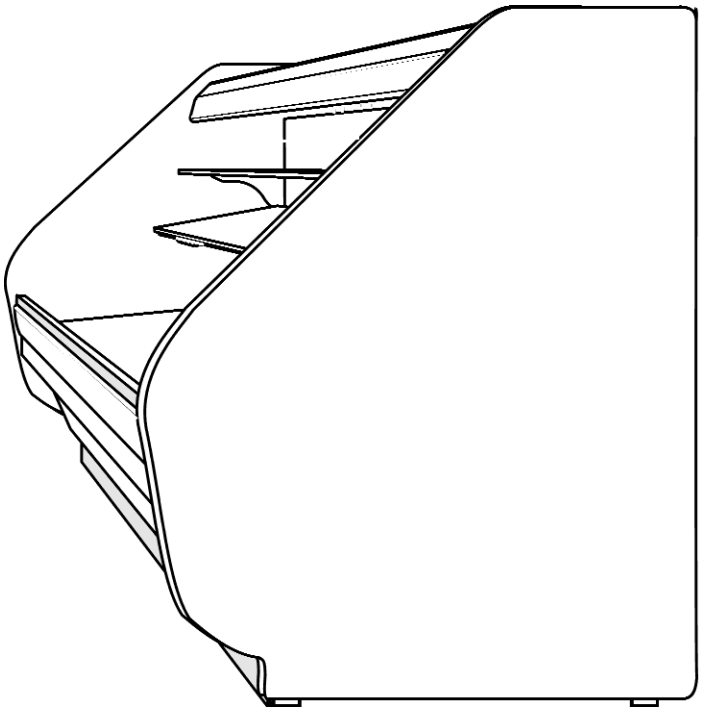
TYLER REFRIGERATION

Carrier
A United Technologies Company

series Advantage

Installation & Service Manual



N2MHP

HIGH PERFORMANCE MEDIUM TEMP MEAT/DELI/CRITICAL TEMP PRODUCE MERCHANDISERS
Medium Temperature Self Serve Display Cases

This manual has been designed to be used in conjunction with the General (UL/NSF) Installation & Service Manual.
Save the Instructions in Both Manuals for Future Reference!!

This merchandiser conforms to the American National Standard Institute & NSF International Health and Sanitation standard ANSI/NSF 7 - 2003.

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The following High Performance Medium Temperature Meat/Deli/Critical Temp Produce Merchandiser models are covered in this manual:

MODEL	DESCRIPTION
N2MHP	6', 8' & 12' HIGH PERFORMANCE SOILD FRONT MEDIUM TEMP MERCHANDISERS

SPECIFICATIONS

N2MHP High Perf. Med. Temp. Meat/Deli/Critical Temp Produce Merchandisers Specification Sheets

Refrigeration Data:

MODEL	CASE LENGTH	CASE USAGE	CAPACITY (BTUH / FT)		EVAPORATOR (°F)	UNIT SIZING (°F)	DISCHARGE AIR		AVG. REF. CHARGE (LBS/FT)
			PARALLEL	CONVENTIONAL			TEMPERATURE (°F)	VELOCITY (FPM)	
N2MHP	6'/8'/12'	MED TEMP	958*	1,075*	+24**	+22	+28	225***	0.48

* **Capacity data listed for cases with optional 2 rows of T-8 canopy lights and optional T-8 shelf lighting. Adjustments must be made to this base rating for each option installed on this case. DEDUCT 23 BTUH/FT for each row of unlighted shelves. For sizing all refrigeration equipment other than TYLER, use conventional BTUH values.**

** **Evaporator temperature is defined as the saturated suction temperature leaving the case.**

*** **Air velocity measured 1 hour after defrost at the top discharge air duct using an ALNOR JR. velometer with a scoop.**

FOR SPECIFIC COMPRESSOR SIZING INFORMATION, REFER TO TYLER APPLICATIONS FOR RACK SYSTEM COMPRESSORS AND/OR THE COMPRESSOR MANUFACTURERS FOR SINGLE COMPRESSORS. FOR LINE SIZING INFORMATION, REFER TO THE MISCELLANEOUS SECTION "BUFF" IN THE TYLER SPECIFICATION GUIDE.

Electrical Data:

Fans and Heaters (120 Volt)

MODEL	CASE LENGTH	FANS / CASE	TOTAL STANDARD FANS		TOTAL ECM FANS		TOTAL ANTI-SWEATS	
			AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
N2MHP	6'	2	1.06	96.0	0.64	34.0	0.09	11.0
N2MHP	8'	2	1.06	96.0	0.64	34.0	0.13	16.0
N2MHP	12'	3	1.59	144.0	0.96	51.0	0.21	25.0

T-8 Lighting with Electronic Ballasts (120 Volt)

MODEL	CASE LENGTH	CANOPY LIGHTS* — PER ROW				SHELF LIGHTS – PER ROW				NOSE LIGHT		MAXIMUM LIGHTING (5 ROWS)	
		AMPS		WATTS		AMPS		WATTS					
		1	2	1	2	1	2	1	2	AMPS	WATTS	AMPS	WATTS
N2MHP	6'	0.40	0.75	42.0	85.0	0.50	0.80	42.0	85.0	0.40	42.0	1.95	212.0
N2MHP	8'	0.50	0.95	57.0	113.0	0.70	1.10	57.0	113.0	0.50	57.0	2.55	283.0
N2MHP	12'	0.70	1.40	85.0	170.0	1.05	1.65	85.0	170.0	0.70	85.0	3.75	425.0

* Standard lighting for this case is 1 row of canopy lights.

Defrost Data:

DEFROST TYPE*	DEFROSTS PER DAY	DURATION TIME (MIN)**	ELEK. THERMOSTAT / AIR SENSOR SETTINGS			EPR SETTINGS ***		CONVENTIONAL COMPRESSOR SETTINGS****				DEFROST WATER (LB / FT / DAY)
			USAGE	CUT IN	CUT OUT	R22 (PSIG)	R404A (PSIG)	R22 (PSIG) CUT-IN	R22 (PSIG) CUT-OUT	R404A (PSIG) CUT-IN	R404A (PSIG) CUT-OUT	
TIME OFF	6	26	MED TEMP	27°F	25°F	48	61	46	35	59	47	5.85

* All high performance cases use **OFF CYCLE** defrost

** **NOTE:** 26 minutes is for EPR with suction stop for defrost isolation. Defrost times increases by eight minutes (34 min. total) when defrost isolation is by pump down.

