

Technical Service Manual

Wine Cellar



 **Electrolux** | **ICON™**

Safe Servicing Practices For All Appliances

Avoid personal injury and/or property damage by observing important Safe Servicing Practices. 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 the repair in a safe and satisfactory manner.
2. Always use the correct Replacement Parts as indicated in the parts documentation. Substitutions may defeat compliance with Safety Standards Set For Home Appliances. Do not exceed maximum recommended wattage on light bulb replacements. Doing so could blow fuses and/or damage transformers.
3. Before servicing or moving an appliance:
 - Remove power cord from the electrical outlet, trip circuit breaker to the OFF position, or remove fuse.
 - Turn off water supply if applicable.
 - Turn off gas supply if applicable.
4. Never interfere with the proper operation of any safety device.
5. Use **ONLY REPLACEMENT PARTS CATALOGED FOR THIS APPLIANCE**. Substitutions may defeat compliance with Safety Standards Set For Home Appliances.
6. **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.
7. 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 Home Products, Inc. cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

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Basic Information

This Manual has been prepared to provide Electrolux Service Personnel with Operation and Service Information for an Electrolux ICON Wine Cellar Model #E24WC160ES.

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Important Safety Instructions

Safety Precautions

Do not attempt to install, operate or service the unit until you have read the safety precautions in this manual. Safety items throughout this manual are labeled with a Danger, Warning, or Caution based on the risk type.

Definitions

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.

WARNING

WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT

Indicates installation, operation, or maintenance information which is important but not hazard related.

General Safety

- Do not store or use gasoline or other flammable liquids near this or any other appliance. Read product labels for warnings regarding flammability and other hazards.
- Do not operate the refrigerator in the presence of explosive fumes.
- Avoid contact with any moving parts of the automatic ice maker.
- Remove all staples from the carton to avoid injury. Staples can also damage finishes if they come in contact with other appliances or furniture.

Child Safety

Packing Materials:

- Packing cartons covered with rugs, bedspreads, plastic sheets, or stretch wrap may become airtight chambers and can quickly cause suffocation.
- Destroy or recycle the product's carton, plastic bags, and any other exterior wrapping material immediately after the unit is unpacked. Children should never play with these items.

Child Entrapment and Suffocation:

- These problems are not limited to the past. Whether junked, abandoned, or temporarily stored (even for a few hours), unattended refrigeration units are dangerous. Please take the precautions listed below.

Proper Disposal of Refrigerators/Freezers

Electrolux Home Products Inc. strongly encourages responsible appliance recycling/disposal methods. Check with your utility company or visit www.recyclemyoldfridge.com for more information on recycling your old refrigeration unit.

Before you recycle or dispose of your old refrigeration unit:

- Remove the doors.
- Leave the shelves and baskets in place so children may not easily climb inside.
- Have refrigerant and compressor oil removed by a qualified service technician.

Basic Information

WINECELLAR WARRANTY The winecellar is protected by this warranty

	WARRANTY PERIOD	THROUGH OUR AUTHORIZED SERVICERS, WE WILL:	THE CONSUMER WILL BE RESPONSIBLE FOR:
FULL ONE-YEAR WARRANTY	One year from original purchase date.	Pay all costs for repairing or replacing any parts of this appliance which prove to be defective in materials or workmanship.	Costs of service calls that are listed under NORMAL RESPONSIBILITIES OF THE CONSUMER. *
LIMITED 2 nd - 5 th YEAR WARRANTY (Cabinet Liner and Sealed System)	Second through fifth years from original purchase date.	Repair or replace any parts in the cabinet liner or sealed refrigeration system (compressor, condenser, evaporator, dryer or tubing) which prove to be defective in materials or workmanship.	Costs for pickup and delivery of the appliance required because of service. Costs for labor, parts and transportation other than with respect to the cabinet liner or sealed refrigerator system.
LIMITED WARRANTY (Applicable to the State of Alaska)	Time periods listed above.	All of the provisions of the full warranties above and the exclusions listed below apply.	Costs of the technician's travel to the home and any costs for pick up and delivery of the appliance required because of service.

In the U.S.A., your appliance is warranted by Electrolux Home Products, Inc. We authorize no person to change or add to any of our obligations under this warranty. Our obligations for service and parts under this warranty must be performed by us or an authorized Electrolux Home Products, Inc. servicer. In Canada, your appliance is warranted by Electrolux Canada Corp.

* NORMAL RESPONSIBILITIES OF THE CUSTOMER

This warranty applies only to products in ordinary household use, and the consumer is responsible for the items listed below:

1. Proper use of the appliance in accordance with instructions provided with the product.
2. Proper installation by a licensed and insured professional in accordance with instructions provided with the appliance and in accordance with all local plumbing, electrical and/or gas codes.
3. Proper connection to a grounded power supply of sufficient voltage, replacement of blown fuses, repair of loose connections or defects in house wiring.
4. Expenses for making the appliance accessible for servicing, such as removal of trim, cupboards, shelves, etc., which are not a part of the appliance when it was shipped from the factory.
5. Damages to finish after installation.
6. Replacement of light bulbs and/or fluorescent tubes (on models with these features)

EXCLUSIONS

This warranty does not cover the following:

1. CONSEQUENTIAL OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.
Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
2. Service calls which do not involve malfunction or defects in workmanship or material, or for appliances not in ordinary household use. The consumer shall pay for such service calls.
3. Damages caused by services performed by servicers other than Electrolux Home products, Inc., Electrolux Canada Corp., or its authorized servicers; use of parts other than genuine Electrolux Home products parts; obtained from persons other than such servicers; or external causes such as abuse, misuse, inadequate power supply or acts of God.
4. Products with original serial numbers that have been removed or altered and can not be readily determined.

IF YOU NEED SERVICE

Keep your bill of sale, delivery slip, or some other appropriate payment record. The date on the bill establishes the warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. You may also have other rights that vary from state to state. Service under this warranty must be obtained by contacting Electrolux Home Products, Inc. or Electrolux Canada Corp.

This warranty only applies in the 50 States of the U.S.A and Puerto Rico, and Canada. Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by Electrolux Home Products, Inc. In Canada, your appliances is warranted by Electrolux Canada Corp.

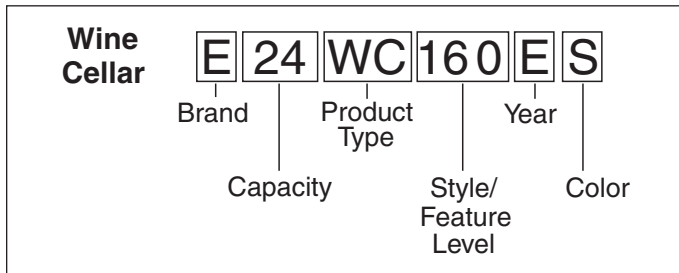
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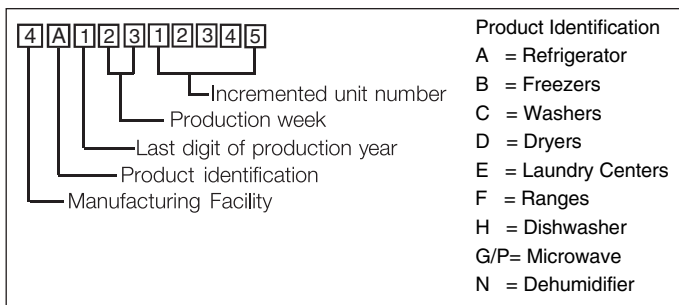
Data Plate

Check the data plate inside the wine cellar at the top left for details on voltage and refrigerant information. The Model and Serial number will be listed on the data plate.

Model Number Breakdown



Serial Number Breakdown



Shipping Damage

Inspect the wine cellar for shipping damage. You must report any damage to the company responsible for the delivery within the legal or stated time for this type of product. If there is no such established report time, the damage must be reported within seven days of delivery.

Questions?

For toll-free telephone support in the U.S. and Canada:
1-877-4ELECTROLUX (1-877-435-3287)

For online support and internet product information:
Electrolux Platinum Star Service Web Site
(www.electroluxplatinumstarservice.com)

Accessories

Check that the following accessories are attached to the Wine Cellar or in the separate cardboard box for accessories which is placed inside the wine cellar.

At the back:

1. Distance bar (to ensure distance to wall behind)

Accessories box:

1. Instruction manual
2. Handle + Socket head screwdriver (2 mm)
3. Drip tray
4. Shelf support
5. Storage shelf
6. Wooden bar

Necessary additional tools not included:

1. Screwdriver (star quad)
2. Adjustable wrench

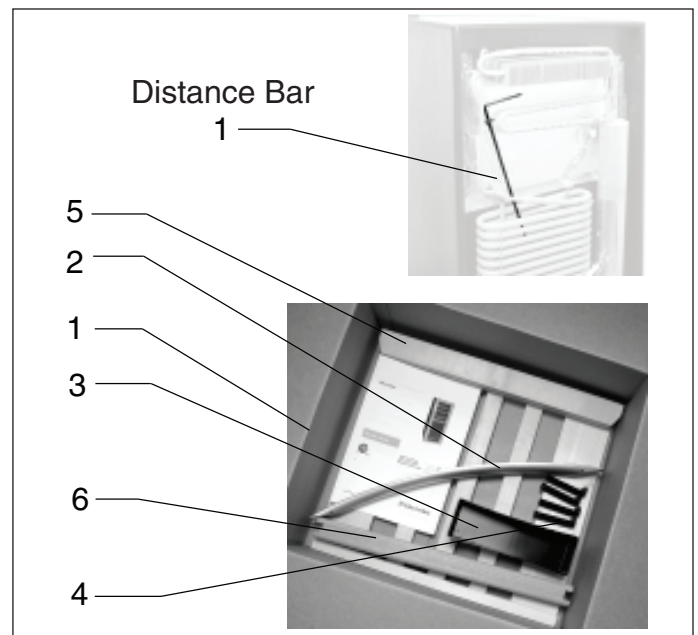


Figure 1-1.

