

STRATUS Single-Deck Display Case

Installation and Operation Manual



KYSOR WARREN
eptarefrigeration



May 2019

Part No. 31E11042

**Models:
MX1LC-SC**

Applications:



Introduction—General Information	2
Plan and Cross Views	3
Case Data	4
Case Installation	5
Electrical Connections—General	6
Expansion Valve and Superheat	9
Paragon ERC-2 Set-Up Instructions	10
ECM Evaporator Fan	14
Operation	16
Parts List	18
Warranty	19

Installation and Operation Manual

Introduction—General Information

This manual has been prepared for our customers and the personnel involved in installing and maintaining our cases.

Our new case line has been designed with a focus on things most important to your bottom line. Ease of use, high energy efficiency, sleek, attractive style and customization has merged together in our STRATUS, MX1, and multi-deck, medium temperature cases. This Kysor Warren single deck self-service case is specially designed to merchandise packaged sandwiches, cheese, deli, prepared foods, produce, and meat products.

These cases should be installed and operated according to the instructions contained in this manual to ensure proper performance. They are designed for display of products in an air-conditioned store where temperature and humidity are maintained at a maximum of 75° dry-bulb temperatures and 55% relative humidity.

CAUTION: Failure to maintain maximum design conditions may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

The MX1LC-SC will accommodate a single level of product display shelving. This level provides excellent visibility and accessibility to the displayed products. These cases offer exceptional display facing area and product pack-out in a case that is 60" in height. The shelving is available in 16 – 24" shelf depths.

These cases are connected to a single compressor condensing unit. Installation and Service instructions are provided by the condensing unit manufacturer and are not part of this manual.

Case Description

Model	Description
MX1LC-SC	Self-contained: Meat, standard depth, single-deck, low front, display case with curved glass and produced in 4 ft. length.

Receiving/Shipping Damage/Lost Items

All equipment should be examined for shipping damage before and during unloading. If there is any damage, the carrier should be notified immediately and an inspection requested. The delivery receipt must be noted that the equipment was received damaged. If damage is of a concealed nature, you must contact the carrier within three (3) days following delivery. The consignee for all damages must file a claim with the carrier.

NOTE: All claims for shortages must be within 10 days after receipt of shipment.

Condensing Unit

The condensing unit is not intended to be removed from the case except in the event a compressor must be replaced. To remove the condensing unit, disconnect the suction/liquid connections on the base valves at the right front of the case.

CAUTION: Before attempting to remove the condensing unit, be sure that all electrical power to the case has been turned off. Also, caution should be used when releasing pressure on the refrigerant system.

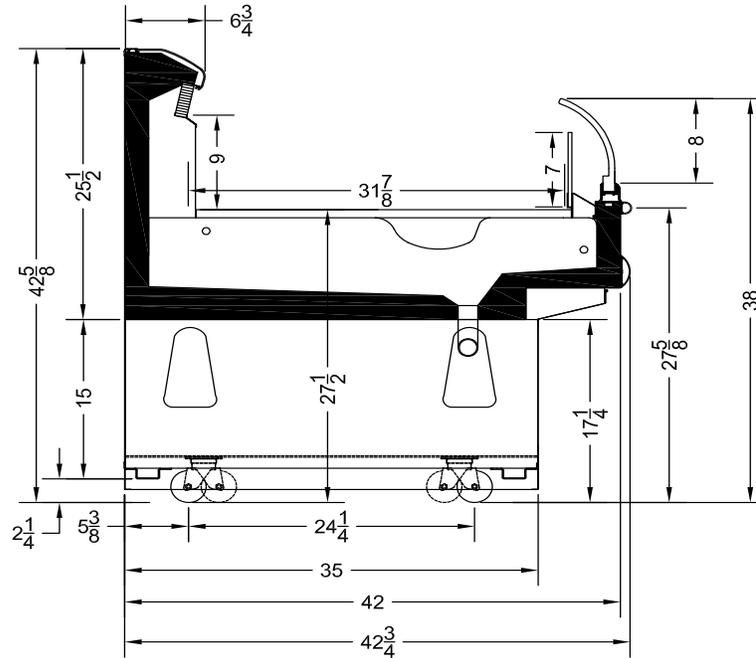
NOTE: The refrigerant charge for this case is very critical. If the case should need to be recharged, an accurate charging device must be used. No refrigerant should be released into the atmosphere; it must be reclaimed. There are several different refrigerant configurations to these units, refer to Case Data for detail.

CAUTION: During installation and service of this equipment, precautions should be taken to prevent loss of refrigerant to the atmosphere.

