

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 #
<b>FAN ASSEMBLIES</b>				<b>LAMPS AND BALLASTS</b>			
<i>ONLY ENERGY EFFICIENT FANS ARE AVAILABLE</i>							
<b>4 Ft, 8 Ft &amp; 12 Ft</b>							
A.	<b>16W Energy Efficient Fan Assembly</b>		(1)	C.	Ballast, Electronic		(3)
	<u>0477657</u>	Fan Motor, Evaporator (MO.4410546)			0480130	2 lamps (BA.4481676)	
	<u>0461805</u>	Fan Blade (FB.4780446)			0480131	3 lamps (BA.4481654)	
<b>6 Ft Only</b>					0480132	4 lamps (BA.4481677)	
A.	<b>12W Energy Efficient Fan Assembly</b>		(1)	D.	Fluorescent Lamp		(4)
	<u>0477655</u>	Fan Motor, Evaporator (MO.4410546)			<i>Replace with like fixtures</i>		
	<u>0463643</u>	Fan Blade (FB.4780648)		<b>LED FIXTURES AND POWER SUPPLY</b>			
<b>THERMOSTATS</b>				E.	0501213	Power Supply (EP.4481861)	(5)
B.	Optional Adjustable Refrigeration Thermostat(2)			F.	LED Canopy Fixture (6)		
					<i>Replace with like fixtures</i>		
				G.	LED Shelf Fixture (7)		
					<i>Replace with like fixtures</i>		

Data sheet-Excel-ME5X-P

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

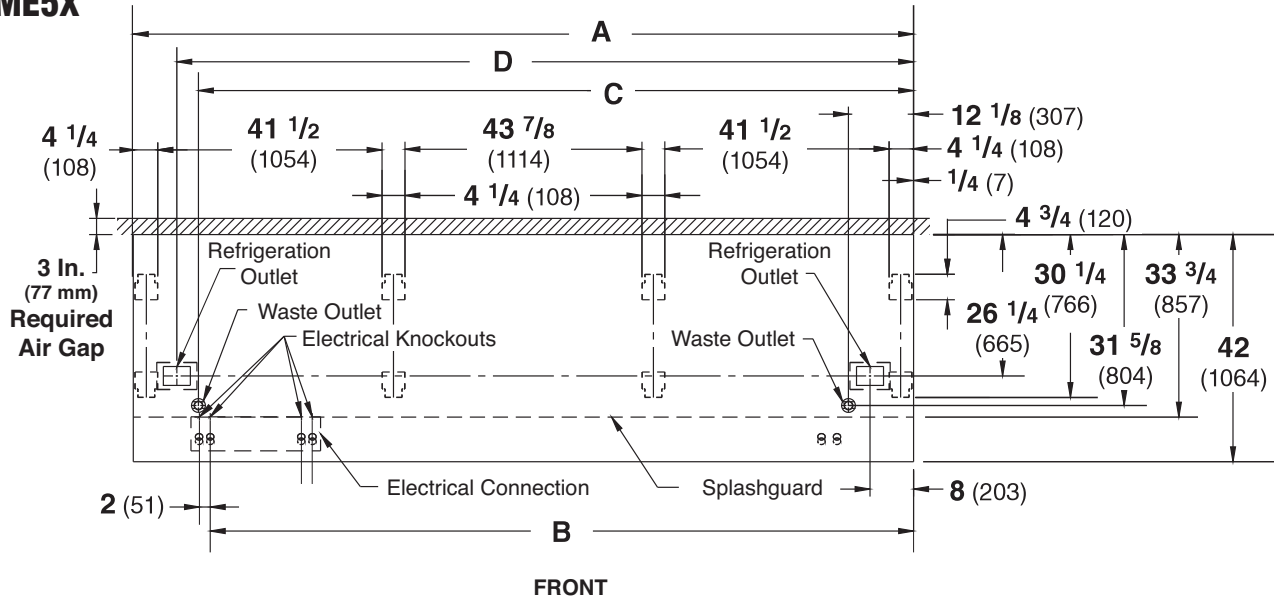
# Engineering Plan Views

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

**Meat and Produce**  
05-2010

Dimensions shown as inches and (mm).

