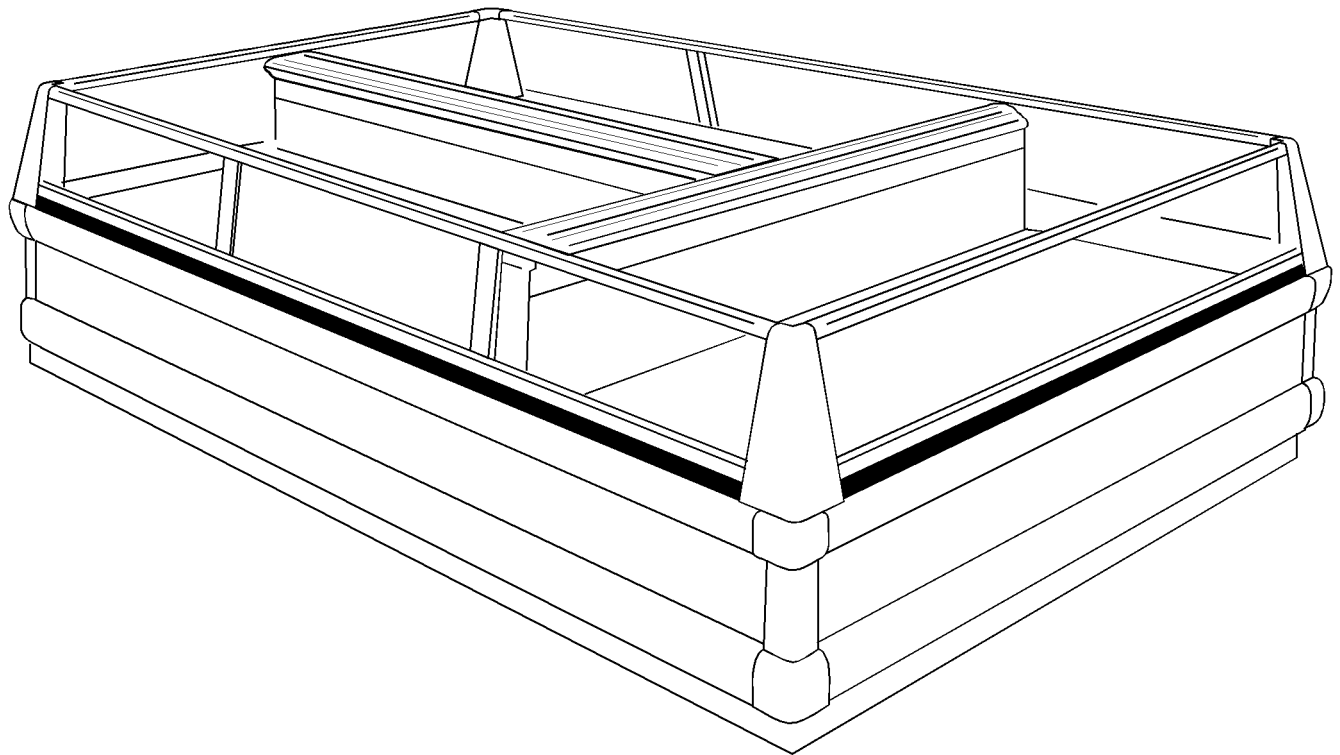


# TYLER



## Installation & Service Manual



**LFJG, LCJG, LTJG, LFMJG, LFJGEA, LCJGEA**

**GLASS FRONT JUMBO ISLAND MERCHANDISERS  
Low and Split Temperature Self Serve Display Cases**

**This manual has been designed to be used in conjunction with the General  
Installation & Service Manual.**

**Save the Instructions in Both Manuals for Future Reference!!**

This merchandiser conforms to the Commercial Refrigeration Manufacturers Association Health and Sanitation standard CRS-S1-96.

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**CONTENTS**

	<u>Page</u>
<b>Specifications</b>	
LFJG/LCJG/LTJG/LFMJG/LFJGEA/LCJGEA Specification Sheets . . .	4
Line Sizing Requirements . . . . . (See General I&S Manual)	
<b>Pre-Installation Responsibilities . . . . . (See General I&amp;S Manual)</b>	
<b>Installation Procedures</b>	
<b>Carpentry Procedures . . . . .</b>	<b>7</b>
Case Pull-Up Locations . . . . .	7
1" Solid Partition . . . . .	7
Plexiglas Partition . . . . .	7
Superstructure Installation . . . . .	8
Trim Installation/Alignment . . . . .	10
<b>Plumbing Procedures . . . . .</b>	<b>10</b>
<b>Refrigeration Procedures . . . . .</b>	<b>10</b>
Optional Dual Temperature Control . . . . .	11
<b>Electrical Procedures . . . . .</b>	<b>12</b>
Electrical Considerations . . . . .	12
<b>Defrost Information . . . . .</b>	<b>12</b>
Defrost Control Chart . . . . .	12
Defrost Schedules . . . . .	13
<b>Installation Procedure Check Lists . . . . . (See General I&amp;S Manual)</b>	
<b>Wiring Diagrams . . . . .</b>	<b>13</b>
LFJG/LCJG Domestic & Export (50Hz) Case Circuits . . . . .	14
LTJG/LFMJG Domestic & Export (50Hz) Case Circuits . . . . .	16
LFJGEA/LCJGEA Domestic & Export (50Hz) End Case Circuits . .	17
LTJG/LFMJG/LFJG Dual Temperature Control Circuit . . . . .	18
Optional Superstructure Wiring Circuit . . . . .	19
<b>Cleaning and Sanitation . . . . . (See General I&amp;S Manual)</b>	

	<u>Page</u>
<b>Service Instructions</b>	
Preventive Maintenance . . . . .	(See General I&S Manual)
Corner Trim Replacement . . . . .	20
Perimeter Glass Replacement . . . . .	20
Defrost Heater Replacement . . . . .	21
Fan Blade and Motor Replacement . . . . .	(See General I&S Manual)
Anti-Sweat Replacement . . . . .	21
Color Band and Bumper Replacement . . . . .	(See General I&S Manual)
<b>Parts Information</b>	
Operational Parts List . . . . .	23
Cladding and Trim Parts Lists . . . . .	24
<b>TYLER Warranty</b> . . . . .	(See General I&S Manual)

The following Low and Split Temperature Frozen Food and Ice Cream Merchandiser models are covered in this manual:

MODEL	DESCRIPTION
LFJG	8' & 12' GLASS FRONT JUMBO ISLAND FROZEN FOOD MERCHANDISER
LCJG	8' & 12' GLASS FRONT JUMBO ISLAND ICE CREAM MERCHANDISER
LTJG	8' & 12' GLASS FRONT JUMBO ISLAND SPLIT TEMP. FF/IC MERCHANDISER
LFMJG	8' & 12' GLASS FRONT JUMBO ISLAND SPLIT COIL FROZEN FOOD MERCHANDISER
LFJGEA	GLASS FRONT JUMBO ISLAND FROZEN FOOD END MERCHANDISER
LCJGEA	GLASS FRONT JUMBO ISLAND ICE CREAM END MERCHANDISER

## SPECIFICATIONS

### LFJG/LCJG/LTJG/LFMJG/LFJGEA/LCJGEA Glass Front Jumbo Island Frozen Food & Ice Cream Merchandiser Specification Sheets

MODEL	LFJG	LCJG	LFJG	LFJG	LFJGEA	LFJGEA	LFJGEA	LCJGEA
USAGE	FROZEN	ICE CREAM	MEAT	DAIRY	MEAT	DAIRY	FROZEN	ICE CREAM
BTUH/FT	738	895	594	564	371	353	446	583
SUCTION°	-25F	-35F	+15F	+25F	+15F	+15F	-25F	-35F
ENTER AIR°	-15F	-25F	+24F	+35F	+24F	+35F	-15F	-25F

NOTE: COMPRESSOR SIZING SHOULD ALLOW FOR SUCTION LINE PRESSURE DROP.

THE ABOVE RATINGS ARE FOR COMPRESSOR SELECTION ONLY. FOR ENERGY CALCULATION DATA REFER TO THE ENERGY SECTION. FOR COMPRESSOR SIZING INFORMATION REFER TO THE "GOLD" SECTION & FOR LINE SIZING INFORMATION REFER TO THE "BUFF" SECTION OF THE TYLER SPECIFICATION GUIDE.

208 VOLT DEFROST (AMPS)											
FT	8	12	16	20	24	28	32	36	40	44	48
FF/MED 1 PH	13.8 TG-30	20.6 TG-30	27.6 TG-40	34.4 TG-40	41.2 TG-50	N/A	N/A	N/A	N/A	N/A	N/A
FF/MED 3 PH	12.0 TG-3-3 0	18.0 TG-3-3 30	18.0 TG-3-3 30	21.0 TG-3-3 0	27.0 TG-3-4 -40	30.0 TG-3-4 -40	33.0 TG-3-5 -40	36.0 TG-3-5 -50	42.0 TG-3-5 -50	24/24 TG-3 -40-40	27/27 TG-3 -40-40
IC 1PH	27.6 TG-40	41.2 TG-50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IC 3PH	24.0 TG-3-3 0	36.0 TG-3-5 0	36 TG-3-5 0	42.0 TG-3-5 50	36/36 TG-3-5 0-50	30/30 TG-3-4 0-40	36/36 TG-3-5 0-50	36/36 TG-3-5 0-50	42/42 TG-3-5 0-50	N/A	N/A
CASE-TO-CASE SUCTION LINE SUB-FEED BRANCH LINE SIZING											
R404A FF	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 5/8"
R404A IC	7/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 5/8"	1 5/8"	1 5/8"	1 5/8"
R404A MED	1/2"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"

DEFROST CONTROL				PRESSURE SETTINGS			EPR SETTINGS	
PER DAY	MODE	TIME	TERM.		CUT IN	CUT OUT	R22	R404A
1	ELECT / FF	60 MIN.	50F	FF	15-22# @ R22	4-8# @ R22	7#	---
1	ELECT / IC	36 MIN.	50F	IC	9-15# @ R22	1-5# @ R22	21#	---
1	ELECT / MED	60 MIN.	50F	MED	45-47# @ R22	32-34# @ R22	37#	---
2-3	HOT GAS / FF	20-25 MIN.	55F	FF	22-31# @ R404A	9-14# @ R404A	---	12#
2-3	HOT GAS / IC	25-30 MIN.	55F	IC	15-22# @ R404A	5-10# @ R404A	---	7#
2-3	HOT GAS / MED	20-25 MIN.	55F	MED	58-60# @ R404A	42-45# @ R404A	---	48#

The information contained herein is based on technical data and tests which we believe to be reliable and is intended for use by persons having technical skill, at their own discretion and risk. Since conditions of use are outside Tyler's control, we can assume no liability for results obtained or damages incurred through the applications of the data presented. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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

**LFJG/LCJG/LTJG/LFMJG/LFJGEA/LCJGEA Glass Front Jumbo Island  
 Frozen Food & Ice Cream Merchandisers**

120 VOLT LIGHTING DATA		120 VOLT ELECTRICAL DATA (AMPS)					
FT	OPTIONAL SHELF LIGHTS PER ROW (AMPS)	FT	STD. FANS	ECM FANS	ANTI-SWT	ANTI-SWT W/SUPER STRUCTR	HEATED GLASS
8	2.0	8	2.0	.8	3.6	3.8	1.3
12	3.0	12	3.0	1.2	4.8	5.2	2.0

**NOTES FOR LFMJG FOR MEDIUM OR LTJG SPLIT-TEMP OPERATIONS**

When using LFJG case for medium or split temperature operation the following load values should be used:

**FF/IC TEMP;** 1 side frozen food/ 1 side ice cream (must use synchronized defrost)  
**(LTJG)** (Frozen food 369 BTUH/FT @ -25°F Evap. & Ice cream 448 BTUH/FT @ -35°F Evap.)  
**FF/MED TEMP;** 1 side frozen food/ 1 side medium temp. (must use synchronized defrost)  
**(LFMJG/LFJG)** (Frozen food 369 BTUH/FT @ -25°F Evap. & Medium temp 297 BTUH/FT @ +15°F Evap.)

