



M-LINE ENERTECH SWINGLINE 3 INSTALLATION INSTRUCTIONS

99-18764-I001_A

TRADEMARKS

The following are trademarks of Ardco, Inc. and may not be used without permissions:

Gildematic, Lektra Gard, Lock-Shelf System, MagniMatic, Speed Shelf, Sta-Clear 3, Swinline 180, Color-glide, Lektroni-Gard, Watt-Gard, Swingline II, Fast Track, Sca-X, Temper-Gard, Swingline 3, Enertech, TemperBend, Vanguard.

Copyright © 2010 by  Anthony

ALL rights reserved. Information in this document is subject to change without notice. Companies, names and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without express permission of Anthony Manufacturing Co., Inc.

Anthony products identified in this manual are designed and certified to meet  or  for safety, and  for sanitation standards.

European products meet  requirements.

Each customer is responsible for final site approval.

TABLE OF CONTENTS

PRELIMINARY CONSIDERATIONS FOR DOOR AND FRAME SERVICING PROCEDURES	1
Safety.....	1
Tools.....	1
Tips.....	1
FRAME INSTALLATION	2
DOOR INSTALLATION	3
DOOR ADJUSTMENT--ALL MODEL	4
HOLD OPEN SPRING INSTALLATION-TOP HOLD OPEN MODELS	6
SWING HINGE CONVERSION-TOP HOLD OPEN MODELS	7
Frames.....	7
Doors	8
LOK-SHELF SYSTEM INSTALLATION	9
ELECTRICAL HOOKUP	12

PRELIMINARY CONSIDERATIONS FOR DOOR AND FRAME SERVICING PROCEDURES

Safety

Proper safety equipment includes:



safety glasses



work gloves



work shoes



NOTE: TURN OFF ALL ELECTRICAL POWER PRIOR TO BEGINNING WORK ON THE DOOR OR ON ANY ELECTRICAL. USE EXTRA CAUTION WHEN WORKING WITH OR AROUND THE DOOR GLASS PACKAGE.

NOTE: DO NOT USE POWER TOOLS FOR THE FOLLOWING PROCEDURES

Tools

Tools required for this procedure include:

- | | |
|--|----------------------------|
| - #2 Phillips-head screwdriver | - Flat-head screwdriver |
| - Needle-nose pliers | - Rubber or plastic mallet |
| - $\frac{7}{16}$ " and $\frac{1}{2}$ " Hand Wrench | - $\frac{5}{32}$ " Hex Key |
| - Wire stripper and cutter | - Razor Knife |

Tips

- Complete replacement of wire assemblies is recommended whenever required. Splice wires only if necessary using proper materials such as, electrical tape, wire nuts, flux core solder and heat shrink.
- Keep doors and frames clean for product efficiency. This can also help reduce energy consumption and potential health hazards.
- Whenever binding gasket or plastic parts, use food grade silicone.
- Always use the correct tool for the job to be performed. This ensures proper installation and minimizes safety risks.

- If there is any doubt about the work to be performed, consult with a certified technician or Anthony representative.
- Preventative maintenance is recommended to ensure product longevity.

FRAME INSTALLATION

1. Place frame into net cooler operating.
2. Clamp top and bottom of frame into cooler opening. [Refer to Figure 1](#) , and [Figure 2](#) .

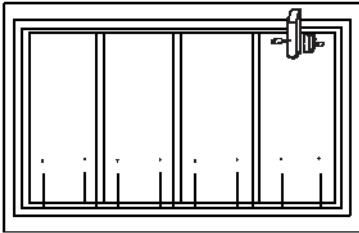


Figure 1

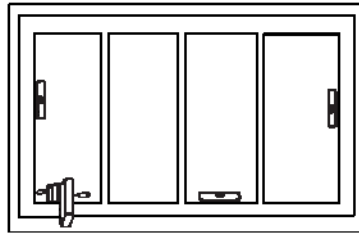


Figure 2

3. Diagonal measurements must be within 1/8" of being equal before fastening top of frame. [Refer to Figure 3](#) . A frame out of square can result in door sag.

