

TYLER

REFRIGERATION



Carrier

A United Technologies Company

N6DHPACA
YE1170 YE1171
YE1174 YE1175
YE1176 YE1178

A^{series} Advantage™

Installation & Service Manual



||| Airewave®

N6DHPACLA, N6DHPACMA, N6DHPACHA

**HIGH PERFORMANCE AIR CURTAIN MULTI-SHELF MERCHANDISER
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 Air Curtain Medium Temperature, Multi-Shelf Dairy, Deli, Produce and Juice Merchandiser models are covered in this manual:

MODEL	DESCRIPTION
N6DHPACLA	6', 8' & 12' HIGH PERF. AIR CURTAIN MERCHANDISER WITH 18" FRONT
N6DHPACMA	6', 8' & 12' HIGH PERF. AIR CURTAIN MERCHANDISER WITH 22" FRONT
N6DHPACHA	6', 8' & 12' HIGH PERF. AIR CURTAIN. MERCHANDISER WITH 26" FRONT

SPECIFICATIONS

N6DHPAC(L, M, H)A High Perf. Air Curtain Med. Temp. Merchandisers

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) PRIM. / SEC.		
N6DHPACLA	6'8"/12'	MED TEMP	1,000*	1,059*	+28**	+26	+34.5	110***	170***	0.55****
N6DHPACMA	6'8"/12'	MED TEMP	960*	1,016*	+28**	+26	+34.5	110***	170***	0.55****
N6DHPACHA	6'8"/12'	MED TEMP	920*	974*	+28**	+26	+34.5	110***	170***	0.55****

- * Capacity data listed for cases with 2 rows of T-8 canopy lights and 4 rows of unlighted 22" deep shelves. Adjustments must be made to this base rating for each option installed on this case. ADD 23 BTUH/FT for each row of lighted shelves. For cases using peg bars, ADD 132 BTUH/FT to parallel load or ADD 153 BTUH/FT to conventional load. NOTE: Baffles are required above each peg bar row to provide proper air flow around the food products. For sizing all refrigeration equipment other than TYLER, use conventional BTUH values.
- ** Evaporator temperature is based on the saturated pressure leaving the case.
- *** Air velocity measured 1 hour after defrost at the front of the top discharge air duct using an ALNOR JR. velometer with a scoop.
- **** This is an average refrigeration charge per foot based on R22 and R404A refrigerant usage.

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 PER CASE		TOTAL ECM FANS				TOTAL ANTI-SWEATS	
		PRIM.	SEC.	AMPS		WATTS		AMPS	WATTS
				PRIM. / SEC	PRIM. / SEC				
N6DHPAC(L/M/H)A	6'	2	1	0.64	0.22	34.0	11.0	N/A	N/A
N6DHPAC(L/M/H)A	8'	2	2	0.64	0.44	34.0	22.0	N/A	N/A
N6DHPAC(L/M/H)A	12'	3	2	0.96	0.44	51.0	22.0	N/A	N/A

T-8 Lighting with Electronic Ballasts (120 Volt)

MODEL	CASE LENGTH	CANOPY LIGHTS* --- PER ROW				SHELF LIGHTS -- PER ROW										NOSE LIGHT		MAX. LIGHTING (8 ROWS)	
		AMPS		WATTS		AMPS					WATTS					AMPS	WATTS	AMPS	WATTS
		1	2	1	2	1	2	3	4	5	1	2	3	4	5				
N6DHPACA	6'	0.40	0.75	48	90	0.60	0.90	1.20	1.50	1.90	72	108	144	180	228	0.40	48	3.05	366
N6DHPACA	8'	0.50	0.95	60	114	0.90	1.20	1.60	1.90	2.40	108	144	192	228	288	0.50	60	3.85	462
N6DHPACA	12'	0.70	1.40	84	168	1.35	1.80	2.40	2.85	3.55	162	288	288	342	426	0.70	84	5.65	678

* Standard lighting for this case is 2 rows 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 CUT-IN	R22 CUT-OUT	R404A CUT-IN	R404A CUT-OUT	
TIME OFF	6	18	FRONT LOAD - ALL APPLICATIONS	33°F	32°F	52	66	50°F	36°F	64°F	47°F	6.9 (max.)

- * All high performance cases use OFF CYCLE defrost
- ** NOTE: 18 minutes is for EPR with suction stop for defrost isolation. Defrost times increases by four minutes when defrost isolation is by pump down.
- *** If EPR is utilized, use the settings shown in the chart. ADD 0.5# to EPR setting for each 1000 foot rise in elevation.
- **** Recommended 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	6'	8'	12'	16'	20'	24'	28'	32'	36'	40'	44'	48'	52'	56'
N6DHPACA / R22	5/8"	5/8"	7/8"	7/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"