*These values are based on one foot of case, with each side of the case considered separately. Add the totals from both sides to calculate the load for the entire case.*

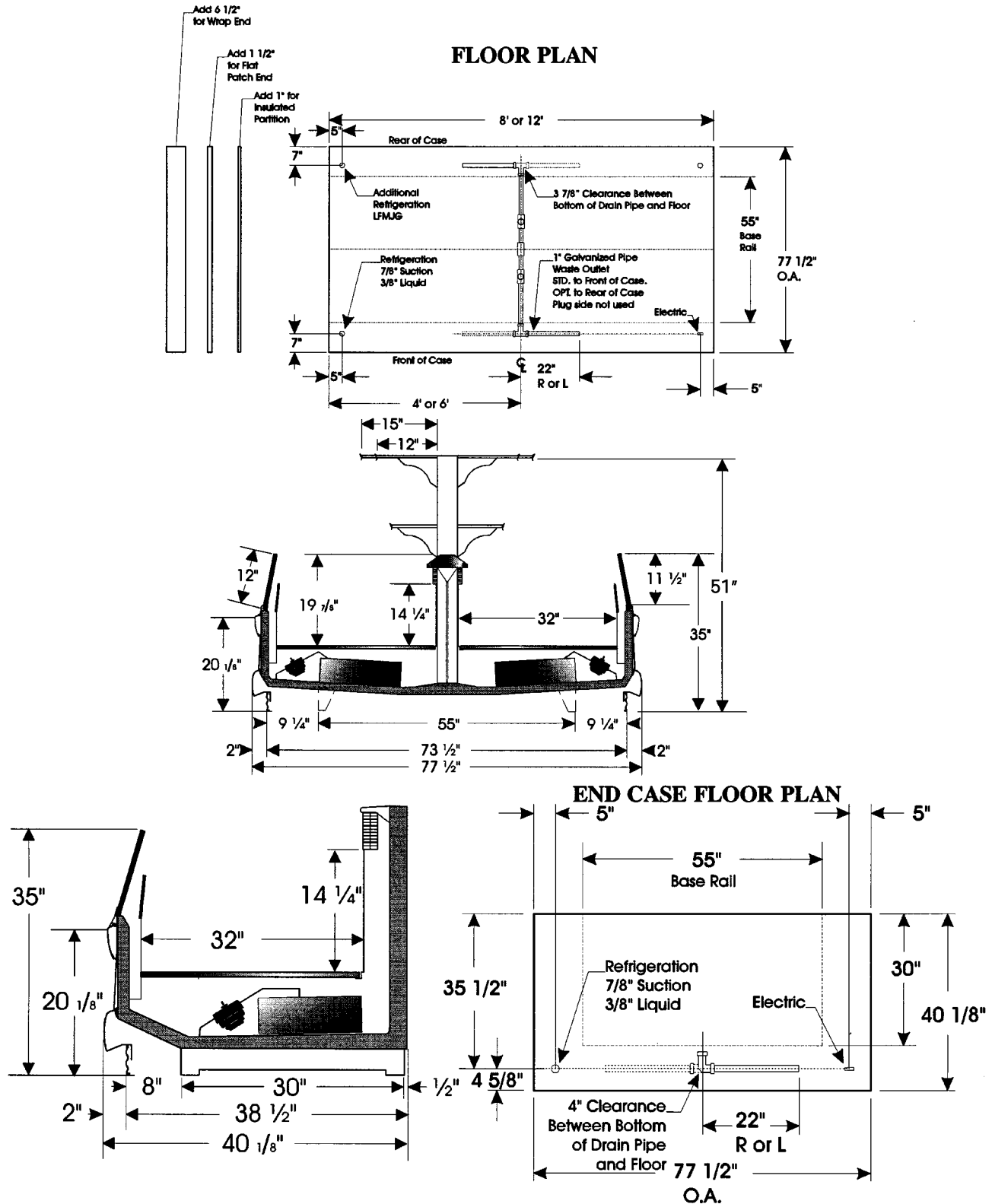
**DEFROST WIRING:** There are two heaters in each case. The heaters stub-out in the 220v raceway, individually (2 pairs of wires). The defrost circuit can therefore be wired as a single phase load or a 3-phase load. The 3-phase defrost information is based on dividing the heater loads as evenly as possible across the phases.

**NOTE:** The LTJG & LFMJG both have split refrigeration coils with dual refrigeration stub-ups. The LTJG model can be used for split temp by using separate refrigeration systems on each coil. The LFMJG can be used for medium temp on one side and frozen food on the other.

Disconnect the heated glass when using this case at medium temp operation. Cases with dual temp controls will do this automatically.

END CASE ELECTRICAL AND REFRIGERATION DATA							
MODEL	USE	BTUH REQUIRED	120V FANS (AMPS)		120V ANTI-SWEAT (AMPS)	208V DEFROST (AMPS)	120V DRAIN HEATER (AMPS)
			STD	ECM			
LFJGEA	FF	3120 @ -25F	1.0	0.4	2.3	8.6	0.1
LCJGEA	IC	4080 @ -35F	1.0	0.4	2.3	8.6	0.1

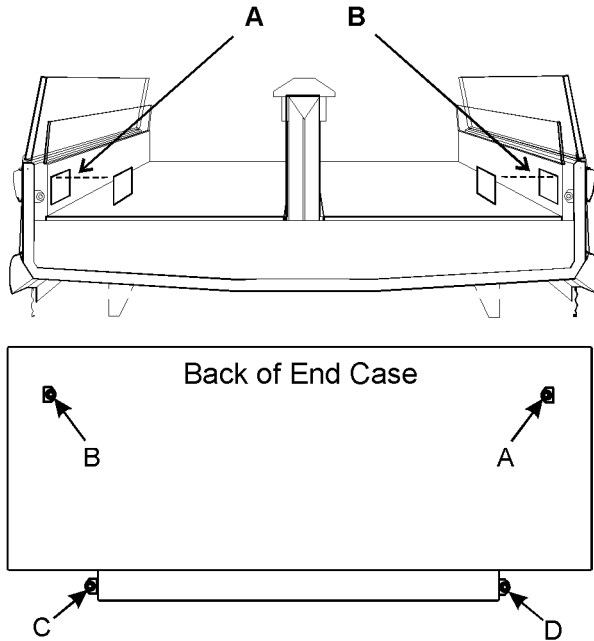
LFJG/LCJG/LTJG/LFMJG/LFJGEA/LCJGEA Glass Front Jumbo Island  
Frozen Food & Ice Cream Merchandisers



## INSTALLATION PROCEDURES

### Carpentry Procedures

#### Case Pull-Up Locations



The LFJG/LCJG/LTJG/LFMJG models have four pull-ups at each end of the case. Top two for adjoining main cases or bottom two for adjoining end cases. The LFJGEA and LCJGEA models have four pull-ups at the rear of the case. Pull-ups A and B or A, B, C and D are located as shown and should be installed and tightened starting with A and finishing with B or D.

#### 1" Solid Partition

A 1" insulated partition is required between adjacent gas defrost cases that are on different defrost schedules. 1" partitions are shipped installed as specified in the case order. Make sure the partitioned case is being installed in the proper location in the case line-up. This assures proper refrigeration to all parts of the case line-up.

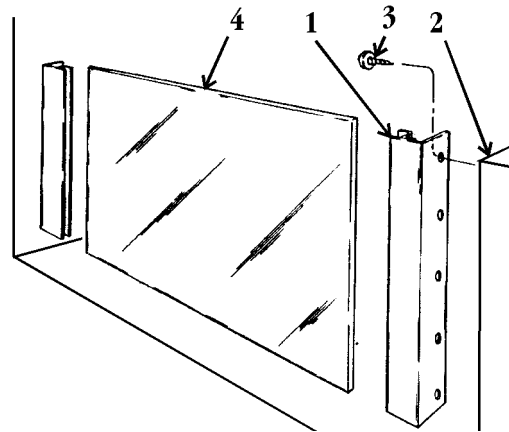
Apply sealant to outside surface of partition where the two surfaces of the adjoining case will contact the partition.

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

After all case pull-ups have been secured, all interior wall joint seams should be sealed with duct tape.

#### Plexiglas Partition

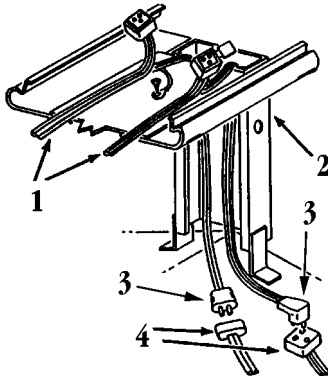
A plexiglas plug partition is required on adjacent electric defrost cases that are on different defrost schedules. These partitions can be installed after the cases have been joined.



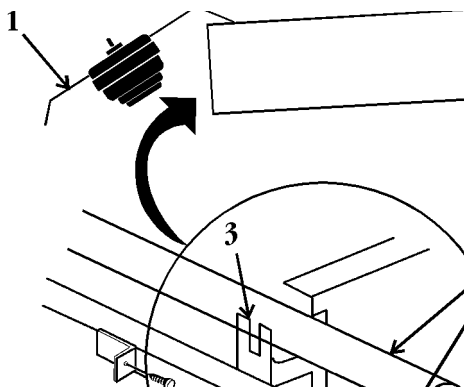
1. Install partition brackets (1) at case joint on front, center and/or rear case wall (2) with screws (3)
2. Slide plexiglas partitions (4) into partition brackets (1).

**Superstructure Installation**

Make sure top riser caps and discharge grids are removed. Clear insulation on top of the center partition from the superstructure end sockets and the upright support angles.



