TRUE MANUFACTURING CO., INC.

INSTALLATION MANUAL

**TCGG - Curved Glass Deli Case**

## Congratulations!

You have just purchased the finest commercial refrigerator available. You can expect many years of trouble-free operation.

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TCGG-36-S-LD

TCGG-48-S

TCGG-60-S-LD

TCGG-72-LD

# INSTALLATION MANUAL

## TCGG - Curved Glass Deli Case

Original Instructions


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*975548-B*

# THANK YOU

FOR YOUR PURCHASE

## How to Maintain Your True Refrigerator to Receive the Most Efficient and Successful Operation

You have selected one of the finest commercial refrigeration units made. It is manufactured under strict quality controls with only the best quality materials available. Your TRUE cooler, when properly maintained, will give you many years of trouble-free service.

**WARNING** – Use this appliance for its intended purpose as described in this Installation Manual.

# Refrigerant Safety & Warning Information

See the serial label inside the cabinet for the units refrigeration type. For Hydrocarbon Refrigeration (R290 only), see below:

**DANGER** – Risk of fire or explosion. Flammable refrigerant used. **DO NOT** use mechanical devices to defrost refrigerator. **DO NOT** puncture refrigerant tubing; follow handling instructions carefully. To be repaired only by trained service personnel.

**DANGER** – Risk of fire or explosion (flammable refrigerant used), consult repair manual/owner's guide before attempting to service this product. All safety precautions must be followed. Dispose of properly in accordance with local and federal regulations. Follow all safety precautions.

**CAUTION** – Keep all ventilation openings clear of obstruction in the appliance enclosure or in the structure housing the appliance.

# Basic Safety & Warning Precautions

- Take care during operation, maintenance or repairs to avoid cuts or pinching from any part/component of the cabinet.
- Units may pose a tipping hazard while uncrating, during installation, or when moving the unit.
- Ensure the unit is properly installed and located in accordance with the Installation Instructions before use.
- This appliance is not to be used, cleaned or maintained 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.
- **DO NOT** allow children to play with the appliance or climb, stand, or hang on the unit's shelves to prevent damage to the refrigerator and personal injury.
- **DO NOT** touch the cold surfaces in the freezer compartment when hands are damp or wet. Skin may stick to these extremely cold surfaces.
- Unplug the refrigerator before cleaning and making repairs.
- Setting temperature controls to the 0 position or powering off an electronic control may not remove power from all components (e.g., light circuits, perimeter heaters, and evaporator fans).
- **DO NOT** store or use gasoline, or other flammable vapors and liquids, in the vicinity of this or any other appliance.
- **DO NOT** store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Keep fingers out of the "pinch point" areas; clearances between the doors and cabinet are necessarily small; be careful closing doors when children are in the area.
- **DO NOT** use electrical appliances inside the food storage compartments of the units unless the appliances are of the type recommended by the manufacturer.

**NOTE:** All servicing must be performed by a qualified technician.

# Cabinet Disposal Warning

## Proper Disposal of the Cabinet

Child entrapment and suffocation are not problems of the past. Junked or abandoned refrigerators are still dangerous, even if they will sit for "just a few days." If you are getting rid of your old refrigerator, please follow the instructions below to help prevent accidents.

**Before throwing away your old refrigerator or freezer:**

- Take off the doors.
- Leave the shelves in place so that children may not easily climb inside.

**DANGER** – Risk of fire or explosion. Flammable insulation and/or refrigerant used. Dispose of all in accordance with local and federal regulations. Follow all safety precautions.

# Installation

## Prior to Installation

### Ownership

To ensure that your unit works properly from the first day, it must be installed properly. We highly recommend a trained refrigeration mechanic and electrician install your TRUE equipment. The cost of a professional installation is money well spent.

Before you start to install your TRUE unit, carefully inspect it for freight damage. If damage is discovered, immediately file a claim with the delivery freight carrier.

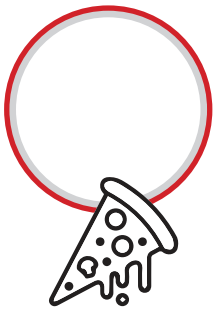
TRUE is not responsible for damage incurred during shipment.

### Cabinet Location

- For proper operation, ambient temperatures shall not be less than 60°F (15.5°C) and no greater than 104°F (40°C).
- Appliance is not suitable for outdoor use.
- Appliance is not suitable for an area where a pressure washer or hose may be used.
- Ensure the location will provide adequate clearances and sufficient airflow for the cabinet.
- Ensure the power supply for the cabinet matches the cabinet specification sheet or cabinet data plate and is within the rated voltage (+/-5%). Also, that the amp rating of the circuit is correct and that it is properly grounded.
- The cabinet should always be plugged into its own individual dedicated electrical circuit. The use of adapter plugs and extension cords is prohibited.