Installation

WARNING

THIS PRODUCT IS INTENDED FOR INDOOR USE ONLY. INSTALLATION OR USE OF THIS PRODUCT OUTDOORS, OR IN ANY AREA EXPOSED TO THE ELEMENTS, MAY CAUSE SERIOUS INJURY, PRODUCT DAMAGE, OR PROPERTY DAMAGE.

Please read all instructions completely before attempting to install or operate the unit.

For best performance, air needs to circulate freely over the cooling unit behind the wine cellar. The freestanding design of the cellar means that it should stand at least 1" (25 mm) from the rear and side walls. Allow a clearance of at least 4" (100 mm) above the wine cellar. (See Figure 2-1)

Adjust the feet of the wine cellar so that it is level from back-to-front and side-to-side. Use a leveling tool if necessary. (See Figure 2-2)

1. Remove the shipping pallet on which your wine cellar rests.
2. **IMPORTANT!** Adjust the feet to allow a 1-3/16" (30mm) clearance under the wine cellar.
3. Attach the distance bar using the two screws at the top back on each side of the cellar. The rod ensures the correct distance to the wall behind. (See Figure 2-3).
4. For optimum performance, please place your wine cellar far away from any source of heat (radiator, range or intense sunlight).

NOTE

Please note that it must be possible to open the wine cellar door at least 90° to allow the sliding shelves to be pulled out.

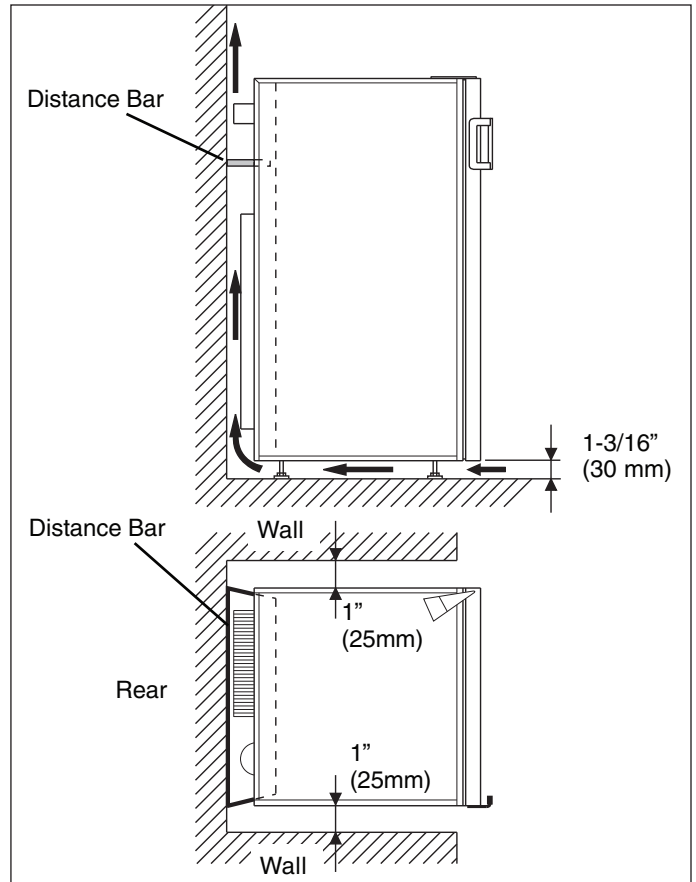


Figure 2-1.

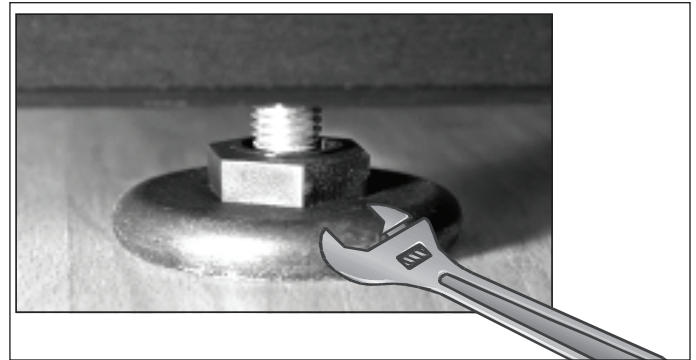


Figure 2-2.

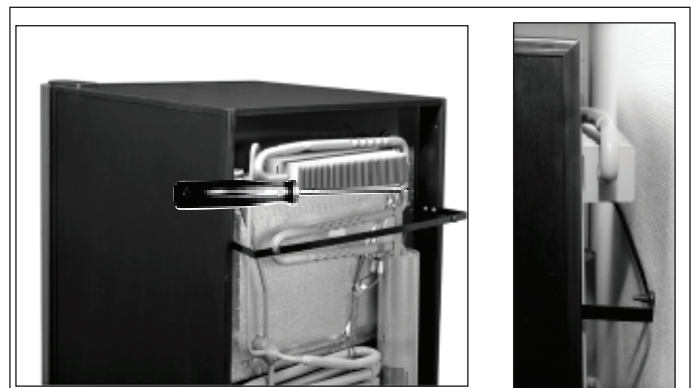


Figure 2-3.

Installation Information

5. Attach the drip tray on the back as shown in Figure 2-4. The screws are already attached at the back.
6. Fit door handle to the door. (See Figure 2-5).
7. Check that the charcoal filter is in place at the top left corner inside the wine cellar. (See Figure 2-6)
The inside ventilation charcoal filter should be replaced every second year. The filter is fitted in the upper left corner inside the wine cellar.
8. Plug in the wine cellar and turn it on with the S1 switch. (See Figure 2-7)



Figure 2-7.

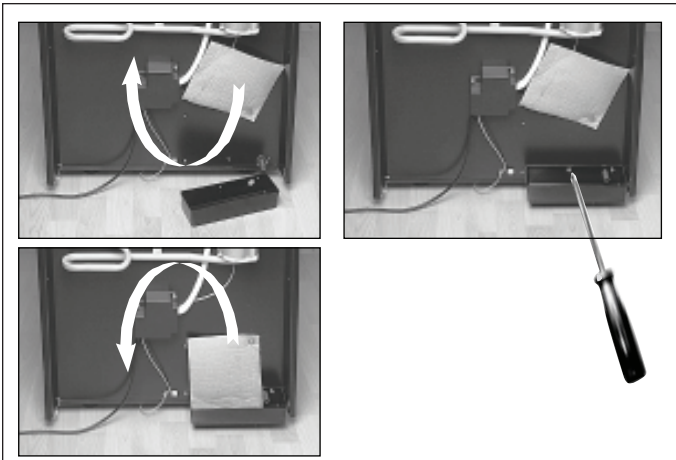


Figure 2-4.



Figure 2-5.

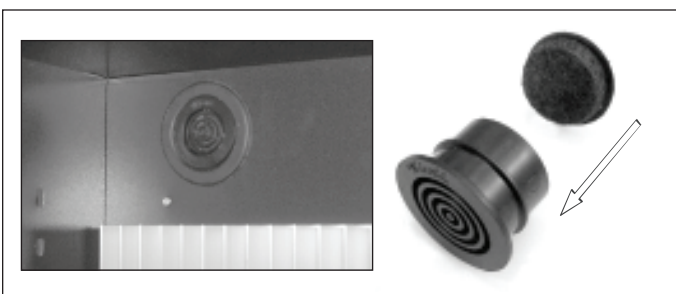


Figure 2-6.

Electrical Information

WARNING

YOU MUST FOLLOW THESE GUIDELINES TO ENSURE THAT THE WINE CELLAR SAFETY MECHANISMS ARE OPERATING CORRECTLY.

- The wine cellar operates on a single phase alternating current (AC). Please check that the voltage shown on the serial plate corresponds to your power supply. All wine cellars require a connection to an electrical power source. Improper hook-up can result in a safety hazard and potential damage to the product or contents!

Proper installation, in accordance with the manufacturer's specifications and all local codes, is the sole responsibility of the consumer. The manufacturer is not responsible for any installation expenses or damages incurred due to improper installation. If you are unsure of your ability to safely connect electric power to the unit, consult a licensed and insured professional to perform all electrical work.

- If the power cord is damaged, it should be replaced by the manufacturer, service technician, or a qualified person.
- Never unplug the wine cellar by pulling on the power cord. Always grip the plug firmly and pull straight out from the receptacle to prevent damaging the power cord.
- To avoid electrical shock, unplug the wine cellar before cleaning and before replacing a light bulb or LED light.

IMPORTANT

To turn off power to your wine cellar, unplug the power cord from the wall outlet.

- Performance may be affected if the voltage varies by 10% or more. Operating the wine cellar with insufficient power can damage the compressor. Such damage is not covered under your warranty.
- Do not plug the unit into an outlet controlled by a wall switch or pull cord to prevent the wine cellar from being turned off accidentally.

WARNING

THE WINE CELLAR MUST BE GROUNDED.

WARNING

ELECTRICAL LEADS MUST BE ROUTED AND SECURED SO THAT THEY CANNOT COME INTO CONTACT WITH HOT OR SHARP PARTS OF THE WINE CELLAR.

