REFRIGERATED PREPARATION TABLES

Installation, Operation and Maintenance Instructions

INSPECTION

When the equipment is received, all items should be carefully checked against the bill of lading to insure all crates and cartons have been received. All units should be inspected for concealed damage by uncrating the units immediately. If any damage is found, it should be reported to the carrier at once, and a claim should be filed with the carrier. This equipment has been inspected and tested in the Manufacturing Facility and has been crated in accordance with transportation rules and guidelines. Manufacturer is not responsible for freight loss or damage.

INSTALLATION

GENERAL

After the unit crate and base have been removed, locate the legs or casters found in the interior of the cabinet. Attach the legs or casters to the unit base by screwing them into the same threaded fittings that were used to secure the crate base to the cabinet. Insure that they are screwed all the way into the base.

LOCATION

The refrigeration system located at the bottom of the cabinet requires free air access for proper operation. The cabinet may be enclosed on three sides, however, there must be a minimum four-inch clearance from the bottom of the cabinet to the floor. This model **cannot** be operated without the legs or casters in place, and the bottom of the cabinet **cannot** be enclosed. The cabinet should be level when it is placed in its permanent location.

ELECTRICAL

Check the proposed outlet to be used to insure that the voltage, phase, and current carrying capacity of the circuit from the electrical panel correspond to the requirements of the cabinet. NEVER use an extension cord to wire any unit. All inter wiring between the electrical panel and the unit must be done in accordance with the National Electric Code and all state and local codes. Refer to the Electrical Data below and the Serial Tag for all pertinent electrical information.

Observe all Warning Labels. Disconnect power supply to eliminate injury from electrical shock or moving parts when servicing equipment.

GENERAL OPERATION

The refrigerated Preparation Tables employ a unit cooler evaporator located inside the cabinet as the heat-removing source. Through the refrigeration process, heat is captured in the evaporator, transferred to the condensing unit located at the bottom of the cabinet, and expelled to the surrounding outside air. It is extremely important to maintain the minimum four-inch clearance from the bottom of the cabinet to the floor for the refrigeration process to function properly. **The cabinet cannot be operated without the legs or casters installed.**

During the operation of these units, frost will periodically form on the coil surface. Each time the refrigeration compressor cycles to the "off" position, the evaporator fans and condenser fans will continue to run. This will tend to keep the interior of the cabinet at a constant temperature and at the same time remove any frost build up on the unit by circulating the inside air over the coil. The water produced will collect in the unit cooler drain pan and travel down a drain tube to the condenser drain pan where the water will vaporize back into the air.

The refrigeration system is designed to provide a 38°F temperature. The system employs a "constant cut-in" control. This device accomplishes control of the interior temperature by sensing the evaporator coil. Since the control features a non-adjustable "cut-in" temperature of 38°F, and the sensor tube is embedded in the fins of the evaporator coil, nuisance coil icing is eliminated because the controller will not permit compressor start up until the coil reaches 38°F. Adjusting the control knob on this system will adjust the "cut-out" temperature only. The control knob on the refrigerator is located on the unit cooler front panel.

PAN AREA

The **switch for the pan area** is located on the front edge of the cabinet top. **This switch controls the pan area only and should be in the "OFF" position when the pan area is not in use.** The **temperature control for the pan area** is located adjacent to the switch and is factory set. It is designed to maintain product temperature between 33°F and 41°F with ambient conditions between 70°F and 86°F. Should adjustment be necessary, carefully remove the plug button with a screwdriver. Adjustment of the control can be made with a screwdriver by turning it no more than 1/2 setting on the scale, i.e. from 4 to 4-1/2. Allow the pan area one day to respond to the control adjustment.

Product should not be stored in the pan area overnight. Product may freeze if left in the pan area for more than four hours or if lids are closed.

