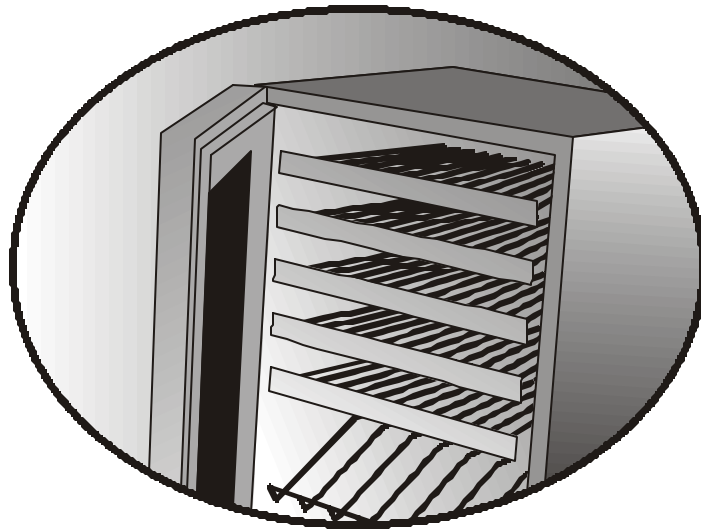


WINE COOLER
SERVICE MANUAL



 **Electrolux**

5995430781 5/2005

SAFE SERVICING PRACTICES - ALL APPLIANCES

To avoid personal injury and/or property damage, it is important that **Safe Servicing Practices** be observed. The following are some limited examples of safe practices:

1. **DO NOT** attempt a product repair if you have any doubts as to your ability to complete it in a safe and satisfactory manner.
2. Before servicing or moving an appliance:
 - Remove the power cord from the electrical outlet, trip the circuit breaker to the OFF position, or remove the fuse.
 - Turn off the gas supply and allow any residual gas to dissipate for 10 to 20 minutes.
3. Never interfere with the proper operation of any safety device.
4. **USE ONLY REPLACEMENT PARTS CATALOGED FOR THIS APPLIANCE. SUBSTITUTIONS MAY DEFEAT COMPLIANCE WITH SAFETY STANDARDS SET FOR HOME APPLIANCES.**
5. **GROUNDING:** The standard color coding for safety ground wires is **GREEN**, or **GREEN** with **YELLOW STRIPES**. Ground leads are not to be used as current carrying conductors. It is **EXTREMELY** important that the service technician reestablish all safety grounds prior to completion of service. Failure to do so will create a hazard.
6. Prior to returning the product to service, ensure that:
 - All electrical connections are correct and secure
 - All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts
 - All non-insulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels
 - All safety grounds (both internal and external) are correctly and securely connected
 - All panels are properly and securely reassembled

ATTENTION!!!

This service manual is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. Electrolux Major Appliances cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

Safe Servicing Practices _____	2
Quick Reference Sheet _____	4
Owner's Guide and Parts Information _____	4
Contact Information _____	4
General information _____	5
Safety Precautions _____	5
Door Adjustment _____	5
Specifications _____	7
Sample Wiring Diagram _____	8
Compressor/Electrical Specifications _____	9
Compressor Pins _____	9
Specifications _____	9
Refrigeration Systems _____	10
Refrigeration System Diagnosis Guide _____	11
Troubleshooting _____	12
Not Refrigerating (compressor and fan are operating) _____	12
Not Refrigerating (compressor not operating - fan operating) _____	12
Not Refrigerating (compressor and fan not operating) _____	12
Compressor Overheating _____	12
Compressor Will Not Stop Operating _____	12
Water Leak (inside unit) _____	12
Excessive Frost Build-up _____	13
Noisy _____	13
Fresh Food Temperature too Cold _____	13

QUICK REFERENCE SHEET

1. Owner's guide and parts information may be viewed or downloaded at: **www.electroluxusa.com**
-

- | | | |
|-------------------------|----------------------------------|----------------|
| 2. Contact information: | EHP Direct South: | 1-800-845-4555 |
| Orders. | EHP Direct Northeast | 1-800-611-4057 |
| | Fax | 1-800-611-4058 |
| | EHP Direct North, Central & West | 1-800-345-2566 |
-

