



## CONGRATULATIONS!

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

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TFM-29FL



TFM-41FL



## INSTALLATION MANUAL

## TFM – TRUE FREEZER MERCHANDISER

### TRUE MANUFACTURING CO., INC.

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975545



SD • 01.22.18

## 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 24 hours prior to usage.**



## SAFETY INFORMATION

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 Owner Manual.

**TO LOCATE REFRIGERANT TYPE, SEE SERIAL LABEL INSIDE CABINET.** This cabinet may contain fluorinated greenhouse gas covered by the Kyoto Protocol (please refer to cabinet's inner label for type and volume, GWP of I 34a= 1,300. R404a= 3,800).

### FOR HYDROCARBON REFRIGERATION ONLY (R-290) SEE BELOW:

- **DANGER** - Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost refrigerator. Do not puncture refrigerant tubing.
- **DANGER** - Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.
- **CAUTION** - 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.
- **CAUTION** - Risk of fire or explosion. Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.
- **CAUTION** - Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully. Flammable refrigerant used.
- **CAUTION** - Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

## SAFETY PRECAUTIONS

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

- This refrigerator must be properly installed and located in accordance with the Installation Instructions before it is used.
- Do not allow children to climb, stand or hang on the shelves in the refrigerator. They could damage the refrigerator and seriously injure themselves.
- Do not touch the cold surfaces in the freezer compartment when hands are damp or wet. Skin may stick to these extremely cold surfaces.
- 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 between the doors and cabinet are necessarily small; be careful closing doors when children are in the area.
- Unplug the refrigerator before cleaning and making repairs.
- Setting temperature controls to the 0 position does not remove power to the light circuit, perimeter heaters, or evaporator fans.

**NOTE:** We strongly recommend that any servicing be preformed by a qualified technician.

## DANGER

# RISK OF CHILD ENTRAPMENT

### PROPER DISPOSAL OF THE REFRIGERATOR

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 YOU THROW AWAY YOUR OLD REFRIGERATOR OR FREEZER:

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

### APPLIANCE DISPOSAL

When recycling appliance please make sure that the refrigerants are handled according to local and national codes, requirements and regulations.

### REFRIGERANT DISPOSAL

Your old refrigerator may have a cooling system that uses "Ozone Depleting" chemicals. If you are throwing away your old refrigerator, make sure the refrigerant is removed for proper disposal by a qualified service technician. If you intentionally release any refrigerants you can be subject to fines and imprisonment under provisions of the environmental regulations.

### USE OF EXTENSION CORDS

**NEVER USE AN EXTENSION CORD!** TRUE will not warranty any refrigerator that has been connected to an extension cord.

### REPLACEMENT PARTS

- Component parts shall be replaced with like components.
- Servicing shall be done by authorized service personnel, to minimize the risk of possible ignition due to incorrect parts or improper service.
- Lamps must be replaced by identical lamps only.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

## WARNING!

### HOW TO CONNECT ELECTRICITY

**DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE GROUND PRONG FROM THE POWER CORD. FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.**

The power cord from this appliance is equipped with a grounding plug which minimizes the possibility of electric shock hazard.

Have the wall outlet and circuit checked by a qualified 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.

The refrigerator should always be plugged into its own individual electrical circuit, which has a voltage rating that matches the rating plate.

This provides the best performance and also prevents overloading building wiring circuits which could cause a fire hazard from overheated wires.

Never unplug your refrigerator by pulling on the power cord. Always grip plug firmly and pull straight out from the outlet.

Repair or replace immediately all power cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length or at either end.

When removing the refrigerator away from the wall, be careful not to roll over or damage the power cord.

If supply power cord is damaged it should be replaced with original equipment manufacture parts. To avoid hazard this should be done by a qualified service technician.

### USE OF ADAPTER PLUGS

**NEVER USE AN ADAPTER PLUG!** Because of potential safety hazards under certain conditions, we strongly recommend against the use of an adapter plug.

The incoming power source to the cabinet including any adapters used must have the adequate power available and must be properly grounded. Only adapters listed with UL should be used.

### NORTH AMERICA USE ONLY!

NEMA plugs

TRUE uses these types of plugs. If you do not have the right outlet have a certified electrician install the correct power source.

**NOTE:** International plug configurations vary by voltage and country.



115/60/1  
NEMA-5-15R



115/208-230/1  
NEMA-14-20R



115/60/1  
NEMA-5-20R



208-230/60/1  
NEMA-6-15R

# 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.

## UNCRATING

### TOOLS REQUIRED

- Adjustable Wrench
- Phillips Screwdriver
- Level

The following procedure is recommended for uncrating the unit:

- Remove the outer packaging, (cardboard and bubbles or Styrofoam corners and clear plastic). Inspect for concealed damage. Again, immediately file a claim with the freight carrier if there is damage.
- Move your unit as close to the final location as possible before removing the wooden skid.

**NOTE:** Keys for coolers with door locks are located in warranty packets.

## ELECTRIC INSTALLATION & SAFETY INFORMATION

- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- Lamps must be replaced by identical lamps only.
- Appliance tested according to the climate classes 5 and 7 temperature and relative humidity.

### ELECTRICAL INSTRUCTIONS

- Before your new unit is connected to a power supply, check the incoming voltage with a voltmeter. If anything less than 100% of the rated voltage for operation is noted, correct immediately.
- All units are equipped with a service cord, and must be powered at proper operating voltage at all times. Refer to cabinet data plate for this voltage.

