

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES AND THERMOSTATS				LAMPS AND BALLASTS			
A.	4W Standard Fan Assembly		(1)	F.	0355716	Ballast, Electronic, 2 lamps	(6)
	0392457	Fan Motor, Evaporator			0355398	Ballast, Electronic, 3 lamps	
	0409513	Fan Blade		G.		Fluorescent Lamp	(7)
		embossing toward motor				<i>Replace with like fixtures</i>	
B.	0522287	High Efficiency Fan Motor, Ambient (120V)	(2)	LED FIXTURES AND POWER SUPPLY			
C.	0411744	Standard Non-adjustable Defrost Thermostat	(3)	H.	0501213	Power Supply	(8)
D.	0137880	Optional Adjustable Refrigeration Thermostat	(4)	J.		LED Canopy Fixture	(9)
						<i>Replace with like fixtures</i>	
				K.		LED Rail Fixture	(10)
						<i>Replace with like fixtures</i>	
HEATERS							
E.	0496496	Heater, Anti-Sweat	(5)				

Data sheet-Elite-ES1

Note: Revision F: April 2017. Updated LED energy values. Other changes marked with a bar, circle or underline.

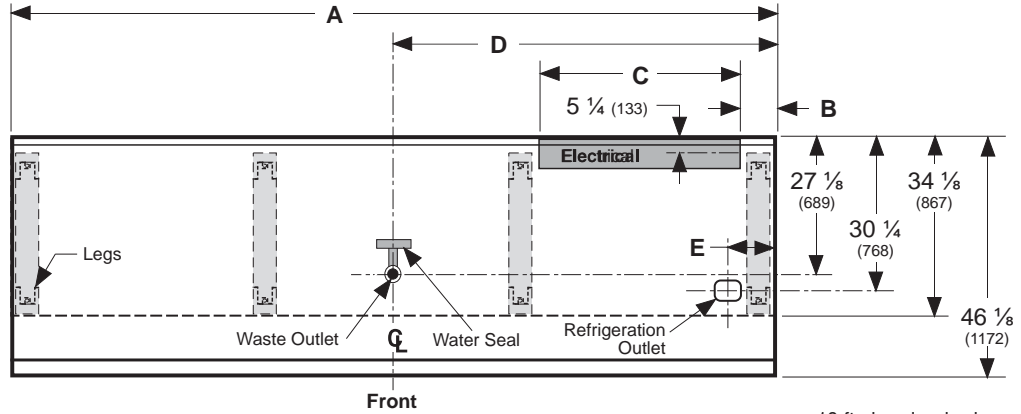
Engineering Plan Views

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8




ES1
Delicatessen,
Meat & Seafood

Dimensions shown as inches and (mm).

10-2005



12 ft plan view is shown.

	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length (<i>without ends or partitions</i>) <i>(Each end and insulated partition adds 1 in. (25 mm) to case line up.)</i>	48 1/4 (1226)	72 3/8 (1838)	96 3/8 (2448)	144 1/2 (3670)
Maximum O/S dimension back to front (<i>with bumper</i>)	46 1/8 (1172)	46 1/8 (1172)	46 1/8 (1172)	46 1/8 (1172)
Back of case to front of front panel	34 1/8 (867)	34 1/8 (867)	34 1/8 (867)	34 1/8 (867)
RH end of case to outside edge of external support	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)
Distance between edges of external support and center support	NA	28 1/2 (724)	40 1/2 (1029)	40 1/2 (1029)
Distance between edges of center supports	NA	NA	NA	43 7/8 (1114)
Distance between edges of external supports	37 (940)	NA	NA	NA
Electrical Service  (<i>Electrical Field Wiring connection point</i>)				
(C) Length of electrical raceway	34 1/2 (876)	26 (660)	38 (965)	38 (965)
RH End of case to center of farthest knockout	12 1/4 (311)	12 1/4 (311)	12 1/4 (311)	12 1/4 (311)
Back of case to center of end knockout	5 1/4 (133)	5 1/4 (133)	5 1/4 (133)	5 1/4 (133)
(B) RH End of case to RH end of raceway	6 7/8 (175)	6 7/8 (175)	6 7/8 (175)	6 7/8 (175)
Waste Outlet 				
(D) RH End of case to the center of waste outlet	24 1/8 (613)	24 1/8 (613)	24 1/8 (613)	72 1/4 (1835)
LH End of case to the center of waste outlet	24 1/8 (613)	48 1/4 (1226)	72 1/4 (1835)	72 1/4 (1835)
Back O/S of case to center of waste outlet	27 1/8 (689)	27 1/8 (689)	27 1/8 (689)	27 1/8 (689)
Water Seal				
Edge of water seal to center of waste outlet	4 (102)	4 (102)	4 (102)	4 (102)
Outside diameter of the drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
<i>(Field installed water seal outlets, tees, and connectors are shipped with the merchandiser.)</i>				
Refrigeration Outlet 				
Back of case to center of refrigeration outlet	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)
(E) RH end of case to center of refrigeration outlet	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)