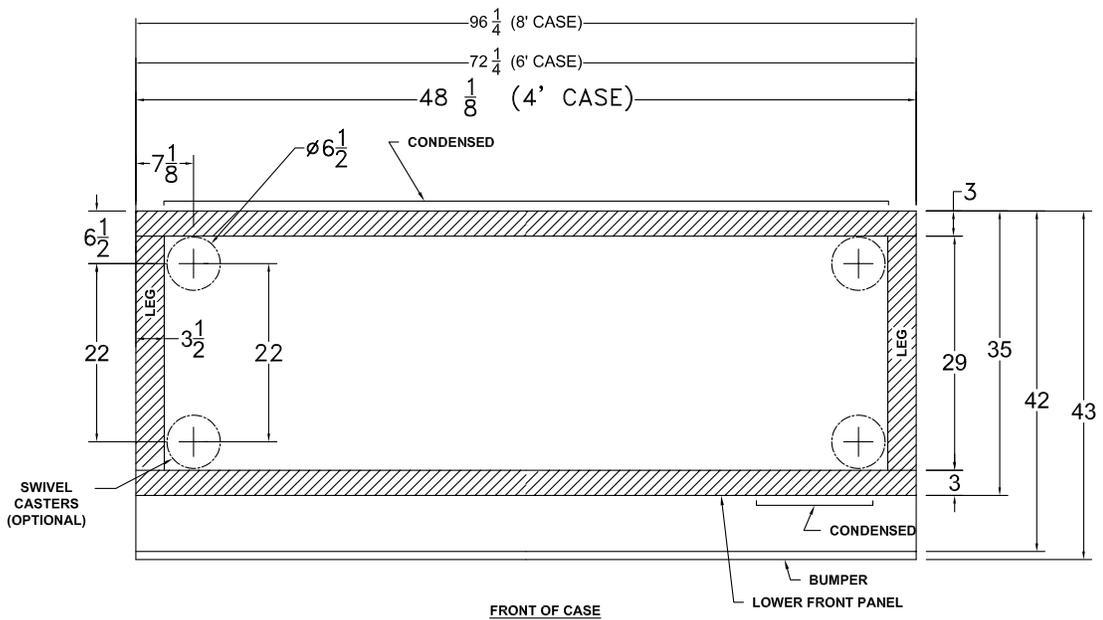
STRATUS Multi-Deck Display Case

Plan and Cross Views

MX1LC Cross View



MX1LC Plan View



Installation and Operation Manual

Case Data

MX1LC-SC REACH-IN MERCHANDISER



KYSOR WARREN
epta refrigeration

General Case Data	Case Length (ft)		
	4'	6'	8'
Total Display Area (ft ²)	11.36	17.06	22.72
Cubic Capacity (ft ³)	5.12	7.70	10.24
Max Shelf Depth (in) [Top/Bottom]	N/A	N/A	N/A
Weight (lb)	-	-	-
Refrigeration Load (General)			
Evaporator Temperature (°F)	20	20	20
Discharge Air Temp (°F)	26	26	26
Discharge Air Velocity (fpm)	250-300	250-300	250-300
Fan Speed (rpm)	1100	1100	1100
Refrigerant Type	R-513A	R-513A	R-513A
Refrigerant Charge (lbs)	3.30	3.70	4.70
Conventional Thermal Load, Single (Btuh) unlighted	2172	3258	4344
Additional Btuh per ft LED - Canopy / Shelf & Nose	13 / 11	13 / 11	13 / 11
Additional Btuh per ft T8	19	19	19
Superheat Setpoint (°F)	6 - 8	6 - 8	6 - 8
Electrical Data (Amps/Watts)			
Power Supply (Volts/Hertz/Phase)	115V/60HZ/1PH	208V/60HZ/1PH	208V/60HZ/1PH
Evaporator Fan Motor Amps (115 V)	0.09	0.18	0.18
Anti-sweat Heater Amps (115 V)	0.10	0.16	0.22
Lights Amps (115V)	N/A	N/A	N/A
Defrost Heater Amps	N/A	N/A	N/A
Condensate Pump Amps (115 V)	N/A	N/A	N/A
Condensate Pan Heater Amps	8.33	4.80	7.21
Compressor RLA	9.30	8.00	8.00
Compressor LRA	50.00	46.00	46.00
Condenser Fan Motor Amps	0.53	0.54	0.54
Refrigeration Cycle Amps	18.35	13.68	16.15
Defrost Cycle Amps	8.52	5.14	7.61
Minimum Circuit Ampacity	20.70	15.72	18.21
Maximum Overcurrent Protection	25	25	25

Defrost Data (off Cycle)			
Defrosts per Day	Failsafe Duration (min) ¹	Termination Temp (°F)	Drip Time (min)
6	60	45 (Coil)	0

¹ At ASHRAE conditions. For conditions above 75°F, 55% RH, increase defrost time by 15 min. Type I refrigerator, intended for use in an area where the environmental conditions are controlled and maintained that conditions do not exceed 75°F and 55% relative humidity. Kysor Warren, whose policy is one of continuous improvement, reserves the right to change at any time specifications, designs, or prices without incurring obligation. DOE 2017 Compliant

APPLICATIONS



ANSI / NSF 7

The above case model has case lengths that are UL and NSF approved.

STRATUS Multi-Deck Display Case

Maximum Top Shelving Size Recommended: Not applicable

NOTE: The air current is very important to the performance of this case. The load limit line (see load case section) is the indicator of the inside edge of the air current and at no time should shelving, product, signs, debris, etc., interfere with air current.

NOTE: Temperature is measured in the discharge air. Defrost frequency is at design conditions. Higher temperature or humidity may require more defrost and longer fail-safes. These cases are not designed to operate in environments where the ambient temperature is greater than 75°F and the relative humidity is greater than 55%.

NOTE: Off-cycle defrost is the recommended defrost for medium temp cases.

CAUTION: Failure to maintain maximum design conditions may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

CAUTION: Failure to properly install electrical wiring and control wiring as per wiring diagram(s), defrost settings, and temperature set-points may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

Case Installation

Preparation—Prepare the installation area as follows:

1. Clean area where case is to be installed.
2. Verify installation area is at least 15 feet from any outside entrances or heating and cooling outlets.
3. Verify at least 2 feet of distance between hot and cold cases.
4. Ensure floor loading will support the case and the case contents.
5. Ensure proper AC power is available. Refer to case AC input requirements located in the electrical connections section of this manual.

CAUTION: To prevent condensation on the end panels of cases, a minimum of 3.0 inches between walls or other cases is required for airflow. If 3.0 inches is not possible, then the space between the cases must be completely filled and sealed or an updraft fan kit must be installed to provide air circulation through the space.

Installation

The following instructions are provided for unpacking, moving, loading, and lifting the case prior to installation.

NOTE: READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING INSTALLATION.

Unpacking

WARNING: Use caution when removing the strapping in the following procedure, as the shelves are very heavy and could fall causing personal injury or equipment damage.

1. Remove all shipping tape from lamps and ensure that all lamp ends are snapped in place.
2. Ensure the evaporator cover is installed correctly with the deck pans installed.
3. Move the case into position, install, adjust superheat, and perform the operational checkout procedures following the instructions within this manual.

CAUTION: Be careful not to damage the factory-installed end while moving the case. Use the case lift points on the case to move it to the proper location.