### TRUE RECOMMENDS THAT A SOLE USE CIRCUIT BE DEDICATED FOR THE UNIT.

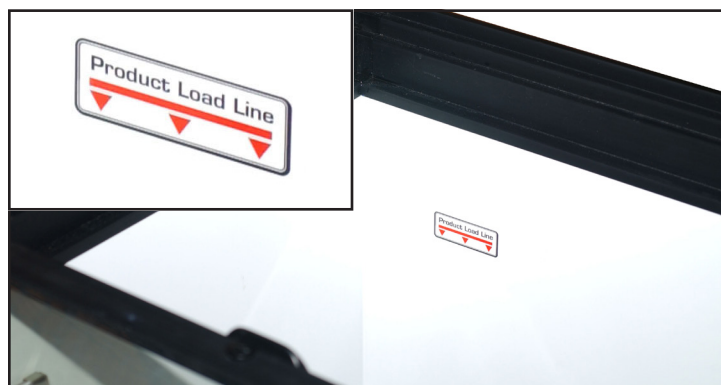
**WARNING:** Compressor warranties are void if compressor burns out due to low voltage.

**WARNING:** Power supply cord ground should not be removed!

**WARNING:** Do not use electrical appliances inside the food storage compartments of the appliances unless they are of the type recommended by the manufacturer.

**NOTE:** To reference wiring diagram, remove front louvered grill, wiring diagram is positioned on the inside cabinet wall.

**NOTE:** When loading product do not exceed product load line labeled on the interior wall of unit.



## WIRE GAUGE CHART

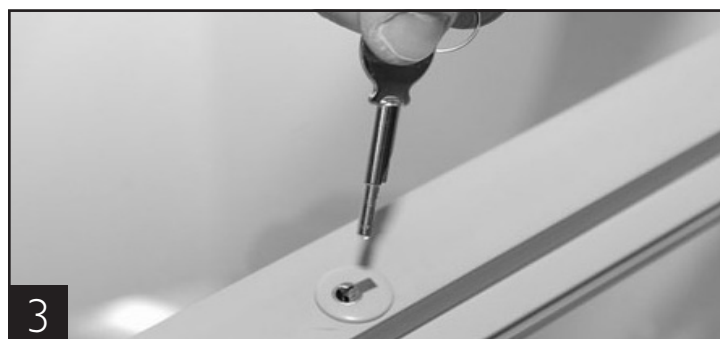
115 Volts	Distance In Feet To Center of Load											
Amps	20	30	40	50	60	70	80	90	100	120	140	160
2	14	14	14	14	14	14	14	14	14	14	14	14
3	14	14	14	14	14	14	14	14	14	14	14	12
4	14	14	14	14	14	14	14	14	14	12	12	12
5	14	14	14	14	14	14	14	12	12	12	10	10
6	14	14	14	14	14	14	12	12	12	10	10	10
7	14	14	14	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	5	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	14	12
8	14	14	14	14	14	14	14	14	14	14	12	12
9	14	14	14	14	14	14	14	14	14	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	8	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

### KEYS

**NOTE:** Keys for coolers with door locks are located in warranty packets.

- A. Insert key with lock into the key hole. Turn and pull the key out. The lock will stay in the key hole.
- B. To remove the lock from the key hole simply do the reverse process. Insert the key into the lock. Turn and pull the key and lock out of the key hole. See images 1-3.



## LOCATING

- A. Place packing material behind cabinet as a cushion. Carefully lay the unit on its back to remove skid.

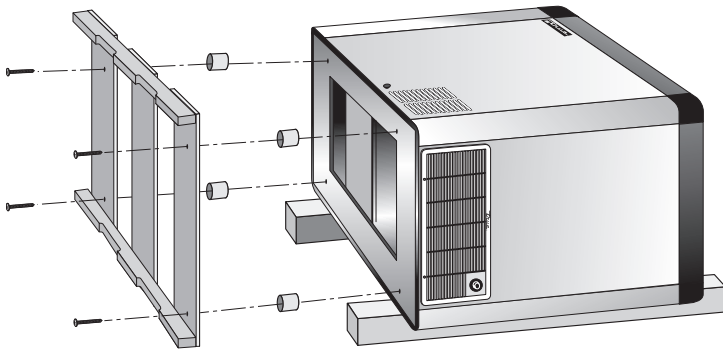
### WHEN LIFTING UNIT REMEMBER TO LEAVE THE CABINET UPRIGHT FOR 24 HOURS BEFORE PLUGGING INTO POWER SOURCE.

- B. Remove skid by unscrewing all base rail anchor brackets. Place skid to the side. (See image 1)
- C. Carefully lift cabinet upright.
- D. Appliance tested according to the climate classes 5 and 7 for temperature and relative humidity.

### RECOMMENDED OPERATION CONDITIONS (75°F DEGREES & 55% RELATIVE HUMIDITY)



Removing skid from bottom of cabinet.



## LEVELING

- A. Set unit in its final location. Be sure there is adequate ventilation in your room. Under extreme heat conditions, (100°F+, 38°C+), you may want to install an exhaust fan.

### WARNING: WARRANTY IS VOID IF VENTILATION IS INSUFFICIENT.

- B. Proper leveling of your TRUE cooler is critical to operating success (for non-mobile models). Effective condensate removal and door operation will be effected by leveling.
- C. The cooler should be leveled front to back and side to side with a level.
- D. Ensure that the drain hose or hoses are positioned in the pan.
- E. Free plug and cord from inside the lower rear of the cooler (do not plug in).
- F. The unit should be placed close enough to the electrical supply so that extension cords are never used.

### 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.

### WARNING: CABINET WARRANTIES ARE VOID IF OEM POWER CORD IS TAMPERED WITH. TRUE WILL NOT WARRANTY ANY UNITS THAT ARE CONNECTED TO AN EXTENSION CORD.

