LA ROSA

REFRIGERATION AND EQUIPMENT CO.

OWNERS MANUAL

SERVICE AND MAINTENANCE

INDEX

INDEX

GENERAL INFORMATION - 80/81/82000 HOT FOOD TABLES AND 83/8400 BUN WARMERS

WARRANTIES

CONGRATULATIONS on your recent purchase of La Rosa food service equipment, and welcome to the growing family of satisfied La Rosa customers.

Our reputation for quality products is the result of consistent superior craftsmanship. From the earliest stages of product design, to successive steps in fabrication, pre-assembly and final assembly, rigid standards of excellence are maintained by our staff.

Only the finest materials and parts are used in the production of La Rosa equipment. This means that each unit, given the proper maintenance, will provide you with years of trouble-free service to its owner.

This manual has been compiled to aid in the installation, operation and maintenance of your new equipment. Please take time to read the material in order to enjoy optimum performance from your La Rosa unit(s).

This booklet is valuable. Refer to it often to familiarize yourself with your new La Rosa equipment. In addition, we recommend you store the manual in a safe place along with your other valuable documents.

If you have not already done so, please record all the information required on the preceding page, as it will be necessary to have when communicating with the dealer on service or warranty issues:

SAFETY PROCEDURES

- Always disconnect power cord before attempting to work on or to clean equipment. Turning the switch off is insufficient, the power remains live to the cabinet and can be a hazard.
- When working on units equipped with casters depress caster brakes to secure unit in place.
- Disconnect plug when appliance is going to be idle for long periods.
- Route the power cord so that it will not be walked on or pinched by other appliances.
- Do not attempt to service this unit yourself, as removing covers may cause unnecessary exposure to dangerous voltage.
- Your unit includes a grounded plug (plug w/2 blades & grounding post). Do not defeat the purpose by removing the ground post or using an adaptor without properly grounding the outlet.
- Never connect the unit to a power source while standing in water. Wet hands and wet floors should be avoided when connecting any electrical appliance to a power outlet.
- Do not overload outlets with too many appliances. This can result in fire or electrical shock.
- When a replacement part is required, always insist on original or equivalent authorized parts.

RECEIVING AND INSPECTING THE EQUIPMENT

A. Receiving: Your equipment comes crated. Maintaining cautious handling while unloading and transporting it into the building prevents delays and added expenses.

B. Inspection: Visibly check crates, containers and boxes for damage. If so, unpack immediately. Together with the driver, you should confirm damage or loss. Take a joint inventory and perform an examination of all contents. Once confirmed, have the driver contact his office. He should also make a proper notation on the freight bill and sign it. A claim in writing must be filled out. This reinforces your position and rights. Carriers will provide the necessary form upon request.

C. Concealed Damage: When discovering concealed damage or loss after giving the carrier a clear delivery receipt. Contact the carrier immediately in writing within ten days from the date of delivery. If you contact the carrier by phone, you should confirm it in writing to protect our rights. You can only improve your position as a claimant by promptly reporting such a loss or damage. You should also keep all crates, cartons and packing materials, until after the inspection or until waived.

D. Filing a Claim: A notation of loss or damage does not start the filing of a claim. You must file a claim immediately in writing with the carrier. You must file a claim within ten days of delivery.

E. Claim Form: Carriers will provide the necessary form upon request. You should also request an inspection. If you have called the carrier by phone, follow it up immediately in writing.

INSTALLATION

A. Inspection: Uncrate the unit and check for physical damage. If damage is present, refer to Receiving and Inspecting the Equipment above. Otherwise, check doors, drawers, and shelves for proper alignment and operation. For instructions on adjustments refer to page 5. Examine refrigerated and condenser compartments for damage. If unit is self-contained, check power cord for proper grounding to the junction box. On refrigerators, check the drain tube for proper alignment with the evaporator pan (if provided).

B. Serial Numbers: Record model and serial number(s) from the unit(s) to page 12 in this manual. This information will be necessary when corresponding with the dealer or service agency. Self-contained units have an identification tag mounted to the refrigerated side-wall, behind the louvered panel, in the condenser compartment. Remote units have an identification tag mounted to the underside of the nosing, centered on the unit. Hot food units have an identification tag mounted to the left stainless steel side-wall, under the plate shelf/half panel. Hot food units with drawers have an identification tag mounted to the left stainless steel side-wall under the plate shelf and behind the drawer front.

C. Warranty Claim Sheet: If you have not already done so, record information in the warranty section of this manual. This information will be necessary when corresponding with the dealer or service agency. Also, review the warranty claims forms on pages 15,16,17 of this manual. This information is important to confirm a claim. If the information is incomplete when filing a claim, it may void the warranty.

D. Pre-Installation: Before contacting a plumbing or electrical contractor for final connections, clean the installation area thoroughly, removing all crating and packing materials, and equip the site with appropriate plumbing lines and electrical outlets.

E. Clearances: Adequate clearance above and behind the unit is critical for proper air circulation to the condensing unit. The bumpers serve as a spacer for air circulation as well as protecting the wall on portable equipment.

F. Leveling: The legs are equipped with adjustable bullet-type feet. Turn feet clockwise or counterclockwise until the unit is level. A unit mounted on casters, can have shims placed between the mounting plates and body support channel. If the floor has a extreme pitch, adjustable casters are available as an option. This option is not considered a warranty item.

STARTING REFRIGERATORS/FREEZERS

A. Starting System: Unit begins cooling when the power switch is turned to the "ON" position. The power switch is in the compressor compartment behind the louvered panel. Remove this panel by pulling it out at the bottom and unhooking it from the top front nosing.

B. Start-up: Allow the unit to operate for at least one hour before making any adjustments in the cooling. Forced air raised rail compartments as well as salad top openings must have pans in them with lid covers in the down position to avoid any cooling loss. Without the pans, the unit will run unnecessarily, and may not reach or be able to maintain proper temperature.

