

HUSSMANN®

IMPACT™ Merchandisers

IMPACT 5-Pin Shelf Lamp LED Retrofit

PARTS LIST

for Hussmann Cases
Manufactured Prior to
February 2001

Item	Quantity	Description
1.	Refer to Table Below	Power Supply / PN 4481861
2.	1 per Light Bar	LED Lamp Adapter / PN 4481863
3.	1 per Shelf	LED Light Bar / (SEE PAGE 2)

Rows of Shelves	8 Ft Case		12 Ft Case	
	EXISTING Ballast / Harness	REPLACEMENT Power Supply / Harness	EXISTING Ballast / Harness	REPLACEMENT Power Supply / Harness
2	2 / 2	2 / 2	2 / 2	2 / 2
3	3 / 3	3 / 3	3 / 3	3 / 3
4	4 / 4	4 / 4	4 / 4	4 / 4
5	5 / 5	5 / 5	5 / 5	5 / 5

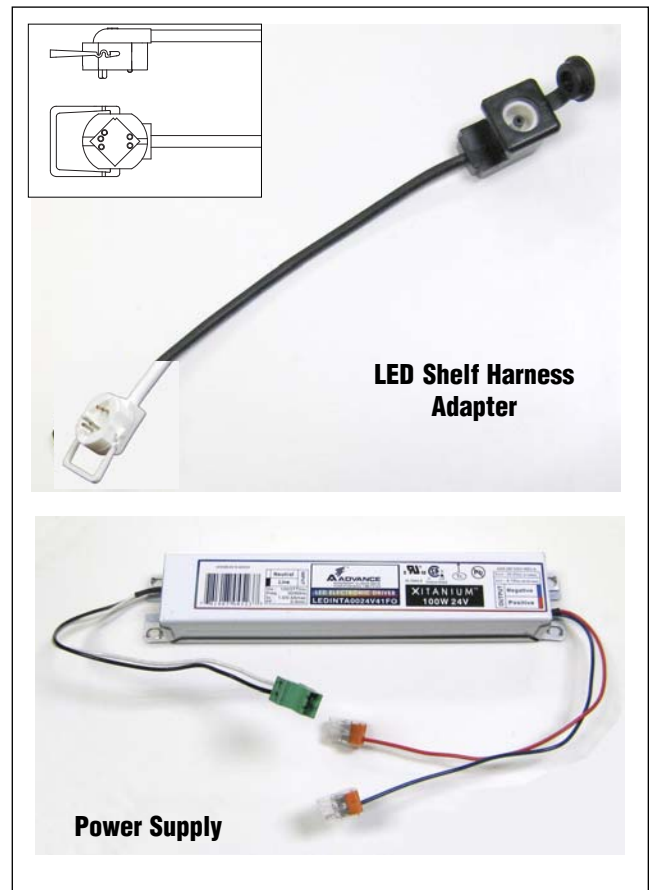
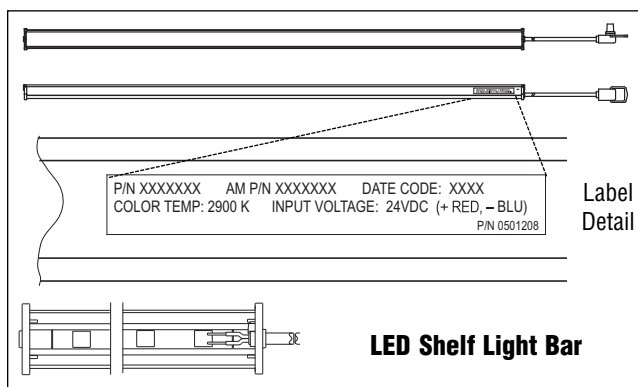
NOTE: Hussmann recommends using butt connectors with Heat Shrink for all field connections.

All equipment should be thoroughly examined for shipping damage before and during unloading.

This equipment has been carefully inspected at our factory. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection reports and/or claim forms.

Every effort is made to ship all parts for the kit. The Hussmann Service Center can be reached by calling

- from U.S. & Canada 1-800-922-1919 •
- from Mexico 1-800-522-1900 •



P/N 0504717_B
April 2010

LED LAMP RETROFIT

This kit explains how to remove OEM fluorescent shelf light fixtures and replace them with LED light bars.

Length	LED Light Bar	
	Color	PN
4-ft	2900K HCRI	4441590
4-ft	3500K HCRI	4441591
4-ft	3500K	4441592
4-ft	4100K	4441593
3-ft	2900K HCRI	4441586
3-ft	3500K HCRI	4441587
3-ft	3500K	4441588
3-ft	4100K	4441589

- 1 Turn off power to the case.

⚠ WARNING

ALWAYS disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as fans, heaters, thermostats and lights.

- 2 Remove fluorescent lamps and shields from the canopy.
- 3 Remove the screws that secure the lamp panel. Grasping the light panel at the area where the top of the panel and the top of the merchandiser meet, pull back and down until the panel swings freely.