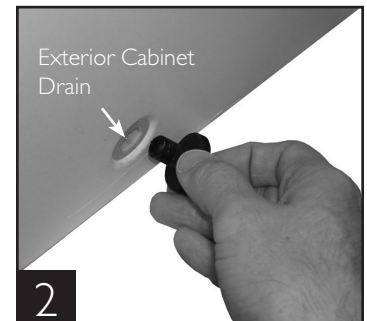
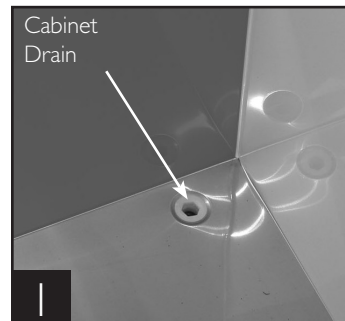
## VENTILATION

Set unit in its final location. Be sure there is adequate ventilation in your room. Maximum ambient operating temperature is 75°F / 55% humidity.

### WARNING: WARRANTY IS VOID IF VENTILATION IS INSUFFICIENT.

## CABINET DRAIN

TRUE Freezer Merchandiser Cabinets have a drain at the bottom of the unit. (See image 1). When cleaning the unit make sure the drain hose is connected to a hose that is routed to a floor drain.





## INSTALLATION OF CASTORS OR OPTIONAL LEGS

Important Safeguard for installation of leg/castor:

### SECURING CASTORS

To obtain maximum strength and stability of the unit, it is important that you make sure each castor is secure. The bearing race on the castor or the top edge of the leg must make firm contact with the rail.

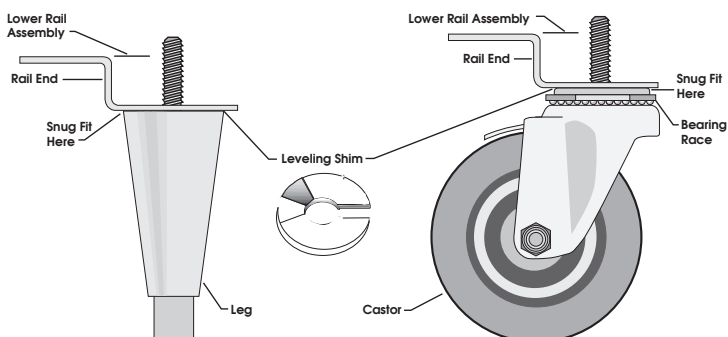
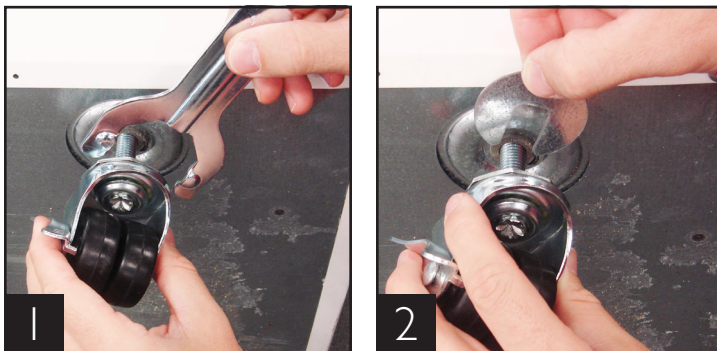
### LEVELING SHIMS

Four leveling shims have been provided for leveling castored units positioned on uneven floors. Shims must be positioned between rail end and bearing race.

- Turn the bearing race counter-clockwise until the cabinet is level. Level front to back and side to side. (diagonally)
- Install the desired number of shims, making sure the slot of the shim is in contact with the threaded stem of the castor. See image 2.
- If more than one shim is used, turn the slot at a 90° angle so they are not in line.
- Turn the bearing race clockwise to tighten and secure the castor by tightening the anchoring bolt with a 3/4 inch open-end wrench or the tool provided. See image 1.

**CAUTION: TO AVOID DAMAGE TO LOWER RAIL ASSEMBLY, SLOWLY RAISE UNIT TO UPRIGHT POSITION.**

**NOTE: OPEN HOLES LOCATED ON THE CROSS MEMBERS OF THE FRAME RAIL SHOULD BE PLUGGED BEFORE UNIT IS IN USE.**



## SEALING CABINET TO FLOOR

**STEP 1 - Position Cabinet** - When positioning cabinet into a final location make sure there are no obstructions in front of the intake and exhaust areas. These areas are located in the front and back of the cabinet.

**STEP 2 - Level Cabinet** - Cabinet should be level, side to side and front to back. Place a carpenter's level in the interior floor in four places:

- Position level in the inside floor of the unit near the doors. (Level should be parallel to cabinet front). Level cabinet.
- Position level at the inside rear of cabinet. (Again level should be placed parallel to cabinet back).
- Perform similar procedures to steps A & B by placing the level on inside floor (left and right sides - parallel to the depth of the cooler). Level cabinet.

**STEP 3** - Draw an outline on the base on the floor:

**STEP 4** - Raise and block the front side of the cabinet.

**STEP 5** - Apply a bead of "NSF Approved Sealant", (see list below), to floor on half inch inside the outline drawn. The bead must be heavy enough to seal the entire cabinet surface when it is down on the sealant.

**STEP 6** - Raise and block the rear of the cabinet

**STEP 7** - Apply sealant on floor as outlined in Step 5 on other three sides.

**STEP 8** - Examine to see that cabinet is sealed to floor around entire perimeter:

**NOTE:** Asphalt floors are very susceptible to chemical attack. A layer of tape on the floor prior to applying the sealant will protect the floor.

### NSF APPROVED SEALANTS:

1. Minnesota Mining #ECU800 Caulk
2. Minnesota Mining #ECU2185 Caulk
3. Minnesota Mining #ECU1055 Bead
4. Minnesota Mining #ECU1202 Bead
5. Armstrong Cork - Rubber Caulk
6. Products Research Co. #5000 Rubber Caulk
7. G.E. Silicone Sealer
8. Dow Corning Silicone Sealer

# OPERATION

## STARTUP

- A. The compressor is ready to operate. Plug in the cooler.
- B. Temperature controls are factory-set to give freezers an approximate temperature of -10°F. Allow unit to function several hours, completely cooling cabinet before changing the control setting.
- Temperature Control Location and Settings.
- Mechanical temperature control is located on rear of unit or behind access grill.
- See website for adjustments, sequence of operation, and more information.
- C. Excessive tampering with the control could lead to service difficulties. Should it ever become necessary to replace temperature control, be sure it is ordered from your TRUE dealer or recommended service agent.