Canada Service, Warranty, General Questions.	Monday - Friday 8:00 AM - 5:00 EST 1-800-265-8352
--	---

U.S.A. Service, Warranty, General Questions.	Monday - Friday 8:00 AM - 5:00 EST 1-877-4Electrolux (435-3287) Electrolux ICON brands
--	---

Damage Claims.	1-800-456-4669 (option 3, then option 2)
----------------	--

Parts Orders.	1-800-320-0859
---------------	----------------

Mailing Address.	Electrolux Major Appliances P.O. Box 212378 Martinez, GA. 30917
------------------	---

GENERAL INFORMATION

Safety Precautions

Do not attempt to service or repair the unit until you have read the entire procedure. Safety items throughout this manual are labeled with Danger, Warning or Caution.



Risk of child entrapment. Before you throw away an old refrigerator or freezer: Take off the doors, leave shelves in place so that children may not easily climb inside



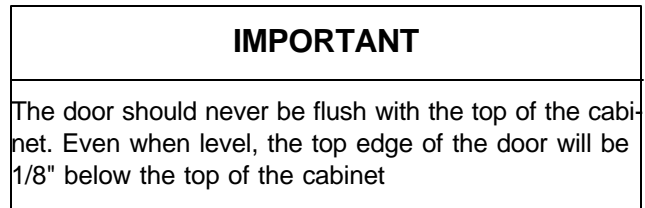
- Never attempt to repair or perform maintenance on the unit until the electricity has been disconnected.
- Altering, cutting of power cord, removal of power cord, removal of power plug, or direct wiring can cause serious injury, fire and/or loss of property and/or life and will void the warranty.

CAUTION

- Do not lift unit by door handle.
- Never use an ice pick or other sharp instrument to help speed up defrosting. These instruments can puncture the inner lining or damage the cooling unit.
- Failure to clean the condenser every three months can cause the unit to malfunction. This could void the warranty.
- Never install the unit behind closed doors. Be sure front grille is free of obstruction. Obstructing free air flow can cause the unit to malfunction, and may void the warranty.

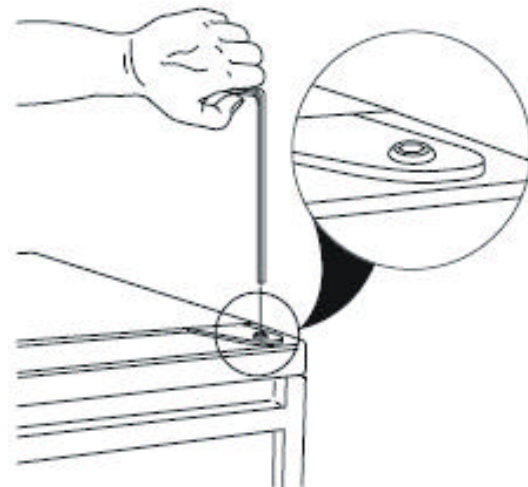
Door Adjustment

All model doors are aligned at the factory before shipment. Occasional readjustment may be necessary, especially if an Overlay Panel is installed. The following procedure will correct for up to 1/4" alignment.

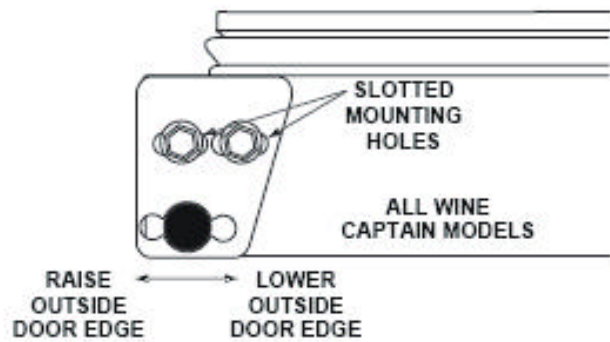
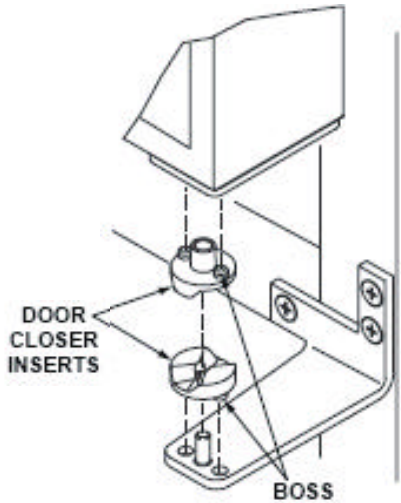


