the front, end glass and rear doors using any common window cleaner.
2. The exterior surfaces should be wiped down using any ammoniated cleansers or warm soapy water.

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# SERVICE

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## Service Information

**CAUTION**  
RISK OF ELECTRIC SHOCK

DISCONNECT POWER  
BEFORE SERVICING UNIT

Before any service work is performed on the case, make sure all power is disconnected to the case.

Service problems or request for repair parts from authorized service agencies, trained service personnel, or owners should be referred to:

### **CUSTOMER SERVICE DEPARTMENT**

**Federal Industries**

**P.O. Box 290**

**Belleville, WI 53508**

**Toll Free: (800) 356-4206 / WI Phone (608) 424-3331**

**Fax: (608) 424-3234**

## **Special Service Situations**

There are rare occasions when the refrigerant charge must be evacuated from a case in order to perform service work. In those situations, Federal Industries recommends that the refrigerant charge be evacuated into a recovery system to prevent the possibility of hydrofluorocarbons (HFC's) from being released into the atmosphere.

If moisture or liquid is observed around or under a Federal Industries case, an immediate investigation should be made by qualified personnel to determine the source of the moisture or liquid. The investigation made should determine if the case is malfunctioning or if there is a simple housekeeping problem.



### **NOTICE:**

**Moisture or liquid around or under a case is a potential slip/fall hazard for persons walking by or working in the general area of the case. Any case malfunction or housekeeping problem that creates a slip/fall hazard around or under a case should be corrected immediately.**

## **Pre-Service Checklist**

You may avoid the cost and inconvenience of an unnecessary service call by first reviewing this checklist of frequently encountered situations that can cause unsatisfactory case performance.



**CAUTION: Before servicing case turn off power at the main breaker of fuse box.**

### ***Case Does Not Operate***

- Check for disconnected power supply.
- Check for tripped breaker or blown fuse.
- Check that power switch is on.

### ***Lights Do Not Operate***

- Check that light switch is on.
- Be sure light cord is properly seated into LED light strip.
- Is the light cord plugged in to light strip upside down.

### ***Case Temperature Too Warm***

- Check that the cold air inlet and outlet slots are not blocked.
- Be sure that the rear doors are closed and tightly sealed.
- Check for a blocked or dirty condenser coil fins.
- Check cold airflow. Lack of adequate cold airflow could be a defective evaporator fan or blocked evaporator coil. Check that paper or foreign material is not blocking evaporator. If the evaporator coil is blocked due to excessive frost, turn the power switch “off” position for approximately one hour to defrost.
- Is the case installed properly to allow adequate air flow to and from condenser?
- Check that the electronic control settings are correct.
- Check environment conditions. This case is designed to operate in no more than 80 degree 55 percent humidity.

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## **SALE & DISPOSAL**

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### **Owner Responsibility**

If you sell or give away your Federal Industries case you must make sure that all safety labels and the Installation-Service Manual are included with it. If you need replacement labels or manuals, Federal Industries will provide them free of charge. Contact the customer service department at Federal Industries at (800) 356-4206.

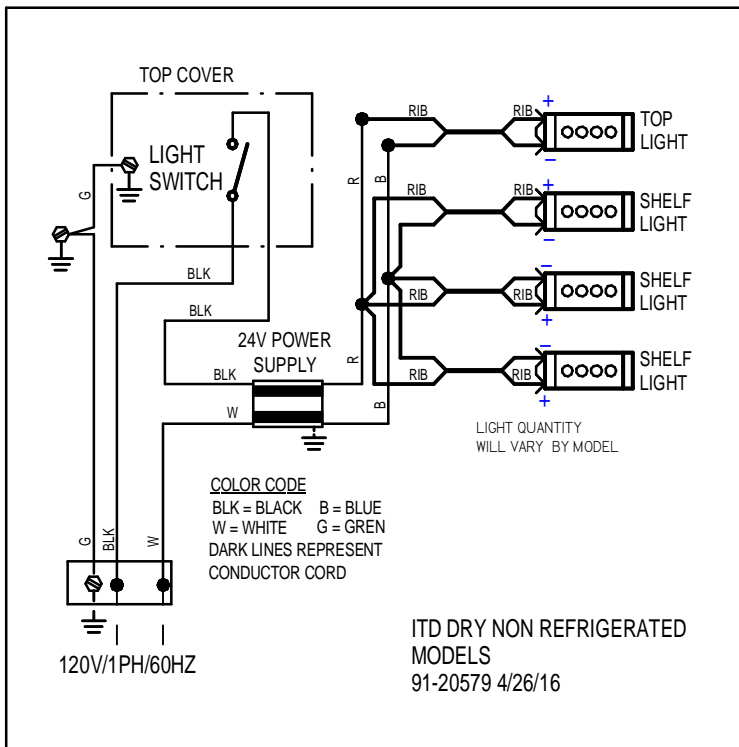
The customer service department at Federal Industries should be contacted at the time of sale or disposal of your case so records may be kept of its new location.

