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Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>LAMPS AND BALLASTS</b>			
A.	<b>7W Parent Fan Assembly</b>		(1)	E.	Ballast, Electronic		
	<u>0058698</u>	Fan Motor, Standard (MO.4410102)			<u>0466234</u>	<b>2 lamps</b> (BA.4480823)	(5)
	<u>0142780</u>	Fan Blade (FB.0142780) embossing toward motor			0376410	<b>3 lamps</b> (BA.4480901)	(5)
B.	<b>12W End Compartment Fan Assembly</b>		(2)	F.	Ballast, Electronic (End Compartment)		(6)
	<u>0477655</u>	Fan Motor, Standard (MO.4410546)			<u>0135966</u>	<b>1 lamp</b> (BA.4480883)	
	<u>0377253</u>	Fan Blade (FB.4780616) embossing away from motor		G.	<u>0039764</u>	Lamp Starter (EP.4481081)	(7)
C.	<u>0398558</u>	Standard Non-Adjustable Defrost Thermostat (CT.4481088)	(3)	H.		Fluorescent Lamp <i>Replace with like fixtures</i>	(8)
D.	<u>0144732</u>	Optional Adjustable Refrigeration Thermostat (CT.4481085)	(4)				

Data sheet-Excel-CW2UGE

Note: Revision B: Added high glide refrigerant note. Other changes marked by bar, underline or circle.

# Engineering Plan Views

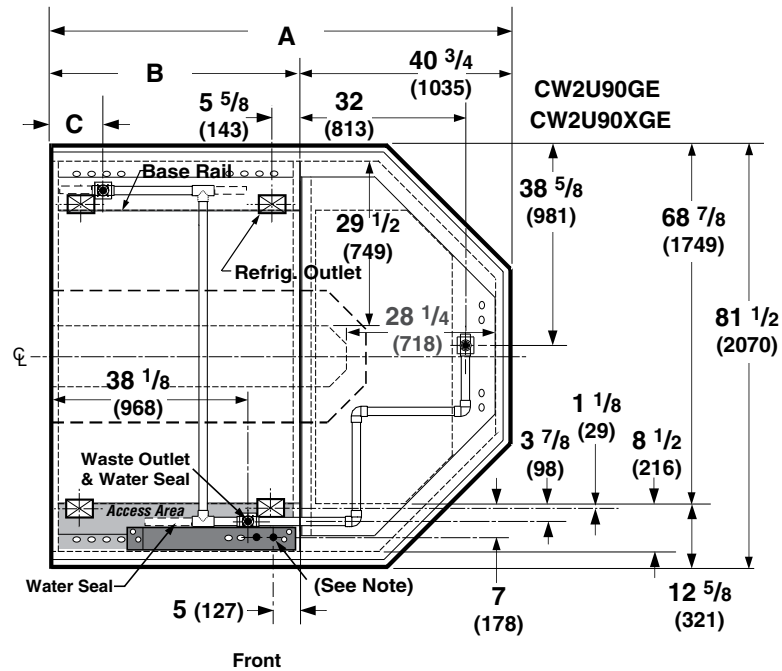
## Unitized Convertible Island





05-2003

### PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	1/2
Merchandiser Suction Line (in.)	1 1/8

Dimensions shown as inches and (mm).



