RPI Industries, Inc.

AIR SCREEN and SELF-SERVE

OPERATION AND SERVICE MANUAL

WARRANTY INFORMATION

For Model

Manhattan Series

SCRFC4848 MS

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

220 Route 70, Medford, NJ 08055

Phone: (609) 714-2330 Fax: (609) 714-2331

IMPORTANT: THE FOLLOWING INFORMATION SHOULD BE RETAINED FOR FUTURE REFERENCE

Congratulations, you have just purchased the finest air screen/self-serve display case available. RPI Industries, Inc. development of an exclusive humidity and temperature control system insures product shelf life and enticing displays, which leads to a better bottom line. We at RPI Industries, Inc. hope you are satisfied with your case for many years to come.

IMPORTANT **IMPORTANT** **IMPORTANT**

Controls are pre-set at our factory. Please consult our refrigeration service department at (609) 714-2330 if setting changes are required.

ADJUSTING CONTROLS WITHOUT PRIOR AUTHORIZATION FROM RPI INDUSTRIES MAY VOID YOUR WARRANTY

Please consult your operation and service manual for proper care of your case.

For Your Records Enter Model And Serial Number of the Product You Purchased.

Model:_____

Serial No.:_____

CASES ARE DESIGNED TO OPERATE IN AN ENVIRONMENT OF 75 DEGREES FAHRENHEIT AMBIENT AND 55% HUMIDITY.

REFRIGERATED AIR SCREENS and SELF SERVE CASES
USE & SERVICE MANUAL

1. Temperature of case is controlled by temperature control in storage area. Cases are pre-set at factory. Settings should not be touched, without first notifying the factory.

2. Condensing unit is COPELAND 115/60 or 208/230V/60 cycle/single phase air-cooled or equal.

3. Refrigerant: R134A, R22, R404

4. Average case temperature in Air Screens and Self-Serve cases is between 37 and 41 degrees Fahrenheit.

5. Make certain that the drain pan on refrigerated cases is checked weekly. Calcium deposits may accrue depending on area and water quality. The float on the drain pan should be cleaned weekly for proper operation.

6. Brush out or vacuum condenser (looks like a black radiator) once a month for efficient operation. (When the condenser is clogged with dirt and dust, the case looses its efficiency, causing the unit to operate without stopping).

7. Do not store packages against blower (evaporator coils) so airflow is not impeded.

8. Do not block airflow inside display area over front and back grill.

9. Keep the flow area around the fixture clean and orderly.

10. Tracks and sliding door fixtures should be cleaned and lubricated periodically.

11. Check inside cooling coil housing to be certain that it is free of ice debris.

12. Replace any malfunctioning parts as soon as possible.

13. It is most important that the interior of the fixture be cleaned periodically. HOW TO CLEAN: Remove the product load and all shelving. Use only mild soap or detergent to wash the interior panels. Rinse with clean, warm water, and dry with a soft absorbent cloth.

14. **Failure to comply with above may void warranty.**

RECEIVING & INSPECTION PROCEDURE

1. All fixtures have been carefully operation tested and inspected before shipping and are determined to be in good operating condition before leaving our factory. All units have been run for 24 hours prior to shipment to ensure proper operation.

2. Upon arrival of the fixture the cases should be examined thoroughly for any damage. If any damage is discovered, it should be noted on the delivery ticket or Bill of Lading and signed to that effect.

3. If you find any hidden damage, notify the carrier at once. Confirm all claims in writing. RPI Industries, Inc. cannot assume responsibility for filing freight claims, however, the factory will assist if required.

LOCATING THE FIXTURE

1. Locate refrigerator or freezer in a dry, cool and well-ventilated area. When possible, do not locate any fixture in the direct rays of the sun, near heating ducts, radiators, stoves, doors or any device which will hinder the airflow as designed.

2. There must be at least 24 inches of unobstructed clearance from the condensing unit compartment.

3. Locate the electrical outlet in such a manner that you may plug in the service cord (when furnished) direct, without the use of an extension cord, must be 115V/20A or 115/208-230V 20/30-amp circuit (depending upon size of case model). On models not furnished with a service cord, a permanent electrical connection is required. Make sure that no other electrically operated appliances are connected to the circuit operating this fixture, which will cause an overload. Overloaded circuits are extremely hazardous. **THE VOLTAGE MUST BE MAINTAINED TO WITHIN 5% OF VOLTAGE INDICATED ON THE NAMEPLATE FOR PROPER OPERATION.**

4. This unit is intended to be sealed to the floor with a NSF approved sealant. Unless supplied with castors or legs, In addition, Air screen display cases may be installed flush against the rear wall with no clearances.

5. This unit is for use in a max. 75F (24C) room ambient. Higher room temperature will effect the operation and warranty of this unit.

INSTALLATION

It is always good practice to have a competent refrigeration service person perform the start-up. It is also advisable to obtain a service contract from this same individual to be assured of reliable and efficient service in case of any future problems.

1. Never use smaller than No. 12 AWG wire for power supply of refrigerators. The electrical outlet used to supply current for a fixture must have proper ground facilities to match the services plug on the fixture service cord.

