

# Alfresco™

## **ARDI SERVICE AND PARTS MANUAL**



## TROUBLESHOOTING AND SERVICE GUIDE

The following is intended as a brief service guide, designed to diagnose most common problems. It is intended to be used only as a guideline. Should the unit require replacement of components, those components must be replaced by a trained and licensed refrigeration professional. While the unit is within the factory warranty period, all repairs require factory authorization before the work is performed.

### UNIT NOT COOLING:

- **POWER TO THE UNIT:** Is there power to the unit? Is the voltage within  $\pm 10\%$  of 115 VAC? Low power conditions affect the amperage draw of the compressor, therefore requiring more amperes at start up. If the amperage draw is too high, the compressor safety relay could trip, leading to component premature failure. If the compressor is tripping on its safety relay at startups, then the unit will not refrigerate as required.
- **COMPRESSOR NOT RUNNING:** When the unit calls for cooling to begin, power is supplied to the compressor and condenser fan simultaneously. Therefore, if the condenser fan is running, then the compressor should also be running. If the fan is running without the compressor running, then this indicates either a problem with the compressor, the power supply to the compressor or the safety overload protection has been tripped. If the latter is the case, then switching the unit off for fifteen minutes, then on again, should solve the problem.
- **CONDENSER FAN NOT RUNNING:** Is the compressor running but not the condenser fan? If the compressor is running, then the condenser fan should be running. Verify that power is being supplied to the fan motor, and that the fan blades rotate freely. Check for debris (leaves, paper, grass clippings, etc.) in the fan blades, these may prevent the fan from rotating.

### UNIT NOT HOLDING TEMPERATURE CORRECTLY:

- **THERMOSTAT CONTROL:** Is the thermostat control set correctly? Please refer to the recommended settings in the user manual, and follow the instructions for setting the control. If the thermostat is not set to suit the prevailing conditions, then the product may not be refrigerated to your liking. The wrong setting may also cause condensation to form inside the unit.
- **ICE BUILD-UP ON INSIDE WALLS:** Under certain circumstances, ice may start to form on the inside walls. If this build-up continues, it will reduce the unit's ability to function correctly. Factors causing this build-up are: humidity, high ambient temperatures and the thermostat set too low. The condition is also exacerbated by frequent opening of the cover, or the cover being left open too much. In the event of ice build-up, first empty the unit and allow the ice time to thaw, then try running the unit at a slightly higher setting (lower number on the knob). See also, "**FULLY STOCKED**", on the next page.

## **NOISY OPERATION:**

- **AMBIENT TEMPERATURE:** Is the ambient temperature about 90°F or above? The unit will need to run more at these elevated temperatures, therefore you will become more aware of sound generated by the compressor and the fans.
- **REQUIRED RUN TIME:** Is the unit running continuously for long periods of time? As the ambient temperature rises, the refrigerator requires more cooling, therefore sound from the compressor and fans will become more noticeable.
- **RESIDUAL HEAT:** Is the unit located outdoors on a concrete or paved slab, or in a sunny area? Residual heat present in the concrete or paving will raise the temperature of the intake air entering the front of the unit. Consequently, the air moving through the condenser coil may be relatively hot and therefore less efficient at cooling, causing the unit to run longer in order to maintain the proper refrigerating capacity.
- **DEBRIS IN THE FAN BLADES:** Is there debris in the condenser fan blades? Not only can debris physically stop the fan from rotating (as previously discussed), it can also block or restrict air flow, thus preventing the unit from cooling. The fan blades may, in some cases, continue to rotate, causing a rattling or similar sound as the blades contact debris trapped in close proximity to the fan.
- **FULLY STOCKED:** Is the unit fully stocked? If the unit is not fully stocked, or only partially filled, then the unit will need to work harder. Air does not hold temperature, products do. If there is no product inside the refrigerator, the unit will cycle ON and OFF several times per hour. If the unit is fully stocked, the run-time will be extended but also the off-time, allowing the compressor to cool down properly between cycles. This will help the unit to run more efficiently.

## **PERFORMANCE ENVELOPE:**

The ARDI has a performance envelope up to 110°F ambient temperature. This means that the unit is capable of maintaining an internal cabinet temperature of between 22°F and 40°F when exposed to 110°F ambient air temperature. In order to maintain the internal cabinet temperatures stated above, the unit will operate without shutting off when the ambient air temperature exceeds 85 to 90°F. These peak temperatures occur at least for a few hours per day in hot weather locations and should be considered normal. The unit will return to normal cyclic operation after the ambient air temperature falls back below 85 to 90°F. Please note, ambient air temperature is a complex measurement to establish, especially outdoors. Your local weather forecaster, when reporting current conditions, will be referring to a temperature measured in a shaded and ventilated box located at least four feet above the ground. If the reported temperature is 100°F, and your unit is sat on a concrete slab in full sunlight, then the ambient temperature around your unit will be substantially higher than the reported 100°F.

## ARDI SERVICE PARTS LIST:

The following is a list of all components and or hardware that are serviceable on the URS-1 refrigerator unit. Please refer to the picture and associated text for reference and identification.



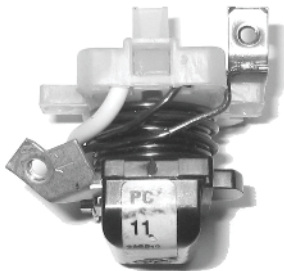
REFRIGERANT  
COMPRESSOR  
260-0055



Condensing Unit  
260-0104



SAFETY OVERLOAD  
210-0391



RELAY  
210-0392



Drier  
220-0030



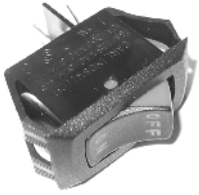
CAPACITOR  
210-0393



Sight Glass  
220-0014

NOTE: PART NUMBERS 210-0391, 210-0392  
AND 210-0393 ARE REPLACEMENT PARTS  
FOR THE COMPRESSOR ASSEMBLY.