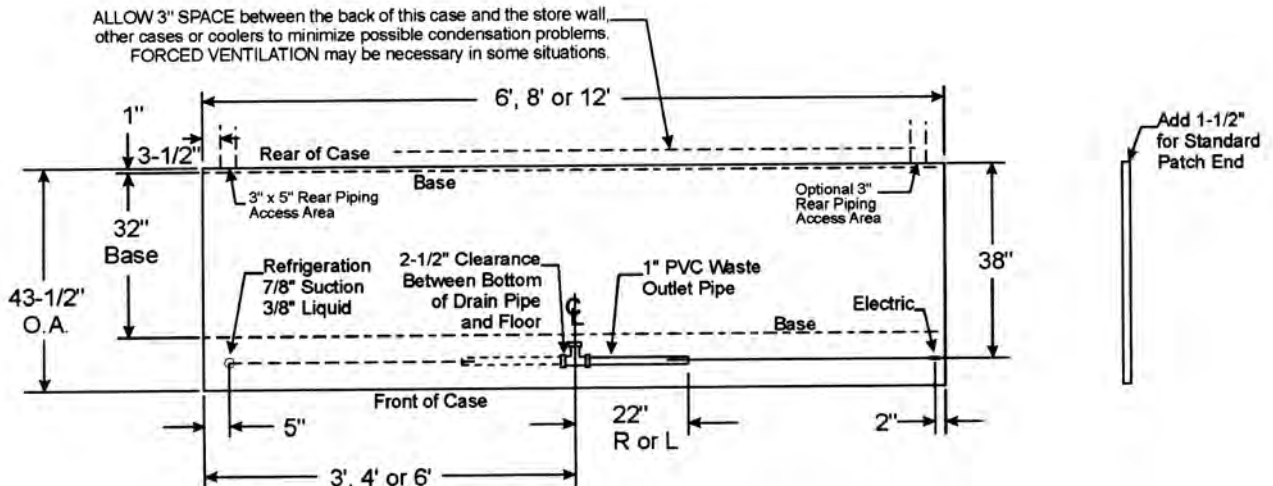
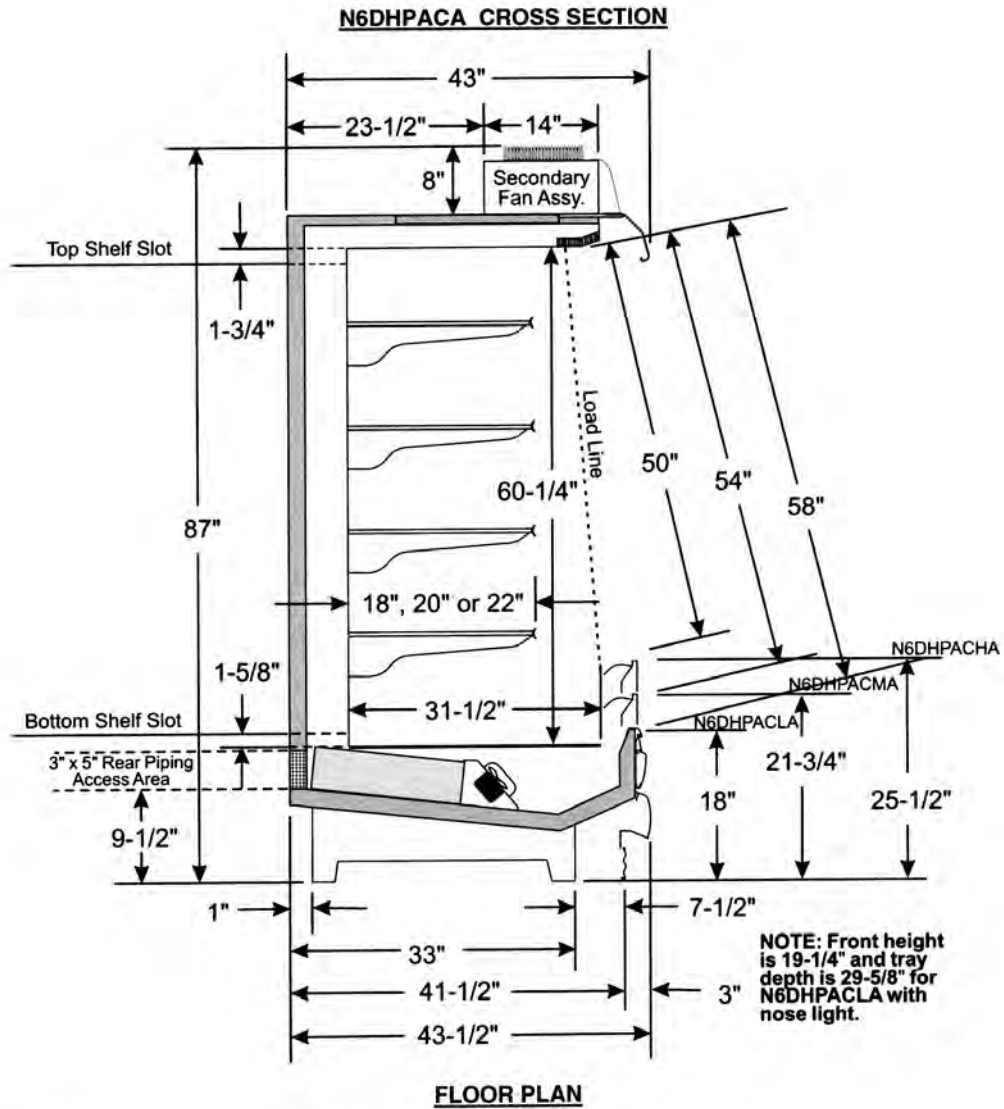
CASE CIRCUITS: This case requires a 120V circuit for fans and lights.

SHELVING NOTES: Shelving widths available for these cases are 15", 18", 20" and 22". When two sizes are used, the smaller must be on top.

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

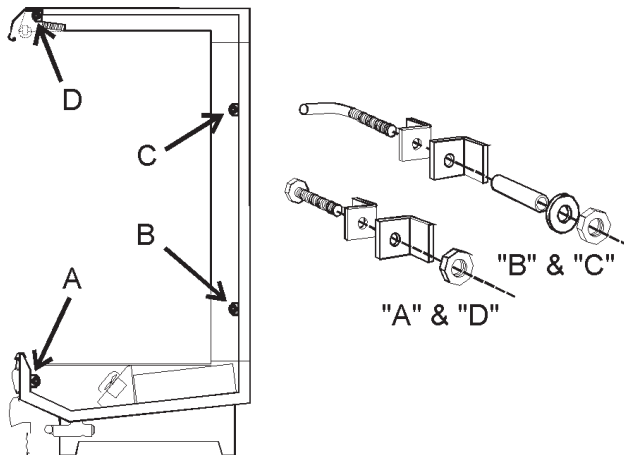
The information contained herein is based on technical analysis and/or tests performed in a controlled lab environment that are consistent with industry practices, and is intended as a reference for system sizing and configuration purposes only and for use by persons having technical skill at their own discretion and risk. Conditions of use are outside of Tyler's control and we do not assume and hereby disclaim any liability for results obtained or damages incurred through application of or reliance on the data presented, including but not limited to specific energy consumption with any particular model or installed application. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



INSTALLATION PROCEDURES

Carpentry Procedures

Case Pull-Up Locations



All N6DHPACA 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 tightened starting with A and finishing with D.

