HUSSMANN®

EcoShine II Vertical LED Lighting

for Reach-in & Walk-in Merchandisers

Upgrade Installation Manual

P/N 0522629_J
October 2016

MANUAL- KIT INSTALLATION ECOSHINE II REACH-IN / WALK-IN UPGRADE

Spanish 0526143
French 0532428

BEFORE YOU BEGIN

Read these instructions completely and carefully.

⚠ WARNING

RISK OF FIRE OR ELECTRICAL SHOCK. LUMINAIRE WIRING AND ELECTRICAL PARTS MAY BE DAMAGED WHEN DRILLING FOR INSTALLATION OF LED RETROFIT KIT. CHECK FOR ENCLOSED WIRING AND COMPONENTS.

⚠ WARNING

RISK OF FIRE OR ELECTRIC SHOCK. LED RETRO-FIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRES' ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.

⚠ WARNING

RISK OF FIRE OR ELECTRICAL SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRES THAT HAVE THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND / OR DRAWINGS.

⚠ WARNING

TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.

NOTICE

ONLY THOSE OPEN HOLES INDICATED IN THE PHOTOGRAPHS AND / OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELETRICAL COMPONENTS.

⚠ WARNING

TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.

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REVISION HISTORY

REVISION J — Removed ES Plus, updated LED charts, new pictures of canopy LEDs

REVISION H – Added additional EcoShine II LED clips

REVISION G — Added new LEDs, updated brackets and power supply parts
REVISION F — Replaced AM Part Numbers pg. 9; new PNs pg. 10; changed 3 clips pg. 15 and 16
REVISION E — Added caution boxes on Page 2. Updated Lighting Chart, Page 8, 9; change reference from EcoShine II to EcoShine II Plus throughout document; Updated wiring Diagrams, Page 14.
REVISION *D* —
1. Added Warnings, Page 6 2. Added Power Supply Part Description, Page 11 3. Added Boxed Note, Page 15 4. Added bold note, Page 16 5. Added Fluorescent Diagrams Pages, 20, 21 6. Added boxed notes Pages 22 - 25
REVISION *C* — Added EcoShine II 56 in. lights to table, Page 8.
REVISION *B* — Added EcoShine II Plus
REVISION *A* — Original Issue

IMPORTANT
KEEP IN STORE FOR FUTURE REFERENCE
Quality that sets industry standards!

HUSSMANN®
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U.S. & Canada 1-800-922-1919 • Mexico 01-800-890-2900
www.hussmann.com
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SAFETY

There are two main hazard areas that service technicians may encounter on a day-to-day basis. They are: working within close proximity to the public and personal safety. Before starting work, review these hazards by completing the following checklist:

WORKING NEAR THE PUBLIC

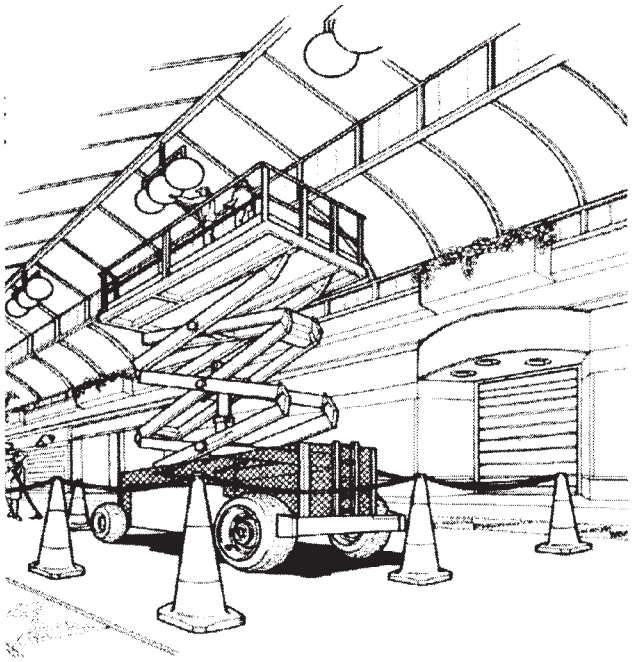
KEEPING THE PUBLIC OUT:
The following techniques reduce the risk of injury to third parties (shoppers, store employees, etc.):
Cordon off all work areas with cones, caution tape, warning signs and/or barricades. Maintain a work area of at least five feet from the public. Is a second person required to prevent the public from entering the work area when the work area cannot be adequately cordoned off?

HAZARDOUS MATERIALS
Can the public be exposed to any chemicals, refrigerants or fumes? If yes, can steps be taken to eliminate or reduce the risk of exposure? to guard against accidental release of refrigerants, make sure the work area is adequately cordoned off (instead of posting a *WET FLOOR* sign, use *CAUTION* tape to prevent the public from entering the area).

Are wet floors going to create a slip hazard for pedestrians? If yes, be sure to post *WET FLOOR* signs and establish a schedule for clean up as soon as the work is complete.

ELECTRICAL HAZARDS
Are all live electrical hazards protected from public access; i.e., de-energized/locked out or cordoned off? Is proper signage in place?

Do light bulbs need to be replaced: If yes, will high work be conducted from a ladder or a scissor lift? Make sure the work area is cordoned off as shown below.



⚠ WARNING

Fluorescent lamps contain mercury vapor. Mercury exposure at high levels can harm the brain, heart, kidneys, lungs, and immune system of people of all ages. Do not break or puncture fluorescent lamps. Dispose of, or store, all fluorescent lamps in accordance with Federal (40 CFR 273), State, and local hazardous waste requirements. Refer to http://www.epa.gov/mercury/about.htm

Personal Safety

Over 90% of accidents are due to human error or from complacency about the job. This checklist is provided to remind you of the potentially hazardous conditions at the jobsite.

Working at height
Will you be working more than six feet off the ground? If yes, have you received appropriate training (i.e., ladder, scissor lifts and personal fall-arrest systems)?

Do you have the appropriate personal protective equipment (PPE) for working at height (safety harness/lanyard)?

Will you be working on roofs with unprotected edges? If yes, make sure actions are taken to prevent a fall (i.e., identification of **adequate** anchor points for safety harnesses).

Confined Space work
Will you be working in any confined spaces? If yes, have you received appropriate training? A confined space has limited means of entry/egress, is not designed for human occupancy, and is large enough for bodily entry.

Is permit-required confined space entry required? If yes, have appropriate steps been taken for safe entry, such as permit issuance. **If in doubt, DO NOT ENTER and inform the client.**

Electrical / LOTO
Does the project require you to work with live electricity? If yes, have you received appropriate training?
Do you have appropriate locks and tags to de-energize or isolate the electrical supply?

Remote and limited use locations
Is there the potential to contact poisonous plants (ivy, oak or sumac)? If yes, make sure you wear proper PPE (gloves, long pants and long sleeves).

Check for snakes, vermin and bees / wasps. If stung or bitten, do you have reactions that require medical treatment, such as Epinephrine EpiPen? ***If yes, inform the client prior to starting work.***

* *

ANSI Z535.5 DEFINITIONS

• **DANGER –** Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.

• **WARNING –** Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.

• **CAUTION –** Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

• **NOTICE –** *Not related to personal injury –* Indicates[s] situations, which if not avoided, could result in damage to equipment.

ALWAYS*CLEAR™ GLASS

Hussmann recommends using a soft cloth with isopropyl (rubbing) alcohol to clean the inside (coated) glass surface. Isopropyl alcohol does not freeze and evaporates without leaving residue. Always allow the surface to dry before closing the door. Use of abrasives may damage the coated surface and void the warranty. Labels (stickers) applied to the coated surface will cause damage and void the warranty.

LED LIGHT FIXTURES

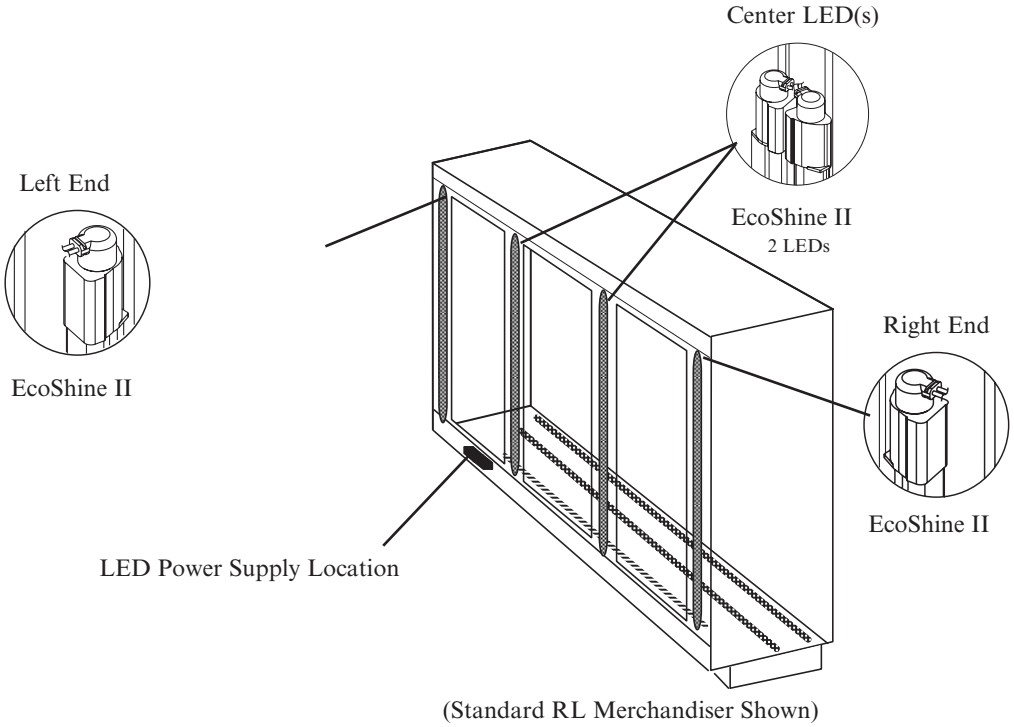
EcoShine II LED (light emitting diode) lights work well for dimming or on/off operation using an occupancy sensor (optional kits). They can be turned on and off in a cold environment with no warm-up time and no negative impact on lamp life.