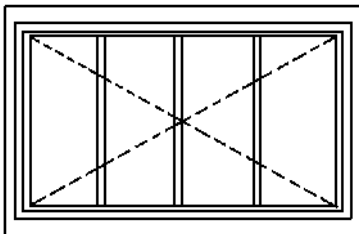


Figure 3

4. Check vertical and horizontal alignment with a level. [Refer to Figure 3](#) .
5. If necessary loosen clamp and wedge from rear of frame with a screwdriver until sides are square. Hold in place with clamp. Fasten bottom, top and sides with No. 10 X 1 1/2" wood screws. Do not tighten or distortion may occur. Caulk perimeter of frame on refrigerated side. [Refer to Figure 4](#) .

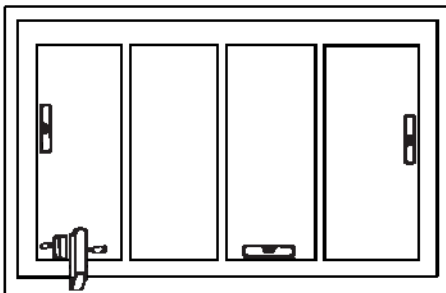


Figure 4

- Where two frames come together use Divider Board. Attach T-Trim after butting edge side of two frames on divider board. Metal strips are overlapped and then extended to butt against frame. Drive attachment screws through both metal pieces and into wood post. Caulk joints as required.

NOTES:

- Some frames are ordered “flangeless”. These frames will not have Divider Boards.
- The Ardco frame is designed to hold Ardco doors. The framing should not be used as support for the cooler header or to support any other type of construction.

DOOR INSTALLATION

- Lift door into frame to engage top door hinge pin into top hinge mounting plate, [Refer to Figure 5 \(A\)](#).

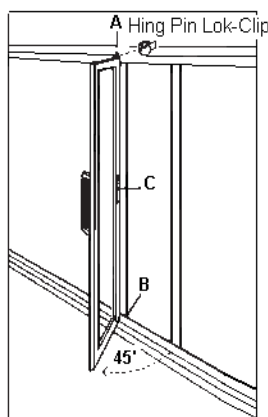


Figure 5

- Reset door on bottom hinge ([Refer to Figure 5 \(B\)](#)) which allows finger clearance to plug in electrical cord. ([Refer to Figure 6 \(C\)](#)).

NOTE: M-Line and Enertech cooler doors are “no-Heat” doors. There will be no power cord on the door and no receptacle on the frame.

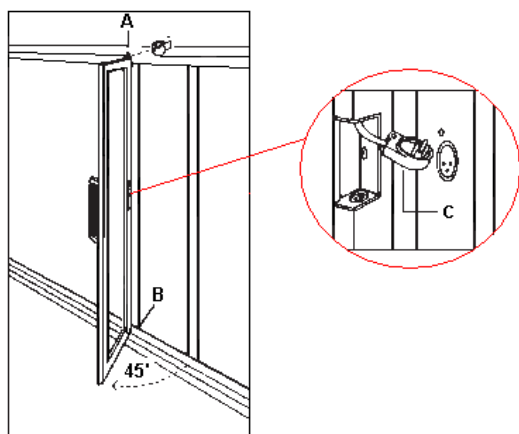


Figure 6

- Open door to approximately 45° to align bottom door pin with mounting hole in bottom plate ([Refer to Figure 5 , B](#)). Swing door open or closed to drop into proper alignment.

- Adjust door closing tension with hex key tool furnished. Tool is standard 5/16" allen wrench. If tool is lost another can be obtained locally. Insert tool into adjusting nut.

NOTE: Located in center-of door recession, opposite electrical plug.

- Rotate tool only in direction door opens (towards the glass).
- For left hand adjustment [refer to Figure 7](#) , for right hand door adjustment [refer to Figure 8](#) .

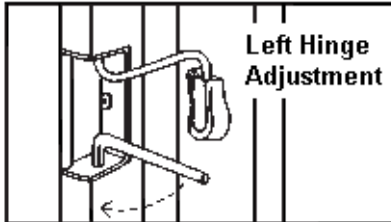


Figure 7

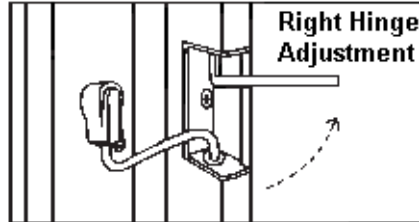


Figure 8

IMPORTANT:

Proper size hinge pin Lok-Clip must be installed to prevent disengagement of door.