Installation and Operation Manual

Case Freezing

Do not allow drip pipe to come in contact with un-insulated suction lines, which will cause the condensation from your case to freeze.

Drain Strainer

NOTE: Not all Kysor Warren cases have drain strainers. This information applies only to the cases equipped with strainers.

The drain strainer is used to keep debris or any foreign objects from entering the PVC drain, which could cause blockage. To install, insert into drain until drain strainer stops. It will not be flush. Strainer will exceed hub by 1". DO NOT flatten drain strainer.

NOTE: 1^{1/2}" Drain Pipe.

NOTE: For Ultra-Low Cases Only: Instead of standard bottom piping, refrigeration piping is located at the inside top or outside rear due to low front rail height. Drain piping connection is located behind removal kick plate along front of the case.

Electrical Connections—General

CAUTION: Failure to properly install electrical wiring and control wiring as per wiring diagram(s), defrost settings, and temperature set-points may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

An electrical box is provided with each refrigerator for wiring your fan, and light circuits. This is an approved method by the Underwriters' Laboratories; however, field wiring must be in accordance with local and national electrical codes.

All field connections are made in the electrical box. Make sure that proper voltage is supplied to your refrigerator. Check refrigerator nameplate for the required voltage for fans, lights and defrost heaters.

NOTE: ALL REFRIGERATORS MUST BE GROUNDED.

The Recommended Control Settings in the Case Data shows the electrical ratings for your case. This is the same information that appears on your refrigeration nameplate.

NOTE: Fan motors must operate continuously and panel must be marked sufficiently to prevent the fan motors from being turned off accidentally. When refrigerators are multiplexed, add the total of these amperage values to determine wire size and circuit protection. Anti-condensate controllers can be used to control the anti-condensate heater.

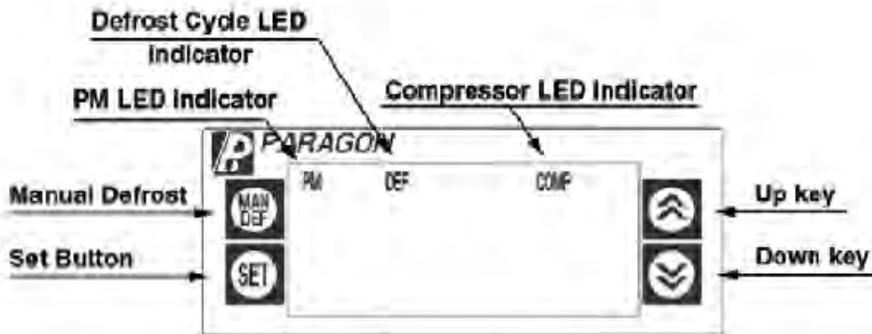
WARNING! Ensure the Kickplate does not come in contact with the case electrical wiring. Live electrical wiring that comes in contact with the case is a shock hazard that may cause severe injury or death by electrocution.

WARNING! Always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as fans, heaters, thermostats, and light bulbs. Failure to disconnect the electrical power may result in personal injury or death.

All electrical connections are made in the control box located in the base of the case.