- D. Good air flow in your TRUE unit is critical. Be careful to load product so that it neither presses against the back wall, nor comes within four inches of the evaporator housing. Refrigerated air off the coil must circulate down the back wall.

**NOTE:** If the unit is disconnected or shut off, wait five minutes before starting again.

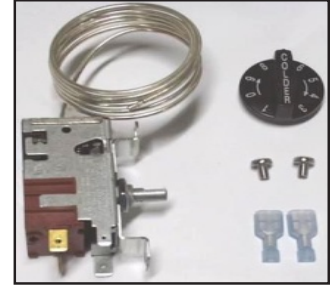
**RECOMMENDATION** - Before loading product we recommend you run your TRUE unit empty for two to three days. This allows you to be sure electrical wiring and installation are correct and no shipping damage has occurred. Remember, our factory warranty does not cover product loss!



# MECHANICAL TEMPERATURE CONTROLS

## COIL SENSING

An evaporator coil sensing temperature control ensures that the evaporator coil will remain clear of frost and ice by not allowing the compressor to restart until the coil temperature is above the freezing temperature. This is considered an **off cycle defrost**.



## MECHANICAL TEMPERATURE CONTROL GENERAL SEQUENCE OF OPERATION

### MECHANICAL CONTROL TFM GENERAL SEQUENCE OF OPERATION

1. Cabinet is plugged in.
2. The compressor only will start if the temperature control is calling for cooling. (If the compressor does not start, verify that the temperature control is not in the "OFF" or "0" position.
3. The temperature control will cycle the compressor on and off.
  - a. The temperature control is sensing the air temperature.
  - b. The temperature control should be set on the #4 or #5.
  - c. The warmest setting is #1, the coldest is #9, and #0 is the off position.
  - d. The thermometer is designed to read and display a cabinet temperature not a product temperature. The thermometer may reflect the refrigeration cycle swings of up and down temperatures. The most accurate temperature on a cabinet's operation is to verify the product temperature.
4. The control will not initiate defrost.
  - a. The cabinet will need to be manually defrosted. The manual defrost frequency will depend on the unit's usage, environment and the amount of frost.

## WHEN TO MAKE AN ADJUSTMENT TO A MECHANICAL TEMPERATURE CONTROL

We advise to make a mechanical temperature control adjustment only for a high altitude location.



## HOW TO ADJUST A MECHANICAL TEMPERATURE CONTROL

### OPERATION INSTRUCTIONS:

#### REQUIRED TOOLS:

- Jewelers Screw Driver (Small Screw Driver)

### GE CONTROL INSTRUCTIONS:

The scale to the right may be used as a guide for measuring degrees of rotation required for altitude correction. See Figure 1. The arrows indicate direction of screw rotation. Turn calibration screw clockwise to obtain warmer operating temperatures.

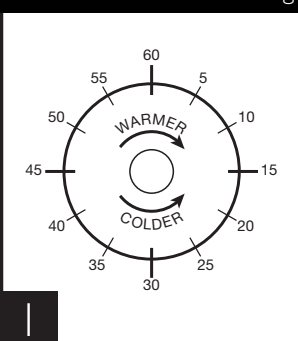
**NOTE:** Each 1/4 turn of the calibration screw is equal to approximately 2 degrees F. Do not make more than 3/4 turn. After making adjustment, measure temperature during three cycles before adjusting again.

**NOTE:** Only adjust the screw (small flathead) on the face of the control (next to the cam). See Figure 3. Follow the Altitude Correction Table to the right.

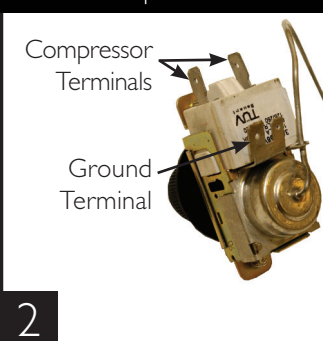
**ALTITUDE CORRECTION TABLE:  
CALIBRATION SCREW ADJUSTS  
BOTH CUT-IN AND CUT-OUT**

Altitude (Feet)	Clockwise Turns
2000	7/60
3000	11/60
4000	15/60
5000	19/60
6000	23/60
7000	27/60
8000	30/60
9000	34/60
10,000	37/60

Scale Guide for Measuring

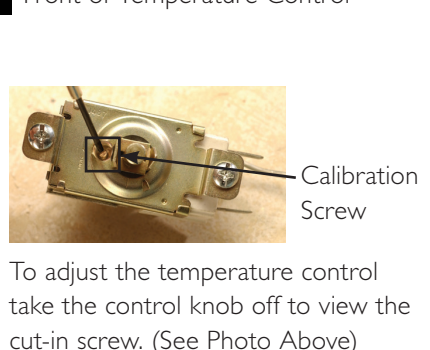


Back of Temperature Control



Altitude Correction

Front of Temperature Control



To adjust the temperature control take the control knob off to view the cut-in screw. (See Photo Above)