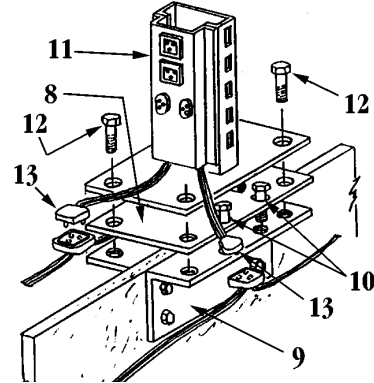
1. If the wiring harness has not been factory installed, remove insulation from top of center riser and lay wire harnesses (1) on top of the center partition (2). The 8' harness has three female plugs and one male plug. The 12' harness has four female plugs and one male plug. There is one harness for shelf anti-sweat heaters and one for the shelf lights. The sockets are not interchangeable. The anti-sweat harness male plug connects at the RH post socket. The light harness male plug goes down the RH post socket (3) and plugs into the matching receptacle in the 115V case wiring block (4). Replace insulation.



2. Position the RH end post (5) in the RH superstructure hole in the center riser (3). Install the two plugs (6) and push them into the insulation. Push down the RH end post (5) until it seats into the center riser (3) and secure with four bolts (7).

**NOTE**

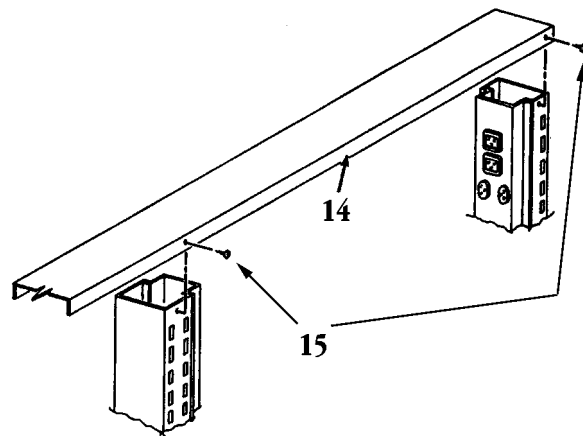
On 12' cases, the electrical outlets on the center posts must face the end posts.



3. Install the base plate (8) to the angle brackets (9) with four bolts (10). Install and align the center upright (11) to base plate (8) and angle brackets (9) with four adjustment bolts (12). The center uprights may face in either direction. Connect upright wire plugs (13) to harness. Route wires and harness around the uprights in the insulation.
4. Install LH end post as described in step 2.

**NOTE**

Notches on upright alignment channel will help position the channels properly.

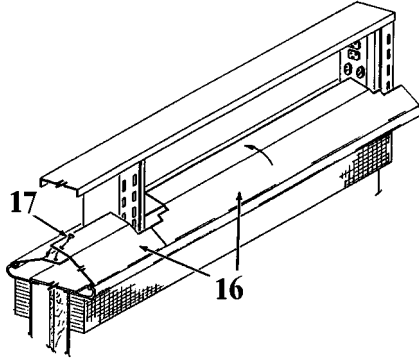


5. Position the upright alignment channel (14) on top of the upright posts. Using the holes in the upright alignment channel as a guide, drill 1/8" pilot holes in the upright posts and secure with screws (15).

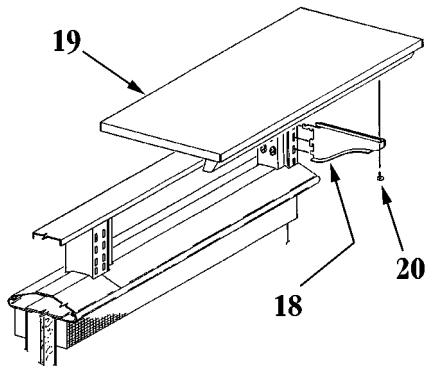


**NOTE**

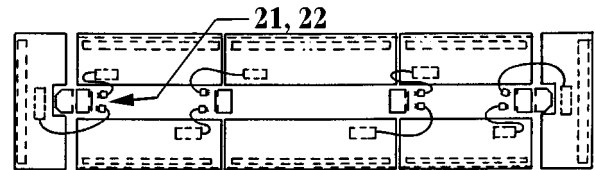
Notches on top riser caps will help position the caps properly.



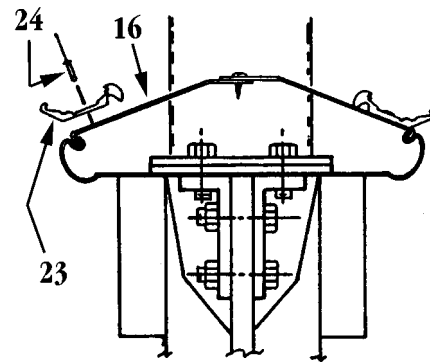
6. Install top riser caps (16) on top of the center partition. Drill pilot holes in the top center of the two riser caps and secure with screws (17).



7. Install each pair of shelf brackets (18) in slots in upright posts. Use one RH and one LH bracket per shelf. Superstructures with end shelves have angled brackets on the end shelf uprights.
8. Position shelves (19) on shelf brackets (18) and install front alignment screws (20).
9. Install shelving close-offs in space between shelves. The close-offs are supported by the shelf brackets. If end close-offs are supplied, they are also secured to the shelf brackets.



10. Plug in the shelf anti-sweat heaters (21) and shelf lights (22)



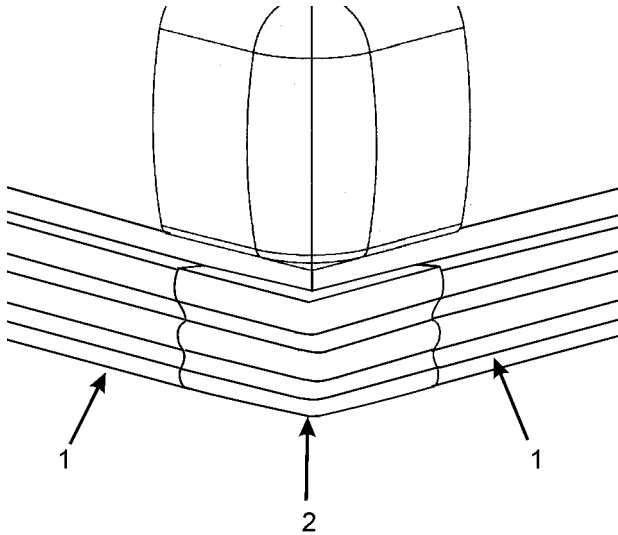
11. Position card moldings (23) as shown and drill 1/8" pilot holes in riser caps (16). Secure card moldings (23) to riser caps (16) with #42 rivets (24).

### Trim Installation/Alignment

See "General I&S Manual" for bumper, color band, raceway and kickplate installation.

#### Corner Trim Installation

Most corner trim on these cases comes factory installed. The kickplate corner trim requires field installation.

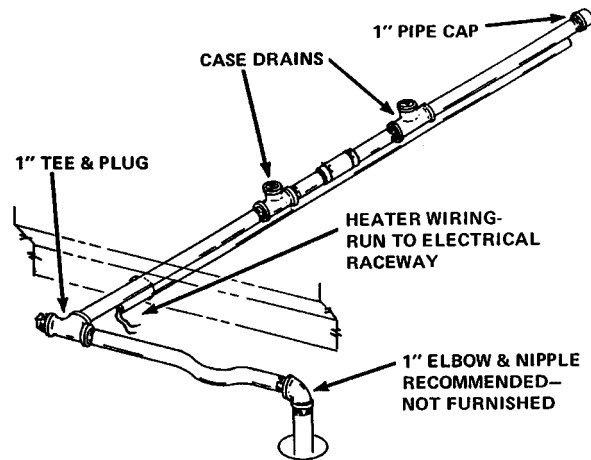


After kickplates (1) have been installed, slide kickplate corner trim (2) into both ends of the kickplates (1)

### Plumbing Procedures

See "General I&S Manual" for recommended drain practices.

#### Waste Outlet Heater



These cases require a waste outlet heater. A 16 Watt heater is located inside a pipe just below the 1" waste pipe and runs from one side to the other. The heater wires run into the case raceway and are to be connected to the fan circuit leads when wiring the cases.

### Refrigeration Procedures

See "General I&S Manual" for general system, control and superheat information.

There are four standard versions of the 8' and 12' cases.

LFJG is for frozen food or medium temp. usage and is equipped with one electric defrost heater on each side. The entire case, or each individual well, is run from a single refrigeration system. The LFJG will operate at low or medium temperatures.

LCJG is for ice cream usage and is equipped with two electric defrost heaters on each side. The entire case runs from a single refrigeration system.

LTJG is a split temp. version for ice cream on one side and frozen food on the other. LTJG is equipped with two electric defrost heaters on each side and can be run from separate refrigeration systems.

LFMJG is a split temp. version for frozen food on both sides. LFMJG is equipped with one electric defrost heater on each side and can be run from separate refrigeration systems.

The LFJG and LFMJG cases can also be set up to display frozen food on one side and medium temp. on the other. Either side can be optionally set up with a dual temperature control to allow one side to be switched between low temp. and medium temp. operation.

LFJG or LFMJG cases set up for electric defrost medium temp. applications utilize the standard defrost heaters. Gas defrost medium temp. applications incorporate a fan delay klixon.

### Optional Dual Temperature Control

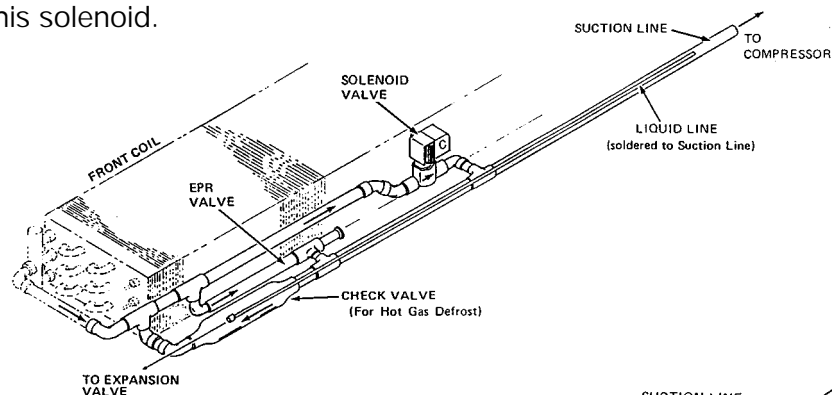
The dual temperature control unit is a factory installed option. This control allows the user to easily switch from medium to low temperature operation by flipping a switch. The dual temperature control consists of an EPR valve in the suction line coming off the evaporator. The EPR valve can be bypassed with a solenoid controlled bypass line around it. The toggle switch opens or closes this solenoid.

When the solenoid is open, the evaporator is connected directly to the compressor suction that allows for low temperature operation. When the solenoid is closed, the evaporator must operate through the EPR valve which has been preset to the desired medium temperature.