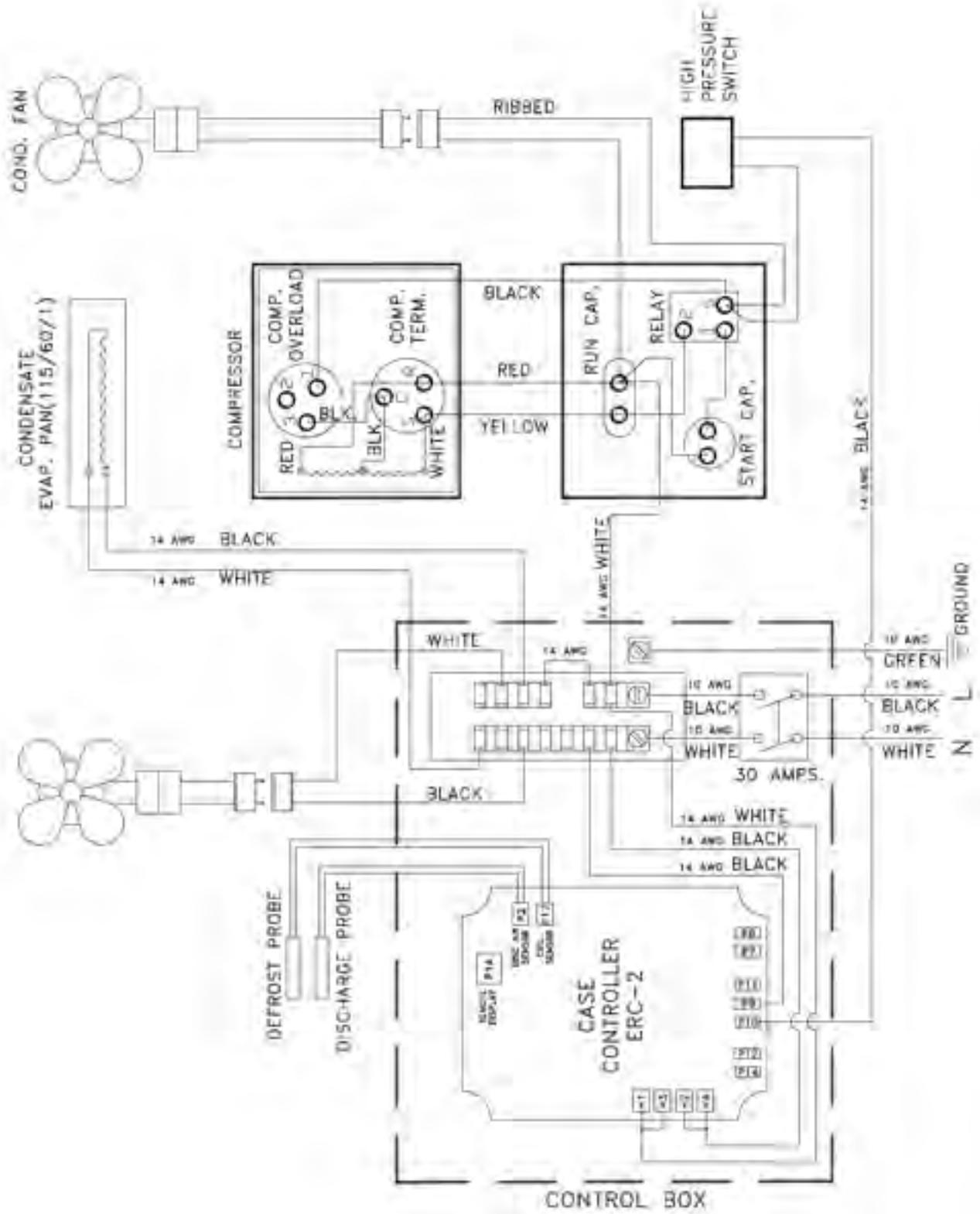


Paragon ERC-2 Set-Up Instructions



Installation and Operation Manual

Wiring Diagram



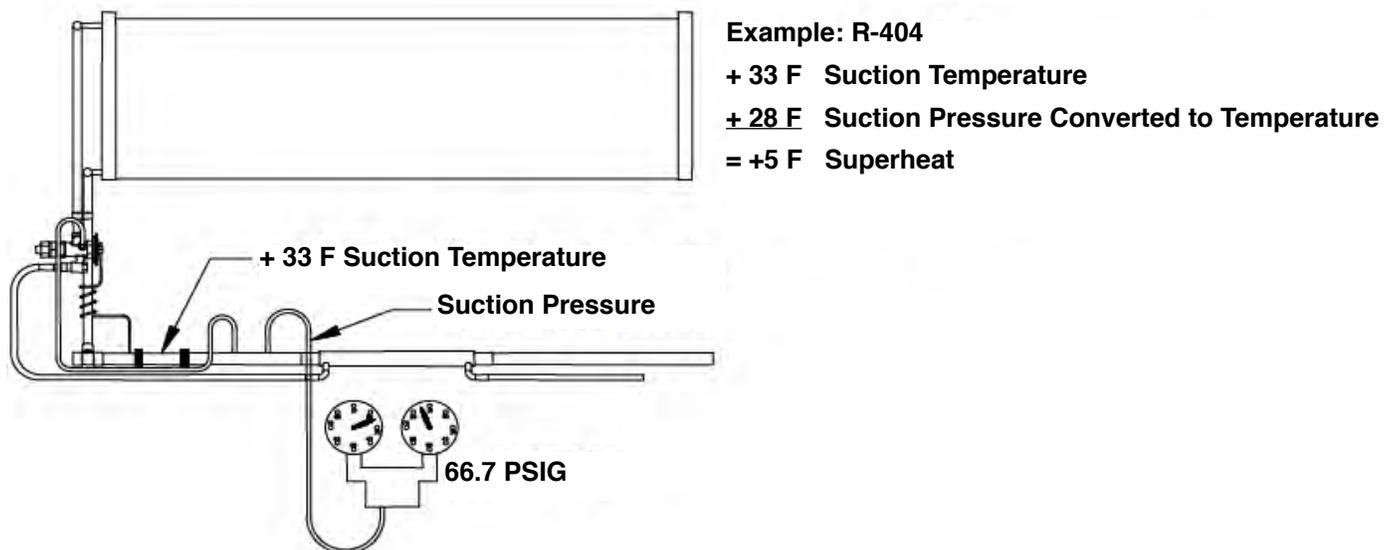
Expansion Valve and Superheat

CAUTION: During service of this equipment, precautions should be taken to prevent loss of refrigerant to the atmosphere. Always install the expansion valve stem cap after making valve adjustments.

The expansion valve furnished with your case has been sized for maximum coil efficiency. To adjust superheat, perform the following:

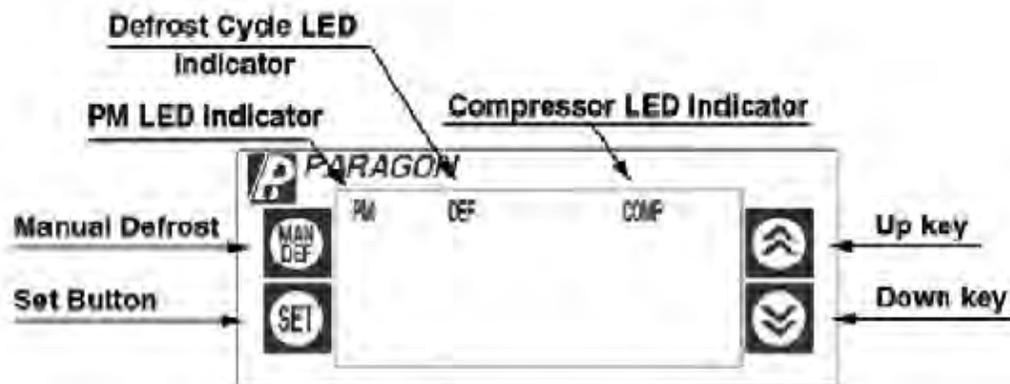
1. Place a thermocouple near the expansion valve bulb. Read the suction line pressure as near coil as possible. If closest is at the condensing unit, estimate suction line loss at 2 PSIG.
2. Convert coil suction pressure to temperature. The difference between coil temperature and the thermocouple temperature is superheat. Use average superheat when expansion valve is hunting.
3. Do not set the superheat until cases have pulled down to operating temperature and never open or close the valve over $\frac{1}{4}$ turn between adjustments and allow 10 minutes or more between adjustments.
4. Superheat should be set at 6-8°F.
5. After the initial setting, the superheat should be rechecked when product is stocked and at designed temperature.

