

#### **CONGRATULATIONS!**

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

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THAC: TRUE HORIZONTAL AIR CURTAIN

#### TRUE MANUFACTURING CO., INC.

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 (636)-240-2400 • FAX (636)-272-2408 • INT'L FAX (636)272-7546 • (800)-325-6152 Parts Department (800)-424-TRUE • Parts Department FAX# (636)-272-9471 Web: www.truemfg.com





### **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 134a= 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 it's 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.











### **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:

- A. 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.
- B. Move your unit as close to the final location as possible before removing the wooden skid.

# 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**

- A. 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.
- B. 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.

#### **WIRE GAUGE CHART**

115 Volts	2.0			e In F		Го С			oad			1.40	230 Volts	2.0					To C			Load			1.40
Amps 2 3 4	20 14 14 14	30 14 14 14	40 14 14 14	50 14 14 14	60 14 14 14	/0 14 14 14	80 14 14 14	90 14 14 14	100 14 14 14	120 14 14 12	140 14 14 12	160 14 12 12	Amps 5 6 7	20 14 14 14	30 14 14 14	40 14 14 14	50 14 14 14	60 14 14 14	/0 14 14 14	80 14 14 14	90 14 14 14	100 14 14 14	120 14 14 14	140 14 14 12	160 14 12 12
5 6	14 14	14 14	14 14	14 14	14 14	14 14	14 12	12 12	12 12	12 10	10 10	10 10	8 9	14 14	14 14	4  4	14 14	14 14	14 14	14 14	14 14	14 12	12 12	12 12	12 10
7 8 9 10 12	14 14 14 14	14 14 14 14	14 14 14 14	14 14 12 12 12	14 12 12 12 10	12 12 12 10	12 12 10 10	12 10 10 10 8	10 10 10 10 8	10 10 8 8	10 8 8 8	8 8 8 8	10 12 14 16 18	14 14 14 14	14 14 14 14	4  4  4  4	14 14 14 14	14 14 14 12 12	14 14 12 12 12	14 12 12 12 10	12 12 12 10 10	12 12 10 10	12 10 10 10 8	10 10 10 8 8	10 10 8 8 8
14 16 18 20 25	14 14 14 14	14 12 12 12 10	12 12 10 10	10 10 10 10 8	10 10 8 8 8	10 8 8 8 6	8 8 8 8	8 8 8 6 6	8 8 8 6 6	6 6 8 6 5	6 6 8 5 4	6 6 5 5 4	20 25 30 35 40	14 14 14 14	14 14 12 12 12	14 12 12 10 10	12 12 10 10	10 10 10 10	10 10 10 8 8	10 10 8 8	10 10 8 8 6	10 8 8 8	8 8 6 6	8 6 6 6 5	8 6 6 5 5
30 35 40 45 50	12 10 10 10	10 10 8 8 8	8 8 8 6 6	8 6 6 6	6 6 6 5	6 5 5 4	6 5 5 4 4	6 5 4 4 3	5 4 4 3 3	4 4 3 3 2	4 3 2 2 1	3 2 2 1	50 60 70 80 90 100	12 12 10 10 10	10 10 10 8 8	10 8 8 8 6 6	8 6 6 6 6	6 6 6 5 5	6 6 6 5 4	6 5 5 4 4	6 6 5 4 4 3	6 5 4 4 3 3	5 4 4 3 3 2	4 4 2 2 1	4 3 2 2 1



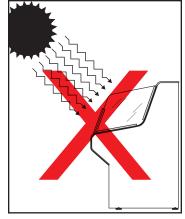
### THAC RECOMMENDED OPERATING CONDITIONS

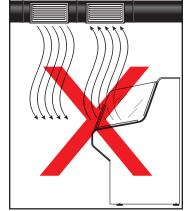
#### **INSTALLATION TIPS**

- Do not place into direct sunlight.
- No HVAC supply or return air vents pushing air into or pulling air out of cabinet.
- No ceiling fans.
- No doorways.
- Make sure cabinet is level from back-to-back and side-to-side.