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

Refrigeration Procedures

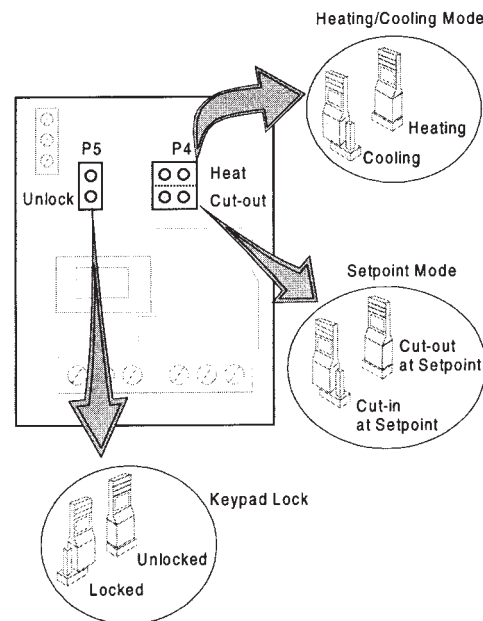
Refrigeration system and superheat instructions can be found in the “General (UL/NSF) I&S Manual”. Case electronic temperature control information is listed below.

Electronic Temperature Control

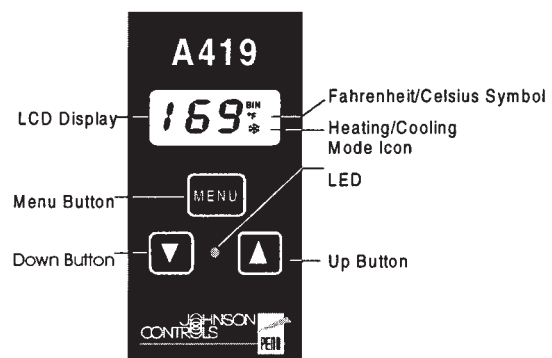
Whenever an N6DHPACA uses an electronic thermostat and solenoid valve for temperature control, use the following instructions to properly set-up the electronic thermostat.

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.
N6DHPAC (w/shelving) = 32°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.
N6DHPACA (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 N6DHPACA 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 will prevent burning of electrical terminals and/or premature component failure.

NOTE

Raceway covers will be shipped loose. See the "General-UL/NSF I&S Manual" for raceway cover installation and removal instructions.

Case Fan Circuit

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

Fluorescent Lamp Circuit

N6DHPACA case lighting is supplied by T-8 electronic ballast lights. The standard lighting is 1-row of horizontal canopy lights. Case lighting options include 2-rows of horizontal canopy lights, up to 5 rows of shelf lights and a nose light.

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)
Off Time (w/ shelves)	6	18*

*** 18 minutes is for EPR only. Defrost duration increases by 4 minutes when controller methods do not include an EPR valve.**

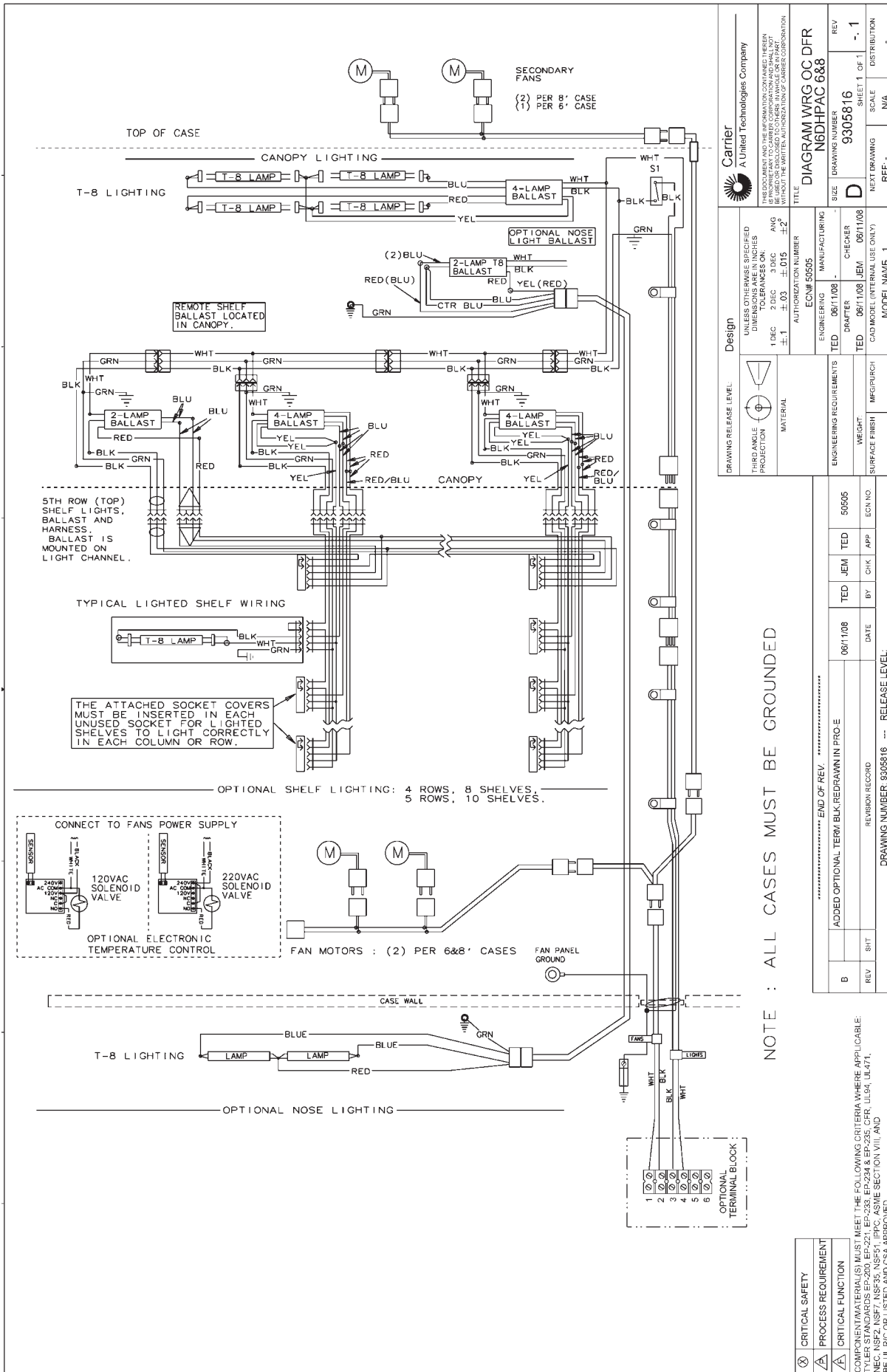
WIRING DIAGRAMS

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.