To adjust door:

1. Compare the top edge of the door (opposite the hinges) to the top edge of the cabinet and note the type (up or down) of adjustment needed.
2. Remove the top hinge pivot pin with a 7/64" hex wrench and lift door off bottom hinge pin.



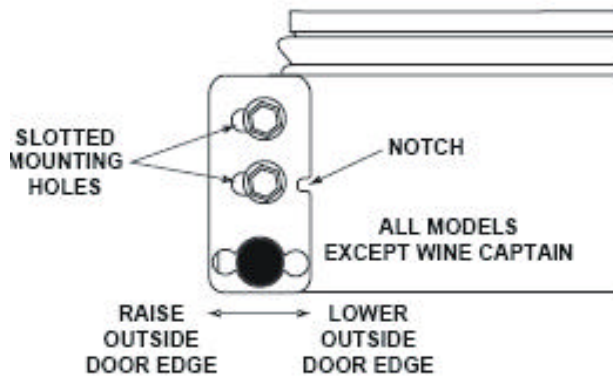
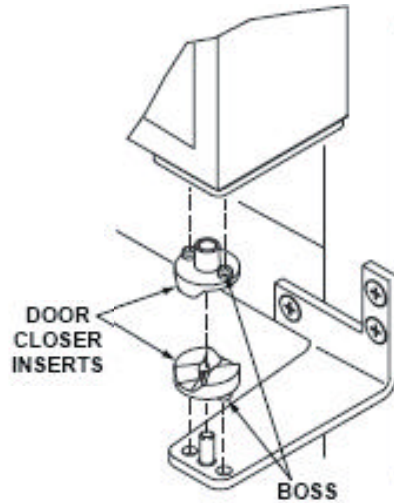
Be careful not to lose door closer inserts.



- After adjustment is complete, remove the door closers from the bottom hinge, clean thoroughly and apply petroleum jelly to the mating surfaces of the closers. Be sure that bosses on closers align with holes in hinge and hinge plate. Mount door and install top hinge pivot pin.

Note: The hinge plate on some models do not have the holes slotted for adjustment. New hinge plates are available from Electrolux Parts.

- With door upside-down, inspect the bottom hinge plate mounting holes.
 - If your plate has slotted mounting holes, loosen but do not remove the two hinge plate screws.
 - If your plate does not have slotted mounting holes, remove the old plate and install the new plate with the notch to the inside of the door.
- If door edge opposite the hinges needs to move up, move plate toward outside of door. If door edge needs to move down, move plate toward inside of door. Repeat until top edge of door is parallel with top of cabinet and tighten screws securely.