C. Test and Check - Recommended: All units have been pre-tested and given a serial number in La Rosa's factory prior to shipment. Units come ready for plug-in operation. Area locations and operations may vary and a qualified Service Agency should test and check the unit. This should be done during an average business period. This will optimize the unit to your working and environmental conditions. Check with the dealer to see if this has or could be arranged. Check, test and adjustments are not covered under warranty.

D. Temperature Settings: Refrigerator and freezer units are factory tested and pre-set to operate at approved temperatures for the food service industry. Refer to page 3, section H for pressure control, or page 3, section I for temperature control to alter the temperature. **Temperature adjustments are not covered under warranty.** Do not make any adjustments to the temperature control without refrigerators containing product. Also, allow time for cooling to a proper refrigerated level. This cooling time will depend on the room temperature, and load size. It is recommended that the product is pre-cooled to thirty-four degrees Fahrenheit particularly during high-volume usage periods. Refrigerators and Freezers are factory tested and adjusted to run within the following temperature ranges:

1. Refrigerator Base compartment: 34 to 38 degrees F
2. Freezer Base compartment: -5 to 0 degrees F
3. Pie and Salad Display Case Top: 44 to 48 degrees F; Display Case Base: 34 to 38 degrees F
4. Ice Cream Freezer Base: -5 to 0 degrees F
5. Creamer Unit Freezer base: -5 to 0 degrees F; Refrigerated base: 36 to 38 degrees F; Syrup Rail: 38 to 40 degrees F; Soda & Water Arms: 42 to 45 degrees F

E. Evaporator Coil Fan - Operation: When the power is turned on, the fans will operate immediately and continuously on the refrigerator to promote a uniform temperature. Freezer fans, however, will not operate until the cooling coil has reached a certain temperature. This normally takes only a few minutes after the unit is turned on.

F. Evaporator Coil Fan - Performance: For maximum performance, do not block or restrict air intake and exhaust areas. Service calls for this problem are not covered under warranty.

G. Thermometers: A thermometer is attached to the evaporator coil to give temperature readings. When checking the temperature inside the unit, be sure food products are cooled down properly and refrigerator doors have remained closed for at least 15 minutes. Loading warm products or allowing warm air into the cabinet by repeated door openings, will affect the temperature. The temperature will run higher during high-volume periods.

H. Pressure Control - Adjustment: Numbers shown, indicate pressure; not temperature. Adjust the temperature by turning cut-in stem to a higher number for warmer temperature and to a lower number for a colder temperature (do not turn differential stem). It is recommended that any temperature adjustment be done by qualified personnel. Temperature adjustments are not covered under warranty.

I. Temperature Control - Adjustment: The temperature control has a stem which allows for adjustments. Turning the stem counter-clockwise will result in increased cooling. Keep the temperature within thirty-four to thirty-eight degrees Fahrenheit in the refrigerated compartment. Turning it beyond these settings can result in freeze-up or warming-up. It is recommended that temperature adjustment be done by qualified personnel. Temperature adjustments are not covered under warranty.

J. Condensate Evaporator - Operation:

1. Start-up: Condensate Evaporator is automatically activated when unit is turned on.
2. Initial start-up: At room temperature the condensate evaporator may overflow. If this happens let the unit achieve normal operating temperature then empty condensate pan.
3. Maximum efficiency: Units before April 1, 1998 with the in-service forced air raised rail and salad top openings must have a full compliment of pans in place. Lids should be kept closed during slow periods and containers with liquids should have sealed covers. Magnetic type gaskets should fit and seal properly. Refer to page 5-6 for specific model series. After April 1, 1998 all in-service opening equipment is intended for use in rooms having an ambient temperature of no greater than eighty-six degrees fahrenheit. Refer to page 5-6 for specific model series.

K. Condensate Evaporator - Type:

1. Hot Gas: Refrigerators/Freezers equipped with this type will be trouble-free for many years of operation. For maximum efficiency pan should be kept free from foreign materials and deposits.
2. Condensate Evaporator - Electric: Refrigerators/Freezers equipped with this type will be trouble-free for many years of operation. For maximum efficiency pan should be kept free from foreign materials and deposits. Turn power supply off before removing cord set from evaporator. Voltage drops will decrease efficiency and power surges will damage heating elements.

DEFROSTING FREEZERS

A. Manual Defrost: Units such as Ice Cream Freezers, Plate Chillers, Mechanically Cooled Cold Pans, Raised Rails, and Salad Tops incorporate cold-wall construction and require periodic defrosting. Excessive ice build-up will reduce the cooling capacity and could keep product from achieving proper temperature. Remove product, unplug/switch unit off and let unit defrost over-night. Defrosting can be sped up by using hot water and a towel. Leave the covers in an up position with the product and pans removed. Defrosting takes a minimum of one hour. Remove condensation before putting these service areas back into operation. Cold Pans, Raised Rails, and Salad Tops require daily defrosting. Ice cream and Plate Chillers require defrosting every three or four months. Never use ice picks or any other pointed sharp object to chip ice away, as this could damage the refrigerant lines behind the liner.

B. Automatic Defrost: Freezers equipped with a forced air evaporator coil come with an automatic defrost timer. The timer automatically shuts the compressor off for a specified period at a number of times each day. When the unit is on defrost time, water will drain from the evaporator through a tube into the condensate evaporator pan at the bottom. The pan has a drain attached, which extends to the unit exterior. Water drains into an optional condensate evaporator. If a condensate evaporator is not provided, the drain must extend to a sanitary waste. The defrost time cycle may be altered to different setting(s). To preform this procedure contact a qualified Refrigeration Technician. Service personnel can refer to the evaporator coil addendum located in the back of this manual. It contains all the information required for the operation and maintenance of the defrost coil. Defrost Timer adjustments are not covered under warranty.

