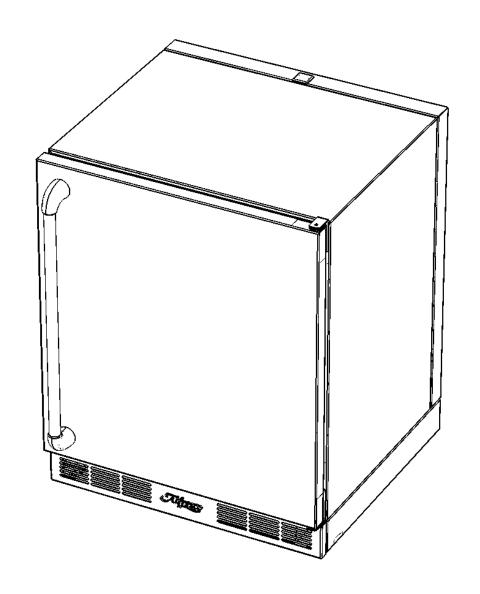


URS-1 SERVICE AND PARTS MANUAL

SERIAL NUMBERS: 06-10679 TO 08-16900.



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 <u>before</u> the work is performed.

UNIT NOT COOLING:

- **POWER TO THE UNIT:** Is there power to the unit? Is the voltage within ± 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, but the power to the compressor is via a time delay set to ten minutes. Therefore, the fan will run for ten minutes before the compressor starts; this is normal.
- **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 BACK COVER:** Is the back cover on the unit? The back cover is an integral part of the airflow system to route air through the condenser coil. If the back cover is removed for cleaning or service, it must be replaced for the unit to operate correctly.

UNIT NOT HOLDING TEMPERATURE CORRECTLY:

- **EVAPORATOR INTAKE:** Is the evaporator coil intake blocked by product? The evaporator unit has been designed to prevent products such as bottles, cans or other rigid packaging from blocking the intake. However, products in soft flexible packaging may still be positioned in a way which blocks some, or all of the air intake slots. If the air intake slots are obstructed, then products must be rearranged to clear the slots, thereby permitting air to be drawn into the evaporator coil.
- **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, or excessive ice to form in the evaporator coil, thereby blocking air flow through the coil. Should the thermostat control need replacement, refer for page 4 for replacement instructions.

NOISY OPERATION:

- **AMBIENT TEMPERATURE:** Is the ambient temperature about 100°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:

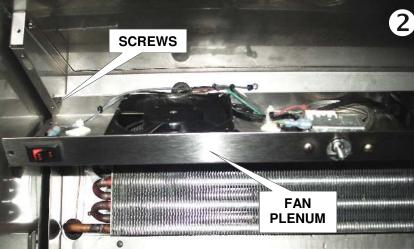
The URS-1 has a performance envelope up to 110°F am bient temperature. This means that the unit is capable of maintaining an internal cabinet temperature of between 22°F and 40°F when exposed to 110°F ambient air temperature. In order to maintain the internal cabinet temperatures stated above, the unit 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 vented 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.

URS-1 THERMOSTAT REPLACEMENT & BULB LOCATION





To replace the RANCO Thermostat, (SES part # 210-0023) open the evaporator coil cover by removing the thermostat knob (pull out) and then the mounting screws A & B shown on the picture below.





Remove the exposed fan plenum by taking out the 4 bottom mounted screws located at each corner.

Tilt the fan plenum forward and remove the RANCO Thermostat mounting screws.

Replace the thermostat.

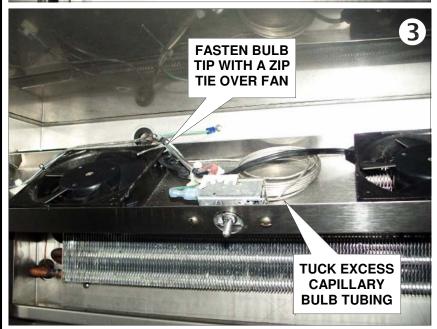


Once the RANCO Thermostat has been replaced, tuck the excess capillary bulb tubing under the fan wiring and secure in place with zip-ties.