### Notice to Customer

Loss or spoilage of products in your refrigerator/freezer is **not covered by warranty**. In addition to following recommended installation procedures, you must run the refrigerator/freezer for 24 hours prior to usage to verify its proper operation.



| CLEARANCES | | | |
|---|---|---|---|
| | TOP | SIDES | BACK |
| TCGG | 0" | 0" | Open |
| **WARNING** – Warranty is void if ventilation is insufficient. | | | |

### Wire Gauge Chart

| 115 Volts | Distance In Feet To Center of Load | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMPS | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | 140 | 160 |
| 2 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| 3 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 |
| 4 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 |
| 5 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 |
| 6 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 |
| 7 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 |
| 8 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 | 8 |
| 9 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 | 8 | 8 |
| 10 | 14 | 14 | 14 | 12 | 12 | 10 | 10 | 10 | 10 | 8 | 8 | 8 |
| 12 | 14 | 14 | 12 | 12 | 10 | 10 | 10 | 8 | 8 | 8 | 8 | 6 |
| 14 | 14 | 14 | 12 | 10 | 10 | 10 | 8 | 8 | 8 | 6 | 6 | 6 |
| 16 | 14 | 12 | 12 | 10 | 10 | 8 | 8 | 8 | 8 | 6 | 6 | 6 |
| 18 | 14 | 12 | 10 | 10 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 5 |
| 20 | 14 | 12 | 10 | 10 | 8 | 8 | 8 | 6 | 6 | 6 | 5 | 5 |
| 25 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 6 | 5 | 4 | 4 |
| 30 | 12 | 10 | 8 | 8 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 3 |
| 35 | 10 | 10 | 8 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 2 |
| 40 | 10 | 8 | 8 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 2 | 2 |
| 45 | 10 | 8 | 6 | 6 | 6 | 5 | 4 | 4 | 3 | 3 | 2 | 1 |
| 50 | 10 | 8 | 6 | 6 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 1 |

| 230 Volts | Distance In Feet To Center of Load | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMPS | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | 140 | 160 |
| 5 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| 6 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 |
| 7 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 |
| 8 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 |
| 9 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 |
| 10 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 |
| 12 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 |
| 14 | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 |
| 16 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 | 8 |
| 18 | 14 | 14 | 14 | 12 | 12 | 12 | 10 | 10 | 10 | 8 | 8 | 8 |
| 20 | 14 | 14 | 14 | 12 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 8 |
| 25 | 14 | 14 | 12 | 12 | 10 | 10 | 10 | 10 | 8 | 8 | 6 | 6 |
| 30 | 14 | 12 | 12 | 10 | 10 | 10 | 8 | 8 | 8 | 6 | 6 | 6 |
| 35 | 14 | 12 | 10 | 10 | 10 | 8 | 8 | 8 | 8 | 6 | 6 | 5 |
| 40 | 14 | 12 | 10 | 10 | 8 | 8 | 8 | 6 | 6 | 6 | 5 | 5 |
| 50 | 12 | 10 | 10 | 8 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 4 |
| 60 | 12 | 10 | 8 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 3 |
| 70 | 10 | 10 | 8 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 2 | 2 |
| 80 | 10 | 8 | 8 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 2 | 2 |
| 90 | 10 | 8 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 3 | 1 | 1 |
| 100 | 10 | 8 | 6 | 6 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 1 |

# Installation (cont.)

## Uncrating

### Tools Required

- Adjustable wrench
- Phillips screwdriver
- Level

The following procedure is recommended for uncrating the unit:

1. Remove the outer packaging (cardboard and bubble wrap or Styrofoam corner and clear plastic). See fig. 1. Inspect for concealed damage. **Again, immediately file a claim with the freight carrier if there is damage.**

   **NOTE: DO NOT** remove shipping blocks (see fig. 2) until the unit is installed in its final location. **Do not discard;** use the blocks when next moving the cabinet.

2. **NOTE:** Remove the clips securing the cabinet to the skid (see fig. 3). Move the unit as close as possible to the final location before removing the wooden skid. Some models may require removing the front and/or rear grill/cover to access the shipping bolts.
3. If leveling legs or castors **will not be used**, remove the cabinet from the wood skid and set the skid aside.

   **NOTE: DO NOT** lift the cabinet by the countertops, doors, drawers, or grills.

   If leveling legs or castors **will be used**, rotate the cabinet on the skid (see fig. 4) and see the installation instructions on page 6.

**NOTE:** Remember to leave cabinet upright for 24 hours before plugging into a power source. Keys for cabinet with door locks are located in the warranty packet.

