

**HUSSMANN®/CHINO**

Installation  
& Operation  
Manual

REV. 0608

RHR-HEX, RHR-HEX2, RHR 1/2, RHR-SQ  
ISLAND HOT FOOD CASE

**HUSSMANN®**

RHR-HEX, RHR2-HEX, RHR 1/2 HEX  
ISLAND HOT FOOD CASE



P/N IGHTRHR-HEX, RHR2HEX2, RHR 1/2 HEX, RHR SQUARE-0608

INSTALLATION & OPERATION GUIDE

**General Instructions**

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**This Booklet Contains Information on:**

The **RHR-HEX** is a self-service Hot Food Hexagon-shaped Island Stand, available in 4 and 6 foot sizes.

The **RHR2-HEX** is a similar unit, with the addition of a second shelf: Both feature surface and overhead food warmers, but both are also available with an overhead Radiant Heat option.

**Shipping Damage**

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

This equipment has been carefully inspected at our factory and the carrier has assumed responsibility for safe arrival. If damaged, either apparent or concealed, claim must be made to the carrier.

**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. The carrier will supply necessary claim forms.

**Concealed Loss or Damage**

When loss or damage *is not apparent until after all equipment is uncrated*, a claim for concealed damage is made. Make request in writing to carrier for inspection within 15 days, and retain all packaging. The carrier will supply inspection report and required claim forms.

**Shortages**

Check your shipment for any possible shortages of material. If a shortage should exist and is found to be the responsibility of Hussmann Chino, *notify Hussmann Chino*. If such a shortage involves the carrier, *notify the carrier immediately*, and request an inspection. Hussmann Chino will acknowledge shortages within ten days from receipt of equipment.


**Hussmann Chino Product Control**

The serial number and shipping date of all equipment has been recorded in Hussmann's files for warranty and replacement part purposes. All correspondence pertaining to warranty or parts ordering must include the serial number of each piece of equipment involved, in order to provide the customer with the correct parts.

Keep this booklet with the case at all times for future reference.

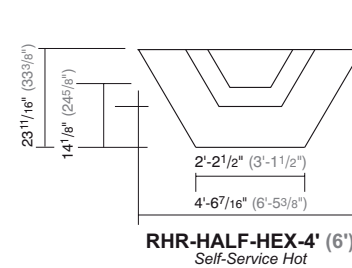
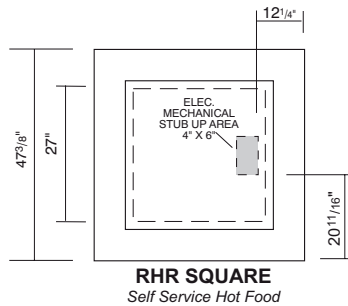
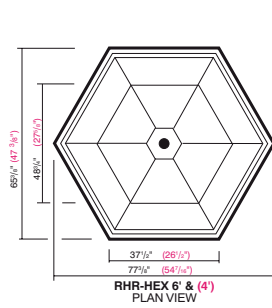
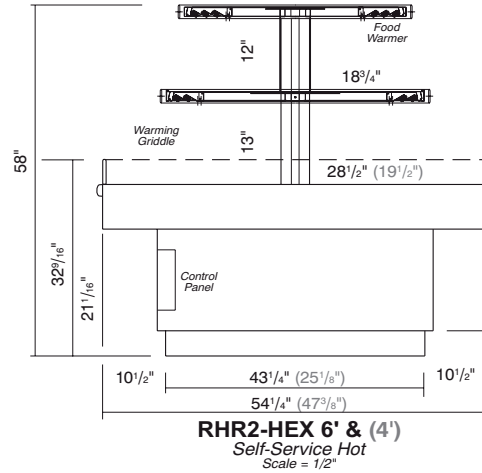
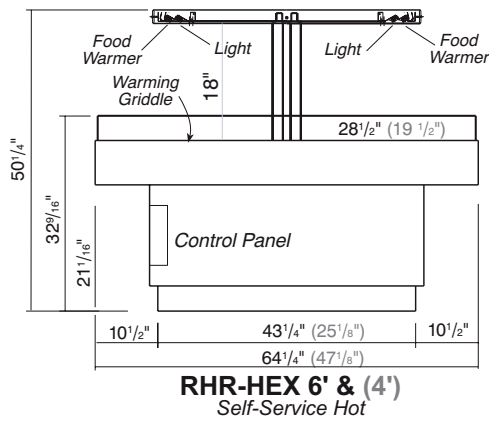
**HUSSMANN®/CHINO**

A publication of HUSSMANN® Chino  
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 (909) 628-8942 FAX  
 (909) 590-4910  
 (800) 395-9229



**This equipment is to be installed to comply with the applicable NEC, Federal, State, and Local Plumbing and Construction Code having jurisdiction.**

Cut and Plan Views



Installation

Leveling



**IMPORTANT:** It is imperative that cases be leveled front to back and side to side prior to joining. A level case is necessary to ensure proper operation.

1. Check floor where cases are to be set to see if it's level. Determine where the highest part of the floor Cases will be shimmed off this point Using case blueprints, measure off and mark on floor the exact dimensions of the case footprint Snap chalk line for front and back position of base rail. Mark location of each joint front and back. Use a transit to find the highest point along both lines. Mark the difference, and place the appropriate number of shims required to maintain high-point level.

Installation (Cont'd)

Bumper Installation Instructions



Step 1: Make sure the aluminum channel and end caps are installed.



Step 2: Use silicone lubricant to help the bumper slide into the channel.



Step 3: Starting on one end: while inserting the bumper, push it up against the end cap to prevent the bumper from shrinking after installation (when it gets cold).



Step 4: As you insert the bumper into the channel with one hand, pull the bumper toward you with the other to open the inside lips. Slowly apply pressure by rolling the bumper into the track.

## Installation (Cont'd)

### Boston Series 2000

**NOTE:** Flexible top: Over cut vinyl 1/8" for every 4' section for the flexible top to ensure a proper fit.

**NOTE:** Rigid Top: Do not over cut.



1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.



- 2a. **Flexible Top:** Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.
  - 2b. **Rigid Top:** Snap the Rigid Top over the Rigid Base.



3. If necessary wipe clean with any household cleaning product.

#### Helpful Hints:

- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.

## Installation (Cont'd)

### Boston 2000 Eco Series



1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.



- 2a. **Flexible Top:** Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.
- 2b. **Rigid Top:** Snap the Rigid Top over the Rigid Base.



3. If necessary wipe clean with any household cleaning product.

#### Helpful Hints:

- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.

## Installation (Cont'd)

### Boston 1000 Series

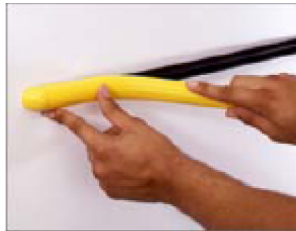
**NOTE:** Flexible top: Over cut vinyl 1/8" for every 4' section for the flexible top to ensure a proper fit.

**NOTE:** Rigid Top: Do not over cut.

#### Installation



1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.



- 2a. **Flexible Top:** Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.
  - 2b. **Rigid Top:** Snap the Rigid Top over the Rigid Base.



3. If necessary wipe clean with any household cleaning product.

#### Helpful Hints:

- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.