Installation Information

Installation Of Guides And Shelf Supports

Install guides for the sliding shelves by placing the rear hook of the guide in front of the desired hole in the rear row (Arrow 1 Figure 2-8). Push in the direction of the arrow, then do the same with the front hook. (Arrow 2 Figure 2-8)

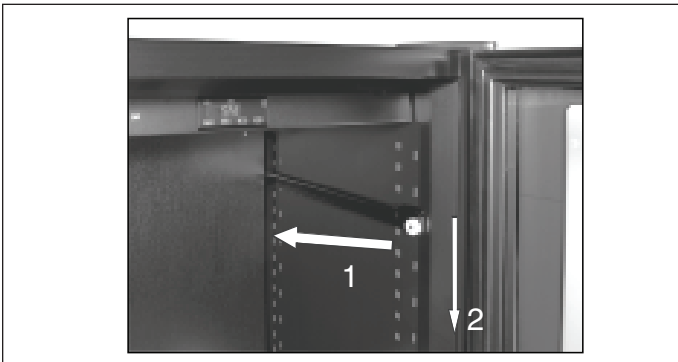


Figure 2-8.

To install the shelf support for the storage shelf, place the support hooks in the holes at desired level, press in as arrow 1 indicates and push down as arrow 2 indicates (See Figure 2-9).

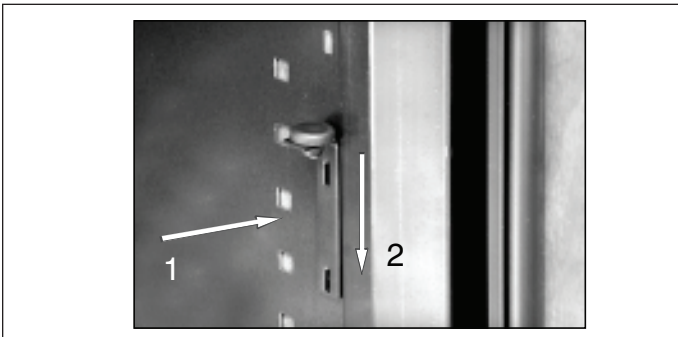


Figure 2-9.

CAUTION

The reinforcement bar is a shelf support and must not be removed for safety reasons.

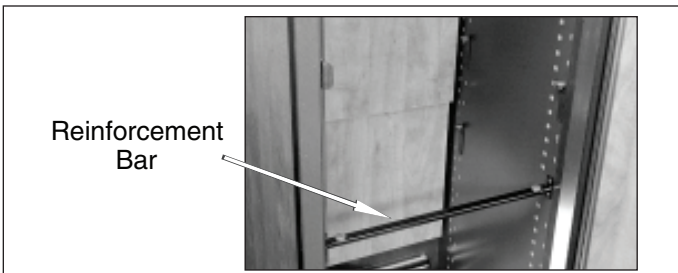


Figure 2-10.

Temperature Setting

The wine cellar is equipped with an electronic control for programming the temperature inside the wine cellar. The wine will be stored between 50°F (10°C) and 59°F (15°C) according to expert advice.

The temperature pre-set in the factory is shown on the display. The temperature, [pre-set at 54°F (12°C)], can be changed on demand between 46°F (8°C) and 64°F (18°C) depending on the wine stored.

1. Press button [1] (See Figure 3-1). While pressing button [1] go to next point (2).
2. Use buttons [2] and [3] (See Figure 3-1) to lower or increase the temperature.
3. Please allow 6 seconds for the control system to record the new pre-set value.

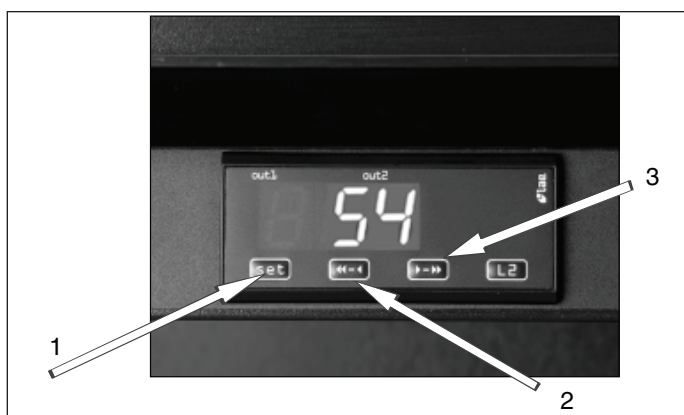


Figure 3-1.

Maintenance

It is recommended that you keep the wine cellar as clean as possible. Unplug the wine cellar before cleaning.

Do not use any abrasive or strong scented substances. Use a smooth cloth or sponge and light detergent. It is very important to check regularly that the air circulation underneath and behind the cellar is not blocked. Condensation collects in a small cup at the back of the cellar. The cup has a sponge which helps the condensation to evaporate. Check that the plastic pipe routing the water from the inside to the cup is not blocked by dust or dirt.

If the wine cellar fails to work, check the following before proceeding with troubleshooting the unit:

- Is the power supply fuse intact ?
- Is the electric power plug properly inserted in its receptacle ?
- Is the wine cellar switched on ?

The wine cellar is equipped with overheating protection. Check whether this has been triggered or not.

How To Store Different Types Of Bottles

Bottles should be stored in your wine cellar according to their size. The most well known types of bottles are the “Bordeaux” and the “Burgundy”. These bottles are not all identical. The most widely recognized bottles are the “Tradition” and the “Légère”. The “Champenoise” and the “flûte d’Alsace” bottles have different diameters and heights. Take these differences into account when storing your wine and avoid mixing the bottles.

It is important to store bottles on their side in order for the cork to remain in contact with the wine. Place bottles top to bottom in the cellar for optimum volume use. The illustrations show the best way to stack the “Burgundy” and the “Bordeaux Tradition”.



Figure 3-2. Bordeaux Tradition



Figure 3-3. Burgundy Tradition

Operation and Maintenance

Mix Bottle Types

Example of mix bottle types placed on a shelf.



Figure 3-4.



Figure 3-5.

Sliding Shelf

Use the sliding shelf when storing specially shaped bottles.

NOTE

Only one layer of bottles on a sliding shelf !



Figure 3-6.

IMPORTANT

The purpose of this section is to give the service technician an understanding of the absorption type sealed system service. Persons attempting to use this service manual to make repairs to sealed system refrigeration systems should have electrical training as well as training in sealed system repairs. The person making the repairs must know and understand all laws (Local and International) governing handling of all refrigerants. The technician must be trained in the use of recovery and recycling equipment. Electrolux Home Products, Inc. cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

IMPORTANT

Effective July 1, 1992, the United States clean air act governs the disposal of refrigerants such as R-134a. Therefore, when discharging or purging the sealed system use an EPA approved refrigerant recovery system as outlined in the final rule on the protection of stratospheric ozone and refrigerant recycling, which was published in the Federal Register May 14, 1993.

WARNING

Instructions given here are furnished as a guide. Persons attempting to use these instructions to make repairs to the sealed refrigeration system should have a working knowledge of refrigeration and previous training on sealed system repair, and an EPA certification for servicing refrigeration systems.

NOTE

Electrolux does not permit the use of recovered refrigerant in the servicing of our products for in-warranty and out-of-warranty repairs or for products covered by service contracts. Therefore, only new refrigerant or refrigerant that has been reclaimed back to new specifications by a refrigerant manufacturer is to be used.

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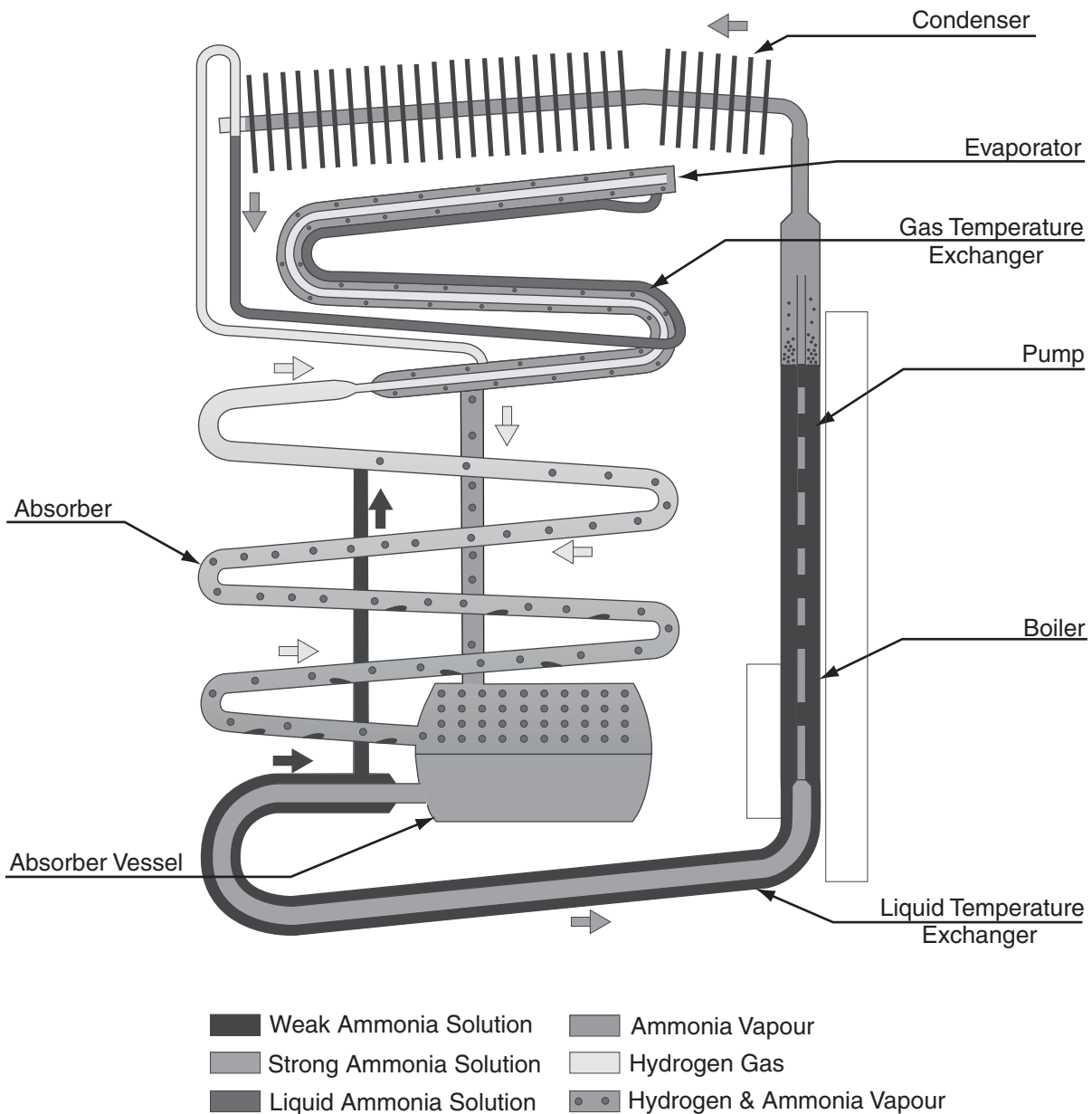
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Sealed System