***Fig. 1.*** Remove the exterior packaging.

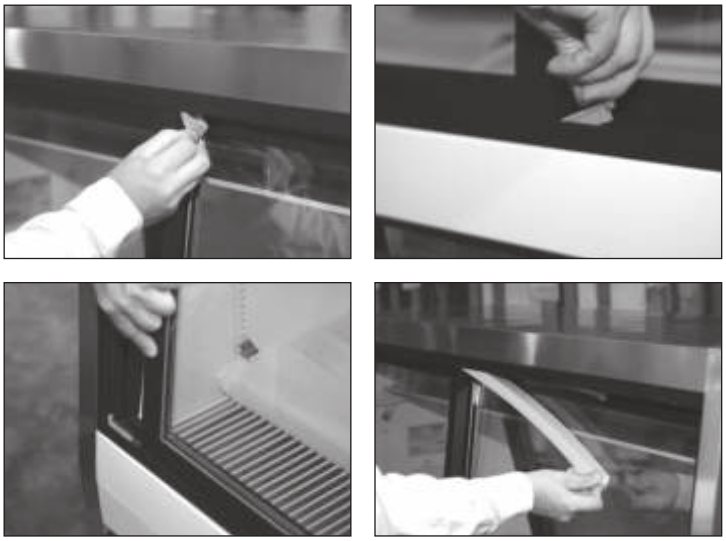


***Fig. 2.*** Glass slide door shipping block locations. Remove if so equipped and do not discard.

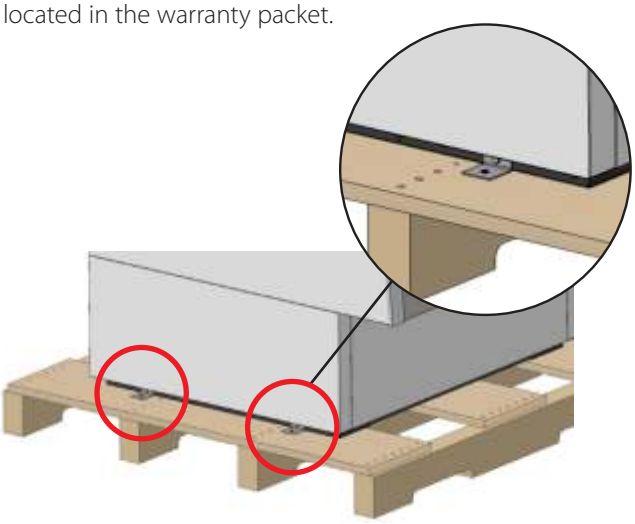


***Fig. 3.*** Pallet clip locations. Not all sides shown.

***Fig. 4.*** When lifting unit, do not use countertops, doors/drawers, or grills as a lifting point.

**WARNING** – Units may pose a tipping hazard while uncrating, during installation, or when moving the unit.

# Installation (cont.)

## Cabinet Location

1. Ensure that the drain hose or hoses are positioned in the pan.
2. Free the plug and cord from inside the lower rear of the cooler (**DO NOT** plug in).
3. Place the unit close enough to the electrical supply so that the extension cords are never used.

## Installing Leveling Legs

Leveling legs are provided to assist with leveling the cabinet.

With access to the bottom of the cabinet, thread the leveling legs into the holes used to secure the cabinet to the skid. See figs. 1 and 2.

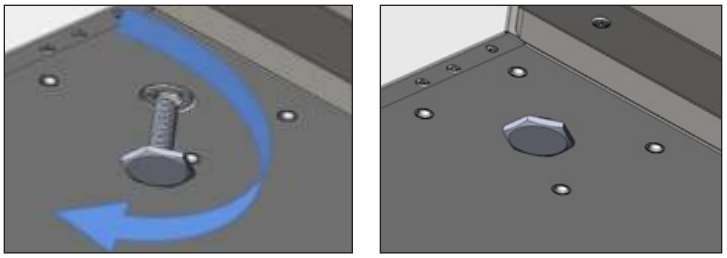


***Fig. 1.*** Turn the leveling legs clockwise to lower the unit.

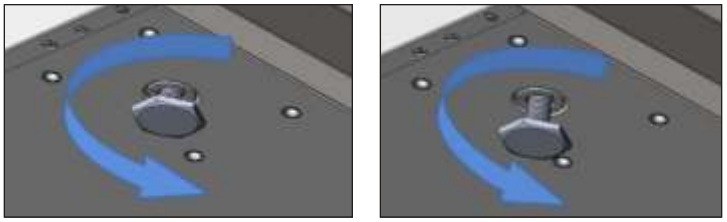


***Fig. 2.*** Turn the leveling legs counterclockwise to raise the unit.

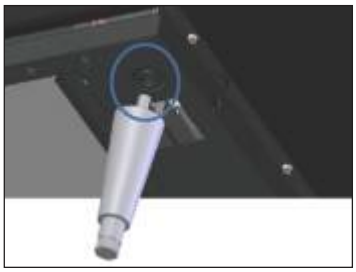


***Fig. 3.*** Locate the threaded hole in the rail.

***Fig. 4.*** Screw in the leveling legs.

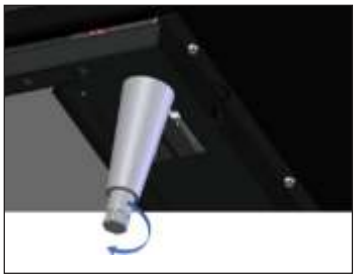
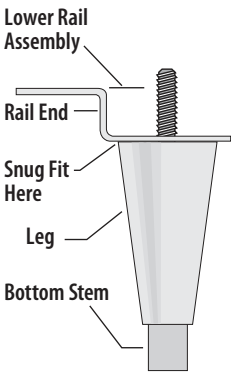


***Fig. 5.*** Turn the bottom stem to level the cabinet.




## Installing 6" Leveling Legs or Castors

Adjustable legs will provide 6" (152 mm) of clearance under the cabinet. Castors provide cabinet mobility.

**NOTE:** If the cabinet has a center leveling screw, castor, or leg, make sure it is adjusted properly so it makes full contact with the floor after the cabinet has been leveled.

### Required Tools

Adjustable Wrench

### 6" Leveling Legs

1. Access the bottom of the cabinet and thread the leveling legs into the rail. See figs. 3 and 4.
2. Verify that the cabinet is level.
3. If the cabinet is not level, gently lift and support the low end of the cabinet. With an adjustable wrench, screw the bottom stem of the leveling leg in or out to level and support the cabinet. See fig. 5.

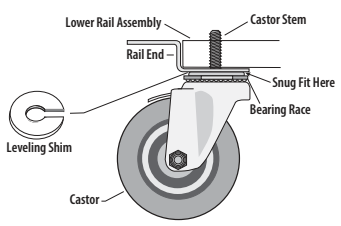
### Castors

1. Loosen the castor bolt enough to slide the provided castor shims between the castor bearing and the bottom rail of the cabinet. See fig. 6.
2. Install the desired number of shims. If more than one shim is used, turn the slots at a 90˚ angle to each other, so the slots do not align. See figs. 7 and 8.
3. Tighten and secure the shims and castors with the optional castor wrench. Lower the cabinet and verify that it is level. If the cabinet is not level, repeat the process until the cabinet is level and supported.