	90 in.	138 in.
<b>General</b>		
<b>(A)</b> Case Length ( <i>without ends or partitions</i> ) <i>(Each flat end adds 1 1/2 in. [38 mm] to lineup; each contour end adds 5 in. [127 mm].</i> Maximum O/S dimension of case front to rear ( <i>includes bumper</i> )	89 (2261) 81 1/2 (2070)	137 (3480) 81 1/2 (2070)
<b>(B)</b> End of case to end of compartment Length of the end compartment Front of splashguard to O/S edge of base rail Front edge of case to O/S edge of base rail Rear of case to O/S edge of front base rail Width of base rail Stub-up area between front base rail and splashguard	48 1/4 (1226) 40 3/4 (1035) 8 1/2 (216) 12 5/8 (321) 68 7/8 (1749) 2 1/8 (54) 7 1/4 (184)	96 1/4 (1478) 40 3/4 (1035) 8 1/2 (216) 12 5/8 (321) 68 7/8 (1749) 2 1/8 (54) 7 1/4 (184)
<b>Electrical Service</b> 		
<b>Note:</b> <i>Electrical Field Wiring connection point</i> Center of Electrical service to O/S edge of front base rail Right end of case to center of knockout Length of electrical raceway	7 (178) 5 (127) 32 5/8 (829)	7 (178) 5 (127) 32 5/8 (829)
<b>Waste Outlet</b> 		
<b>(C)</b> LH end of case to the center of rear waste outlet Center of waste outlet to O/S edge of rear base rail Left end of case to center of front waste outlet Left edge of end compartment to center of waste outlet Rear edge of end compartment to center of waste outlet	10 1/8 (257) 3 7/8 (98) 38 1/8 (968) 32 (813) 38 5/8 (981)	58 1/8 (1476) 3 7/8 (98) 38 1/8 (968) 32 (813) 38 5/8 (981)
<b>Water Seal</b> 		
Water seal length Schedule 40 PVC drip pipe <i>Water seal outlet must clear front skid rail.</i>	11 (279) 1 1/4 (32)	11 (279) 1 1/4 (23)
<b>Refrigeration Outlet</b> 		
RH & LH end of case to center of refrigeration outlets Center of refrigeration outlet to O/S edge of front base rail	5 5/8 (143) 1 1/8 (29)	5 5/8 (143) 1 1/8 (29)

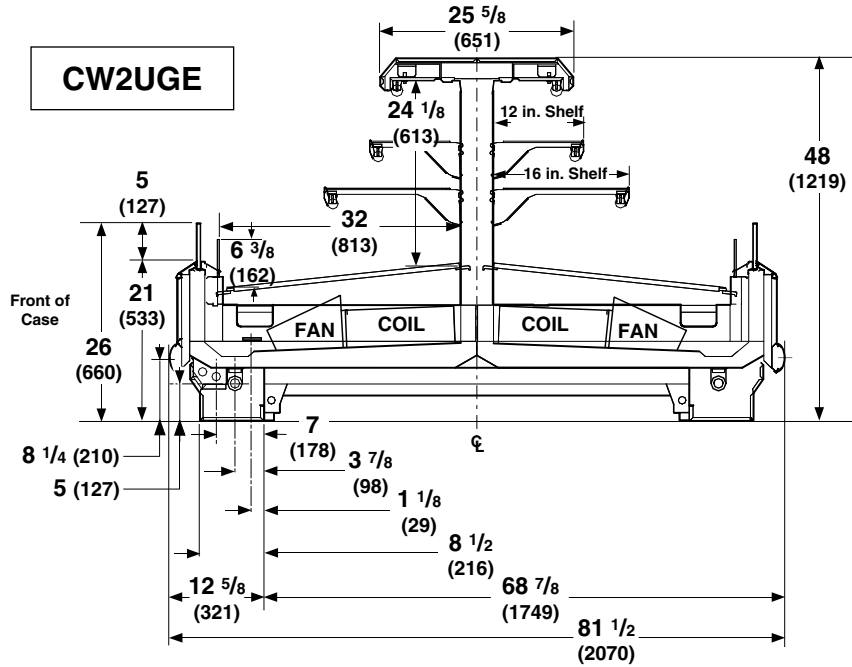
Unitized Convertible Island, 2 Display Levels



Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.



Dimensions shown as inches and (mm).