Superheat Calculations



Installation and Operation Manual

Paragon ERC-2 Set-Up Instructions



To change time of day and setpoint temperature (First Level), follow these steps:

1. Press and hold SET for five (5) seconds. The display will show "CLoC."
2. Press SET again to change the time of day.
3. Press UP or DOWN until the correct time of day is displayed.
4. Press SET to accept the new time.
5. Press DOWN to go to the next parameter -- Setpoint Temperature. The display will show "SEt."
6. Press SET to change the setpoint temperature.
7. Press UP or DOWN to go to the desired setpoint. The range is -40 to 60°F.
8. Press SET to accept the change.
9. Press DOWN to exit the first level of programming.

NOTE: During programming, if no button is pressed for thirty (30) seconds, the control will go back to the normal operation mode. This is valid for both programming levels.

NOTE: When changing the time, press and hold the MAN DEF button for three (3) seconds to change the AM / PM mode.

To change the other parameters (Second Level), follow these steps:

1. Press and hold SET and DOWN for ten (10) seconds. The display will show "dSPL." Press SET to change the parameter.
2. Press UP or DOWN to change options, time, or temperature for the currently selected parameter. Press SET to accept new value.
3. Press DOWN to go the next parameter. Then, go back to step 2. After the last parameter is displayed (ALHi), the display will return to the normal operating condition.

STRATUS Multi-Deck Display Case

To change the other parameters (Second Level), follow these steps:

1. Press and hold SET and DOWN for ten (10) seconds. The display will show “dSPL.” Press SET to change the parameter.
2. Press UP or DOWN to change options, time, or temperature for the currently selected parameter. Press SET to accept new value.
3. Press DOWN to go the next parameter. Then, go back to step 2. After the last parameter is displayed (ALHi), the display will return to the normal operating condition.

Set the following parameters as described:

CloC = Set Clock to local time.	SEt = 21	dSPL = rSP°	CLHr = 12HR
dSP = °F	dFtP = ELEC	CFAN = on	EFAN = yES
dFin = TdAy	CoFF = 0:00	Alrd = 0:00	Con = 0:00
CPrn = N/A	nodF = 6	dEFd = 60 minutes	dEF1 = 02:00 dEF2 = 06:00 dEF3 = 10:00 dEF4 = 14:00 dEF5 = 18:00 dEF6 = 22:00
Fand = 0:00	Pudn = 0:00	diF = 8	driP = 0:00
tDEF = N/A	dEF = 45°	ALLo = 18	FAn = 32
ALHi = 60			

**Set defrost intervals at every 4 hours.*

Installation and Operation Manual

Parameter	Display Symbol	Description	Range / Options
Display Status	dSPL	Information shown on the display during operation conditions.	tdAy - time of day rSP° - zone temperature (refrigerated space) CyCL - cycle between time and zone temperature Epr° - evaporator coil temperature
Clock Format	CLHr	Format of the time (12 / 24 hour mode)	12Hr - AM / PM Format 24Hr - 24 hour Format
Temperature Format	°dSP	Temperature Degrees	°F - degrees Fahrenheit °C - degrees Celsius
Defrost Type	dFtP	Type of defrost used in the application	ELEC - electric heater defrost / off cycle HgAS - hot gas
Fan Status During Defrost	EFAN	Enable or not the fan during defrost	no - fan is turned off during defrost yES - fan remains on during defrost
Fan Status During Normal Mode	CFAN	Enable or not the fan during normal compressor on/off mode	on - fan is always on during normal mode CyAP - fan cycles with compressor
Defrost Interval	dFin	Type of defrost interval	TdAy - time of day setpoint CPrn - compressor run time tdEF - temperature initiated defrost
Minimum Compressor Off Time	CoFF	Minimum time that the compressor will remain turned off	Range: 0 - 15 minutes
Minimum Compressor On Time	Con	Minimum time that the compressor will remain turned on	Range: 0 - 15 minutes
Alarm Delay	ALrd	Time delay before the alarm goes off after the temperature falls off the two alarm setpoints	Range: 0 - 59 minutes
Compressor Run Time	CPrn	Time the compressor will run between defrosts	
Number of Defrosts	nodF	Number of defrosts per day	from 0 - 8 (0 means 1 defrost every 48 hours)
Defrost Start Time	dEF1-8	Start time of each defrost	
Defrost Duration	dEFd	Defrost duration time (Back up for defrost termination temperature)	Range: 0 mins - 4 hours
Fan Delay	FAnd	Delay time for the fan after defrost (back up for fan cut-in temperature)	Range: 0 - 15 minutes
Pump Down	Pudn	Pump down duration	Range: 0 - 59 minutes
Drip Time	driP	Drip Time Duration	Range: 0 - 59 minutes
Setpoint Differential	diF°	Cut-in temperature differential (NOTE: cut-in is cut-out plus differential)	Range: 1 - 25°
Temperature Initiated Defrost	tdEF	Temperature that will initiate a defrost cycle	Range -40 to 40°F / -40 to 4°C
Defrost Termination Temperature	dEF°	Temperature in the evaporator that will terminate the defrost cycle	Range: 0 - 75°F / -18 to 24°C
Fan Cut-in Temperature	FAn°	Temperature that will turn the fan on after defrost	Range: -40 to 60°F / -40 to 16°C
Low Temperature Alarm	ALLo	Low temperature setpoint that will make the alarm go off and the error message appear on the display	Range: -40 to 83°F / -40 to 28°C
High Temperature Alarm	ALHi	High temperature setpoint that will make the alarm go off and the error message appear on the display	Range: -40 to 83°F / -40 to 28°C

STRATUS Multi-Deck Display Case

NOTE: To change from degrees C to F, and vice versa, the user must reprogram all the parameters that are related to the temperature. The unit DOES NOT convert the parameters automatically from degrees C to F or vice versa.

PLEASE SEE BELOW PARAGON DISPLAY AND ERROR CODES

Display	Control Status
Error 1	ERC Fault - software or hardware failure
Error 2	ERC Communications Fault - indicates that there is a problem with the display module cable
Error 3	Zone Sensor Fault - indicates an open or shorted temperature sensor
Error 4	Evaporator Sensor Fault - indicates an open or shorted evaporator sensor
Error 6	Low Temperature Alarm - indicates that the temperature has dropped below the low alarm setpoint
Error 7	High Temperature Alarm - indicates that the temperature has risen above the high alarm setpoint

For error codes 1 and 2, disconnect the power to the unit and correct the problem to reset the display.