Hussmann EcoShine II LED light fixtures normally perform for up to 50,000 hours. That is 5.7 years of continuous, 24 hour operation. They are backed by a multi-year materials warranty on the LED light strips and a five-year materials warranty on the power supply.

CLEANING LED FIXTURES

Use a lint-free cloth to wipe the surface of the luminaires. Do NOT use scouring pads, bleach, solvents, or detergents. This may damage the surface of the clear plastic cover.

Do not get these LEDs wet when cleaning the merchandiser. These LEDs are not for use in damp or wet environments.



(Standard RL Merchandiser Shown)

GENERAL

This instruction explains how to remove Reach-in original equipment manufacture (OEM) fluorescent lamp fixtures and replace them with Hussmann LED light bars.

FOR YOUR SAFETY

• Read and observe all CAUTIONS and WARNINGS shown throughout these instructions.

• Each person working on or near the installation described must wear safety glasses or goggles.

• Block access to the work area by customers or other personnel to prevent injury.

• Read and follow all industry safety recommendations and established procedures.

• Wiring must be 2 wire with ground and rated for 75°C (176°F).

ELECTRICAL CONNECTIONS

All wiring must be in compliance with NEC and local codes. All electrical connections are to be made in the wireway or mullion or LED light fixture.

IDENTIFICATION OF WIRING

Leads for all electrical circuits are identified by colored plastic bands. These bands correspond to the *color code sticker* (shown below) located inside the merchandiser's wireway cover. Anthony doors may not conform to this chart. Refer to the manufacturer's manual for their information.

WIRING COLOR CODE

Leads for all electrical circuits are identified by a colored plastic band: neutral wire for each circuit has either White insulation or a White plastic sleeve in addition to the color band.

PINK ..... REFRIG. THERMOSTAT LOW TEMP.	ORANGE OR TAN ..... LIGHTS
LIGHT BLUE . REFRIG. THERMOSTAT NORM TEMP.	
DARK BLUE . DEFROST TERM. THERMOSTAT	MAROON .. RECEPTACLES
PURPLE ..... CONDENSATE HEATERS	YELLOW ... DEFROST HEATERS 120V
BROWN ..... FAN MOTORS	RED ..... DEFROST HEATERS 208V
GREEN* ..... GROUND	*EITHER COLORED SLEEVE OR COLORED INSULATION

ELECTRICIAN NOTE: Use copper conductor wire only.
CASE MUST BE GROUNDED

THESE ARE MARKER COLORS WIRES MAY VARY.

SHIPPING DAMAGE

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.

Apparent Loss Or Damage

If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim.

Concealed Loss Or Damage

When loss or damage is not apparent until after equipment is uncrated, retain all packing materials and submit a written request to the carrier for inspection, within 15 days.

Missing Parts

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 01-800-890-2900

Part Numbers are subject to change.
Contact your Hussmann Rep. for replacement parts.

EcoShine II — LED Light Specifications

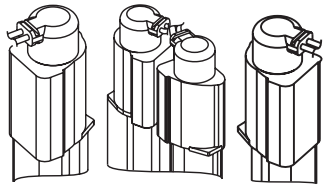
	Hussmann Part Number	Description	Energy Watts (DC) Per Fixture	Energy Watts (AC) Per Door	CRI Rating (typical)	Length (inches)	Efficacy (Lumens/ Watts) Nominal
Warm Neutral	3007068	EcoShine II Vertical Reach-In / Walk-In 3500K 48 in.	6.6	7.7	93	49.09	80
	3007071	EcoShine II Vertical Reach-In / Walk-In 3500K 56 in.	7.68	8.9	93	55.68	80
	3007074	EcoShine II Vertical Reach-In / Walk-In 3500K 60 in.	8.16	9.5	93	60.06	80
	3007079	EcoShine II Vertical Reach-In / Walk-In 3500K 68 in.	9.36	10.9	93	66.64	80
	3007087	EcoShine II Vertical Reach-In / Walk-In 3500K 72 in.	9.96	11.6	93	71.02	80
	3007077	EcoShine II Vertical Reach-In / Walk-In 3500K 60 in. High Output	12.5	14.5	93	60.06	80
	3007082	EcoShine II Vertical Reach-In / Walk-In 3500K 68 in. High Output	14	16.3	93	66.64	80
	3007084	EcoShine II Vertical Reach-In / Walk-In 3500K 68 in. Close Space*	9.36	10.9	93	66.64	80
	3007090	EcoShine II Vertical Reach-In / Walk-In 3500K 72 in. Close Space*	9.96	11.6	93	71.02	80
Neutral White	3007069	EcoShine II Vertical Reach-In / Walk-In 4000K 48 in.	6.6	7.7	93	49.09	80
	3007072	EcoShine II Vertical Reach-In / Walk-In 4000K 56 in.	7.68	8.9	93	55.68	80
	3007075	EcoShine II Vertical Reach-In / Walk-In 4000K 60 in.	8.16	9.5	93	60.06	80
	3007080	EcoShine II Vertical Reach-In / Walk-In 4000K 68 in.	9.36	10.9	93	66.64	80
	3007088	EcoShine II Vertical Reach-In / Walk-In 4000K 72 in.	9.96	11.6	93	71.02	80
	3007078	EcoShine II Vertical Reach-In / Walk-In 4000K 60 in. High Output	12.5	14.5	93	60.06	80
	3007083	EcoShine II Vertical Reach-In / Walk-In 4000K 68 in. High Output	14	16.3	93	66.64	80
	3007085	EcoShine II Vertical Reach-In / Walk-In 4000K 68 in. Close Space*	9.36	10.9	93	66.64	80
	3007091	EcoShine II Vertical Reach-In / Walk-In 4000K 72 in. Close Space*	9.96	11.6	93	71.02	80
Cool White	3007070	EcoShine II Vertical Reach-In / Walk-In 5000K 48 in.	6.6	7.7	93	49.09	80
	3007073	EcoShine II Vertical Reach-In / Walk-In 5000K 56 in.	7.68	8.9	93	55.68	80
	3007076	EcoShine II Vertical Reach-In / Walk-In 5000K 60 in.	8.16	9.5	93	60.06	80
	3007081	EcoShine II Vertical Reach-In / Walk-In 5000K 68 in.	9.36	10.9	93	66.64	80
	3007089	EcoShine II Vertical Reach-In / Walk-In 5000K 72 in.	9.96	11.6	93	71.02	80
	3007086	EcoShine II Vertical Reach-In / Walk-In 5000K 68 in. Close Space*	9.36	10.9	93	66.64	80
	3007092	EcoShine II Vertical Reach-In / Walk-In 5000K 72 in. Close Space*	9.96	11.6	93	71.02	80

* For walk-in close spacing placement. The light source for close spaced walk-in lights is visible.
EcoShine II LED lights are covered by a 5 year limited parts and labor warranty.
See Hussmann warranty policy for additional details.
Color Temperature:
Color temperature is measured in kelvins (K). Higher color temperatures produce bright, white light hues. Cool White (5000K) has the brightest white hue. Neutral White (4000K) has a cooler hue than Warm Neutral (3500K).

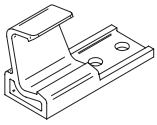
PARTS IDENTIFICATION CHART

EcoShine II Kit Components

(Luminaires are Class 2)

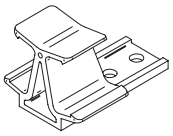


Left End Center Right End
2 LEDs



End
Mounting Clip 3 per fixture

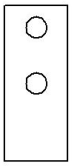
Part Number: 0519313
Close Space
Part Number: 0519315



Center
Mounting Clip
4 per fixture

Part Number: 0519312
Close Space
Part Number: 0519314

Backing Plate
Part Number:
0551858



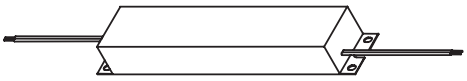
Reinforcement Plate
Part Number: 0554070

NOTE: Plates are only used for center mounting clip, not end clips

For standard reach-in and walk-in applications
Standard Bracket Kit Part Number 4919371

24VDC Power Supply

(Class 2)



Standard 100W Power Supply 0547639
Slimline 100W Power Supply 4483262

RECOMMENDED TOOLS AND SUPPLIES

Safety Eye-wear

Tape
Measure

Heat Shrink
Butt Terminals

Wire Nuts

Battery-
powered
Drill

Diagonal Pliers

Phillips and Flat Blade
Screwdrivers

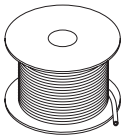
7/64 Drill Bit

9/64 Drill Bit

5/32 Drill Bit

Gloves

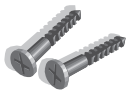
DMM
Digital Multimeter



Wire

Wire Stripper

Bit Depth Collar



#6 Self-Tapping
(2 per Bracket)