**PHYSICAL DATA**

Estimated Charge (lb)\*\*

CW2U-90GE	4.0
CW2U-138GE	6.3

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

**NSF Certification**

This merchandiser model is manufactured to meet ANSI/NSF (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

**REFRIGERATION DATA§**

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

	CW2U 90GE	CW2U 138GE
Discharge Air (°F)	28	28
Evaporator Air (°F)	21	21
Unit Sizing (°F)	19	19

§ Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

Btu/hr/case*	CW2U 90GE	CW2U 138GE
Parallel	10,520	16,440
Conventional	11,660	18,220

\*Optional energy efficient motors reduce the refrigeration load of:  
 CW2U-90GE by 171 Btu/hr/case  
 CW2U-138GE by 341 Btu/hr/case.

**DEFROST DATA**

	CW2U 90GE	CW2U 138GE
Frequency (hr)	6	6
Defrost Water (lb/day)	72	112

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

OFFTIME	CW2U 90GE	CW2U 138GE
Temp Term (°F)	48°	48°
Failsafe (minutes)	45	45

*ELECTRIC OR GAS* Not Recommended

**Standard Defrost Thermostat**

Close on rise: close 48°F — open 33°F

**CONVENTIONAL CONTROLS**

**Low Pressure Backup Control**

	CW2U 90GE	CW2U 138GE
CI/CO (Temp °F)*	17°/7°	17°/7°

**Indoor Unit Only, Pressure Defrost Termination (Temp °F)\* 48° 48°**

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

# Excel **CW2UGE** Unitized Convertible Island

## Electrical Data

			90 in.	138 in.		
<b>Number of Fans—7W</b>			2	4		
<b>Number of Fans—12W</b>			2	2		
			Amperes		Watts	
			90 in.	138 in.	90 in.	138 in.
<b>Evaporator Fan</b>						
120V	60Hz	Standard	1.60	2.60	114	192
120V	50Hz	Standard				
230V	60Hz	Export	NA		NA	
230V	50Hz	Export	NA		NA	
120V	60Hz	Energy Efficient	0.98	1.36	64	92
230V	60Hz	Energy Efficient				

**Cycling Anti-sweat Heaters** None

### Minimum Circuit Ampacity

120V	60Hz	Standard	1.80	2.80
120V	50Hz	Standard	NA	
230V	60Hz	Export	NA	
230V	50Hz	Export	NA	
120V	60Hz	Energy Efficient	1.18	1.56
230V	60Hz	Energy Efficient	NA	

**Maximum Over Current Protection 120V** 20 20

Maximum Over Current Protection 230V 15 15

**208V Electric Defrost Heaters** None

### Standard Lighting (T-8 Fluorescent)

1 Row Canopy	1.31	1.82	99	158
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ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2017 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

### Optional Lighting (T-8 Fluorescent)

Additional 1 Row Canopy				
Additional 2 Row Canopy	1.82	2.84	158	276

### Optional Shelf Lighting (T-8 Fluorescent)

1 Rows of Shelves	1.31	1.82	99	158
2 Rows of Shelves	2.62	3.64	198	316

**Note 1:** All CW2 end compartments are equipped with Energy Efficient fan motors as standard.

**Note 2:** CW2 end compartments are not available with 2 row canopy lighting due to space constraints.

Please note: some combinations of fluorescent lights on this case model may not be compliant with DOE 2017 and may not be available to order in the US and Canada. More lighting options are available with LED lights. The Hussmann Product Configurator will not allow lighting options that do not comply with the DOE 2017 standards.

**Excel CW2UGE**  
**Unitized Convertible Island**

**Product Data**

**CW2U90GE**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft / Case)	43.07 ft <sup>3</sup> /case (1.22 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft / Case)	39.66 ft <sup>2</sup> /case (3.68 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft / Case)	70.40 ft <sup>2</sup> /case (6.54 m <sup>2</sup> /case)

**CW2U138GE**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft / Case)	67.67 ft <sup>3</sup> /case (1.92m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft / Case)	61.02 ft <sup>2</sup> /case (5.67 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft / Case)	110.24 ft <sup>2</sup> /case (10.24m <sup>2</sup> /case)