***Fig. 6.*** Loosen castor bolt.

***Fig. 7.*** Install shim(s).

***Fig. 8.*** Position multiple shims at 90˚ angles.



# Installation (cont.)

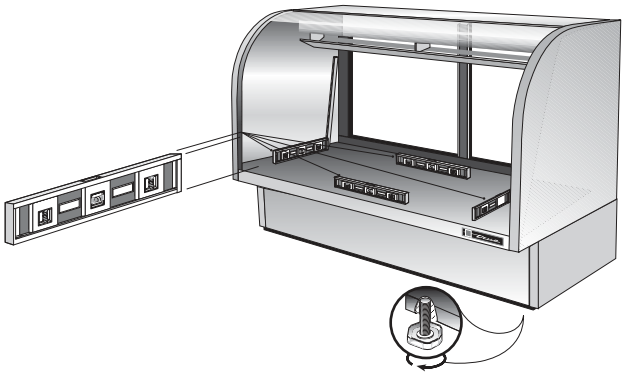
## Leveling

Proper leveling of your TRUE cooler is critical to operating success (for non-mobile models). Leveling impacts effective condensate removal and door operation.

Level the unit front-to-back and side-to-side.

1. Position the level on the inside floor of the unit near the doors (the level should be parallel to cabinet front). Level the cabinet.
2. Position the level at the inside rear of cabinet (again, the level should be placed parallel to cabinet back). Level the cabinet.
3. Perform procedures similar to steps 1 and 2 by placing the level on inside floor (left and right side, parallel to the depth of the cooler). Level the cabinet.

**NOTE:** If the cabinet has a center leveling screw, castor, or leg, make sure it is adjusted properly so it makes full contact with the floor after the cabinet has been leveled.



## Sealing the Cabinet to the Floor

Sealing the deli case to the floor may be required for local sanitary codes or for the customer's application.

**NOTE:** Asphalt floors are susceptible to chemical attach. A layer of tape may be place on the floor prior to applying sealant to protect the floor.

True recommends using either of the following sealing methods:

- Vinyl cove base trim as produced by Armstrong, Johnson, or Kentile (available at floor covering suppliers)
- Mastics available at hardware stores.

### Cove Base Trim

1. Thoroughly clean the cabinet and floor of dirt and grease.
2. Apply a recommended contact cement to the cove base trim and install the trim.
3. Let the cove base trim dry.
4. Fill in cracks and joints with caulking material.

### Mastic

1. Thoroughly clean the cabinet and floor of dirt and grease.
2. Draw an outline of the cabinet base on the floor.
3. Raise and block the front side of the cabinet.
4. Apply a bead of mastic to the floor, 1/2" (13 mm) inside the front part of the outline drawn in step 3.
5. Raise and block the rear of the cabinet.
6. Apply sealant to the floor on the other three sides as outlined in step 4.
7. Lower the cabinet.
8. Examine the cabinet to ensure that it is sealed to the floor around the entire perimeter.

### NSF-Approved Sealants

- 3M #ECU800 Caulk
- 3M #ECU2185 Caulk
- 3M #ECU1055 Bead
- 3M #ECU1202 Bead
- Armstrong Cork – Rubber Caulk
- Products Research Co. #5000 Rubber Caulk
- G.E. Silicone Sealer
- Dow Corning Silicone Sealer

# Installation (cont.)

## Electrical Installation & Safety

### Use of Adapter Plugs

**NEVER USE AN ADAPTER PLUG!** An adapter plug alters the original OEM plug configuration when connecting it to a power source.

TRUE will not warranty any refrigerator/freezer that has been connected to an adapter plug.

### Use of Extension Cords

**NEVER USE AN EXTENSION CORD!** An extension cord is determined to be any component that adds length to the original OEM power cord when connecting it to a power source.

TRUE will not warranty any refrigerator/freezer that has been connected to an extension cord.

### NEMA Plug Configurations

**60 HZ USE ONLY!**

TRUE uses these types of NEMA plugs shown. If you **DO NOT** have the proper outlet, have a licensed electrician verify and install the correct power source.

### How to Connect Electricity

- The power cord from this appliance is equipped with a grounding plug which minimizes the possibility of electric shock hazard.
- The wall outlet and circuit should be checked by a licensed electrician to make sure the outlet is properly grounded.
- If the outlet is a standard 2-prong outlet, it is your personal responsibility and obligation to have it replaced with the properly grounded wall outlet.
- **DO NOT**, under any circumstances, cut or remove the ground prong from the power cord. For personal safety, this appliance must be properly grounded.
- Before your new unit is connected to a power supply, check the incoming voltage with a voltmeter. If the recorded voltage is less than the rated voltage for operation (+/-5%) and amp rating, correct immediately. Refer to cabinet data plate for this voltage requirement.
- The refrigerator/freezer should always be plugged into a dedicated electrical circuit. This provides the best performance and prevents building wiring circuits from being overloaded, which could cause a fire hazard from overheated wires.
- Never unplug your refrigerator/freezer by pulling on the power cord. Always grip plug firmly and pull straight out from the outlet.
- When moving the refrigerator/freezer, for any reason, be careful not to roll over or damage the power cord.
- Repair or replace immediately all power cords that have become frayed or otherwise damaged. **DO NOT** use a power cord that shows cracks or abrasion damage along its length or at either end.
- If the supply power cord is damaged, it should be replaced with original equipment manufacturer (OEM) components. To avoid hazard this should be done by a licensed service provider.