## ARDI SERVICE PARTS LIST CONTINUED:



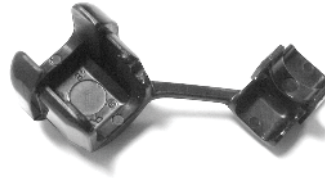
Main Power Switch  
210-0021



Power Cord  
210-0287



Refrigerator Control  
210-0551



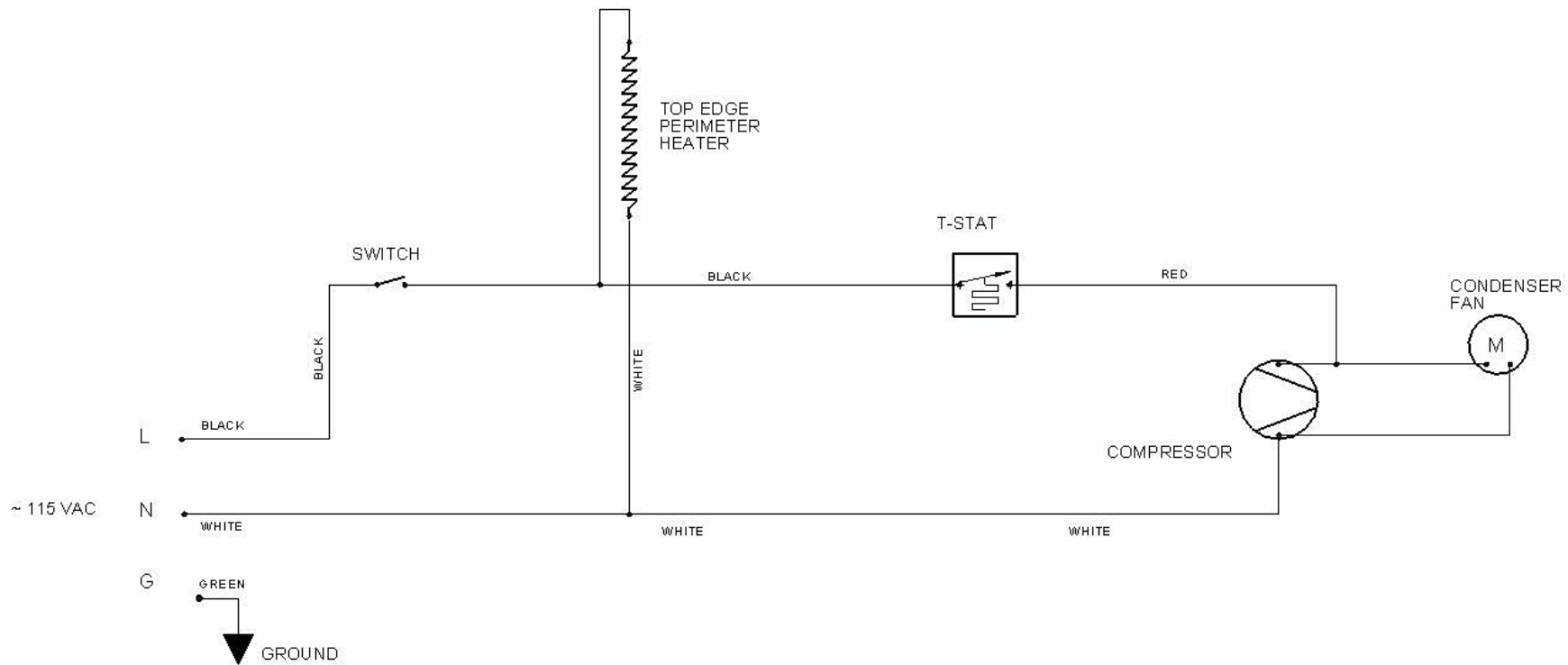
Strain Relief  
200-0009  
Used to secure power cord



Food Pan 1/6 x 4  
290-0162



Pan Holder  
130-1043



NOTE : CASE MUST BE GROUNDED

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	\I:\Wiring Diagrams\	WIRING DIAGRAM	DRAWING TITLE:	SHEET 1 OF 1



## ARDI SERVICE DATA:

### ELECTRICAL:

- VOLTAGE: 115 VAC
- FREQ: 60 Hz
- PHASE: 1
- AMPS: 6.0
- RLA: 5.3
- LRA: 29.0
- MCA: 7.0

### REFRIGERATION:

REFRIGERANT 134A (13OZ)

#### SUCTION PRESSURE @ TEMP.

18 PSI @ 20°F

ACCEPTABLE RANGE: 12 - 21 PSI (COIL TEMP. 10°F - 24°F)

#### LIQUID PRESSURE @ TEMP.

125 PSI @ 100°F

ACCEPTABLE RANGE: 125 - 147 PSI (AMBIENT TEMP. 80°F - 90°F)

170 PSI @ 120°F

ACCEPTABLE RANGE: 170 - 197 PSI (AMBIENT TEMP. 100° - 110°F)



# FOR SERVICE, CALL: 1 866 203 5607

When calling, please provide the following information: model number, serial number and date of installation, along with a brief description of the problem. The model number and serial number can be found on a plate located either on the underside of the top cover or on the body behind the removable louvered front panel.