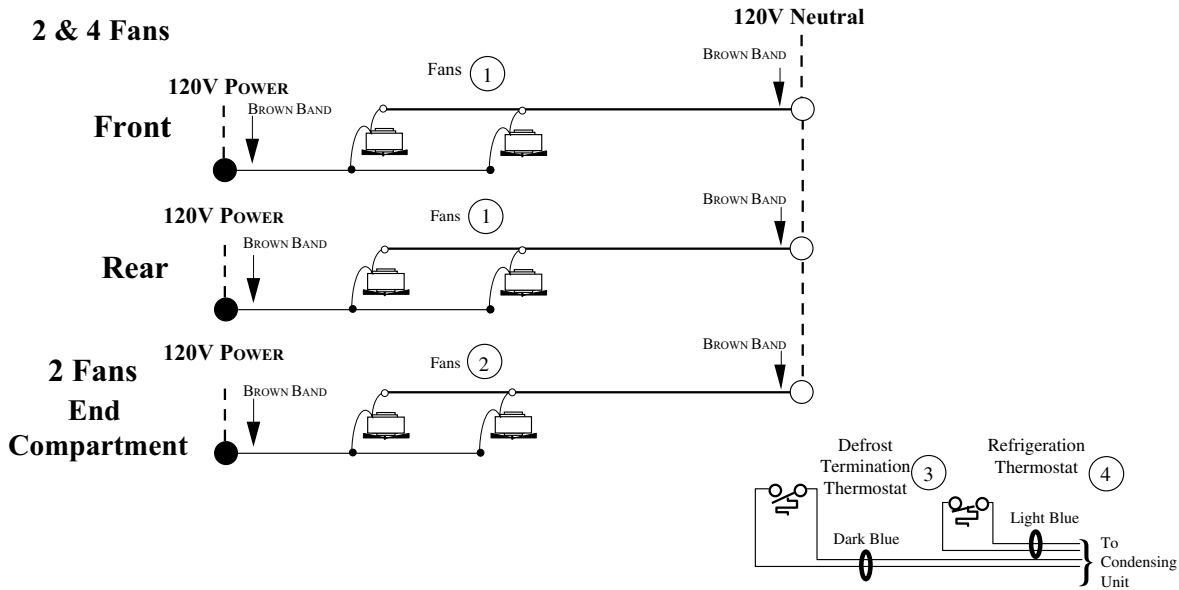
- <sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]  
<sup>2</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]  
<sup>3</sup> Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (2) rows of 12-inch shelves and (2) rows of 18-inch shelves.

**ESTIMATED SHIPPING WEIGHT**<sup>4</sup>

Case	<i>CW2U-90GE</i>	<i>CW2U-138GE</i>
<b>lb</b> (kg)	1100 (499)	1600 (726)

<sup>4</sup> Actual weights will vary according to optional kits included.