**ME5X**



	6 ft	8 ft	10 ft	12 ft
<b>General</b>				
<b>(A)</b> Case Length ( <i>without ends or partitions</i> ) (Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)	72 3/8 (1838)	96 3/8 (2448)	120 1/2 (3061)	144 1/2 (3670)
Maximum O/S dimension of case back to front (includes bumper)	42 (1064)	42 (1064)	42 (1064)	42 (1064)
Back of case to front of splashguard	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
Back of case to O/S edge of front leg	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)
Distance between edges of external legs and center legs	29 1/2 (750)	41 1/2 (1054)	29 1/2 (749)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	43 7/8 (1114)	43 7/8 (1114)
Distance between front legs and splashguard	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)
<b>Electrical Service</b> ( <i>Electrical Field Wiring connection point</i> )				
<b>(B)</b> RH End of case to center of stub up area	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
Back of case to center of stub up area	24 (612)	24 (612)	24 (612)	24 (612)
Length of electrical wireway	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
<b>(C)</b> RH End of case to LH end of wireway	66 1/8 (1680)	90 1/8 (2289)	114 1/4 (2902)	138 1/4 (3511)
<b>Waste Outlets</b> ( <i>One each end</i> )				
<b>(D)</b> RH End of case to the center of LH waste outlet	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
RH End of case to the center of RH waste outlet	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)
Back O/S of case to center of waste outlets	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
<b>Refrigeration Outlet</b>				
Back of case to center of refrigeration outlet	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)	8 (203)



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



**REFRIGERATION DATA**

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

ME5X-P§	OPTIMAL SHELF LIFE		AHRI 1200 RATING POINT†	
	UNLIT	LIT	UNLIT	LIT
Discharge Air °F	29	27	36	34
Evaporator °F	24	22	30	28
Unit Sizing °F	22	20	28	26
Btu/hr/ft — Unlit Shelves‡	Parallel	Conventional	Parallel	Conventional
	UNLIT	1325	1475	1205

‡ Add 10 Btu/hr/ft *per shelf row* for LED fixtures.

† For energy consumption comparison only.

§ 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.

**DEFROST DATA**

Frequency Hr	4
Defrost Water (lb/ft/day)	10
(± 15% based on case configuration and product loading).	
OFFTIME	ME5X-GP
Time (minutes)	25
ELECTRIC OR GAS	Not Recommended

**CONVENTIONAL CONTROLS**

Low Pressure Backup Control	
ME5X-GP	
CIICO*	15°F / 5°F
Indoor Unit Only,	
Pressure Defrost Termination*	48°F
*Use a Temperature Pressure Chart to determine PSIG conversions.	

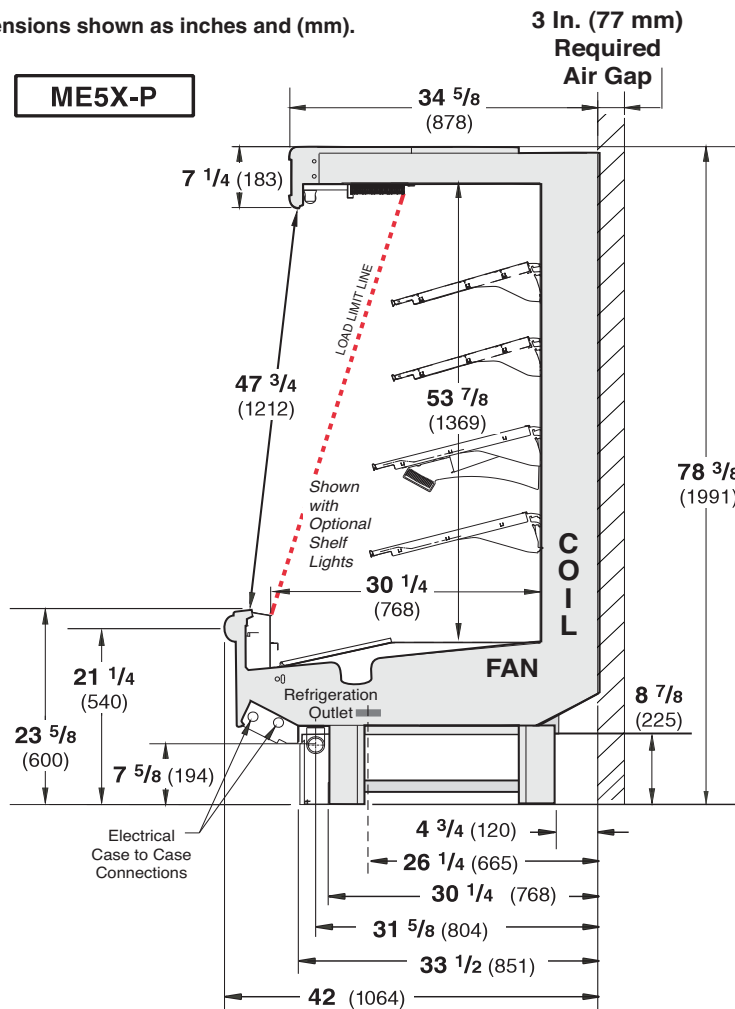
Estimated Charge**	ME5X-P		
4ft	1.9 lb	30 oz	0.9 kg
6ft	2.5 lb	40 oz	1.1 kg
8ft	3.7 lb	59 oz	1.7 kg
12ft	5.1 lb	82 oz	2.3 kg