*** If EPR is utilized, use the settings shown in the chart. **NOTE:** The customer will need to set the EPR on the parallel rack or single unit to the appropriate suction temperature and the N2MHP cases must be on a separate suction stub with a separate EPR. **ADD** 0.5# to EPR setting for each 1000 foot rise in elevation.

**** Required setup for a conventional unit uses an electronic thermostat to assure accurate temperature control.

CASE-TO-CASE SUCTION LINE SUB-FEED BRANCH LINE SIZING											
MODEL	8'	12'	16'	20'	24'	28'	32'	36'	40'	44'	48'
N2MHP / R22	1/2"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"

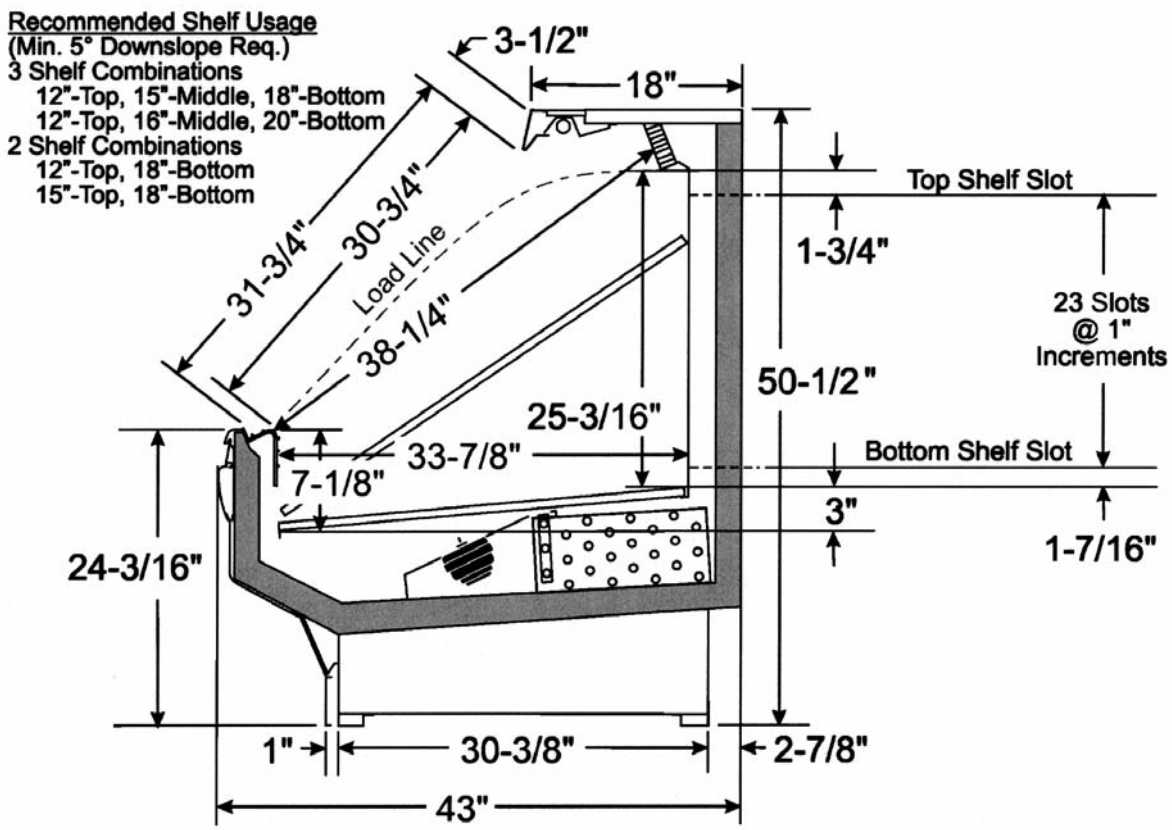
CASE CIRCUITS: This case requires a 120V circuit for fans, lights and anti-sweat heaters.

Screens are standard. Shelving must be ordered separately. All rows of shelving require a shelf gasket. Shelves are available in 12", 15", 16", 18" and 20" deep sizes. When multiple shelf sizes are used, position smallest shelf size on top to largest shelf size on bottom.

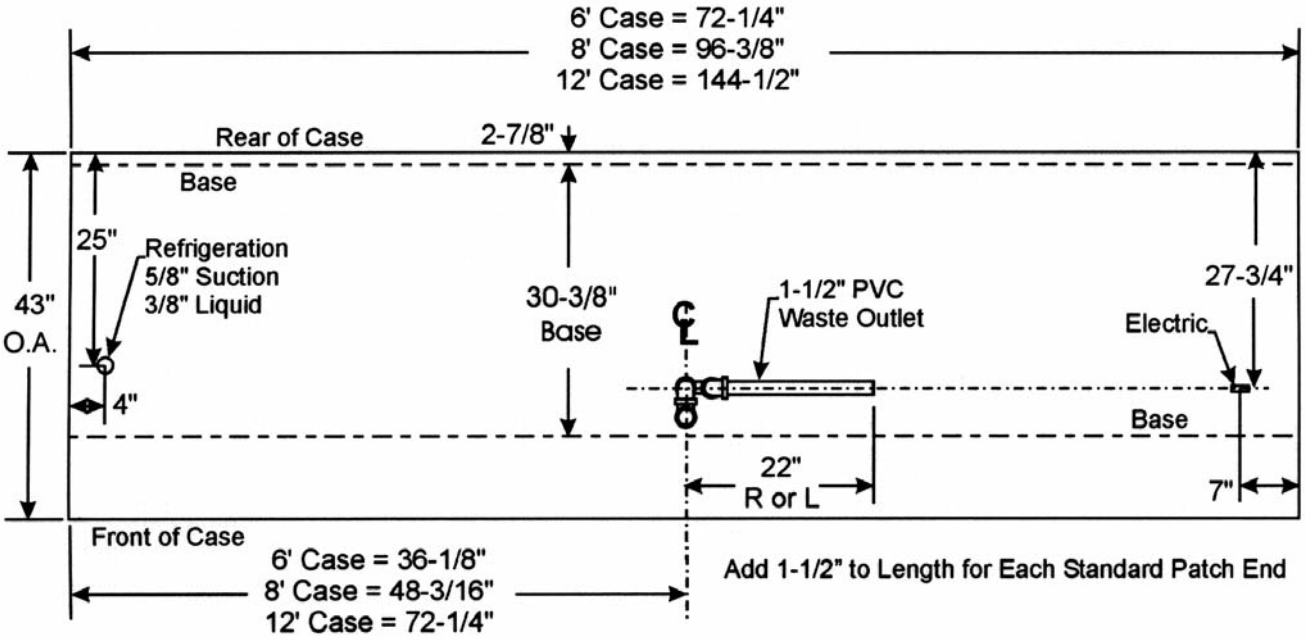
UL SANITATION approved in accordance with ANSI/NSF – 7.