### Cabinet Wiring Diagram

The cabinet's wiring diagram is in the exterior servicing compartment space of the cabinet.

A copy of the wiring diagram may also be obtained at **www. truemfg.com/support/serial-number-lookup**

# Cabinet Setup

## Curved Glass Deli Case Receptacles

Deli cases are equipped with a service receptacle located on the upper left of the cabinet rear. Cord and plug included.

**WARNING** – DO NOT connect an electrical load greater than 4.0 amps to this receptacle

## Standard Accessories

### Stainless Steel Shelf Installation

1. Without disconnecting the elastic tubing, lift each door up out of its track. Stretch the elastic surgical tubing and set the doors on each side of the unit.
2. Locate the shelf supports and install the teeth-end into the stainless pilasters on the interior walls at the desired height (see fig. 1). Install as matching left and right pairs at the same height.
3. Position the stainless steel shelf with the product stop towards the front of the cabinet. See fig. 2.

   **NOTE:** Be sure the side flaps overlap the shelf support (see fig. 3) and the shelf support tip fits into the front slot of the shelf (see fig. 4).
4. Plug the shelf light into the receptacle. See fig. 5.

   **NOTE:** Lights will not operate if they are not plugged in.
5. Reinstall the doors.

***Fig. 1.*** Hook the shelf supports into the pilasters at the desired height.

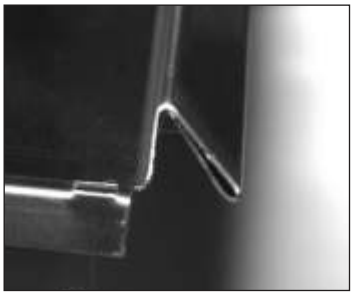


***Fig. 2.*** Position the product stop towards the front of the cabinet.

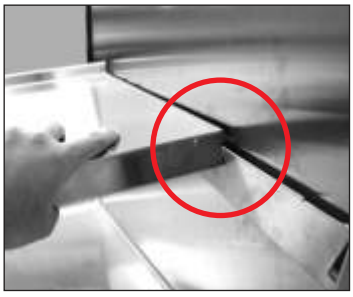
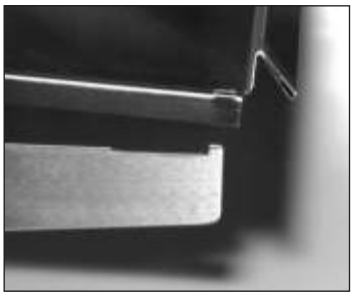


***Fig. 3.*** Be sure the shelf's side hooks over the shelf support.



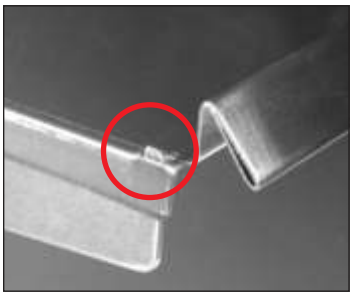


***Fig. 4.*** Shelf support tip fits into the front slot of the shelf.

***Fig. 5.*** Plug in the shelf light.

# Cabinet Setup (cont.)

## Bakery Case Shelving Installation

1. Without disconnecting the elastic tubing, lift each door up out of its track. Stretch the elastic surgical tubing and set the doors on each side of the unit.
2. Locate the shelf supports and install the teeth-end into the stainless pilasters on the interior walls at the desired height (see fig. 6). Install as matching left and right pairs at the same height.
3. Locate the horizontal lights. Hook the light assembly on the shelf supports positioned light-side down and with the electrical cords on the right. See fig. 7.
4. Slide the light assembly forward until it sits in the front notch of the shelf support.
5. Position the stainless steel shelf on the shelf support.
6. Plug the shelf lights into the receptacle.

   **NOTE:** Lights will not operate if they are not plugged in or the plug cover is not plugged in.
7. Reinstall the doors.

***Fig. 6.*** Hook the shelf supports into the pilasters at the desired height.

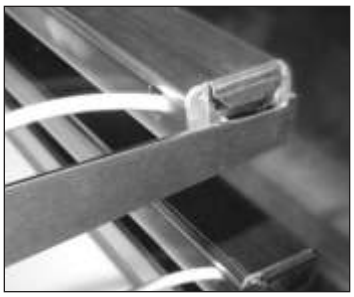


***Fig. 7.*** Position the light assembly hooked on the shelf support and seated in the notch.

## Wire Shelf Installation

1. Without disconnecting the elastic tubing, lift each door up out of its track. Stretch the elastic surgical tubing and set the doors on each side of the unit.
2. Locate the shelf supports and install the teeth-end into the stainless pilasters on the interior walls at the desired height. Install as matching left and right pairs at the same height.
3. Hook the rear shelf brackets over the rear notch of the shelf supports. See fig. 8
4. Locate the horizontal lights. Hook the light assembly on the shelf supports positioned light-side down and with the electrical cords on the right.
5. Slide the light assembly forward until it sits in the front notch of the shelf support.
6. Position the top shelf on the top light assembly and rear bracket.