2. Make certain that the fixture is level in all directions. This is especially important for proper door closure, correct water drainage and efficient operation of evaporator.

3. Place drain line in evaporator pan, or directly into floor drain.

4. Check vibrations or any objectionable noises.

5. Check operation of lights.

6. Inspect door for proper operation.

7. Adjust time clock to coincide with the local time

8. Check serial and rating plate for voltage and current requirements, then make electrical hook-up.

9. After installing shelves, be certain that they are in their proper place. Do not lay products against the wall. This will restrict airflow from storage area. Make sure light cords are properly seated and secured to rear of unit. Loose cords may short out and void warranty.

10. Fixture should be checked again after one weeks' operation.

OPERATING INSTRUCTIONS

TEMPERATURE CONTROL

Temperature is regulated by a pressure control.

This control is activated by the refrigerant suction pressure and is used to cycle the compressor on and off to maintain proper temperatures in the cabinet. This control is properly set at the factory; for R134A systems, with a cut-in pressure of 34 psi and cutout of 14 psi, for R-22 systems with a cut-in pressure of 64 psi and cutout pressure of 34 psi. for R-404A systems, with cut-in 82 psi and cut-out 46 psi (May be changed if colder or warmer temperature is needed.) Consult RPI Industries', Inc. refrigeration service department at (609-714-2330) for assistance.

STOCKING THE CABINET

After the equipment is running, it should be operated for a 24-hour period of time to bring the storage temperature to the proper temperature. This unit should not be turned off and on during the day.

The evaporator fans draw air up from the storage area circulates it through the evaporator and discharges it up through the display section of the case and returns via the perforated grill at the rear of display deck. Be certain that products do not block air circulation vents and evaporator intake grill in storage compartment. Products must be refrigerated prior to loading unit.

It is also a good idea to keep the lights turned off during initial pull down and loading of the fixture to prevent overloading of the condensing unit.

Load Level Recommendations: A space of 1.5 to 2.0 inches should be provided between the top of product and the bottom of the next shelf. In addition product should be held back a minimum of 1 inch from the front air baffle.

DRAIN EVAPORATOR PAN

When specified, an evaporator pan is furnished to dissipate the water collected from the coil during defrost or "off" cycle. This evaporator is installed and is equipped with a power cord for plugging into 115 volts AC separate outlet. (3^{ft} and 4^{ft} Bravo models only). On models using 208-230-volts plug into 230 receptacle located inside unit compartment. (This does not apply to cases with floor drains.)

OPERATING INSTRUCTIONS

A time clock with four (4) 15 Min.* defrosts per day is required. Defrost time should be increased if coils are not clear at the end of defrost cycle.

Times on "defrost" cycle are pre-set at factory. (Timed cycles are 12:00 a.m., 12 p.m., 6:00 a.m. & 6 p.m.)

* Lengths of defrost time varies with humidity conditions.

MAINTENANCE

Brush out/vacuum condenser (looks like black radiator) every 30 days for efficient operation. When condenser is clogged with dirt, the unit loses its efficiency, causing it to run more frequently.

1. Keep the floor area around the fixture clean and orderly.

2. Check inside cooling coil housing to be certain that it is free of ice and debris.

3. Check door operation and door seal. Doors must close and seal properly on all sides.

4. Replace any malfunctioning parts as soon as possible.

5. Check drains for clogged food or other obstructions.

6. Check for proper float operation in drain pan when furnished. Clean any material build-up from water evaporation. High temperature or humidity may effect the proper operation of the piece of equipment and will not be covered under warranty.

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RPI Industries, Inc.

WARRANTY

PARTS: One Year

RPI Industries, Inc. warrants to the original purchasers, the equipment manufactured by it to be free from defects in material and workmanship under normal use and service within 12 months from the date of original shipment from the factory.

Any items returned to the factory must be authorized by RPI Industries', Inc. refrigeration service department and shipped prepaid. Replacements will be shipped collect.

This warranty does not include any materials, which have been subject to misuse, neglect, and damage in transit, accident, negligence or alterations.

LABOR: One Year

RPI Industries, Inc. warrants to the original purchasers, the equipment manufactured by it. RPI Industries, Inc. will for a period of 12 months, from the date of original shipment from the factory, pay the cost of labor for repairs and replacement of parts that it has determined to be defective.

This warranty does not include the cost of labor for initial installation, start-up, correction of improper installations, by contractors other than RPI Industries, Inc. misapplications, repair due to abuse and negligence, by buyer, modifications, normal adjustments, drive time to and from repair site and freon recovery. The cost of service labor reimbursed will be based on straight-time rate and reasonable time for the repair of defect.

All service labor charges are subject to approval by RPI Industries, Inc. service department.

MOTOR-COMPRESSOR: One Year:

RPI Industries, Inc. warrants to the original purchasers that it will repair or exchange at our option, at anytime during the 12 months following the date of original shipment from the factory a motor-compressor assembly or like design and capacity if the motor-compressor assembly or any part thereof is returned prepaid to nearest authorized jobber and is proved to our satisfaction to be inoperative due to defects in material or factory workmanship.