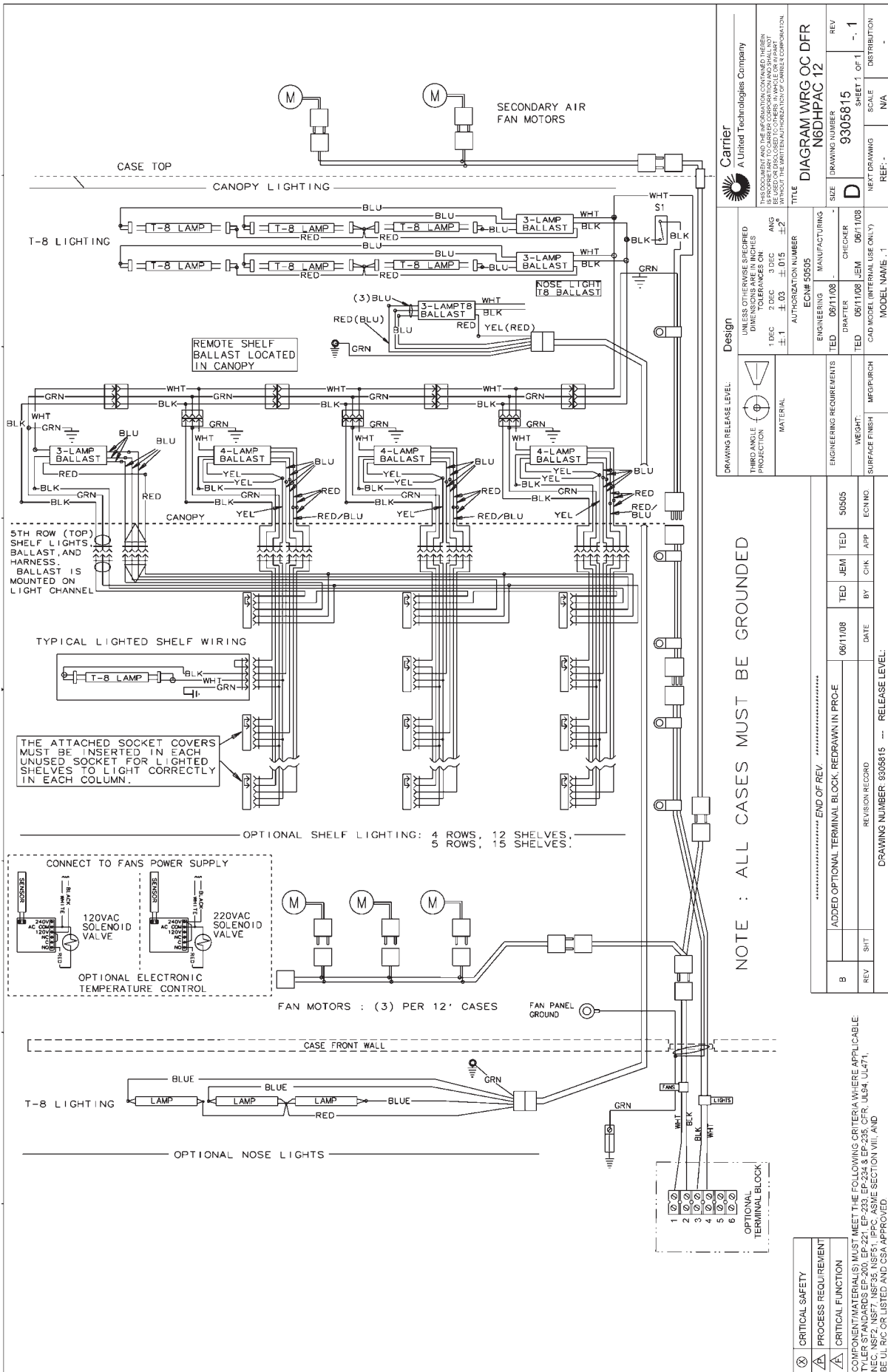
The following wiring diagrams on pages 8 and 9 will cover the N6DHPACA case circuits. The defrost and lighting circuits are covered in the case circuit diagrams.

N6DHPAC(L, M, H)A Domestic & Export (50 Hz) Case Circuits (6' & 8' Cases)