For error codes 3 and 4, press the UP or DOWN button on the display to reset the message. If the display still shows the error message, the sensor must be replaced.

The error codes 6 and 7 will automatically reset once the temperature is back within the two setpoints.

NOTE: To change from degrees C to F, and vice versa, the user must reprogram all the parameters that are related to the temperature. The unit DOES NOT convert the parameters automatically from degrees C to F or vice versa.

Installation and Operation Manual

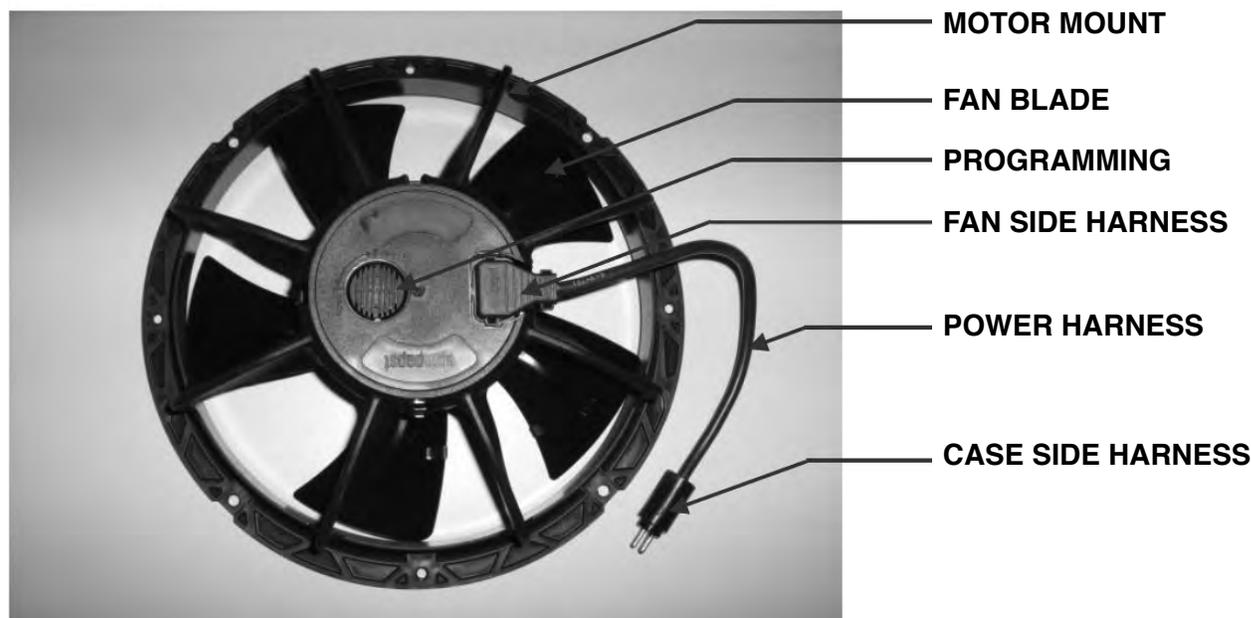
ECM Evaporator Fan

Product Overview

This troubleshooting guide covers the evaporator fan. The fan is supplied as a complete assembly (fan blade, motor mount and power harness) with no replaceable components. An electronically commutated (brush-less) motor powers the fan.

The following problems are addressed:

- motor is not spinning at the correct speed
- motor is not spinning
- motor sounds noisy



Procedures—Fan mounted in the case

Motor is not spinning at the correct speed

- Disconnect fan power. Use the handheld speed programmer P/N HX0C-003-000-01 and the instructions in the accompanying operating manual to confirm that the fan speed setting is correct for the case model. If the setting is incorrect, reprogram the fan as needed, disconnect the programmer and reconnect fan power. If the setting is correct, continue with the troubleshooting.

Motor is not spinning

- Perform a hard reset of the electronics by removing power to the fan for at least 10 seconds.
- Check that the fan blades are completely free of obstruction by manually spinning the fan blade.
- If any obstruction is found, remove it and inspect the fan blades for damage.
- Replace any fan with bent or gouged blades. Small nicks in the blades are acceptable.
- Check that the correct power is being applied at the case side of the fan harness and that the harness is firmly connected to the power line.
- Reapply fan power and check if the problem has been resolved.

NOTE: If the above actions do not solve the problem, disconnect power to the fan and remove the fan from the case along with its harness.

Procedures—Fan removed from the case

1. Disconnect the fan plug from the case wire harness and inspect the pins. If they appear bent, straighten them out and reconnect the plug. If pins are broken, replace the power harness.
2. Remove the fan side harness plug from the back of the fan. This is generally best accomplished by placing a thumb under the plug and applying steady pressure outwards from the fan.
3. Check for liquid in the slot where the harness plugs into the fan. If any liquid is present, check that the seal around the perimeter of the slot is completely intact. Replace any fan with a damaged seal. If the seal is good, completely dry out the slot and the harness pins before proceeding further.
4. Check the resistivity across the L1 & N fan side male pins with the common lead from the ohmmeter on the N pin. Check the resistivity across the speed selection and L1 pins with the common lead on the L1 pin. Both measurements should have a value of $M\Omega$'s (typically 2-3 $M\Omega$). If either reading is zero or infinity, replace the fan.

2—FAN HARNESS PLUG



4—RESISTIVITY



SPEED SELECTION

L1 (LINE)

N (NEUTRAL)

SEAL

5. If the resistivity measurements are good, reconnect the power on the case side of the fan harness and check that the correct voltage is being applied at the fan side harness pins.
6. If a problem is found with the voltage at the fan side of the harness, perform a continuity test on each leg of the harness. Replace the fan if the harness is found to be bad.
7. If the continuity test is good, check the fan side harness connections for any damage or corrosion to the female pins in the harness or the male pins in the fan. Replace the fan if any damage or corrosion is seen.