## INSTALLATION INSTRUCTIONS DANFOSS TEMPERATURE CONTROL ADJUSTMENT FOR HIGH ALTITUDE APPLICATIONS:

#### REQUIRED TOOLS:

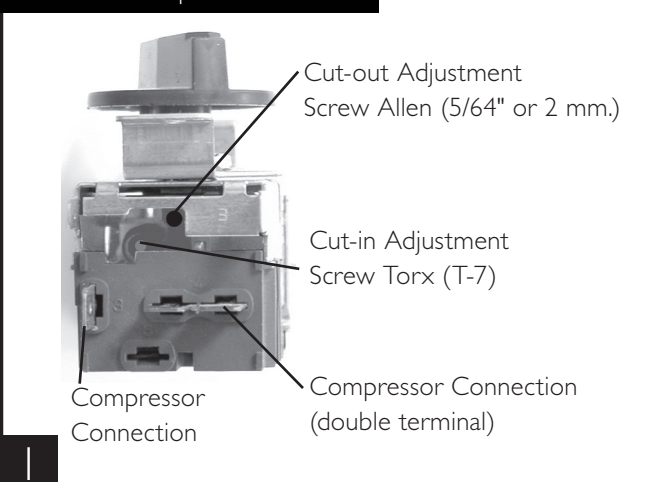
- Allen Wrench (5/64")
- Torx Screw (T-7)

#### TERMS:

**Cut-out** - Temperature sensed by the controller that shuts the compressor off.

**Cut-in** - Temperature sensed by the controller that turns the compressor on.

Bottom of Temperature Control



**INSTRUCTIONS: DANFOSS TEMPERATURE CONTROL ADJUSTMENT FOR HIGH ALTITUDE APPLICATIONS**

**STEP 1** - Unplug cooler.

**STEP 2** - Remove the screws that secure the temperature control to the inset box.

**STEP 3** - To make these adjustments it may be necessary to remove the temperature control from the housing.

**NOTE:** You may have to remove the wires attached to the control. Take note as to which wire is on which spade terminal.

**STEP 4** - Pull out gently from cabinet.

**NOTE:** Mechanical temperature controllers are affected when functioning at high altitude. The cut-in and cut-out temperatures will be colder than when the controller functions closer to sea level.

**STEP 5** - For high elevation installations, it may be necessary to “warm-up” the set points. To make the adjustment, insert the appropriate tool in each adjustment screw and turn 1/4 of a revolution clockwise (to the right). This procedure will adjust both the cut-in and cut-out about 2°F warmer.

**STEP 6** - Make sure to reconnect the wires to the proper spade terminal when reinstalling.

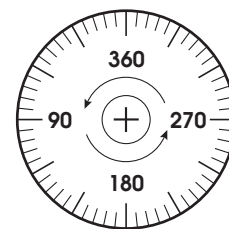
**INSTALLATION INSTRUCTIONS  
TEMPERATURE CONTROL ALTITUDE ADJUSTMENT:****REQUIRED TOOLS:**

- Allen Wrench (5/64")
- Torx Screw (T-7)

The scale to the right may be used as a guide for measuring degrees of rotation required for altitude correction. The arrows indicate direction of screw rotation. See Figure 1.

**IMPORTANT:** Upright models ordered with “High Altitude” temperature controls are pre-calibrated and do not require adjustment.

Scale Guide for Measuring

**INSTRUCTIONS: CUTLER HAMMER TEMPERATURE CONTROL ALTITUDE ADJUSTMENT**

**STEP 1** - Unplug cooler.

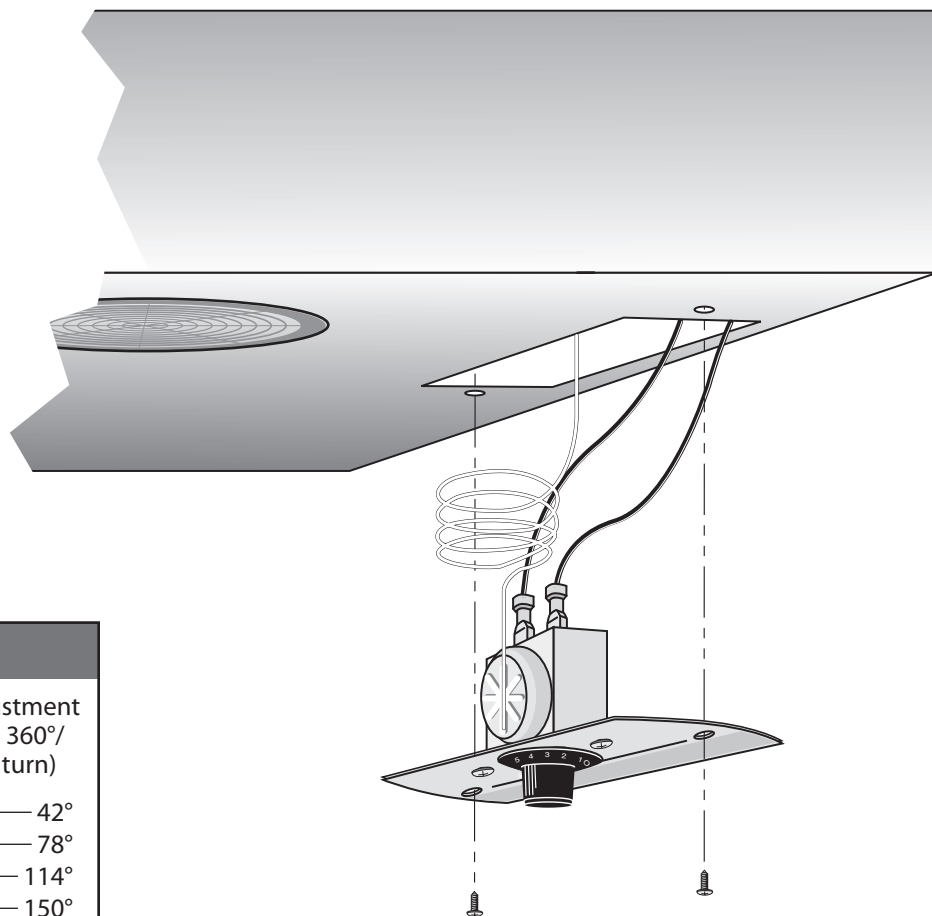
**STEP 2** - Turn the temperature control to the “9” position.