\*\*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 NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

Dimensions shown as inches and (mm).



# Excel ME5X-P

## Ultra Efficient Meat

### Electrical Data

	4 ft	6 ft	8 ft	12 ft					
Number of Fans – 16W	2	—	4	6					
Number of Fans – 12W	—	4	—	—					
		Amperes					Watts		
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft	
<b>Evaporator Fans</b>									
120V 60Hz Standard Energy Efficient	0.8	1.2	1.6	2.4	60	72	120	180	
120V 50Hz Standard Energy Efficient									
230V 60Hz Export	NA								
230V 50Hz Export	NA								
<b>Minimum Circuit Ampacity</b>									
120V 60Hz Standard Energy Efficient	1.0	1.4	1.8	2.6					
120V 50Hz Standard Energy Efficient									
230V 60Hz Export	NA								
230V 50Hz Export	NA								
<b>Maximum Over Current Protection 120V</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>					
Maximum Over Current Protection 230V	15	15	15	15					

### Standard Lighting (T-8 fluorescent)

1 Row Canopy	0.26	0.51	0.51	0.77	30	59	59	85
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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	0.26	0.51	0.51	0.77	30	59	59	85
Additional 2 Row Canopy	0.51	1.02	1.02	1.54	59	118	118	170
Additional 3 Row Canopy	0.77	1.53	1.53	2.31	89	177	177	255
1 Row Rail Light	0.26	0.51	0.51	0.77	30	59	59	85

*Fluorescent Shelf Lighting is not available on Ultra Efficient Merchandisers.*

### EcoShine II Canopy

EcoShine II	0.16	0.26	0.32	0.48	19.3	31.6	38.6	58.0
EcoShine II HO	0.22	0.33	0.44	0.66	26.5	39.5	53.0	79.4

### EcoShine II Rail Light —1 Row

	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
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### EcoShine II Shelf

3 Rows of Shelves	0.25	0.35	0.49	0.74	29.7	42.3	59.3	89.0
4 Rows of Shelves	0.33	0.47	0.66	0.99	39.5	56.4	79.1	118.6
5 Rows of Shelves	0.41	0.59	0.82	1.24	49.4	70.5	98.9	148.3

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

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

230V Lighting Circuit Total = Multiply 120V 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**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	6.95 ft <sup>3</sup> /ft (0.65 m <sup>3</sup> /m)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	4.40 ft <sup>2</sup> /ft (1.34 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	8.36 ft <sup>2</sup> /ft (2.55 m <sup>2</sup> /m)

<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 16-inch shelves and (2) rows of 18-inch shelves.

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

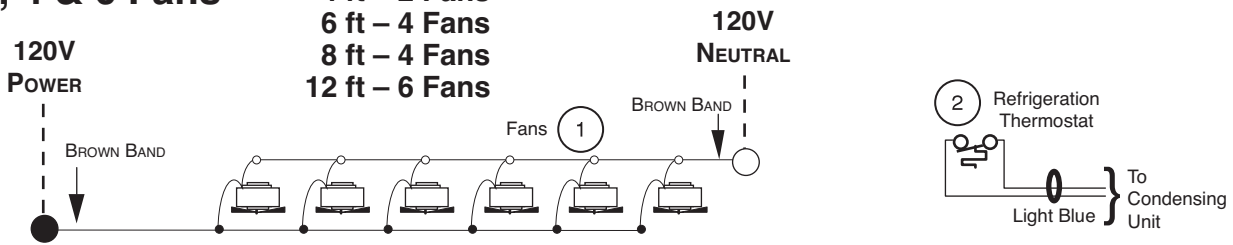
<b>Case</b>	<b>6 ft</b>	<b>8 ft</b>	<b>10 ft</b>	<b>12 ft</b>	<b>Solid End</b>
					<i>(each)</i>
<b>lb (kg)</b>	1000 (454)	1100 (499)	1300 (590)	1500 (680)	100 (45)