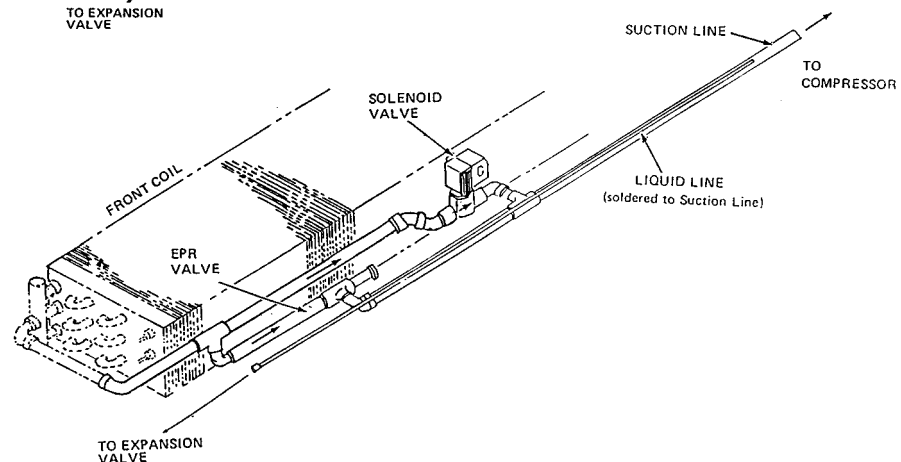
**EXAMPLE: R-404A system with 12 psig of suction pressure.** With the suction line solenoid open, the coil pressure operates at 12 psig with a temperature of -29°F. When toggle switch is flipped, the solenoid closes directing the flow through the EPR valve. If the EPR valve is set for 48 psig, the evaporator will see a coil temperature of 12°F and will operate at a discharge air temperature of about 22°F.

When gas defrost is used, an additional check valve is mounted around the EPR valve to allow reverse flow for the defrosting gas. A fan delay is also connected with gas defrost to cycle the fans off, but only during the medium temperature mode.

### Gas Defrost Dual Temperature Controls with EPR Valve



### Electric Defrost Dual Temperature Controls with EPR Valve



## 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 and components for the case. All raceway covers will be shipped loose.
- The LFJG or LFMJG do not require the heated perimeter glass when used for medium temp. operation. The glass heater should be disconnected from the terminal block.
- Cases equipped with optional dual temperature control will de-energize the perimeter glass with klixon when switched to medium temp. operation.

### Case Fan Circuit

This circuit is to be supplied by an uninterrupted, protected 120V circuit. The case fan circuit is not cycled, except when equipped for gas defrost. On gas defrost cases the fan circuit is controlled by a 50/40 klixon.

#### NOTE

With gas defrost, the fans will not start until the coil temperature reaches 40°F at the fan delay thermostat. This only applies in the medium temp. mode.

### Anti-Sweat Circuit

LFJG/LCJG/LTJG/LFMJG cases have one anti-sweat heater in the top of the center riser and one under the perimeter glass retainer. When cases are equipped with an optional superstructure, there is an anti-sweat heater on the superstructure. LFJGEA/LCJGEA end cases have one anti-sweat heater in the discharge air grid and under the perimeter glass retainer. The perimeter glass is also heated

on all models. Anti-sweat heaters are wired directly to the main power supply so it can operate at all times.

### Superstructure Shelf Lamp Circuit

Optional superstructures are equipped with one row of 430MA T-12 shelf lights.

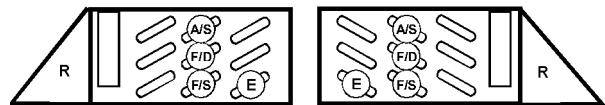
## Defrost Information

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

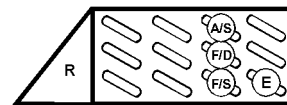
### Defrost Control Chart

Defrost Type	Defrosts Per Day	Defrost Duration (Min)	Term. Temp.
Electric/FF	1	60	50°F
Electric/IC	1	36	50°F
Electric/MED	1	60	50°F
Gas/FF	2	20-25	55°F
Gas/IC	2	25-30	55°F
Gas/MED	2	20-25	55°F

### LFJG-LCJG-LTJG-LFMJG



### LFJGEA-LCJGEA



**E = Electric Defrost Termination**  
**F/S = Electric Defrost Failsafe (Opt.)**  
**F/D = Gas Defrost (Fan Delay)**  
**A/S = Glass Anti-Sweat (Dual Temp.)**

Most klixons are located on the right end of the evaporator coil. The diagram shows the location for each defrost type that uses a klixon.

#### NOTE

The termination klixon for gas defrost is located at the bypass check valve.

### CAUTION

If electronic sensors are used in place of the klixons, the sensors must be located in the same location as the klixons for that defrost type. Any other locations will effect the refrigeration efficiency of the case.

### **Defrost Schedules**

For satisfactory performance, both sides of the case should be scheduled to defrost at the same time. This holds true even when both sides run from different machines.

**Two Single Machines** Use the defrost clock which controls one of the machines and run a relay to control the other machine. Defrost load is spread across clock contacts and extra contactors (as required).

**Parallel with Electric Defrost and Dual Temp or Split Temp Operation** Use one station of the multi-circuit time clock to control the defrost circuit breakers for the cases defrost heaters. This ensures both sides defrost at the same time.

**Parallel with Gas Defrost (LTJG or LFMJG only)** Make sure that only 25% of the combined load (frozen food & ice cream or frozen food & medium temp.) is on one circuit. Use one station of the multi-circuit time clock to control the booster circuit and that portion of the frozen food cases opposite the ice cream side.

Gas defrosting is only available as an option on cases operated from a parallel system. About 25% of the cases can be defrosted at one time. This allows the refrigeration heat being removed from the cases to be used to defrost the others.

### **NOTE**

**Insulated partitions must be used between case line-ups that have gas defrost!**

Single Temp. cases (LFJG/LCJG/LFJGEA/LCJGEA) have individual coil piping that needs to be joined at installation when both sides and/or ends are on the same system. Split Coil cases (LTJG/ LFMJG) with gas defrost should be piped to their respective systems and defrosts should be scheduled at the same time. Each coil requires a separate defrost termination klixon at the check valve.

## **WIRING DIAGRAMS**

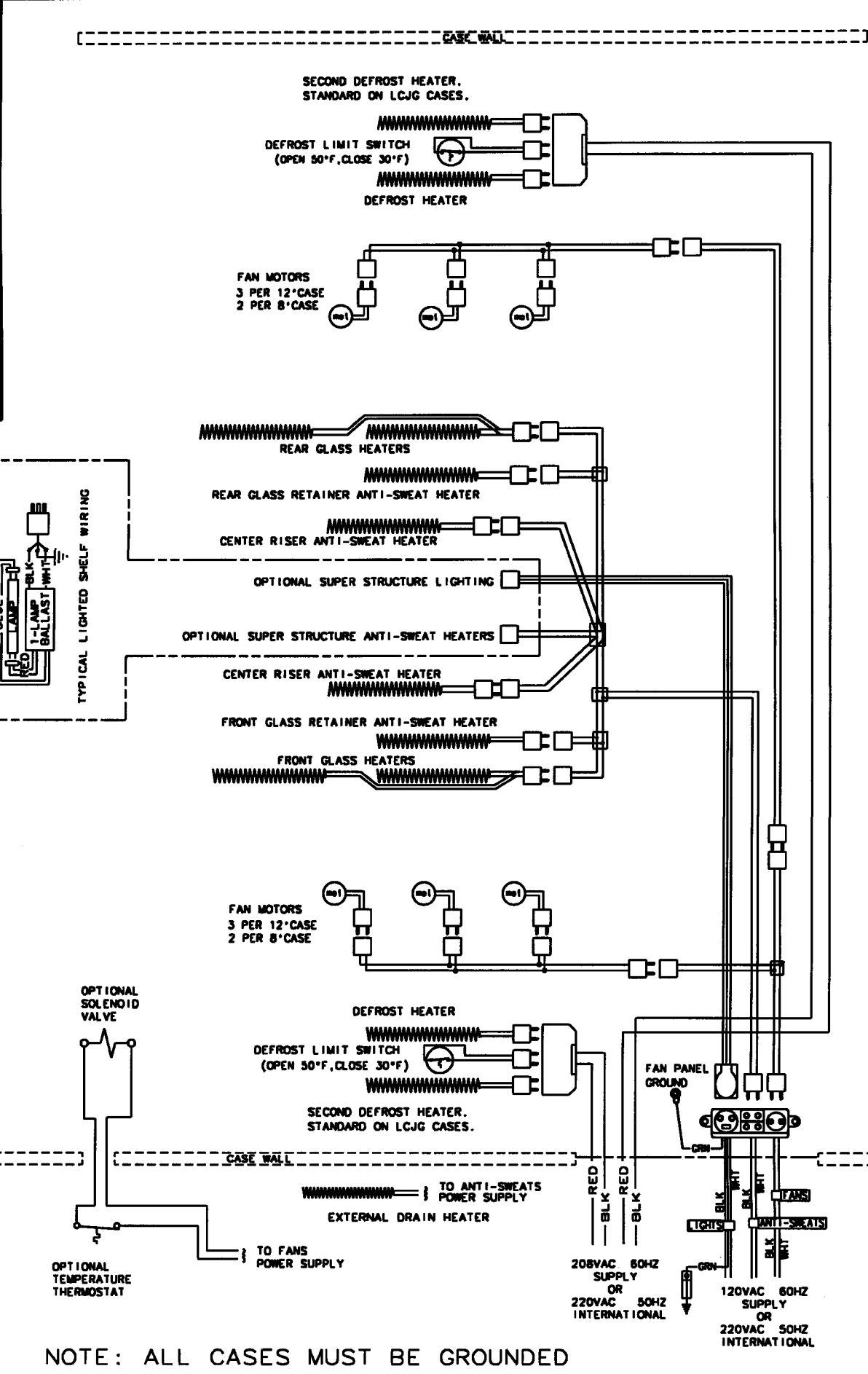
### **ELECTRICIAN NOTE - OVERCURRENT PROTECTION**

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 14 thru 19 will cover the LFJG/LCJG/LTJG/ LFMJG/LFJGEA/LCJGEA case circuits, electric defrost circuit, gas defrost circuit, dual temperature control circuits and the super-structure wiring circuit.