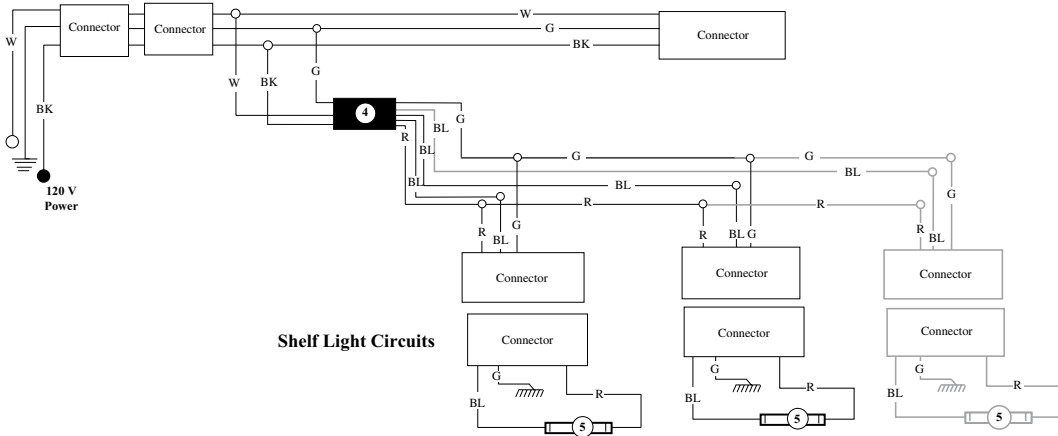
# Fan Wiring Offtime Defrost



# Optional Shelf Lighting

## Optional Shelf Harness and Light Circuits for One Row of Shelves

### Shelf Harness



## WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

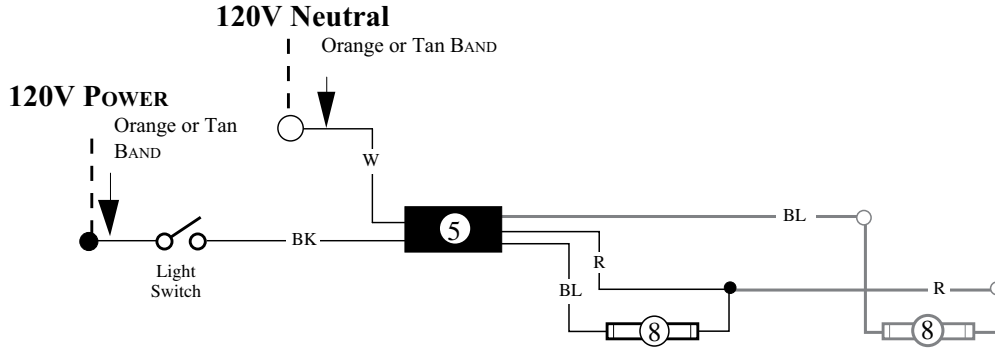
Circled numbers = Parts list Item Numbers

Grayed components in 138 models only

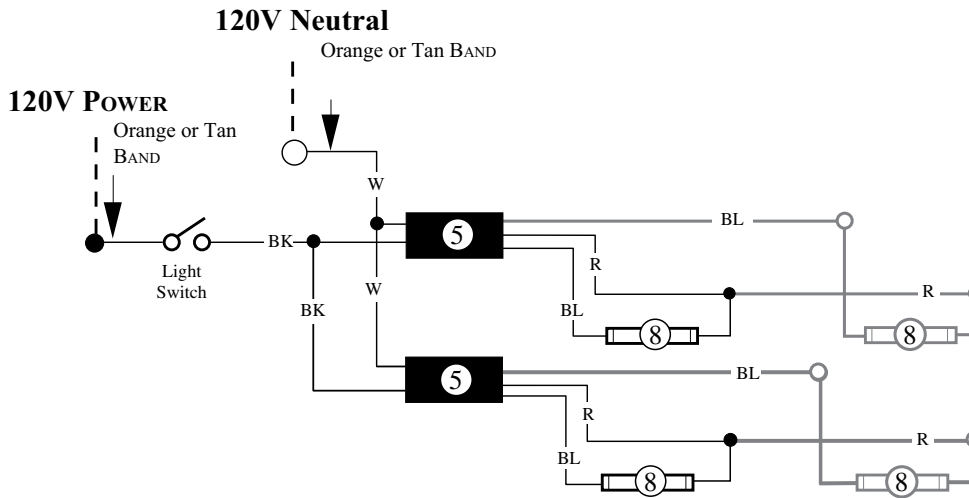
R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

