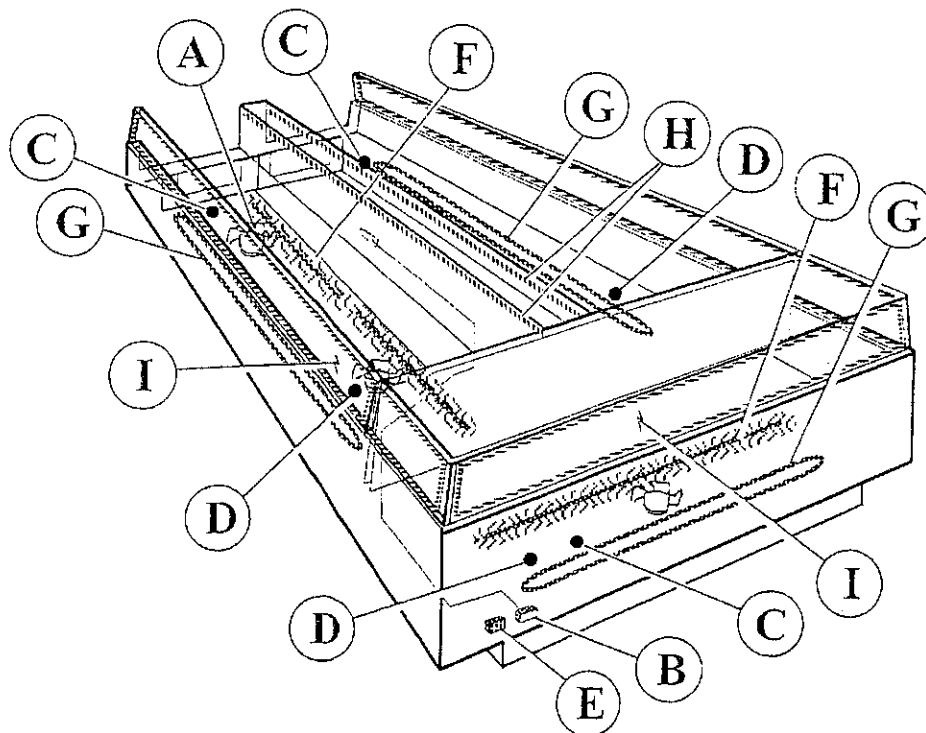


HUSSMANN® IMPACT™ Merchandisers

LWUG Data Sheet Set
P/N 395742F
August 2000



FAN ASSEMBLIES, AND THERMOSTATS

Item	Part #	Description	Wiring Item #
A.	4W Fan Assembly		(1)
	392457	Fan Motor, Standard	
	409511	Parent - Fan Blade embossing toward motor 6 3/4 Inch, 20°, CW	
	409513	End Unit - Fan Blade embossing toward motor 6 3/4 Inch, 30°, CW	
B.	Optional Adjustable Refrigeration Thermostat,		(2)
	144732	White Rodgers	
	253451	Honeywell	
C.	398557 (Front & End) Defrost Termination Thermostat		(3)
	398558 (Rear)	(Electric Defrost Only)	
D.	<u>425304</u>	Heater Switch (Koolgas Defrost Only)	(4)

HEATERS

E.	Control-Glass Anti-sweat Heaters (Export)	(5)
	Contour Ends 250V, 5amp	
	400543	90 & 138 inch cases

HEATERS

Item	Part #	Description	Wiring Item #
F.	Modular Electric Defrost Heaters, 208V		(6)
	395709	Parent Compartments	
	<u>406444</u>	End Compartment	
G.	Drip Pan Heaters, Electric 208V		(7)
	392412	90 inch case	
	392413	138 inch case	
	392412	End Compartment	
	Drip Pan Heaters, Koolgas 120V		(8)
	<u>421237</u>	90 inch case	
	<u>421238</u>	138 inch case	
	<u>421237</u>	End Compartment	
H.	Nosing Anti-sweat Heaters		(9)
	401603	90 inch case (Discharge)	
	401605	138 inch case (Discharge)	
	401612	End Compartment (Discharge)	
I.	Multiglass - 2 Pane, w/heater (Front & Rear)		(10)
	420174	90 inch case (Front)	
	420175	90 inch case (Rear)	
	420176	138 inch case (Front)	
	420177	138 inch case (Rear)	
	420183	End compartment (90 & 138)	
	420182	Contour End	