PART TYPE N T S  
 MODEL  
 FABRICATED  
 PURCHASED  
 COPY



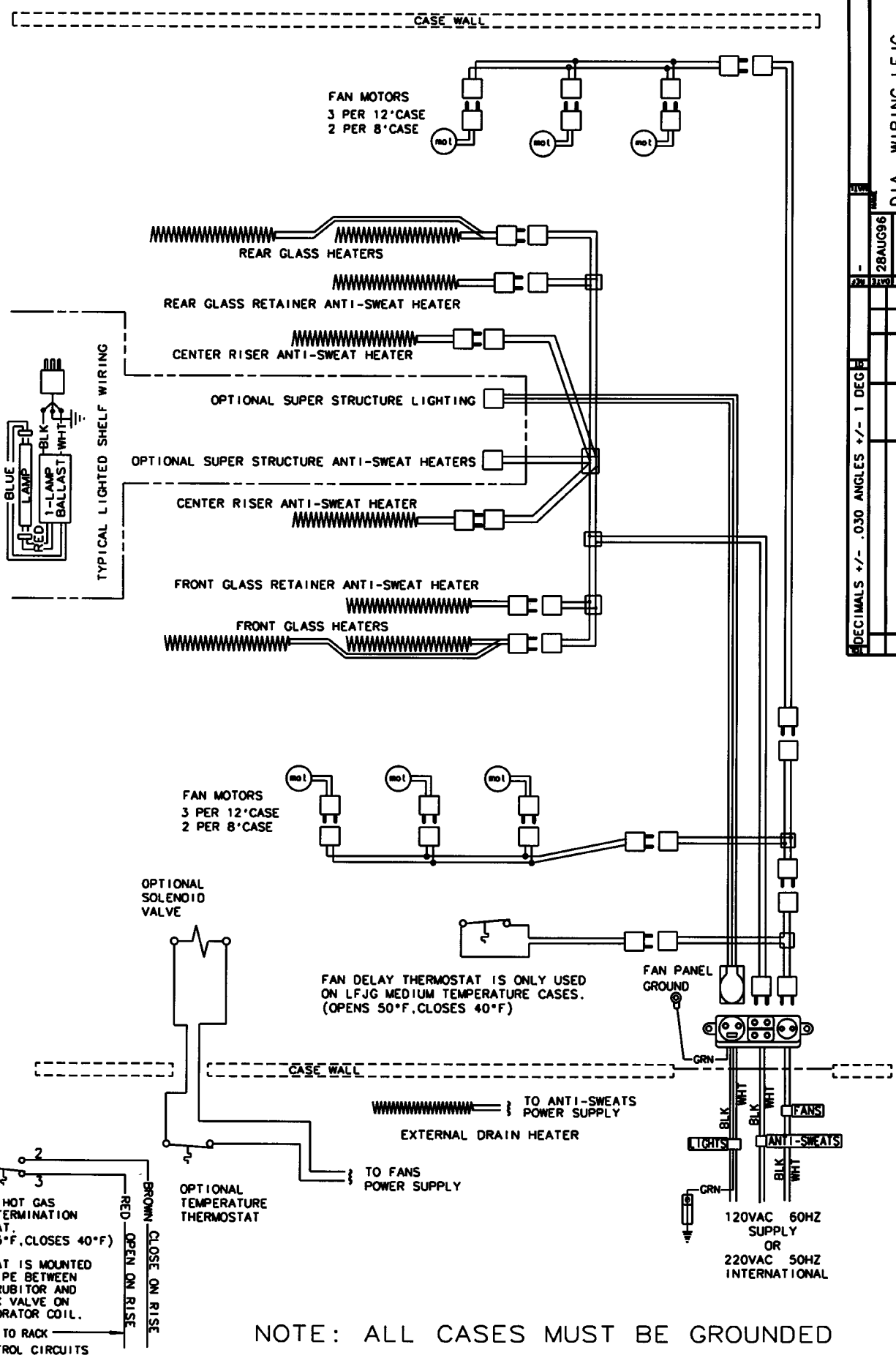
DECIMALS +/- .030 ANGLES +/- 1 DEG		28AUC96	LC	DIP	95-080A
A	REVISED PER ECH 22843	22843	17NOV88	LC	CK
REV	DESCRIPTION	RELEASE	DATE	BY	CHK

DIA. WIRING LFJG.LCJG  
 8&12FT ELECT DEFR  
 9028461 A



PART TYPE N T S  
 MODEL  
 FABRICATED  
 PURCHASED  
 DEPT CC W

1. TYLER REFRIGERATION CORP. OBTAINS RIGHTS  
 2. INFORMATION IS FOR CONTINUING USE ONLY.  
 3. AND DRAWING NOT BE USED IN OTHER APPLICATIONS.  
 4. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.  
 5. ANY TOLERANCES TO FINISHED PART AFTER  
 6. NO MANUAL REVISIONS ALLOWED.



NOTE: ALL CASES MUST BE GROUND

REV	DESCRIPTION	DATE	BY	CHK
A	REVISED PER ECN 98-003F	98-003F	16.JUL.98	LC
				DIP
				LC
				28AUC96

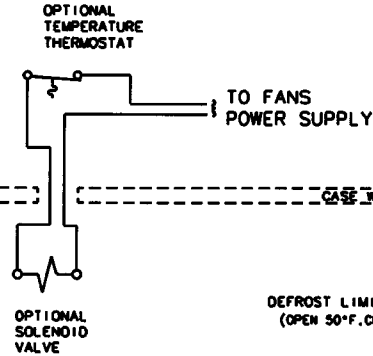
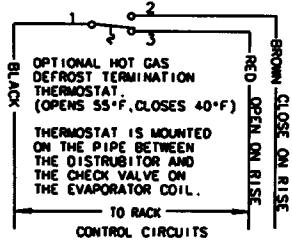
DECIMALS +/- .030 ANGLES +/- 1 DEGR

DIA. WIRING-LFJG  
 LCJG, 8&12'-HG DEFR

9028462 A

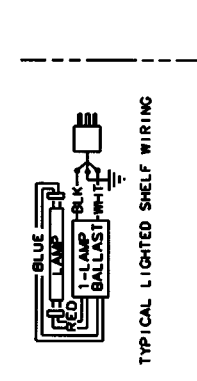
1. TYLER REVISIONS ONLY. CLAIM RIGHTS TO COMPANY FOR REVISIONS ONLY. AND NOT TO BE USED WITHOUT PERMIT.  
 2. ALL DIMENSIONS IN INCHES UNLESS SPECIFIED OTHERWISE.  
 3. ALL DIMENSIONS TO FINISHED PART AFTER ANNEALING.  
 4. ALL DIMENSIONS TO FINISHED PART AFTER ANNEALING.  
 5. NO MANUAL REVISIONS ALLOWED.

PART TYPE N T S  
 MODEL  
 FABRICATED  
 PURCHASED  
 (OPT) CC #



FAN MOTORS  
 3 PER 12" CASE  
 2 PER 8" CASE

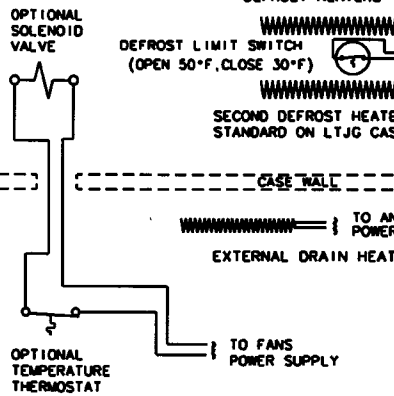
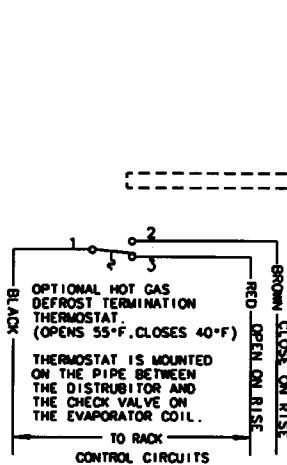
FAN DELAY THERMOSTAT,  
 USE IN LFMJG CASES  
 FOR MEDIUM TEMPERATURE  
 USAGE.  
 (OPENS 50°F, CLOSES 40°F)



NOTE: UNPLUG FRONT & REAR GLASS HEATERS IN LFMJG CASES FOR MEDIUM TEMPERATURE USAGE.

FAN MOTORS  
 3 PER 12" CASE  
 2 PER 8" CASE

FAN DELAY THERMOSTAT,  
 USE IN LFMJG CASES  
 FOR MEDIUM TEMPERATURE  
 USAGE.  
 (OPENS 50°F, CLOSES 40°F)