Carrier A United Technologies Company		DIAGRAM WRG OC DFR N6DHPAC 688	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DIMENSIONS: ±.005 ±.015 ±.020 ANGLES: ±.015 ±.020		TITLE: N6DHPAC 688 SIZE: D DRAWING NUMBER: 9305816 SHEET 1 OF 1	REV: -1 DISTRIBUTION: N/A
DESIGN: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DIMENSIONS: ±.005 ±.015 ±.020 ANGLES: ±.015 ±.020	AUTORIZATION NUMBER: ECFNF 50505 MANUFACTURING: 06/11/08 CHECKER: 06/11/08 JEM CAD MODEL: (INTERNAL USE ONLY) MODEL NAME: 1	ENGINEERING REQUIREMENTS: TED DRAMETER: TED WEIGHT: MGS/PURCH SURFACE FINISH: MGS/PURCH	NEXT DRAWING: SCALE: N/A REF.:
DRAWING RELEASE LEVEL: MATERIAL	END OF REV. *****	REV: B DATE: 06/11/08 REVISION RECORD:	DRAWING NUMBER: 9305816 RELEASE LEVEL:
CRITICAL SAFETY	PROCESS REQUIREMENT	CRITICAL FUNCTION	COMPONENT MATERIAL(S) MUST MEET THE FOLLOWING CRITERIA WHERE APPLICABLE: UL 94V-0 FOR UL94, UL471, NEC NFPA 70, NFPA 70B, NFPA 70E, NFPA 70F, NFPA 70G, NFPA 70H, NFPA 70I, NFPA 70J, NFPA 70K, NFPA 70L, NFPA 70M, NFPA 70N, NFPA 70O, NFPA 70P, NFPA 70Q, NFPA 70R, NFPA 70S, NFPA 70T, NFPA 70U, NFPA 70V, NFPA 70W, NFPA 70X, NFPA 70Y, NFPA 70Z, NFPA 70AA, NFPA 70AB, NFPA 70AC, NFPA 70AD, NFPA 70AE, NFPA 70AF, NFPA 70AG, NFPA 70AH, NFPA 70AI, NFPA 70AJ, NFPA 70AK, NFPA 70AL, NFPA 70AM, NFPA 70AN, NFPA 70AO, NFPA 70AP, NFPA 70AQ, NFPA 70AR, NFPA 70AS, NFPA 70AT, NFPA 70AU, NFPA 70AV, NFPA 70AW, NFPA 70AX, NFPA 70AY, NFPA 70AZ, NFPA 70BA, NFPA 70BB, NFPA 70BC, NFPA 70BD, NFPA 70BE, NFPA 70BF, NFPA 70BG, NFPA 70BH, NFPA 70BI, NFPA 70BJ, NFPA 70BK, NFPA 70BL, NFPA 70BM, NFPA 70BN, NFPA 70BO, NFPA 70BP, NFPA 70BQ, NFPA 70BR, NFPA 70BS, NFPA 70BT, NFPA 70BU, NFPA 70BV, NFPA 70BW, NFPA 70BX, NFPA 70BY, NFPA 70BZ, NFPA 70CA, NFPA 70CB, NFPA 70CC, 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NFPA 70XF, NFPA 70XG, NFPA 70XH, NFPA 70XI, NFPA 70XJ, NFPA 70XK, NFPA 70XL, NFPA 70XM, NFPA 70XN, NFPA 70XO, NFPA 70XP, NFPA 70XQ, NFPA 70XR, NFPA 70XS, NFPA 70XT, NFPA 70XU, NFPA 70XV, NFPA 70XW, NFPA 70XX, NFPA 70XY, NFPA 70XZ, NFPA 70YA, NFPA 70YB, NFPA 70YC, NFPA 70YD, NFPA 70YE, NFPA 70YF, NFPA 70YG, NFPA 70YH, NFPA 70YI, NFPA 70YJ, NFPA 70YK, NFPA 70YL, NFPA 70YM, NFPA 70YN, NFPA 70YO, NFPA 70YP, NFPA 70YQ, NFPA 70YR, NFPA 70YS, NFPA 70YT, NFPA 70YU, NFPA 70YV, NFPA 70YW, NFPA 70YX, NFPA 70YY, NFPA 70YZ, NFPA 70ZA, NFPA 70ZB, NFPA 70ZC, NFPA 70ZD, NFPA 70ZE, NFPA 70ZF, NFPA 70ZG, NFPA 70ZH, NFPA 70ZI, NFPA 70ZJ, NFPA 70ZK, NFPA 70ZL, NFPA 70ZM, NFPA 70ZN, NFPA 70ZO, NFPA 70ZP, NFPA 70ZQ, NFPA 70ZR, NFPA 70ZS, NFPA 70ZT, NFPA 70ZU, NFPA 70ZV, NFPA 70ZW, NFPA 70ZX, NFPA 70ZY, NFPA 70ZZ

N6DHPAC(L, M, H)A Domestic & Export (50 Hz) Case Circuits (12' Cases)



Carrier A United Technologies Company		TITLE DIAGRAM WRG OC DFR N6DHPAC 12	SIZE DRAWING NUMBER 9305815	REV 1
DESIGN UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS OR FRACTIONS ANGLES 1 DEC ±.1 1/16 ±.015 1/32 ±.015 1/64 ±.015		AUTHORIZATION NUMBER EGM 50505	ENGINEERING MANUFACTURING TED 08/11/08	CHECKER JEM 06/11/08
DRAWING RELEASE LEVEL THIRD ANGLE PROJECTION MATERIAL		ENGINEERING REQUIREMENTS TED 08/11/08	DRAFTER JEM 06/11/08	NEXT DRAWING SCALE DISTRIBUTION
END OF REV.		DATE 08/11/08	BY JEM	MODEL NAME N/A

NOTE: ALL CASES MUST BE GROUNDED

REV B	DATE 08/11/08	APP JEM	ECN NO. 50505
REV 1	DATE 06/11/08	APP JEM	ECN NO. 06/1108

COMPONENT MATERIALS MUST MEET THE FOLLOWING CRITERIA WHERE APPLICABLE:
 TYLER STANDARDS EP-201, EP-221, EP-233, EP-234 & EP-235; CFR, UL54, UL471,
 NEC, NSF2, NSF7, NSF35, NSF51, IPPC ASME SECTION VIII, AND
 BEULRIC OR LISTED AND CSA APPROVED.

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 lower 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. For cases with 5 rows of lighted shelves, remove screw above top shelf socket and push socket assembly back through the hole in the rear duct panel.
3. Remove mounting screws from rear duct panel.

4. Slowly lift out rear duct panel until the shelf harness connector near the top of the panel can be accessed.
5. 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.

6. After cleaning, reconnect the shelf harness connector: install the top socket assembly; replace and secure rear duct panels in reverse order.

Discharge Air/Ambient Air Honeycombs

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.

If secondary air baffle behind the honeycomb grid section needs to be cleaned, remove screws and secondary air baffle.

CAUTION

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

3. After cleaning, replace components in reverse order, and secure with the rear retainer plate and screws.

Top Duct

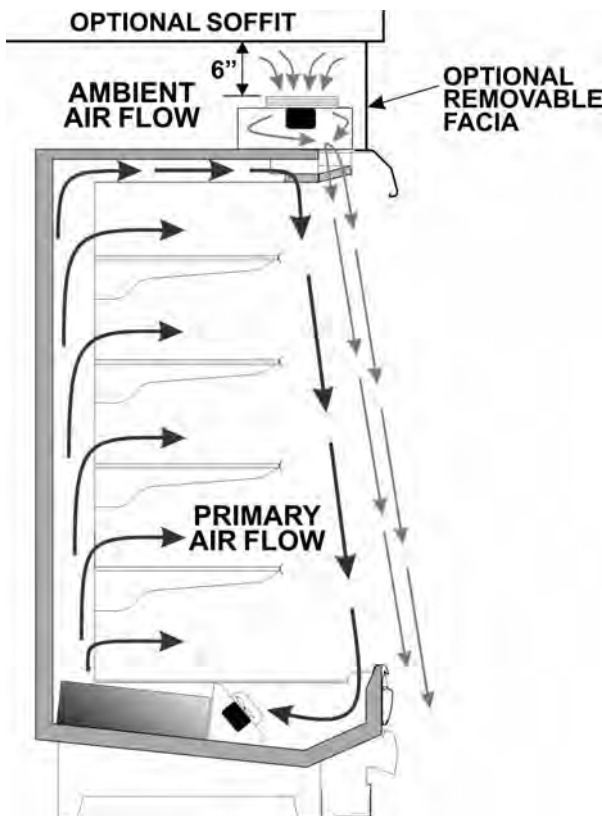
1. Remove shelves and shelf brackets, see above.
2. Remove screws, rear retainer plate and honeycomb grid sections from top of case.
3. Remove screws and top duct from case.
4. After cleaning, replace top duct and remaining components in reverse order.