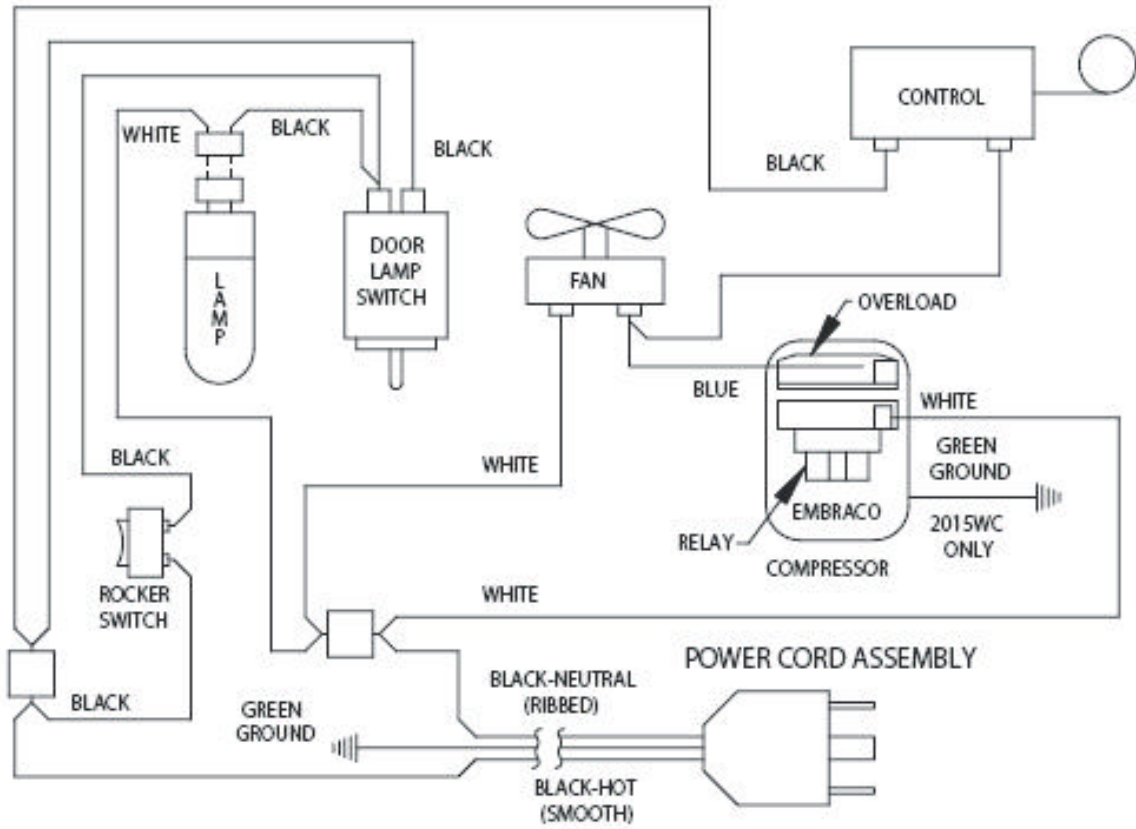


Specifications

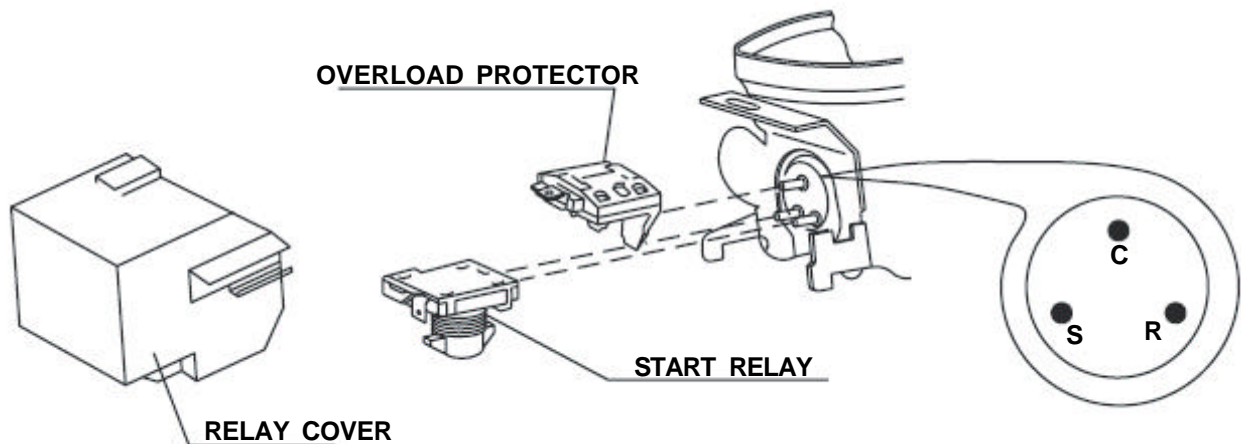
Brand	Electrolux	Electrolux
Series	Designer	Professional
Models	E24WC48EBS	E24WC48EPS
Defrost	Automatic	Automatic
Cooling Type	Compressor	Compressor
Total Capacity (bottles)	48	48
Dimensions		
Width	23 15/15"	23 15/15"
Height	34 1/8"	34 1/8"
Depth	23 1/4"	23 1/4"
Unit Wt. (lbs)	128 lbs	128 lbs
Voltage	115 VAC	115 VAC
Agency Certs	UL, cUL	UL, cUL
Legs	Adjustable	Adjustable
Handle	ICON	Professional
Badge	Electrolux ICON	Electrolux ICON
Controls	Manual	Manual
Shelves	5 side, 1 fixed display	5 side, 1 fixed display
Temperature Zones	3	3
Door Arrangement	Reversible, tinted glass	Reversible, tinted glass
Lighting	always on option	always on option