   **NOTE:** Be sure the tray stop is positioned face up and towards the cabinet front.
7. Snap the shelf into the clips on the rear bracket. See fig. 9.
8. Plug the light into the receptacle. See fig. 9.

   **NOTE:** Lights will not operate if they are not plugged in or the plug cover is not plugged in.
9. Repeat steps 6-8 for the remaining shelves.
10. Reinstall the doors.

***Fig. 8.*** Position the rear brackets over the rear notch.

***Fig. 9.*** Be sure the wire shelves snap into the clips on the rear brackets. Plug the light into the receptacle.

***Fig. 10.*** Repeat the procedure for the remaining shelves.

# Cabinet Operation

## Startup

- The compressor is ready to operate when the unit is purchased. All you need to do is plug in the cooler.
- Excessive tampering with the control could lead to service difficulties. If replacing the temperature control is ever needed, be sure to order the replacement from your TRUE dealer or recommended service agent.
- Good air flow inside your TRUE unit is critical. Take care to prevent product from pressing against the sides or back wall and coming within 4" (101.6 mm) of the evaporator housing. Refrigerated air off the evaporator coil must circulate throughout the cabinet for even product temperatures.

**NOTE:** If the unit is disconnected or shut off, wait 5 minutes before restarting.

**RECOMMENDATION** – Before loading product, run your TRUE unit empty for 24 hours to verify proper operation. Remember, our factory warranty **DOES NOT** cover product loss!

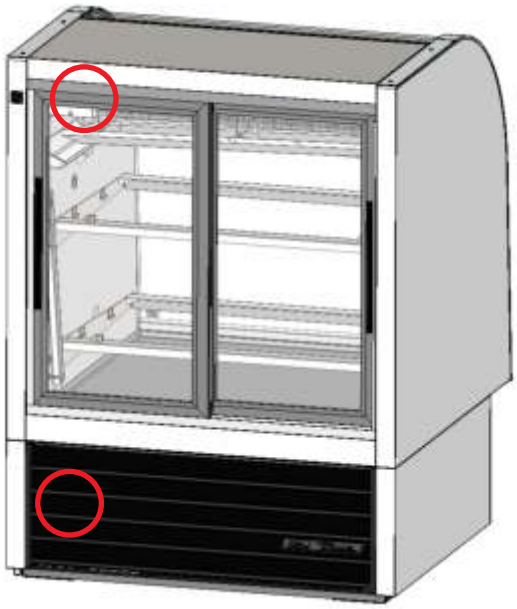
## Temperature Control & Light Switch Location

The light symbol shows the approximate location of the light switch.

*Light Switch on Glass Door Models*
Inside top left ceiling as viewed from the cabinet rear

*Mechanical Temperature Control*
Inside top left ceiling as viewed from the cabinet rear

*Electronic Temperature Control*
Behind the rear louver grill on the left



**FOR MORE INFORMATION**

For more information regarding a cabinet's temperature control adjustment or general sequence of operation, please see our **Temperature Control Adjustment—Sequence of Operation Manual** in our resource library at **https://www.truemfg.com/Service-Manuals/Sequence-of-Operation** or follow the QR code.

# Cabinet Operation (cont.)

## Refrigerator and Freezer Cabinets

### When the cabinet is plugged in

- Interior lights will illuminate on glass door models (see previous page for light switch location).
- An electronic control with digital display will illuminate (if installed).
- There may be a short delay before the compressor and/or evaporator fan(s) start. This delay may be determined by time or by temperature, which could be the result of an initial defrost event that will last at least 6 minutes.
- The temperature control/thermostat may cycle the compressor and evaporator fan(s) on and off together. Every cabinet will require a defrost event to ensure the evaporator coil remains clear of frost and ice buildup. Defrost is initiated by a defrost timer or by the electronic control.

  **EXCEPTION** – Models TSID, TDBD, TCGG, and TMW do not have an evaporator fan(s).
- The temperature control/thermostat senses either an evaporator coil temperature or air temperature, NOT product temperature.
- An analog thermometer, digital thermometer, or electronic control display may reflect the refrigeration cycle swings of up and down temperatures, NOT product temperature. **The most accurate method to determine a cabinet's operation is to verify the product temperature.**
- Refrigerators with mechanical temperature controls will defrost during every compressor off-cycle.
- Freezers with mechanical temperature controls will defrost by time initiation as determined by a defrost timer.

  **EXCEPTION** – Models TFM, TDC, THDC and TMW require a manual defrost. The frequency of this manual defrost will depend on the cabinet's usage and ambient conditions.
- An electronic control with a digital display (if installed) will show **def** during defrost.

  **NOTE:** The display may have a short delay before showing a temperature after a defrost event has expired and instead show **def** during a refrigeration cycle.
- Models with an analog or digital thermometer may show higher than normal temperatures during defrost.
- A refrigerator will use the evaporator fans to clear the coil during defrost.

  **EXCEPTION** – Models TSID, TDBD, and TCGG do not have an evaporator fan(s).
- A freezer will use heaters to clear the evaporator coil during defrost.

  **NOTE:** The evaporator coil heater and drain tube heater are only energized during defrost. Defrost is terminated when a specific evaporator coil temperature is reached or by a time duration.

# Maintenance, Care & Cleaning (cont.)

**CAUTION** - Take care during operation, maintenance or repairs to avoid cuts or pinching from any cabinet part/component.