CASE BTUH REQUIREMENTS are calculated to produce approximately the indicated entering-air temperature with absolute maximum operating ambient limits of **75°F & 55RH**.

N2MHP CROSS SECTION



FLOOR PLAN



INSTALLATION PROCEDURES

Carpentry Procedures

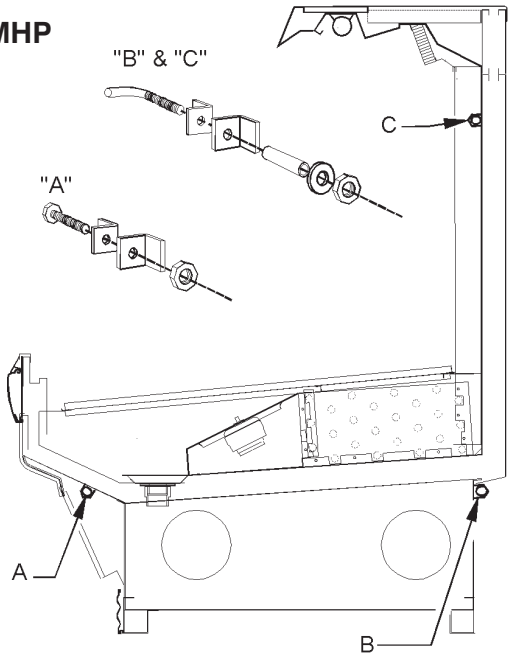
Case Line-Up

NOTE

See the "General-UL/NSF I&S Manual" for the proper case line-up procedures.

Case Pull-Up Locations

N2MHP



The N2MHP models have four pull-ups at each end of the case. Pull-ups A, B, C and D are located as shown and should be installed and tightend starting with A and finishing with D.

See "General-UL/NSF I&S Manual" for line-up assembly instructions.

Refrigeration Procedures

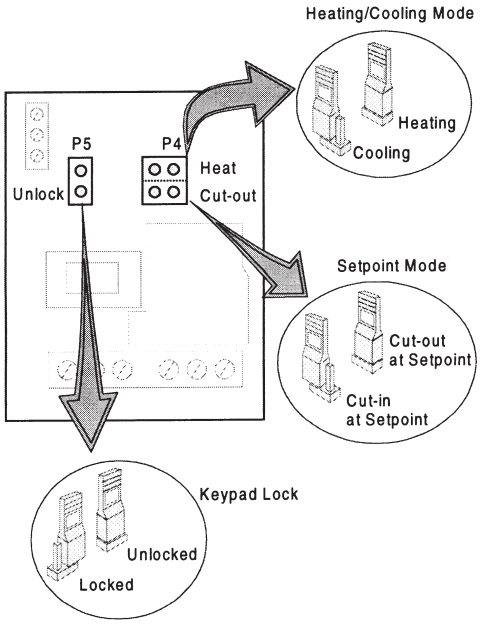
Refrigeration system and superheat instructions can be found in the "General-UL/NSF I&S Manual". Electronic temperature control information is listed below.

Electronic Temperature Control

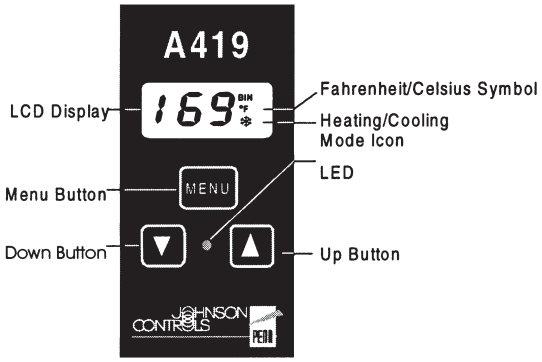
Whenever a N2MHP uses an electronic thermostat and solenoid valve for temperature control, use the following instructions to properly set-up the electronic thermostat.

Setting the Electronic Thermostat

1. Remove the four screws and cover from the electronic thermostat.
2. Connect sensor wires to the common (COM) and sensor (SEN) terminals of the terminal strip located at the top left of the printed circuit board. The sensor leads are interchangeable.



3. Set the Heating/Cooling jumper blocks to the "COOL" position.
4. Set the Cut-in at Setpoint/Cut-out at Setpoint jumper blocks to the "Cut-out at Setpoint" position.
5. Set the keypad Locked/Unlocked jumper blocks to the "Unlocked" position.
6. Replace the electronic thermostat cover and secure with four screws.



7. To adjust the setpoint:

a. Push the Menu Button. "SP" will flash on the LCD display.
b. Push the Menu Button one more time and a setpoint temperature will be displayed.
c. Push the Up or Down Button until the desired setpoint is displayed.
N2MHP = 25°F
d. Push the Menu Button.

8. To adjust the differential:
a. Push the Menu Button. "SP" will flash on the LCD display.
b. Push the Down Button until "DIF" is shown on the LCD display.
c. Push the Menu Button one more time and a differential number will be displayed.
d. Push the Up or Down Button until the desired differential setting is displayed.
N2MHP (all applications) = 2°F
d. Push the Menu Button.

With the cooling mode selected, the differential is ABOVE the setpoint. The relay will energize and the LED indicator will illuminate when the temperature reaches the differential setting. When the temperature drops to the setpoint, the relay and LED indicator will de-energize and refrigeration will stop.

The settings above are specific to TYLER N2MHP cases. Other applications will require different setpoints and differentials.

Electrical Procedures

Electrical Considerations

CAUTION

Make sure all electrical connections at components and terminal blocks are tight. This prevents burning of electrical terminals and/or premature component failure.

NOTE

The raceway houses the electrical wiring, components and terminal blocks for the case. Remove the lower front cladding to access the raceway.

Case Fan Circuit

This circuit is to be supplied by an uninterrupted, protected 120V circuit. The case fan circuit is not cycled during defrost.