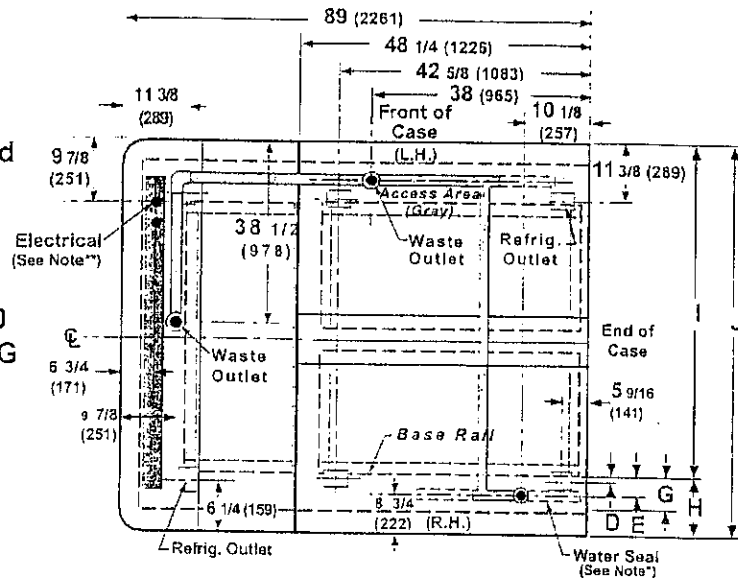
Note: Changed items have been underlined.

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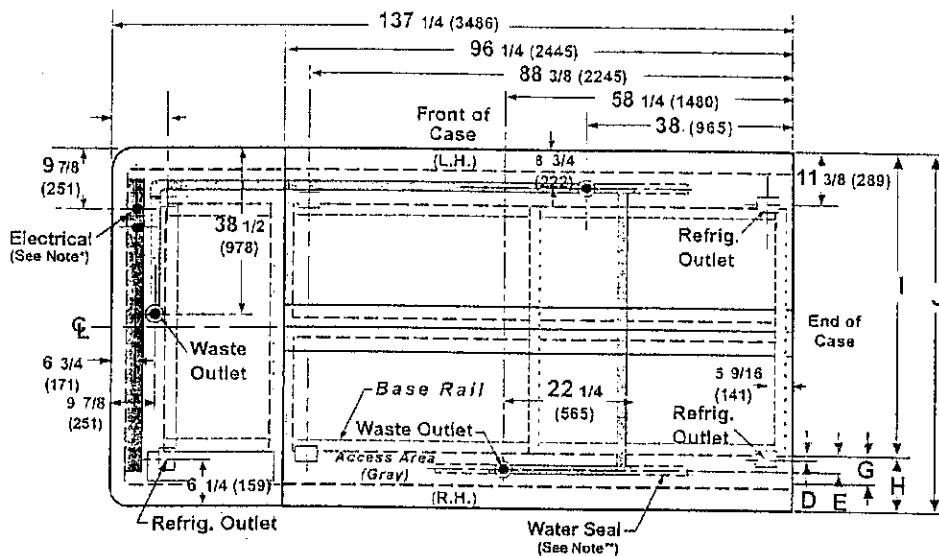
Engineering Plan Views

Single Deck Frozen Food Wide Island with Unitized End

LWU-90
LWU-90G



LWU-138
LWU-138G



Length of Case---U-90 - 89; U-138 - 137 1/4
End of case to end compartment ---U-90 - 48 1/4;
U-138 - 96 1/4

Maximum O/S dimensions of case front to rear
(includes bumper)---J = 81 1/2
Front of splashguard to O/S edge of base rail
---G = 8 1/2
Front edge of case to O/S edge of rear base rail---I = 69
Rear of case to O/S edge of rear base rail--- H = 12 1/2

Width of base rail--- 2 1/2

Stub-up area between front base rail
and splashguard--- 7 5/8

Electrical Service

Edge of case to center of knockouts--- 6 3/4
Front O/S edge of case to nearest knockout--- 9 7/8
Note *: Electrical Field Wiring Connection Point