GENERAL MAINTENANCE

PERIODIC CLEANING

Beginning with the initial installation, the interior surfaces of the cabinet should be periodically wiped down with a solution of warm water and baking soda. This solution will remove any odors from spillage that has occurred. The exterior of the cabinet should also be cleaned frequently with a commercial grade of glass cleaner.

Monthly cleaning of the condenser will aid the heat transfer characteristics of the refrigeration system and increase its efficiency. To accomplish this, remove the cover panel from the cabinet and use a wire brush to loosen any dirt particles that are attached to the fins. Use a vacuum cleaner to remove the loosened particles. **Failure to keep the condenser coil clean and clear of obstructions could result in temperature loss and damage to the compressor.**

The pan area is to be turned off as needed to manually defrost. After the pan area is turned off it should be wiped dry using a soft rag.

All moving parts have been permanently lubricated and will generally require no maintenance.

MAINTENANCE SERVICE AND ANALYSIS GUIDE

REFRIGERATION SYSTEMS - ALL MODELS

MALFUNCTION	POSSIBLE CAUSE	SOLUTION
Compressor will not start - no hum	1. Service cord unplugged	1. Plug in service cord
	2. Fuse blown or removed	2. Replace fuse
	3. Overload tripped	3. Determine reasons and correct
	4. Control stuck open	4. Repair or replace
	5. Wiring incorrect	5. Check wiring against the diagram
Compressor will not start - hums but trips on overload protector	1. Improperly wired	1. Check wiring against the diagram
	2. Low voltage to unit	2. Determine reason and correct
	3. Starting capacitor defective	3. Determine reason and replace
	4. Relay failing to close	4. Determine reason, correct or replace
Compressor starts and runs, but short cycles on overload protector	1. Low voltage to unit	1. Determine reason and correct
	2. Overload defective	2. Check current, replace overload protector
	3. Excessive head pressure refrigeration system	3. Check ventilation or restriction in
	4. Compressor hot-return gas hot	4. Check refrigerant charge, fix leak if necessary
Compressor operates long or continuously	1. Short of refrigerant	1. Fix leak, add refrigerant
	2. Control contact stuck	2. Repair or replace
	3. Evaporator coil iced	3. Determine cause, defrost manually
	4. Restriction in refrigeration system	4. Determine location and remove restriction
	5. Dirty condenser	5. Clean condenser
Compressor runs fine, but short cycles	1. Overload protector	1. Check wiring diagram
	2. Cold control	2. Differential too close - widen
	3. Overcharge	3. Reduce charge
	4. Air in system	4. Purge and recharge
	5. Undercharge	5. Fix leak, add refrigerant
Starting capacitor open, shorted or blown	1. Relay contacts stuck	1. Clean contacts or replace relay
	2. Low voltage to unit	2. Determine reason and correct
	3. Improper relay	3. Replace
Relay defective or burned out	1. Incorrect relay	1. Check and replace
	2. Voltage too high or too low	2. Determine reason and correct
Refrigerated space too warm	1. Control setting too high	1. Reset control
	2. Refrigerant overcharge	2. Purge refrigerant
	3. Dirty condenser	3. Clean condenser
	4. Evaporator coil iced	4. Determine reason and defrost
	5. Not operating	5. Determine reason, replace if necessary
Standard temperature system freezes the product	1. Control setting is too low	1. Reset the control
	2. Control points stuck	2. Replace the control
Objectionable noise	1. Fan blade hitting fan shroud	1. Reform or cut away small section of shroud
	2. Tubing rattle	2. Locate and reform
	3. Vibrating fan blade	3. Replace fan blade
	4. Condenser fan motor rattles	4. Check motor bracket mounting, tighten
	5. General vibration	5. Compressor suspension bolts not loosened on applicable models - loosen them
	6. Worn fan motor bearings	6. Replace fan motor
Pan Area	1. No cooling	1. Make sure switch is in the "on" position
	2. Too cold	2. Adjust temperature control - see instructions under pan area
	3. Too warm	3. Adjust temperature control - see instructions under pan area