



**TRUE FOOD SERVICE EQUIPMENT, INC.**  
 2001 East Terra Lane • P.O. Box 970 • O'Fallon, Missouri 63366  
 (636)-240-2400 • FAX (636)272-2408 • (800)325-6152  
 Parts Department (800)424-TRUE • Parts Department FAX# (636)272-9471

# INSTALLATION MANUAL FOR TGU MODELS (TRUE GASTRONORM UNDERCOUNTER & WORKTOP REFRIGERATORS / FREEZERS)



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### CONGRATULATIONS!

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

# TRUE GASTRONORM UNDERCOUNTER & WORKTOP REFRIGERATORS / FREEZERS

# **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.**

True Manufacturing Company, Inc.

SAFETY INFORMATION

# **How to Maintain Your *TRUE*® Unit 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.***

### **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 refrigerated compartment when hands are damp or wet. Skin may stick to these extremely cold surfaces.
- Do not store or use flammable liquids or vapors in the vicinity of this or any other 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.

***NOTE: Any servicing, warranty repairs or maintenance should be carried out by qualified personnel, failure to do so could be dangerous and may invalidate your warranty.***

- Unplug the refrigerator before cleaning and making repairs.
- Setting temperature controls to 0 position does not isolate the unit from the electrical supply, you must disconnect the main power lead from the wall receptacle to isolate.

SAFETY INFORMATION

**DANGER!**  
**RISK OF CHILD ENTRAPMENT**

**HOW TO SAFELY DISPOSE OF USED REFRIGERATION EQUIPMENT**

Child entrapment and suffocation are not problems of the past. Junked or abandoned display cases are still dangerous... even if they will sit for "just a few days."

*It is much safer if doors and lids are removed so children cannot get trapped inside, leaving the shelves in place will also deter children from trying to climb inside.*

If you are getting rid of your old display case, please follow the instructions below to help prevent accidents. Depending on the country where the unit is located there will be officially approved ways of disposing of your used equipment.

***It is important that care is taken in disposing of used refrigerators or freezers. 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.

***CFC Disposal:***

***Depending on the Country where the unit is located there will be Officially approved ways of disposing of your used equipment. This will ensure that an CFC's (chlorofluorocarbons) are safely and legally recovered. Releasing CFC's into the atmosphere is an offence in many parts of the World.***

Your old refrigerator may have a cooling system that used CFC's (chlorofluorocarbons). CFCs are believed to harm stratospheric ozone.

If you are throwing away your old refrigerator, make sure the CFC refrigerant is removed for proper disposal by a qualified service technician. If you intentionally release this CFC refrigerant you can be subject to fines and imprisonment under provisions environmental legislation.

SAFETY INFORMATION

# WARNING!

## **IMPORTANT ELECTRICAL SAFETY INFORMATION**

*Do not, under any circumstances, cut or remove the third (ground) prong from the power cord. For personal safety, this appliance must be properly grounded.*

Your TRUE unit will come fitted with the correct plug for your Country (if not contact your supplying dealer). This plug has a ground or earth prong or pin, it must be connected to a electrical supply outlet that is also grounding or earthed. This minimizes the possibility of electric shock hazard. Do not connect to any power supply if you have any doubts. Make sure a qualified electrician confirms that the supply is grounded or earthed. Ensure that the supply is correct and matches that on the unit information plate. Do not use adapter plugs or extension leads as these can cause safety issues and early failure of electrical components. The use of adapters and extension cords will invalidate your warranty. Always disconnect the unit by pulling on the plug and not on the power lead. Do not use the unit if the power lead has been damaged.

## **USE OF EXTENSION CORDS / ADAPTER PLUGS**

*Do not use adapter plugs or extension leads as these can cause safety issues and early failure of electrical components. The use of adapters and extension cords will invalidate your warranty.*

### **WARNING**

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

### **WARNING**

*Power supply cord ground should not be removed!*

### **NOTE**

*To reference wiring diagram - Remove lower rear grill. Wiring diagram is positioned on the inside cabinet wall.*

INSTALLATION / OPERATION INSTRUCTIONS

# INSTALLATION / OPERATION INSTRUCTIONS

## OWNERSHIP

To insure that your unit works properly from the first day, it must be installed properly. We highly recommend that your True unit is installed by your supplying dealer or service company. The cost of a professional installation is money well spent. Issues caused by incorrect installation may invalidate your warranty

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 or supplying dealer.