Waste Outlet

End of case to center of rear waste outlet ---U-90-- 10 1/8;
U-138-- 58 1/4
Center of waste outlet to O/S edge of rear base rail---E = 3 3/4
End of case to center of front waste outlet--- U-90-- 38;
U-138-- 38
O/S edge of case to center of waste outlet--- 8 3/4

Water Seal

Edge of water seal to center of waste outlet--- 11
O/S diameter of drip pipe lines--- 1 1/2
Note **: Field installed water seal outlet, tees, and connectors,
are shipped with case.

Refrigeration Outlet

End of case to center of front and rear
refrigeration outlets-- 5 9/16
End of case to center of refrigeration outlets at other end
-- U-90- 42 5/8; U-138-- 88 3/8
O/S edges of case to center of refrigeration outlets---11 3/8
Center of refrigeration outlet to O/S edge of rear base rail---D = 1 1/4

Impact **LWUG**
Frozen Food & Ice Cream

REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

	FF	IC
Discharge Air (°F)	-12-	22
Evaporator(°F)	-20-	30
Unit Sizing (°F)	-23-	33
Btu/hr/case*	FF	IC
Parallel		
90 in.	5425	5485
138 in.	8525	8620
Conventional		
90 in.	5600	5665
138 in.	8800	8900

*For all refrigeration equipment other than Hussmann, use conventional Btu values.

DEFROST DATA

	FF	IC
Frequency (hr)	24	24
Defrost Water (lb/day)		
90 in.	12.5	10.0
138 in.	20.0	16.0

(± 15% based on case configuration and product loading).

	FF	IC
ELECTRIC		
Temp Term (°F)	48°	48°
Failsafe (min)	60	60
GAS		
Duration (min)	15	18