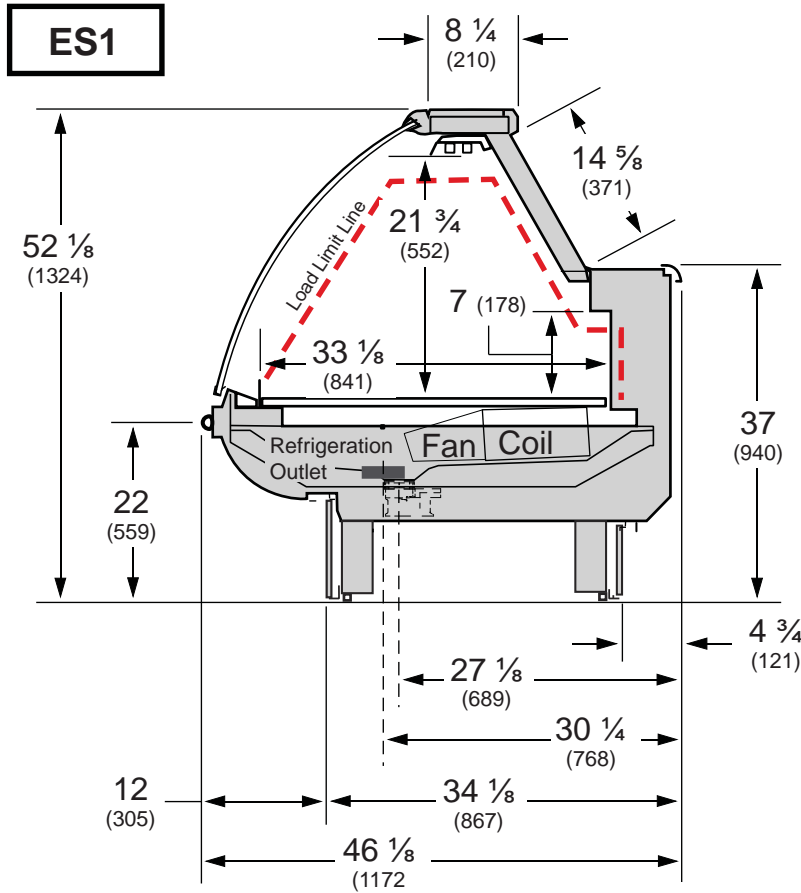
Elite specialty service merchandiser, curved front glass, 1 display level



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 in. & (mm).



REFRIGERATION DATA

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

	ES1§
Discharge Air (°F)	28
Evaporator (°F)	20
Unit Sizing (°F)	18

§ 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/ft	ES1
Parallel	250
Conventional	270

DEFROST DATA

	ES1
Frequency (hr)	12
Defrost Water	0.8 lb/ft/day

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

	ES1
OFFTIME	43
Temp Term (°F)	90
Failsafe (minutes)	

ELECTRIC OR GAS Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F – open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control	
CI/CO*	ES1
Temp	13°F / 3°F

Indoor Unit Only, Pressure Defrost

Termination (Temp °F)* 43°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

ES1 cannot use shelves!