## Electrical

### Wiring Color Code


STANDARD CASE WIRE COLOR CODE CODIGO DE COLORES DE LOS ALAMBRES PARA LAS VITRINAS ESTANDAR CODE COULER POUR FILS DE BOITIER NORMALISE		
COLOR DESCRIPTION	DESCRIPCION	DESCRIPTION
■ GROUND	TIERRA MASA	MASSE
■ ANTI-SWEAT	ANTICONDENSACION	ANTI-SUINTEMENT
■ LIGHTS	LUCES	ECLAIRAGE
■ RECEPTACLES	ENCHUFES	PRISE DE COURANT
■ T-STAT/SOLENOID 230VAC	TERMOSTATO/SOLENOIDE (230VAC)	SOUPAPE A SOLENOID (230 VAC)
■ T-STAT/SOLENOID 115VAC	TERMOSTATO/SOLENOIDE (115VAC)	SOUPAPE A SOLENOID (115 VAC)
■ T-STAT/SOLENOID 24VAC	TERMOSTATO/SOLENOIDE (24VAC)	SOUPAPE A SOLENOID (24 VAC)
■ FAN MOTORS	VENTILADORES	VENTILATEUR
■ BLUE CONDENSING UNIT	UNIDAD DE CONDENSACION	UNITE DE CONDENSATION

**USE COPPER CONDUCTORS ONLY**  
**UTILISEZ LES CONDUCTEURS DE CUIVRE SEULEMENT**  
**UTILICE LOS CONDUCTORES DE COBRE SOLAMENTE**  
 430-01-0338 R101003

### Electrical Circuit Identification

Standard lighting for all models will be fluorescent lamps located within the case at the top.

The switch controlling the lights and heaters are located within an access panel on the side of the case.



**DANGER**

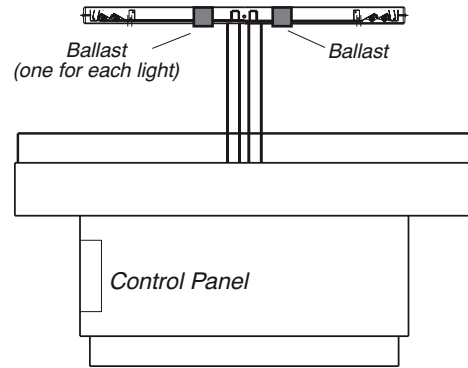
**BEFORE SERVICING**  
**ALWAYS DISCONNECT ELECTRICAL**  
**POWER AT THE MAIN DISCONNECT**  
**WHEN SERVICING OR REPLACING ANY**  
**ELECTRICAL COMPONENT.**

**This includes (but not limited to) Fans, Heaters**  
**Thermostats, and Lights.**

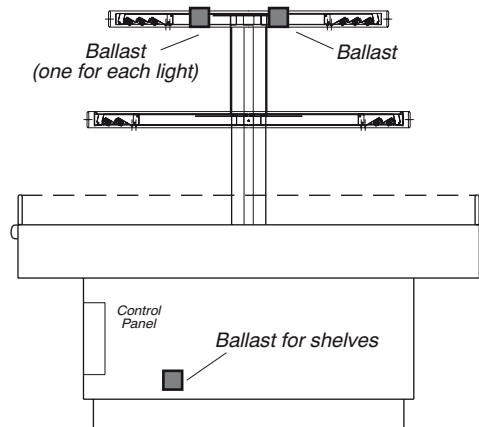
### Field Wiring and Serial Plate Amperage

Field Wiring must be sized for component amperes printed on the serial plate. Actual ampere draw may be less than specified. Case amperes are listed on the wiring diagram, but due to parts availability they may vary slightly. Always check the serial plate for the actual loads.

### Ballast Location



**RHR-HEX 6' & (4')**  
*Self-Service Hot*



**RHR2-HEX 6' & (4')**  
*Self-Service Hot*  
 Scale = 1/2"



## User Information

### Food Handling

These hot tables are for short-term holding and display of precooked hot foods. They are not intended to cool or reheat food. The temperature of the food should be approximately 160°F when first put into the hot table. Any attempt to use the hot table to display large amounts of food for long periods of time will result in dehydrated, overcooked and unsafe food. The quality of food will progressively worsen as the length of time increases. The deterioration of product quality is a function of time and temperature. All products are affected even though in a gravy or other liquid. They may appear to withstand the temperature better than “dry” foods such as fried chicken but this is not necessarily true. ALL foods will continue to be affected by prolonged exposure to elevated temperatures.

The following guidelines are provided only as a general guide for the use of this equipment. The local health agency for your area can provide specific temperature requirements.

Critical attention must be given to the heat controls for these hot tables. Both the upper and lower heat controls must be adjusted to maintain proper food temperatures. Hot foods should be held at a minimum temperature of at least 140°F (60°C) according to 1993 FDA Food Code. However, increasing the temperature too high will also cause the food to overcook, dry out, lose its flavor, texture and color. Food held for prolonged periods at high temperatures will also lose some of their nutritional value.

All griddle type units are designed to maintain temperatures above the FDA guideline of 140°F. This is product temperature, not air or griddle temperature. Due to the open design of these units, they must be loaded with product for proper operation. When units are empty, they experience rapid rise of heated air from air outside the case. This action gives empty units a false, lower than desired, temperature reading. Loading the case traps the air at the griddle, raising temperatures to the 165°F to 185°F range, keeping product well above the FDA guidelines. Remember, these units must be loaded with product to maintain safe product temperature.

Different foods will require different control settings. The type of food, the quantities of food and length of time that it is to remain in the hot table must be considered when establishing control settings. Therefore, it must be the user’s responsibility to establish the correct control settings to maintain the food at the safest, tastiest and most saleable condition.

***FOOD TEMPERATURES CAN BE  
ACCURATELY DETERMINED ONLY  
THROUGH THE USE OF FOOD  
THERMOMETERS!***

### Important Operation Tips:

- Preheat case 30 minutes before loading product using higher settings.

- **Using thermometer**, check product before loading in case (150°F-160°F).
- At start, set lamps to “3”. After loading, recheck temperature every 1/2 hour to see that unit is operating properly. Adjust the thermostat (a higher number for hotter and a lower number for cooler) to maintain product temperature of 140°F (60°C) minimum. The setting will depend on the type of product being displayed. Be sure to test product temperature with a thermometer frequently for good product maintenance.
- Food should maintain contact directly with the “griddle” at all times.

### Controls

There are three sets of controls for the hex case, each behind its own access panel located on the side of the case. The dial with the numbered settings is for the griddle. The other dials/switches are for the overhead lights and heating components.

### Overhead Heating System

Cal rod units are located above the griddles to provide top heat. **To obtain the proper food temperatures, they must be adjusted. Settings may vary depending on food composition. Maximum limits should be avoided to prevent overcooking or drying out food.**

### Care and Cleaning

Long life and satisfactory performance of any equipment is dependent upon the care it receives. With this in mind, all of the exposed work surfaces of these hot tables have been made entirely of easy to clean stainless steel.

Stainless steel is one of the easiest materials to clean and keep clean. Normally it is just a matter of wiping spills off the surface when they happen followed by a thorough cleaning with soap and water at the end of the day. Frequent and regular cleaning will prevent the buildup of baked on difficult to remove spills. Many types of cleansers are available and safe to use on stainless steel. However, ordinary steel wool and steel brushes should not be used. Small particles of the steel may become imbedded into the stainless steel surfaces that will eventually rust and stain.

### General Cleaning Rules

1. ALLOW SURFACES TO COOL BEFORE HANDLING.
2. Clean frequently and regularly.
3. Rinse thoroughly after cleaning.
4. Remove surface spills immediately with a damp cloth.

**User Information (Cont'd)**

**Cleaning Instructions**

1. Turn temperature control knobs to OFF position.
2. Allow unit to cool completely.
3. Wipe entire unit with clean cloth and mild detergent.

The EXTERIOR surfaces of these hot tables must be cleaned with a mild detergent and warm water to protect and maintain their attractive finish. Never use abrasive cleaners or scouring pads.