- Select Lok-Clip with proper thickness to fill space between top of door and outer frame. [Refer to Figure 5](#) .
- Remove protective tape from doors and frame(s) before energizing unit for any extended period.

DOOR ADJUSTMENT--ALL MODEL

- After installation, if door appears to sag, [refer to Figure 9](#) , Ardco's adjustable hinging features will allow this situation to be corrected.

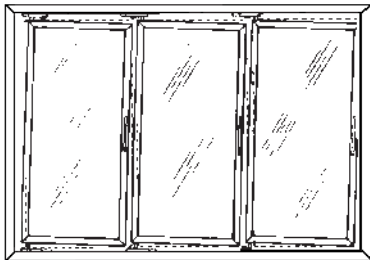


Figure 9

- Be sure the upper hinge mounting plate is aligned property with the screw head centered on the gauge mark on the plate. [Refer to Figure 10](#) .

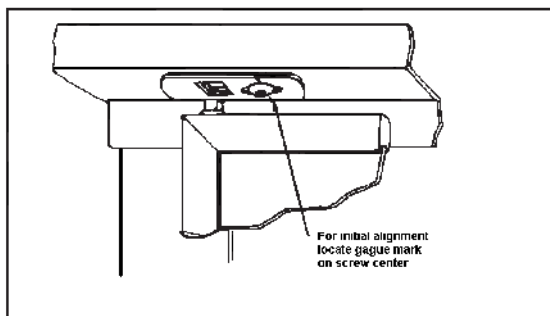


Figure 10

3. For proper alignment of the bottom mounting plates at the frame ends, the inboard screws should be flush with the end of the mounting plate. [Refer to Figure 11](#).

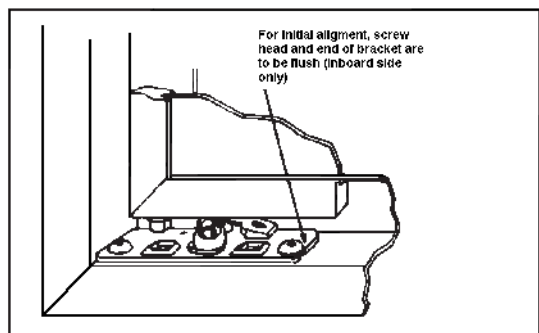


Figure 11

4. For proper alignment of the bottom mounting plates of the Mullions, both ends of the plate should be flush with both mounting plate screws. [Refer to Figure 12](#).

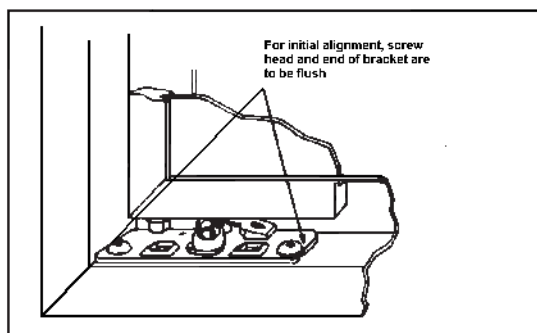


Figure 12

5. To correct the problem in [Figure 9](#), shift the top mounting plates to the left and the bottom mounting plates to the right.
6. To keep door in open position, open door fully and push Hold-open retainer, To release, close door. [Refer to Figure 13](#).

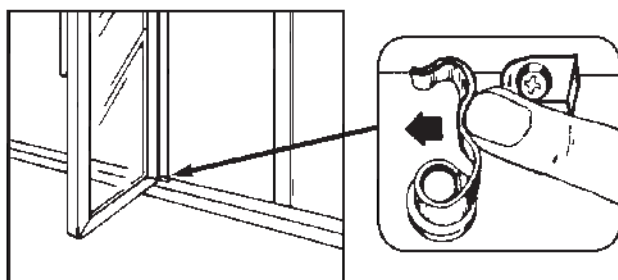


Figure 13

7. Go to "HOLD OPEN SPRING INSTALLATION-TOP HOLD OPEN MODELS" on page 6.

HOLD OPEN SPRING INSTALLATION-TOP HOLD OPEN MODELS

1. The connection of the hold open spring to the door is made after the door has been installed.
2. The assembly of the spring, washer and shoulder screw is made at the factory. [Refer to Figure 14](#) .