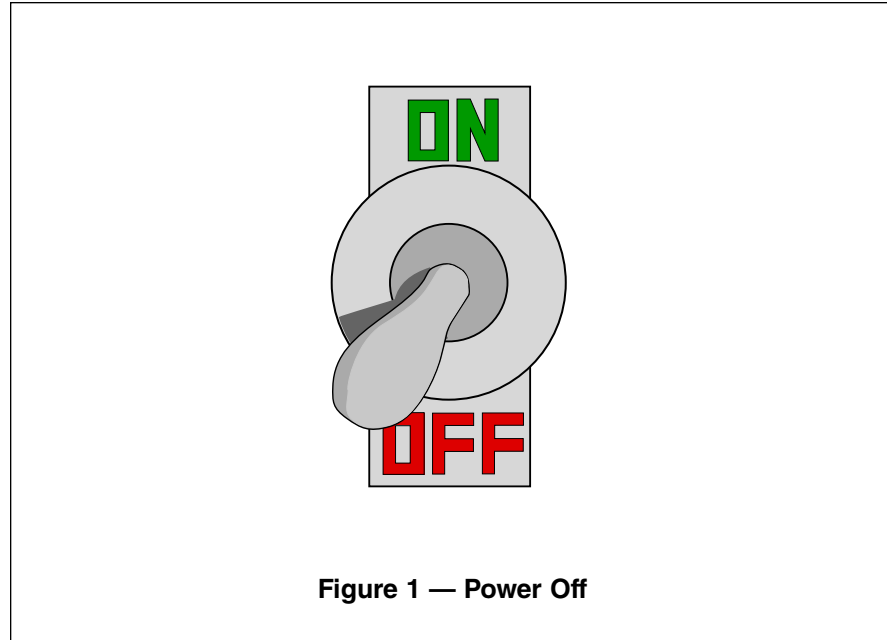


Figure 1 — Power Off

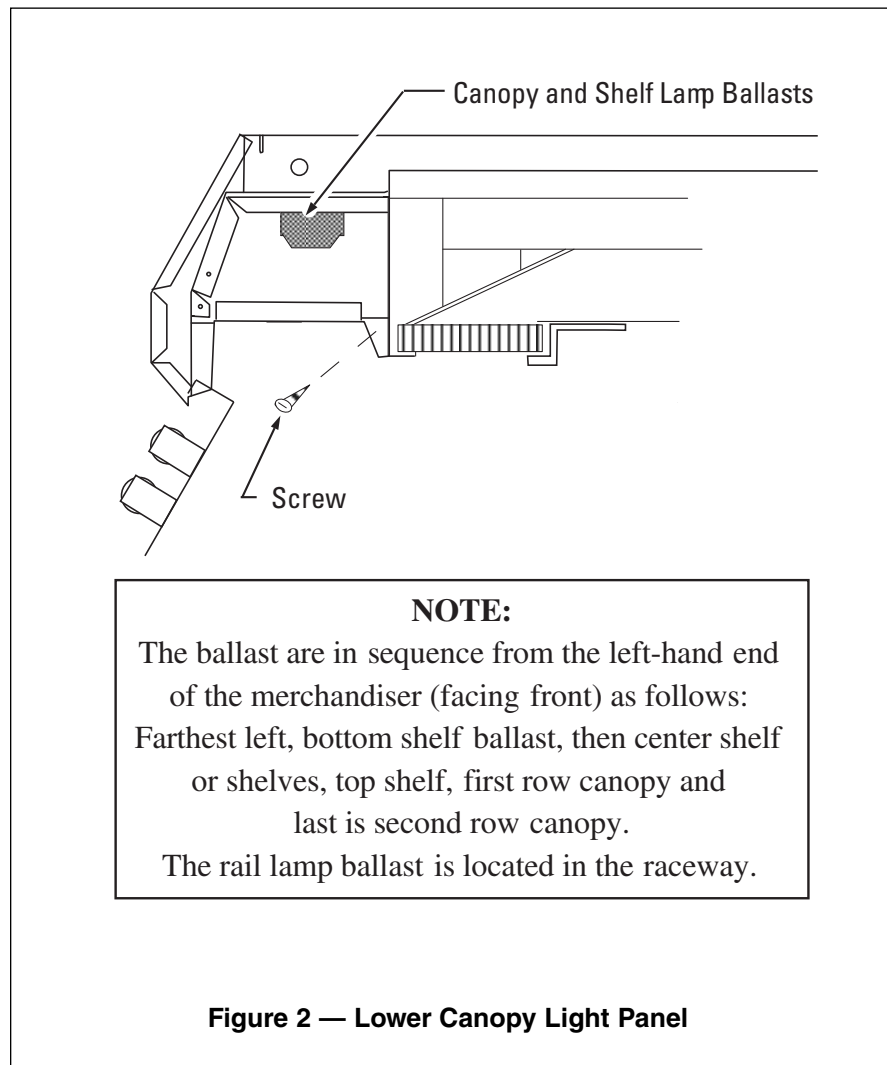
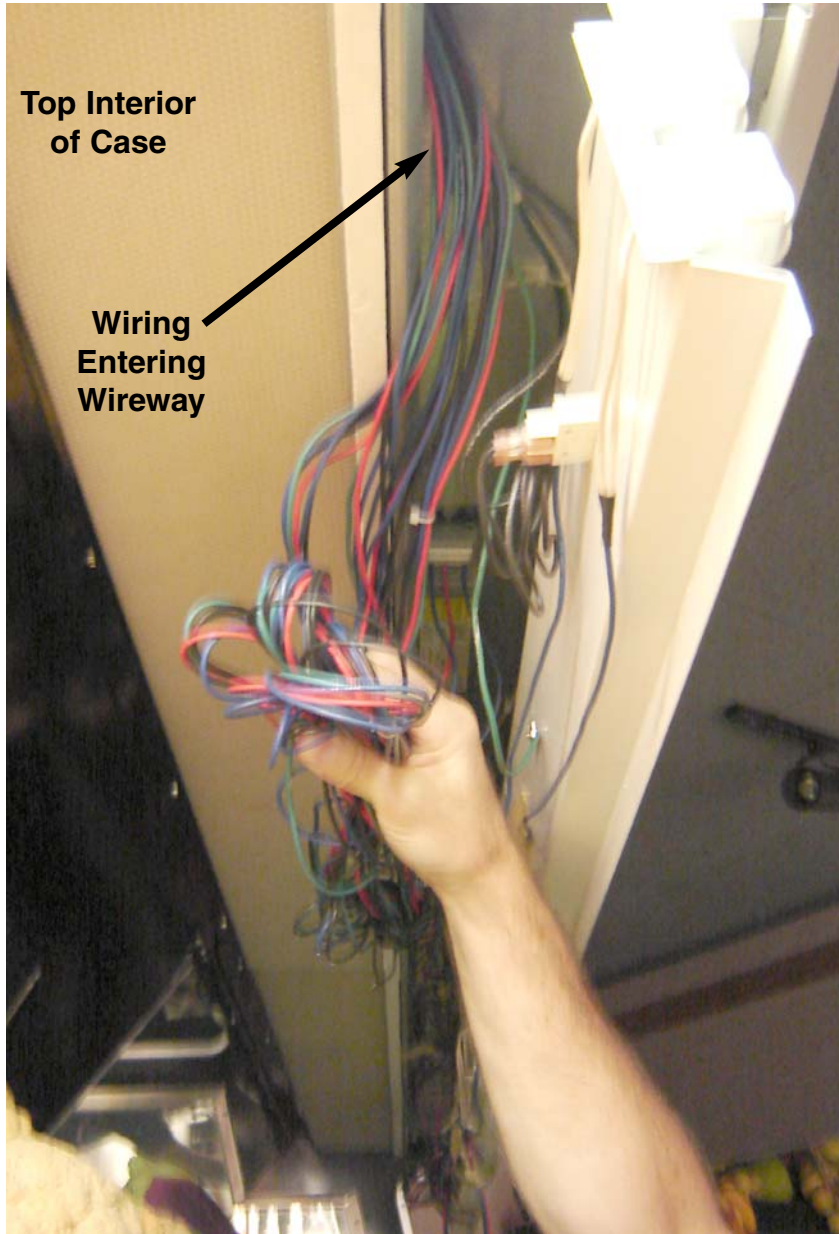