Introduction

In 1922, the Swedish engineers Baltzar v. Platen and Carl Munters developed a continuously working absorption cooling unit which is not subject to mechanical wear and tear (unit has no moving parts), and which uses an auxiliary gas (hydrogen) as its pressure equalizing gas. Until the present day, absorber aggregates have been utilizing this principle. An absorption unit consists of steel pipes which are welded together to form a complex pipe system which generates the different thermodynamic conditions required for the absorption process. The success of these refrigerators results from their silent operation, long life span (no moving parts), and the different methods for powering them (main operation: 120-230V, battery operation: 12V, operation by gas, oil and alternative energy sources). This feature makes these refrigerators ideally suited for use in hotels or leisure vehicles.

The Absorption System



Description of Function

1. **Boiler:**
The strong ammonia solution is heated, which sends ammonia gas to the condenser. The weak ammonia solution returns through the liquid heat exchanger to the absorber.
2. **Condenser:**
The ammonia gas is condensed to liquid by heat dissipation.
3. **Evaporator:**
The liquid ammonia flows into the evaporator. The evaporation of ammonia in the hydrogen atmosphere absorbs heat. The heavier ammonia/hydrogen mixture flows down to the absorber vessel.
4. **Absorber:**
The rising ammonia gas is absorbed by the weak solution which flows down to the absorber vessel. Hydrogen is separated from ammonia and then rises to the evaporator.

Important

1. The cooling unit needs ventilation.
2. The cooling performance depends on air circulation.
3. The condenser component is affected by heat. Heat accumulation leads to performance loss.
4. Correct installation of the Electrolux ventilation grilles ensures best possible performance.

Features of the optimum installation:

1. Ventilation grilles with a free cross-section= 250cm².
2. Upper ventilation grille positioned above the condenser.
3. Distance between cooling unit and wall must be approximately 3/4" to 1" (20-25mm).
4. Heat deflector to the upper grille, to guide heated air out.

Depending on the model, the cooling unit function is more or less dependent on position. When checking function, the cooling unit should be level front to back and side to side.

Description of Function

Electric Thermostat:

Senses with the capillary tube temperature, and switches power to the heater on and off.

Gas Thermostat:

Senses with the capillary tube temperature, and opens or closes the main gas supply (bypass remains open constantly because of pilot flame).

Thermocouple:

When the thermocouple tip is heated by the gas flame, electricity is generated. This feeds the safety valve solenoid which keeps the valve open as long as the flame burns.

Gas Control Valve:

In conjunction with the gas thermostat, this gas control device allows either an open or closed position. A Zero, Min, Mid and Max Position valve is used in products not having gas thermostats. Both types have a built in safety device. By pressing the safety valve button, the gas flow to the burner is opened. When the flame is lit, the thermocouple powers the valve solenoid and the valve remains open. If the flame is extinguished, the valve closes.

Gas Filter:

It is positioned in the gas supply pipe and may obstruct the gas flow if it is dirty or damp. This obstruction can result in poor cooling or no cooling in gas mode.

Piezo Ignition:

Pressure produces high voltage in the piezoelectric crystal. The high voltage gives via ignition cable and an electrode, a spark in the burner where the gas is lit.

Burner:

Consists of burner housing, mixing chamber and burner jet. The burner jets are marked with numbers. Only jets with the correct number for the model in question must be used.

Sealed System

Re-ignitor:

An electric re-ignitor powered by a supply voltage of approximately 12V, generates via an ignition cable and an electrode, a spark in the burner where the gas is lit.

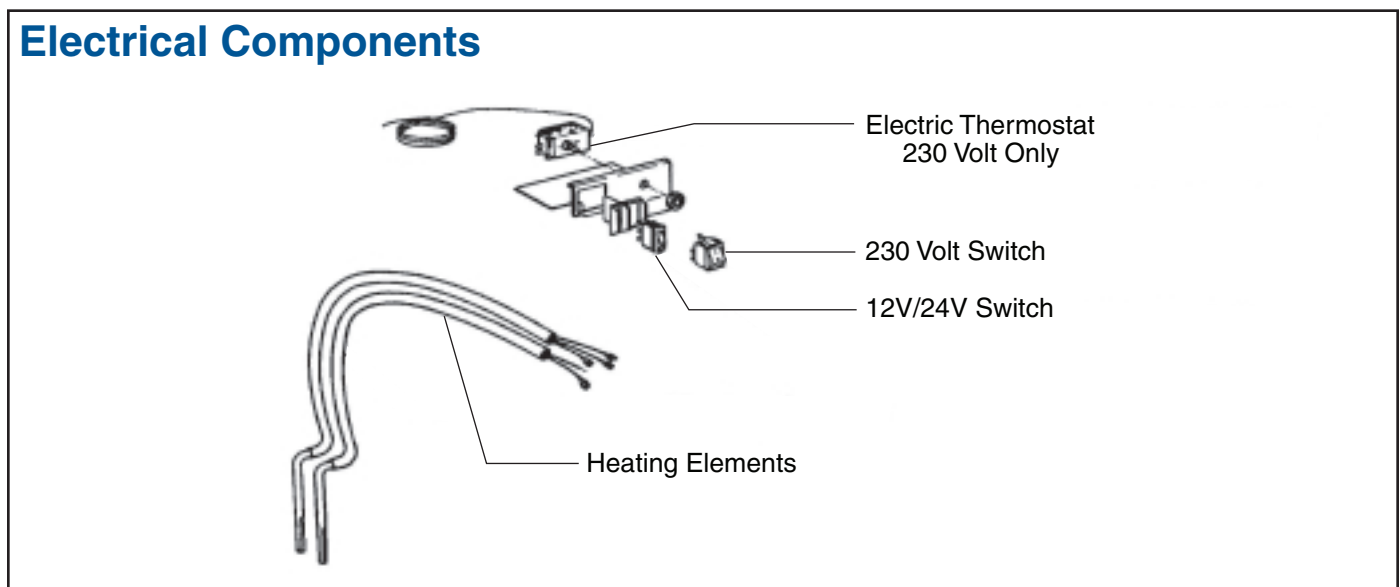
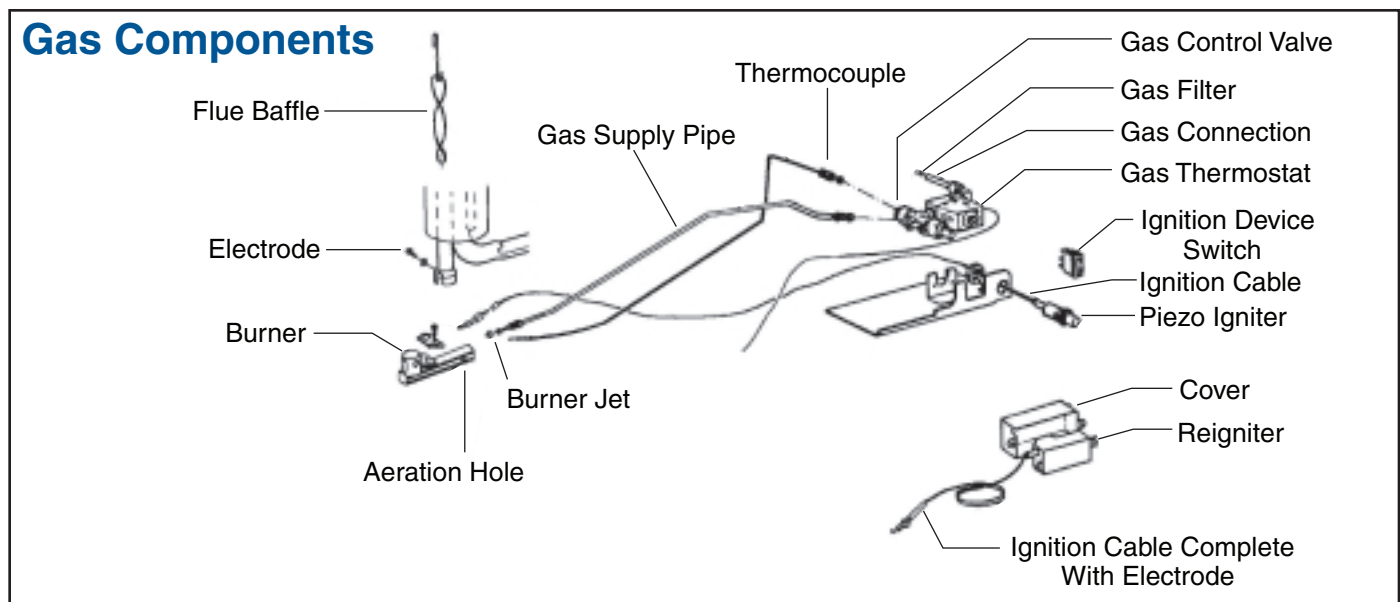
The re-ignitor automatically repeats this operation until a “feedback” signal to the electronics registers the presence of a flame. On the re-ignitor, there is a voltage supply connection which is powered by the re-ignitor switch. There is also a connection for the switch control light.