208VAC 60HZ SUPPLY  
 OR  
 220VAC 50HZ INTERNATIONAL  
 120VAC 60HZ SUPPLY  
 OR  
 220VAC 50HZ INTERNATIONAL

NOTE: ALL CASES MUST BE GROUNDED

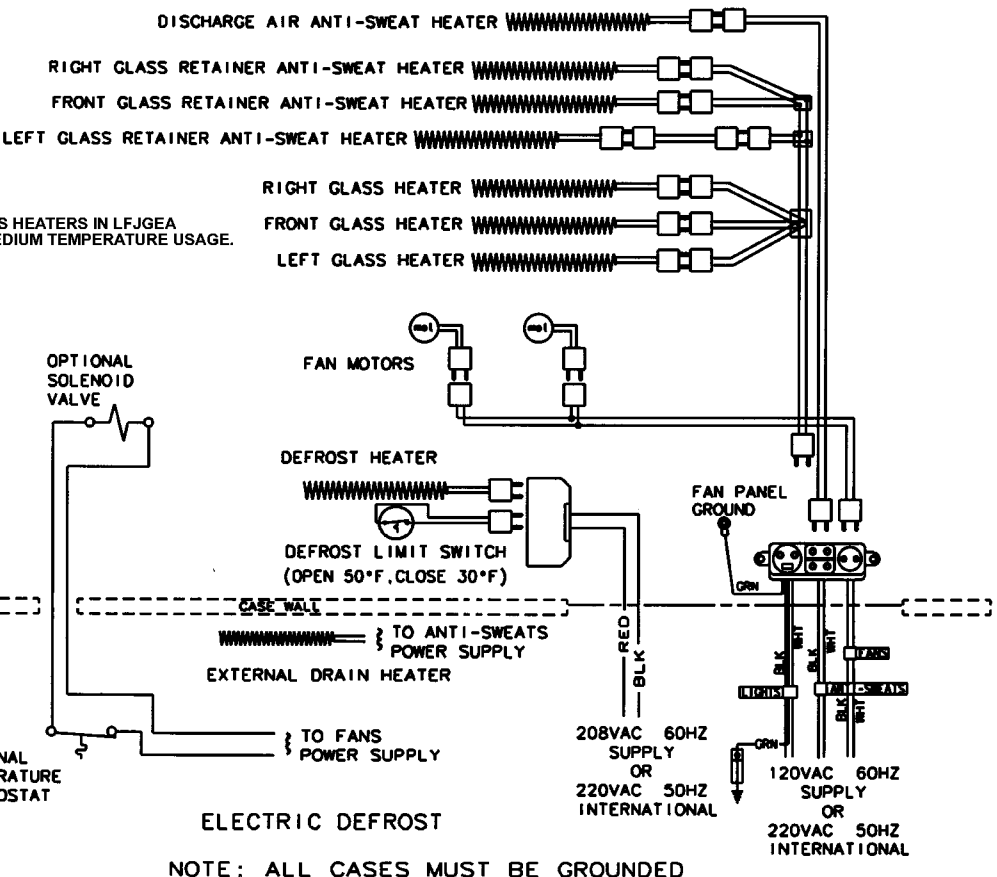
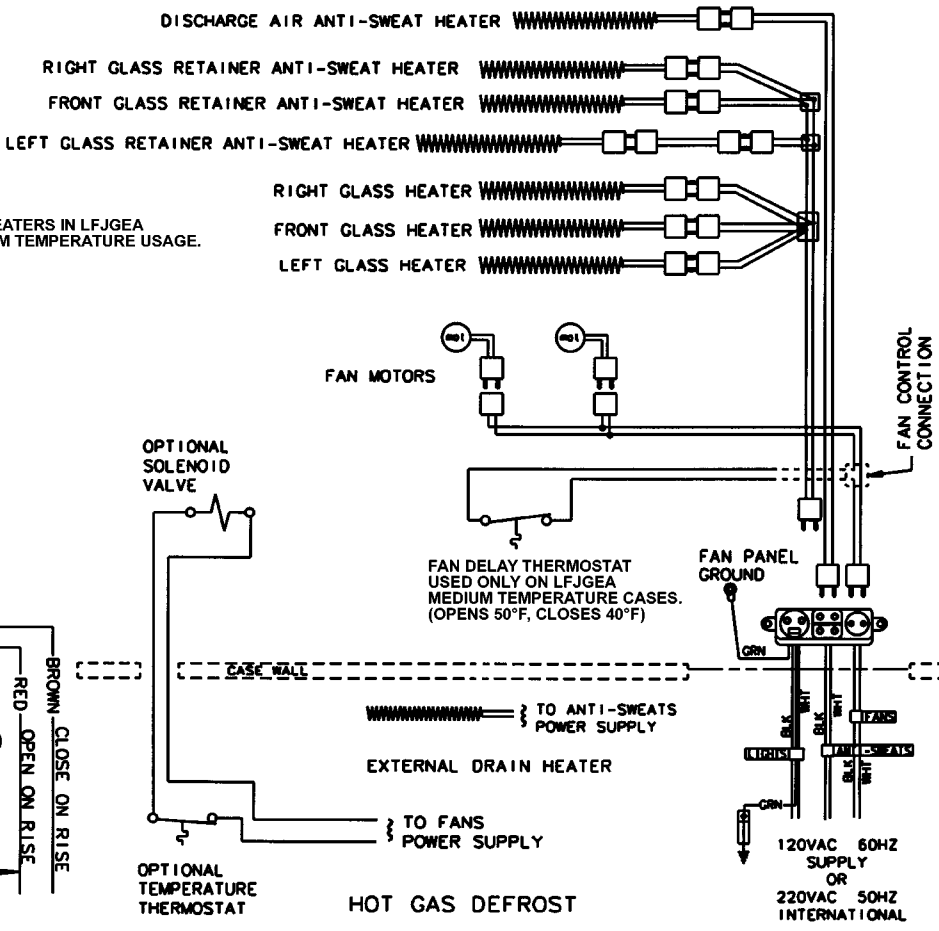
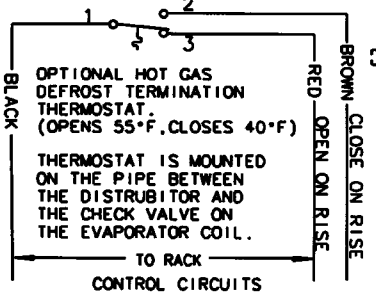
REV	DESCRIPTION	DATE	BY	CHK	APP
A	REMOVE T-STATS, ADD KL.INDNS	98-003F	17JUL98	LC	CK
2					
1					

28AUG96	LC	DIP	95-080A	A
DIA. WIRING LTJG LFMJG 8&12FT				
9028463				



PART TYPE H T S  
 MODEL  
 FABRICATED  
 PURCHASED  
 (DATE)  
 CC  
 W  
 S

NOTE: UNPLUG GLASS HEATERS IN LFGJEA CASES FOR MEDIUM TEMPERATURE USAGE.

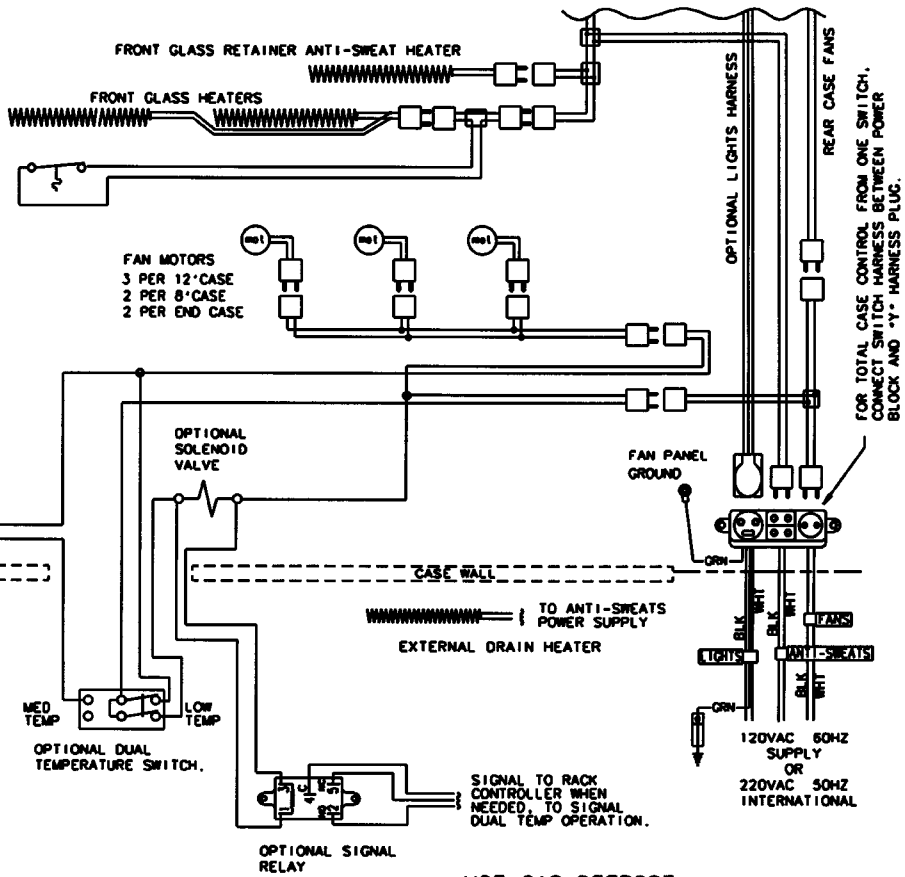


NOTE: ALL CASES MUST BE GROUNDED

28AUG96		LC		DIP	
98-003F		17JUL98		LC	
95-080A		95-080A		95-080A	
DESCRIPTION		RELEASE		DATE	
DECIMALS +/- .030 ANGLES +/- 1 DEGR		A REMOVE T'STATS-ADD RL'XONS		9028465	
DIA. WIRING LFGJEA		LCJGEA-HG OR ELE DEF		A	

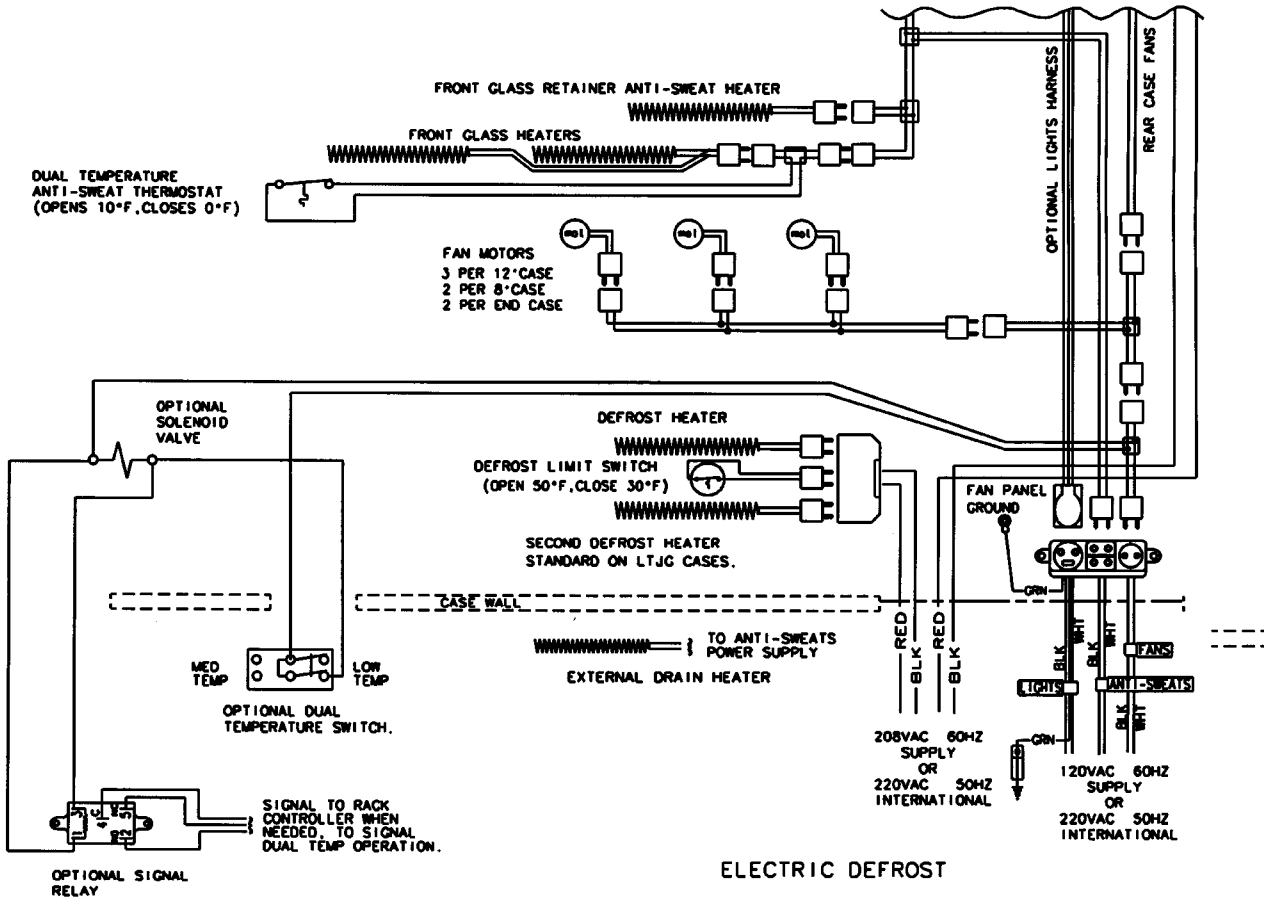
PART TYPE N I S  
 1. THIS REFERENCE TO COMP. CLASSE RIGHTS  
 2. TO THE INFORMATION ON THIS DRAWING,  
 3. AND ANY PART IS TO BE USED UNLESS  
 4. OTHERWISE SPECIFIED IN THE TITLE BLOCK.  
 5. ALL DIMENSIONS ARE IN INCHES UNLESS  
 6. OTHERWISE SPECIFIED IN THE TITLE BLOCK.  
 7. DIMENSIONS SHOWN TO FINISHED PART AFTER  
 8. ALL DIMENSIONS ALLOWED.