INNOVATOR DOOR LED LIGHT FIXTURE INSTALLATION

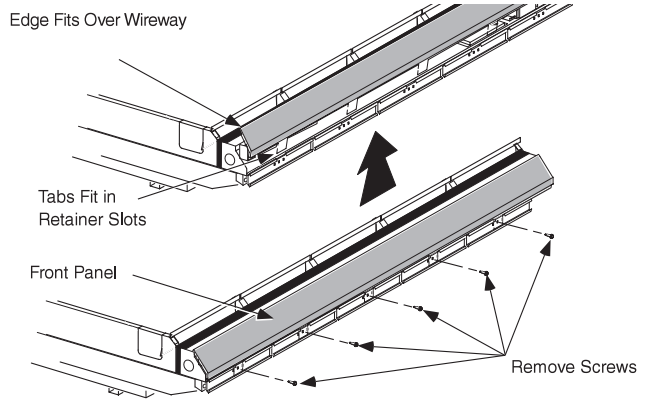
REMOVE EXISTING FLUORESCENT LIGHTING

a. Remove product from the merchandiser and store at appropriate product temperature.

b. Turn the light switch to off. The switch is located inside the case on the door mullion.

c. Lock out and tag out the circuit breaker for the lighting circuit of the case where the LED light fixtures are being installed.

d. Remove appropriate bumpers and front panels to access the electrical wireway, then remove wireway cover. Use a VOLTMETER to verify there is no voltage at the ballasts.



Remove Panels to Locate Ballast (Typical Installation)

⚠ WARNING

— LOCK OUT / TAG OUT —

To avoid serious injury or death from electrical shock, 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 doors, lights, fans, heaters, and thermostats.

e. Remove and discard the lenses covering the fluorescent tubes.

f. Remove the fluorescent tubes.

⚠ CAUTION

Fluorescent lamps contain mercury vapor. Mercury exposure at high levels can harm the brain, heart, kidneys, lungs, and immune system of people of all ages. Do not break or puncture fluorescent lamps. Dispose of, or store, all fluorescent lamps in accordance with Federal (40 CFR 273), State, and local hazardous waste requirements. Refer to http://www.epa.gov/mercury/about.htm

Fluorescent Lamp Disposal: The United States Environmental Protection Agency has information regarding environmentally-safe fluorescent lamp waste management programs.

On the Net: EPA Web site: http://www.epa.gov/osw/hazard/wastetypes/universal/lamps/recycle.htm

g. Remove the tombstones from the UPPER mounting clips. Cut wires from the tombstones as close to the tombstones as possible. Discard tombstones. Leave the existing fluorescent ballast wires protruding from the mullion for connecting LED light fixture.

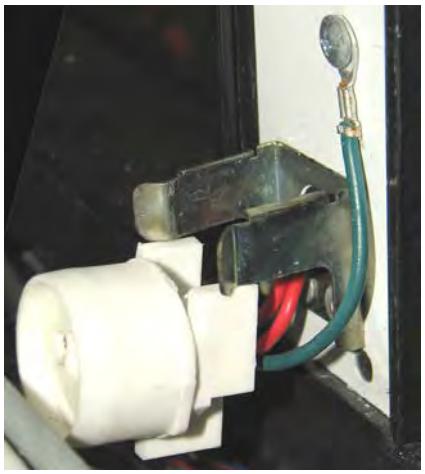
h. Use a 9/64-inch drill bit to remove the rivets holding the UPPER tombstone mounting clip in place. Remove and discard all UPPER clips.

Remove Top Tombstone and Tombstone Support

⚠ CAUTION

Prior to drilling make sure that there are no existing components inside the mullion in the areas marked off for the designated holes.

i. Remove the tombstones from the LOWER mounting clips. Remove or cut wires from the tombstones. If cutting wires, cut them off flush with the existing grommet. Cut off other end of wires as they enter the wireway. Discard tombstones.



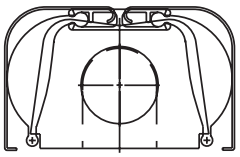
Remove Tombstones

Seal all LOWER cutouts in the mullion using approved silicone sealant.

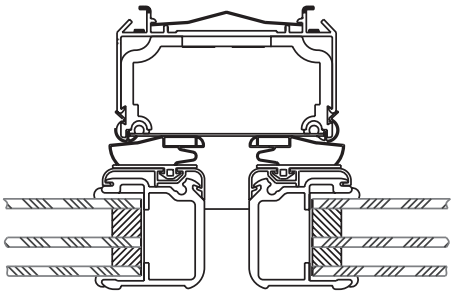
j. Use a 9/64-inch drill bit to remove the rivets holding the UPPER tombstone mounting clip in place. Remove and discard all UPPER clips.

REMOVING EXISTING ANTHONY DOOR CENTER MULLION FLUORESCENT LAMPS

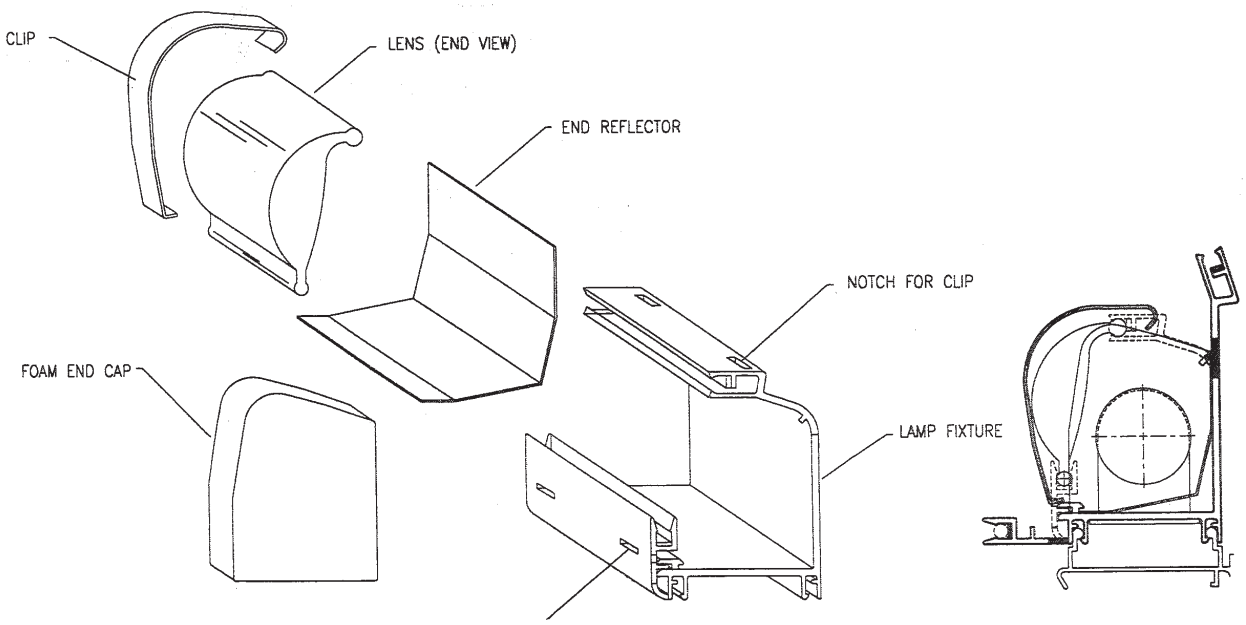
a. *Center Mullions:* Remove top and bottom clips. Remove both lenses, and bridge covering the fluorescent tube.



b. *End Mullion:* Remove top and bottom clips. Remove lens covering and fluorescent tube.



c. Remove the fluorescent lamps and insulator tubes. Remove the end caps.



Remove Anthony End Mullion Fluorescent Lamps

d. Cut wires from lamp-holder, leaving as much wire as possible. Remove End Lamp Fixture. Leave the busing and existing fluorescent ballast wires protruding from the mullion for connecting light fixture.

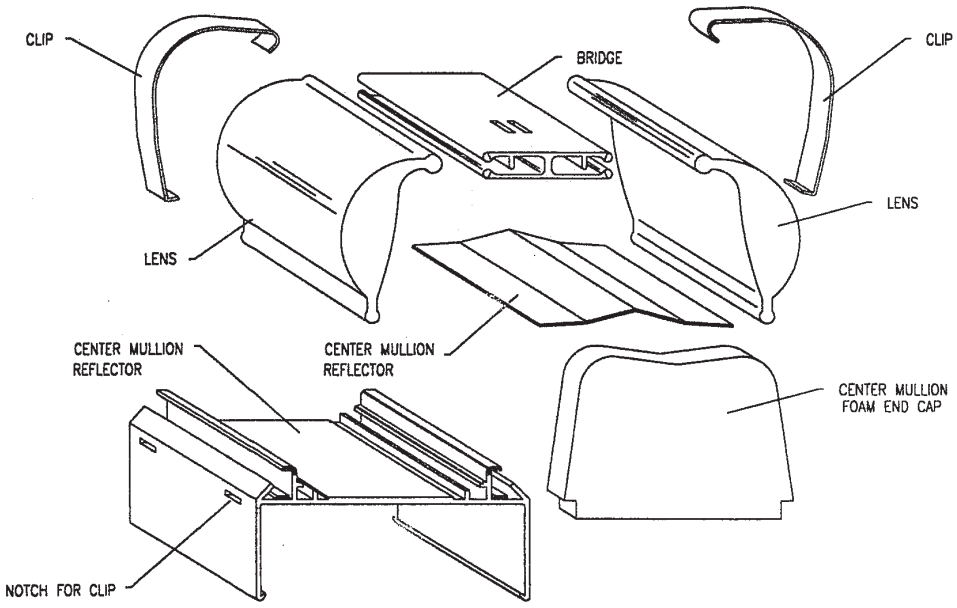
e. Remove the lamp-holders from the LOWER mounting clips. Remove the cut wires from the lamp-holders. If removing wires, reinstall the bushing into the electrical cutout. If cutting wires, cut them off flush with the grommet. Cut off other end of wires as they enter the wireway. Discard lamp-holders.