Figure 2 — Lower Canopy Light Panel



Facing the front of the case, the shelf lighting wire harnesses are run through the top left end of the case into the wireway hidden by the canopy lamp fixture.

Canopy lamp fixture is hinged at front to pivot down to expose wire bundles.

4 Break the large bundle of wires loose and you will find multiple smaller bundles. Each smaller bundle is tied together with cable ties. There is one bundle for each row of lighted shelves.

These bundles contain six wires each—two blue, two black, one red, and one green.



Figure 3a — Separate Large Bundle

Remove cable ties as necessary to complete modification but be sure to install new ties before moving to next bundle.

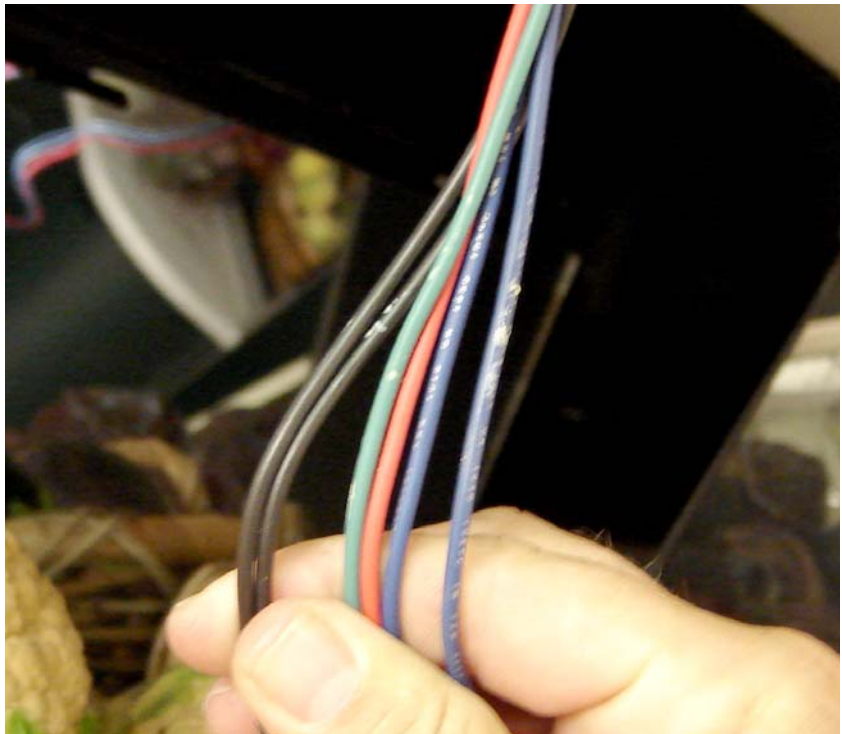
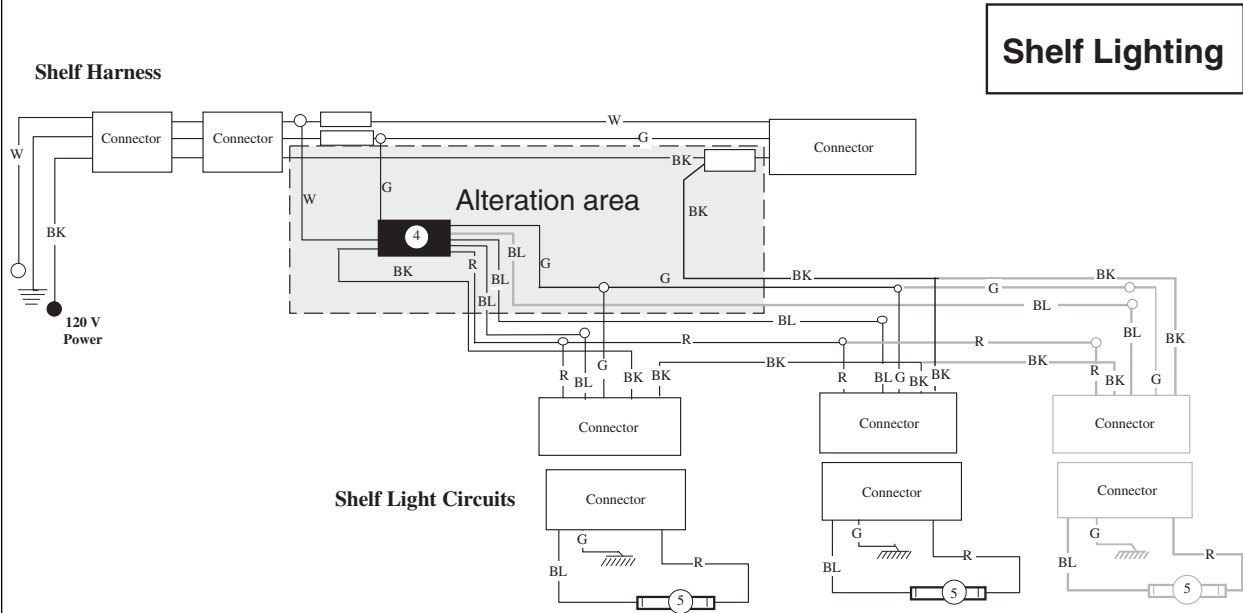