Fluorescent Lamp Circuit

Case lighting is supplied by T-8 electronic ballast lights. It is controlled by a light switch in each case. The standard lighting is 1-row of T-8 canopy lights. N2MHP models also offers up to 3 rows of optional T-8 shelf lights.

Anti-Sweat Heater Circuit

N2MHP cases have one anti-sweat heater in the top light assembly. All anti-sweat heaters are wired directly to the main power supply so they can operate at all times.

Defrost Information

See "General-UL/NSF I&S Manual" for operational descriptions for each type of defrost control.

Defrost Control Chart

Defrost Type	Defrosts Per Day	Defrost Duration (Min)	Term. Temp.
Off Time	6	26*	----

***See specification pages in this manual for pump down adjustment variations.**

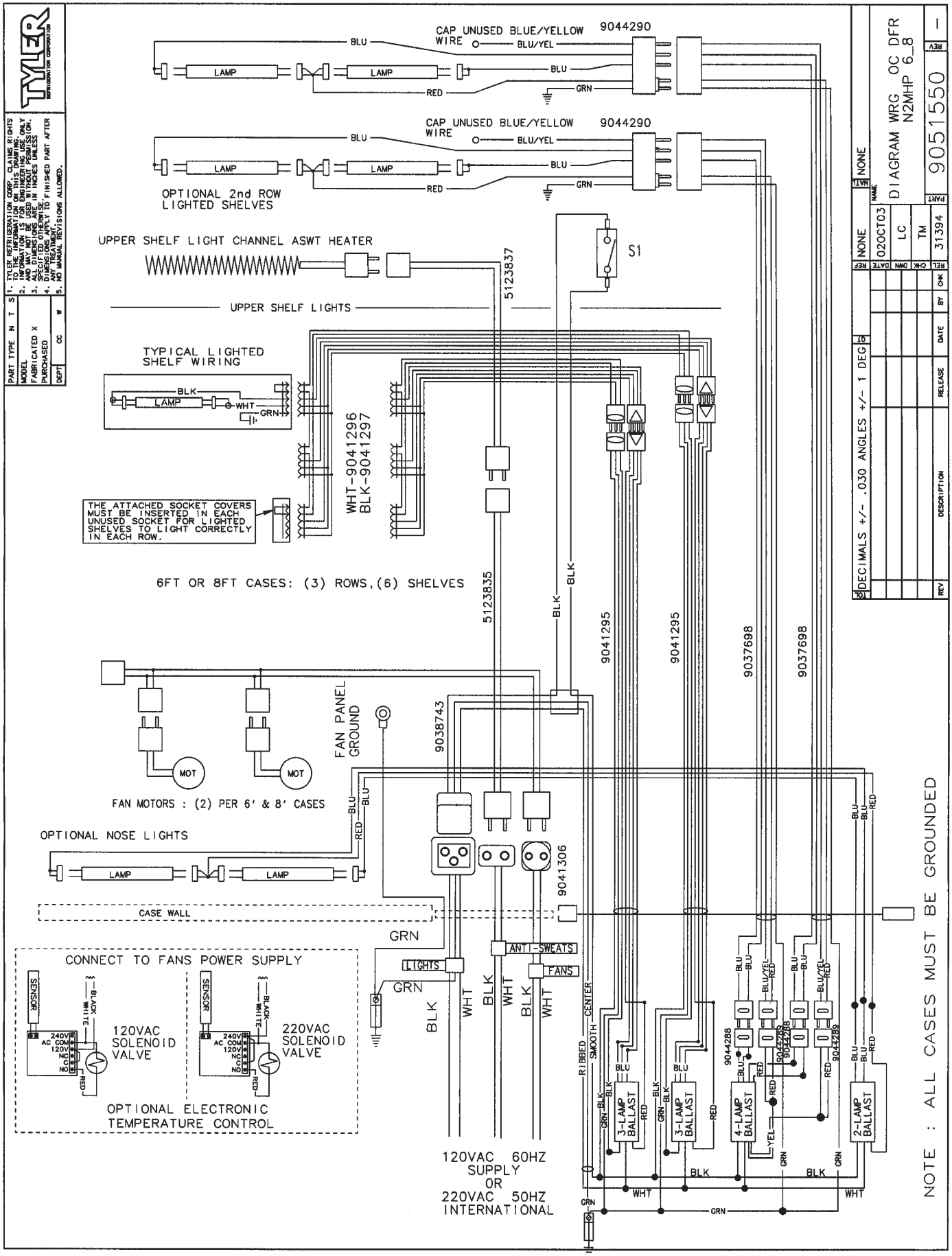
WIRING DIAGRAMS

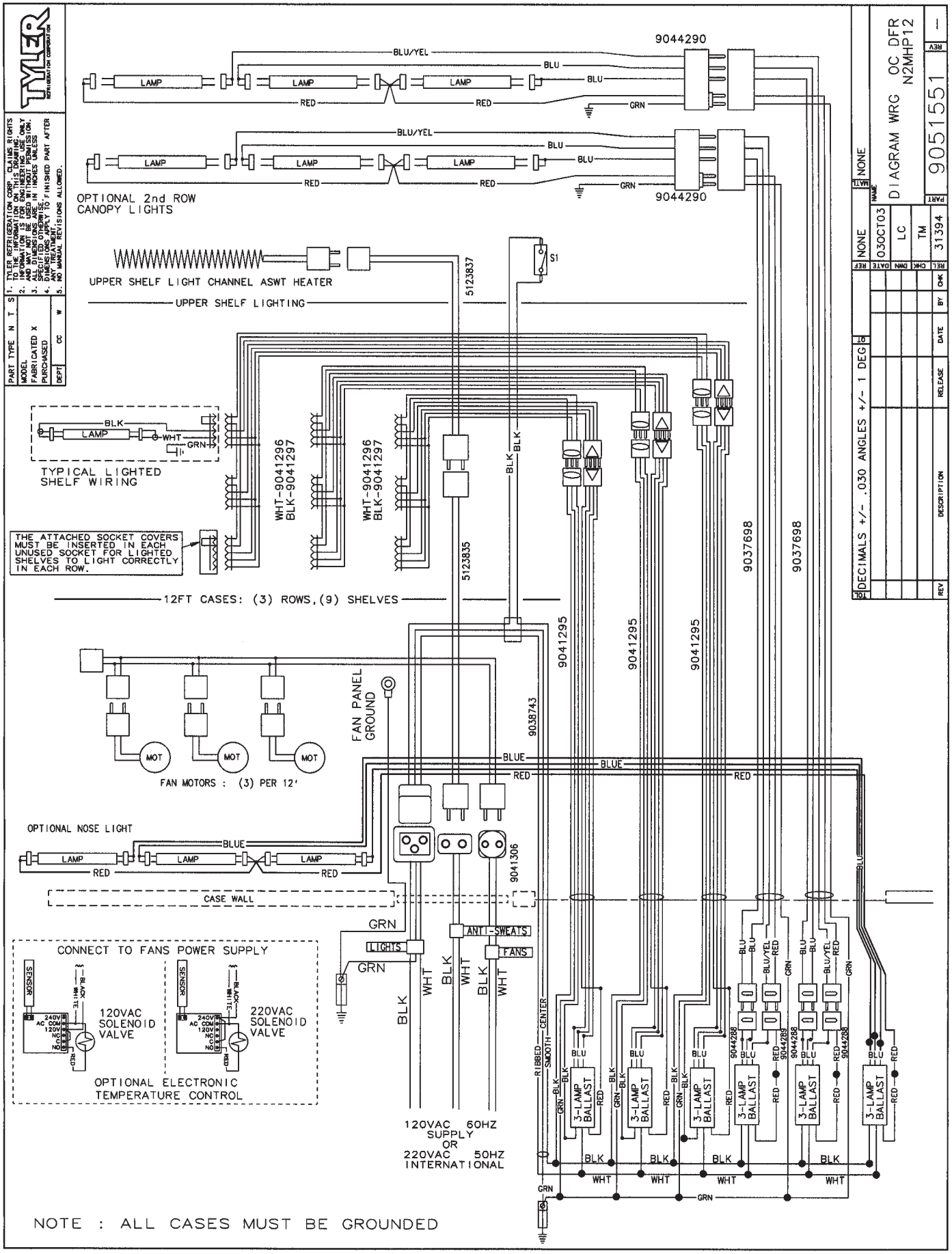
ELECTRICIAN NOTE - OVERCURRENT PROTECTION

120V circuits should be protected by 15 or 20 Amp devices per the requirements noted on the cabinet nameplate or the National Electrical Code, Canadian Electrical Code - Part 1, Section 28. 208V defrost circuits employ No. 12 AWG field wire leads for field connections. On remote cases intended for end to end line-ups, bonding for ground may rely upon the pull-up bolts.

The following wiring diagrams on pages 8 and 9 will cover the N2MHP case circuits including all defrost and lighting wiring circuits.

N2MHP Domestic & Export (50 Hz) Case Circuits




TYLER
DIAGRAM WRG OC DFR N2MHP12
9051551
9044290
BLU/YEL
BLU
RED
GRN
LAMP
OPTIONAL 2nd ROW CANOPY LIGHTS
UPPER SHELF LIGHT CHANNEL ASWT HEATER
UPPER SHELF LIGHTING
5123837
S1
TYPICAL LIGHTED SHELF WIRING
BLK
WHT
GRN
WHT-9041296
BLK-9041297
THE ATTACHED SOCKET COVERS MUST BE INSERTED IN EACH UNUSED SOCKET FOR LIGHTED SHELVES TO LIGHT CORRECTLY IN EACH ROW.
5123835
9037698
12FT CASES: (3) ROWS,(9) SHELVES
9041295
FAN PANEL GROUND
9038743
MOT
FAN MOTORS : (3) PER 12'
BLUE
OPTIONAL NOSE LIGHT
9041306
CASE WALL
CONNECT TO FANS POWER SUPPLY
SENSOR
120VAC SOLENOID VALVE
220VAC SOLENOID VALVE
OPTIONAL ELECTRONIC TEMPERATURE CONTROL
LIGHTS
ANTI-SWEATS
FANS
RIBBED
SMOOTH
CENTER
3-LAMP BALLAST
9044288
9044289
120VAC 60HZ SUPPLY OR 220VAC 50HZ INTERNATIONAL
NOTE : ALL CASES MUST BE GROUNDED

CLEANING AND SANITATION

Component Removal and Installation Instructions for Cleaning

Shelves and Shelf Brackets