If you sell or give away your Federal Industries case and you evacuate the refrigerant charge before shipment. Federal Industries recommends that the charge be evacuated into a recovery system to prevent the possibility of HFC's from being released into the atmosphere.

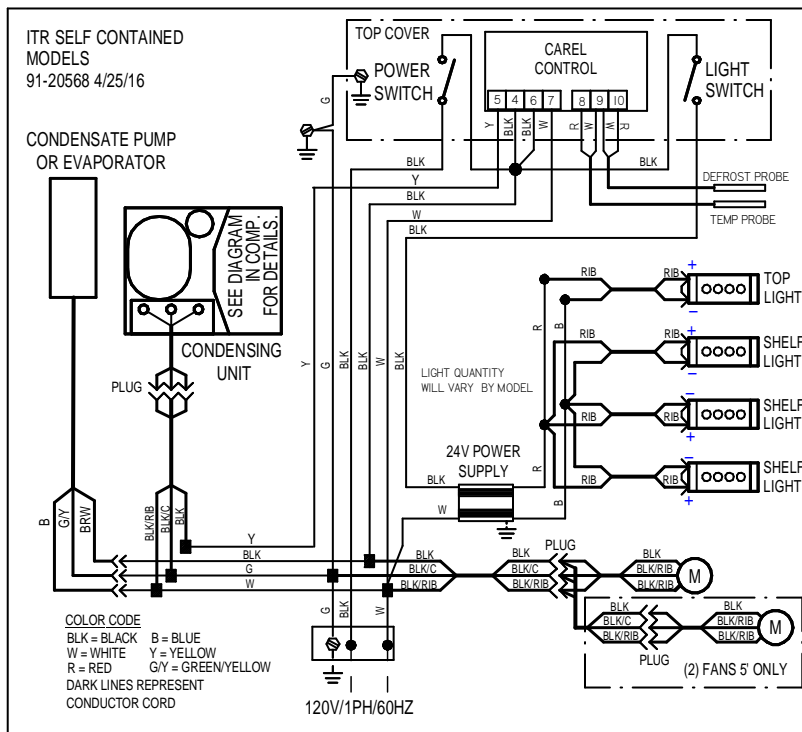
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# MAIN WIRING DIAGRAMS

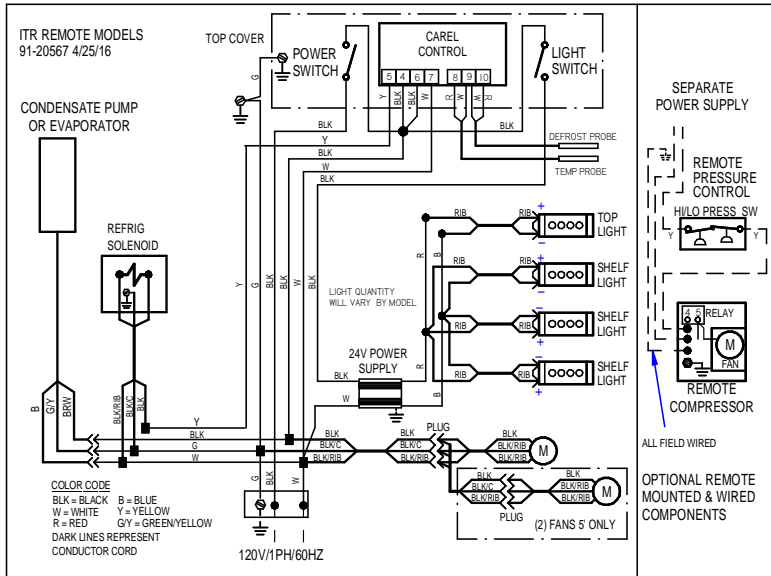
## Non-Refrigerated



## Refrigerated Self Contained



# Refrigerated Remote



# REPLACEMENT PARTS

## ELECTICAL COMPONENTS

MODELS	LIGHT SWITCH	POWER SWITCH	LIGHT POWER SUPPLY	LIGHT 24V LED STRIP	SHELF LIGHT CORD	SC MAIN WIRING DIAGRAM	REMOTE MAIN WIRING DIAGRAM	DRY MAIN WIRING DIAGRAM
ITD36	4I-11066	4I-11066	39-20555	42-20550-5	43-20475			9I-20579
ITD48	4I-11066	4I-11066	39-20555	42-20550-10	43-20475			9I-20579
ITD60	4I-11066	4I-11066	39-20555	42-20550-11	43-20475			9I-20579
ITR36	4I-11066	4I-11066	39-20555	42-15441	43-20475	9I-20568	9I-20567	
ITR48	4I-11066	4I-11066	39-20555	42-15441	43-20475	9I-20568	9I-20567	
ITR60	4I-11066	4I-11066	39-20555	42-15441	43-20475	9I-20568	9I-20567	