CLEANING

Avoid using cleaning waxes, harsh detergents, bleaches, corrosive compounds or abrasive cleaning powders.

A. Exteriors: Clean with a mild detergent in warm water. Always rub stainless steel in the direction of the grain using a soft rag.

B. Door Gaskets: Use a mild soapy solution, rinse and wipe dry. Keep gaskets clean between the bellows as heavy dirt accumulation will interfere with proper sealing. Gaskets contain a resilient but thin vinyl material and should be treated with care to avoid tearing or damage. Do not clean with sharp or pointed objects.

C. Glass: Glass doors and mirrors may be cleaned with any commercial glass cleaner.

D. Interiors: Mix four tablespoons of baking soda with 1/2 gallon of water. Wash cabinet thoroughly with solution, then rinse and dry.

E. Compressor compartment: Use a vacuum cleaner to remove dust and lint from the condenser coil fins. Vacuum general compartment area and clean out condensate evaporator pan by using a mild soapy solution. If mineral deposits are presents, fill the pan with hot white vinegar and let stand, as this will dissolve the deposit build-up. Drain pan and rinse completely. Dry pan and make sure drain line is clear and engaged to pan. Repeat procedure every sixty days or as needed.

F. Cutting board: Composition/Richlite board (polyethylene). When high pressure cleaning equipment is not available, use hot water with cleanser or any other granulate detergent, and a stiff bristle brush. The abrasive action is very important. Merely wiping the board with a damp cloth will not do a sufficient job. Germicidal cleaners such as Calgon's Biog Cat and Johnson's Break Up do an excellent job. Clorox is another good cleaner and is USDA approved. Rinse with clean water to remove chemical residue.

DOOR & DRAWER REMOVAL

A. Hinged Door Adjustment/Removal - All Units: Doors are installed and aligned at the factory under level conditions. Assemble and level units before making any adjustments. Adjust the door by removing middle set screw. Loosen outside screws, and adjust as required for proper alignment. Remove the door by removing top screws first and then the bottom.

B. Drawer Removal- All Units: To remove the drawer from the track assembly, pull out drawer until it stops. In pre 1991 units push the two stop clips down and pull to remove. On units manufactured from 1991 to present, pull out drawer to stop, and lift up the drawer until the roller bearing clears the fixed stop. Continue pulling out until the tracks separate. To reassemble, locate drawer bearings in track and push. Lift drawer up so rollers clear stops, and continue pushing in until drawer closes.

C. Sliding Door Removal - Utility Type: Remove sliding door guide from the door support post located at the bottom center of btoh doors. Open both doors enough to clear end stops. Pull both doors out away from the body until the door guide drops off the post support. Remove the front door by pulling bottom out slightly. Lift the door up and push the top back until the door sheaves seperate from track. Set the door on the floor and unhook the spring from the door sheave.

D. Sliding Glass Door Removal - Display Type:

1. La Rosa Style - s/s glass frame: The following method of removal will help prevent damaging the insulated glass panel. Use tempered glass when replacing doors. Reuse the stainless steel frame and rollers when replacing glass by cutting one corner, replacing glass and re-welding the corner. Check the sticky backed foam tape inside the frame and replace if necessary. First, remove the sliding door guide located at the bottom center of both doors. Pull the door away from the display case slightly. Slide door towards the center until the roller locates the slot provided in the track. Let the center end of the door drop first and the outside end second. Locate the outside slot by sliding the door back and forth slightly. Remove the rear door in the same manner.

2. Sliding Glass Door Removal - Refrigerated Anthony Display Type:
   See Additional Information - Extras

LUBRICATION

A. Door hinges: Include a nylon bushing insert which protects the metal parts. These hinges are virtually trouble free and require no additional lubrication.

B. Roller Bearings: Periodically lubricate drawer and sliding-door rollers with a light lithium base grease.

N.S.F. STANDARD #7 - COMPLIANCE - APRIL 1, 1998

A. If Manufactured Before April 1, 1998: Open top in-service units are in full compliance under the pre-April first standard. These units operated with a forced-air cooling principle. Usage requirements and recommendations are as follows.

Requirements:
1. Do not let product reach forty-one degrees fahrenheit.
2. Refrigerated base temperature of no less than thirty-three degrees, and no greater than forty-degrees Fahrenheit.
3. Pre-cool the product before introducing it into the in-service opening.
4. In-service opening areas must have a full compliment of pans that fit properly with no open spaces.
5. Remove the product from the in-service openings to a refrigerated base when closing for the day.
6. Keep a full compliment of pans in the in-service opening at night with the lids in the down position. This promotes proper cooling of the refrigerated base.

Recommendations:
7. Stir product occasionally, for a uniform temperature.
8. Rotate the product to a refrigerated base on a pre-planned time basis.
9. Covers are to be in the down position when not in use.

B. Manufactured After April 1, 1998: All open top in-service units come with cold-wall construction. This new standard has improved test requirements by including the in-service opening. Usage requirements and recommendations are as follows:

Requirements:
1. Do not let product reach forty-one degrees fahrenheit.
2. Refrigerated base temperature of no less than thirty-three degrees, and no greater than forty-degrees Fahrenheit.
3. All in-service opening equipment, intended for use in rooms having an ambient temperature of no greater than eighty-six degrees fahrenheit.
4. Pre-cool the product to thirty-four degrees fahrenheit before introducing it into the in-service opening.
5. In-service opening areas must have a full compliment of pans that fit properly with no open spaces.
6. Remove the product from the in-service openings to a refrigerated base when closing for the day.
7. Turn off in-service openings with cold-wall construction at night and defrost. Leave lids in the up position, and do not place pans in the opening during the defrosting period.
8. Stir product occasionally, for a uniform temperature.
9. Rotate the product to a refrigerated base on a pre-planned time basis.
10. Covers are to be in the down position when not in use.
11. Remove moisture from compartment before turning it on.