1. Remove product from shelves.
2. If shelf has a light, unplug the light cord from the socket in the rear duct panel. Completely insert socket cover in the light socket to protect the receptacle.
3. Push shelves back and then lift up and out to remove them from the shelf brackets.
4. Remove shelf brackets from slots in rear uprights.
5. After cleaning, replace in reverse order.

Bottom Trays

1. Remove product from bottom of case.
2. Grasp and lift out each of the bottom trays from the case interior.
3. After cleaning, replace in reverse order.

Front Air Ducts

1. Remove bottom trays, see this page.
2. Lift out front air duct sections.
3. After cleaning, replace in reverse order.

Rear Duct Panels (w/o Shelf Light Sockets)

1. Remove shelves and bottom trays, see above.
2. Remove mounting screws and rear duct panels from case.
3. After cleaning, replace and secure rear duct panels in reverse order.

(with Shelf Light Sockets)

1. Remove shelves and bottom trays, see above.
2. Remove mounting screws from rear duct panel.
3. Slowly lift out rear duct panel until the shelf harness connector near the top of the panel can be accessed.
4. Disconnect shelf harness connector and complete removing the rear duct panel.

WARNING

Rear duct panels with electrical receptacles can be cleaned without removing the electrical receptacles. Do not get moisture on electrical wires when cleaning under this cover. Moisture on wires could cause premature product failure and/or personal injury or death from electrical shock.

5. After cleaning, reconnect the shelf harness connector and replace and secure rear duct panels in reverse order.

Discharge Air Honeycomb

1. Loosen screws securing rear retainer plate.

NOTE

Note position of the honeycomb grid during removal so it can be reinstalled the same way.

2. Slide rear retainer plate back until the honeycomb grid sections can be removed from the top duct.

CAUTION

Improper installation of the honeycomb grid section could result in improper air flow and/or poor refrigeration.

3. After cleaning, replace honeycomb grid sections as they were removed and secure with the rear retainer plate and screws.

Lower Cladding

1. Remove kickplate from kickplate supports. (See General-UL/NSF I&S Manual.)
2. Remove mounting screws from top and bottom of lower cladding and remove lower cladding.
3. After cleaning, replace in reverse order.