OFFTIME OR REVERSE AIR
Not Recommended

CONVENTIONAL CONTROLS

	FF	IC
Low Pressure Backup Control		
CL/CO (Temp °F)**	-27°/-39°	-27°/-39°

Indoor Unit Only, Pressure Defrost Termination (Temp °F)**

Not Recommended

**Use a Temperature Pressure Chart to determine PSIG conversions.

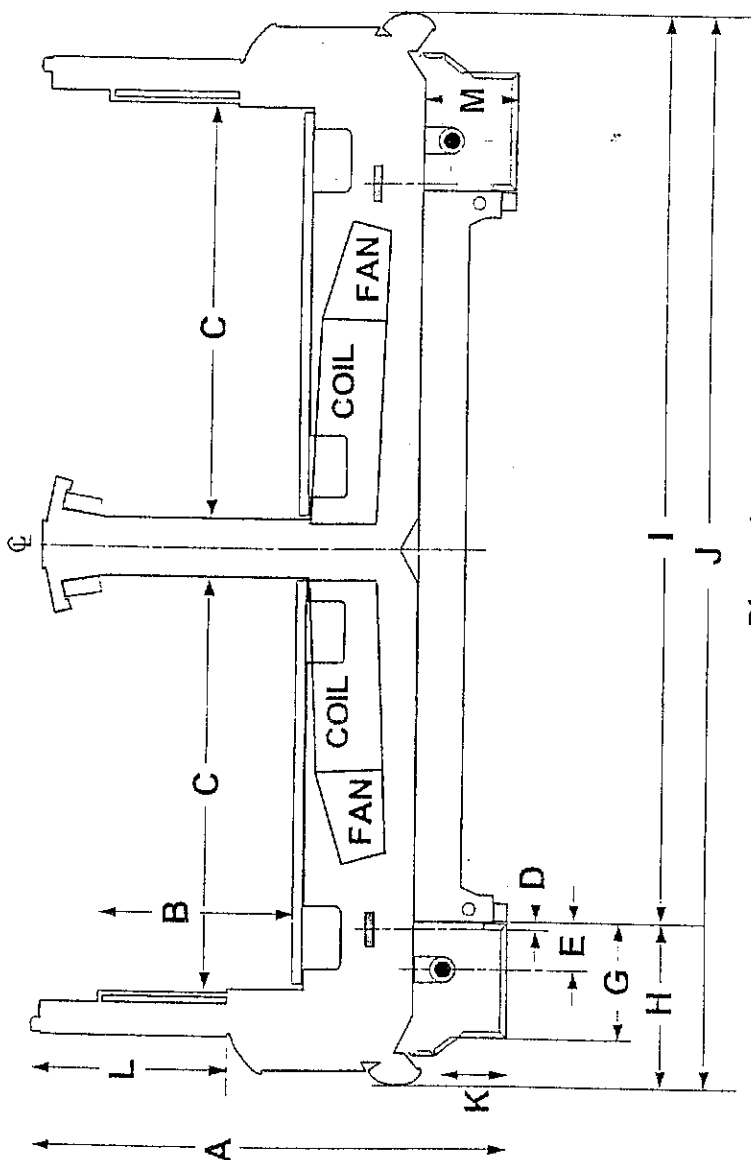
PHYSICAL DATA

Drip Pipe (in.)	1 1/4
Liquid Line (in.)	3/8
Suction Line (in.)	7/8
Estimated Charge (lb)***	
90 in.	2.8
138 in.	4.6

***This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

Length Added to Lineup by:	
Each End/Partition (in.)	1 1/2
Each Contoured End (in.)	5

Dimensions shown in inches & (mm).



Dimensions

	A	B	C	D	E	F	G	H	I	J	K	L	M
	36	15	32	1 1/4	3 3/4	-	8 1/2	12 1/2	69	81 1/2	5	15	7
	914	381	813	32	95	-	214	318	1753	2070	127	381	178
LWG (MM)													

NOTE: The bumpers are 4 inches wide. The top of the front glass bumper rail is 21 inches from the floor, and the center of the bottom bumper is 8 1/4 inches from the floor.

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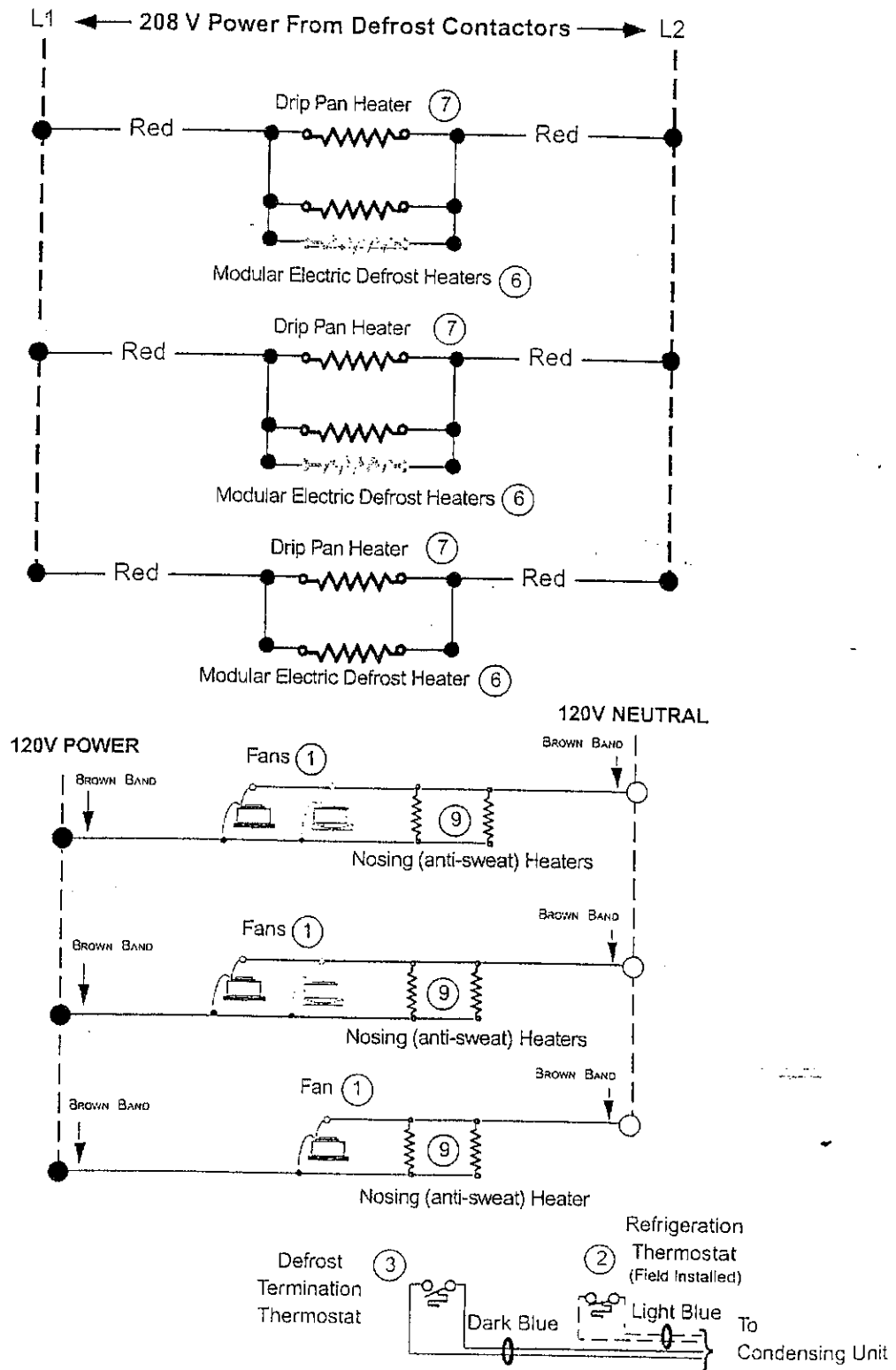
HUSSMANN®