C. Series Models Effected:

1. 12000 & 13000 - all models; Salad Top Openings
2. 14000 & 15000 - all models; Raised Rail Openings
3. 2000-PTB & 2500-PTB - all models; Raised Rail Openings
4. 90133 & 90135 - all models; Salad Top Openings
5. 4100-MCD - all models; Mechanically Cooled Cold Pans

FOOD STORAGE PRACTICES

A. In General: Refrigerators/Freezers depend on air flow to maintain proper temperature. Overloading the unit will restrict proper air flow. Do not block air intake fans on evaporator coil. Keep cellophane wrap and aluminum foil from blocking the fan intakes. Keep large containers and equipment away from the louvered panel on the front of the condenser compartment. Do not allow items to extend beyond the shelf edge keeping the door open. Keep food products in sealed containers. This prevents premature part failure due to the acid content and moisture level in some foods.

B. Openings: Raised Rail or Salad Top styles are for in-service periods only and must not have food in them after hours. Remember to keep lids down during slow periods.

CORRESPONDING WITH DEALER, SERVICE AGENCY OR FACTORY

On occasion, it will become necessary to correspond with La Rosa Refrigeration & Equipment Co. To order

replacement parts and expedite shipment of the correct part, you must provide us with the following information:

1. Unit Model Number
2. Unit Serial Number
3. Part Name and Manufacturer (if appropriate)
4. Part Model Number (if appropriate)
5. Quantity Required
6. Drawer and door parts sizes vary. It will be necessary to measure overall width and height. Interior depth of unit is required when ordering drawer tracks, shelves and racks.
7. Gasket replacement, requires overall width and height dimensions.

Custom of modified units require detailed information and measurements. If unit dates to before October 25,1994 give dealers name along with La Rosa's invoice number and date.

STANDARD COMPONENTS

A. Evaporator Coil: Parts do not have to come from our factory. Your refrigeration service technician can get coil parts locally from a refrigeration supply house if replacement becomes necessary . If the part is under La Rosa's twelve month warranty, return it along with the warranty parts claim sheet on page 17 of this manual.

B. Condensing unit: The condensing unit and related parts are standard items. They do not have to come from our factory. If replacement becomes necessary, your refrigeration service technician can get them locally through a refrigeration supply house. If under warranty, refer to the warranty pump form on page 15 or parts claim form on page 17 of this manual.

C. Gasket Replacement: Replacement is required if air discharges from unit with door closed. First clean gasket thoroughly (pull accordion folds out) and check for proper sealing. To replace the gasket, open the door and lift gasket up to expose mounting screws. Remove all screws from the retainer strips and remove gasket. Install the new gasket with the reusable aluminum retainer strips and take care not to damage the gasket.

BASIC TROUBLE SHOOTING - FOR THE OPERATOR

A. NOISY OPERATION
1. Check for loose compressor mounts
2. Eliminate tubing rattle
3. Check fan mounting
4. Check fan blades for obstructions
5. Call qualified service technician

B. TEMPERATURE TOO HIGH IN REFRIGERATED/ FREEZER COMPARTMENT
1. Check power cord, circuit breaker, and junction box connections
2. Is temperature control set too high?
3. Dirty coil or condenser
4. Coil or condenser intakes - blocked or restricted
5. Call qualified service technician

C. EXCESSIVE OR CONTINUOUS OPERATING TIME
1. Unit located in hot spot, corner or near ovens
2. No air space allowance - see general information
3. Poor gasket seals - clean gaskets or replace
4. Dirty condenser - vacuum thoroughly
5. Iced or plugged coil - clean or defrost
6. Call qualified service technician

D. COMPRESSOR DOES NOT RUN
1. Check power cord to outlet

2. Check fuse box or breaker
3. Examine cord at junction box
4. Call qualified service technician

E. COMPRESSOR RUNS BUT FANS NOT RUNNING
1. Power cord disconnected at junction box
2. Fan blades stop by an obstruction
3. Call qualified service technician

Freezer evaporator coil fans have a built-in delay; refer to page 3; section E,F

F. CONDENSATE EVAPORATOR OVERFLOWING
1. Food pans not fitting properly in Raised Rail or Salad Top opening
2. Condiment pan(s) missing in the in-service opening
3. Condiment pans not being left in Raised Rail or Salad Top opening over-night when not in use
4. Uncovered liquid containers in refrigerated base
5. Worn-out or torn door or drawer gaskets
6. Sediment build-up in condensate pan or on condensate lines
7. Electric condensate evaporator not working properly or not plugged in
8. Drain line not lined-up with condensate evaporator pan

G. DISPLAY LIGHTS DO NOT COME ON RIGHT AWAY, OR ALTERNATE ON & OFF
1. Bulb loose or not making proper contact with fixture socket
2. Reversed polarity on supply line
3. Faulty off/on switch or bad ballast

Call a qualified service technician for services beyond above suggestions. Do not attempt to service these units yourself. Removing electrical covers may cause unnecessary exposure to dangerous voltage.