Figure 3b — Wires in One Bundle

This alteration applies only to shelf ballast.
Do not apply to canopy wiring.

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



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

5 Separate the black wires from the bundle, then cut them in two.

Strip the two wires on the left (as you are facing the case) then connect them together with an approved connector.

Then strip the two wires on the right and connect them together with an approved connector.

Repeat this process on all harnesses for the shelf lights.

DO NOT MAKE ANY CHANGES TO THE CANOPY LIGHTS.

Complete one bundle before starting the next.

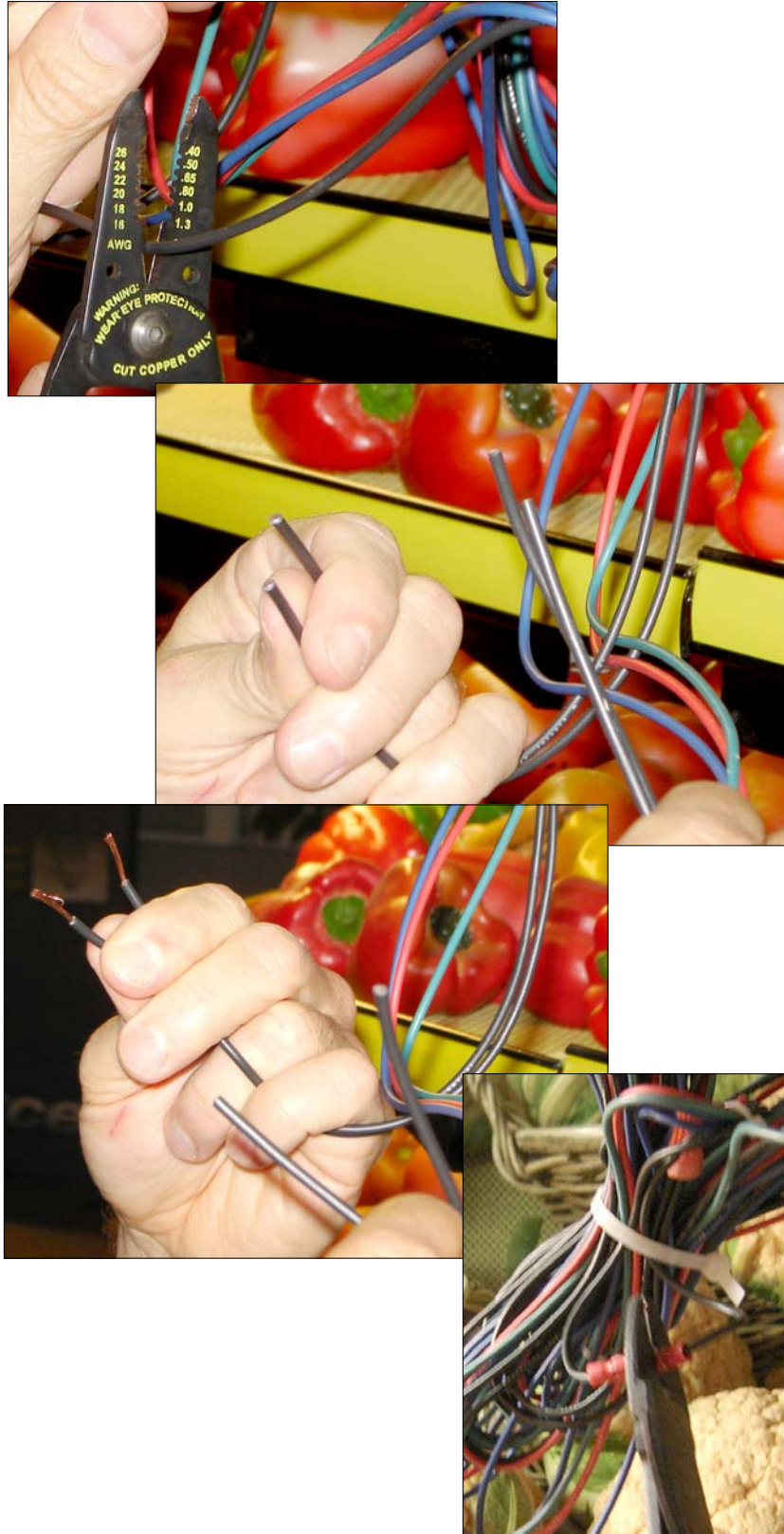
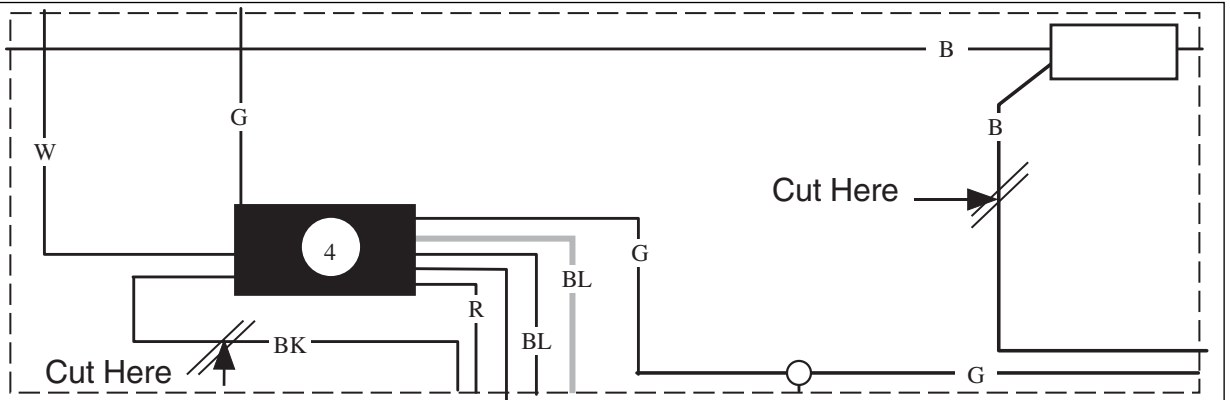
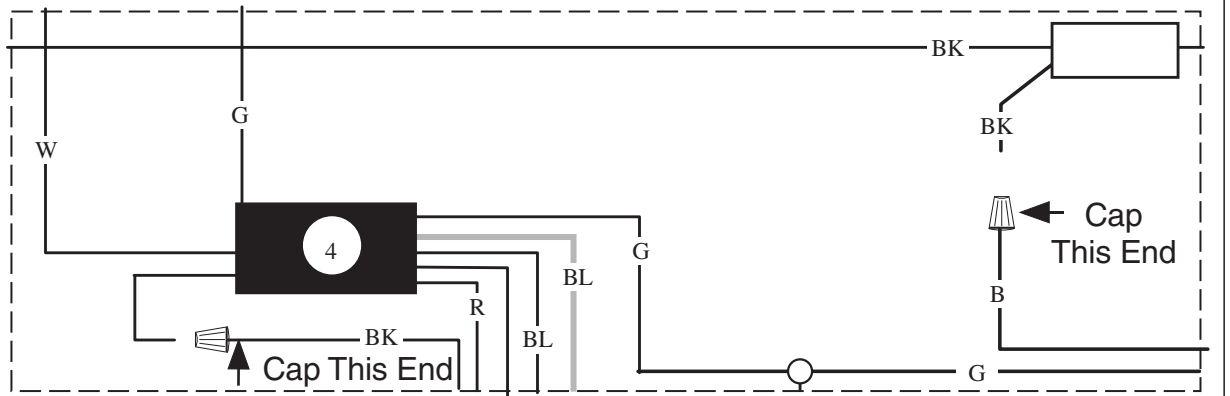


Figure 4 — Power Wire Change Required

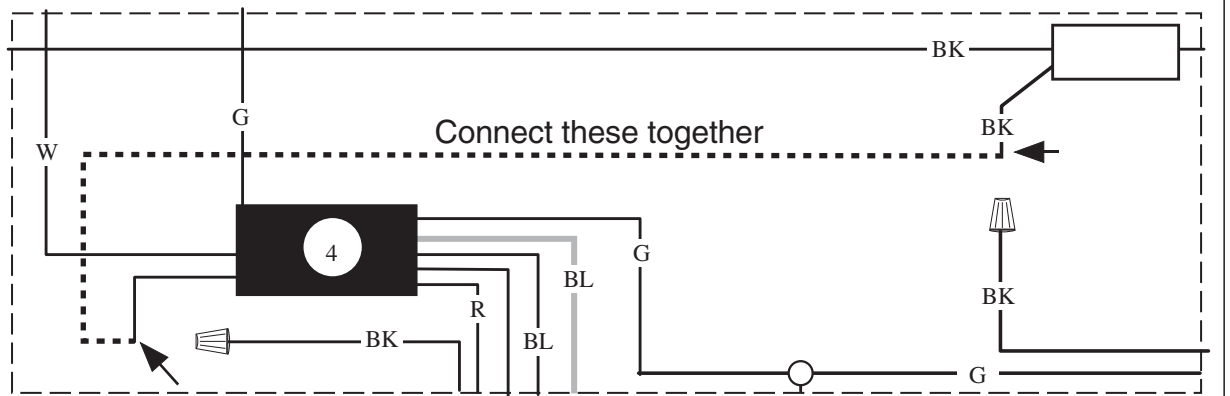
CUT



CAP



CONNECT



**This alteration applies only to shelf ballast.
Do not apply to canopy wiring.**

6 Disconnect wires from shelf lamp ballast. Note the color of power source wire.

Remove shelf lamp ballast.