## GLASS COMPONENTS

MODELS	FRONT GLASS	TOP GLASS	END GLASS CLEAR L.H.	END GLASS CLEAR R.H.	END GLASS REFL. L.H.	END GLASS REFL. R.H.	FRONT GLASS MAGNET TOP	FRONT GLASS MAGNET SIDE
ITD3626			50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-1	64-20476-5
ITD4826			50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-2	64-20476-5
ITD6026			50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-3	64-20476-5
ITD3634			50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-1	64-20476-4
ITD4834			50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-2	64-20476-4
ITD6034			50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-3	64-20476-4
ITR3626	50-20471-4	50-20472-1	50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-1	64-20476-5
ITR4826	50-20471-5	50-20472-2	50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-2	64-20476-5
ITR6026	50-20471-6	50-20472-3	50-20471-IL	50-20471-IR	50-20471-ILA	50-20471-IRA	64-20476-3	64-20476-5
ITR3634	50-20471-1	50-20472-1	50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-1	64-20476-4
ITR4834	50-20471-2	50-20472-2	50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-2	64-20476-4
ITR6034	50-20471-3	50-20472-3	50-20471-L	50-20471-R	50-20471-ILA	50-20471-IRA	64-20476-3	64-20476-4

## REFRIGERATION COMPONENTS

MODELS	CONDENSING UNIT (SC) 120V	EVAPORATOR COIL	EXPANSION VALVE	EVAPORATOR FAN MOTOR	EVAPORATOR FAN BLADE	FILTER DRIER	ELECTRONIC CONTROL	TEMPERATURE PROBE	CONDENSATE PAN ASSY 200W 120V
ITR36	30-20347	33-16019	32-20431	4I-11628	72-11450	32-12626	32-20558-14	32-19866	40-20420
ITR48	30-20513	33-16020	32-12625	4I-11628	72-11450	32-12626	32-20558-14	32-19866	40-20420
ITR60	30-20513	33-18283	32-12625	4I-11628	72-11450	32-12626	32-20558-14	32-19866	40-20420

## DOOR COMPONENTS

MODELS	DOOR LEFT CLEAR	DOOR RIGHT CLEAR	DOOR LEFT REFLECTIVE	DOOR RIGHT REFLECTIVE
ITD3626	53-20467-4	53-20468-4	53-20467-4A	53-20468-4A
ITD4826	53-20467-5	53-20468-5	53-20467-5A	53-20468-5A
ITD6026	53-20467-6	53-20468-6	53-20467-6A	53-20468-6A
ITD3634	53-20467-1	53-20468-1	53-20467-1A	53-20468-1A
ITD4834	53-20467-2	53-20468-2	53-20467-2A	53-20468-2A
ITD6034	53-20467-3	53-20468-3	53-20467-3A	53-20468-3A

## SHELF COMPONENTS

MODELS	GLASS SHELF 11"	GLASS SHELF 14"	GLASS SHELF 17"	SHELF BRACKET 9"	SHELF BRACKET 12"	SHELF BRACKET 15"	SHELF SUPORT (NO LIGHT)
ITD3626	-	52-20473-2	52-20473-3	-	M20441-2L/IR	M20441-3L/IR	M20379-1
ITD4826	-	52-20473-5	52-20473-6	-	M20441-2L/IR	M20441-3L/IR	M20379-2
ITD6026	-	52-20473-8	52-20473-9	-	M20441-2L/IR	M20441-3L/IR	M20379-3
ITD3634	52-20473-1	52-20473-2	52-20473-3	M20441-1L/IR	M20441-2L/IR	M20441-3L/IR	M20379-1
ITD4834	52-20473-4	52-20473-5	52-20473-6	M20441-1L/IR	M20441-2L/IR	M20441-3L/IR	M20379-2
ITD6034	52-20473-7	52-20473-8	52-20473-9	M20441-1L/IR	M20441-2L/IR	M20441-3L/IR	M20379-3