## Cleaning the Condenser Coil

When using electrical appliances, basic safety precautions should be followed, including the following:

**WARNING** – Electrical shock or burn hazard. Unplug the unit or turn off the power supply before proceeding. **DO NOT** clean appliance with a pressure washer or hose.

**CAUTION** – Risk of eye injury. Eye protection is recommended.

**CAUTION** – Coil fins are sharp. Gloves are recommended.

### Tools Required

- 1/4" nut driver
- 3/8" nut driver
- Stiff bristle brush
- Phillips screwdriver
- Tank of compressed air
- Vacuum cleaner
- Flashlight
- Eye protection
- Gloves

1. Disconnect power to unit.
2. Remove the rear louvered grill from the cabinet. See fig. 1.
3. With a stiff bristle brush, carefully clean accumulated dirt from the front condenser coil fins See fig. 2.
4. With dirt removed from the surface of the coil, use a flashlight to verify that you can see through the coil and observe the condenser fan blade spinning. See fig. 3.

   If the view is clear, reinstall louvered grill, connect unit to power and verify operation.

   **If the view is still blocked with dirt, proceed to step 5.**
5. Remove the condenser base bolts. See fig. 4.
6. Carefully slide the condensing unit out (tubing connections are flexible). Gently blow compressed air or $CO_2$ through the coil until it is clean. See fig. 5.
7. Carefully vacuum any dirt around and behind the condensing unit area.
8. Carefully slide the compressor assembly back into position and bolt it in place. See fig. 6.
9. Reinstall the louvered grill, connect power to the unit, and verify operation.

***Fig. 1.*** Rear louver grill screw location. Carefully remove the grill.

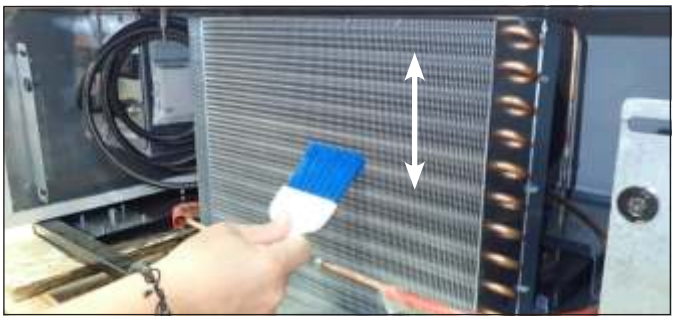


***Fig. 2.*** Never brush across the coil fins.

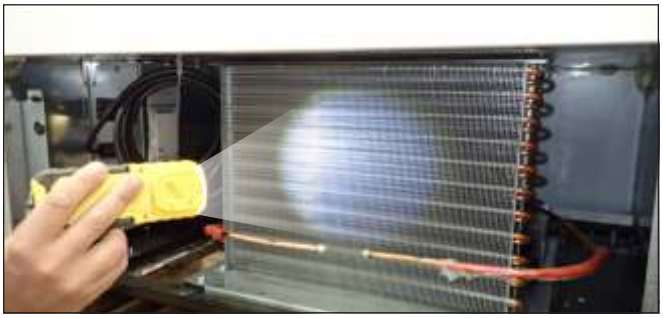


***Fig. 3.*** Verify all blockages have been removed.

***Fig.4.*** Remove condenser base bolts.

# Maintenance, Care & Cleaning (cont.)

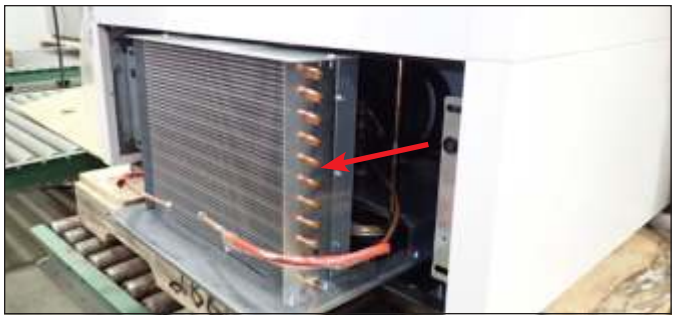


***Fig. 5.*** Carefully slide the condensing unit out.

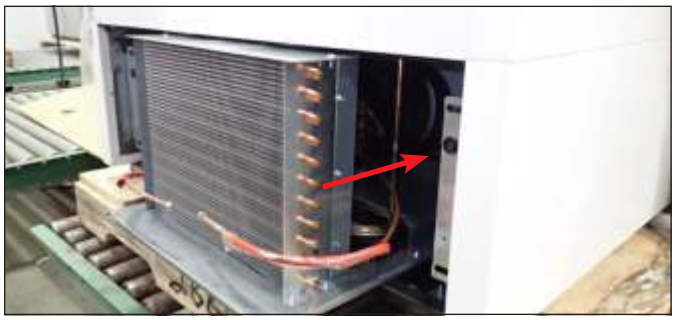


***Fig. 8.*** Carefully slide the condensing unit back into position and replace the bolts.

## Important Warranty Information

**THE CLEANING OF THE CONDENSER IS NOT COVERED BY WARRANTY!**

If you have any questions, please contact your local TRUE Manufacturing Service Department. See the front cover for locations and contact information.

- Condenser coils accumulate dirt and require cleaning every 30 days or as needed.
- A dirty condenser coil can result in non-warranteed repairs and/or cabinet failure.
- Proper cleaning involves removing dust from the condenser by using a soft brush, vacuuming the condenser with a shop vac, or using $CO_2$, nitrogen or pressurized air.
- Do not place any filter material in front of the condensing coil.
- On most units, the condenser is accessible by removing the cabinet's outer grill cover.
- If you cannot remove the dirt adequately, please contact your licensed refrigeration service provider.