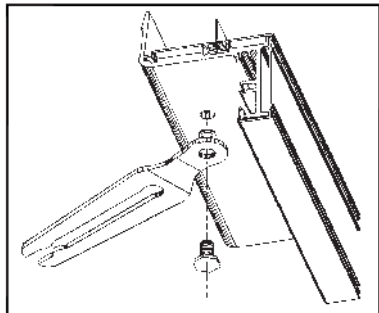


Figure 14

3. To install the spring onto the door:
 - a. open the door to just before detent and place one side of the spring into the top groove of the pin on the door. [Refer to Figure 15](#) .

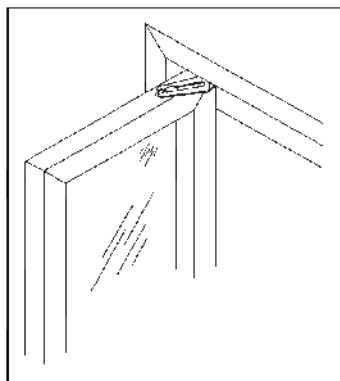


Figure 15

- b. Then apply pressure to the other side of the spring until it snaps into the pin.

4. To remove the spring from the door:
 - a. Open the door to just before the detent and insert a screw driver between the legs of the hold open spring, [Refer to Figure 16](#).

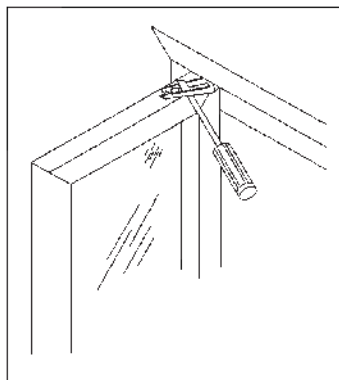


Figure 16

- b. Push it up until the spring is disconnected from the door.

SWING HINGE CONVERSION-TOP HOLD OPEN MODELS

Frames

[Refer to Figure 17](#) and [Figure 18](#)

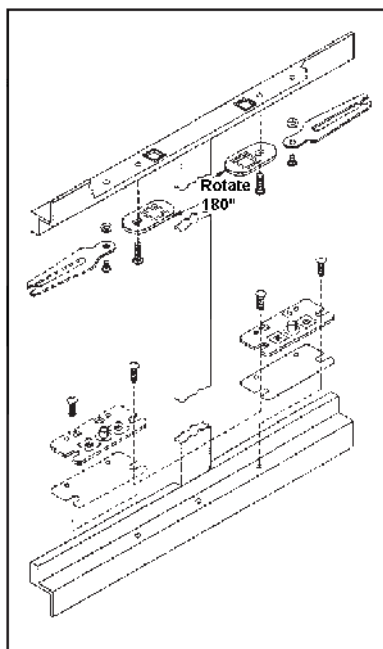


Figure 17

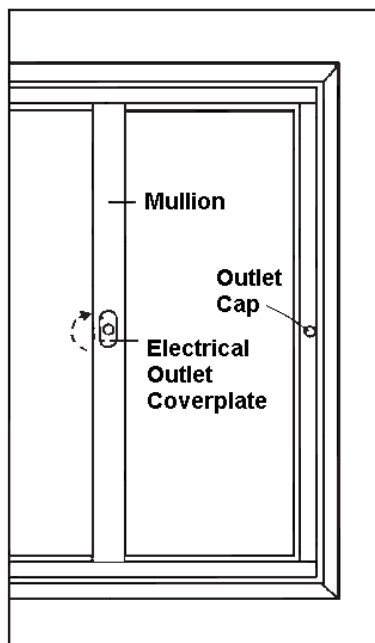


Figure 18

1. Remove top hinge plate. Rotate plate 180° and reinstall on opposite side of the opening.
2. Remove the hold open spring and reinstall on the opposite side of opening. [Refer to "HOLD OPEN SPRING INSTALLATION-TOP HOLD OPEN MODELS on page 6.](#)

3. Remove the bottom mounting plate and reinstall on the opposite side of the opening
4. To accommodate the power cord:
 - a. Rotate the receptacle plate 180°.
 - b. Move the electrical cap to the opposite end of the frame.