Upper Cladding

1. Remove lower cladding, see above.
2. Remove color band, bumper and bumper retainer from case. (See General-UL/NSF I&S Manual.)
3. Remove mounting screws from top and bottom of upper cladding and remove upper cladding.
4. After cleaning, replace upper cladding and remaining components in reverse order.

Cleaning Instructions

WARNING

TYLER Refrigeration does not recommend the use of high pressure cleaning equipment on display cases!! High pressure cleaners can penetrate and/or damage joint seals. Damaged seals allow water leaks and/or air leaks that can cause poor case refrigeration.

CAUTION

- **When cleaning this case, try not to introduce water into the case faster than it can be carried away by the waste outlet.**
- **Liquid chlorine bleach is corrosive to metals. The use of bleach or products containing bleach will damage metal surfaces and void the case warranty.**
- **Sanitize the case with Quaternary Ammonium Solutions (ex: KAYQUAT II, J-512 Sanitizer, SANIQUAT 512, etc...) approved per 21CFR 178.1010, followed by adequate draining and air drying. These solutions may be obtained from Kay Chemical Co., Johnson Wax Professional, Coastwide Laboratories, etc....**
- **Always use a soft cloth or sponge with mild detergent and water to clean any glass. Never use abrasives or scouring pads to clean glass. They can scratch and/or damage the glass.**

See "General (UL/NSF) I&S Manual" for case cleaning instructions.

Stainless Steel Cleaning Methods

The cleaning data in the following stainless steel cleaning chart was supplied by AISI. The information was supplied by Prime Metals Division, Alumax Aluminum Corporation.

TYPE OF CLEANING	CLEANING AGENT*	APPLICATION METHOD**	EFFECT ON FINISH
Routine cleaning	Soap, ammonia or detergent and water.	Sponge with cloth, then rinse with clear water and wipe dry.	Satisfactory for use on all finishes.
Smears and fingerprints	Arcal 20, Lac-O-Nu, Lumin Wash O'Cedar Cream Polish, Stainless Shine	Rub with cloth as directed on the package.	Satisfactory for use on all finishes. Provides barrier film
Stubborn spots and stains, baked-on splatter, and other light discolorations	Allchem Concentrated Cleaner	Apply with damp sponge or cloth.	Satisfactory for use on all finishes.
	Samae, Twinkle, or Cameo Copper Cleaner	Rub with damp cloth.	Satisfactory for use on all finishes if rubbing is light.
	Grade FFF Italian pumice, whiting or talc	Rub with damp cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Liquid NuSteel	Rub with dry cloth. Use a small amount of cleaner.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Paste NuSteel or DuBois Temp	Rub with dry cloth. Use a small amount of cleaner.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.

TYPE OF CLEANING	CLEANING AGENT*	APPLICATION METHOD**	EFFECT ON FINISH
	Cooper's Stainless Steel Cleaner, Revere Stainless Steel Cleaner	Apply with damp sponge or. cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Grade F Italian pumice, Steel Bright, Lumin Cleaner, Zud or Restoro	Rub with a damp cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Penny-Brite or Copper-Brite	Rub with a dry cloth. Use a small amount of cleaner.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
Heat tint or heavy discoloration	Penny-Brite or Copper-Brite	Rub with a dry cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Paste NuSteel or DuBois Temp	Rub with dry cloth. Use a small amount of cleaner.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Revere Stainless Steel Cleaner	Apply with a damp sponge or cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
	Allen Polish, Steel Bright, Wyandotte or Zud	Rub with a damp cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and No. 7 and 8 (polished) finishes.
Burnt-on foods and grease, fatty acids, milkstone (where swabbing or rubbing is not practical)	Easy-Off, De-Grease-It, 4-6% hot solution of such agents as trisodium tripolyphospate, or 5-15% caustic soda solution	Apply generous coating. Allow to stand for 10-15 min. Repeated application may be necessary.	Excellent removal, satisfactory for use on all finishes.
Tenacious deposits, rusty discolorations, industrial atmospheric stains	Oakite No. 33, Dilac, Texo 12, Texo N.Y., Flash-Klenz, Caddy Cleaner, Turco Scale 4368 or Permag 57.	Swab and soak with clean cloth. Let stand 15 minutes or more according to directions on package. Rinse and dry.	Satisfactory for use on all finishes.
Hard water spots and scale	Vinegar	Swab or wipe with a cloth. Rinse with water and dry.	Satisfactory for use on all finishes.
	5% oxalic acid, 5% sulamic acid, 5-10% phospheric acid, or Dilac, Oakite No. 33, Texo 12 or Texo N.Y.	Swab or soak with a cloth. Let stand 10-15 minutes. Always follow with neutralizer rinse, and dry.	Satisfactory for use on all finshes. Effective on tenacious deposites or where scale has built up.
Grease and oil	Organic solvents such as carbon tetrachloride, trichlorethylene, acetone, kerosene, gasoline, benzene, alcohol and chlorethane n.u.	Rub with a cloth. Organic solvents may be flammable and/or toxic. **Observe all precautions against fire. Do not smoke while vapors are present. Be sure area is well ventilated.**	Satisfactory for use on all finishes.

*** Use of proprietary names is intended only to indicate a type of cleaner, and does not constitute an endorsement, nor is omission of any proprietary cleanser to imply its inadequacy. It should be emphasized that all products should be used in strict accordance with instructions on package.**

**** In all applications a sponge or fibrous brush or pad are recommended. DO NOT use ordinary steel wool, steel brushes, chlorine bleach or products containing bleach for cleaning or sanitizing stainless steel.**

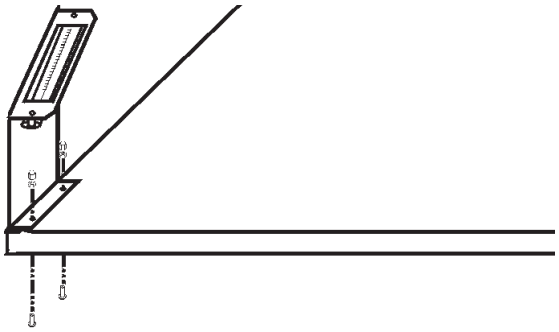
GENERAL INFORMATION

NSF Product Thermometer Installation

1. Unwrap the thermometer and bracket assembly shipped loose with the case.
2. Position bracket in front left corner of the left-most bottom tray. Making sure the bracket is flush with the left edge, use the bracket holes as a template for where to drill the holes.
3. Drill two .196" holes in the bottom tray.

NOTE

For ease of installation, position the washers and capnuts on the top side of the bracket and bottom tray.