TROUBLE SHOOTING REFERENCE GUIDE - FOR THE SERVICE TECHNICIAN

A. COMPRESSOR DOES NOT RUN

1. Motor line open	Close start or disconnect switch
2. Fuse/Breaker blown	Replace fuse/reset breaker
3. Control stuck open	Repair or replace
4. Frozen compressor ro motor bearings	Replace
5. Off on high pressure	Determine cause of high pressure; make corrections and reset high limit lockout

B. UNIT SHORT CYCLES

1. Control differential set too closely	Widen differential
2. Discharge valve leaking	Correct condition
3. Motor compressor overload cutting out	Check for high head pressure or clogged condensing unit
4. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
5. Leaky expansion valve	Replace
6. Refrigerant overcharge	Capture excess refrigerant

C. UNIT OPERATES LONG OR CONTINUOUSLY

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Control contacts frozen	Replace control
3. Dirty condensing unit	Clean condensing unit
4. Unit location too warm	Move to a cooler location
5. Plugged expansion valve or strainer	Clean or replace
6. Iced or plugged coil	Defrost or clean
7. Service load	Keep doors closed

D. HEAD PRESSURE TOO HIGH

1. Refrigerant overcharge	Capture excess refrigerant
2. Dirty condensing unit	Clean condensing unit
3. Unit location too warm	Move to a cooler location

E. UNIT TEMPERATURE TOO HIGH

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Control set too high	Reset control
3. Plugged expansion valve or strainer	Clean or replace
4. Iced or dirty coil	Defrost or clean
5. Restricted gas lines	Clear restriction

F. HEAD PRESSURE TOO LOW

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Unit location too cold	None needed, efficiency increased

G. UNIT IS VERY NOISY

1. Improper unpacking	Remove shipping blocks and/or angles
2. Tubing rattle	Bend tube away from contact point
3. Mountings loose	Tighten

H. COMPRESSOR LOOSES OIL

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Plugged expansion valve or strainer	Clean or replace
3. Oil trapping lines	Drain tubing towards compressor
4. Short cycling	Refer to "Unit short cycles"
5. Superheat to high at compressor suction	Change location of expansion valve bulb or adjust valve to return wet gas to compressor

I. FROSTED OR SWEATING SUCTION LINE

1. Expansion valve admitting excess refrigerant	Adjust expansion valve

J. HOT LIQUID LINE

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Expansion valve	Adjust expansion valve

K. FROSTED LIQUID LINE

1. Receiver shut-off valve partially restricted	Open valve or remove restriction
2. Restricted dehydrator or strainer	Replace restricted part

L. TOP CONDENSING UNIT COILS COOL WHEN UNIT IS OPERATING

1. Shortage of refrigerant	Evacuate, capture remaining refrigerant, repair leak and recharge
2. Compressor inefficient	Check and correct compressor

M. UNIT ON VACUUM - FROST ON EXPANSION VALVE ONLY

1. Ice plugging expansion valve orifice	Apply hot wet cloth to expansion valve; moisture indicated by increase in suction pressure; install dryer
2. Plugged expansion valve strainer	Clean strainer or replace valve

DONT FORGET YOU CAN ALWAYS CALL LA ROSA FOR IMMEDIATE ASSISTANCE 1-800-527-6723

INSTALLATION

A. Safety Procedures/Installation: Follow applicable steps in general as outlined in Safety Procedures page 1, and Installation page 2. Refer to index in the front of the manual and additional instructions as described in the following pages.

B. Gas Connection: The factory installed safety valve has one end marked "IN" (gas inlet). Be sure the final gas connection hook-up is to the "ELBOW" or "TEE" that is provided and installed by the factory. Failure to do this will void the warranty.

C. Gas: Pressure and types vary and it is recommended that a service agency or the gas co. start, test and adjust gas, air, and pilot light to proper efficient operating levels for your area and conditions. This procedure is considered a start, test, and check and is not covered under warranty. Check with the Dealer to see if this has already been scheduled or done.

D. Voltage: Check unit voltage against power supply for proper match-up. If unit voltage and phase of power supply are not compatible, the warranty is void.

E. Water Supply: For wet applications, it is recommended that a minimum 140 degree water supply be provided. This will reduce the pre-heat time required to bring water up to proper temperature.

OPERATION

A. Starting Wet Units Only: Fill the tank to recommended level, turn burner on high, and heat water for 30 minutes or to a minumum of 190 degrees fahrenheit.

B. All Units: All units are designed for 150 to 190 degrees fahrenheit operation or 150 to 160 degrees fahrenheit product temperature.

C. Important - Wet Only Units: Must have four-and-a-half inches (4-1/2") of water covering immersion heater or bottom of water bath tank on gas units before turning unit on and heating.

Note: When shutting down unit at night, add water to the tank as specified above. This will protect the water bath tank from the pilot light and immersion element from accidental burn-out if turned on. Failure to follow these steps may damage electrical element or tank bottom therefore voiding any warranty.

D. Electric Wet Only Or Electric Wet/Dry: Once the power supply is provided, adjust the control knob to the desired temperature. The unit is know ready for operation.

E. Electric Wet Only: In the event that the water level falls below the immersion heater an automatic safety device will shut-off power to the element. Add water as stated above and reset the device located at the junction box directly below the element outside the tank. To reset the element - make sure power is off - depress reset button (you should hear a click like sound). This is intended as an emergency procedure only. The water level inside the tank should be maintained at the proper level as stated above at all times.

F. Electric Wet/Dry Warmers - Warranty: Warmers are covered under their manufacturers warranty statement and authorized service agency net work booklet which is shipped with the unit. If there is a problem with the warranty please contact your dealer. This booklet also explains operating, care, maintenance and warnings. Please read it carefully before you begin operation.

G. Junction Boxes: Electrically powered hot food tables are pre-wired in shop, tested and cycled for proper operation before shipment.

H. Power Indicator Lights:

1. Electric Wet/Dry Food & Soup Warmers: Warmers have infinite control(s) with a positive off-position and a single light to indicate power-on. When turned on, power indicator light stays on continuously until power is turned off.
2. Electric Wet-Only Hot Food Tables & Bun Warmers: Warmers have thermostat control(s) with a positive off-position and a single light to indicate power-on. When turned on, power indicator light is controlled by thermostat which will alternate power on/off as required by the censor bulb.

I. Gas Wet Only: Check the gas orifice to make sure the fitting is tight. The water bath pan (Hot Food Tables) must be filled with 2" of water, or the double wall tank (Bun Warmers) must be filled prior to the safety pilot light valve or burner being ignited.