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

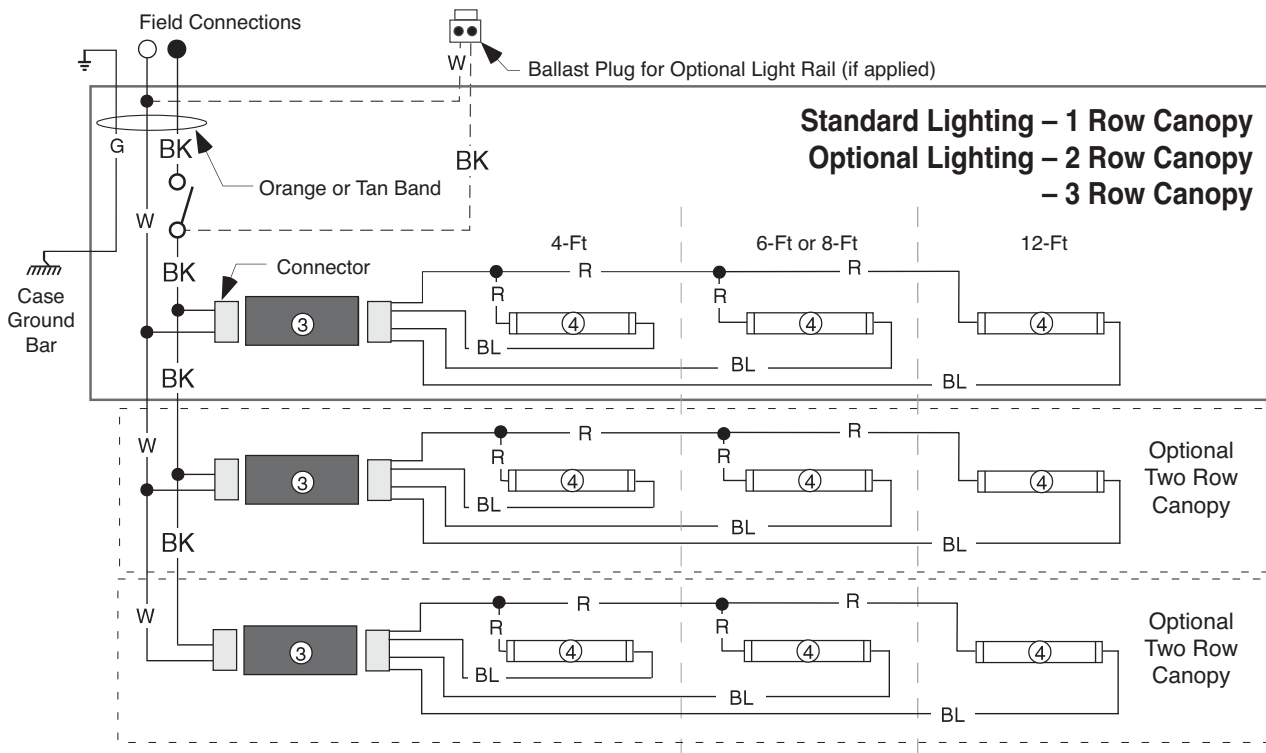
# Fan Wiring Offtime Defrost

## 2, 4 & 6 Fans

4 ft – 2 Fans  
6 ft – 4 Fans  
8 ft – 4 Fans  
12 ft – 6 Fans



# Light Circuits — Fluorescent Fixtures



## WARNING

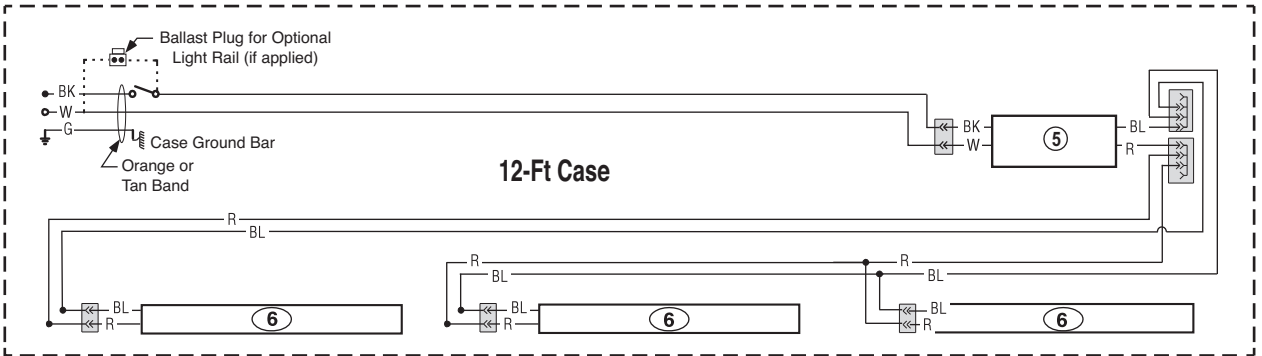
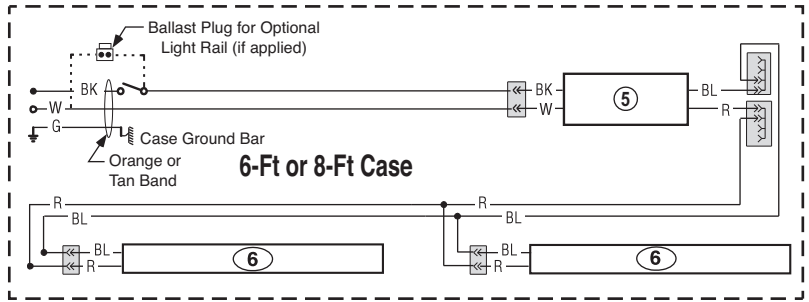