Sample Wiring Diagram

Note: Always refer to diagram on wine cooler.



Compressor/Electrical Specifications:



Compressor Pins:

To measure start winding resistance, measure across the C-S pins.

To measure run winding resistance, measure across the C-R pins. These pins should never measure any resistance to ground. This would indicate a shorted compressor.

Specifications:

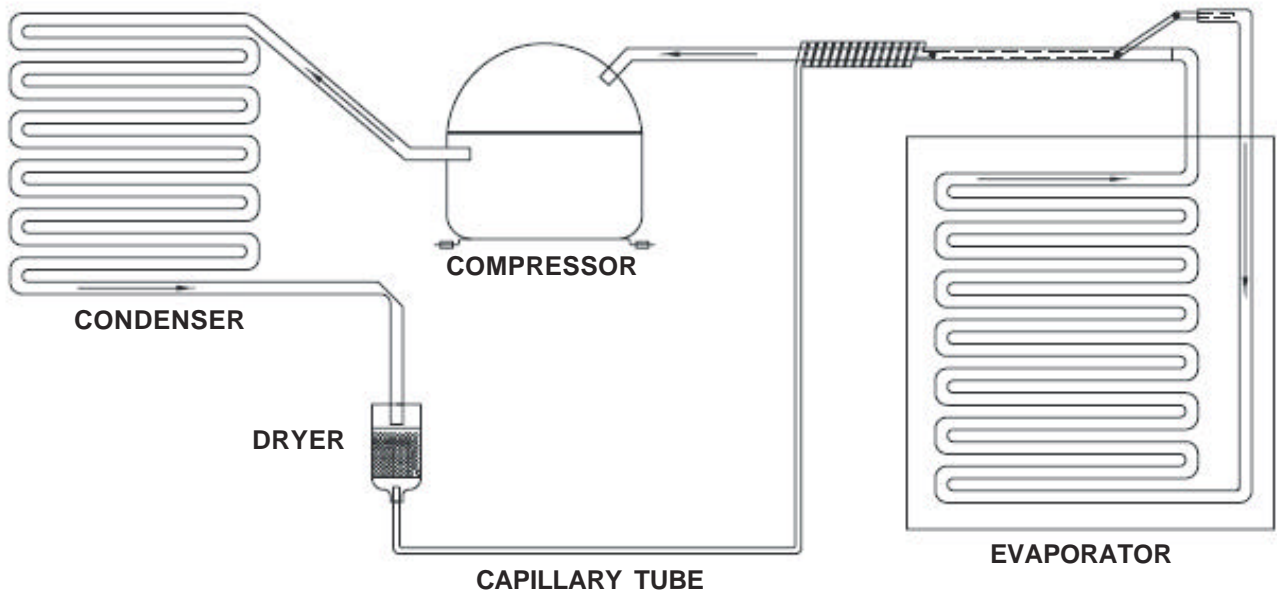
Start Winding Resistance: 28 OHMS.

Run Winding Resistance: 8 OHMS.

REFRIGERATION SYSTEMS

Normal Vapor/Compression Cycle Refrigeration

- Refrigerant is pumped from the compressor to the condenser as a high pressure, high temperature vapor.
- As the refrigerant cools in the high pressure condenser, the vapor condenses to liquid. During this phase change, a great amount of heat is rejected with the help of the condenser fan.
- The liquid then flows to the dryer where it is strained and filtered.