J. Hot Food Warmers Built-In: The 82000 Series comes standard with Wells Manufacturing built-in 12x20 food warmers. Wells warranty supersedes LaRosa's, and any problem, repair or parts replaced while under Wells Warranty must be performed by an Authorized Wells Service Agency. Work performed by Unauthorized Service Agency while under warranty will be rejected unless pre-approved by Wells Manufacturing.

LIGHTING GAS BURNER

A. PROCEDURES:

1. Make sure the burner control knob valve is completely clockwise in the off position.
2. Depress red plunger on the pilot safety valve and light the pilot.
3. Keep plunger depressed one minute. Pilot should remain lit when the plunger is released. If not, try again. The gas line has to be completely free of air before the pilot light will ignite or stay lit.
4. Pilot light has a height adjustment, clockwise to reduce height and counter-clockwise to increase height. Make sure the flame is covering the thermocouple. The flame will have a blue color when adjusted correctly.
5. To adjust air mixture, loosen screw on the air mixing chamber and turn the plate until the proper mixture is achieved. Tighten the screw when finished.
6. If the Gas Flow Orifice to the main burner is Adjustable, the orifice hood on the gas control valve can be rotated clockwise to reduce gas flow, and counter-clockwise to increase gas flow. Contact a qualified technician to do this work. To avoid breaking the threaded connection, hold the valve with a wrench when making adjustments on the valve hood.
7. If the Gas Flow Orifice to the main burner is Non-Adjustable, the orifice has a hole that is provided for either natural gas or LP gas. If this needs to be changed, call your local Gas Company Service Agency or your Dealer.
8. Efficiency: It is recommended that you have your local Gas Co., or Service agency come start, test, and adjust gas equipment before operation begins for more efficient and trouble free operation. These procedures are not covered under warranty.

CLEANING

A. TANK OR PANS:

1. Normal cleaning: Keep tank and element in normal operating condition. Daily cleaning is recommended.
2. Avoid using: Do not use sharp objects or detergents containing chlorine, ammonia or acidic acid. Always rinse tank thoroughly after use or after using harsh chemicals.
3. Deposits: The tank bottom on Gas Wet Only warmers and the immersion heating elements on Electric Wet Only warmers must be kept free from mineral deposits to keep units working efficiently and trouble free. If the water has a high mineral content it is recommended that a filtering devise be added. Use hot white vinegar full strength to dissolve mineral deposits. This method will also work well on the bun steamer for the interior of the double wall where it can not be cleaned by hand. Remember to rinse out thoroughly before returning to normal operation.

RECORDING DATA

A. EXPEDITING: Record all the following information, as it will be required when communicating with the Dealer, Service Company, or La Rosa Refrigeration on service or warranty issues;

B. SERIAL NUMBER LOCATIONS:

1. Self-Contained Units: The La Rosa serial number I.D. tag is located on refrigerator side wall behind the louvered panel in the compressor compartment.
2. Remote units: The I.D. tag is located under the nosing centered in the unit.
3. Remote units with rail: The I.D. tag is located on refrigerator side wall behind the panel with the controls
4. Hot food units: The I.D. tag is located under the plate shelf/half panel mounted to the left stainless steel sidewall.
5. Hot Food units with drawers: The I.D. tag is located under the plate shelf or half panel, mounted behind the drawer front on the left end of the unit.

C. PROJECT INFORMATION:

1. Dealer's Name _____

2. La Rosa's Invoice # _____ Invoice Date _____

Note: La Rosa's Invoice No. can be obtained from the Dealer.

3. Date Received _____ Date Installed _____

D. UNIT(S) RECORD LOG:

	Model Number	Serial Number
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____

Signature of Installer _____ Date _____

REQUIRED INFORMATION FOR CLAIM PROCEDURE

A. ORIGINAL DEALERS NAME: Who La Rosa sold the equipment to.

B. NAME AND LOCATION OF RESTAURANT:

C. LA ROSA INVOICE NUMBER AND DATE TO CONFIRM: (proof of purchase)
1. Ship date is Warranty start date

D. TYPE OF WARRANTY:
1. Basic Coverage - 90 days on Labor and 1 Year on Parts (other than compressor pump). Faulty parts must be returned
2. Compressor Pump - First 20 months is Tecumseh's Over The Counter exchange program, or under La Rosa's first year parts (if Tecumseh's OTC program has expired)
3. Five Year Compressor Warranty (optional)
4. One Year Labor Warranty (optional)

NOTE: Compressor pump warranty is on factory installed pump only. Some Dealers do not purchase optional warranties and may offer their own. The Consumer may not be aware of who's responsible for coverage.

E. COMPRESSOR PUMP:

Bill of Material # _____

Date Code: _____ Serial #: _____ Model #: _____

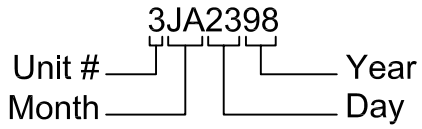
NOTE: Pump date code must be older than La Rosa's Serial Number date code (see below for example).

F. LA ROSA'S MODEL AND SERIAL NUMBERS:

1. Location of ID tag on Self-Contained Unit - Inside compressor compartment on base side wall
2. Location of ID tag on Remote Unit - Underside of the front nosing in the center of the refrigerated base unit or inside control compartment on base side wall.

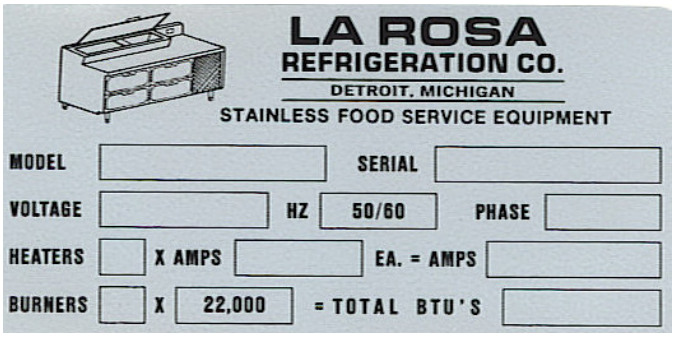
La Rosa's Serial Number:

JA = January	FE = February	MA = March
AP = April	MY = May	JU = June
JL = July	AU = August	SE = September
OC = October	NO = November	DE = December



NOTES: La Rosa's serial numbers are assigned the day the unit passes the testing. All units are checked and tested prior to shipping (no exceptions).