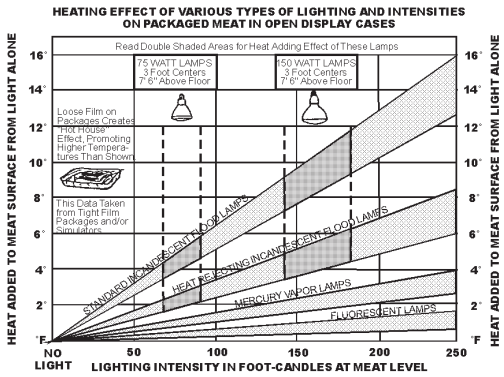


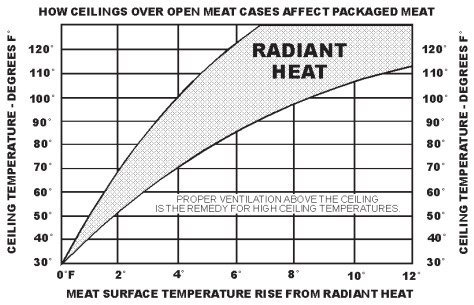
4. Mount the bracket to the bottom tray with two screws, washers and capnuts.

Radiant Heat Information

A wide temperature range is shown for each type of lighting. This data does not show all situations. Many situations will have higher package warm-up figures than indicated.

It is generally known that the temperature of displayed meat in refrigerated cases will run higher than the circulated air temperature of





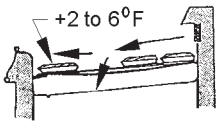
the cases. A dial thermometer stuck into the center of a piece of meat compared with one in the air stream quickly confirms this fact. Another fact is that the surface temperature of the meat will be higher than the center temperature due to radiant heat. TYLER's ongoing research identifies sources of radiant heat and accurately measures and records it. These charts were developed from the information gathered during this research. Two major sources of radiant heat are from display lights and ceiling surfaces. Additional heat sources come from bad display practices which either overload the case with product or allow voids in the product display. Poor display practices impair the efficiency of the refrigeration, adding to the surface temperature of the meat. Bacteria and molds

grow when surface temperatures rise above 45°F. This prematurely discolors displayed meats and causes unnecessary meat department losses.

Radiant Heat Measurement

Place two accurate dial thermometers side by side in a case. Cover one of the thermometer stems with black friction tape. The temperature difference is the approximate amount of radiant heat. A change in display lighting or a reduction of high ceiling temperatures (over 80°F) could reduce the radiant heat in the case.

Display Practices



Voids in display raise surface temperature of package in front of void 2 to 6⁰ F.

Encourage butchers to maintain all meat below the case load lines and to eliminate product voids. Case screens could be covered in some instances to keep the refrigerated air over the display.

CAUTION

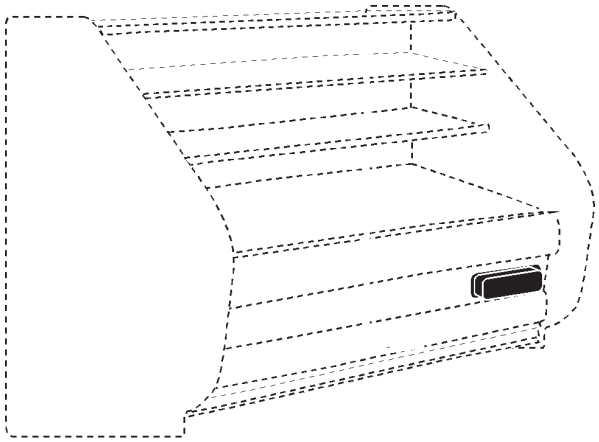
The quality damage done to meat products by high temperatures and/or contamination during delivery, cooler storage, cutting and wrapping cannot be repaired by placing the products into properly operating display cases.

SERVICE INSTRUCTIONS

Light Servicing

See "General-UL/NSF I&S Manual" for T-8 lamp, fan blade and motor, and color band and bumper replacement instructions.

Ballast and Lighting Locations



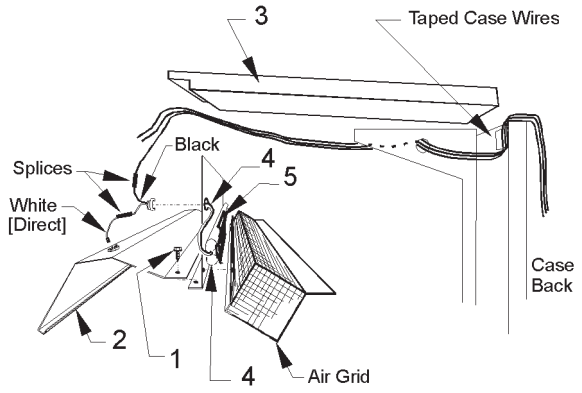
All N2MHP light ballasts are located behind the lower front cladding in the raceway. This includes remote ballasts for optional shelf lights. The canopy light(s) are under the canopy light channel in the top of the case. The optional shelf lights are mounted in separate light fixtures under the front of each shelf section.

In order to retain safety approval with Underwriters Laboratory and the Canadian Standards Association, the mounting of electrical components and interconnecting wires must not deviate from the following instructions. Only qualified personnel are authorized to install the accessory items. TYLER Refrigeration recommends you order all component parts from its Service Parts Department.

Anti-Sweat Replacement

WARNING

Shut off or disconnect power supply to case before changing an anti-sweat. Electrical power from wire ends could damage other components and/or cause personal injury or death.



1. Remove screws (1) and lower the top light channel assembly (2) from top of the case (3).
2. Disconnect or cut the defective anti-sweat wires (4) from the case wires.
3. Remove and replace the aluminum tape (5) and defective anti-sweat wire (4) from the back of the top light channel assembly (2).
4. Position new anti-sweat wire (4) in case) and secure with new aluminum tape (5).
5. Reconnect the new anti-sweat wires (4) to case wires and reinstall the top light channel assembly (2) with screws (1).
6. Restore electrical power to the case.