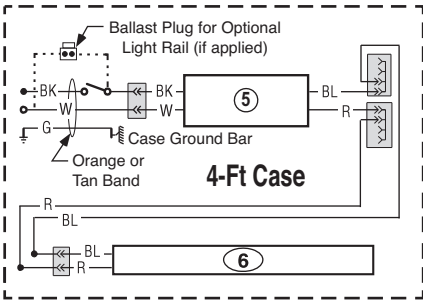
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

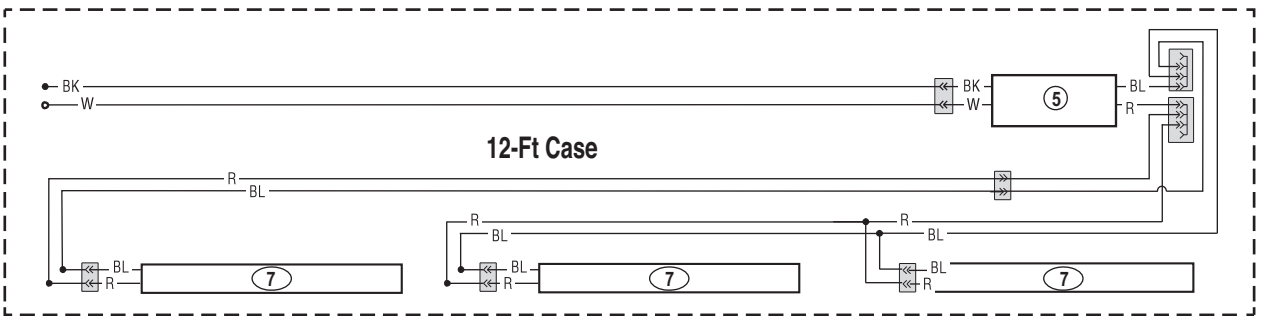
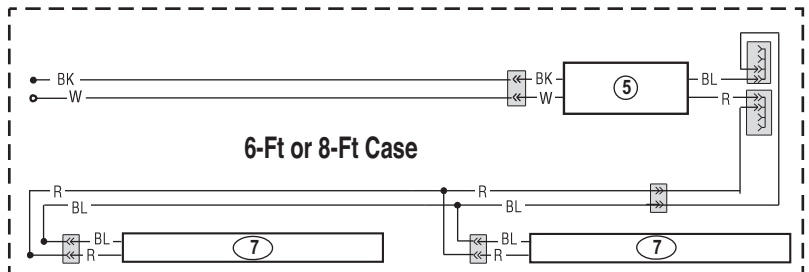
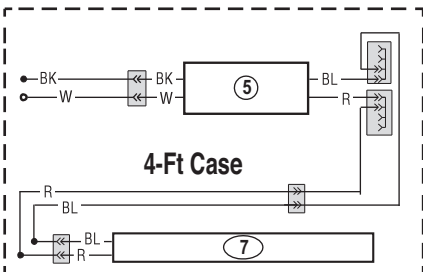
R = Red    Y = Yellow    G = Green    BL = Blue    BK = Black    W = White  
● = 120V POWER    ○ = 120V NEUTRAL    ⊥ = FIELD GROUND    mm = CASE GROUND