Electrical Data

	90 in.	138 in.
Number of Fans – 4W	3	5
Number of Fans – 9W(Export)	3	5
(Export: 230V 50 hz shown)		
Number of Fans – 2W(ECM)	2	4
(Energy Efficient fan motors not available for End or End-compartment models)		

Merchandiser	Amperes		Watts	
	90 in.	138 in.	90 in.	138 in.
Fans				
Standard	0.78	1.30	54	90
Energy Efficient	0.50	0.74	25	32
Export: 230V 50hz	0.90	1.50	144	240
Anti-sweat Heaters (on fan circuit)				
Nosing Anti-sweat Heaters	1.42	2.08	170	250
Export: 230V 50hz (Discharge)	0.74	1.09	170	250
Glass Anti-sweat Heaters				
Glass Heaters	3.44	4.28	412	514
Export: 230V 50hz (Glass)	1.97	2.46	454	566
Cycling Anti-sweat Heaters	NA			
Export: 230V 50hz	NA			
Min. Circuit Ampacity				
With Standard Fans	2.40	3.58		
With Energy Efficient Fans	2.12	3.02		
Export: 230V 50hz	1.84	2.79		
Max. Over Current Protection	20	20		
Export: 230V 50hz	15	15		
208V 1Φ Electric Defrost Heaters				
Front Compartment	<u>4.00</u>	<u>8.00</u>	<u>835</u>	<u>1670</u>
Rear Compartment	<u>4.00</u>	<u>8.00</u>	<u>835</u>	<u>1670</u>
End Compartment	<u>5.50</u>	<u>5.50</u>	<u>1150</u>	<u>1150</u>
Export: 230V 50hz Electric Defrost Heaters				
Front Compartment	<u>4.40</u>	<u>8.90</u>	<u>1012</u>	<u>2047</u>
Rear Compartment	<u>4.40</u>	<u>8.90</u>	<u>1012</u>	<u>2047</u>
End Compartment	<u>6.10</u>	<u>6.10</u>	<u>1403</u>	<u>1403</u>
120V 1Φ Koolgas Drip Pan	<u>3.75</u>	<u>6.25</u>	<u>450</u>	<u>750</u>
Export: 120V 50hz Koolgas Drip Pan	NA	NA	NA	NA
Standard Lighting				
None				