La Rosa's Identification Tag:



ITEMS NOT COVERED UNDER WARRANTY

1. Original Start-up, Installation and Service Charge
2. Temperature Adjustments, Control Adjustments or Control Calibrations of any kind
3. Misuse, abuse, tampering, or changes by unauthorized persons
4. Taxes-Local/State/Federal
5. Handling Charges
6. Shipping Charges to or from La Rosa's Factory
7. Additional Part(s) not originally installed at Factory, unless authorized
8. More than one Service Technician
9. Excessive trips, trip charges or hours
10. Overtime (premium pay) in regards to work performed in its entirety, only straight time will be paid for Saturday, Sunday, and Holidays
11. Repeated Service Charges for correcting the same Re-occurring problem
12. Additional and/or excessive costs due to non-original Factory installed Compressor, Condenser or Evaporator Coil replacements
13. Excessive wholesale cost of alternate replacement parts
16. Failure of built-in equipment provided by others. La Rosa warrants it's workmanship to the extent of installation
17. Any part not manufactured by La Rosa that is not covered under La Rosa's Supplier's Warranty and Authorized Service Agent
18. Work performed on remote refrigeration systems not previously assembled, and tested in La Rosa's factory prior to shipment
19. Self-contained units with condensing unit remote to another piece in the line-up assembly by La Rosa which has been re-connected by someone other than a qualified Refrigeration Service Co
20. Damage of equipment or any part there of while in transit by accident or neglect;
    Cosignee is responsible for inspection prior to signing the freight bill, Refer to page 2 for instructions
21. Loss of food or other product due to failure of unit

Refer to Claim Procedures and page 18 for Terms and Conditions

COMPRESSOR PUMP WARRANTY CLAIM PROCEDURE

CLAIM # : _____ DATE : _____

Original Dealer : _____

Name of Restaurant : _____

Location : _____

La Rosa's Invoice # : _____ Date : _____ Ship Date : _____

La Rosa Model # : _____ Serial # : _____

Warranty Purchased: Five-Year Compressor __ YES __ NO; One-Year Labor __ YES __ NO

Compressor Pump Information:

Bill of Material # : _____

Date Code : _____ Serial # : _____ Model # : _____

NOTE: Warranty is Void if Tecumseh's/La Rosa's I.D. Plate/Tag are missing.

Compressor Pump Replacement:

A. If the original compressor pump is within a 20-month period from the date on the compressor pump I.D. plate, then it is covered under Tecumseh's O.E.M. warranty and can be exchanged at no charge over the counter under Tecumseh's O.E.M. exchange program through any Authorized Distributor.

   If for any reason the compressor pump cannot be exchanged over the counter, the pump, not the condenser, is covered under warranty. If the pump/condenser is provided by Tecumseh's/La Rosa's plant, the pump/condenser must be returned F.O.B. prepaid to La Rosa's Plant. In any case, you should send for La Rosa's file of the following:

   - A copy of the no charge bill from the Tecumseh distributor
   - A copy of the refrigeration repair bill - dated and detailed

B. If the original compressor pump is after the 20-month period, either the Dealer, Restaurant Owner, or Service Co. would have to purchase a pump, have it replaced, and send the old I.D. plate/tag from the original compressor pump back to La Rosa with the following:

   - A copy of the bill showing where the compressor pump was purchased from, and the wholesale cost
   - A copy of the refrigeration repair bill - dated and detailed

Upon receipt of the above information, La Rosa will reimburse the wholesale cost of the original compressor pump (taxes and freight are not applicable). If a wholesale bill is not provided, La Rosa reserves the right to contact a Distributor to obtain the cost. La Rosa will also refund any reasonable labor charges if within our labor warranty.

Follow Up:

Amount Paid : _____ Check # : _____ Date : _____

Credit Amount : _____ Credit # : _____ Date : _____

COMPRESSOR WARRANTY CLAIM PROCEDURE

CLAIM # : _____ DATE : _____

Original Dealer : _____

Name of Restaurant : _____

Location : _____

La Rosa's Invoice # : _____ Inv. Date : _____ Ship Date : _____

La Rosa Model # : _____ Serial # : _____

Warranty Purchased: Five-Year Compressor __ YES __ NO; One-Year Labor __ YES __ NO

Compressor Information:

Bill of Material # : _____

Date Code : _____ Serial # : _____ Model # : _____

NOTE: Warranty is Void if Tecumseh's/La Rosa's I.D. Plate/Tag are missing.

Compressor Replacement:

A. If the original compressor is within a 20-month period from the date on the compressor I.D. plate, then it is covered under Tecumseh's O.E.M. warranty and can be exchanged at no charge over the counter under Tecumseh's O.E.M. exchange program through any Authorized Distributor.

If for any reason the compressor part cannot be exchanged over the counter, a replacement compressor may be ordered from La Rosa Refrigeration. This replacement part will be shipped on a C.O.D. basis only, and with the return of the defective, F.O.B. prepaid compressor, a credit and/or wholesale cost of the compressor will be reimbursed. For all warranty repair work, the following must be sent to La Rosa:

- A copy of the no charge bill from the Tecumseh distributor
- A copy of the refrigeration repair bill - dated and detailed

B. If the original compressor is after the 20-month period of the date code, the dealer, restaurant owner, or service co. would have to purchase a compressor, have it replaced, and send the old I.D. plate/tag from the defective compressor back to La Rosa with the following:

- A copy of the bill showing where the compressor was purchased from, and the wholesale cost
- A copy of the refrigeration repair bill - dated and detailed

Upon receipt of the above information, La Rosa will reimburse the wholesale cost of the original compressor (taxes and freight are not applicable). If a wholesale bill is not provided, La Rosa reserves the right to contact a local wholesaler to obtain the cost. La Rosa will also refund any reasonable labor charges if within La Rosa's labor warranty.