Place the BULB TIP over the left evaporator fan (approx. 1" exposed over fan blades) and fasten to the fan corner mounting hole with a ziptie.

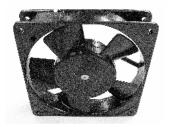
Make sure the BULB TIP does not touch the fan blades, bend tip until it is approximately 1/4" over the fan blades.

Close and secure with screws the fan plenum and coil cover. Replace the thermostat knob to finish.



URS-1 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.



Evaporator Fan 210-0025



Plug Cap 290-0082



Main Power Switch 210-0021



Condenser Fan Blade 210-0350



Power Cord 210-0287



Condenser Fan Motor 210-0349



Evaporator Fan Power Cable 210-0020



Compressor 260-0081



4 Pole Terminal Block 210-0301



PTC Relay



6 Pole Terminal Block 210-0302



260-0090



Jumper 210-0304



Overload Protector 260-0091



Filter Drier 220-0029

URS-1 SERVICE PARTS LIST CONTINUED:



Refrigerator Bulb 210-0327



Light Switch 210-0308



Lampholder 210-0321



Adjustable Foot 290-0175



Thermostat 210-0023



Wheel 290-0129



Motor Speed Control 210-0358



Pry-out Plug 510-0226



Time Delay 210-0357



Run Capacitor 260-0092

URS-1 SERVICE PARTS LIST CONTINUED:



Arrow Clip 200-0043 Used to plug unused hinge mount holes



Hinge (body side) 130-1684



Hinge (door side) 130-1685 Bushing (shown) 130-1340



Condenser Coil 250-0072



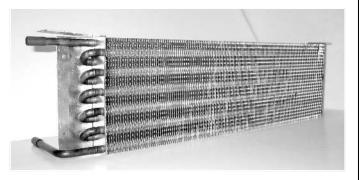
Strain Relief 200-0009 Used to secure power cord