Estimated Charge **	ES1		
4 ft	0.8 lb	13 oz	0.4 kg
6 ft	1.2 lb	19 oz	0.5 kg
8 ft	1.5 lb	24 oz	0.7 kg
12 ft	2.0 lb	32 oz	1.9 kg

**This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

NSF Certification

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

Elite ES1 Delicatessen, Meat & Seafood

Electrical Data

	4 ft	6 ft	8 ft	12 ft
Number of Fans — 4W	1	2	2	3
Number of Fans — 4W (Export) (Export: 230V 50 hz shown)	1	2	2	3
Ambient Air Wipe — 4.5W	2	4	4	6

Merchandiser	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Fans (Evaporator)								
120V 60Hz Standard	0.31	0.62	0.62	0.93	24	48	48	72
230V 50Hz Export	0.18	0.36	0.36	0.54	27	54	54	81
Fans (Ambient Air Wipe)								
120V 60Hz High Efficiency	0.1	0.2	0.2	0.3	4.5	9	9	13.5
230V 50Hz Export	0.15	0.3	0.3	0.45	25	50	50	75
Constant On Anti-sweat Heaters	0.13	0.26	0.26	0.39	16	32	32	48
Minimum Circuit Ampacity								
120V 60Hz Standard Fans	0.68	1.35	1.35	2.03				
230V 50Hz Export Fans	0.41	0.83	0.83	1.24				
Maximum Over Current Protection								
230V 50Hz Export	20	20	20	20				

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.

Standard Lighting (T-8 fluorescent)

2 Rows Canopy	0.49	0.80	0.98	1.42	59	92	118	170
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Optional Lighting (T-8 fluorescent)

1 Row Ledge Lights	0.26	0.40	0.49	0.71	30	46	59	86
1 Row Rail Lights	0.26	0.40	0.49	0.71	30	46	59	86

EcoShine II IP67 LED

Canopy 2 Row Front	0.16	0.23	0.33	0.49	19.8	28.2	39.5	59.3
Canopy 1 Row Front	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
1 Row Rail	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7

115V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Rail Lighting

230V Lighting Circuit Total = Multiply 115V Lighting Circuit Total by 0.52

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.

Product Data

Recommended Usable Cube ² (Cu Ft/Ft)	1.61 ft ³ /ft (0.15 m ³ /m)
AHRI Total Display Area ³ (Sq Ft/Ft)	3.51 ft ² /ft (1.07 m ² /m)
Shelf Area ⁴ (Sq Ft/Ft)	2.76 ft ² /ft (0.84 m ² /m)

¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

³ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

⁴ 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 NONE.