PARTS INFORMATION

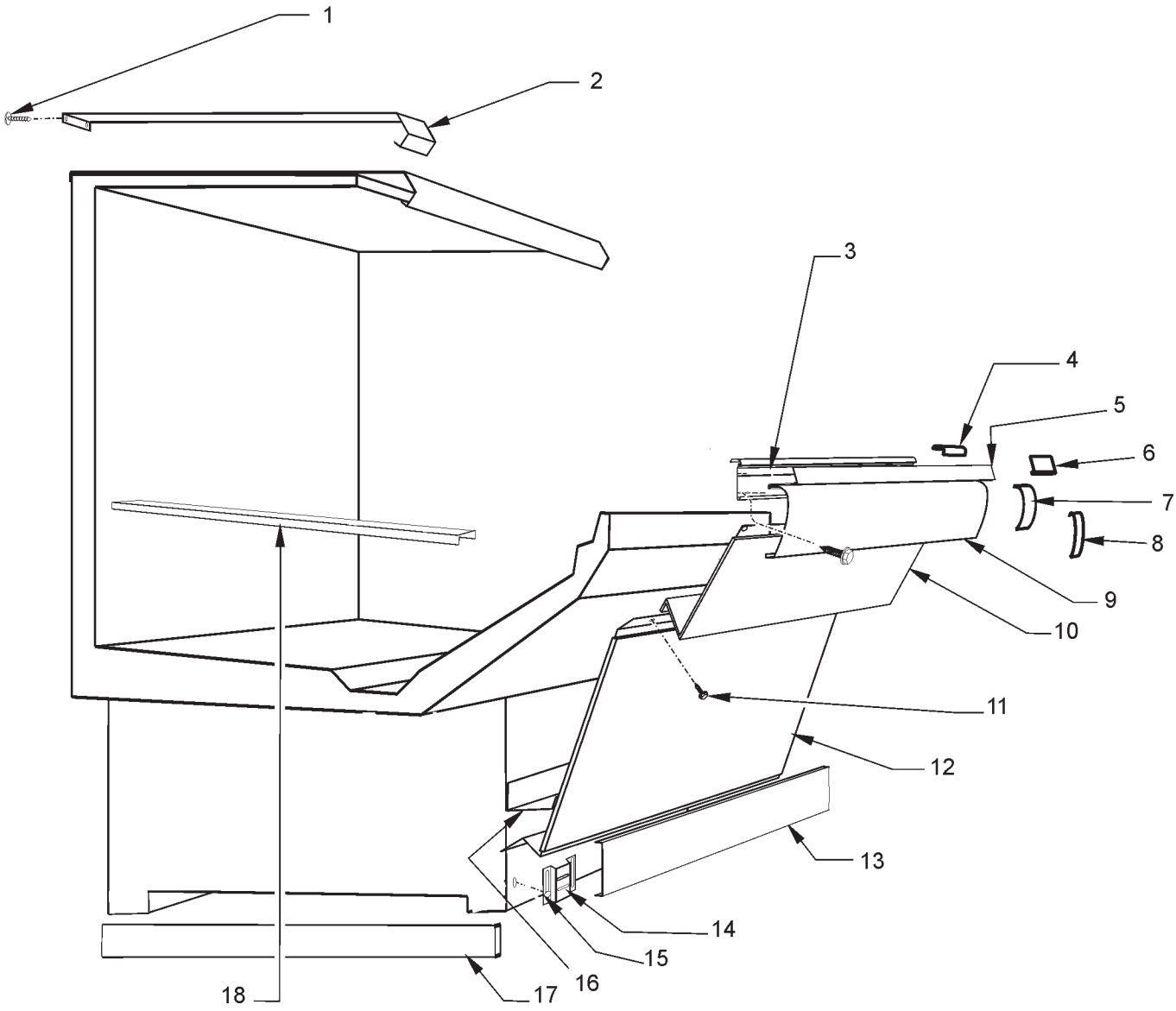
Operational Parts List

Case Usage		**Domestic**	
Electrical Circuit		115 Volt 60 Hertz	
Case Size	6’	8’	12’
Fan Motor	5243498 9 Watt	5243498 9 Watt	5243498 9 Watt
Fan Motor Brackets	5962268	5962268	5962268
Fan Bracket Plate	9041077	9041077	9041077
Fan Blades (8.75” 25° 5B)	9038461	9038461	9038461
Opt. ECM Fan Motor	9025000 12 Watt	9025000 12 Watt	9025000 12 Watt
Opt. ECM Fan Motor Brackets	5205112	5205112	5205112
Opt. ECM Fan Blades (8.75” 25° 5B)	9038461	9038461	9038461
T-8 Ballast (canopy & shelf)			
(canopy / 1-row)	5991029	5991029	5991030
(opt. shelf / 2-row or 3-row)	5991030	5991030	5991030
T-8 Lampholder (canopy or shelf)	9041897	9041897	9041897
Anti-Sweat Heater Wire (top light)	9039372	9045395	9046396
NSF Product Thermometer	5967100	5967100	5967100

For information on operational parts not listed above contact the TYLER Service Parts Department.

Cladding and Trim Parts Lists

		N2MHP		
Item	**Description**	**6'**	**8'**	**12'**
1	Screw (per cover)	5100217 (2)	5100217 (2)	5100217 (2)
2	Joint Trim, Rear Riser	9042342	9042342	9042342
3	Bumper Retainer/Handrail	----------	color per order	----------
	Shoulder Screw, Bumper Ret.	9025833 (12)	9025833 (18)	9025833 (24)
4	Handrail Backer, Ptd.	9025316	9025316	9025316
5	Color Band, Ptd.	9023796	9023799	9023801
6	Color Band Backer, Ptd.	9040223	9040223	9040223
7	Bumper Backer	----------	color per order	----------
8	Bumper End Trim	----------	color per order	----------
9	Bumper	----------	color per order	----------
10	Upper Front Cladding, Ptd.	9025132	9025133	9025134
11	Screw	5183536 (8)	5183536 (11)	5183536 (16)
12	Lower Front Cladding, Ptd.	9025446	9025447	9025448
13	Kickplate, Ptd.	9039015	9039016	9039017
	Kickplate Joint Trim, Ptd.	9039020	9039020	9039020
	Screw	9037551 (6)	9037551 (6)	9037551 (6)
14	Kickplate Support	9039022 (3)	9039022 (4)	9039022 (4)
15	Screw	5183536 (6)	5183536 (8)	5183536 (8)
16	Raceway	5233273	5233274	5233275
17	LH End Close-off, Ptd.	9022460	9022460	9022460
	RH End Close-off, Ptd.	9022467	9022467	9022467
	Screw	5183536 (6)	5183536 (6)	5183536 (6)
18	Horizontal Joint Trim	5964733	5964733	5964733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