Flue Baffle:

This distributes the heat in the boiler area during the gas operation (not required for all models). A performance loss occurs if this baffle is missing. The length of baffle will vary depending on model.

Burner Jet:

Burner jets are designed for the specific gas operating pressure (28 to 50 mbar). Only the burner jets specified for the model and gas pressure stated on the data plate, must be used.



Troubleshooting Chart

No cooling on 230 V AC	Poor cooling on 230 V AC	No cooling on 12V/24V DC	Poor cooling on 12V/24V DC	No cooling on gas	Poor cooling on gas	No cooling on any energy source	Poor cooling on any energy source	Too cold	
X	X	X	X	X	X	X	X		How long since start?
	X		X		X		X		Installation OK?
				X					Gas bottle empty
X		X							Voltage OK?
X		X							Switches ON?
	X		X						Low voltage?
X		X							Heating elements OK?
					X	X			Gas pressure OK?
X	X	X	X						Electrical connections OK?
				X	X				Gas burner clean OK?
				X	X				Burner jet OK?
				X	X				Restricted gas flow?
				X	X				Gas regulator OK?
				X					Gas control or safety valve OK?
X	X			X	X			X	Thermostat OK?
				X					Thermoelement OK?
				X					Ignition electrode/cable OK?
				X					Ignition device OK?
					X				Flue baffle in position?
	X		X		X		X		Thermomastic OK?
						X			Cooling unit OK?
							X	X	Ambient temperature too high or to low?

Troubleshooting

Poor Cooling In All Modes

1. Is the upper ventilation grille positioned above the condenser? (See Figure 5-1)
2. Are the ventilation openings sufficient (250cm²)? (See Figure 5-2)
3. Is the evaporator pipe partially covered with foam? (See Figure 5-3)
4. Is thermalmastic applied properly between evaporator pipe and the tins?

NOTE: Good contact is essential.

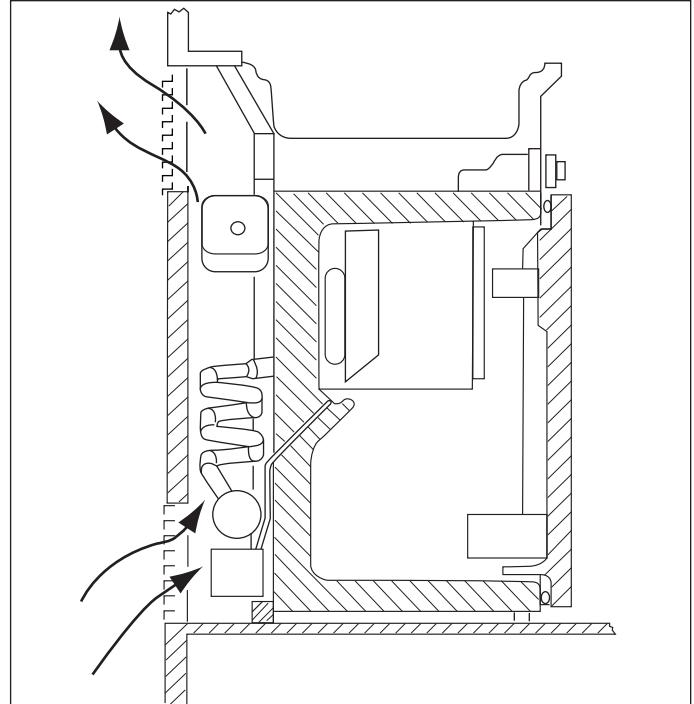


Figure 5-1.

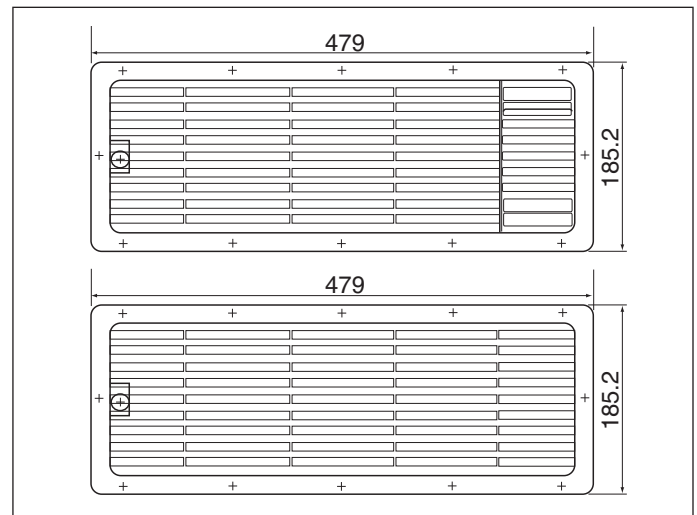


Figure 5-2.

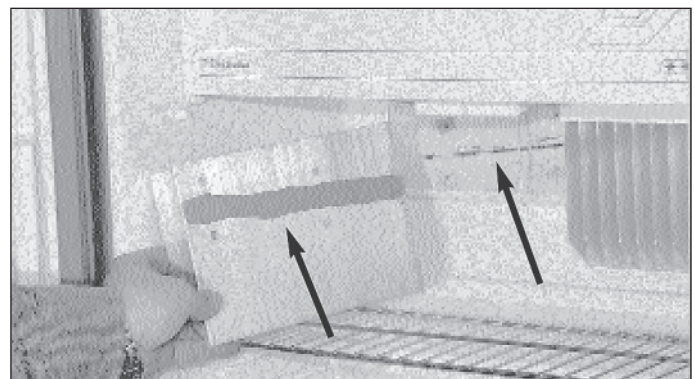


Figure 5-3.

No Cooling On 230V AC

1. Check the supply line voltage with meter. (See Figure 5-4)
2. Check main switch.
3. Check heating element.
4. Check cable connections.
5. Check thermostat (a continuity meter may be used for testing).

NOTE: Check country specific voltage.

Poor Cooling On 230V AC

1. Check supply line voltage. Low line voltage has a negative effect on cooling performance.

NOTE: Hotels and recreational vehicles will be more prone to voltage drops.

NOTE: Check country specific voltage.

2. If voltage is low, recommend the customer use gas instead.
3. Check that thermostat capillary tube is correctly positioned. Insertion length is approximately 3-15/16" (10cm). (See Figure 5-5)

No Cooling On 12V DC

1. Check voltage at terminal with meter when 12V DC switch is activated. (See Figure 5-6)
2. Check 12V DC switch.
3. Check heating element.
4. Check cable connections.
5. Check cable cross section and cable length if there is a voltage drop.

Recommended cross sections:

- 2.5mm² < 4m length
- 4.0mm² ≤ 4m - 6m length
- 6.0mm² > 6m length



Figure 5-4.

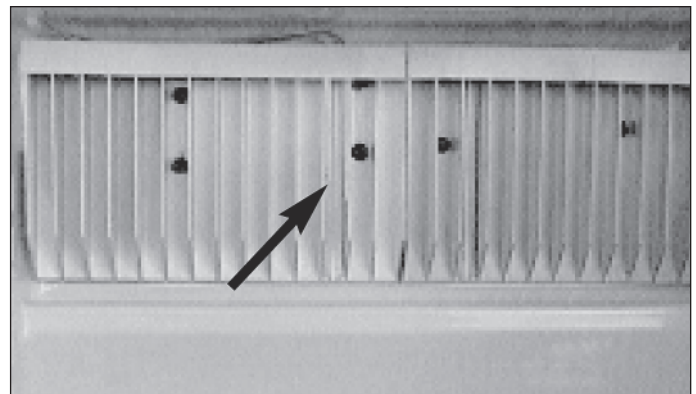


Figure 5-5.

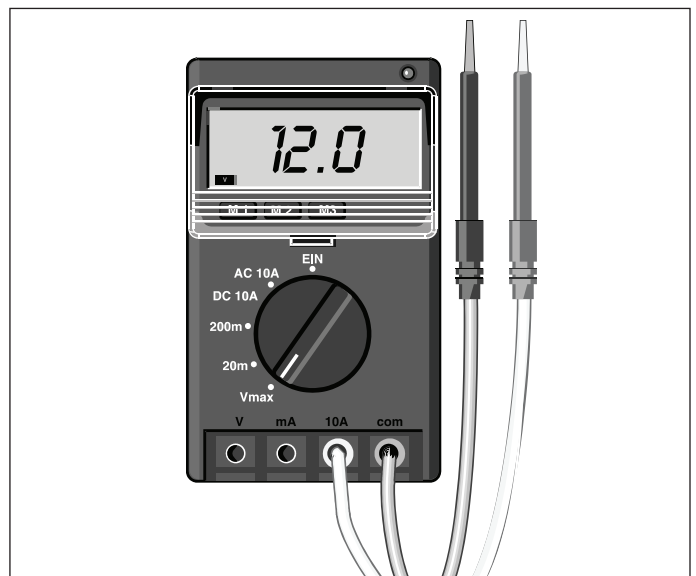


Figure 5-6.

Troubleshooting

Poor Cooling On 12V DC

1. Check if 12V DC is available at terminal block with the 12 V element switch ON. A voltage drop has a negative effect on cooling performance. If the voltage is below 12V DC, an insufficient cable cross section could be the reason. Measure at battery and compare.
2. Is the heating element in the correct position?
3. Is the wattage correct? See unit data plate. (See Figure 5-7)
4. Using 12V DC and gas at the same time, leads to a reduced cooling performance or no cooling at all. The cooling unit will be damaged after a short time.