REFER TO FLUORESCENT WIRING DIAGRAMS ON PAGE 18 AND 19 TO LOCATE AND REMOVE THE BALLASTS.

f. Seal off the LOWER cutouts in the mullion using approved silicone sealant.

g. Leave the LOWER lamp-holder clip in place on all CENTER mullion to locate and hold the new light fixture.

h. Remove the LOWER lamp-holder clips from the center and end mullion. The reflector is a stainless steel sheet metal part that runs the length of the mullions. It will interfere with the installation of the mounting clips. Wear gloves to prevent injury when handling the reflector. Use a flat-bladed screwdriver to pry the reflector from its mounting.



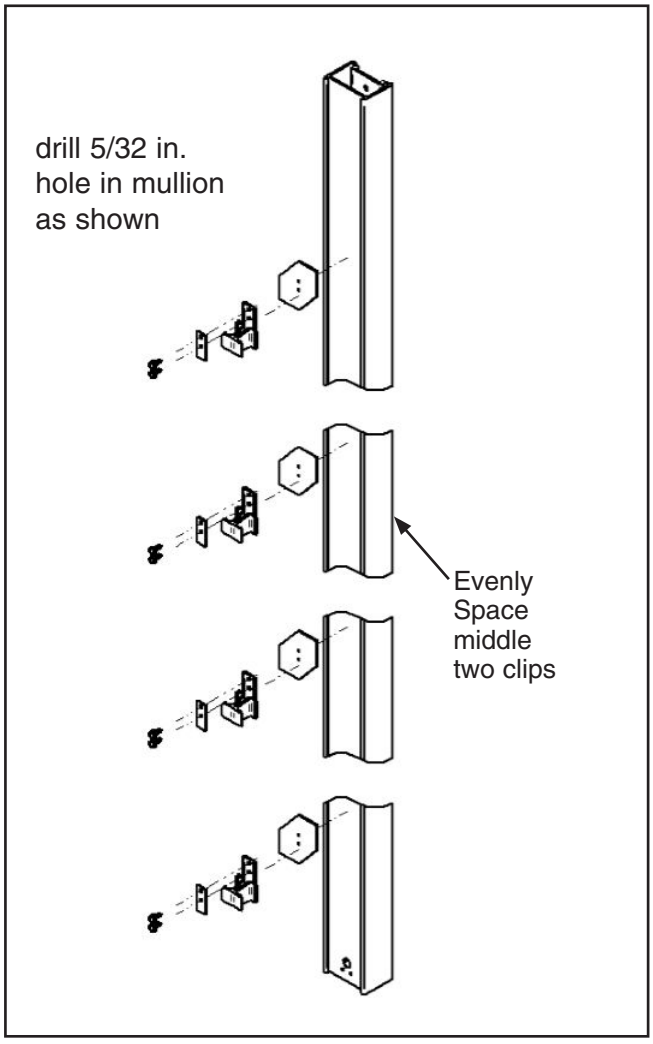
Remove Anthony Center Mullion Fluorescent Lamps

ECOSHINE II — CLIP INSTALLATION

IMPORTANT!

ONLY THOSE OPEN HOLES INDICATED IN THE PHOTOGRAPHS AND/OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS.

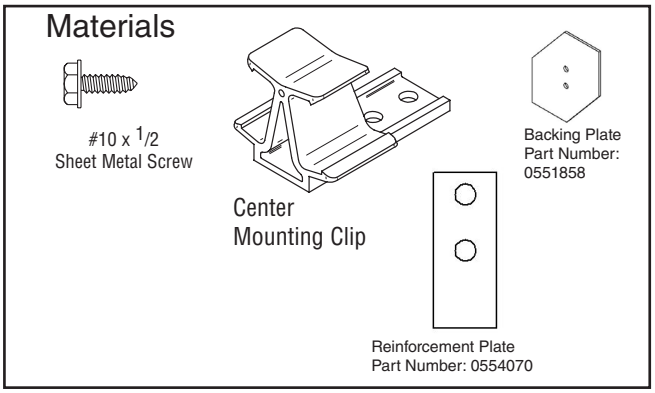
Do not tighten fasteners more than 1 lbs of torque.



INSTALL CENTER MOUNTING CLIP

a. Mark and drill 5/32 inch diameter holes using the backing plate as a template. Upper clip should be centered on the mullion, 8 inches from the top. Lower mounting clip should be centered and located 8 inches from the bottom mullion frame. The two additional clips should be evenly spaced between the top and bottom clips, as shown.

b. Place the reinforcement plate in the bracket. Use two #10 sheet metal screws to fasten through the reinforcement plate, mounting clip and backing plate, 4 each per mullion.



NOTE: Center clips may be orientated with screw holes facing up or down on the mullions.

⚠ CAUTION

Prior to drilling make sure that there are no existing components inside the mullion in the areas marked off for the designated holes.

DO NOT USE A SELF-DRILLING SCREW. The composite mullion will be damaged and the screw will not properly secure the mounting clip to the mullion.

Install Mounting Clip into Center Mullion(s)

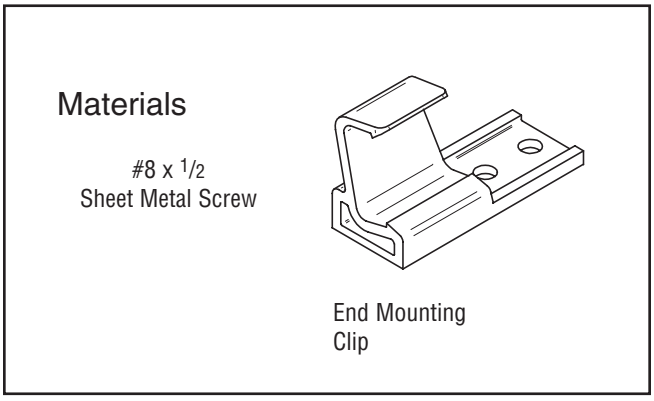
Install end Mounting Clips

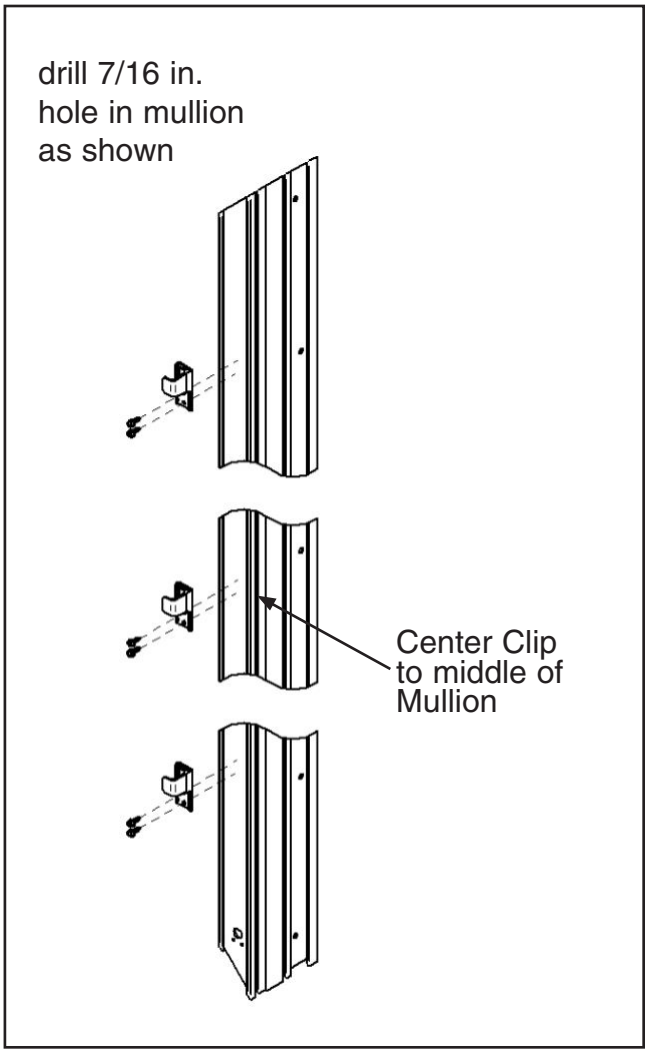
EcoShine II

a. Mark and drill 7/64 inch diameter holes using the mounting clip as a template. Upper clip should be centered on the mullion, 8 inches from the top. Lower mounting clip should be centered and located 8 inches from the bottom mullion frame. Center middle clip to middle of the mullion as shown.