**TO REMOVE “BAKED-ON” SPLATTER, GREASE OR LIGHT DISCOLORATION TO STAINLESS STEEL.**

<u>CLEANSING AGENT</u>	<u>APPLICATION</u>
Grade F Italian Pumice.....	Scour or rub with damp cloth
Liquid NuSteel.....	Scour with small amount on dry cloth

Paste NuSteel  
Household Cleansers.....Rub with damp cloth

**TO REMOVE HEAT TINT OR HEAVY DISCOLORATION**

<u>CLEANSING AGENT</u>	<u>APPLICATION</u>
Allen Stainless Steel Polish.....	Small amount on damp cloth
Birdsall “Staybright” .....	Rub with damp cloth
Wyandotte Bab-O	
Nusteel.....	Rub with stainless steel wool

**Plexiglass and Acrylic Care**

**Cleaning**

Clean with plenty of nonabrasive soap (or detergent) and lukewarm water, using the bare hand to feel and dislodge any caked-on dirt. A soft, grit-free cloth, sponge, or chamois may be used, but only as a means of carrying the water to the plastic. Dry with a clean damp chamois or clean soft cloth such as cotton flannel. Hard, rough cloths or paper towels will scratch the acrylic and should not be used.

**Waxing**

If after removing dirt and grease, the acrylic can be waxed with a good grade commercial wax. This will improve the appearance of the surface by filling in most minor scratches. Wax should be applied in a thin even coat, and brought to a high polish by rubbing lightly with a dry clean soft cloth, such as a cotton flannel. Excessive rubbing may cause scratching and/or buildup an electrostatic charge, which attracts dust and dirt to the surface. Blotting with a clean damp cloth is recommended to remove charge.

**Antistatic Coatings**

For acrylic used indoors, antistatic coatings successfully prevent the accumulation of electrostatic charge for periods of several months, if the surface is not washed or wiped down with a wet cloth. Between applications of the antistatic coatings, the parts need only be dusted with a soft clean cloth to maintain a good appearance. In use, liquid antistatic coatings should be applied in a very thin even coat. If beads appear as it is applied, the coat is too thick and the excess should be removed with another cloth. Allow the coating to dry, then bring to a high gloss with a soft cloth.

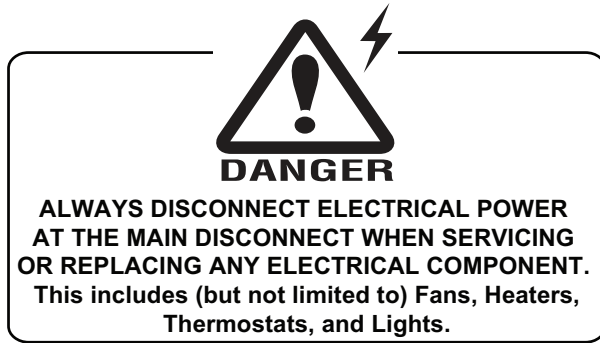


**CAUTION**

**Cleaning Precautions**

To preserve the attractive finish, use warm water and a mild detergent to wash the exterior of the cases. **DO NOT USE ABRASIVE CLEANERS OR STEEL WOOL SCOURING PADS** as these will mar the surface.

## Maintenance



### Replacing Overhead Heat Lamps

Overhead Halogen and Merco lamps are designed to last through many hours of use. Should there be a need to replace one, it is as simple as replacing a standard fluorescent light bulb.



### CAUTION

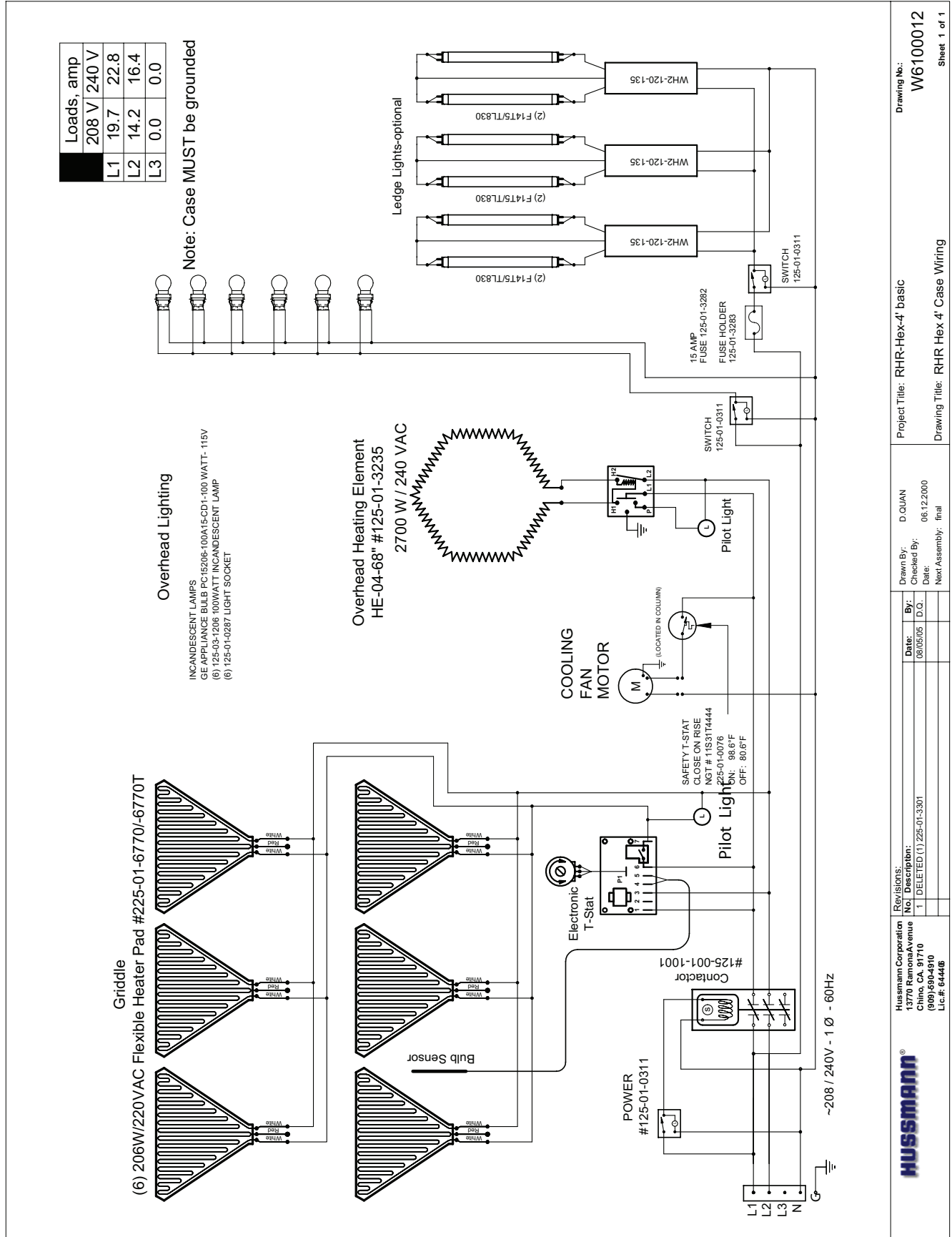
**The Heat lamps used in these cases get EXTREMELY HOT! NEVER touch a lamp until the case has had ample time to cool down! It is also highly recommended to handle lamps with gloves or use a cloth rag - not just for the heat factor, but also the oils in your fingers will drastically shorten the life of the lamp.**

1. Turn light switch to OFF before replacing any lighting components.
2. Disconnect light fixture by removing power cord from socket in the right rear interior corner of the merchandiser.
3. Place the shelf on a flat surface to remove the clear plastic protective shield from the fixture. Carefully insert one finger between the fixture socket and the protective shield. Use other hand to “pinch” lens cover (and simultaneously hold the fixture in place) while lifting with inserted finger. When shield separates from fixture at one end, remove it by SLOWLY pulling remainder of shield away from fixture.
4. Remove lamp by depressing spring loaded socket at end of fixture, and swinging opposite end of lamp from it’s former position.
5. Using gloves or covering for lamp, insert new lamp into spring loaded socket, depressing socket until opposite end of lamp properly enters stationary light socket.
6. Return lamp to original position by lightly pinching it in from each side, and inserting shield flanges into fixture channel. Continue process along length of lamp shield until it is in it’s final proper position.
7. Return lamp to original position by lightly pinching it in from each side, and inserting shield flanges into fixture channel. Continue process along length of lamp shield until it is in it’s final proper position.