Follow Up:

Amount Paid : Check # : Date :

Credit Amount : Credit # : Date :

PARTS WARRANTY CLAIM PROCEDURE

CLAIM # : _____ DATE : _____

Original Dealer : _____

Name of Restaurant : _____

Location : _____

La Rosa's Invoice # : _____ Inv. Date : _____ Ship Date : _____

La Rosa Model # : _____ Serial # : _____

Warranty Purchased: One-Year Labor ☐ YES ☐ NO (one-year parts, 90-days labor standard)

Parts Information :

Description : _____

Make/Brand Name : _____ Serial # : _____ Model # : _____

NOTE: For compressor parts, refer to compressor claim procedure

Part Replacement :

A. If the original factory part is within a 12-month period from the date of shipment, the dealer, restaurant owner, or service co. would have to purchase a part, have it replaced, and send the original factory part back to La Rosa F.O.B. prepaid for inspection with the following:

- A copy of the bill showing where the part was purchased from and the wholesale cost
- A copy of the refrigeration repair bill - dated and detailed

Upon receipt of the above information, La Rosa will exchange, replace, or reimburse wholesale cost of the part (taxes and freight are not applicable). If a wholesale bill is not provided, La Rosa reserves the right to contact a local wholesaler to obtain the cost. La Rosa will also refund any reasonable labor charges if within La Rosa's labor warranty (standard 90-days or optional one-year).

Follow Up :

Amount Paid : Check # : Date :

Credit Amount : Credit # : Date :

REFRIGERATION AND EQUIPMENT CO.

All equipment manufactured by **La Rosa** meets the standards set by NSF organization.

EQUIPMENT WARRANTY

The **La Rosa Refrigeration & Equipment Company**, for a period of one year from the date of shipment from its factory, guarantees its equipment to be free from defects in material and workmanship, under normal use. The company obligation under this warranty shall be limited to repairing or replacing at our option, F.O.B. factory, any part of said equipment which after examination proves to be defective.

Parts furnished by suppliers to **La Rosa** such as: immersion and strip heaters, gas valves, built-in warmers, evaporators, refrigeration valves, temperature and pressure controls and others are guaranteed to the extent of their manufacturers expressed warranty to **La Rosa**.

The dealer or distributor is fully responsible for service as stated below and **LaRosa Co**. guarantees to furnish replacement parts as stated herein. A service labor warranty is available per terms stated below.

In any case a repair work order shall be obtained from the company prior to shipping the defective part or unit back to the factory. At this time the company can decide to approve a repair work order at the job site providing at no charge a new replacement part and also paying reasonable labor charges for a period of 90 days only from original shipping date. After these 90 days, an additional 9 months labor warranty is available at extra charge for most of our units and shall become effective only if originally ordered and having been paid for together with the whole job at the time of the repair authorization.

To expedite the company response to this request, the dealer accredited with the original sale only shall be contacted to obtain the original **La Rosa** invoice # and date, which is necessary for us to receive together with model and serial numbers of such defective equipment. (See warranty section of owners manual for procedures)

This Warranty does not apply to any equipment, or any part thereof, which has been subject to accident, alteration, abuse or misuse, and does not cover loss of food, other products, or damage to property due to mechanical or power failure.

This Warranty does not cover cost of original installation and initial start up. Also the following items are not covered; control adjustment, timer setting other than original, tightening of compressor hold down bolts, thermometer calibration, freight damage, normal maintenance, and refrigeration items that are not installed at factory.

This Warranty is in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on the part of the Company, and it neither assumes nor authorizes any other person to assume for it, or any other obligation or liability in connection with the sale or said equipment.

COMPRESSOR WARRANTY

In addition to the warranty by the compressor manufacturer*, and/or the one year **LaRosa** warranty as stated above, an extended four year warranty on the original hermitically sealed compressor can be purchased at an additional charge as indicated in our price list. This additional warranty, when purchased, will cover only the direct cost of such compressor bought at the nearest compressor dealer.

Under no circumstances will we accept responsibility for any labor or freight charges involved in replacing defective compressors during the four year period. This warranty shall not apply to said equipment, or any part thereof, which has been subject to accident, alteration, abuse or misuse, and does not cover loss of food or other products due to mechanical or power failure.

*EXCHANGE PROCEDURE FOR TECUMSEH COMPRESSORS STILL UNDER TECUMSEH WARRANTY

Tecumseh Compressors which are replaced within 20 months from the date of compressor manufacturer as indicated on the compressor nameplate qualify for an in warranty exchange. Your serviceman should take the compressor to the nearest Authorized Tecumseh Wholesaler

TERMS

All prices are F.O.B. our factory, Detroit, Michigan. Cash Discount – 1%, 10 days, net 30 days.

All overdue invoices subject to 1 1/2% service charge 18% annually.

Merchandise shipped open account to firms furnishing satisfactory credit references.

Several references, (including their addresses), together with name of your bank should accompany application for open account terms.

Never will a cash discount apply to Pro-forma (Cash in Advance), C.O.D., Sight Draft Bill of Lading or Irrevocable Letter of Credit Terms.

All shipments are sent C.O.D., or S/D/B/L, until credit has been established with our firm.

No merchandise may be returned for repair or credit without written approval.

All prices and specifications are subject to change without notice, and do not include Federal Excise, Municipal, or any other tax.

All orders are subject to acceptance at our office. Unless the effectiveness of this price list is verified, its possession does not constitute an offer to sell