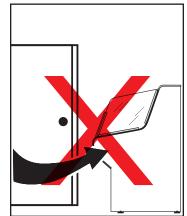
**NOTE:** Check for correct clearance space in for air flow in front of the unit.

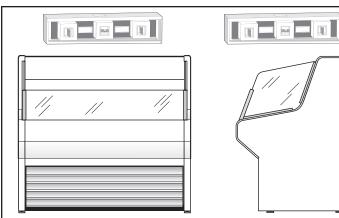
- Maximum ambient condition 75 degrees and 55% Relative Humidity.
- Place cabinet in an area that will not have any air drafts.
- Excessive airflow around cabinet can effect interior cabinet airflow (air-curtain).

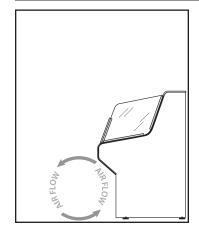


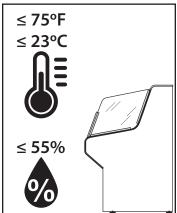












#### **LOCATING**

- 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.
- C. Carefully lift cabinet upright.
- D. Applicance tested according to the climate classes 5 and 7 for temperature and relative humidity.

#### **INSTALLATION TIPS**

- Place cabinet in an area that will not have any air drafts.
- Excessive airflow around cabinet can effect interior cabinet airflow (air-curtain).
- No HVAC supply or return air vents pushing air into or pulling air out of cabinet.
- No doorways.
- · No ceiling fans.
- Do not place into direct sunlight.

**NOTE:** Do not place THAC unit in an area that will obstruct air flow through the front louver grill.

Maximum ambient condition 75 degrees and 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.

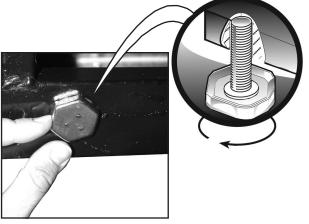
- B. Proper leveling of your TRUE cooler is critical to operating success (for non-mobile models). Effective condensate removal and door operation will be effected by leveling.
- C. The cooler should be leveled front to back and side to side with a level.
- D. Ensure that the drain hose or hoses are 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.







Leg levelers in the bottom of the cabinet can be backed out for leveling.



#### INSTALLATION OF CASTORS

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.

- A. Turn the bearing race counter-clockwise until the cabinet is level. Level front to back and side to side. (diagonally)
- B. 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.
- C. If more than one shim is used, turn the slot at a 90° angle so they are not in line.
- D. Turn the bearing race clockwise to tighten and secure the castor by tightening the anchoring bolt with a 3/4 inch openend wrench or the tool provided. See image 3.

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.



Thread castor into the underside of cabinet frame rail.



For leveling, insert the shim between castor and frame rail.



Use the tool provided to tighten the castor into place.

#### SEALING CABINET TO FLOOR

- **STEP I** <u>Position Cabinet</u> When positioning cabinet into a final location make sure there are no obstructions in front of the intake and exhaust areas.
- **STEP 2** <u>Level Cabinet</u> Cabinet should be level, side to side and front to back.
- **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:**

- I. 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 refrigerators an approximate temperature of 35°F (I.6°C). Allow unit to function several hours, completely cooling cabinet before changing the control setting.

Temperature Control Location and Settings.

- Electronic temperature control is located on rear of unit or behind access grill.
- LAE temperature control is located on the front of cabinet countertop or in/behind louvered grill.
- Mechanical temperature control is located inside of unit.

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!

#### **LIGHT SWITCH LOCATION:**

The light switch is located behind the interior light on the ceiling. Depending on the model, the switch will be either on the left or right side of the ceiling.