NOTE: If the above checks / changes do not fix the motor issues, the motor should be replaced.

NOTE: Any time the fan side harness connector is plugged back into the fan, be sure to press it all the way down in order to make a good seal.

Installation and Operation Manual

Operation

Merchandise should not be placed in the fixture until all controls have been adjusted and the case is at the proper temperature. AT NO TIME SHOULD THE CASE BE STOCKED BEYOND THE LOAD LINE OR OVER THE FRONT EDGE OF THE ADJUSTABLE SHELVES.

CAUTION: Air discharge and return flues must remain open and free of debris or obstruction at all times to provide proper refrigeration and air current performance.

CAUTION: Do not allow any product, signs, debris, etc., to block these grilles.

CAUTION: Do not use any non-approved shelving, display racks, or any accessory that could hamper air current performance.

WARNING! Do not walk on top of the cases! This could result in damage to the case and serious personal injury could occur. These cases are not designed to support excessive external weight. Do not use top of cases for storage.

Off cycle defrost is standard on these models and the fans run continuously.

1. Off-Cycle Defrost is standard on these models. The fans run continuously during operation and defrost.
2. Single Condensing Case Systems – A thermostat should be used to control case temperatures. The thermostat bulb should be mounted in the discharge air (see case data if your case is a single condensing case system).

NOTE: Where termination temperatures are given, mechanical defrost termination is required.

Cleaning

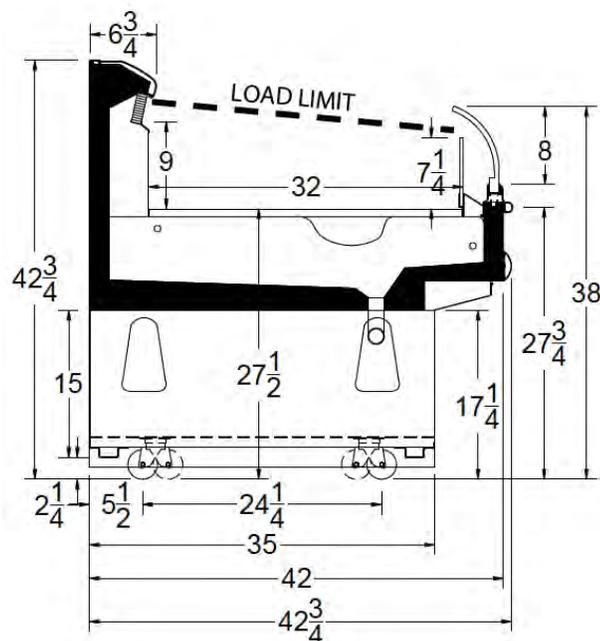
As a general rule, always use mild soap and water to wipe the case down, including the sliding doors at the back of the case. Special precautions must be taken when cleaning some components of the case.

Exterior surfaces should be cleaned with warm water and mild soap to protect and maintain the finish. Do not use cleaners containing abrasive materials or ammonia, which will scratch or dull the finish. The waste outlet should be flushed with water following each cleaning.

Interior surfaces may be cleaned with most mild soap formulas, ammonia based cleaners, and sanitizing solutions with no harm to the surface.

WARNING! Always shut power off during the cleaning process. Cleaning the case with electrical power applied is a shock hazard that may cause serious injury or death.

WARNING! DO NOT USE HOT WATER ON COLD GLASS SURFACES. This could cause the glass to shatter and could result in personal injury. Glass fronts and ends should be warm before applying hot water.



STRATUS Multi-Deck Display Case

CAUTION—The following could damage the case:

- Use of cleaning products containing chlorine, chloride ion, the words Bleach, is not recommended for unpainted stainless steel surfaces as it may cause rust to form. The operational warranty of the equipment will be voided if these products cause rust to form on the SS parts or any other parts of the equipment.
- Do not use solvent, oil, or acidic-based cleaners on any interior surfaces as the surface may become damaged.
- Do not use abrasive cleaners and scouring pads, as these will mar the finish.
- Never introduce water into the case faster than the waste outlet can release it.
- Do not use steam or high pressure systems to clean the case, as seals may be broken which will cause the case to leak.

Condensing Units

Follow the previous general cleaning of the interior and exterior parts with the exception of DO NOT USE WATER HOSE to clean evaporator or tub of the case.

CAUTION: Condensing units should have at least 18” clearance from any wall or other obstruction in order to operate properly.

WARNING! Always shut power off at the main breaker during the cleaning process. Cleaning the case or condensing unit with electrical power applied is a shock hazard that may cause serious injury or death.

CAUTION: DO NOT FLUSH WITH WATER. This case is not connected to a drain system and has its own evaporating pan with limited capacity.

Condensing Units: Once a month compressed air should be blown through evaporator to clear any debris or dust – opposite to direct normal air flow.

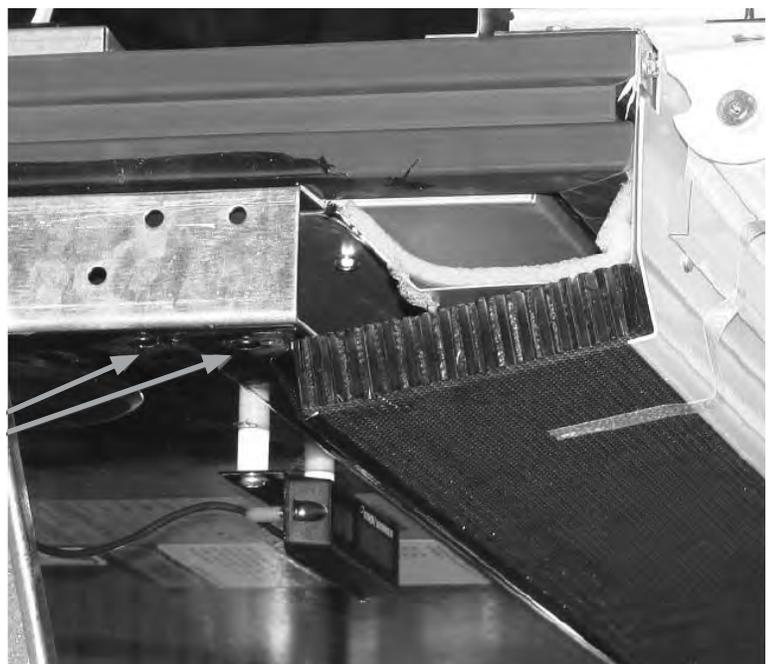
CAUTION: Care should be taken with compressed air. Debris and dust may be blown into eyes.