NOTE: Enertech and M-Line cooler doors and frames may not have power cords.

Doors

Refer to Figure 19 .

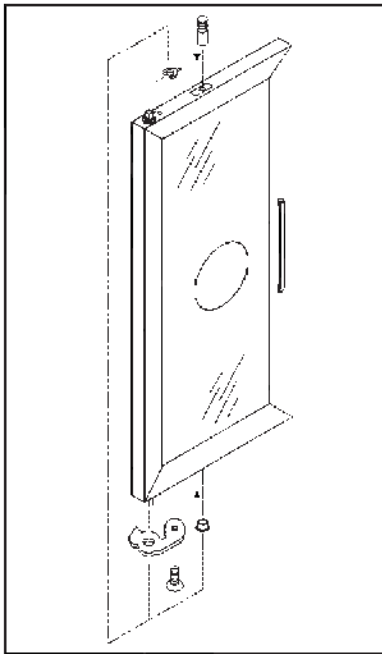


Figure 19

1. Remove the hold open pin and screw from the top of the door and reinstall in the bottom of the door.
2. Move the door stop plate from the bottom of the door to the top.
3. Turn the door upside down and reinstall.

LOK-SHELF SYSTEM INSTALLATION

1. Ardco shelving is secured to the frames by use of brackets that are preinstalled on Ardco frames and post clips that are on the front posts. [Refer to Figure 21](#) .

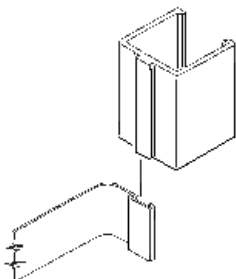


Figure 20

2. Place a front post at the end of the Ardco frame. Slide the post clips down the post into the post brackets. [Refer to Figure 21](#) .

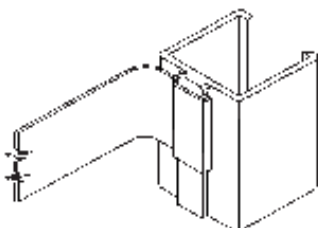


Figure 21

3. The post clips are pre-crimped at the top of the tongue. After the post clips are installed in the brackets, crimp the bottom of the tongue to prevent accidental disengagement of the post clip. [Refer to Figure 22](#) .

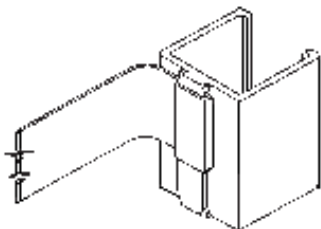


Figure 22

4. Continue installing the front posts for the entire lineup.
5. For ease of shelf installation, Ardco supplies Post Stabilizer Bars. [Refer to Figure 23](#) There will be four bars per frame:
 - a. Starting at one end, install one bar at the top of the posts and one at the bottom of the posts.
 - b. Then proceed to the first Mullion and install the stabilizer bars on these posts.

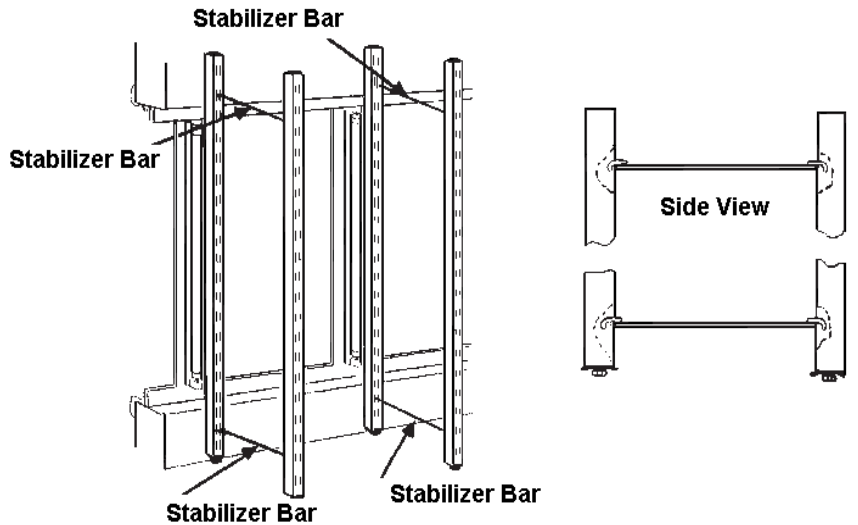


Figure 23

6. Install the required shelves behind the first door, then proceed to the next door.
7. At this point, remove the stabilizer bars from the first Mullion:
 - a. Move them to the posts at the second Mullion.
 - b. Continue this until you have the stabilizer bars on the end posts.
8. The shelves are installed into the slots on the rear of the posts. [Refer to Figure 24](#) .