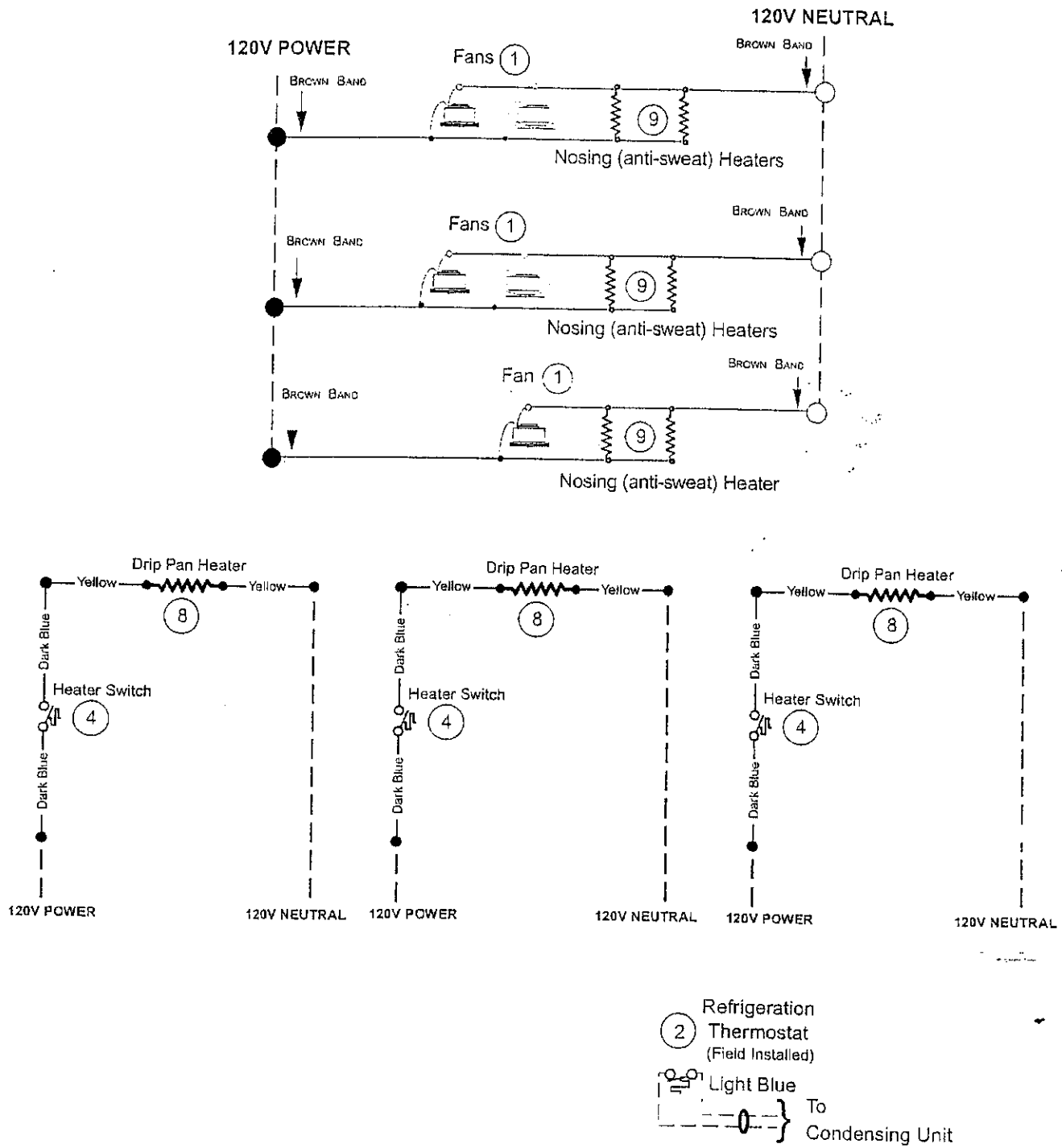
Electric Defrost – Standard



WARNING

All components must have mechanical ground, and the merchandiser must be grounded.
 Circled Numbers = Parts List Item Numbers
 Grayed components in 138 inch models only.