DUAL TEMPERATURE  
 ANTI-SWEAT THERMOSTAT  
 (OPENS 10°F, CLOSES 0°F)



**HOT GAS DEFROST**

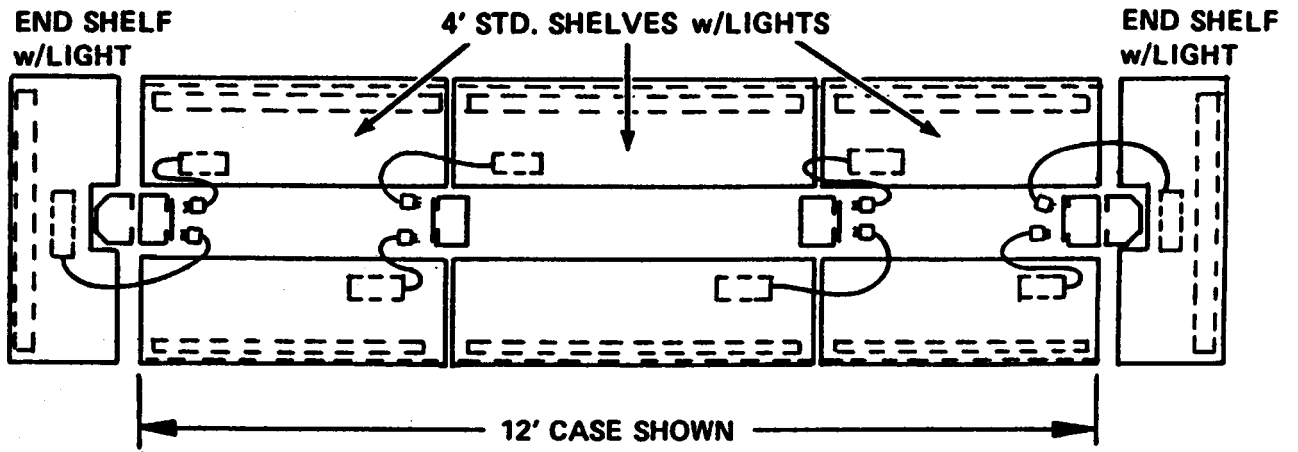
DUAL TEMPERATURE  
 ANTI-SWEAT THERMOSTAT  
 (OPENS 10°F, CLOSES 0°F)



**ELECTRIC DEFROST**

REV	DESCRIPTION	DATE	BY	CHK
A	REMOVE T-STATS-ADD RLTRONS	98-003F 20 JUL 98	LC	CK
DECIMALS +/- .030 ANGLES +/- 1 DEG				
28AUG96	LC	DIP		
DIA WIRING LFJG(EA)				
LFM-LTJG DUAL TEMP				
				9028464
				A

Optional Superstructure Wiring Circuit

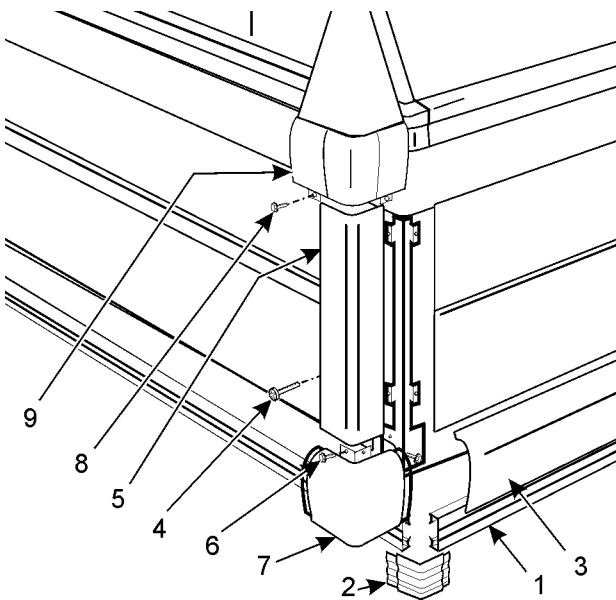


## SERVICE INSTRUCTIONS

See "General I&S Manual" for fan blade and motor replacement, color band and bumper replacement and raceway cover removal instructions.

### Corner Trim Replacement

Since some of the corner trim fasteners are hidden, remove the trim and hardware in the following sequence.

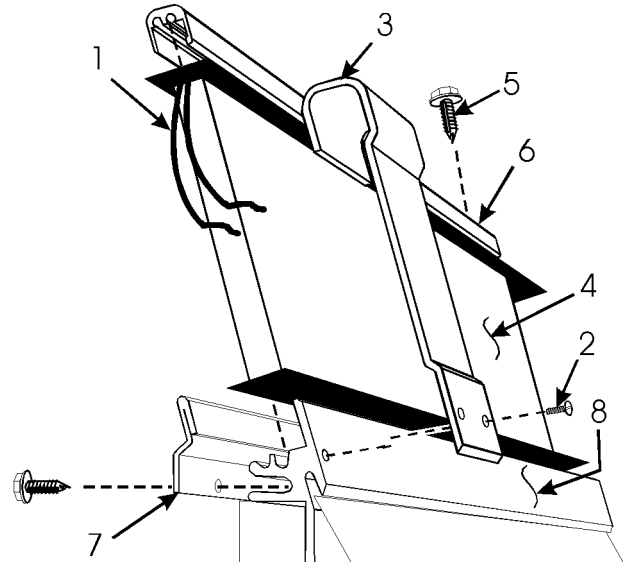


1. Remove kickplates (1) and kickplate corner trim (2) from both sides of the corner trim.
2. Remove raceway covers (3) from both sides of the corner trim.
3. Remove two screws (4) and corner cladding trim (5).
4. Remove two top screws (6) from the raceway corner trim (7), then lift and remove the raceway corner trim from the retainers in the bottom slots.
5. Remove two bottom screws (8) and lift off the bumper corner/glass trim (9).
6. Replace corner/glass trim, raceway corner trim, corner cladding trim, raceway covers and kickplates in reverse order.

### Perimeter Glass Replacement

#### NOTE

End cases require corner trim removal before replacing the glass. See "Corner Trim Replacement" in this manual.



1. Unplug glass anti-sweat wires (1).
2. Remove two screws (2) and glass joint trim (3) from both joints of the broken glass (4).
3. Remove screws (5) and glass trim rail (6) from top of glass (4).
4. Loosen rear retainer (7) and remove broken glass from glass retainer assembly (8).

#### NOTE

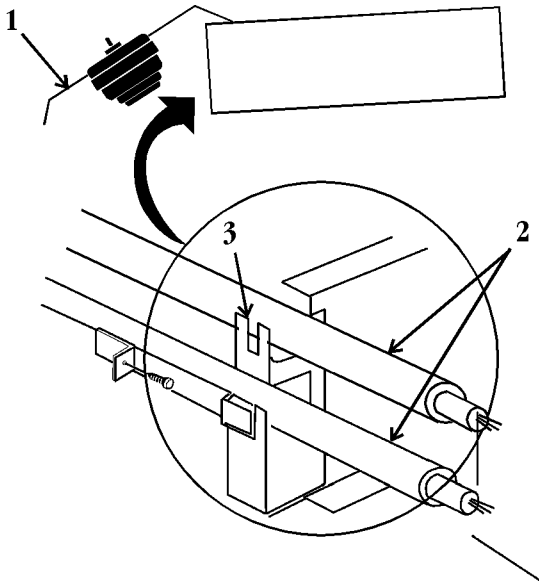
**Inspect the anti-sweat wire in glass retainer assembly. If wire is damaged or broken, replace it before replacing the front glass.**

5. Apply sealant tape to top and bottom edge of new glass (4).
6. Position new glass (4) in glass retainer assembly (8) and secure by tightening rear retainer (7).
7. Install glass trim rail (6) with screws (5) over top edge of new glass (4).
8. Install glass joint trim (3) with screws (2) over the joint areas of glass (4).
9. Reconnect the anti-sweat wires (1).

## Defrost Heater Replacement

### WARNING

Always shut off electricity to case before replacing a defrost heater. Automatic cycling of fans or electrical power to wire ends could cause personal injury and/or death.



1. Remove bottom trays from case.
2. Unclip and lift up fan plenum (1).
3. Disconnect defective defrost heater (2) and remove from mounting clips (3) and case.
4. Install new defrost heater (3) in reverse order.
5. Restore electrical power to case.

## Anti-Sweat Heater Replacement

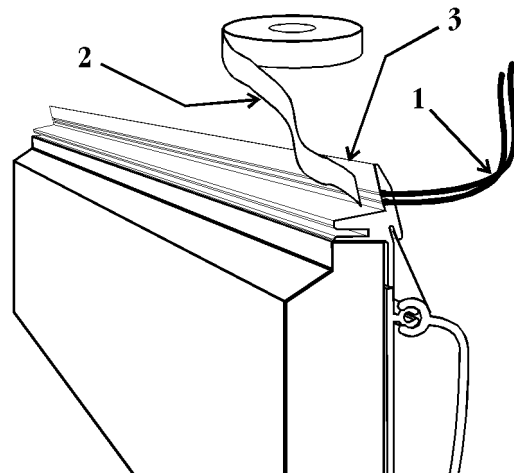
### WARNING

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.

### Glass Retainer Anti-Sweat (All Models)

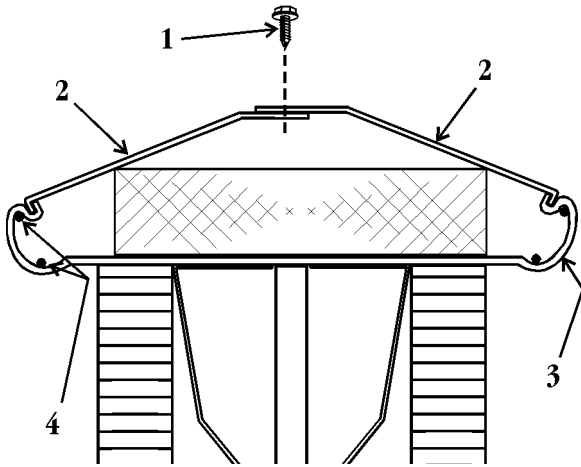
#### NOTE

- Perimeter glass must be removed from glass retainer. See "Perimeter Glass Replacement" in this manual.
- Corner cases require removal of all raceway covers, cladding, corner trim, bumpers and bumper retainers.