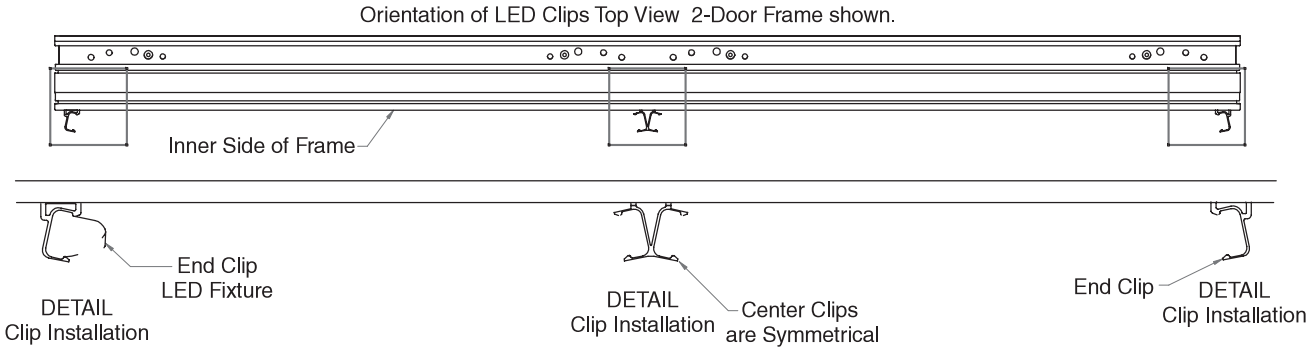
b. Use two #8 sheet metal screws to fasten each mounting clip, three per mullion.

c. Repeat for the RH end mullion. Refer to the illustration on the next page to ensure that the orientation of the clip assemblies is correct.





Proper End Clip Orientation — Left End versus Right End
(View looking down from top of mullion)



Install End Mounting Clip Assemblies onto End Mullion

CONNECT LED POWER SUPPLY

a. Remove Ballast(s) from the mullion(s) or electrical wireway. Walk-in ballasts are located at the top of the doors. Reach-in power supplies are located at the bottom of the doors.

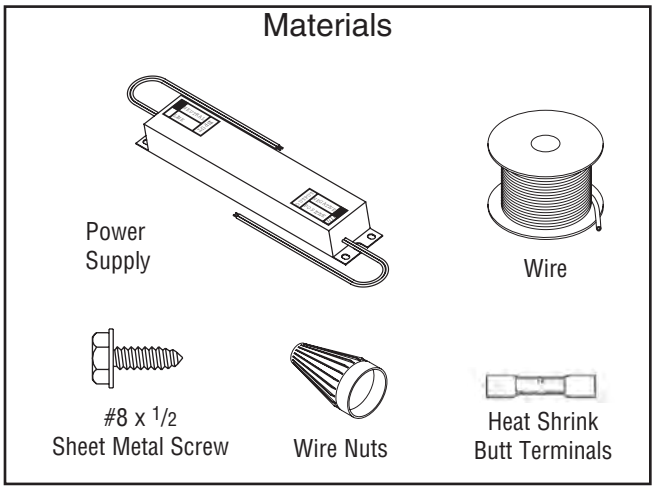
b. Mount the LED power supply in the mullion or wireway near where the ballast was located to re-use wiring. If mounting power supply in mullion, trial fit the mullion cover before permanently mounting the power supply. Power supply has a 120V 50/60 Hz input and a 24V DC output.

Remove Ballast & Install Power Supply
(Typical Installation)

DO NOT LEAVE ANY EXPOSED WIRE NUTS OR CONNECTORS. RETROFIT LED FIXTURES HAVE LONG WIRING. FISH NEW WIRING THROUGH MULLION USING EXISTING BALLAST WIRING.

⚠ CAUTION

Ensure that all connection points are sealed for damp location using the appropriate method per the NEC or local electrical code.



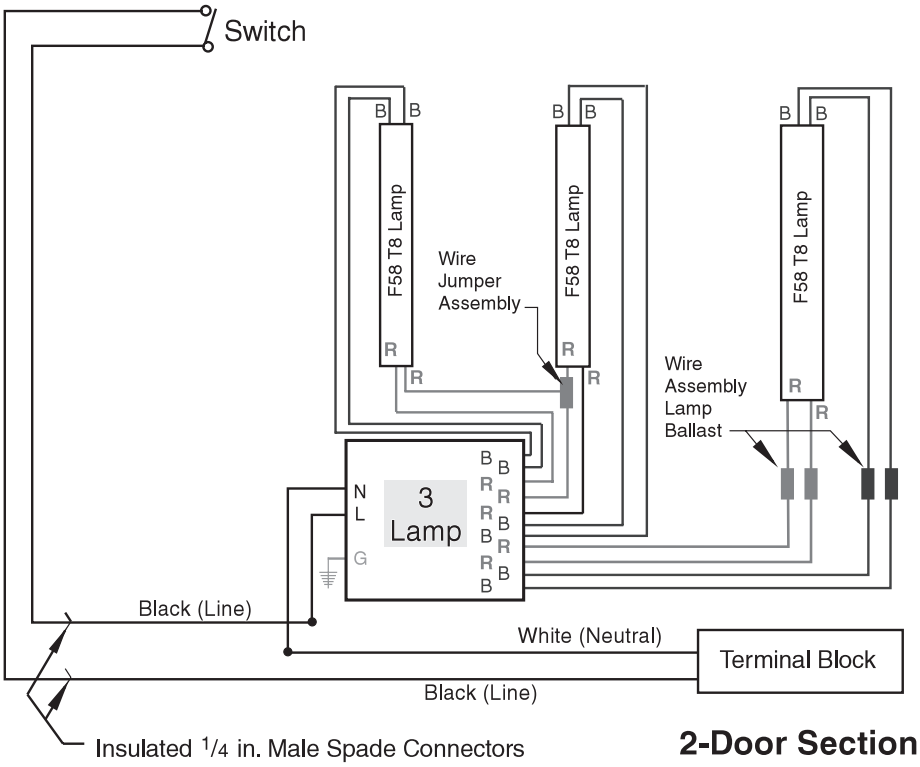
c. Follow appropriate wiring diagram on the following pages. Connect the original load and neutral wires to LED power supply input wires (black and white wires) and secure with approved wiring nuts. **All wiring from the LEDs is to fed to the wireway through existing wireway electrical knockout holes. All connections should be made in the wireway as shown in the photo at left. No holes need to be drilled.**

d. Connect the LED power supply output wires (red and blue wires) to wiring from previously connected fluorescent lamp-holders. LED light fixtures are not polarity sensitive.

e. Additional wiring may be needed to connect the power supply to existing wiring in the wireway. Use conductors of proper size and rating.

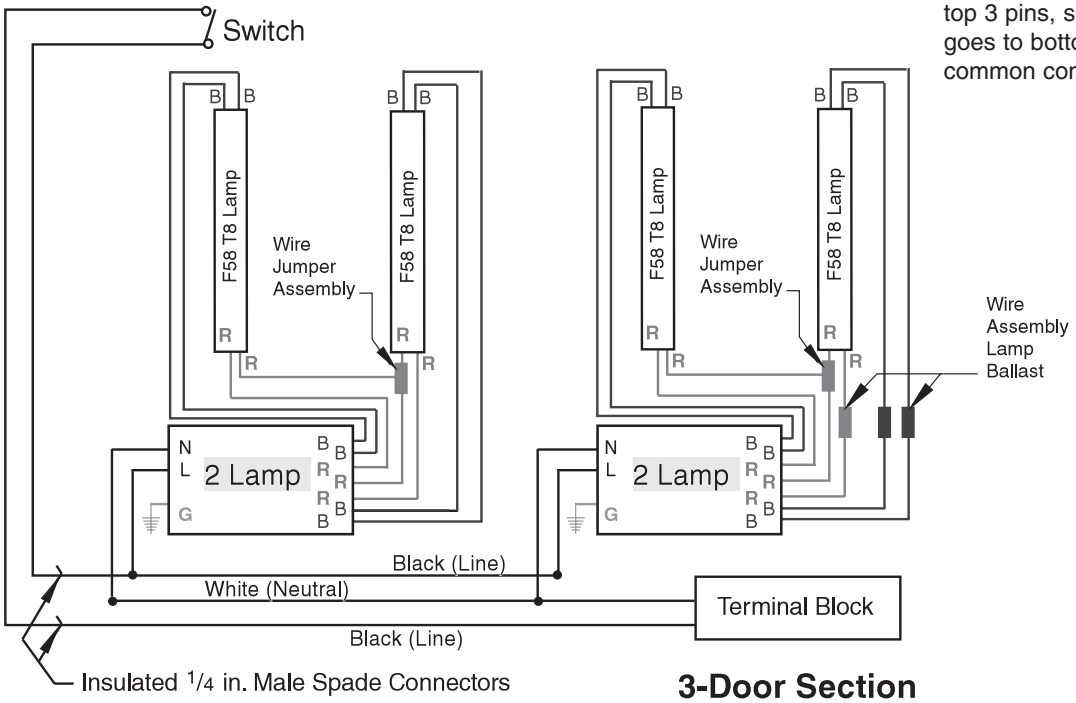
f. Ground power supply by either 1) using the green ground wire, if provided with the power supply, 2) directly by attaching a green wire with screws to both the refrigerator raceway and power supply case, or 3) electrically bonded by fasteners holding the power supply to the raceway.