Gas Defrost – Optional

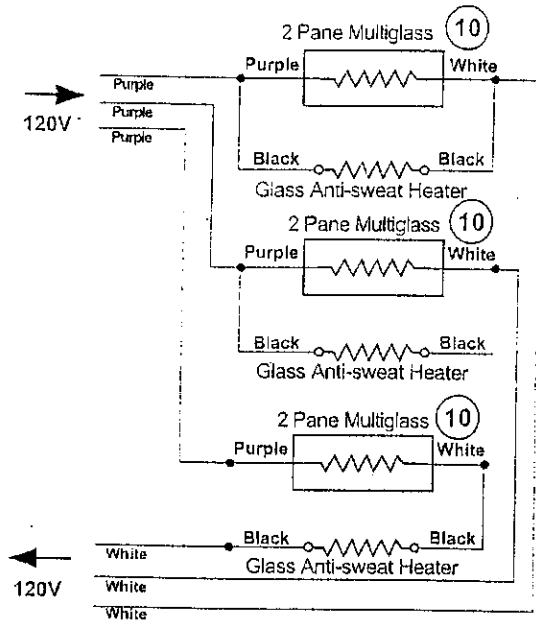


WARNING

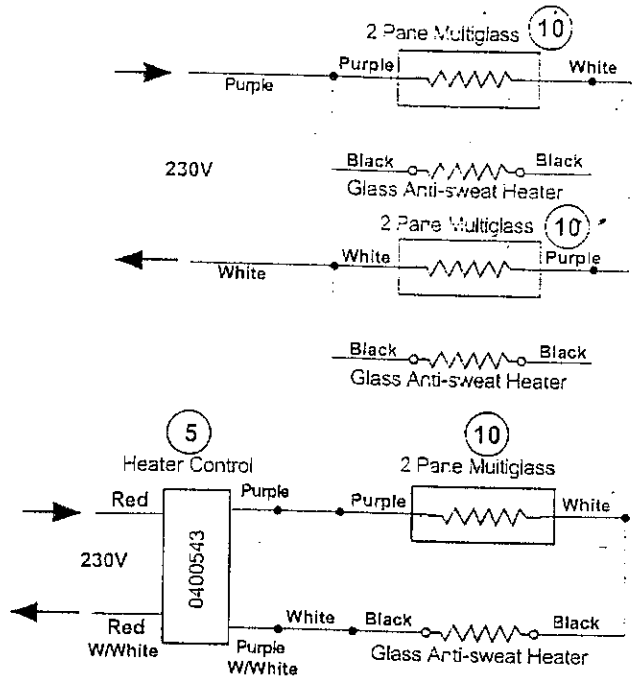
All components must have mechanical ground, and the merchandiser must be grounded.
 Circled Numbers = Parts List Item Numbers
 Grayed components in 12 foot models only.

Glass Anti-sweat Heaters — Domestic & Export

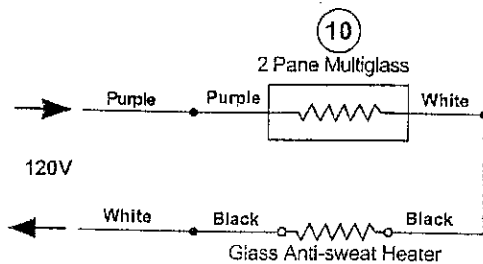
Glass Anti-sweat Heater (Domestic)
 LWUG-90 & LWUG-138 (Unitized)



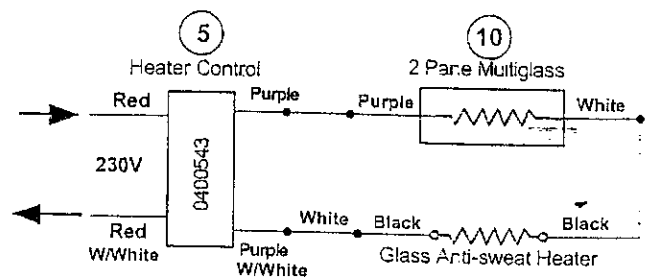
Glass Anti-sweat Heater (Export Only)
 LWUG-90 & LWUG-138 (Unitized)



Anti-sweat Heater (Domestic)
 LWUG Contour Ends



Anti-sweat Heater (Export Only)
 LWUG Contour Ends



WARNING

All components must have mechanical ground, and the merchandiser must be grounded.
 Circled Numbers = Parts List Item Numbers