Figure 5 — Remove Shelf Lamp Ballast

7 Fasten all red wires together. Fasten all blue wires together. Add pigtail of the same color (red or blue) to each group.

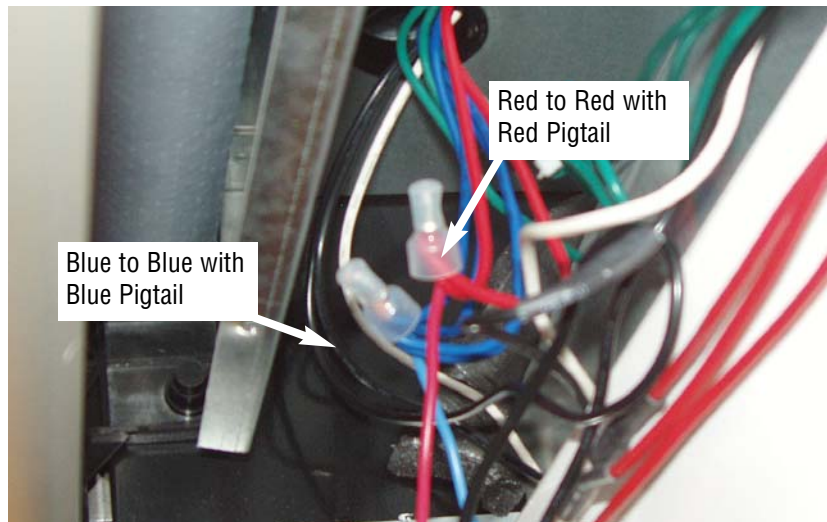
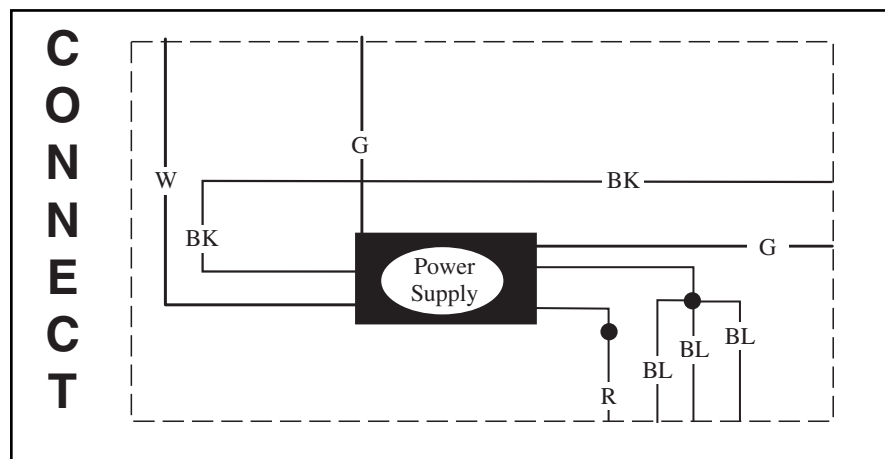
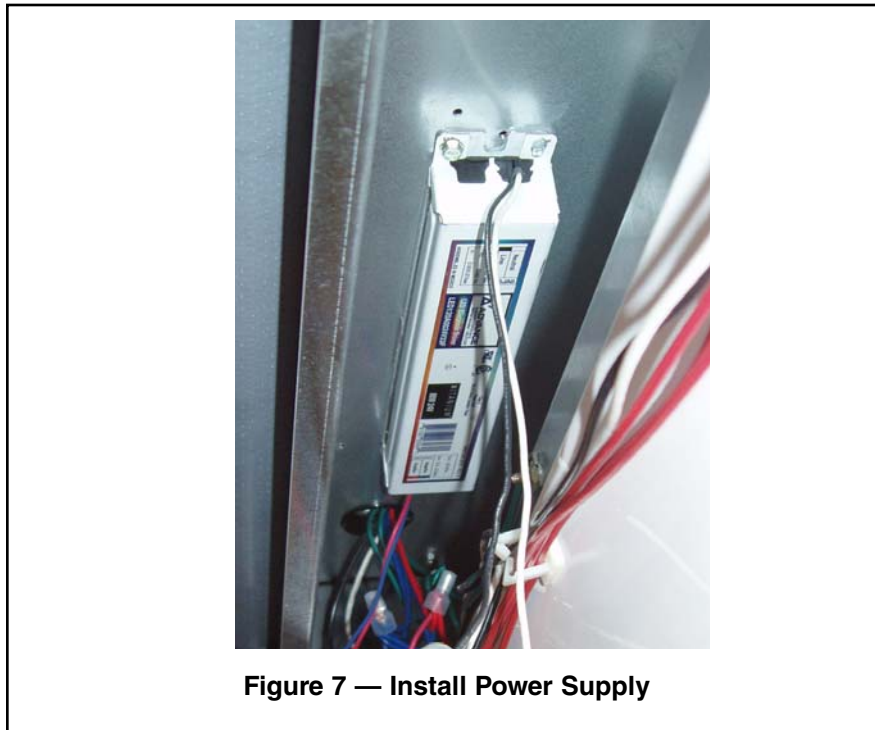