**Electrical Wiring Diagrams**

<b>RHR-HEX</b>	RHR-HEX	4'	W6100012
		5' 6"	W6100002
	RHR-HEX-2 (w/shelf)    OLD ▶	4'	W6100003
		NEW ▶	4'
		6'	W6100015
	RHR-Square	4'	W6100005
	RHR-1/2-HEX	4'	W6100007
		6'	W6100008

Wiring Diagrams



**HUSSMANN**  
 Hussmann Corporation  
 13770 Ramona Avenue  
 Chino, CA 91710  
 909/594-6770  
 Lic#: 64448

**Revisions:**

No.	Description
1	DELETED (1) 225-01-3301

**Drawn By:** D.QUAN  
**Checked By:** 06/05/05  
**Date:** 06.12.2000  
**Next Assembly:** final

**Project Title:** RHR-Hex-4' basic  
**Drawing No.:** W6100012  
**Drawing Title:** RHR Hex 4' Case Wiring  
**Sheet 1 of 1**

Wiring Diagrams (Cont'd)

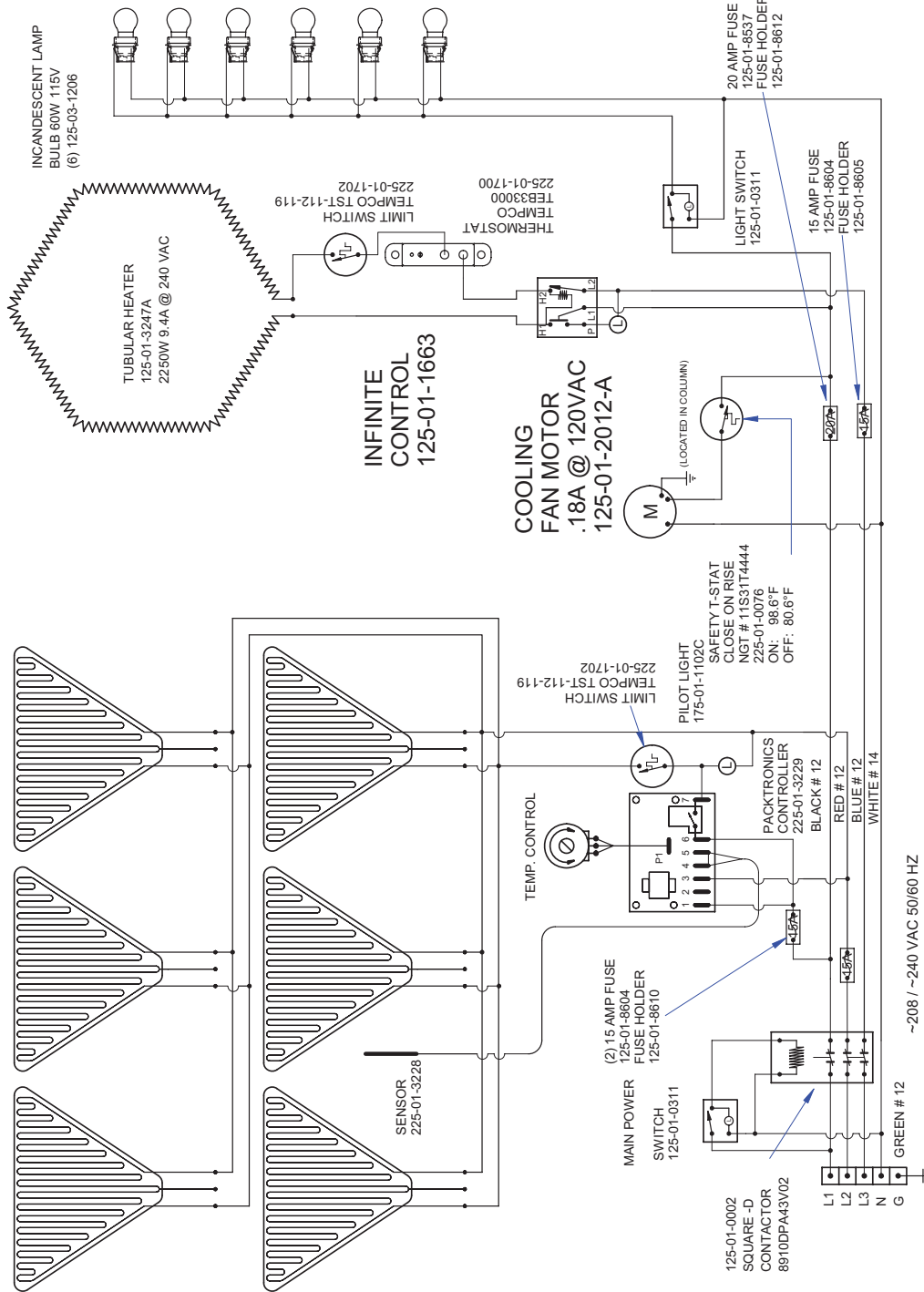
LOADING	208 V	240 V
L1	21.1	23.9
L2	9.8	11.3
L3	8.2	9.4

**6180W @ 240VAC**  
**4695W @ 208VAC**

GRIDDLE

HEATING PADS - 451W 1.88A @ 240 VAC - EA.  
(6) 225-01-6771

OVERHEAD CANOPY INSTALLATION



REVISIONS:

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B	Updated dwg. added 2 limiters and 1 t-stat	2/15/08	JR		2/1/00

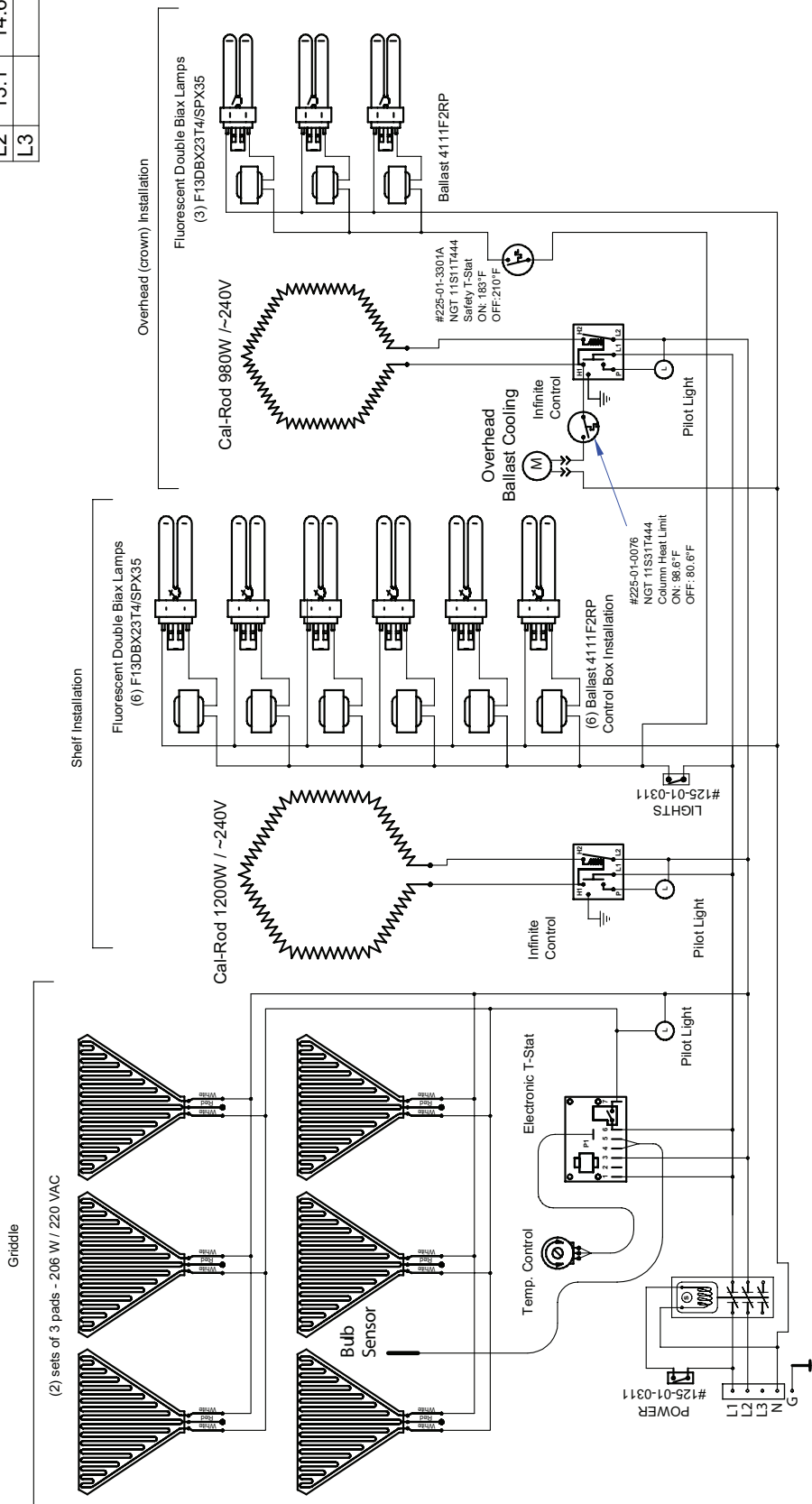
PROJECT TITLE: RHR-Hex-5'6" DRAWING #: W6100002