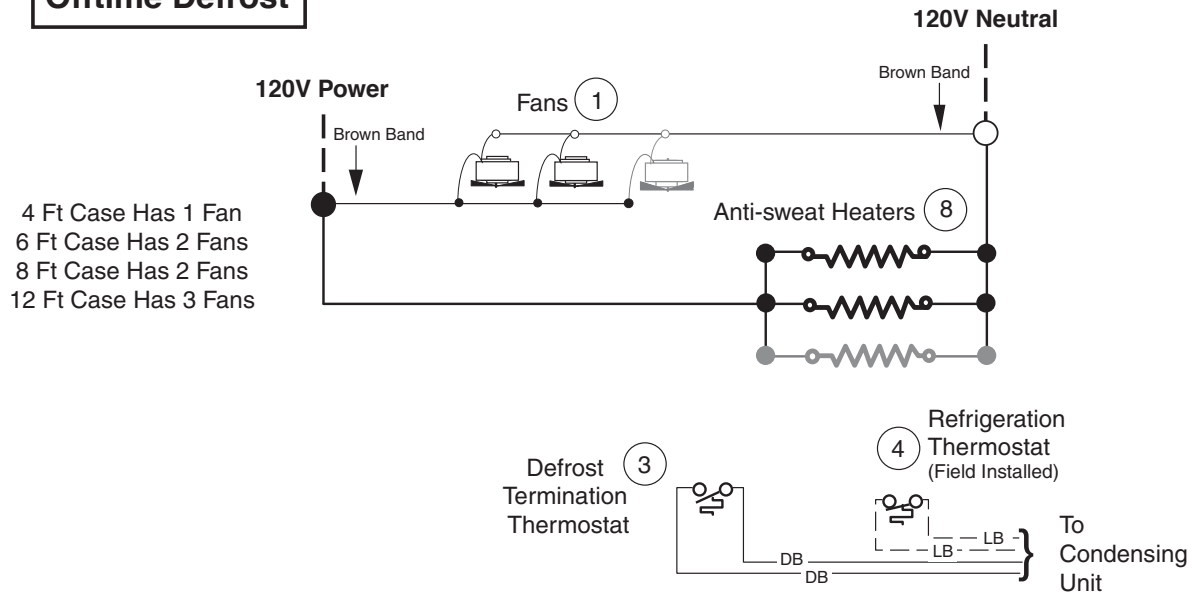
ESTIMATED SHIPPING WEIGHT ⁴

Case	4 ft	6 ft	8 ft	12 ft	Solid End (each)
lb (kg)	600 (272)	700 (318)	1100 (499)	1200 (545)	100 (45)

⁴ Actual weights will vary according to optional kits included.

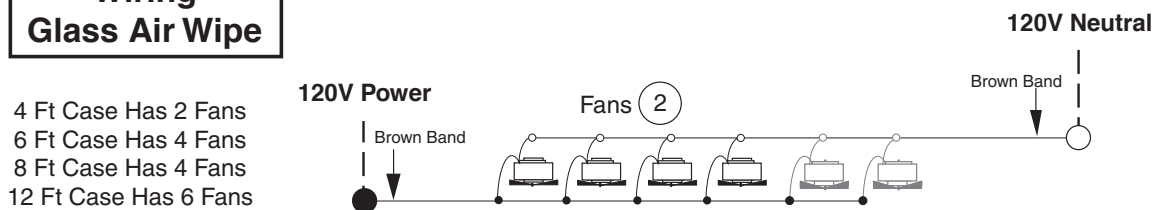
Fan Wiring Offtime Defrost

Fans



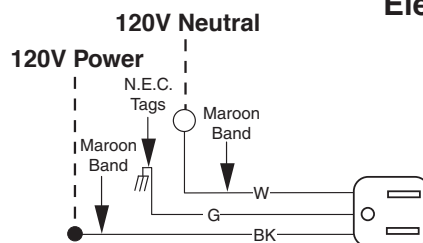
Ambient Fan Wiring Glass Air Wipe

Fans



Receptacles

Electric Service Receptacle



WARNING

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

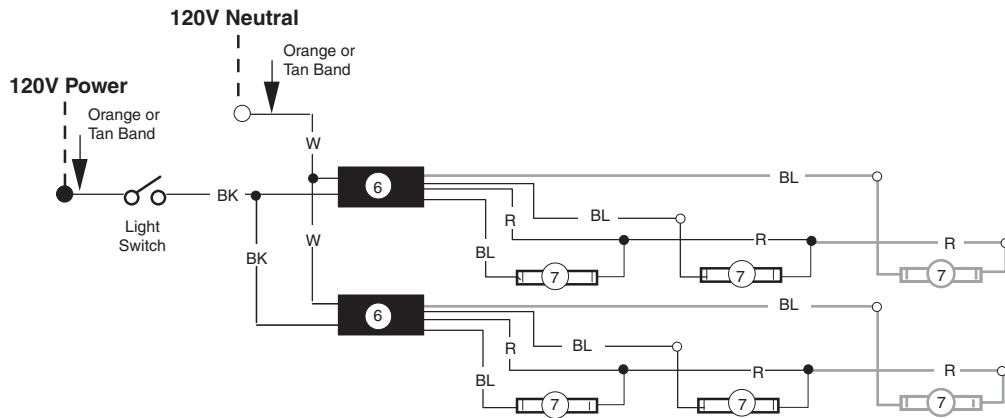
Circled Numbers = Parts List Item Numbers

Grayed components in 12 foot models only.