### ELECTRONIC TEMPERATURE CONTROLS

#### DIXELL ELECTRONIC TEMPERATURE CONTROL GENERAL SEQUENCE OF OPERATION

pl = supply air (thermostat)

p2 = coil / copper line (defrost)

p3 = return air (display)

p3 probe is not installed and / or activated in all applications with p3 is not installed and / or activated, the display probe is p1.



#### **DIXELL ELECTRONIC CONTROL GENERAL SEQUENCE OF OPERATION**

- I. Cabinet is plugged in.
  - a. Display will illuminate.
  - b. Interior lights will illuminate on Glass Door Models only. If lights do not come on verify the light switch is in the "ON" position. Solid door cabinets may or may not have lights that may be controlled by the door switch.
  - c. Evaporator motors will come on (refrigerator only).
- 2. After the Dixell control preprogrammed time delay of 3-5 minutes, the compressorand freezer evaporator fan(s) will start if the control is calling for cooling.
- 3. The Dixell control will cycle the compressor but may also cycle the evaporator fan(s) on and off determined by the Set-Point and Differential temperatures.
  - a. The Set-Point is the **adjustable** preprogrammed temperature which shuts off the compressor and evaporator fan(s). This is not the programmed cabinet temperature.
  - b. The Differential is the **non adjustable** preprogrammed temperature that is added to the Set-Point temperature that will start the compressor and evaporator fan(s).
  - c. The Dixell control is designed to read and display a cabinet temperature **not a product temperature**. This cabinet temperature may reflect the refrigeration cycle of the Set-Point and it's Differential. The most accurate temperature on a cabinets operation is to verify the product temperature.

Example: If the Set-Point is 33°F/1°C and the Differential is 8°F/4°C

(Set-Point)  $33^{\circ}F + 8$  (Differential) =  $41^{\circ}F$ 

Or

(Set-Point)  $I^{\circ}C + 4$  (Differential) =  $5^{\circ}C$ 

The compressor will cycle off 33°F/I°C and back on at 41°F/5°C

- 4. The Dixell control may be preprogrammed to initiate defrost at specific intervals that start when the cabinet is plugged in.
  - a. At this time the "dEF" may appear on the display and compressor will turn off until a preprogrammed temperature or duration is reached. During this time, for freezers only, evaporator fan(s) will also turn off and the coil heater and drain tube heaters will also be energized. Some cabinets may also change the rotation of the reversing condenser fan motor.
  - b. After the preprogrammed temperature has been reached or duration for defrost has expired, there may be a short delay for both the compressor and evaporator fans to restart. At this time "dEF" may still appear on the display for a short time.



#### **DIGITAL TEMPERATURE CONTROL COMMANDS:**

Use of LED: Each LED function is described in the table below.

Key Combinations:



+ To lock & unlock the keyboard.



To enter the programming mode.



+ To exit the programming mode.

#### **HOW TO START A MANUAL DEFROST:**

**STEP I** - Push the (**DEFROST**) key for more than (2) seconds and a manual defrost will start.

**STEP 2** - By pushing the **(ON/OFF)** key, the instrument shows "OFF" for 5 seconds and then the ON/OFF LED switch ON.



LED	MODE	FUNCTION
*	ON	The compressor is running
*	FLASHING	- Programming phase (flashing with LED <b>%</b> ) - Anti-short cycle delay enabled
4	ON	The fan is running
4	FLASHING	Programming phase (flashing with LED 🕏)
懋	ON	The defrost is enabled

#### **ALARM SIGNALS**

MESSAGE	CAUSE	OUTPUTS
"P1"	Thermostat probe failure	Alarm output ON; Compressor output according to "COn" and "COF"
"P2"	Evaporator probe failure	Alarm output ON; Other outputs unchanged
"P3"	Auxiliary probe failure	Alarm output ON; Other outputs unchanged
"HA"	Maximum temperature alarm	Alarm output ON; Other outputs unchanged
"LA"	Minimum temperature alarm	Alarm output ON; Other outputs unchanged
"EE"	Data or memory failure	Alarm output ON; Other outputs unchanged
"dA"	Door switch alarm	Alarm output ON; Other outputs unchanged
"EAL"	External alarm	Alarm output ON; Other outputs unchanged
"BAL"	Serious external alarm	Alarm output ON; Other outputs OFF
"PAL"	Pressure switch alarm	Alarm output ON; Other outputs OFF

NOTE: To silence alarm, press any button on keypad.