DRAWING TITLE: RHR Hex 5'6" FILE LOCATION:

DRAWN BY: Boris Kestel

Wiring Diagrams (Cont'd)

LOADING	208 V	240 V
L1	16.0	18.1
L2	13.1	14.6
L3		



Note: Case MUST be grounded

<b>HUSSMANN®</b> Hussmann Corporation 13770 Ramona Avenue Chino, CA 91710 (909) 596-4910 Lic.# 64406		Revisions: No.   Description:
Drawn By: Boris Kneel Checked By: BK Date: 10/22/99 Next Assembly: final	Project Title: RHR - Hex 4' Shelf Unit Drawing No.: W6100003	Sheet 1 of 1



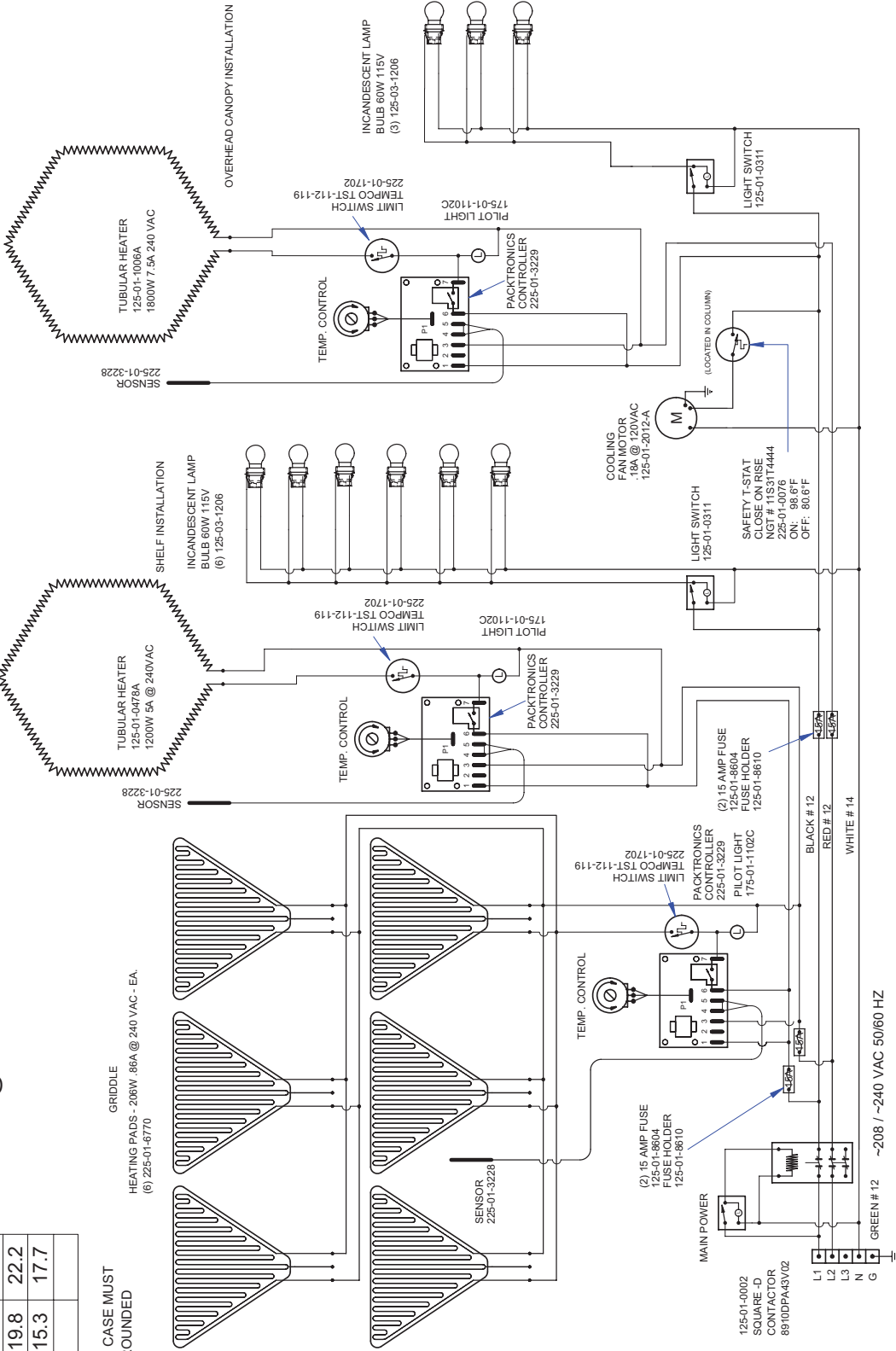
Wiring Diagrams (Cont'd)