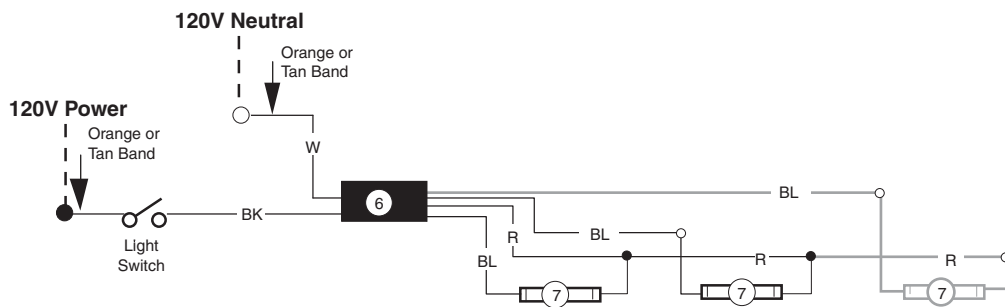
R = Red G = Green BL = Blue LB = Light Blue DB = Dark Blue BK = Black W = White

Light Circuits

Standard Lighting - 2 Rows Canopy



Optional Lighting: 1 Row Ledge or 1 Row Rail



WARNING

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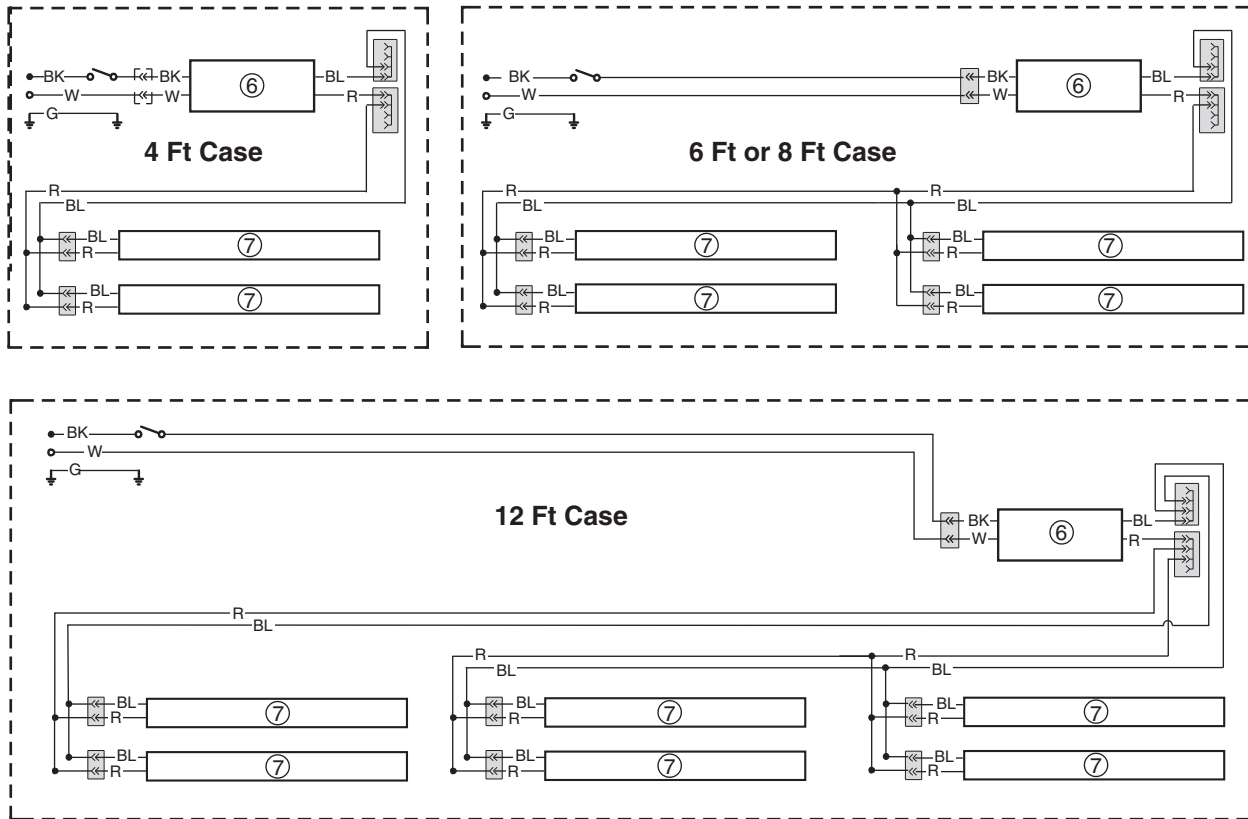
Grayed components in 12 foot models only.