#### USING THE DIXELL ELECTRONIC CONTROL

#### **HOW TO LOCK / UNLOCK THE KEYS:**

STEP I - Press the (UP) and (DOWN) keys at the same time for more than (3) seconds.

STEP 2 - The "POF" message will be displayed if the keyboard is locked. At this point, it is only possible to view the set point, MAXIMUM / MINIMUM temperature stored.

STEP 3 - To unlock the keyboard, press the (UP) and (DOWN) keys at the same time for more than (3) seconds. The "Pon" message will be displayed.



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# THE SET POINT IS WHERE THE COMPRESSOR WILL SHUT OFF.

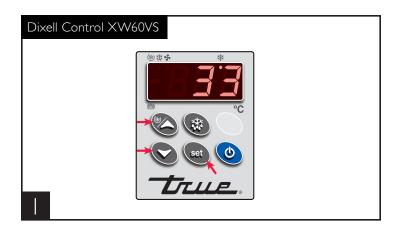
#### **HOW TO SEE AND MODIFY THE SET POINT:**

**STEP I** - Model XW60VS push and immediately release the (SET) key. Model XR160C push and hold the (SET) key: The display will show the (SET) point value.

STEP 2 - The (SET LED) will start blinking.

**STEP 3** - To change the (SET) value, push the (UP) or (DOWN) arrows within (10) seconds.

**STEP 4** - To memorize the new set point value, push the (SET) key again or wait (10) seconds.



# THE LOCAL DISPLAY SHOWS WHICH PROBE IS READING.

#### **HOW TO SEE "LOD" LOCAL DISPLAY:**

**STEP I** - Press and hold the (SET) and (DOWN) arrows at the same time for (7-12) seconds.

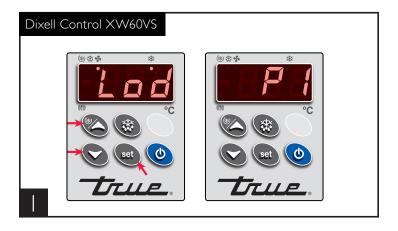
**STEP 2** - You should then see (HY).

**STEP 3** - Release the keys.

**STEP 4** - Press the down arrow until you see the letters (LOD).

**STEP 5** - Press the (SET) button. You should see PI, P2, P3. This is the probe used for the display. (All probes may not be used in some applications). To change, press the (UP / DOWN) arrow to set a new number and then push the (SET) button to save these changes.

Wait 10 seconds for control to display temperature.





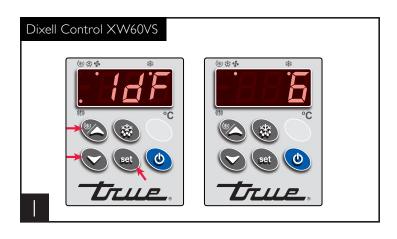
# THE INTERVAL BETWEEN DEFROST TERMINATION IS THE TIME BETWEEN EACH DEFROST CYCLE.

**NOTE:** This interval is started when the cabinet is plugged in or after initiate of manual defrost.

## HOW TO SEE "idF" INTERVAL BETWEEN DEFROST:

- **STEP I** Press and hold the (SET) and (DOWN) arrows at the same time for (7-12) seconds.
- **STEP 2** You should then see (HY).
- **STEP 3** Release the keys.
- **STEP 4** Press the down arrow until you see the letters "idF".
- **STEP 5** Press the (SET) button. You should see the number 6. This is time in hours between each defrost cycle. To change, press the (UP / DOWN) arrow to set a new number and then push the (SET) button to save these changes. Wait 10 seconds for control to display temperature.