Front Cladding

1. Remove front kickplate and raceway cover. (See General-UL/NSF I&S Manual.)
2. Remove color band, bumper and bumper retainer from the case. (See General-UL/NSF I&S Manual.)
3. Remove screws for top and bottom of front cladding and remove cladding.
4. After cleaning, replace front cladding and remaining front components in reverse order.

GENERAL INFORMATION

High Performance Air Curtain (HPAC) Operating Information



Tyler’s High Performance Air Curtain (HPAC) reduces case refrigeration load and energy usage. A secondary ambient air curtain acts as a wall to reduce cold air spillage from the primary air curtain and ambient air infiltration from the store atmosphere.

Secondary ambient air fans are mounted on top of the case. These fans circulate air from the store atmosphere that creates a wall of air that keeps refrigerated air in the case and warm air out of the case. The final result is the most efficient operating case in the industry.

NOTE

When case is installed under a soffit with a facia, the facia must be removable to provide service access to the secondary ambient air fans.

NSF Product Thermometer Installation

1. Unwrap the thermometer and bracket assembly shipped loose with the case.

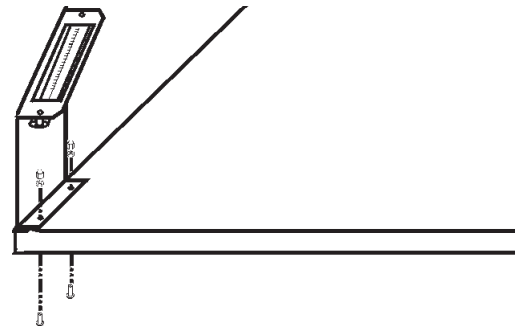
NOTE

Recommended bottom tray position is with the lips up.

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.

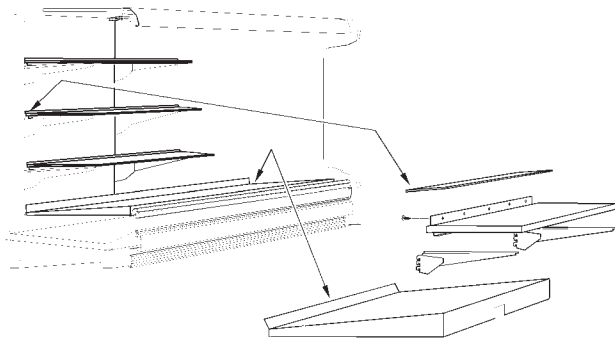
NOTE

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.

Egg Merchandiser Kit Instruction



All egg shelves come galvanized or stainless steel. The upper egg shelves are 15" x 48" and come with 82 degree fixed white brackets. The brackets are available in one position only. The upper egg shelves assemblies include a rear air close-off.

Tilted base egg shelves come in 4' modules. They are designed and notched to fit inside the existing 2' bottom trays.

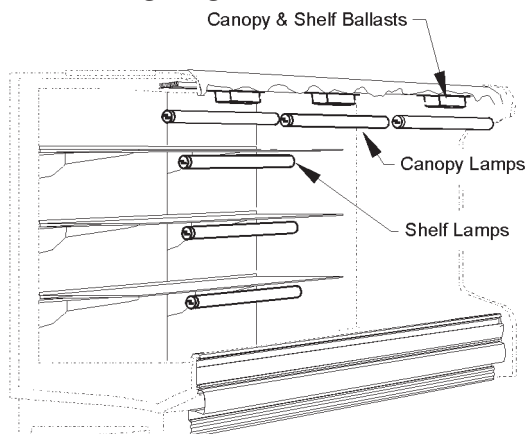
NOTE

Egg shelves are designed to catch and hold spilled liquids so they can be cleaned up before getting further into the case. If the tilted base shelves are used upside down, improper shelf support will result causing the middle of each shelves to sag. Upside down usage also allows drippage to get into the case making cleaning very difficult. Good sanitation is essential for egg merchandising.

SERVICE INSTRUCTIONS

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

Ballast and Lighting Locations



All light ballasts are located under the canopy and mounted above or on the top of the canopy light channel. This includes remote ballasts for optional shelf lights and optional nose lights. The canopy light(s) are under the canopy light channel in the top of the case. The optional shelf lights are mounted under the top interior liner above each shelf section.

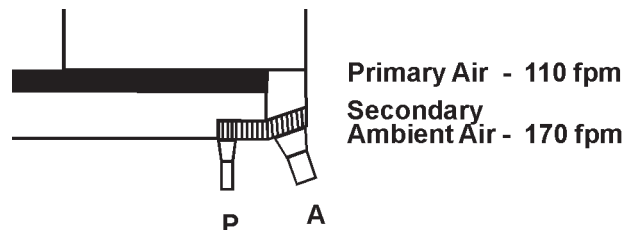
Checking Air Velocities

NOTES

- **Be sure area above the case is clear!**
- **Conditioned air must circulate above the case for secondary ambient air band intake!**
- **Do not block or restrict the top secondary ambient air fan grids!**

Check air velocities with an Anor, Jr. Model 8100 Velometer with airscoop modification. Further information on the Velometer can be obtained from the TYLER Service Department.

N6DHPACA case air velocities should be as follows:



To check the primary air velocity, the Anor, Jr scoop should be against the back edge of primary air portion of the grid with the meter facing the front of the case.

To check the secondary ambient air velocity, the Anor, Jr scoop should be turned 90° so the scoop is perpendicular to the ambient air portion of the grid and the meter faces the end of the case.