**True is not responsible for damage incurred during shipment.**

## REQUIRED TOOLS

- Adjustable Spanner or Mole Grips
- Phillips Head Screwdriver
- Spirit Level

## UNCRATING

### Step 1

The following procedure is recommended for uncrating the unit:

- Remove the outer packaging by pulling tri-wall nails from skid. Remove (4) cardboard corner pads and dust cover.
- 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.

## LOCATING

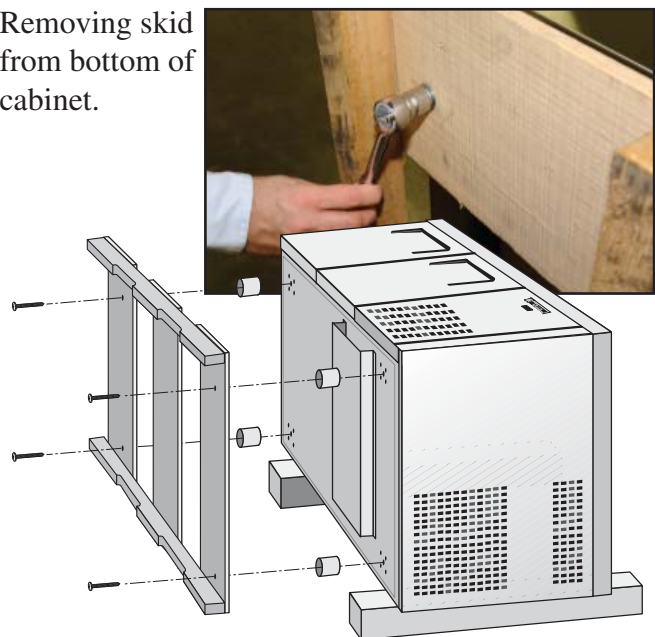
### Step 2

- Remove 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.

- Remove skid by unscrewing all base rail anchor brackets. Place skid to the side.
- Carefully lift cabinet upright.

Removing skid from bottom of cabinet.



## INSTALLATION OF LEGS AND CASTORS

### Step 3

#### 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 of the top edge of the leg must make firm contact with the rail.

#### Unit Leveling:

Four leveling shims have been provided for leveling castored units positioned on uneven floors. Shims must be positioned between rail end and bearing race. True recommends a four shim limit to any single castor.

**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.

**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 open-end wrench, socket, or the tool provided.

#### CAUTION

**To avoid damage to lower rail assembly, slowly raise unit to upright position after installing castors.**



**1** Thread four screws into castor in the underside of cabinet frame rail.



**2** Anchor the four screws firmly to the base of the unit.

INSTALLATION / OPERATION INSTRUCTIONS

**LEVELING**

**Step 4**

**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 inside the cabinet 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.

**Warning**

*Compressor warranties are void if the unit is more than 7ft. (2.1m) from plug-in connection. TRUE will not warranty any units that are connected to an extension cord.*

**ELECTRICAL INSTRUCTIONS**

**Step 5**

**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 7 ft. (2.1m) service cord, and must be powered at proper operating voltage at all times. Refer to cabinet data plate for this voltage.

**True** requires that a sole circuit be dedicated for the unit. Failure to do so voids warranty.

**WARNING**

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

**WARNING**

*Power supply cord ground should not be removed!*

**NOTE**

*To reference wiring diagram - Remove lower rear grill. Wiring diagram is positioned on the inside cabinet wall.*



INSTALLATION / OPERATION INSTRUCTIONS

**STARTUP**

**Step 6**

- A.** The compressor is ready to operate. Plug in the unit.
- B.** Temperature control set at No. 4 position gives refrigerators an approximate temperature of 35°F (1.6°C) and freezers an approximate temperature of -10°F (-23.3°C). Allow unit to function several hours, completely cooling cabinet before changing the control setting.
- 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.

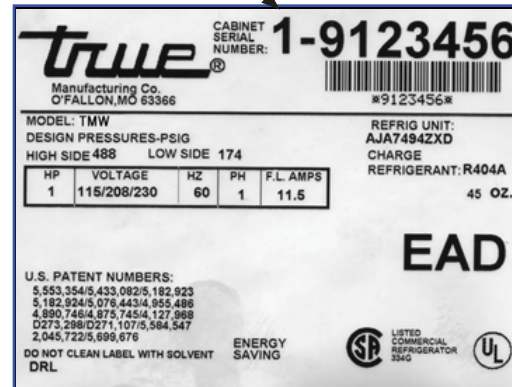
**RECOMMENDATION**

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!