120V Electronic Ballast Wiring Diagrams



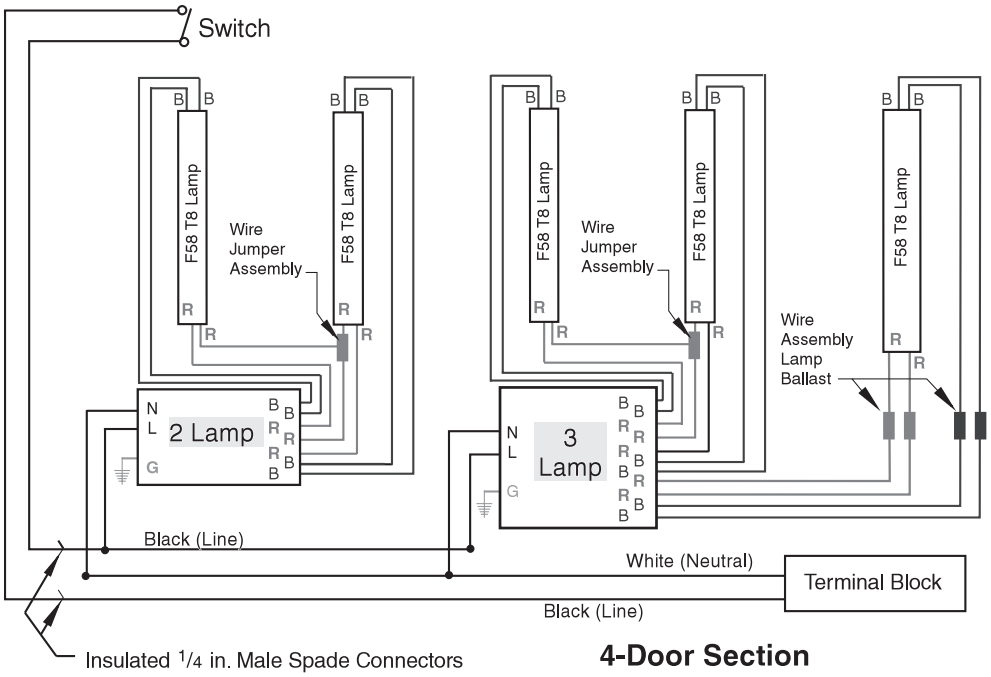
2-Door Section

Two lamp wiring has a red wire from each lamp spliced together and returning to the ballast. Two blue wires and one red wire go to the ballast as a group from each lamp. Note that one lamp goes to top 3 pins, second lamp goes to bottom 3 pins, with a common connection between.

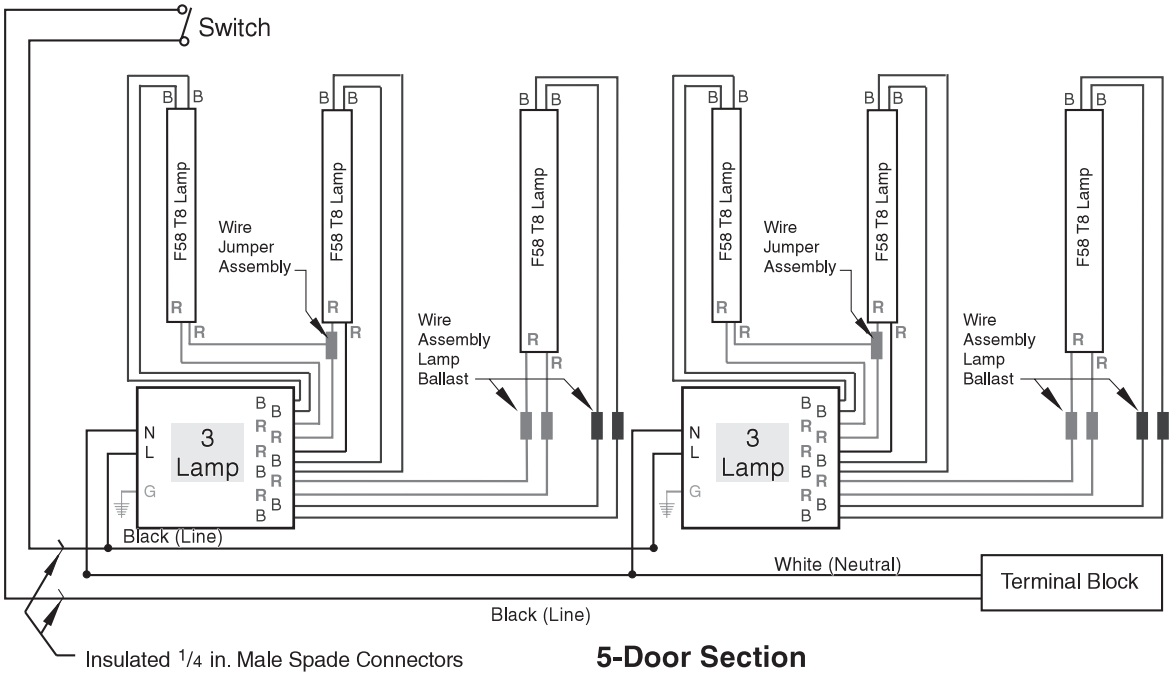


3-Door Section

120V Electronic Ballast Wiring Diagrams



4-Door Section

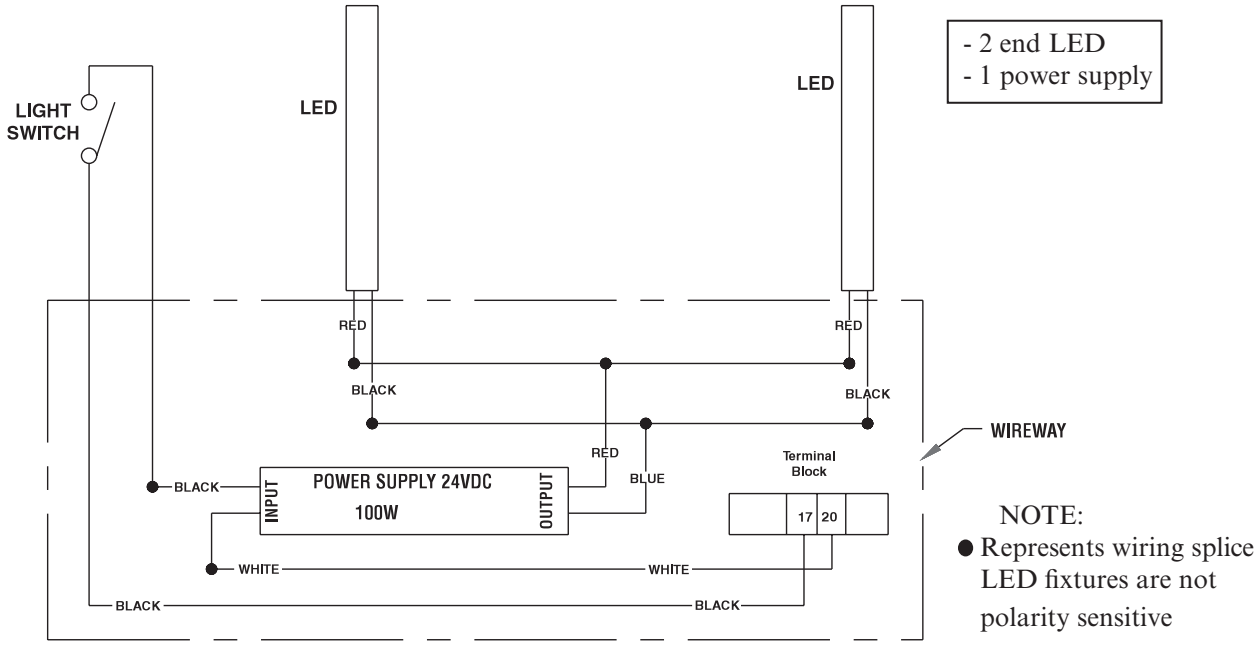


5-Door Section

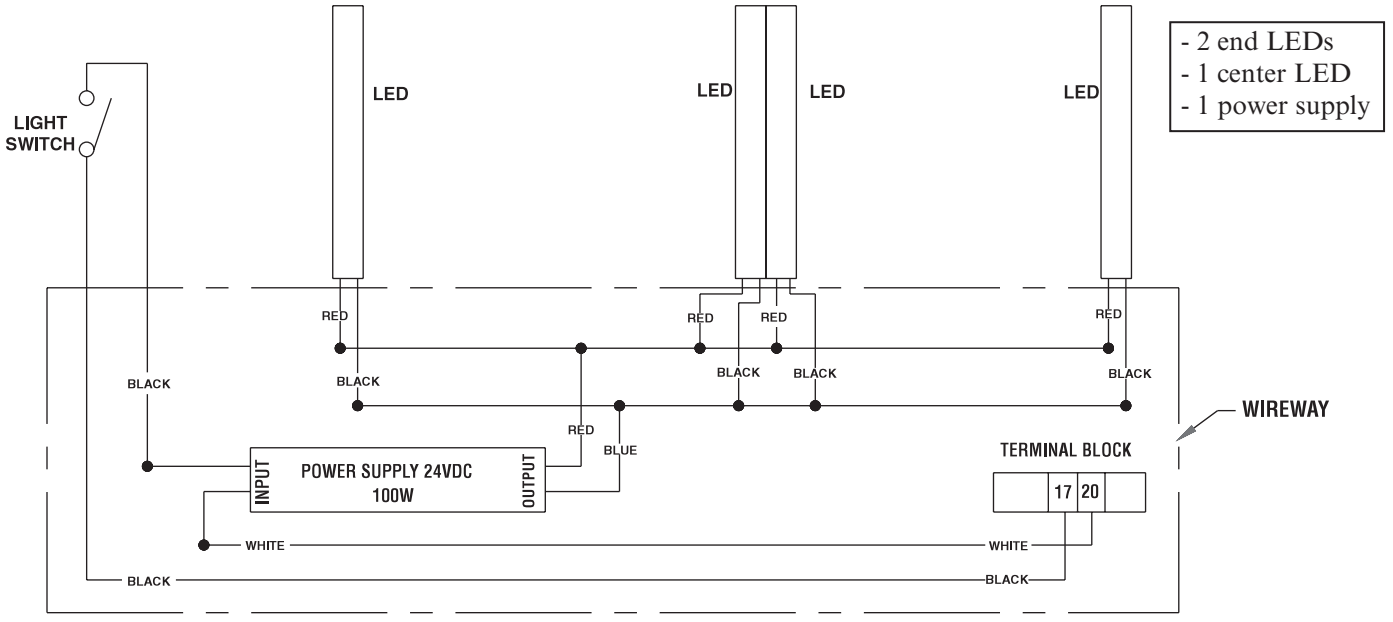
WIRING DIAGRAMS

Wiring diagrams are shown below for 1-door and 2-door, 60 in. and 67 in. merchandisers with EcoShine II LEDs.