# Optional Canopy and Rail Light Circuits — LED Fixtures

## EcoShine II LED Canopy Lighting – 1 Row



## EcoShine II LED Rail Lighting – 1 Row



### WARNING

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

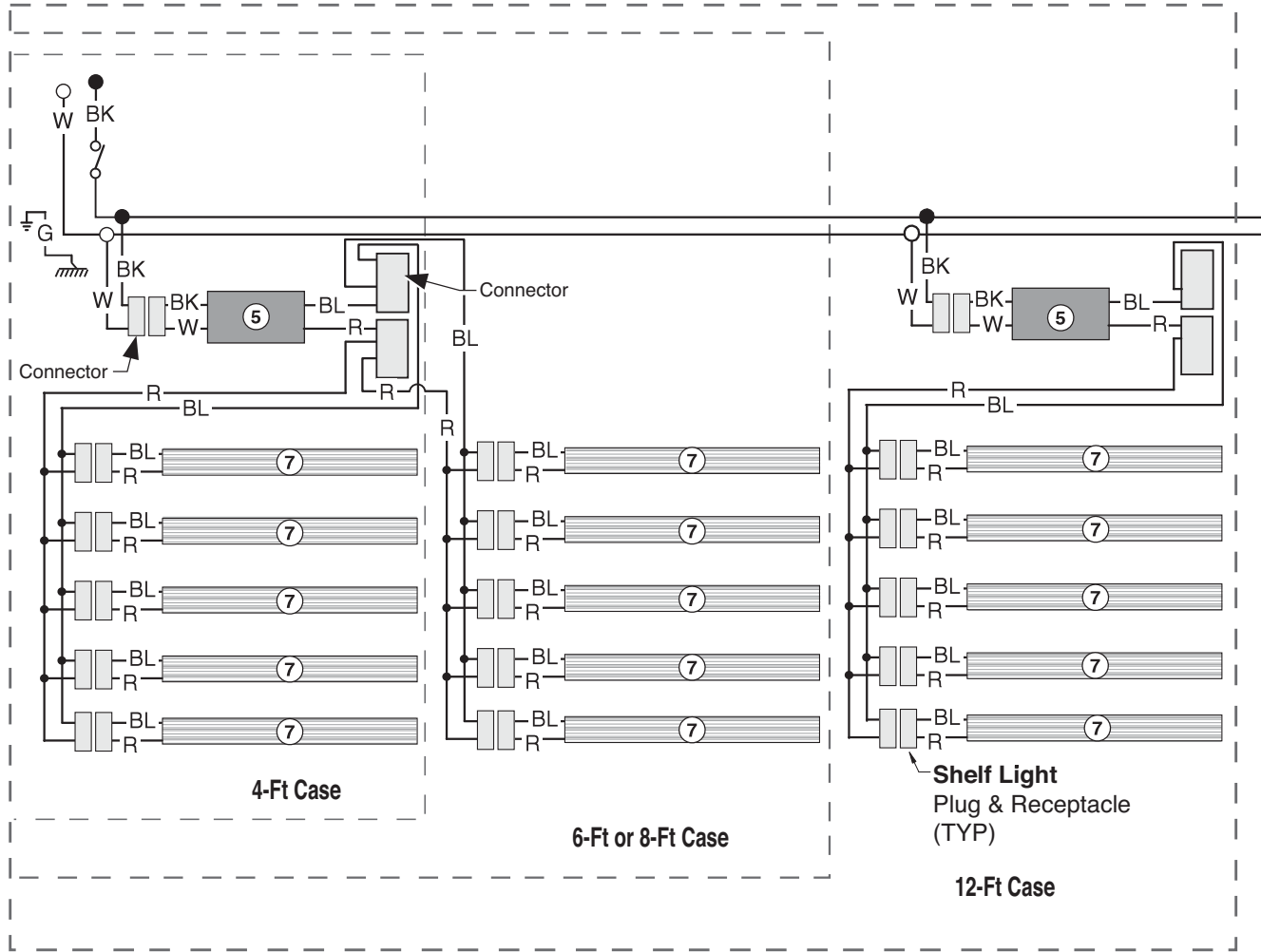
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER    ○ = 120V NEUTRAL    ⏏ = FIELD GROUND    ⏏ = CASE GROUND