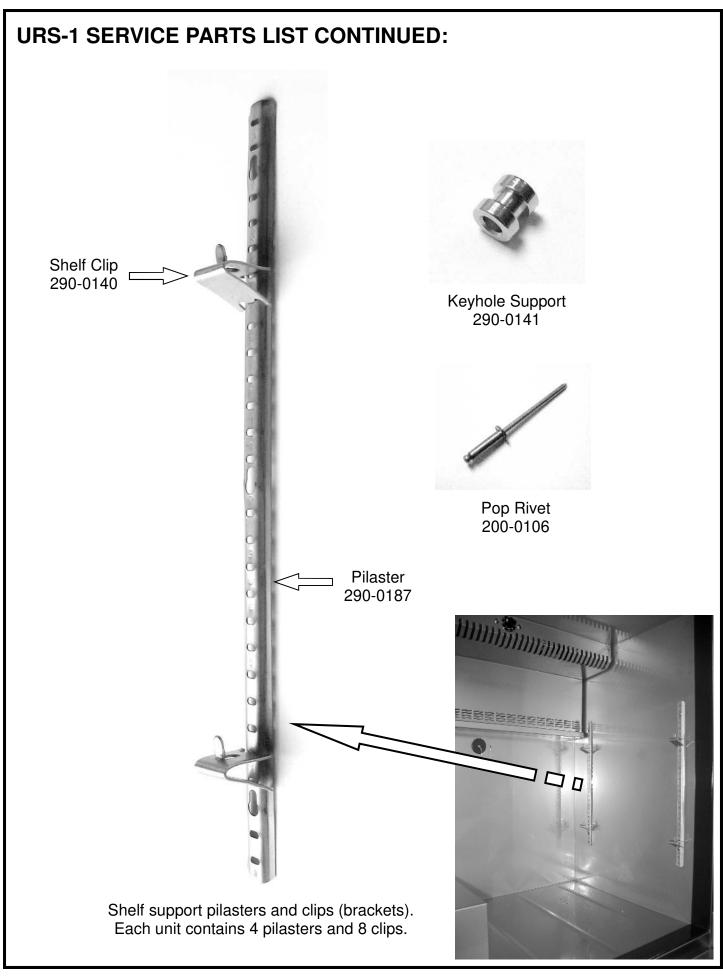
Cable Tie (push mount) 210-0258

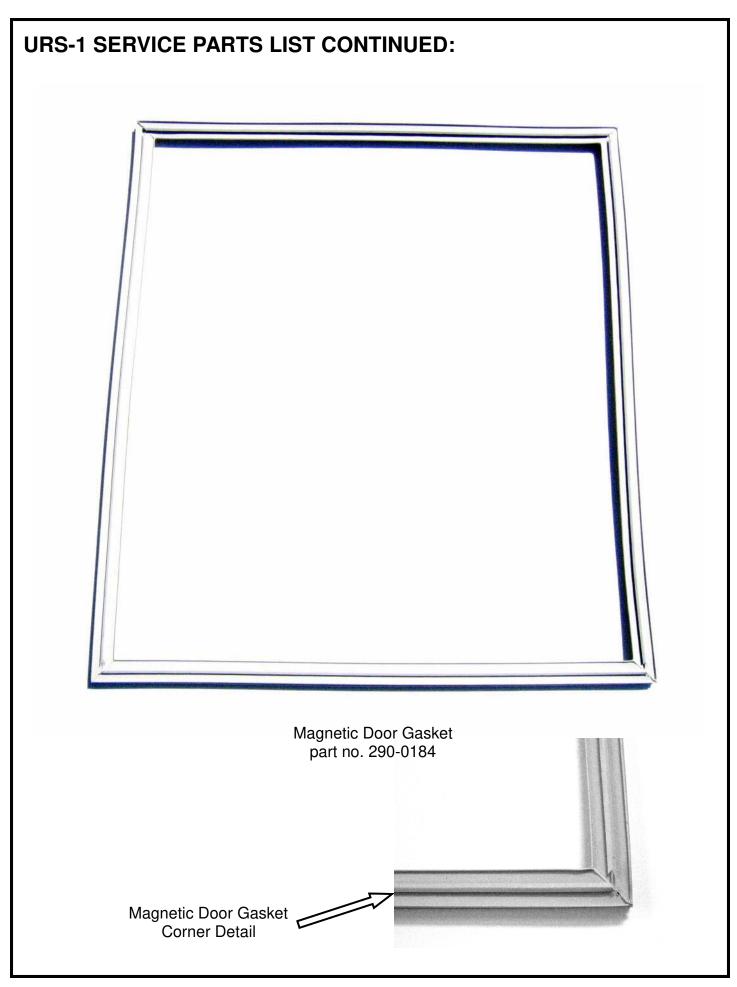


Relay 210-0147

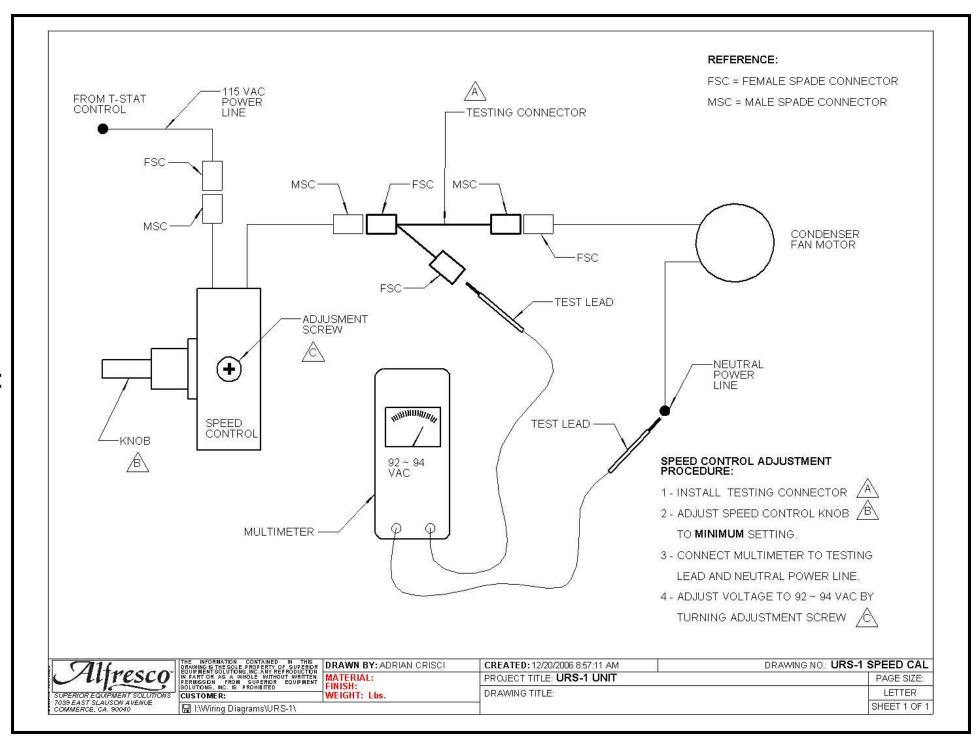


Evaporator Coil 250-0071





WIRING DIAGRAM EVAPORATOR COIL ASSEMBLY COMPRESSOR **EVAPORATOR FAN** MOTORS M M BLACK POWER BLACK RELAY PLUG IN CONNECTORS LIGHT T-STAT TO COMPRESSOR RED RED MAIN PTC W. **SWITCH** RELAY **MOTOR** 1 **PROTECTOR** RUN CAPACITOR DOOR LIGHT SWITCH BLUE BLACK BLACK RED DOOR WHITE BLACK BLACK HEATER M 115 VAC - 1Ø - 3 W WHITE TIME DELAY L BLACK BLUE CONDENSER FAN WHITE WHITE WHITE G GREEN FAN SPEED CONTROL (FIXED @ 94 VAC) GROUND NOTE: CASE MUST BE GROUNDED THE INFORMATION CONTAINED IN THIS DEAMING IS THE SOLE PROPERTY OF SUPERIOR EQUIPMENT SOLUTIONS, INC. ANY REPRODUCTION IN PART OR IS A WHOLE WITHOUT WRITTEN PERMISSION FROM SUPERIOR EQUIPMENT SOLUTIONS, INC. IS PROHIBITED THE INFORMATION CONTRIBUTED