ELECTROLUX SIEGEN GMBH					
TYPE	C 40/110	CLIMATE CLASS	SN		
MOD. No.	RN 4480 LM	PROD. No.	921877381	SER. No.	
BRUTTOINHALT	VERDAMPFERFACH	NUTZINHALT			
TOTAL CAP.	100 L	FREEZER COMP.	12 L	USEFUL CAP.	92 L
VOLUME BRUT		VOLUME COMPT BT		VOLUME NET	
~ 230 V/	135 W	LPG		Q _m	0,252 kWh/24h
~ 12 V/	130 W			m	18,3 g/h
BE, ES, FR, IE, IT, PT, GR	13+	28-38/37 nbar			
DE, CH, AT, DK, FI, NL, SE, NO	13B/P	28-38 nbar			
CE 8885 A08718	G30	3+/38/P	p=38 nbar		
ABSORBER	NH ₃	135 g	p _{max} = 35 bar		
FKW-FCKW FREI/CFC, HCFC FREE			MADE IN GERMANY		

Figure 5-7.

No Cooling On Gas But Cooling On 230V AC

1. Is gas available? (Switch on the cooker)
2. Are all valves open? (See Figure 5-8)
3. Is there an ignition spark? If no spark is generated see next page. (See Figure 5-9)
4. Does the flame stay on after the gas control or safety valve button has been released?
If this is not the case, See the Flame Does Not Stay ON.

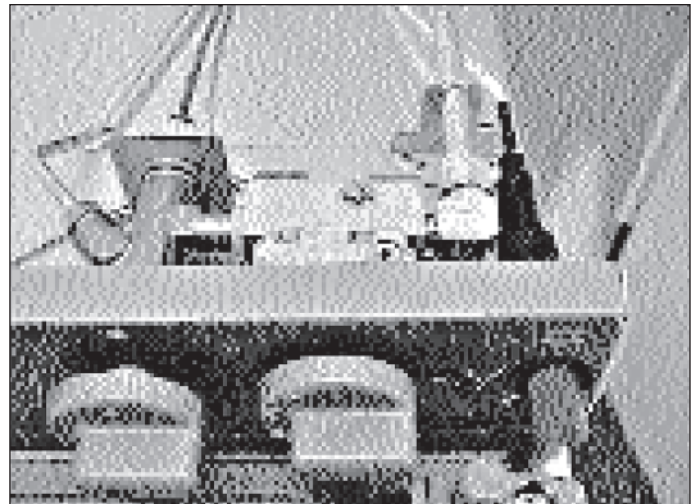


Figure 5-8.



Figure 5-9.

Flame Does Not Ignite

1. Is electrode in the correct position? (See Figure 5-10)
2. Is the electrode clean and dry? (Carbon deposits or moisture)
3. The spark should jump to the thermocouple.
4. The ignition cable properly connected to the electrode and to the ignitor.
5. Is the ignition cable undamaged?
6. Does the ignitor generate a spark?
7. Check position of flue baffle. (See Figure 5-11 & 5-12)
8. Is the burner dirty? (See Figure 5-13)
9. Is the burner jet blocked? Clean burner jet using liquid and compressed air- no mechanical cleaning. If cleaning does not open the jet replace with a new replacement burner jet.
10. Is the burner's aeration hole blocked? (Insects, spider webs)
11. Is the gas filter in the gas inlet pipe dirty? Replace if needed. (See Figure 5-14)
12. Is the gas control valve defective. (See Figure 5-15)

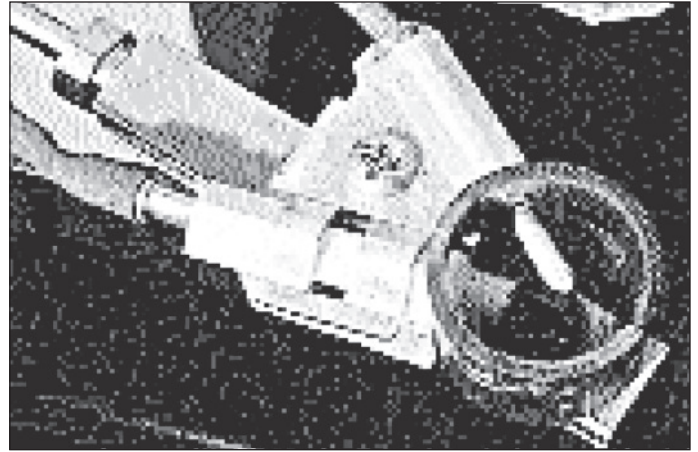


Figure 5-10.

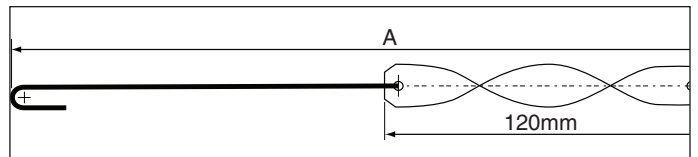


Figure 5-11.

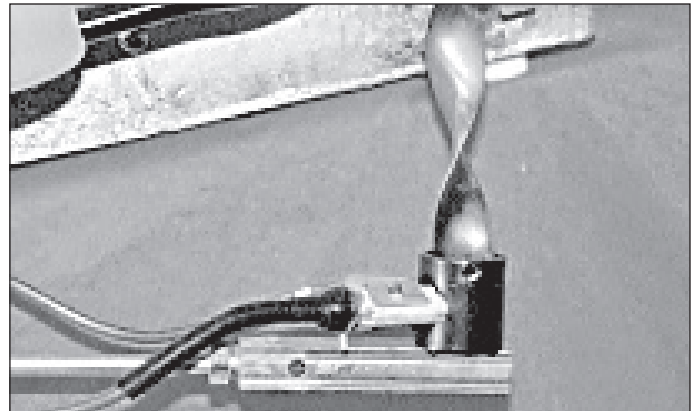


Figure 5-12.

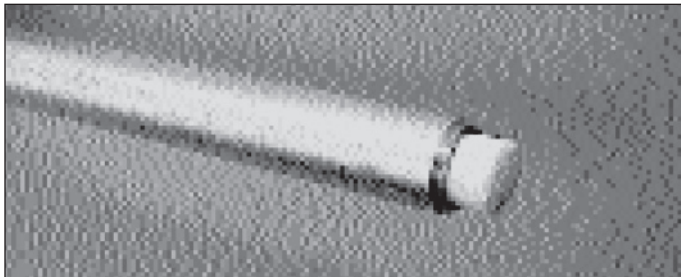


Figure 5-14.

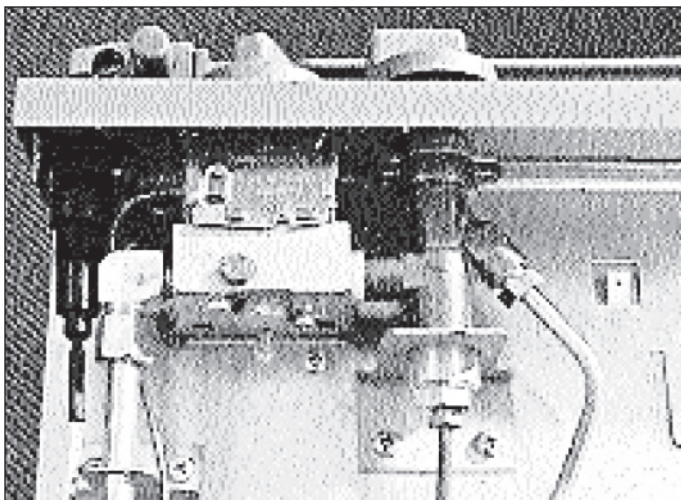


Figure 5-15.

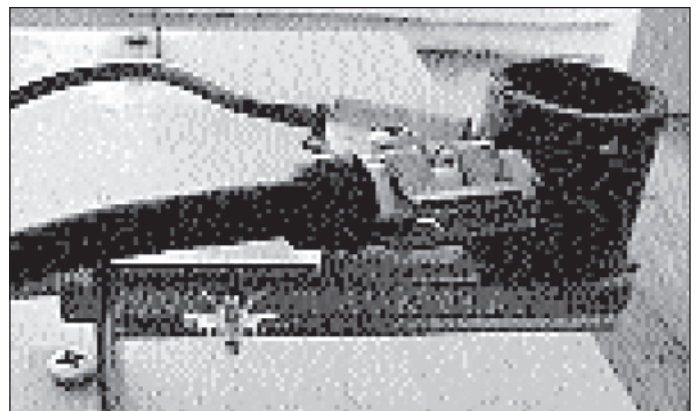


Figure 5-13.

Troubleshooting

Flame Does Not Stay On

1. Is the control knob obstructed by the control panel? If so lengthen the axis by inserting a washer into the control knob. (See Figure 5-16)
2. Check thermocouple connections. (See Figure 5-17)
3. Check thermocouple and replace if necessary.
4. Does the pressure regulator function properly? (Over or under pressure listed on the data plate) (See Figure 5-18 & 5-19)
5. Is the pressure regulator correct for the unit? (See data plate on unit)
6. Replace the complete gas control valve. (See Figure 5-20)
7. For appliances with a gas thermostat, check the function of the thermostat. Position 1 (Min.) Position 7 (Max.).