# Optional Shelf Lighting LED Fixtures

## Optional Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves



### WARNING

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

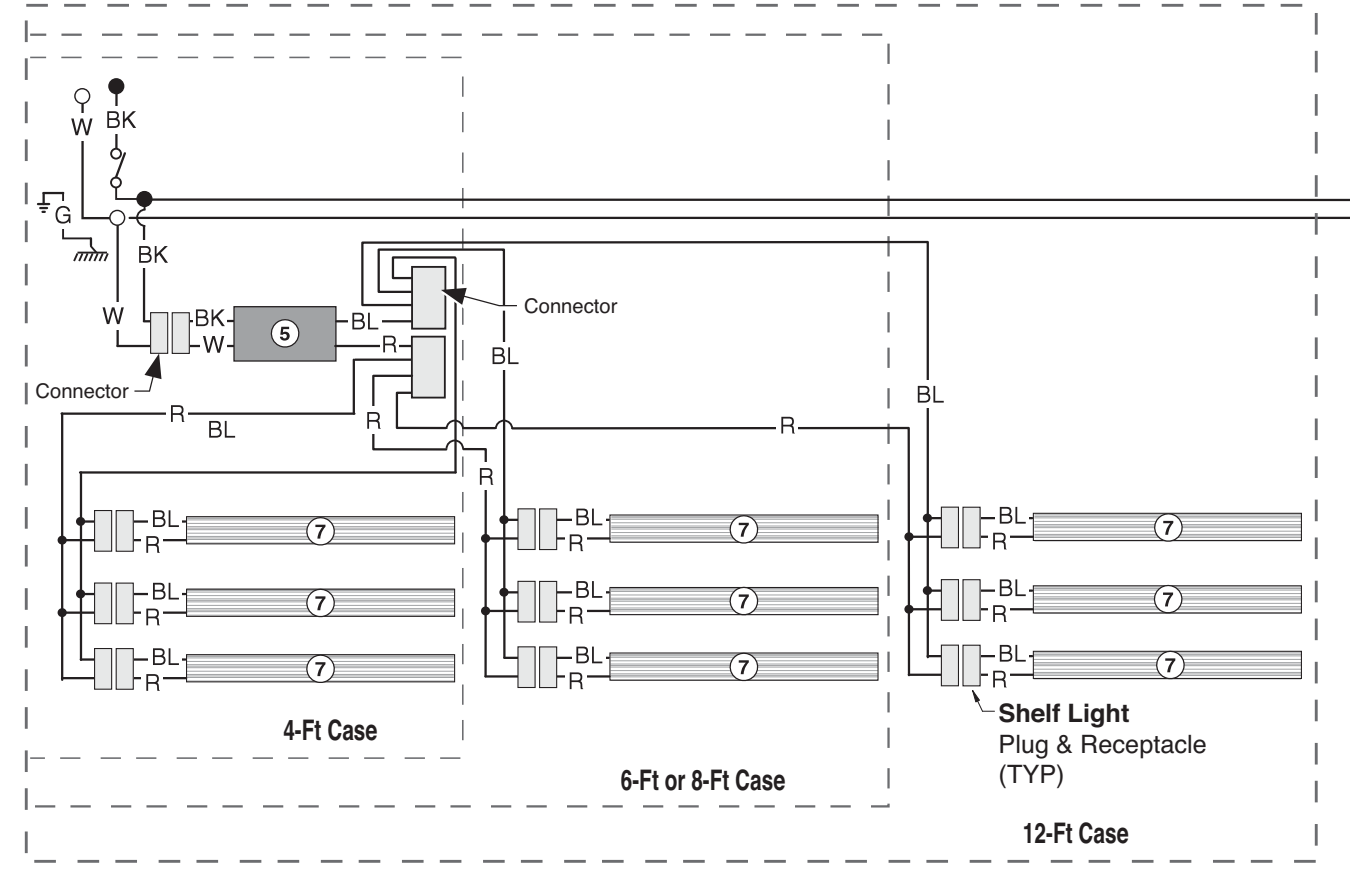
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 70V POWER      ○ = 70V NEUTRAL      ⊥ = FIELD GROUND      ≡ = CASE GROUND