- From the dryer, the refrigerant flows through the capillary tube which meters the liquid refrigerant to the evaporator. The pressure of the refrigerant is reduced to the evaporating or low side pressure.
- The reduction of pressure on the liquid refrigerant causes it to boil or vaporize until it reaches saturation temperature. As the low temperature refrigerant passes through the evaporator coil, it continues to absorb a lot of heat, causing the boiling action to continue until the refrigerant is completely vaporized. It is during this phase change that the most heat is absorbed (the cooling takes place) in the refrigerator.
- The refrigerant vapor leaving the evaporator travels through the suction line to the compressor inlet. The compressor takes the low pressure vapor and compresses it, increasing both pressure and temperature. The hot high pressure gas is pumped out the discharge line and into the condenser. The cycle continues.

REFRIGERATION SYSTEM DIAGNOSIS GUIDE

System Condition	Suction Pressure	Suction Line	Compressor Discharge	Condenser	Capillary Tube	Evaporator	Wattage
Normal	Normal	Slightly below room temperature	Very hot	Very hot	Warm	Cold	Normal
Overcharge	Higher than normal	Very cold may frost heavily	Slightly warm to hot	Hot to warm	Cool	Cold	Higher than normal
Undercharge	Lower than normal	Warm - near room temperature	Hot	Warm	Warm	Extremely cold near inlet - outlet below room temperature	Lower than normal
Partial Restriction	Somewhat lower than normal-in vacuum	Warm - near room temperature	Very hot	Top passes warm - lower passes cool (near room temperature) due to liquid	Room temperature (cool) or colder	Extremely cold near inlet - outlet below room temperature backing up	Lower than normal
Complete Restriction	In deep vacuum	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal
No Gas	0 PSIG to 25"	Room temperature (cool)	Cool to hot	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal

Troubleshooting

DANGER
DO NOT service the unit until the main electrical power has been disconnected.

Problem	Cause	Correction
1. Not refrigerating (compressor and fan are operating).	a. Little or no frost pattern on evaporator.	a. Check for sealed system leak or restriction.
2. Not refrigerating (compressor not operating - fan operating).	a. Relay defective.	a. Replace relay.
	b. Overload defective (open).	b. Replace overload.
	c. Compressor defective.	c. Replace compressor.
3. Not refrigerating (compressor and fan not operating).	a. Control defective (open).	a. Replace control.
	b. Broken wire in compressor circuit.	b. Repair or replace wiring.
	c. Power cord not plugged in.	c. Plug in power cord.
	d. Control in off position.	d. Rotate control knob clockwise.
4. Compressor overheating.	a. Condenser air flow restricted.	a. Remove restriction (clean condenser and grille).
	b. Condenser fan blade obstructed.	b. Remove blade restriction.
	c. Condenser fan motor stalled.	c. Replace fan motor.
	d. Defective compressor.	d. Replace compressor.
5. Compressor will not stop operating.	a. Control set too cold.	a. Adjust control warmer (counter clockwise).
	b. Control defective (contacts will not open).	b. Replace control.
	c. Control sensing bulb not sensing evaporator plate.	c. Clamp bulb completely against bottom of plate, routing bulb away from compressor discharge tube.
6. Water leak (inside unit).	a. Defrost drain plugged.	a. Remove obstruction.

Problem	Cause	Correction
7. Excessive frost build-up.	<ul style="list-style-type: none"> a. Door gasket not sealing properly. b. Door out of alignment. c. Water soaked cabinet insulation. d. Light stays on when door is closed. 	<ul style="list-style-type: none"> a. Adjust door hinges or replace door gasket. b. Align fill door hinges. c. Replace foamed cabinet assembly (factory repair only). d. Repair light bracket.
8. Noisy.	<ul style="list-style-type: none"> a. Copper refrigeration tube touching cabinet. b. Fan blade touching shroud. c. Fan blade obstruction (wiring, foam insulation, packaging material). 	<ul style="list-style-type: none"> a. Carefully adjust tubing. b. Adjust fan mounting or shroud. c. Remove obstruction.
9. Fresh food temperature too cold.	<ul style="list-style-type: none"> a. Temperature control set too cold. 	<ul style="list-style-type: none"> a. Adjust control to warmer setting (counterclockwise).