**NOTE:** The interval between defrost termination is the time between each defrost cycle.



### THE PROGRAM PARAMETERS CAN BE DOWNLOADED BY THE USE OF A "HOT KEY."

**NOTE:** These parameters will vary from model to model.

# HOW TO DOWNLOAD THE CONTROL PARAMETER:

- **STEP I** Turn controller in the off position or unplug cabinet.
- **STEP 2** Insert "Hot Key" into the back of the controller.
- **STEP 3** Turn on controller or plug in cabinet.
- **STEP 4** "Hot Key" will download automatically once download is complete. Remove "Hot Key".





### **MAINTENANCE, CARE, CLEANING**

#### **CLEANING THE CONDENSER COIL**

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

#### **TOOLS REQUIRED**

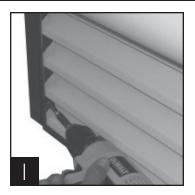
- Phillips Screwdriver
- Air Tank or CO2 Tank
- Stiff Bristle Brush
- Vacuum Cleaner
- Adjustable Wrench
- **STEP I** Disconnect power to unit.

**STEP 2** - To remove existing louver back out the two black Phillips head screws that are on either side of the cabinet toward the bottom of the louver. See Image 1.

Once the bottom two louver screws are removed pull the bottom of the louver out. The top of the louver will pivot letting the bottom swing out. See image 2. Then to remove the louver, unhook the louver bracket from the spacer. See image 3. Back out the screw holding the spacer. Keep spacer for reinstall.

- **STEP 3** Remove bolts anchoring compressor assembly to frame rails and carefully slide out. (tube connections are flexible)
- **STEP 4** Clean off accumulated dirt from condensing coil with a stiff bristle brush.
- **STEP 5** Lift cardboard cover above fan at plastic plugs and carefully clean condenser coil and fan blades.
- **STEP 6** After brushing condenser coil vacuum dirt from coil, and interior floor.
- **STEP 7** Replace cardboard cover. Carefully slide compressor assembly back into position and replace bolts.
- **STEP 8** Reinstall louver assembly onto unit with appropriate fasteners and clips. Tighten all screws.
- **STEP 9** Connect unit to power and check to see if condenser is running.

All TRUETHAC Models are manufactured with Reversing Condenser Fan Motors. This kind of fan motor allows less dust and dirt to accumulate onto the condenser coil. This reduces the required cleaning time of the condenser coil and allows for less expensive operating costs.















#### 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!

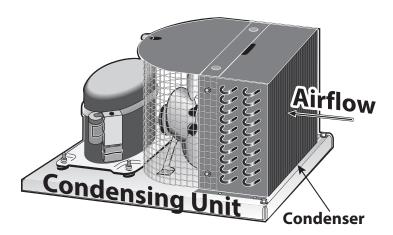
#### **HOW TO CLEAN THE CONDENSER:**

- I. 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 I (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.

- 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:

#### **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

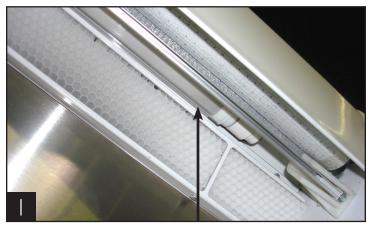
#### **GENERAL MAINTENANCE**

# LIGHT BULB REPLACEMENT (INTERIOR LIGHTS) GENERAL MAINTENANCE

**WARNING:** When replacing a light bulb make sure power to the unit is either turned off or unplugged.

Be careful when removing the light bulb. Please be aware of your local ordinances in disposing old bulbs. These bulbs should be disposed in a safe and correct manner:

• Simply unscrew the light bulb. See images | & 2.



Interior Light



Interior Lampholder



### 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, NEGLECT, 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.