Figure 6 — Connect pigtail to Red Group and Blue Group

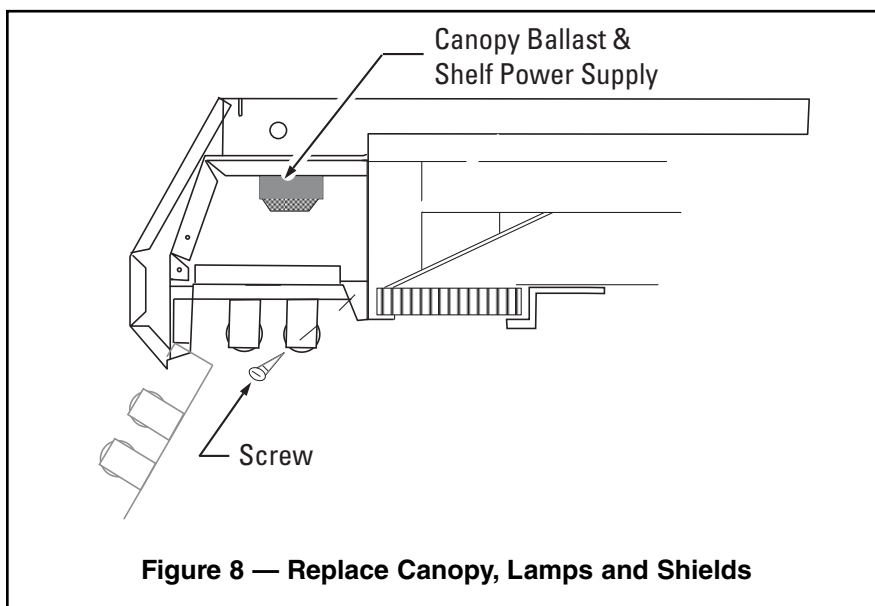




8 Install **Power Supply – 1** in the spot where ballast was removed.

9 Connect colored pigtail to same color power leads on **Power Supply – 1** (red with red, blue with blue).

10 Connect **Power Supply – 1** to power source wire.



11 Rotate light channel back into place, being careful not to pinch or damage any wires. Replace screws. Install fluorescent lamps with shields.

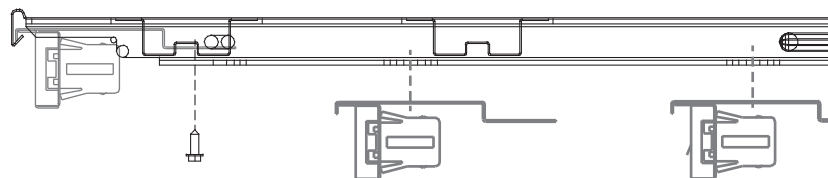
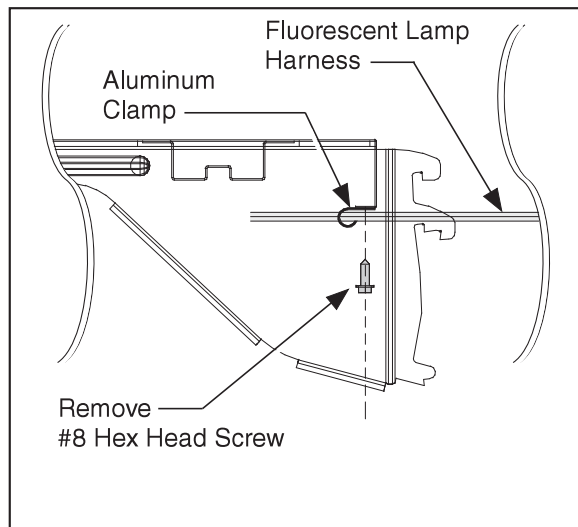
12 Unplug fluorescent shelf lamp from back panel.

Remove the fluorescent tube and shield from the shelf light bar.

Remove the harness clip at rear of shelf. (It will be reinstalled in Step 14.)

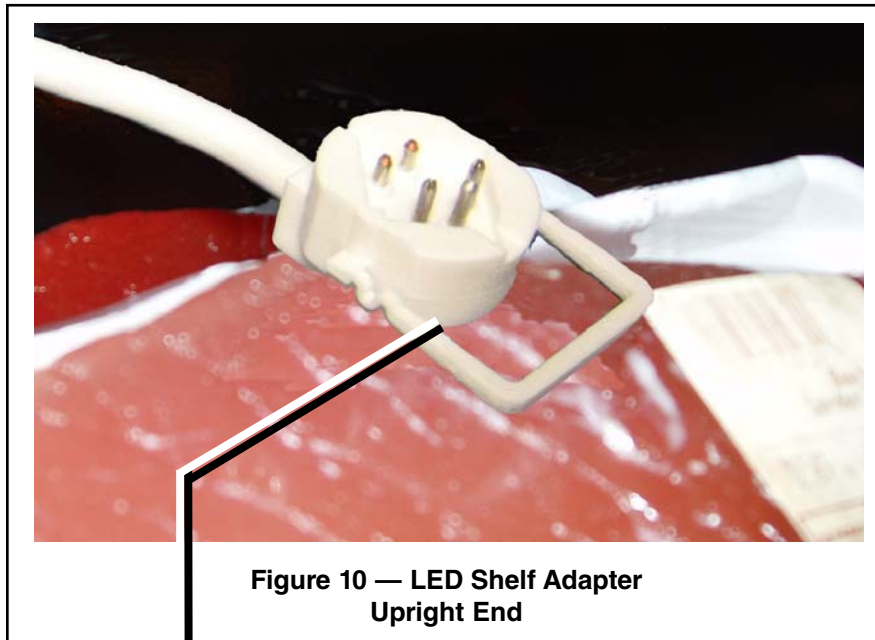
Remove the light bar by removing the screws that hold it to the shelf.