# Optional Shelf Lighting LED Fixtures

## Optional Shelf Harness and LED Light Circuits for 2 or 3 Rows of Shelves



### WARNING

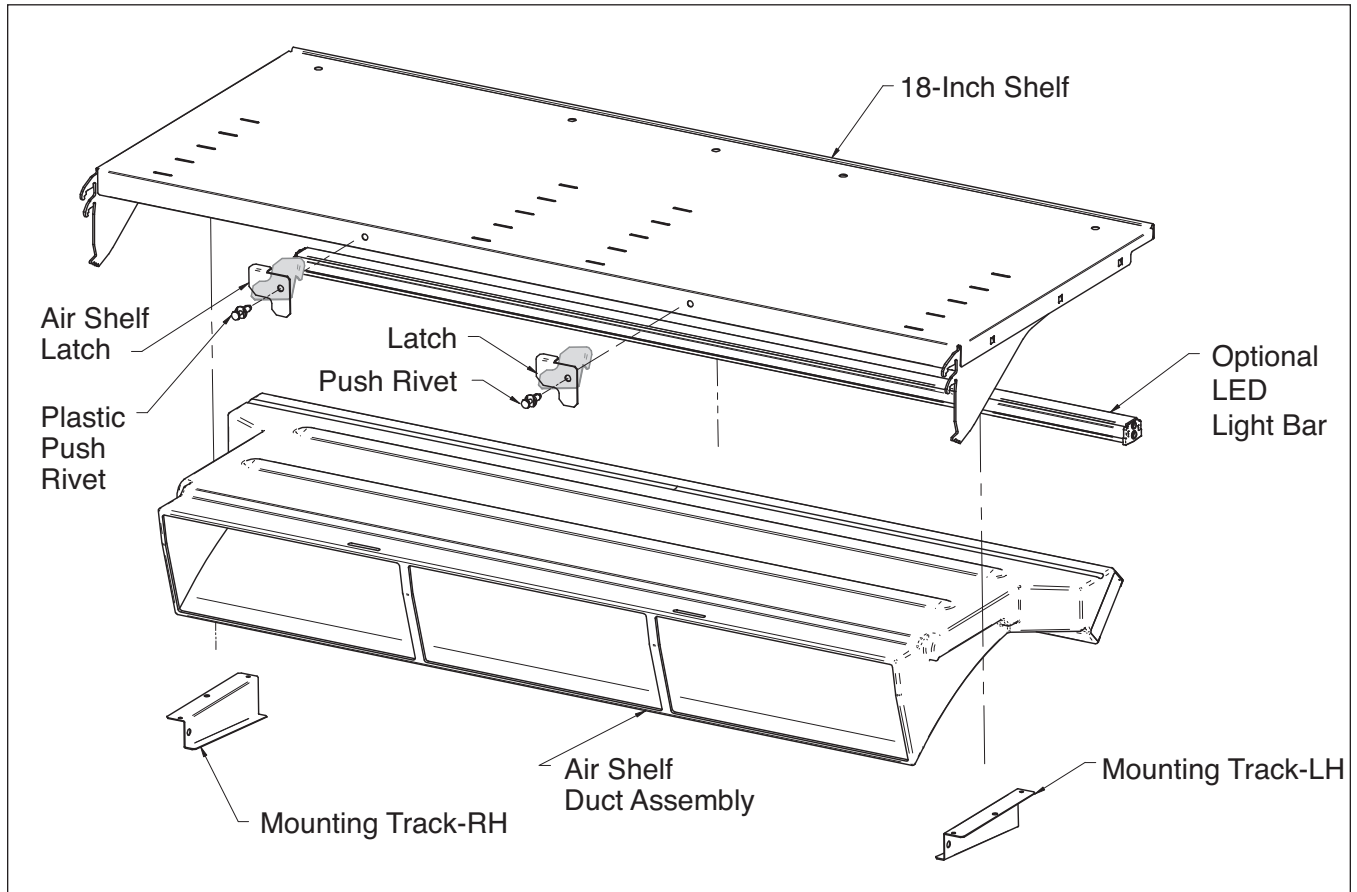
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER      ○ = 120V NEUTRAL      ⊥ = FIELD GROUND      mmm = CASE GROUND





**Exploded View (Rear) of the  
Air Shelf Duct Assembly**