**STEP 3** - Remove the screws that secure the mounting plate to the evaporator top. See Figure 2.

**STEP 4** - Pull control down gently from housing.

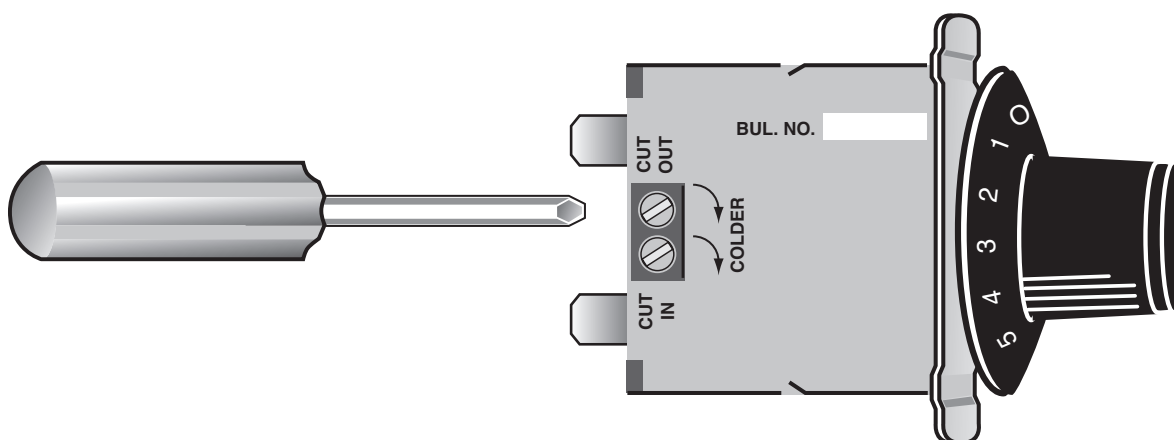
**STEP 5** - Turn screws counterclockwise (CCW).

**STEP 6** - Reassemble to cooler housing and return the temperature control to the “5” position.



## CHART

Height	CCW Adjustment (based on 360°/ complete turn)
2000'	42°
3000'	78°
4000'	114°
5000'	150°
6000'	186°
7000'	222°
8000'	258°
9000'	294°
10,000'	330°



## DEFROST OPERATIONS

### MANUAL DEFROST:

The unit will need to be manually defrosted. Unplug unit until all frost is gone. The manual defrost frequency will depend on the units usage, environment, and the amount of frost.

### NOTE

Remember to place the unit close to a floor drain when manually defrosting unit. Make sure the drain plug is removed when manually defrosting the unit.

### IF ICE BUILDS UP ON INTERIOR WALLS-

- A. Remove product, unplug and roll unit so defrost plug is above floor drain (or large flat pan).
- B. Remove plug and allow ice to melt and drain. Do not scrape interior of cabinet to loosen ice, as this will damage the cabinet. Allow cabinet to defrost with power off.
- C. When ice has melted wipe up and water left in the freezer floor.
- D. Be sure to replace defrost plug before moving freezer back in position.
- E. Allow freezer to refrigerate and cycle before placing wire baskets and product back into freezer.

# MAINTENANCE, CARE, CLEANING

## CLEANING THE CONDENSER COIL

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

### TOOLS REQUIRED

- Phillips Screwdriver
- Stiff Bristle Brush
- Adjustable Wrench
- Air Tank or CO2 Tank
- Vacuum Cleaner

### STEP 1

Disconnect power to unit. Take off lower grill assembly. Remove phillips screws at the bottom of the grill. Holding grill at the bottom gently pull out and down as shown. (see illustration 1).

### STEP 2

Clean off accumulated dirt from condensing coil with a stiff bristle brush and clean fan blade

**NOTE:** It may be necessary to use CO2 or compressed air to blow off any dust or debris from condenser coil. Use a vacuum to clean up any debris.

**WARNING:** Do not bend or disrupt the refrigeration lines when cleaning the condenser coil. TRUE is not responsible for damage done to the condensing unit and refrigeration lines.

### STEP 3

Remove bolts anchoring compressor assembly to frame rails and carefully slide out. (tube connections are flexible)

### STEP 4

Lift W.R. Board cover above fan at plastic plugs and carefully clean condenser coil and fan blade.

### STEP 5

After brushing condenser coil vacuum dirt from coil, and interior floor

### STEP 6

Carefully slide compressor assembly back into position and replace bolts.

### STEP 7

Reinstall grill assembly onto unit. Connect unit to power and check to see if fan blade is turning.

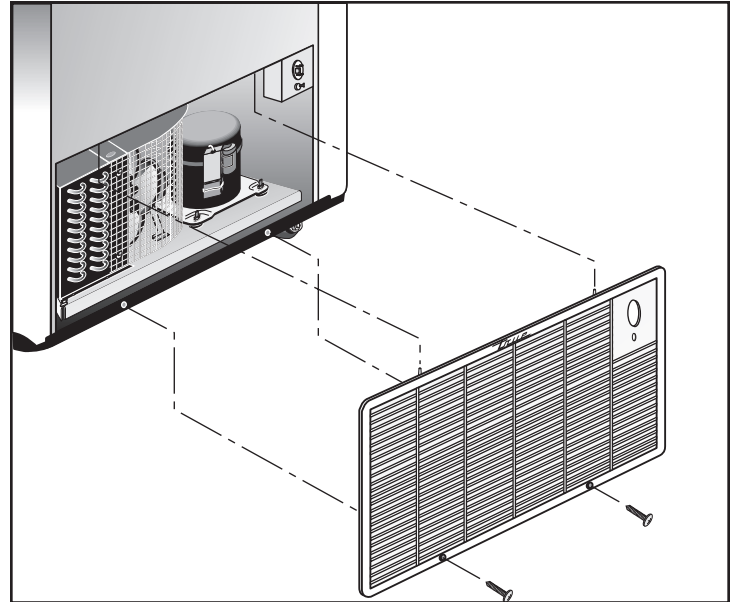


Illustration 1



Illustration 2



## IMPORTANT WARRANTY INFORMATION

Condensers accumulate dirt and require cleaning every 30 days. Dirty condensers result in compressor failure, product loss, and lost sales, which are not covered by warranty.