● = 120V Power ○ = 120V Neutral ⊥ = Field Ground ≡ = Case Ground

### Standard Lighting 1 Row Canopy



### Optional Lighting 2 Rows Canopy



### WARNING

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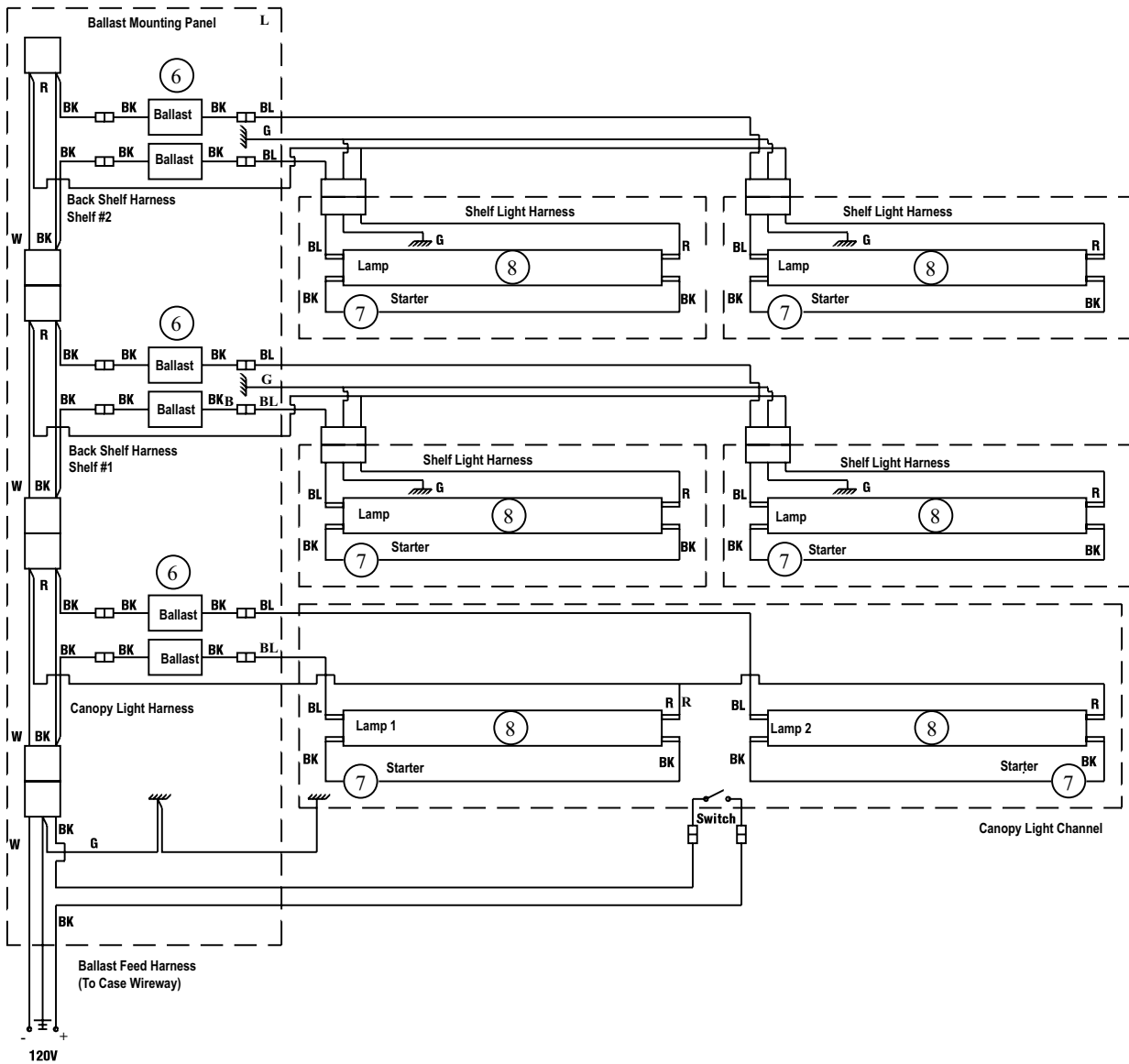
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# Light Circuits

## CW2U-90GE/138GE End Compartment Lighting Schematic

(Standard canopy lighting and optional shelf lighting are shown)



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