NOTE: Do not stack anything that may block airflow in front of louvers or rear of case. Self-contained cases draw air from back to front and blocking this airflow will cause case to overheat and shut down.

Honeycomb Assembly

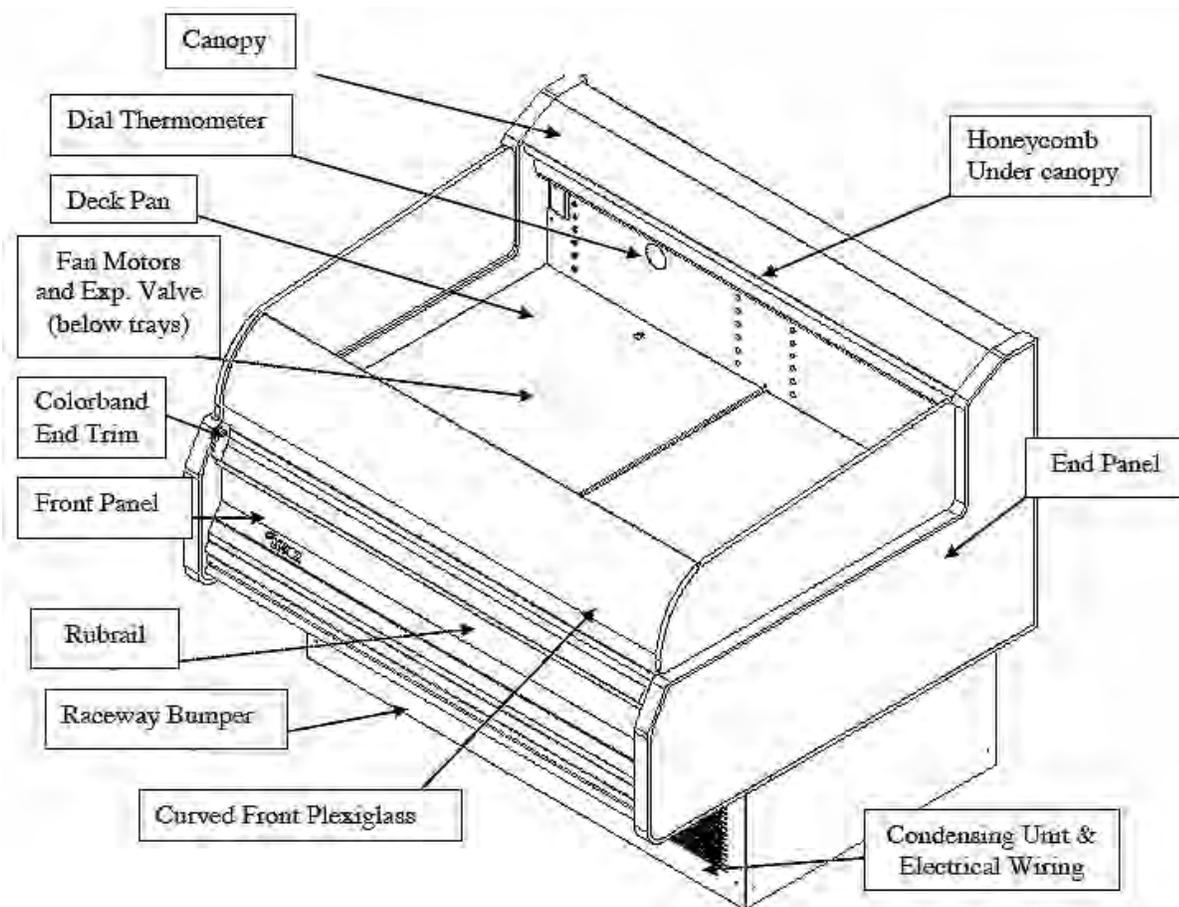
The honeycomb should be cleaned every 6–8 months, depending on store conditions. The honeycomb may be cleaned with a vacuum cleaner or removed to be washed with soap and water. The honeycomb must be completely dry before returning it to the case. Note the position and angle of the honeycomb when removing from the case. Honeycomb must be replaced at the same angle.

SCREWS



Installation and Operation Manual

Parts List



Description	Part No.		
	4 FT	6 FT	8 FT
Expansion Valve	03A28006	03A28007	03A28005
Evap Fan Motor	09A10114	09A10116	09A10114
Fan Wiring Harness	10M10499	10M10499	10M10499
Curved Front Plexiglass	13A10399	13A10568	13A10819
Plexiglass Wing End	13A10741	13410741	13A10740
Honeycomb White	13A15147	13415149	13A15147
Honeycomb Black	13A15148	13415150	13A15148
Condensate Drain Pan (1000 Watt)	28H12042	28H12027	28H12043
Condensing Unit	01610034	01D10031	01D10031

NOTE: Standard parts are provided in the parts lists. Cases may be equipped with specialty parts that were incorporated into the case(s) at the time they were manufactured. It is important to have the case serial number when contacting Kysor Warren for replacement parts.

NOTE: Standard parts are listed. Individual cases may have options different than listed and the serial number for these cases is required when ordering parts.

Warranty

KYSOR WARREN EPTA US CORPORATION EQUIPMENT LIMITED WARRANTY

www.kysorwarren.com/warranty
for complete details



KYSOR WARREN
eptarefrigeration

5201 Transport Blvd.
Columbus, GA 31907
P: 800.866.5596
F: 706.568.8990



www.kysorwarren.com