If you keep the Condenser clean you will minimize your service expense and lower your electrical costs. The Condenser requires scheduled cleaning every thirty days or as needed.

Air is pulled through the Condenser continuously, along with dust, lint, grease, etc.

A dirty Condenser can result in NON-WARRANTEED part & Compressor Failures, Product Loss, and Lost Sales.

Proper cleaning involves removing dust from the Condenser. By using a soft brush, or vacuuming the Condenser with a shop vac, or using CO<sub>2</sub>, nitrogen, or pressurized air.

If you cannot remove the dirt adequately, please call your refrigeration service company.

On most of the reach-in units the condenser is accessible in the rear of the unit. You must remove the cabinet grill to expose the Condenser.

The Condenser looks like a group of vertical fins. You need to be able to see through the condenser for the unit to function at maximum capacity. Do not place filter material in front of condensing coil. This material blocks air-flow to the coil similar to having a dirty coil.

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

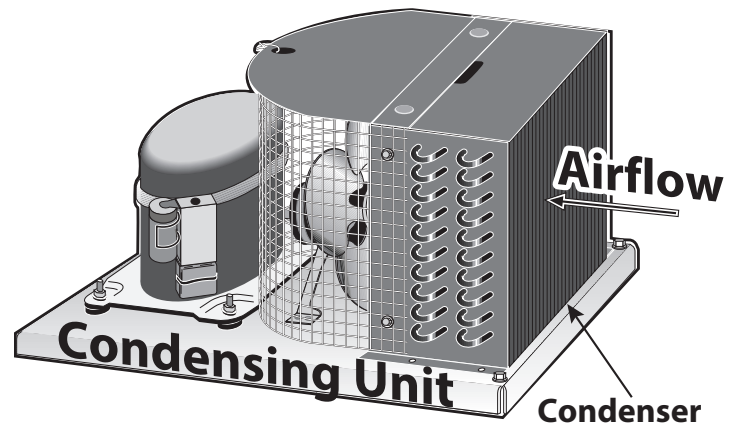
### HOW TO CLEAN THE CONDENSER:

1. Disconnect the electrical power to the unit.
2. Remove the louvered grill.
3. Vacuum or brush the dirt, lint, or debris from the finned condenser coil.
4. If you have a significant dirt build up you can blow out the condenser with compressed air.

### (CAUTION MUST BE USED TO AVOID EYE INJURY. EYE PROTECTION IS RECOMMENDED.)

5. When finished be sure to replace the louvered grill. The grill protects the condenser.
6. Reconnect the electrical power to the unit.

If you have any questions, please call TRUE Manufacturing at 636-240-2400 or 800-325-6152 and ask for the Service Department. Direct to Service Department 1(855)372-1368. Service Department Availability Monday-Thursday 7:00 a.m. to 7:00 p.m., Friday 7:00 a.m. to 6:00 p.m. and Saturday 8:00 a.m. to 12:00 p.m. CST.



## STAINLESS STEEL EQUIPMENT CARE AND 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 rear its ugly head.

1. Scratches from wire brushes, scrapers, and steel pads are just a few examples of items that can be abrasive to stainless steel's surface.
2. 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.
3. Chlorides are present in table salt, food, and water. Household and industrial cleaners are the worst type of chlorides to use.

### RECOMMENDED CLEANERS FOR CERTAIN SITUATIONS / ENVIRONMENTS OF STAINLESS STEEL

- A. Soap, ammonia and detergent medallion applied with a cloth or sponge can be used for routine cleaning.
- B. Arcal 20, Lac-O-Nu Ecoshine applied provides barrier film for fingerprints and smears.
- C. Cameo, Talc, Zud First Impression is applied by rubbing in the direction of the polished lines for stubborn stains and discoloring.
- D. Easy-off and De-Grease It oven aid are excellent for removals on all finishes for grease-fatty acids, blood and burnt-on foods.
- E. Any good commercial detergent can be applied with a sponge or cloth to remove grease and oil.
- F. Benefit, Super Sheen, Sheila Shine are good for restoration / passivation.

**NOTE:** The use of stainless steel cleaners or other such solvents is not recommended on plastic parts. Warm soap and water will suffice.

## 8 STEPS THAT CAN HELP PREVENT RUST ON STAINLESS STEEL:

### 1. USING 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. Step 2 tells you how to find the polishing marks.

### 2. CLEANING ALONG THE POLISH LINES

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

### 3. USE ALKALINE, ALKALINE CHLORINATED OR NON-CHLORIDE CONTAINING 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.

### 4. WATER TREATMENT

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

### 5. MAINTAINING THE CLEANLINESS OF YOUR FOOD EQUIPMENT

Use cleaners at the recommended strength (alkaline chlorinated or non-chloride). Avoid build-up of hard stains by cleaning frequently. When boiling water with your stainless steel equipment, the single most likely cause of damage is chlorides in the water. Heating any cleaners containing chlorides will have the same damaging effects.