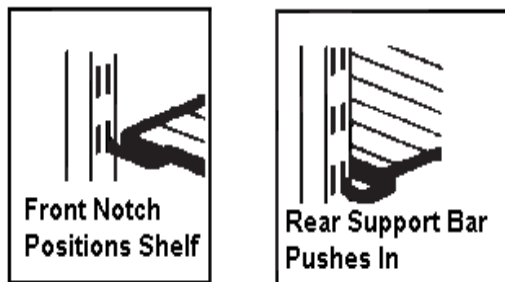


Figure 24

9. Shelves may be leveled by using the leveler bolt at the bottom of each post.

10. Shelves may be placed at a slant by moving the rear mounting bar to a higher slot in the rear post. [Refer to Figure 25](#).

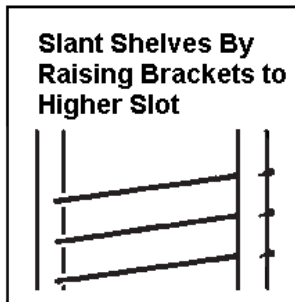
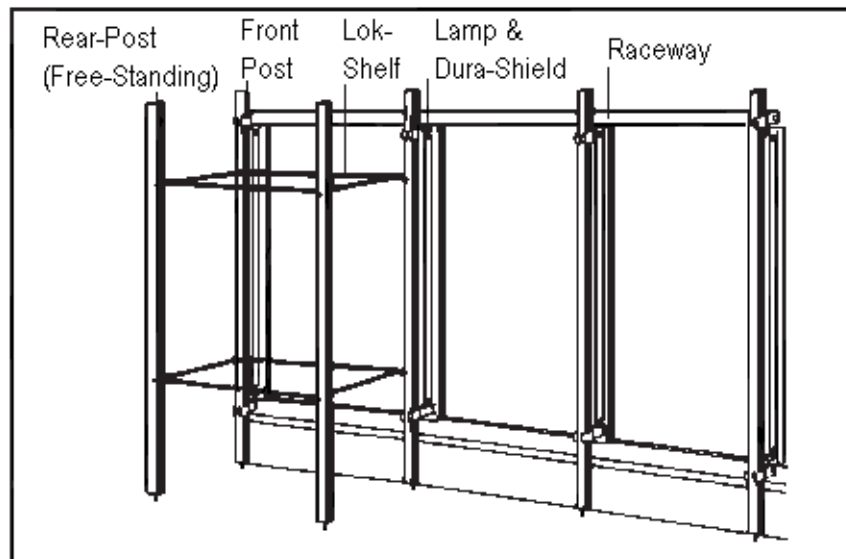


Figure 25

NOTE: When the cooler or freezer sill is 4 1/2" deep or deeper, special mounting brackets will be required for the front posts.



ELECTRICAL HOOKUP

1. After Ardco's frame (or frames) have been installed in the rough opening, bring the appropriate power to the back of the frame
2. Two circuits are required recommended; one for the lights and one for the heaters, regardless of voltage.
 - a. The heaters are 120 volts on both the coolers and the freezers.
 - b. The lights on the freezers are 120 volts.
 - c. The lights on the coolers may be 120 volts or 220 volts.
 - d. Check the requirements on the back of the frame.
3. All heaters and light wiring in Ardco frames is labeled and color coded.

NOTE: 208/230 volt wires are red. 120 volt wires are black and white. Refer to Figure 26 .