LOADING	
208 V	240 V
L1	19.8
L2	15.3
	17.7

5328W @ 240VAC  
4118W @ 208VAC

NOTE: CASE MUST BE GROUNDED

GRIDDLE  
HEATING PADS - 208W .86A @ 240 VAC - EA.  
(6) 225-01-6770



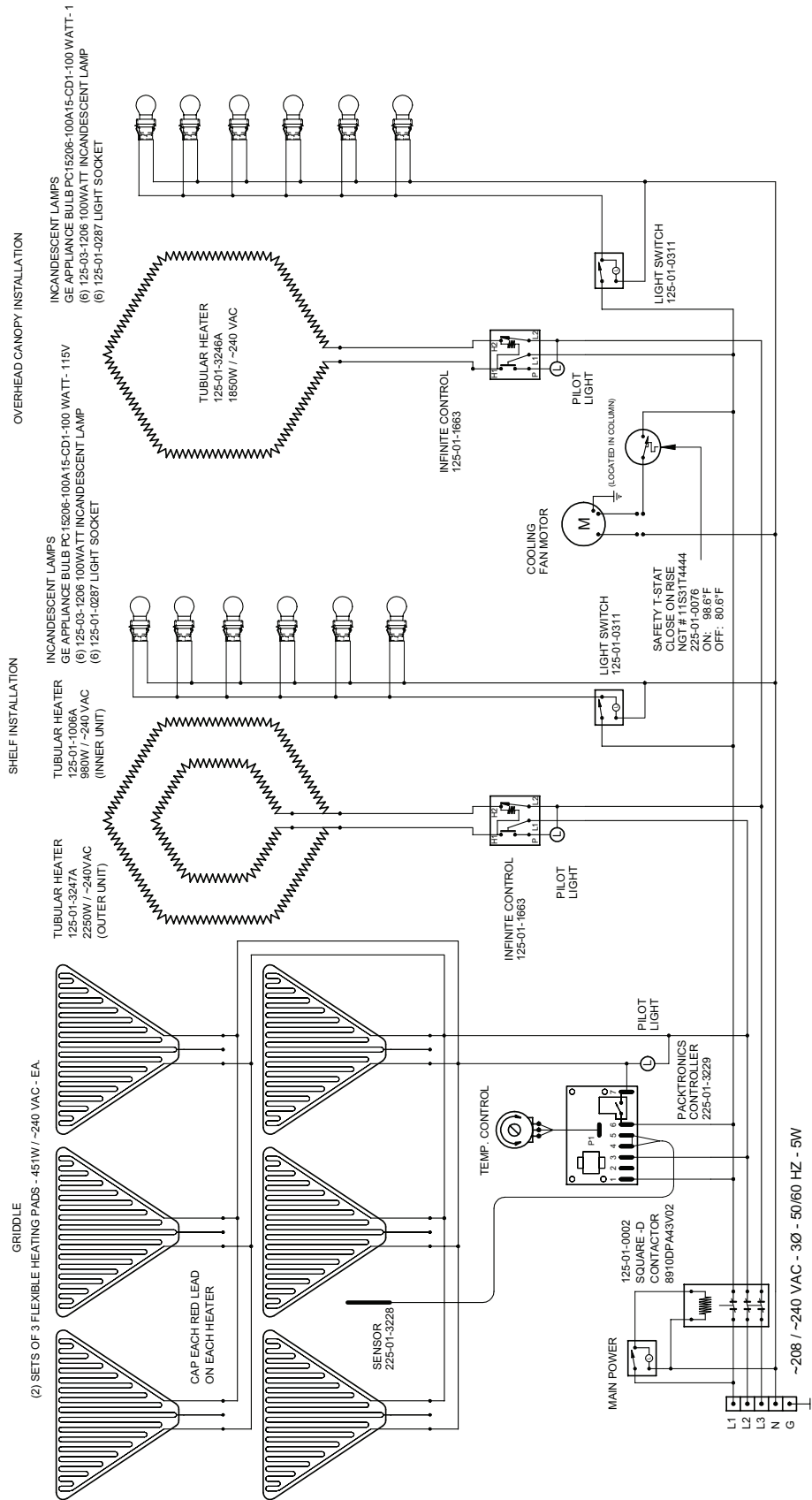
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DRAWN BY: D.QUAN		DATE: 08/05/05	
CHECKED BY: JR		PRODUCTION ORDER #:	
DATE: 2/15/08		FILE LOCATION:	
BY: JR		RHR-HEX-2-4' CASE W/ SHELF UNIT	
DATE: 2/2/08		PAGE 1 OF 1	

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13770 Harbor Avenue  
Cerritos, CA 91710  
(800) 590-4810 Lic.# 644406

Wiring Diagrams (Cont'd)

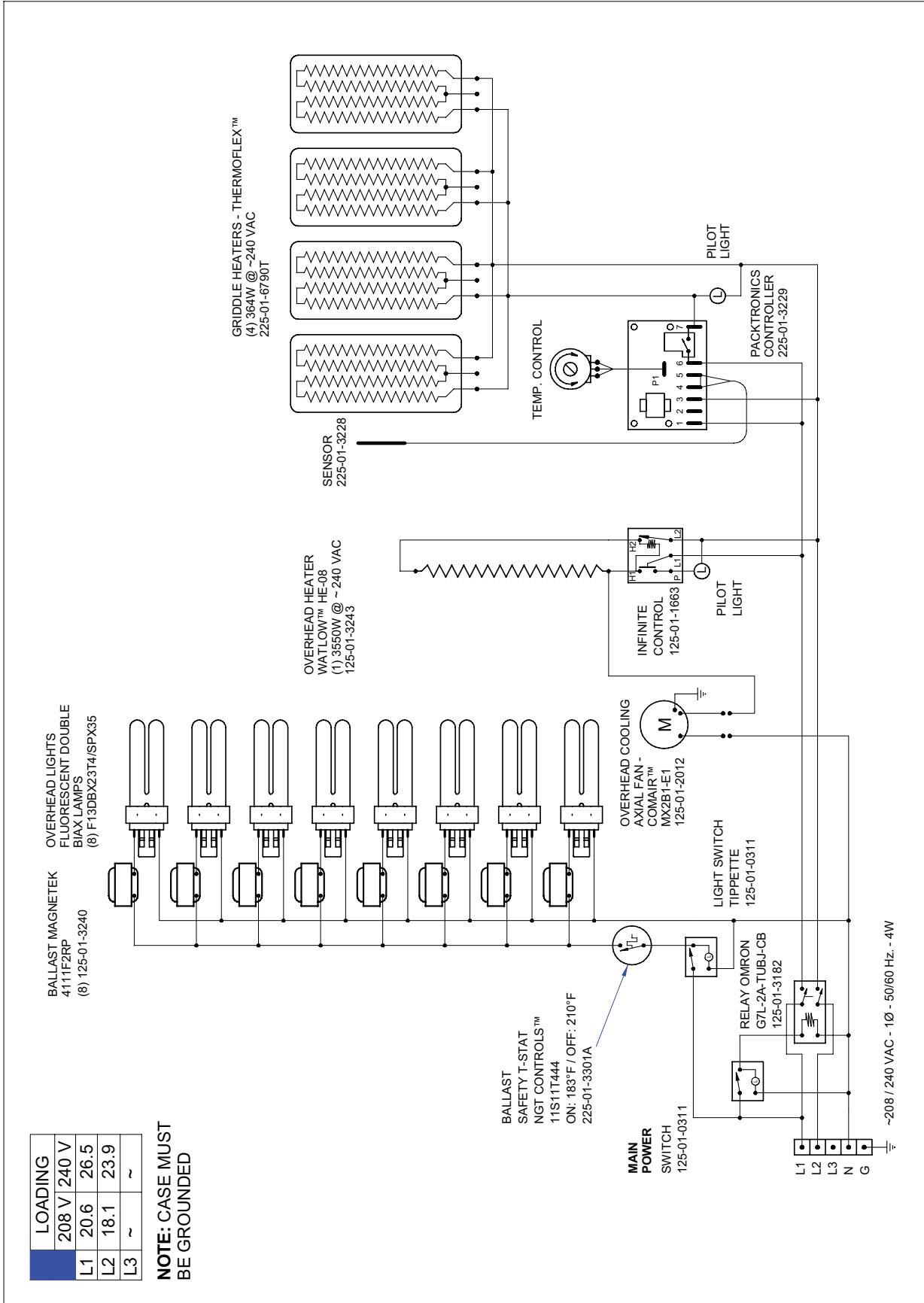
LOADING	
208 V	240 V
L1	24.5
L2	18.6
L3	16.1

NOTE: CASE MUST BE GROUNDED



<b>HUSSMANN</b> Husmann Corporation, Inc. 13770 Cowley Avenue Cincinnati, OH 45240 (800) 590-4810 Lic.# 644406		REVISIONS: # DESCRIPTION: 1 UPDATED CASE TOTAL LOADING 2 DELETED (1) 225-01-3301	DATE: 06/27/01 BY: AEC 08/05/05 D.O.	FILE LOCATION: H:\WIRESCHEMATICS\NEW WIRING	PROJECT TITLE: RHR HEX CASES	DRAWING #: W6100015
DRAWN BY: D.QUAN		CHECKED BY: ---	DATE: 06/08/01	PRODUCTION ORDER #:	DRAWING TITLE: RHR HEX 5'-6" - (1) SHELF UNIT	PAGE 1 OF 1