Cleaning Honeycomb

Since the honeycomb is a single honeycomb that cover multiple air bands, it will require cleaning. How often will depend on the amount of dust and lint in the store air.

Need for cleaning can be determined by comparing clean honeycomb air velocities with what velocities are being produced when they are checked. See page 10 in this manual for cleaning instructions.

Secondary Ambient Air Fan Replacement

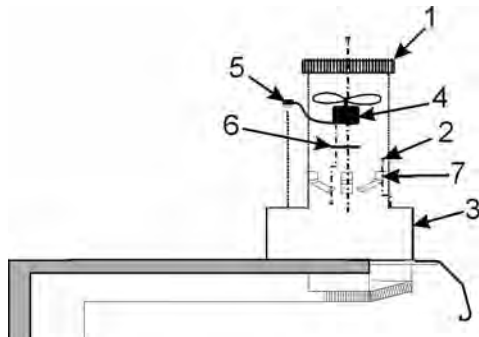
WARNING

Shut off or disconnect power supply to case before servicing a fan. Automatic cycling of fan or electrical power to wire ends could cause personal injury and/or death.



Secondary ambient air fans are located on top of the case near the front edge of the top panel. If top of case is behind a facia, remove facia to gain access to the fans.

Fan Motor Replacement



1. Remove screw and top fan guard (1).
2. Remove three screws mounting brackets (2) from top fan panel (3).
3. Carefully lift fan motor assembly (4) and unplug wire connector (5).
4. Remove three screws, bracket mounting plate (6) and mounting brackets (7) from top fan motor (4).

NOTE

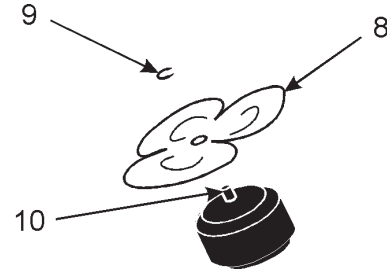
If replacement blades and/or motor are not available, unplug motor and cover opening until the replacement parts are available.

5. Replace new secondary ambient fan motor assemblies in reverse order. Replace facia, if removed to access the fans.

Fan Blade Replacement

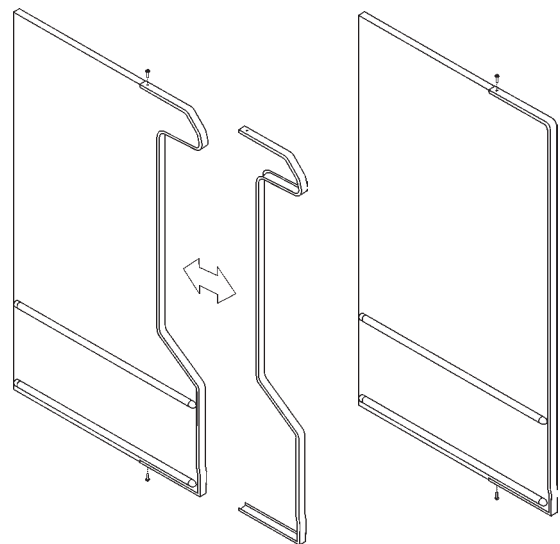
1. Remove fan motor assembly from top fan panel. See steps 1 thru 4 in "Fan Motor Replacement" on this page.
2. To replace fan blades (8), remove spring clips (9) and fan blade (8) from motor shaft (10). Discard spring clips.

3. Install new fan blade (8) on motor shaft (10) and secure with new spring clips (9).
4. Replace fan motor assemblies in the top fan panel. See step 5 in "Fan Motor Replacement" on this page.



Removing Metal Edge Trim

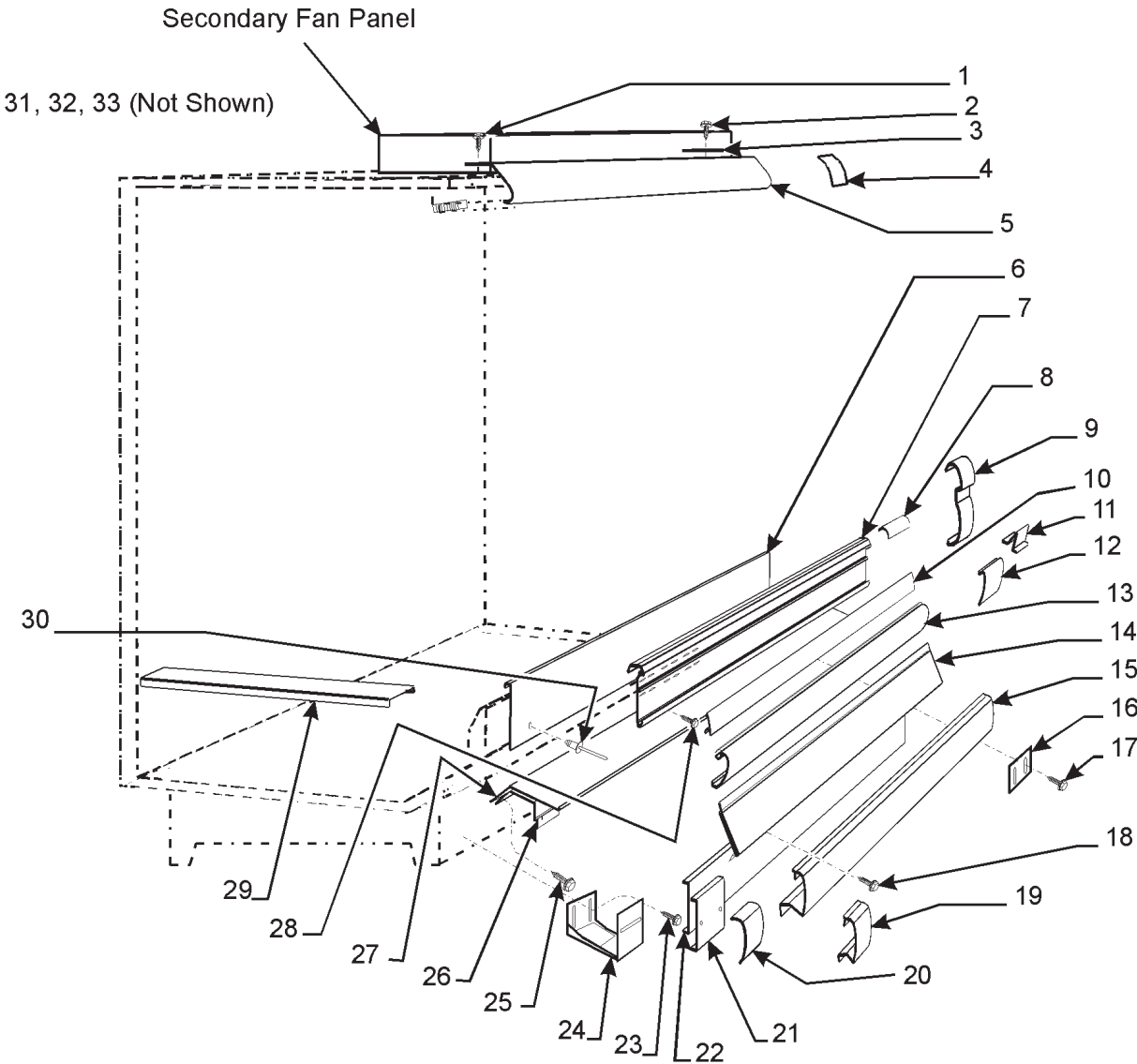
For those who have chosen a metal trim option on Tyler patch ends, the edge trim can be easily removed and reinstalled, or replaced. The diagrams below show the locations of two screws on the top and bottom of each piece of metal trim. Locate and unscrew the fasteners first, then carefully pull the edge trim from the end.