IN THIS DEAMING THE CONTRIBUTED IN THE CONTRIBUTED IN THIS DEAMING THE CONTRIBUTED IN THE CONTRIBUT CREATED: Wednesday, November 15, 2006 3:391/SFQMER: PROJECT TITLE: DRAWING NO .: W900-0026 SES URS-1 DRAWING TITLE: SIZE: LETTER SUPERIOR EQUIPMENT SOLUTIONS 7039 EAST SLAUSON AVENUE COMMERCE, CA. 90040 ☐ I:\Wiring Diagrams\URS-1\ SERIAL NOS 06-10679 THRU 07-11724 SHEET 1 OF 1



URS-1 SERVICE DATA:

ELECTRICAL:

VOLTAGE: 115 VAC

FREQ: 60 HzPHASE: 1

AMPS: 2.57RLA: 1.3

LRA: 7.1MCA: 2.9

REFRIGERATION:

REFRIGERANT 134A (90Z)

SUCTION PRESSURE @ TEMP.

18 PSI @ 20F ACCEPTABLE RANGE: 12 - 21 PS I (COIL TEMP. 10F - 2 4F)

LIQUID PRESSURE @ TEMP.

125 PSI @ 100F ACCEPTABLE RANGE: 125 - 147 PSI (AMBIENT TEMP. 80F - 90F)
170 PSI @ 120F ACCEPTABLE RANGE: 170 - 197 PSI (AMBIENT TEMP. 100° - 110F)

చేస్తు చేస్త

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 near the top of the inside left wall.