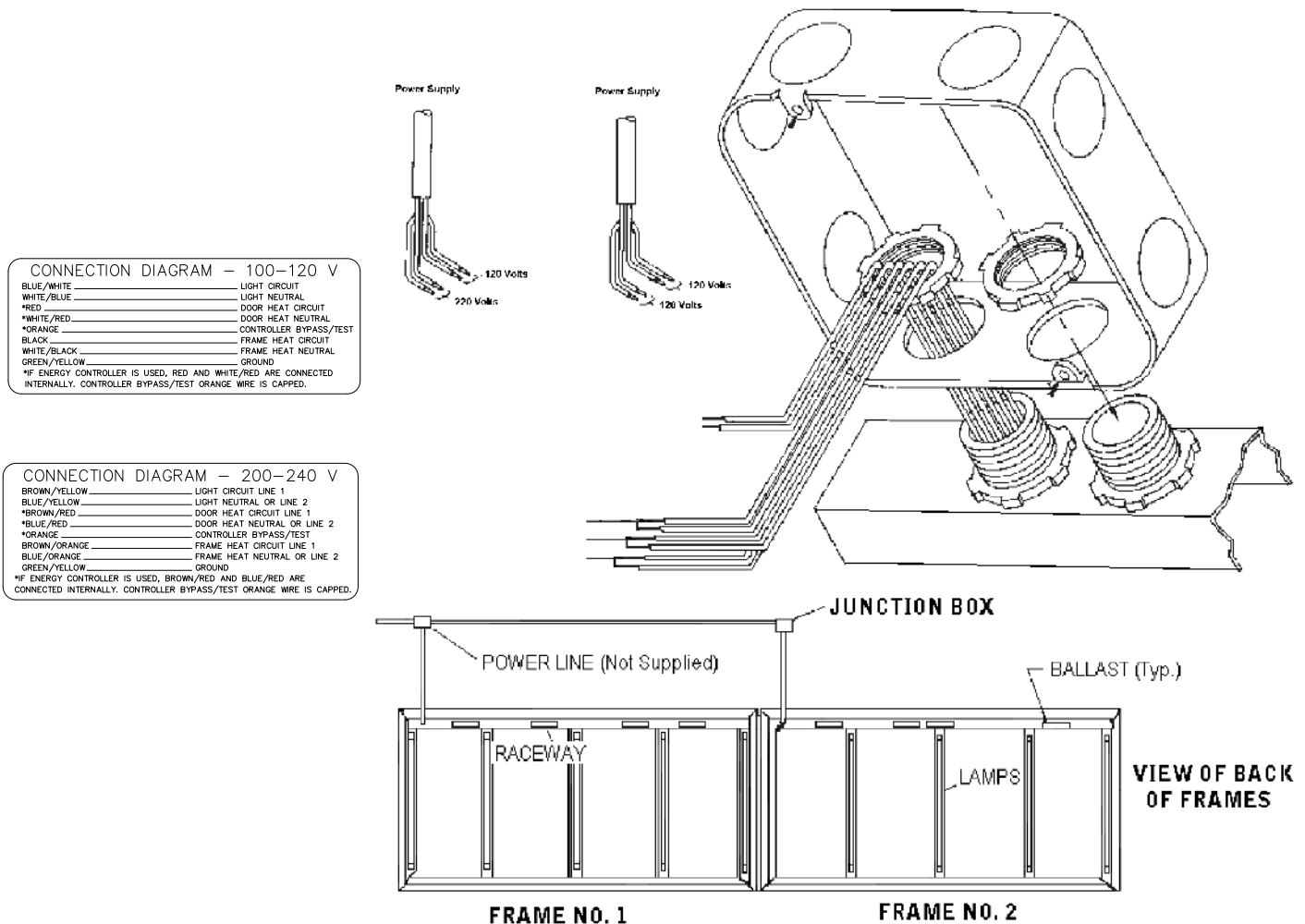


Figure 26



12391 Montero Street, Sylmar, CA 91342
800.772.0900 www.anthonydoorintl.com

99-18764-I001_A

Document Revision History

Revision History

A	April 19, 2011		
	0		

Contributors

Sherman Watstein			

Copyright © 2010 by  **Anthony**®

ALL rights reserved. Information in this document is subject to change without notice. Companies, names and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without express permission of Anthony Manufacturing Co., Inc.



12391 Montero Street, Sylmar, CA 91342
800.772.0900 www.anthonyintl.com
99-18764-I001_A