NOTE: Wiring diagrams for Anthony Doors are contained in the manufacturer's documentation.



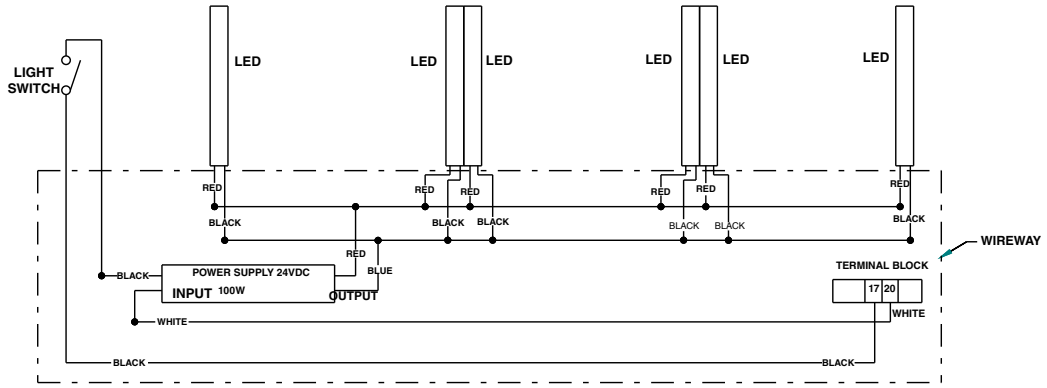
1 DOOR LED LIGHT WIRING DIAGRAM



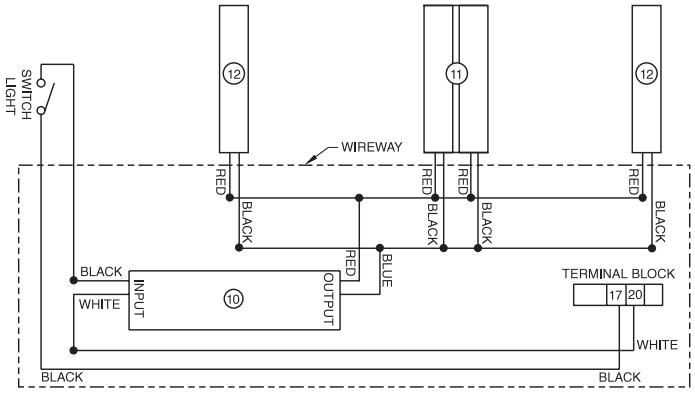
2 DOOR LED LIGHT WIRING DIAGRAM

Wiring diagrams are shown below for RLNIE merchandisers with 60 in. EcoShine II LEDs.

- 2 end LEDs
- 2 center LEDs
- 1 power supply



3 DOOR RH SIDE COMPARTMENT LED LIGHT WIRING DIAGRAM

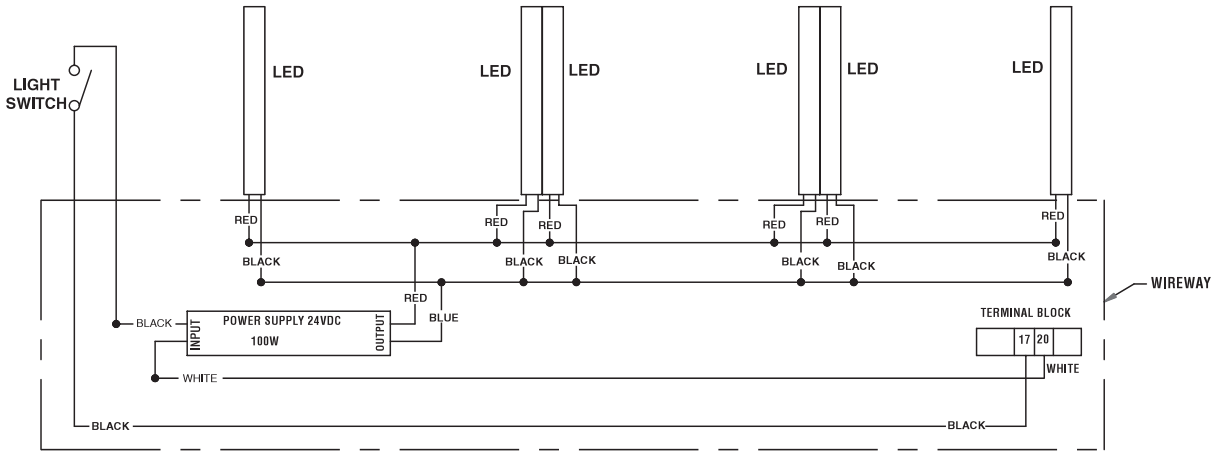


2 DOOR END COMPARTMENT
LED LIGHT WIRING DIAGRAM

- 2 end LEDs
- 1 center LED
- 1 power supply

NOTE:

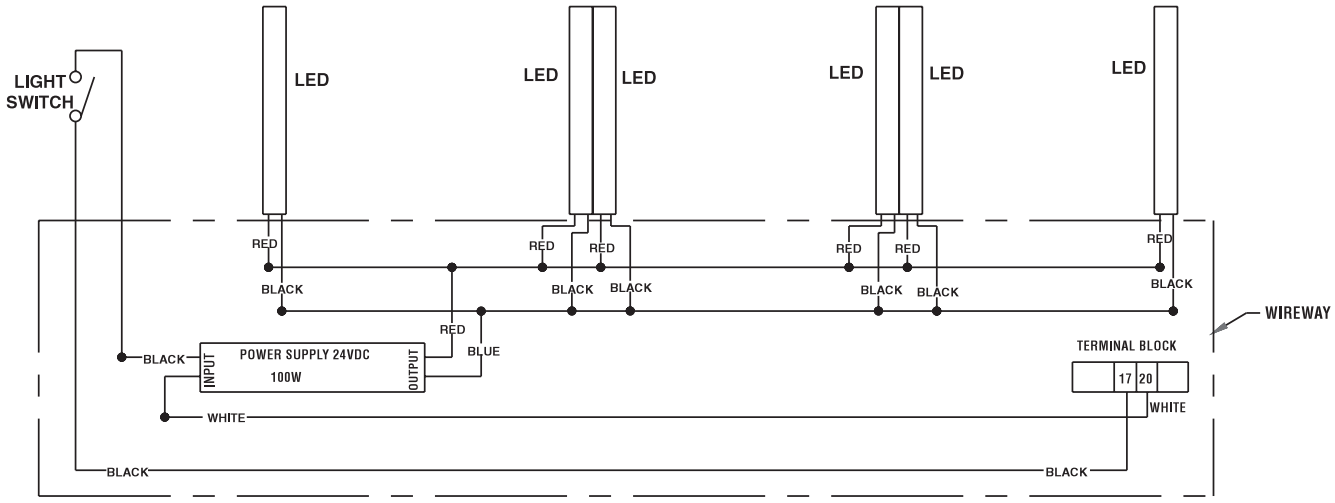
- Represents wiring splice LED fixtures are not polarity sensitive



3 DOOR LH SIDE COMPARTMENT LED LIGHT WIRING DIAGRAM

Wiring diagrams are shown below for 3-door and 4-door merchandisers with 60 in. and 67 in. EcoShine II LEDs.