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

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

Optional Lighting LED Fixtures

EcoShine II LED Canopy Lighting – 2 Row



WARNING

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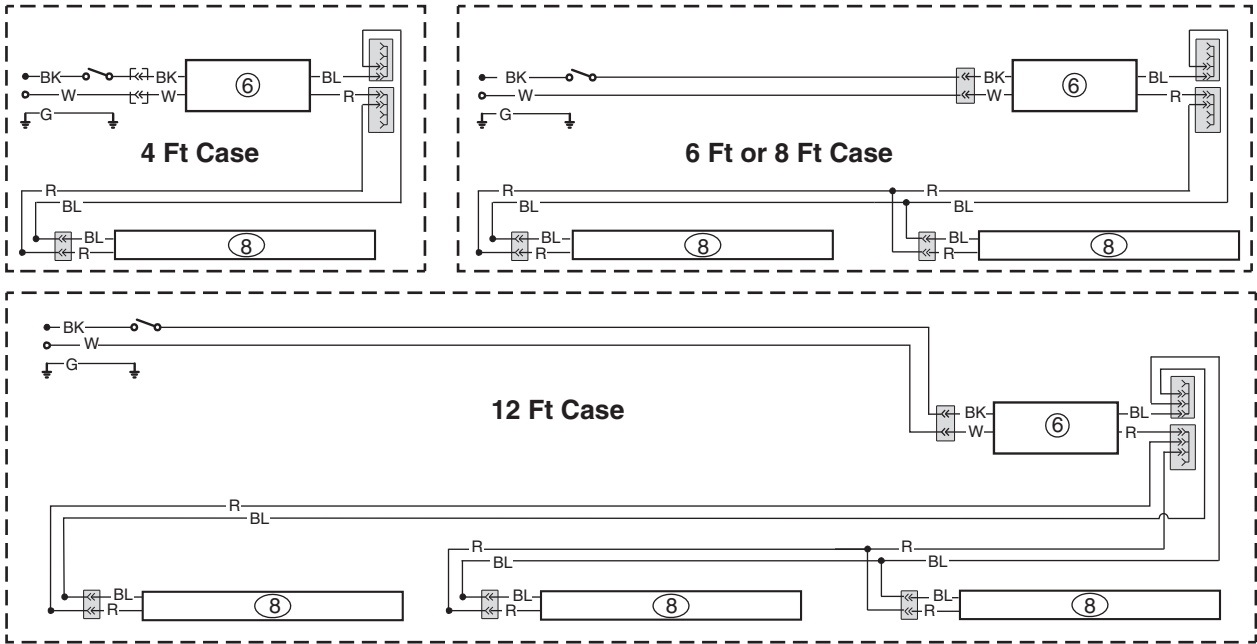
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Optional Lighting LED Fixtures

EcoShine II LED Rail Lighting – 1 Row



WARNING

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

Circled Numbers = Parts List Item Numbers

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