Do not break or puncture fluorescent lamps. Dispose of all fluorescent lamps in accordance with Federal, State, and Local hazardous waste requirements.

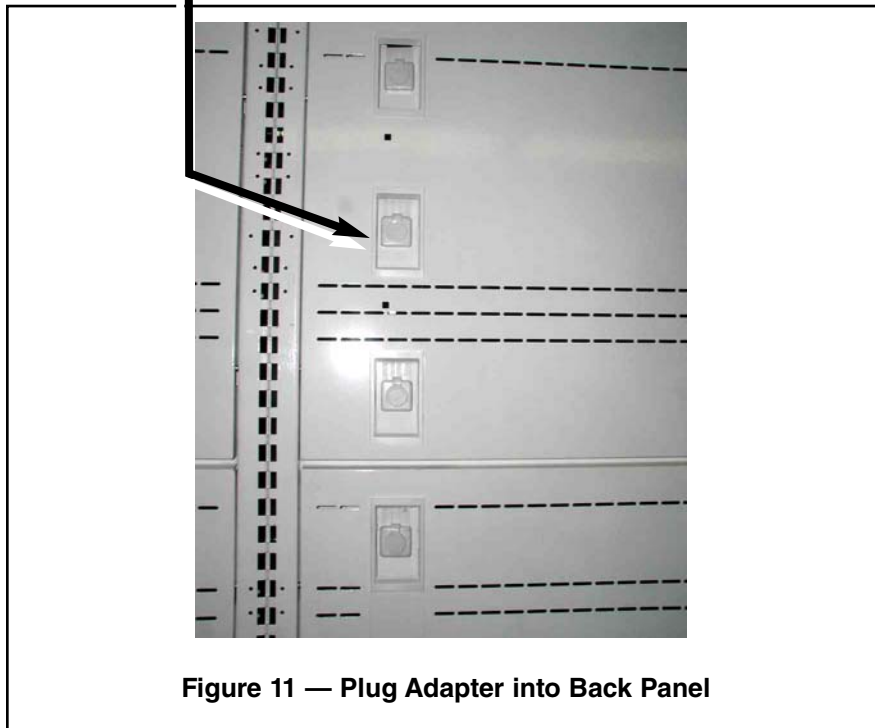


Note: 24-inch shelf shown

Figure 9 — Remove Existing Light Bar Assembly



13 Insert an **LED Lamp Adapter – 2** into a receptacle in the back panel. Refer to Figures 10 and 11.



14 Position the magnetic
LED Light Bar – 3
under the shelf.



Figure 12 — LED Light Bar

15 Insert the plug from the
LED Light Bar – 4 into
the free end of **LED Lamp
Adapter – 3**.



Figure 13 — LED Shelf Adapter — Light Bar End



Figure 14 — Control Excess Wire

16 Use a cable tie to contain excess adapter wire. Do not allow wire to lie on product or hang loose. The clip removed in Step 12 should be reused.

Free cord length from last clip (strain relief) to outlet must be less than 12 inches (305 mm). Longer lengths must be constrained.

Review HSB-008A-BTN. Inspect all shelf lamp plugs and receptacles for arcing, corrosion or other damage. Replace as necessary.

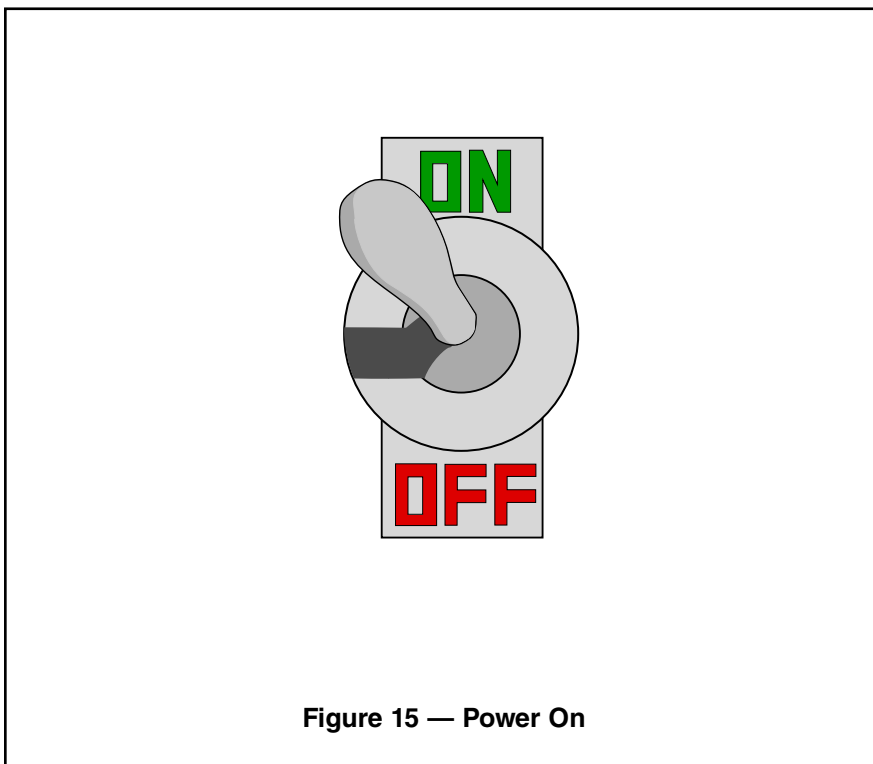


Figure 15 — Power On

17 Restore power to case.

18 Verify proper operation of all LED light bars.

Wiring diagrams for LED shelf lighting are contained in the Technical Data Sheet for each model.