PARTS INFORMATION

Cladding and Trim Parts List

<u>Item</u>	<u>Description</u>	<u>6'</u>	<u>8'</u>	<u>12'</u>
1	Screw	5183536 (4)	5183536 (6)	5183536 (8)
2	Screw	5183536 (8)	5183536 (8)	5183536 (8)
3	End Cover	9305824 (2)	9305824 (2)	9305824 (2)
4	Canopy Joint Trim	9029422	9029422	9029422
5	Canopy Hood, Ptd.	9025222	9025223	9025224
6	Front Panel	5636774	5203468	5203469
7	Hand Rail/Bumper Retainer	-----	color per order	-----
8	Hand Rail Backer	9025316	9025316	9025316
9	Bumper End Trim	-----	color per order	-----
10	Color Band, Ptd.	9023795	9023798	9023800
11	Color Band Backer, Ptd.	9040223	9040223	9040223
12	Bumper Backer	-----	color per order	-----
13	Bumper	-----	color per order	-----
14	Front Cladding, Ptd.			
	(N6DHPACLA)	9025135	9025136	9025137
	(N6DHPACMA)	9025647	9025648	9025649
	(N6DHPACHA)	9300395	9025650	9025651
15	Raceway Cover	-----	color per order	-----
16	Raceway Cover Retainer	9023841 (2)	9023841 (4)	9023841 (6)
17	Screw (per retainer)	5183536 (2)	5183536 (2)	5183536 (2)
18	Screw	5183536 (7)	5183536 (9)	5183536 (12)
19	Raceway Cover End Trim	-----	color per order	-----
20	Raceway Cover Backer	-----	color per order	-----
21	Kickplate Joint Trim, Ptd.	9039020	9039020	9039020
22	Metal Kickplate, Ptd.	9324394	9324402	9324407
23	Shoulder Screw	9025833 (6)	9025833 (8)	9025833 (8)
24	Kickplate Support Assy.	9043402 (3)	9043402 (4)	9043402 (4)
25	Screw	5183536 (8)	5183536 (12)	5183536 (16)
26	Raceway Support	9041322 (4)	9041322 (6)	9041322 (8)
27	Raceway	9300242	9300243	9300244
28	Screw, Shoulder	9025833 (12)	9025833 (16)	9025833 (24)
29	Horizontal End Trim	5211585	5211585	5211585
30	Pop Rivet	5105037 (5)	5105037 (10)	5105037 (14)
31	Opt.Top Front Facia, Ptd. (not shown)	9055656	9055654	9055643
32	Opt. Top LH Facia, Ptd. (not shown)	9055645	9055645	9055645
33	Opt Top RH Facia, Ptd. (not shown)	9055644	9055644	9055644



N6DHPACMA Illustrated

Operational Parts List

Case Usage	Domestic		
Electrical Circuit	115 Volt 60 Hertz		
Case Size	6'	8'	12'
ECM Fan Motors	9025000 12 Watt	9025000 12 Watt	9025000 12 Watt
ECM Fan Motor Brackets	5205112	5205112	5205112
ECM Fan Blades (8.75" 18° 5B)	9040682	9040682	9040682
ECM Sec. Fan Motor	9025002 8 Watt	9025002 8 Watt	9025002 8 Watt
ECM Sec. Fan Bracket	5197471	5197471	5197471
ECM Sec. Fan Blades (7.75" 13° 5B)	9042245	9042245	9042245
Secondary Fan Motor Guard	5063030	5063030	5063030
Opt. Ballast (T-8 shelf lamps)	5966635	5966635	5966635
Opt. Ballast (5th row shelf lamp)	5991029	5991029	5991030
T-8 Shelf Lampholder	5232279	5232279	5232279
Light Switch	5100565	5100565	5100565
NSF Product Thermometer	5967100	5967100	5967100

Contact the TYLER Parts Department for information on operational parts not listed above .

Revision Log

This log sheet is intended to track both major and minor revisions to this manual, and to describe what the nature of the revision is. Revision identification is located in the lower right corner of the cover page.

Major revisions are lettered alphabetically, dated accordingly, and require reprinting for inclusion with the product at shipment. Minor revisions are denoted after the major revision with a "period" followed by a sequential number, and do not require a printed update. All manuals with any revision changes will be available in electronic PDF format on the Tyler Refrigeration website.

Content changes that determine the type of revisions are decided on a case-by-case basis by Tyler internal management. This revision log was created in October of 2008.

DATE	REVISION TYPE		DESCRIPTION	RESULTS
	MAJOR	MINOR		
Oct 2008		E.1	Changed wiring diagrams ... Update Service Instructions added terminal blocks to electrical. ... added metal edge trim replacement.
Apr 2009		E.2	Updated fan blade info. on p.16...	... ECM fan blade p/n's & blade angle chg.