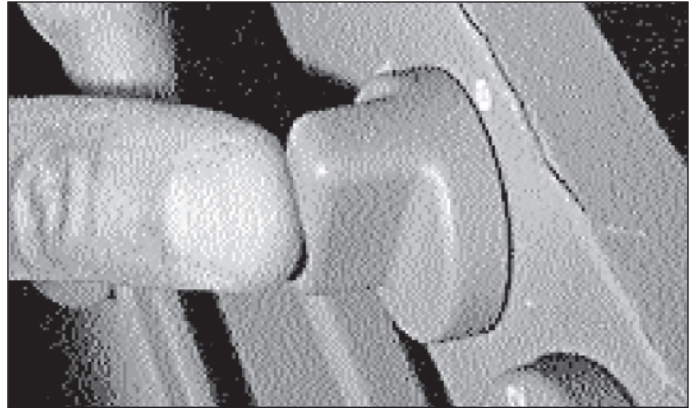


Figure 5-16.

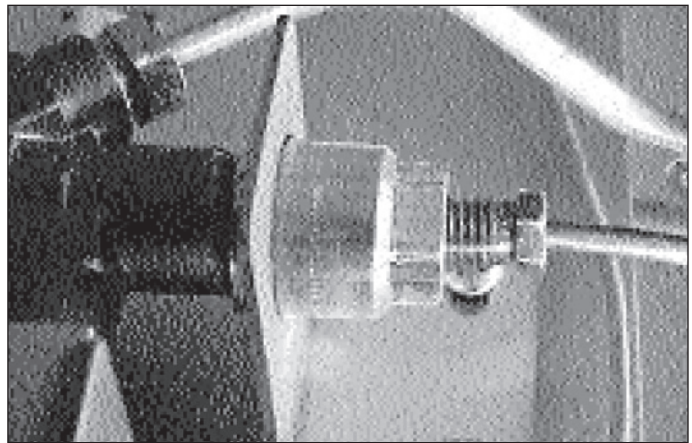


Figure 5-17.

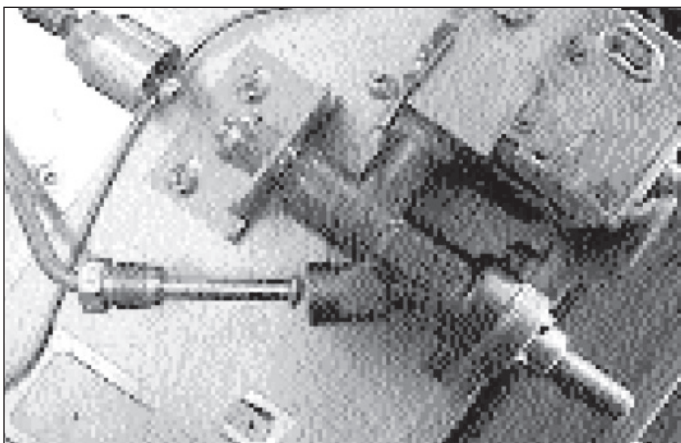


Figure 5-20.

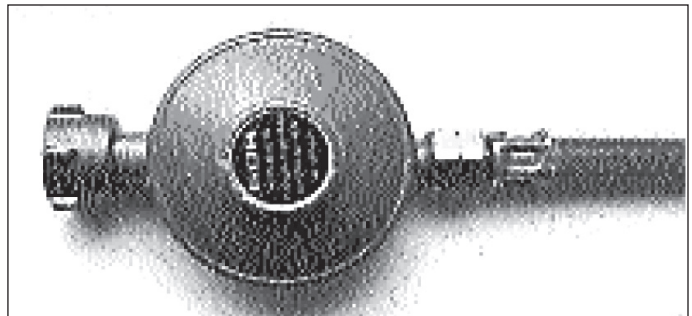


Figure 5-18.

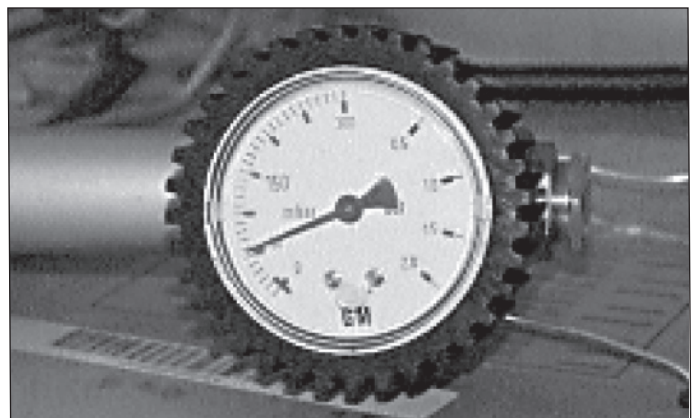


Figure 5-19.

Poor Cooling On Gas But Normal Cooling On 230V AC

1. Check height of flame. (Siegen Products)
Maximum flame height: 3/16" - 1/4" (5-6 cm.)
Minimum flame height: 1/16" - 5/64" (1.5-2.0 cm.)
(See Figure 5-21 & 5-22)
2. Check height of flame. (Motala Products)
Maximum flame height: 1/8" - 5/32" (3-4 cm.)
refrigerators > 103l
Minimum flame height: 1/32" - 1/16" (1.0-1.5 cm.)
refrigerators > 103l (See Figure 5-23 & 5-24)

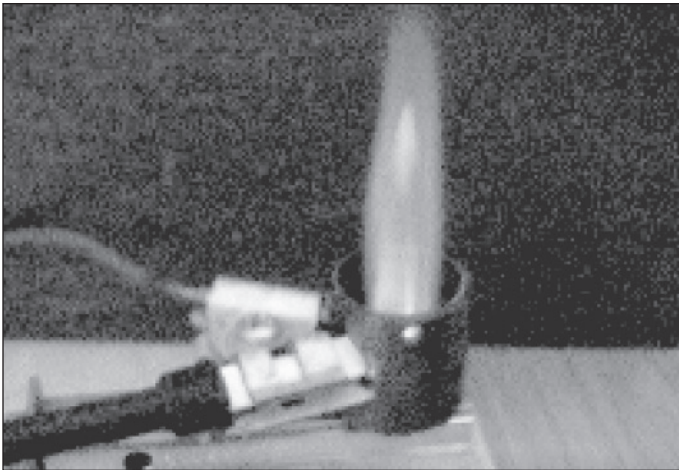


Figure 5-21.



Figure 5-22.

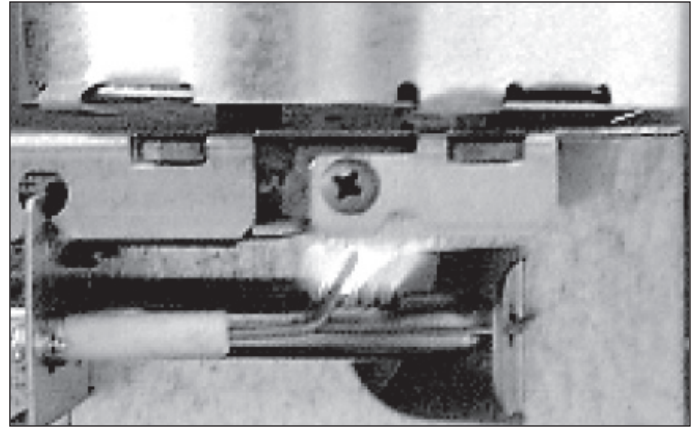


Figure 5-23.

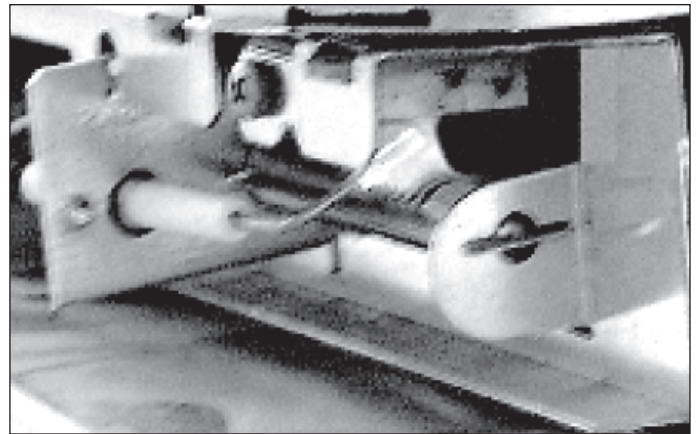


Figure 5-24.

Troubleshooting

3. Is the gas pressure correct?
4. Check that data plate and pressure regulator show the same values. (See Figure 5-25)
5. Is the burner or burner jet dirty? Clean burner jet using liquid and compressed air- no mechanical cleaning. (See Figure 5-26)
6. Replace burner jet.
7. For refrigerators with a gas thermostat, check thermostat for correct function.
8. Is flue baffle missing or incorrect length of baffle used for the model?
9. Check thermostat setting.
10. Is the thermostat defective?
11. Is the ambient temperature too low? Fit winter cover if temperature is too low.
12. Check position of thermostat capillary tube. Insertion length of capillary tube is approximately 3-15/16" (10cm). (See Figure 5-27)

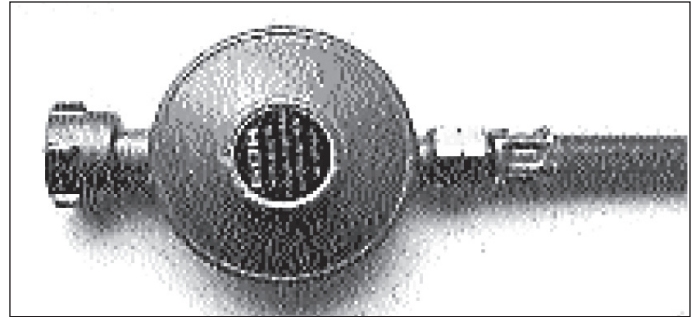


Figure 5-25.