MOTOR-COMPRESSOR LABOR – One Year

RPI Industries, Inc. warrants to the original purchasers, the motor-compressor assembly. RPI Industries, Inc. will for a period of one year from the date of original shipment from factory pay the cost of labor for repairs and replacement of motor-compressor assembly when it has been determined to be defective.

This warranty does not include the cost of labor for initial installation, start-up, correction of improper installations, by contractors other than RPI Industries, Inc. misapplications, repairs caused by abuse and negligence, by buyer, modifications, normal adjustments, drive time to and from repair site and freon recovery. The cost of service labor reimbursed will be based on straight-time rate and reasonable time for the repair of defect.

All service labor charges are subject to approval by RPI Industries, inc. service department.

MOTOR-COMPRESSOR – FOUR YEAR (OPTIONAL):

RPI Industries, Inc. warrants to the original purchasers, that it will repair or exchange at our option at anytime during the four years following the date of original shipment from the factory a motor-compressor assembly or any part thereof is returned prepaid to nearest authorized jobber and is proved to our satisfaction to be inoperative due to defects in material or factory workmanship.

The term "motor-compressor assembly" consists of the stator, rotor, eccentric rod, eccentric shaft, piston, wrist pin, suction valve, discharge valve and the cast housing in which these parts are enclosed.

This warranty does not apply to any electrical controls, condenser, evaporator, fan motors, overload switch, starting relay, temperature control, dryer, accumulator or wiring harnesses.

No claims can be made against this warranty for spoilage of product.

Replacement of the motor-compressor assembly must receive prior approval from RPI Industries', Inc. service department. Purchaser must have model number, serial number and date of shipment.

GENERAL CONDITIONS:

RPI Industries, Inc. Recommends That The Installation, Inspection and Start-Up of Refrigeration Equipment Be Performed By A Qualified Refrigeration Technician.

RPI Industries, Inc. Makes No Other Expressed Or Implied Warranty, And No Person or Representative Of The Seller Is Authorized To Add To The Seller's Liabilities in Connection With Its Products Other Than What Is Expressed.

Warranties Listed Here Are For Equipment Located Inside The Continental United States.

All Services Labor And/Or Part Charges Are Subject to Approval By RPI Industries, Inc. Contact the Service Department in Writing or Call (609) 714-2330.

All Claims Must Contain The Following Information:

* The model and serial number of the equipment.

* The date of the equipment failure and place of installation.

* The name and address of the agency which will perform the service work.

- A complete description of the equipment failure, circumstances relating to that failure, parts replaced and itemized list of all labor charges to be incurred.

RPI Industries, Inc. Shall Not Be Liable For Any Default Or Delay In Performance Caused By Any Contingency Beyond Its Control.

Warranties Do Not Include Any Food or Business Loss and Transportation Charges To Or From RPI Industries', Inc. factory.

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Trouble Shooting Charts

TROUBLE	PROBLEM CAUSE	SOLUTION
Compressor will not start no Noise	1. Switch turned off	1. Check power switch in unit compartment.
	2. Power disconnected	2. Check service cord wiring connections
	3. Blown fuse or breaker	3. Replace fuse or reset breaker
	4. Defective or broken wire	4. Repair or replace
	5. Defective overload	5. Replace
	6. Defective temperature control	6. Replace
Compressor will not Start, cuts out on overload	1. Low voltage	1. Check voltage at Cabinet should not Be more than 5% Below rating voltage
	2. Defective compressor	2. Replace
	3. Restriction (moisture)	3. Leak check, replace drier evacuate and recharge
	4. Condenser blocked with dust and dirt	4. Clean condenser
	5. Defective relay	5. Replace
	6. Defective condenser fan motor	6. Replace
Warm storage temperature	1. Temperature control not Set properly	1. Reset control
	2. Short of refrigerant	2. Leak check, replace drier evacuate and recharge
	3. Cabinet location too warm	3. Move to cooler location or correct excessive heat source.
	4. Refrigerant overcharge	4. Purge system, evacuate and recharge.
	5. Low voltage, compressor cycling on overload	5. Check voltage at compressor should not be more than 5% below rating.

Compressor runs Continuously, product too Warm	1. Short of refrigerant	1. Leak check, replace drier evacuate and recharge.
	2. Inefficient compressor	2. Replace.
Compressor runs Continuously, product too Cold	1. Defective control	1. Replace.
	2. Short of refrigerant	2. Leak check, replace drier, evacuate and Recharge.

TROUBLE SHOOTING FOR LIGHT CHART

Problem	**Solution**
Lights won't start	1. Check light switch 2. Check continuity to ballast 3. Check to see if bulbs inserted properly in socket 4. Check voltage
Lights flicker	1. Allow lamps to warm up 2. Check lamp sleeve for cracks 3. Check sockets for moisture and proper contact. 4. Bulb replacement may be necessary. 5. Check voltage.

WARNING

ALWAYS DISCONNECT THE ELECTRICAL POWER AT THE MAIN DISCONNECT WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT OF THIS REFRIGERATOR. THIS INCLUDES, BUT IS NOT LIMITED TO SUCH ITEMS AS FANS AND THERMOSTATS.