Wiring Diagrams (Cont'd)



LOADING	208 V	240 V
L1	20.6	26.5
L2	18.1	23.9
L3	~	~

**NOTE: CASE MUST BE GROUNDED**

**REVISIONS:**

#	DESCRIPTION	DATE	BY	CHECKED BY	AEC	PRODUCTION ORDER #	DATE	FILE LOCATION
1	REPLACE CONTACTOR FOR RELAY	02/22/02	AEC	ADRIAN E. CRISCI			10/22/99	
2	BROUGHT TO SPEC FROM ORIGINAL BY AEC	10/22/99	AEC					H:\WIRESCHMATIC\CS\NEW-WIRING
3								

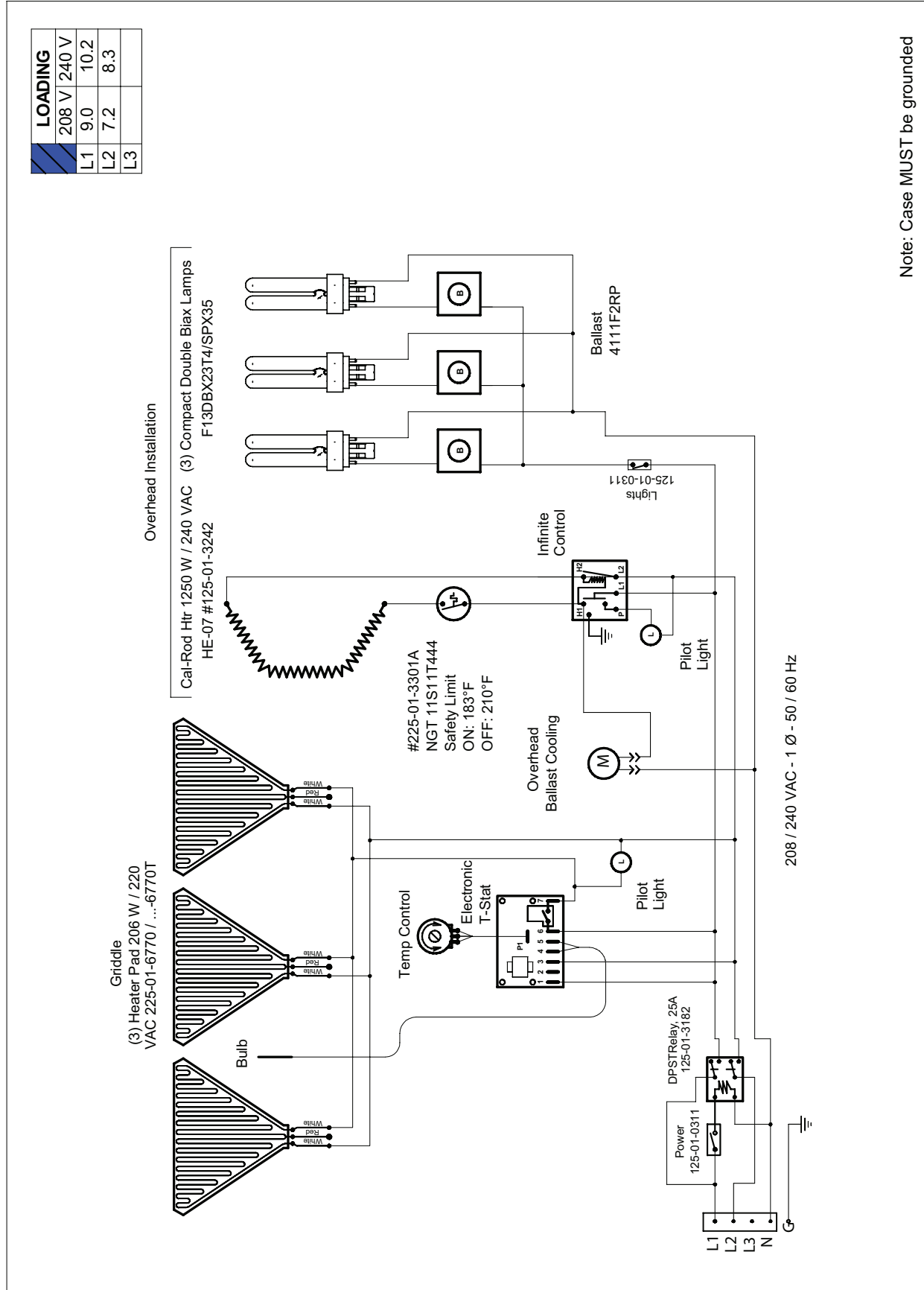
**HUSSMANN CORPORATION**  
 13720 RAMONA AVENUE  
 CHINO, CA 91710  
 (909) 590-4910 LIC# 684406

**PROJECT TITLE:** RHR CASES  
**DWG #:** W6100005

**DRAWING TITLE:** 4' x 4' SQUARE CASE MODEL  
**PAGE 1 OF 1**

Wiring Diagrams (Cont'd)

LOADING	
208 V	240 V
L1	9.0 10.2
L2	7.2 8.3
L3	



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 Lic.#: 644406

**REVISIONS:**  
 No. Description:

By:	Date:

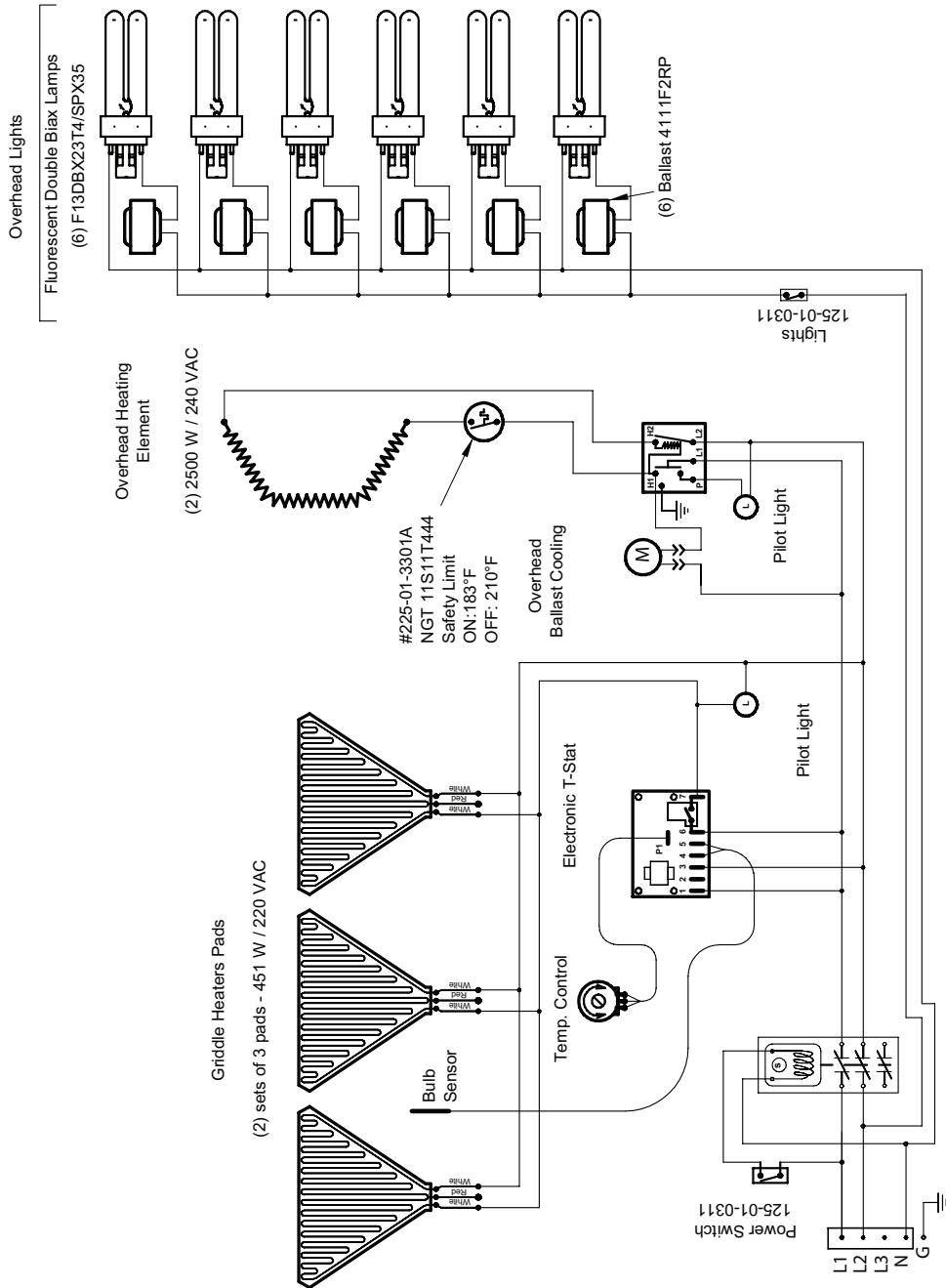
Drawn By: Boris Kaseel  
 Checked By: BK  
 Date: 10/22/99  
 Next Assembly: X