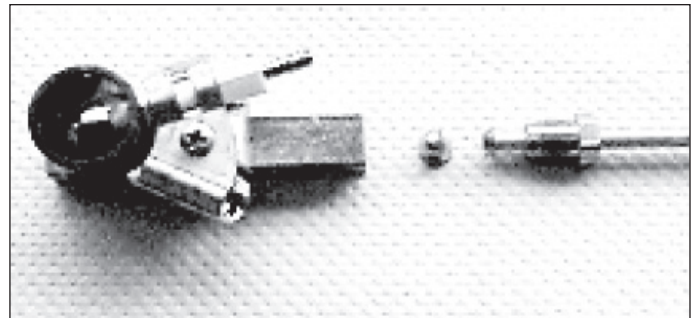


Figure 5-26.

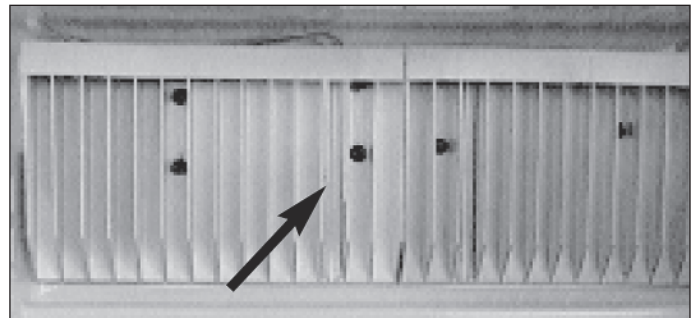


Figure 5-27.

Freezer Flap Does Not Close

1. Remove screws from freezer flap. (See Figure 5-28)
2. Remove expanding screws. (See Figure 5-29)
3. Turn the freezer flap hinge until the stop touches the freezer compartment. (See Figure 5-30)
4. Insert and screw hinge onto the freezer flap. (See Figure 5-31)
5. Turn the hinge to the appropriate position. (See Figure 5-31)



Figure 5-28.

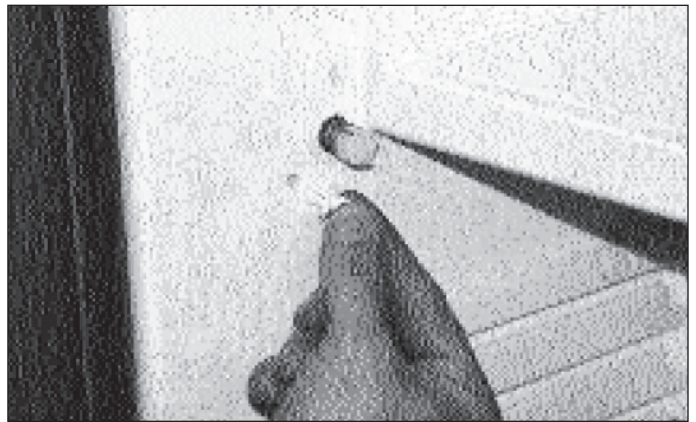


Figure 5-29.



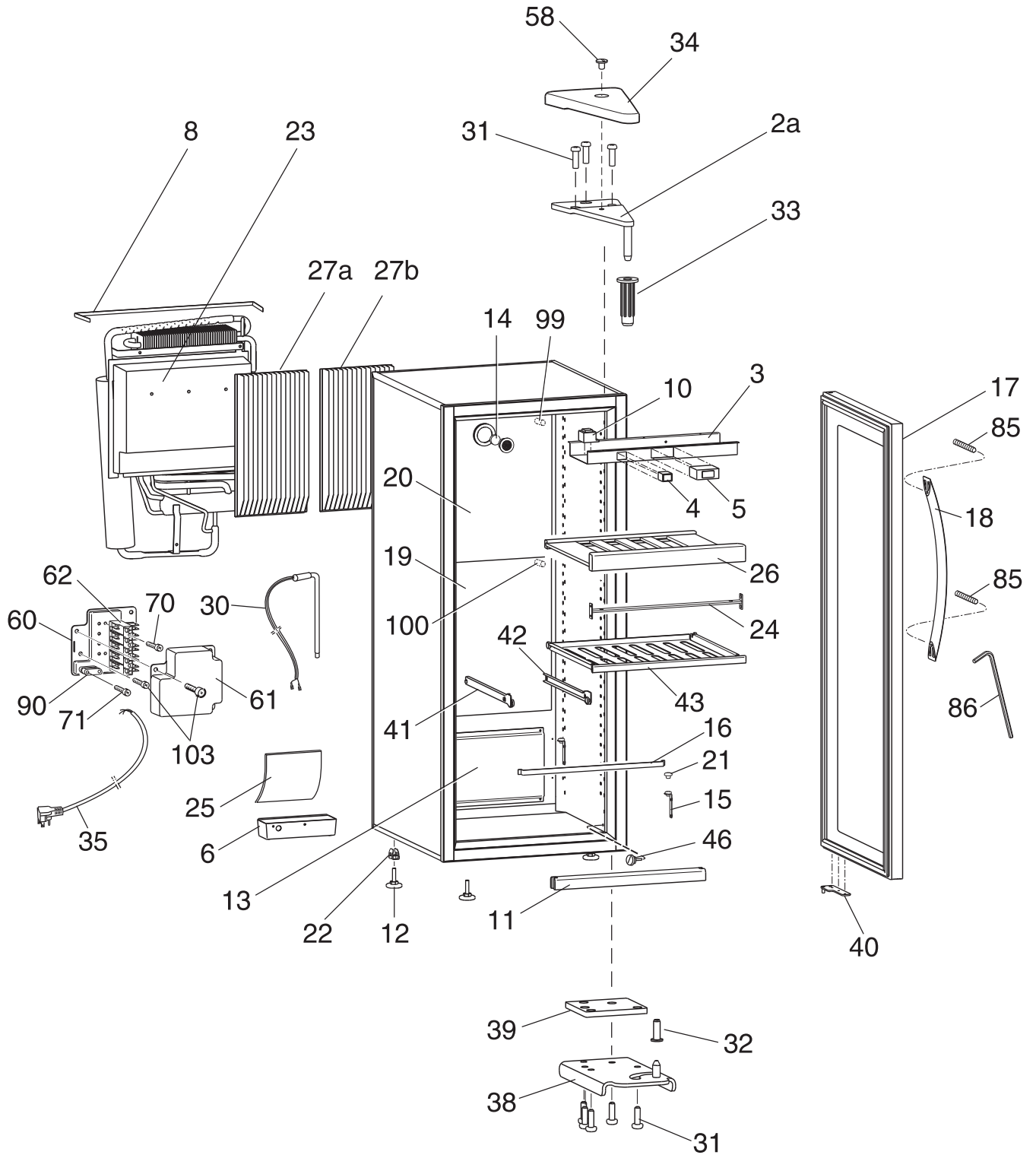
Figure 5-30.



Figure 5-31.

Parts List & Exploded Views

Exploded View



Parts List & Exploded Views

Parts List

Model Index: A E24WC160E (E24WC160ES0) # Functional Parts
 B E24WC160E (E24WC160ES1) * Non-Illustrated Parts

POS. NO		DESCRIPTION
2A	A B	Hinge, door, upper
3	A B	Panel, control console, 115 V
4 #	A B	Switch, toggle
5 #	A B	Control, temperature
6	A B	Drip Tray
8	A B	Distance Bar, wall spacer, cabinet rear
10 #	A B	Transformer, 115V/12V
11	A B	Support, floor
12	A B	Leveling Leg, screw
13 #	A B	Panel, cover/temp cont, 40 W, 127 V, with heater
14	A B	Filter, ventilation, charcoal
15	A B	Support, shelf, with bumper
16	A B	Bar, detent, metal, heater panel
17	A B	Door, complete assy, glas, stainless steel
18	A B	Handle, door
19	A B	Panel, inside back, lower
20	A B	Panel, inside back, upper
21	A B	Bumper, shelf support, rubber
22	A B	Nut, leveling foot, M10
23 #	A B	Cooling Unit, absorption, w/thermal fuse
24	A B	Bar, reinforcement, shelf support
25	A B	Sponge, drip tray
26	A B	Shelf, wood
27A#	A B	Evaporator, left side
27B#	A B	Evaporator, right side
30 #	A B	Heater, defrost, 220 W, 115 V
31	A B	Screw, MRT, M5 x 20, black
32	A B	Bushing, door hinge, lower
33	A B	Bushing, door hinge, upper
34	A B	Cover, hinge, top
35 #	A B	Power Cord, electric svce
38	A B	Hinge, door, lower
39	A B	Plate, hinge spacer
40	A B	Door Stop
41	A B	Guide, shelf support, left side
41	A B	Guide, shelf support, right side
43	A B	Shelf, sliding
46	A B	Screw, slotted, plastic head, black
58	A B	Screw, LKCS, M5 x 6
60	A B	Terminal Box, bottom plate
61	A B	Terminal Box, cover
62 #	A B	Terminal Block
70	A B	Screw, PT, 35 x 28
71	A B	Screw, PT, 35 x 20
85	A B	Screw, set, M4 x 13 S6SS, handle
86	- B	Allen Wrench, handle mounting, 2 mm
90	A B	Clamp, cable
99	A B	Spacer, sleeve, upr back panel
100	A B	Spacer, sleeve, lwr back panel
103	A B	Screw, DK4.8 x 16P, zinc plated
*	A -	Use & Care Guide, Trilingual
*	- B	Use & Care Guide, Trilingual
*	5300807509	RTV Sealant
*	5303307896	Thermal Mastic 10 oz tube
*	5300900118	Permagum cords 3/8 D
*	5303300785	Teflon tape
*	5304436417	Aluminum tape.

Wiring Schematic