# Maintenance, Care & Cleaning (cont.)

## Stainless Steel Care & Cleaning

**CAUTION** – **DO NOT** use any steel wool, abrasive or chlorine-based products to clean stainless steel surfaces.

### Stainless Steel Opponents

There are three basic things which can break down your stainless steel's passivity layer and allow corrosion to form.

- Scratches from wire brushes, scrapers, steel pads, and other items that can be abrasive to stainless steel's surface.
- Deposits left on your stainless steel can leave spots. You may have hard or soft water depending on what part of the country you live in. Hard water can leave spots. Hard water that is heated can leave deposits if left to sit too long. These deposits can cause the passive layer to break down and rust your stainless steel. All deposits left from food prep or service should be removed as soon as possible.
- Chlorides which are present in table salt, food and water, as well as in household and industrial cleaners. These are the worst type of chlorides to use on stainless steel.

### Stainless Steel Cleaning and Restoration

**DO NOT** use stainless steel cleaners or similar solvents to clean plastic or powder-coated parts. Instead, use warm soapy water.

- For routine cleaning and removal of grease and oil, apply white vinegar, ammonia, or any good commercial detergent* with a soft cloth or sponge.
- Stainless steel polish (e.g., Zep® Stainless Steel Polish, Weiman® Stainless Steel Cleaner & Polish, Nyco® Stainless Steel Cleaner & Polish, or Ecolab® Ecoshine®) and olive oil can act as a barrier against fingerprints and smears.
- Degreasers* (e.g., Easy-Off® Specialty Kitchen Degreaser or Simple Green® Industrial Cleaner & Degreaser) are excellent for removal of grease, fatty acids, blood and burnt-on foods on all surfaces.

*__DO NOT__ use detergents or degreasers with chlorides or phosphates.

- For restoration/passivation or removing stubborn stains and discoloration, Brillo® Cameo®, Zud® Cleanser, Ecolab® Specifax™ First Impression® Metal Polish, Sheila Shine, or talc can be applied by rubbing in the direction of the polish lines.

**NOTE:** The use of proprietary names is intended for example only and does not constitute or imply an endorsement. Omission of proprietary cleansers from this list does not imply inadequacy.

## 8 Tips to Help Prevent Rust on Stainless Steel

### Maintain the Cleanliness of Your Equipment

Avoid build-up of hard stains by cleaning frequently. Use cleaners at the recommended strength (alkaline chlorinated or non-chloride).

### Use the Correct Cleaning Tools

Use non-abrasive tools when cleaning your stainless steel products. The stainless steel's passive layer will not be harmed by soft cloths and plastic scouring pads.

### Clean Along Polishing Lines

Polishing lines ("grain") are visible on some stainless steels. Always scrub parallel to polishing lines when visible. Use a plastic scouring pad or soft cloth when you cannot see the grain.

### Use Alkaline, Alkaline-Chlorinated or Non-Chloride Cleaners

While many traditional cleaners are loaded with chlorides, the industry is providing an ever increasing choice of non-chloride cleaners. If you are not sure of your cleaner's chloride content, contact your cleaner supplier. If they tell you that your present cleaner contains chlorides, ask if they have an alternative.
Avoid cleaners containing quaternary salts, as they can attack stainless steel, causing pitting and rusting.

### Rinse

When using chlorinated cleaners, you must rinse and wipe dry immediately. It is better to wipe standing cleaning agents and water as soon as possible. Allow the stainless steel equipment to air dry. Oxygen helps maintain the passivity film on stainless steel.

### Never Use Hydrochloric Acid (Muriatic Acid) on Stainless Steel

Even diluted, hydrochloric acid can cause corrosion, pitting and stress corrosion cracking of stainless steel.

### Water Treatment

To reduce deposits, soften hard water when possible. Installation of certain filters can remove corrosive and distasteful elements. Salts in a properly maintained water softener can also be to your advantage. Contact a treatment specialist if you are not sure of the proper water treatment.

### Regularly Restore & Passivate Stainless Steel

Stainless steel gets its stainless properties from the protective chromium oxides on its surface. If these oxides are removed by scouring, or by reaction with harmful chemicals, then the iron in the steel is exposed and can begin to oxidize, or rust. Passivation is a chemical process that removes free iron and other contaminants from the surface of stainless steel, allowing the protective chromium oxides to re-form.

# Cabinet Adjustments, Servicing, & Component Replacement

**NOTE:** Any cabinet adjustments are to be made **AFTER** the cabinet has been verified level and properly supported.

## Servicing & Replacing Components

- Replace component parts with original equipment manufacturer (OEM) components.
- Have a licensed service provider service your unit to minimize the risk of possible ignition due to incorrect parts or improper service and to ensure the operator's health and safety.
- Unplug the refrigerator/freezer before cleaning or making any repairs. Setting temperature controls to the 0 position or powering off an electronic control may not remove power from all components (e.g., light circuits, perimeter heaters, and evaporator fans).

**FOR MORE INFORMATION**

For additional maintenance instruction, please visit the media center at

**www.truemfg.com**

## Warranty Information (USA & Canada Only)

# Warranty Information

**To view and download the Warranty Statements for USA and Canada, please scan the QR code below.**

www.truemfg.com

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