Project Title: Fir Lamps, Contactor  
 Drawing No.: W6100007

Drawing Title: RHR HEX - 4/ Half Case  
 Sheet 1 of 1

Wiring Diagrams (Cont'd)

LOADING	
208 V / 240 V	
L1	14.8
L2	16.5
L3	18.8



208 / 240 VAC - 1Ø - 50 / 60z.

Note: Case must be grounded

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**Revisions:**  
 No. Description:  
 \_\_\_\_\_

Drawn By: \_\_\_\_\_  
 Checked By: \_\_\_\_\_  
 Date: 10/22/99  
 Next Assembly: final

Project Title: RHR-Hex-5'6" 1/2 Case  
 Drawing No.: W6100008  
 Drawing Title: RHR Hex 5'6" 1/2 Case Wiring  
 Sheet 1 of 1

## Appendices

### Appendix A. - Temperature Guidelines

1.0 Hot cases are tested to maintain all hot food at 140°F - 150°F. These cases are not designed to heat up or cook food. It is the user's responsibility to stock the hot food cases immediately after the cooking of the food with a pulp temperature of at least 150°F to 160°F.

**All griddle type units are designed to maintain temperatures above the FDA guideline of 140°F. This is product temperature, not air or griddle temperature. Due to the open design of these units, they must be loaded with product for proper operation. When units are empty, they experience rapid rise of heated air from air outside the case. This action gives empty units a false, lower than desired, temperature reading. Loading the case traps the air at the griddle, raising temperatures to the 165°F to 185°F range, keeping product well above the FDA guidelines. Remember, these units must be loaded with product to maintain safe product temperature.**

### Appendix B. - Application Recommendations

- 1.0 The installer should perform a complete start-up evaluation prior to the loading of food into the hot food case, which includes such items as:
- Initial temperature performance, Griddles and Hot Wells.
  - Observation of outside influences such as drafts, radiant heating from the ceiling and from lamps. Such influence should be properly corrected or compensated for.
  - Complete start-up procedures should include
    - Heat/display lamps are lighting.
    - Indicator lamps on control panel(s) are working
    - Auto-fill is functioning properly (Service cases)
    - Hot Griddles are functioning.

### Appendix C. - Field Recommendations

1.0 The most consistent indicator of display hot case performance is temperature of the product itself.

**NOTE:** Public Health will use the temperature of the product in determining if the hot case will be allowed to display potentially hazardous food. For the purpose of this evaluation, product temperature above the FDA Food Code 1993 temperature for potentially hazardous food will be the first indication that an evaluation should be performed. It is expected that all hot case will keep food at the FDA Food Code 1993 temperature for potentially hazardous food.

- 1.1 The following recommendations are made for the purpose of arriving at easily taken and understood data which, coupled with other observations, may be used to determine whether a hot case is working as intended:
- INSTRUMENT** - A stainless steel stem-type thermometer is recommended and it should have a dial a minimum of 1 inch internal diameter. A test thermometer scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to 1°C (1.8°F). Temperature measuring devices that are scaled only in Fahrenheit shall be accurate to 2°F. The thermometer should be checked for proper calibration. (It should read 32°F when the stem is immersed in an ice water bath).
  - LOCATION** - The thermometer must be inserted into the food itself to acquire proper food pulp temperature.
  - READING** - The thermometer reading should be made only after it has been allowed to stabilize, i.e., maintain a constant reading. Loading Product: Cases should be allowed to heat up for one hour before product is loaded. Temperature adjustments: Allow 4 hours after adjustment has been made before testing pulp temperature of product.
  - OTHER OBSERVATIONS** - Other observations should be made which may indicate operating problems, such as unsatisfactory product, feel/appearance.

### Appendix D. - Recommendations to User

- 1.0 The manufacturer should provide instructions and recommendations for proper periodic cleaning. The user will be responsible for such cleaning, including the cleaning of equipment within the compartment and the hot area(s). Cleaning practices, particularly with respect to proper refrigerator unloading and warm-up, must be in accordance with applicable recommendations.
- Allow the case to preheat for one hour prior to loading.
  - Hot foods should enter the case directly after cooking or no lower than 150° - 160°F. The Hot Cases are not designed to heat up or cook food.
  - Self Service - be sure to display product in single layer in direct contact with heating surface.

### Appendices (Cont'd)

4. All griddle type units are designed to maintain temperatures above the FDA guideline of 140°F. This is product temperature, not air or griddle temperature. Due to the open design of these units, they must be loaded with product for proper operation. When units are empty, they experience rapid rise of heated air from air outside the case. This action gives empty units a false, lower than desired, temperature reading. Loading the case traps the air at the griddle, raising temperatures to the 165°F to 185°F range, keeping product well above the FDA guidelines. Remember, these units must be loaded with product to maintain safe product temperature.
5. Check the food pulp temperature frequently with a thermometer to make sure it is at the proper holding temperature. Hot foods should be at 140°F. The thermometer must be inserted into the food itself for the proper temperature.
6. Do not display more food than will be sold within a 4 hour period.
7. When restocking, bring older food to the front, and stock fresher food on top.
8. Clean spills as soon as they happen.
9. Fingerprints and food splatter will drastically shorten bulb life. Clean splatter off the bulbs immediately with a soft cloth. When handling bulbs, wear cotton gloves or use a cotton rag/towel.
10. When “freshening” foods such as macaroni and cheese with added water, heat the water in a clean container until it is 10°F to 20°F above the desired holding temperature of the food. This will keep the food at a safe serving temperature. Depending on the amount of water, the temperature can drop 100°F to 20°F in as little as five minutes.
11. When transferring hot foods in the heated merchandiser to clean pans, preheat the clean pan. Transferring hot foods to room temperature pans can cause the temperature of the food to drop 20°F or more thus causing food to be at an unsafe serving temperature.
12. Clean spills as they happen simply by wiping with a cloth. Be sure to use a dry cloth on very hot surfaces to prevent steam burns.
13. Turn the equipment off and allow to cool before cleaning.
14. To remove “baked-on” splatter from Stainless Steel, the following may be used
 

Grade F Italian Pumice	Scour or rub with a damp cloth
Liquid NuSteel	Scour with a small amount of a dry cloth
	Paste NuSteel
Household Cleaners	Rub with a damp cloth
Coopers Stainless Steel Cleaner	
Allen Stainless Steel Polish	



---

## Service Record

Last service date:      By:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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The *MODEL NAME* and *SERIAL NUMBER* is required in order to provide you with the correct parts and information for your particular unit.

They can be found on a small metal plate on the unit.  
Please note them below for future reference.

**MODEL:**

**SERIAL NUMBER:**