- 2 end LEDs
- 2 center LEDs
- 1 power supply



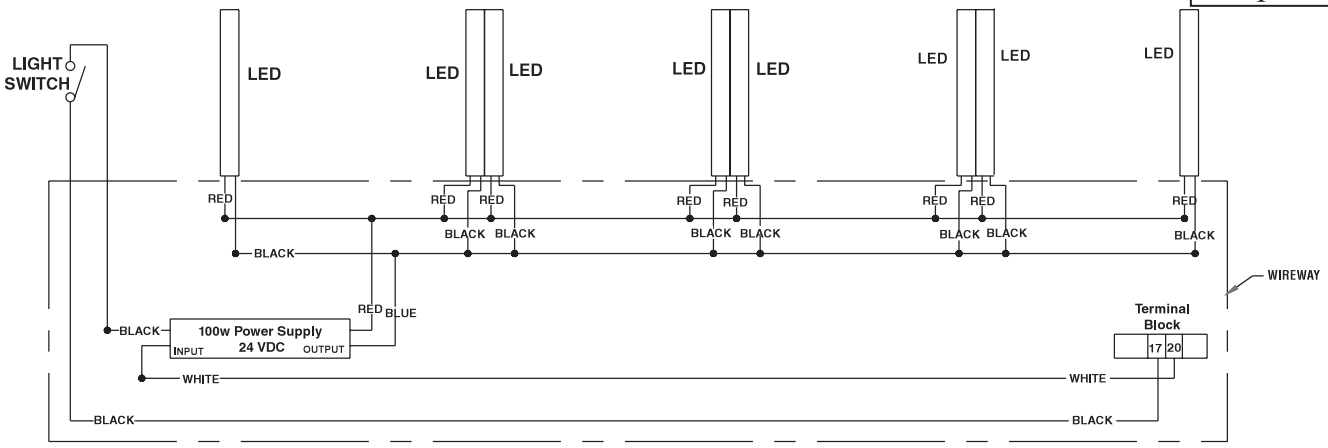
3 DOOR LED LIGHT WIRING DIAGRAM

NOTE:

● Represents wiring splice

LED fixtures are not polarity sensitive

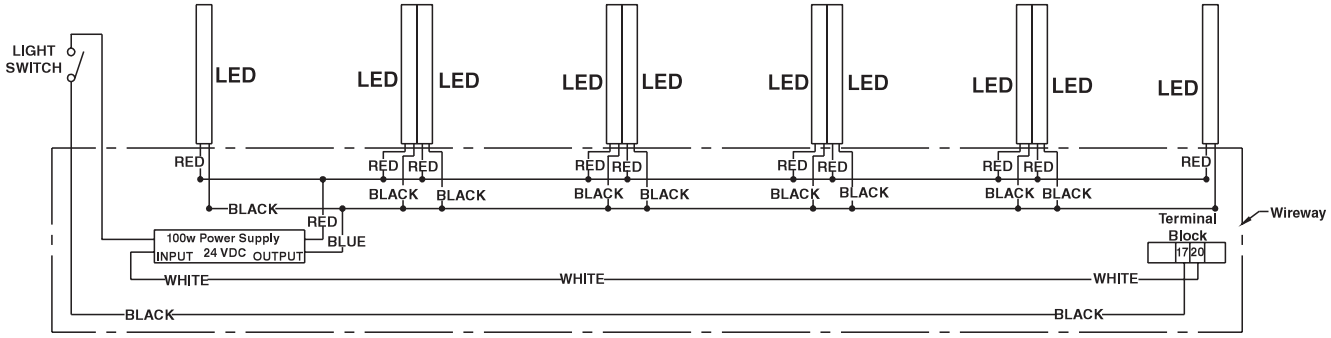
- 2 end LEDs
- 3 center LEDs
- 1 power supply



4 DOOR LED LIGHT WIRING DIAGRAM

Wiring diagrams are shown below for 5-door merchandisers with 60 in. and 67 in. Ecoshine II LEDs.

- 2 end LEDs
- 4 center LEDs
- 1 power supply



5 DOOR LED LIGHT WIRING DIAGRAM ECOSHINE II

NOTE:

● Represents wiring splice LED fixtures are not polarity sensitive

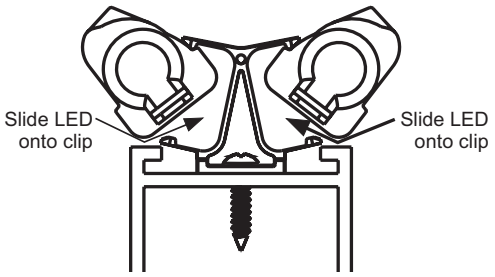
INSTALL CENTER LED LIGHT FIXTURE

a. **Verify that lower electrical cutouts have been sealed.** If not, use an approved silicone sealant.

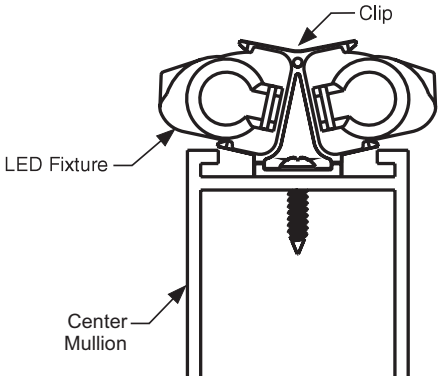
b. Insert each LED connector into each LED fixture. Ensure LED wiring is facing direction of power mullion wiring. Install each LED fixture into the mounting clips. Verify LED orientation is correct.

DO NOT LEAVE ANY EXPOSED WIRE NUTS OR CONNECTORS.

EcoShine II



Installing Center Light Fixture into Clip



Light Fixture Properly Installed in Clip

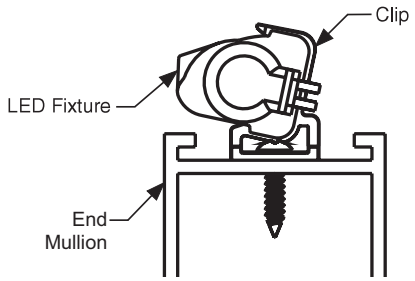
INSTALL END LED LIGHT FIXTURE

a. **Verify that lower electrical cutouts have been sealed.** If not, use an approved silicone sealant.

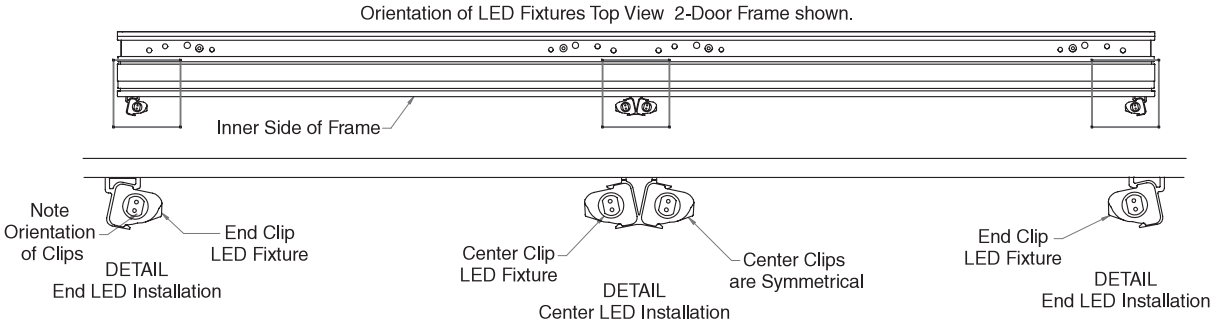
b. Insert each LED connector into each LED fixture. Ensure LED wiring is facing direction of power mullion wiring. Install each LED fixture into the mounting clips. Verify LED orientation is correct.

DO NOT LEAVE ANY EXPOSED WIRE NUTS OR CONNECTORS.

EcoShine II



Installing End Light Fixture into Clip



Proper End Orientation — Left End versus Right End
(View looking down from top of mullion EcoShine II LEDs shown)

CONNECT WIRING TO LED LIGHT CONNECTORS

ECOSHINE II

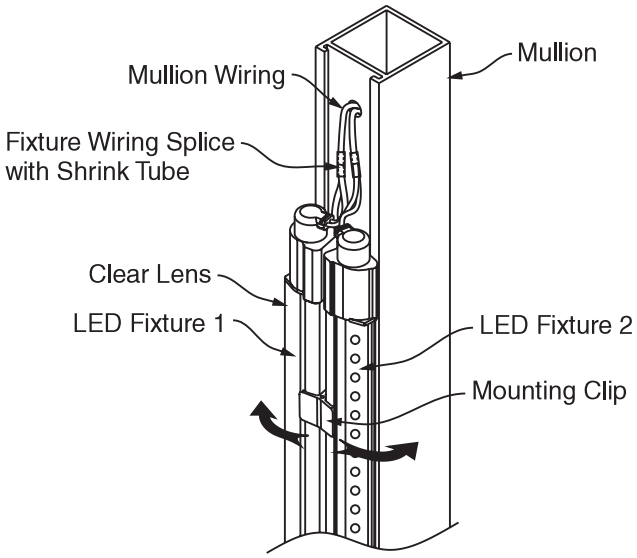
a. If existing wiring is present, use the wiring to fish the new LED wiring to the power supply location.

b. Remove the existing wiring.

c. Connect the red and black wires to the LED power supply.

d. Verify circuit against appropriate wiring diagram. EcoShine II end mullions will have a single connector, the center mullion will have two.

DO NOT LEAVE ANY EXPOSED WIRE NUTS OR CONNECTORS.



Wiring Center Light Fixture EcoShine II

FINISHING THE INSTALLATION

a. Replace wireway cover.

b. Turn circuit breaker to ON

c. Remove protective film from lens (if applicable.)

d. Turn light switch to ON.

e. Check operation of LED light fixtures.

f. Replace front panels and associated hardware and bumpers.

g. Clean up work area.

h. Replace bottom wire racks.

i. Return product to merchandiser after merchandiser reaches appropriate product temperature.

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To obtain warranty information or other support, contact your Hussmann representative. Please include the model and serial number of the product.

Hussmann Corporation, Corporate Headquarters: Bridgeton, Missouri, U.S.A. 63044-2483 01 October 2012