**REPLACEMENT PARTS**

TRUE maintains a record of the cabinet serial number for your unit. If at any time during the life of your display case, a part is needed, you may obtain this part by furnishing the model number and serial number to the company from whom you purchased the cabinet. Call Toll-Free: (800)-424-TRUE (Direct to Parts Department). (800)-325-6152 (U.S.A. & Canada only) or call: (636)-240-2400.

Serial Number



**REMOTE UNITS (This section applies to remotes only!)**

- Remote cabinets must be ordered as remote. We do not recommend converting from a standard self contained to remote system.
- All remote cabinets must be hard wired.
- No castors available.
- All remote cabinets come standard using 404A refrigerant.
- All remote units come standard with expansion valve, liquid line solenoid, heated condensate pan, and defrost timer when applicable.
- Contact True Technical Service for BTU requirements.
- No wiring necessary between cabinet and condensing unit.
- All remote condensing units purchased from True are 208/230 volts single phase.

**If you have any questions regarding this section, please call True at 1-(800)-325-6152.**

# SHELVING INSTALLATION / OPERATION

## REQUIRED TOOLS:

- Tray Slide

### Step 1

Position tray slide to align front to back (level) with rectangular hole of the standard posts. Make sure tabs on the back-side of the tray slide are facing down. Push in and slide down on both ends so tabs are in the locked position. (See figure 1).

### Note

*Make sure that pan slide is level front to back within the refrigerator or freezer.*

### Step 2

Repeat procedure with remaining tray slides.

### Note

Figure 2 illustrates correct installation of tray slide.



Figure 1



Figure 2

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 Spanner or Mole Grips
- Vacuum Cleaner

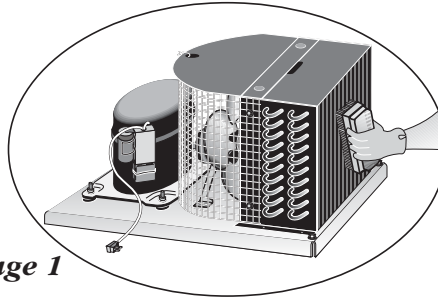


Image 1

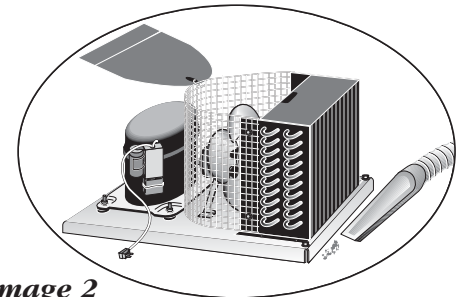


Image 2

**Step 1**

Disconnect power to unit.

**Step 2**

Removing the four Phillips screws to allow removal of the front grill.

**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 the condenser coil and the fan with a stiff bristle brush. (See image 1).

**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. (See image 2).

**Step 7**

Replace cardboard cover. Carefully slide compressor assembly back into position and replace bolts.

**Step 8**

Reinstall rear grill assembly onto unit. Tighten all screws.

**Step 9**

Connect unit to power and check to see if compressor is running.

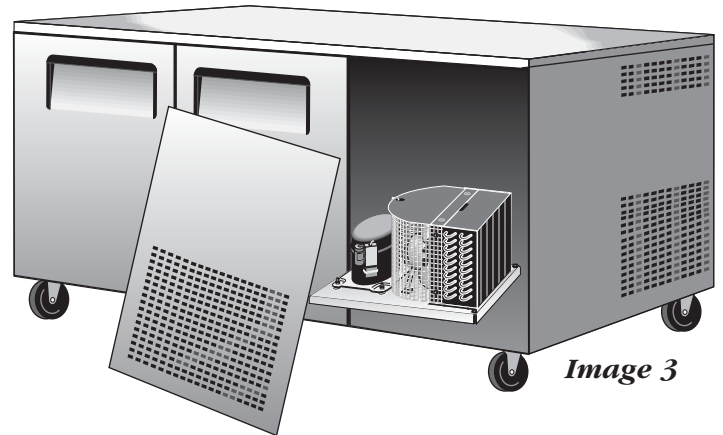


Image 3

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

*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.*

*If you have any questions, please call True Manufacturing at 636-240-2400 or 800-325-6152 and ask for the Service Department. Service Department Availability Monday-Friday 7:30 a.m. to 5:30 p.m. and Saturday 7:45 a.m. to 11:45 a.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. Please ensure that you use appropriate products when cleaning and polishing your True unit. Cleaners containing chlorine must not be used as these will attack the stainless steel causing damage and in some cases corrosion. Your supplier of cleaning products should be able to advise you of the products suitable to keep your True unit looking like new.

### • **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.

### **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 recommended strength (alkaline, 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**