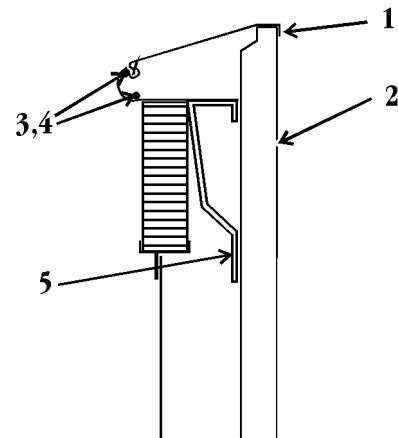
1. Disconnect or cut the defective anti-sweat wires (1) from the case wires.
2. Remove and replace the aluminum tape (2) and defective anti-sweat wire (1) from the bottom of the front glass retainer (3).
3. Reconnect the anti-sweat wires to case wires .
4. Replace the perimeter glass and any other trim or cladding that was removed.

**Center Riser Anti-Sweat  
(LFJG/LCJG/LTJG/LFMJG)**



1. Remove screws (1) and top riser caps (2) and insulation from top of center riser (3).
2. Disconnect or cut the defective anti-sweat wires (4) from the case wires.
3. Remove and replace the aluminum tape and defective anti-sweat wire (4) from the bottom of the top riser cap (2).
4. Reconnect the anti-sweat wires to case wires and reinstall the insulation, top riser caps and screws.

**Discharge Air Grid Anti-Sweat  
(LFJGEA/LCJGEA)**



1. Drill out rivets and remove rear guard trim (1) from top of rear case wall (2).
2. Disconnect or cut the defective anti-sweat wire (3) from the case wires.
3. Remove and replace the aluminum tape (4) and defective anti-sweat wire (3) from top of rail and wire trim assembly (5).
4. Reconnect anti-sweat wires to case wires and reinstall the rear guard trim with new rivets.

## PARTS INFORMATION

### Operational Parts List

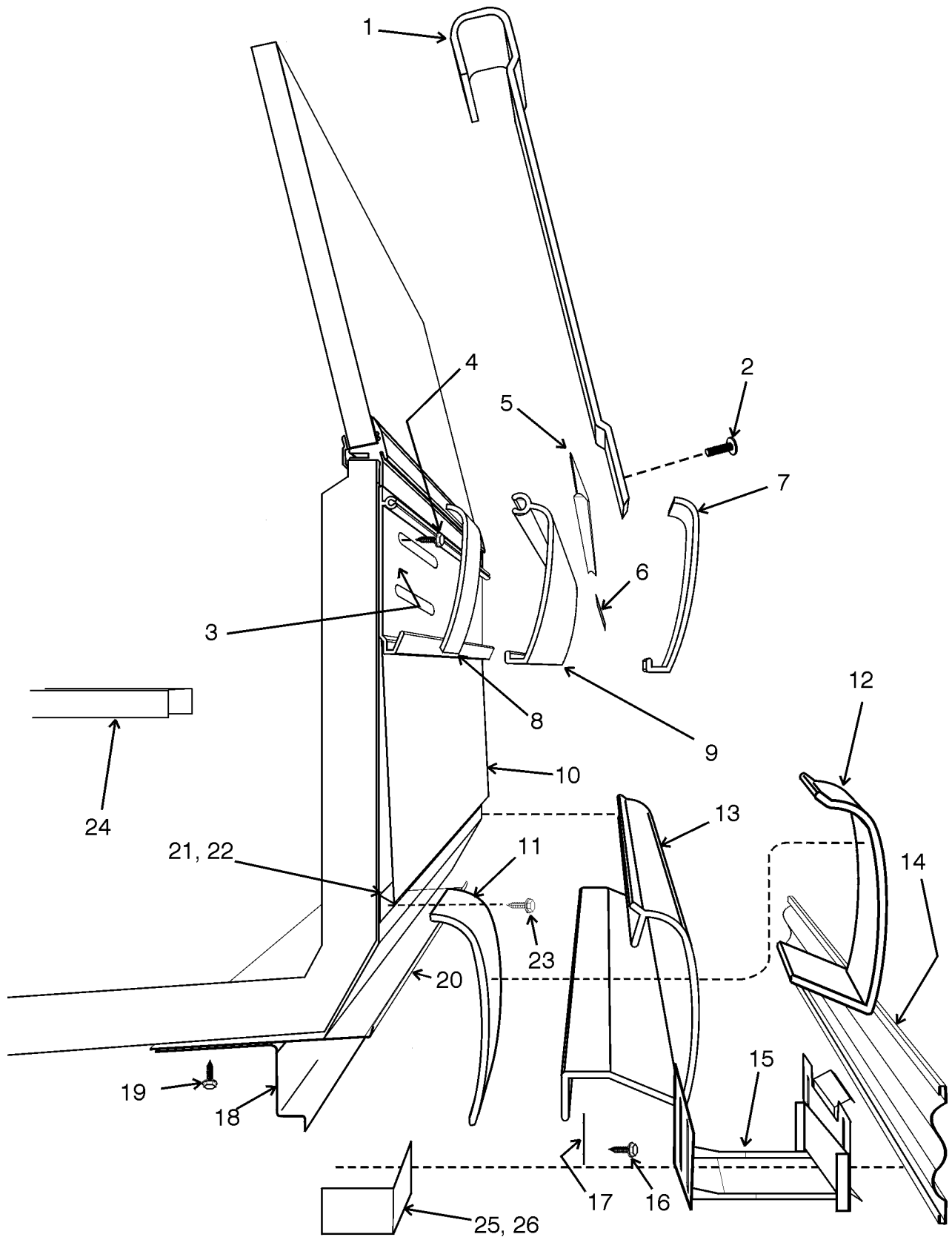
Case Usage	Domestic			Export		
	115 Volt 60 Hertz			220 Volt 50 Hertz		
Case Size	8'	12'	End Case	8'	12'	End Case
Fan Motor	5644521 5 Watt	5644521 5 Watt	5644521 5 Watt	5126572 5 Watt	5126572 5 Watt	5126572 5 Watt
Fan Motor Brackets	5213132	5213132	5213132	5213132	5213132	5213132
Fan Blades (6" 21° 3B)	5105621	5105621	5105621	----	----	----
(6" 27° 3B)	----	----	----	5104294	5104294	5104294
Anti-Sweat Heater Wire (glass retainer) (LFJG/LCJG/LTJG/LFMJG)	5218331	5218332	----	5081149	5081150	----
(center riser) (LFJG/LCJG/LTJG/LFMJG)	5124818	5124819	----	5081149	5081150	----
(discharge air) (LFJGEA/LCJGEA)	----	----	5028893	----	----	5081271
(front glass retainer) (LFJGEA/LCJGEA)	----	----	5233734	----	----	5081201
(side glass retainer) (LFJGE/LCJGE)	----	----	5225475(2)	----	----	5229188(2)
Opt. Elec. Def. Heater	5088278	5088279	5195710	5088278	5088279	----
Opt. Elec. Def. Term. Klixon	5125211	5125211	5125211	5125211	5125211	----
Opt. Gas Def. Fan Delay Klixon (Medium or Dual Temp. only)	9023503	9023503	9023503	9023503	9023503	----
Opt. Gas Def. Term. Klixon	9023508	9023508	9023508	9023508	9023508	----
Opt. Glass Anti-Sweat Klixon (Dual Temp only)	9310711	9310711	9310711	9310711	9310711	----
Waste Pipe Heater	5215068	5215068	5963471	5216300	5216300	5963472
Opt. Superstructure Lighting 430MA Ballast (20W/1 lamp)	----	----	5102019	----	----	5102019
430MA Ballast (40W/1 lamp)	5627909	5627909	----	5627909	5627909	----
T-12 Lampholder	5217544	5217544	5217544	5217544	5217544	5217544

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

**Cladding and Trim Parts Lists**

Item Description	LFJG/LCJG/LTJG/LFMJG	
	8'	12'
1 Glass Joint Trim	9301808(2)	9301808(2)
2 Screw	5120206	5120206
3 Bumper Retainer	9025058	9025061
4 Shoulder Screw	9025833(20)	9025833(24)
5 Color Band, Painted	9020971	9020972
6 Color Band Backer, Painted	9025982	9025982
7 Bumper End Trim	color per order	
8 Bumper Backer	color per order	
9 Bumper	color per order	
10 Front Cladding, Painted	9025209	9025210
11 Raceway Cover Backer	color per order	
12 Raceway Cover End Trim	color per order	
13 Raceway Cover	color per order	
14 Kickplate	color per order	
Kickplate Backer	9023569	9023569
15 Kickplate Support Assy. (per side)	9042415(3)	9042415(4)
Shoulder Screw	9025833 (8)	9025833 (8)
16 Screw (per retainer)	5183536(2)	5183536(2)
17 Raceway Cover Retainer (per side)	9023841(4)	9023841(6)
18 Raceway Support (per side)	9041465(4)	9041465(4)
19 Screw (per support)	5183536	5183536
20 Raceway	9300218	9300219
21 Cladding Retainer (per side)	9300197(4)	9300197(4)
22 Screw (per retainer)	5183536	5183536
23 Shoulder Screw (per side)	9025833(8)	9025833(10)
24 Horizontal Joint Trim	5196166	5196166
25 Binding Screw	5222637(6)	5222637(6)
26 LH End Close-off, Painted	9027925	9027925
RH End Close-off, Painted	9027926	9027926





**Cladding and Trim Parts Lists**

Item	Description	LFJGEA/LCJGEA	
		Front	Side
1	Bumper Retainer	9025867	9025866(2)
2	Shoulder Screw (per side)	9025833(6)	9025833(3)
3	Color Band, Painted	9020965	9020969
4	Color Band Backer, Painted	9025982	9025982
5	Bumper	color per order	
6	Front Cladding, Painted	9025769	9025768
7	Raceway Cover	color per order	
8	Kickplate	color per order	
9	Kickplate Support Assy.(per side)	9042415(4)	9042415(2)
	Screw	9025833(8)	9025833(4)
10	Screw (per retainer)	5183536(2)	5183536(2)
11	Raceway Cover Retainer (per side)	9023841(3)	9023841(2)
12	Raceway Support (per side)	9041465(4)	9041465(2)
13	Screw (per support)	5183536	5183536
14	Raceway	9300266(2)	9300267(RH) 9300268(LH)
15	Cladding Retainer (per side)	9300197(3)	9300197(2)
16	Screw (per retainer)	5183536(2)	5183536(2)
17	Shoulder Screw (per side)	9025833(3)	9025833(2)

**Corner Trim Parts List**

Item	Description	Per Corner
1	Bumper Corner/Glass Trim	color per order
2	Screw	9025833(2)
3	Corner Cladding Trim	9041335
4	Screw	5048626(2)
5	Screw	9025833(2)
6	Raceway Corner Trim	color per order
7	Kickplate Corner Trim, Painted	color per order(2)