### 6. 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.

### 7. HYDROCHLORIC ACID (MURIATIC ACID) SHOULD NEVER BE USED ON STAINLESS STEEL

### 8. REGULARLY RESTORE/PASSIVATE STAINLESS STEEL

**FOR ADDITIONAL MAINTENANCE INSTRUCTION, PLEASE VISIT THE MEDIA CENTER AT [WWW.TRUEMFG.COM](http://WWW.TRUEMFG.COM)**



# WARRANTY INFORMATION (U.S.A. & CANADA ONLY!)

**THIS WARRANTY ONLY APPLIES TO UNITS SHIPPED FROM TRUE'S MANUFACTURING FACILITIES AFTER SEPTEMBER 1, 2015.**

## **THREE-YEAR PARTS & LABOR WARRANTY**

TRUE warrants to the original purchaser of every new TRUE refrigerated unit, the cabinet and all parts thereof, to be free from defects in material or workmanship, under normal and proper use and maintenance service as specified by TRUE and upon proper installation and start-up in accordance with the instruction packet supplied with each TRUE unit. TRUE's obligation under this warranty is limited to a period of three (3) years from the date of original installation or 39 months after shipment date from TRUE, whichever occurs first.

Any part covered under this warranty that are determined by TRUE to have been defective within three (3) years of original installation or thirty-nine (39) months after shipment date from manufacturer, whichever occurs first, is limited to the repair or replacement, including labor charges, of defective parts or assemblies. The labor warranty shall include standard straight time labor charges only and reasonable travel time, as determined by TRUE.

Warranty does not cover standard wear parts which include door gaskets, incandescent bulbs or fluorescent bulbs. Warranty also does not cover issues caused by improper installation or lack of basic preventative maintenance which includes regular cleaning of condenser coils.

## **ADDITIONAL TWO-YEAR COMPRESSOR WARRANTY**

In addition to the Three (3) year warranty stated above, TRUE warrants its hermetically and semi-hermetically sealed compressor to be free from defects in both material and workmanship under normal and proper use and maintenance service for a period of two (2) additional years from the date of original installation but not to exceed five (5) years and three (3) months after shipment from the manufacturer.

Compressors determined by TRUE to have been defective within this extended time period will, at TRUE's option, be either repaired or replaced with a compressor or compressor parts of similar design and capacity.

The two (2) year extended compressor warranty applies only to hermetically and semi-hermetically sealed parts of the compressor and does not apply to any other parts or components, including, but not limited to: cabinet, paint finish, temperature control, refrigerant, metering device, driers, motor starting equipment, fan assembly or any other electrical component, etcetera.

## **404A/134A/HYDROCARBON COMPRESSOR WARRANTY**

The two year compressor warranty detailed above will be voided if the following procedure is not carefully adhered to:

1. This system contains R404A, R134A, or R290 refrigerant and polyol ester lubricant. The polyol ester lubricant has rapid moisture absorbing qualities. If long exposure to the ambient conditions occur, the lubricant must be removed and replaced with new. For oil amounts and specifications please call TRUE technical service department (855-372-1368). Failure to comply with recommended lubricant specification will void the compressor warranty.

2. Drier replacement is very important and must be changed when a system is opened for servicing. An OEM exact replacement should be used. The new drier must also be the same capacity as the drier being replaced.

3. Micron level vacuums must be achieved to insure low moisture levels in the system. 500 microns or lower must be obtained.

## **WARRANTY CLAIMS**

All claims for labor or parts must be made directly through TRUE. All claims should include: model number of the unit, the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect.

In case of warranty compressor, the compressor model tag must be returned to TRUE along with above listed information.

Any action or breach of these warranty provisions must be commenced within one (1) year after that cause of action has occurred.

## **WHAT IS NOT COVERED BY THIS WARRANTY**

TRUE's sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

**NO CONSEQUENTIAL DAMAGES.** TRUE IS NOT RESPONSIBLE FOR ECONOMIC LOSS; PROFIT LOSS; OR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSSES OR DAMAGES ARISING FROM FOOD OR PRODUCT SPOILAGE CLAIMS WHETHER OR NOT ON ACCOUNT OF REFRIGERATION FAILURE.

**WARRANTY IS NOT TRANSFERABLE.** This warranty is not assignable and applies only in favor of the original purchaser/user to whom delivered. ANY SUCH ASSIGNMENT OR TRANSFER SHALL VOID THE WARRANTIES HEREIN MADE AND SHALL VOID ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**IMPROPER USAGE.** TRUE ASSUMES NO LIABILITY FOR PARTS OR LABOR COVERAGE FOR COMPONENT FAILURE OR OTHER DAMAGES RESULTING FROM IMPROPER USAGE OR INSTALLATION OR FAILURE TO CLEAN AND/OR MAINTAIN PRODUCT AS SET FORTH IN THE WARRANTY PACKET PROVIDED WITH THE UNIT.

**RELOCATION OF CABINET FOR REPAIR.** True is not responsible for the cost to move a cabinet for any reason from its position of operation on the customer's premises to make a warranty repair.

**NON OEM PARTS.** Use of non OEM parts without manufacturer's approval will void cabinet warranty.

**ALTERATION, NEGLIGENCE, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT OR INSTALLATION, FIRE, FLOOD, ACTS OF GOD.** TRUE is not responsible for the repair or replacement of any parts that TRUE determines have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood, or act of God.

**IMPROPER ELECTRICAL CONNECTIONS.** TRUE IS NOT RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF FAILED OR DAMAGED COMPONENTS RESULTING FROM INCORRECT SUPPLY VOLTAGE, THE USE OF EXTENSION CORDS, LOW VOLTAGE, OR UNSTABLE SUPPLY VOLTAGE.

**NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE:** THERE ARE NO OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, EXCEPT THE THREE (3) YEAR PARTS & LABOR WARRANTY AND THE ADDITIONAL TWO (2) YEAR COMPRESSOR WARRANTY AS DESCRIBED ABOVE. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTY AND MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

**OUTSIDE U.S. AND CANADA:** This warranty does not apply to, and TRUE is not responsible for, any warranty claims made on products sold or used outside the United States and Canada. This warranty only applies to units shipped from True's manufacturing facilities after September 1, 2015.