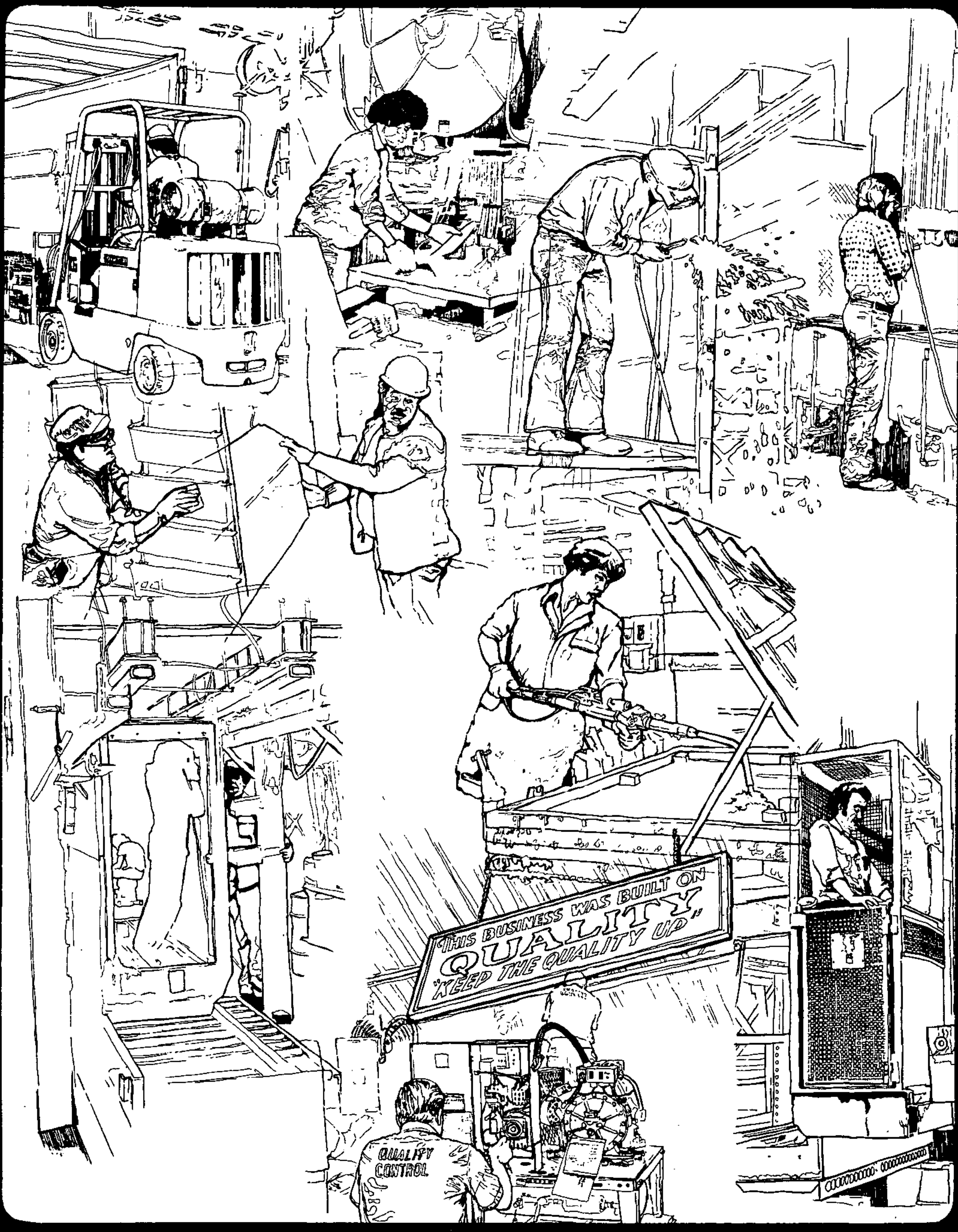


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HUSSMANN CORPORATION

VBL-VGL

ADDENDUM
to
Eng. #250990
and
Eng. #250991

Self-Contained Refrigerated Fresh Meat
and
Delicatessen Merchandisers

ENG.NO.250992C
February, 1990
Supersedes #250992B
Dated November, 1989
Section 2

INSTALLATION / SERVICE INSTRUCTIONS

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WARRANTY

Revision Changes "C"

1. New fan motor part number, page 11.

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

THIS MERCHANDISE CONFORMS TO THE
COMMERCIAL REFRIGERATOR MANUFACTURER'S ASSOCIATION
HEALTH AND SANITATION STANDARD

CRS-S1-86

GENERAL INFORMATIONMODEL DESCRIPTION

These models are self-contained refrigerated display merchandisers designed for fresh meat or delicatessen service departments. Each model is equipped with its own condensing unit and control panel. The table below lists the models covered by this addendum and their basic differences.

The appearance, application and operating temperature of these models is the same as that of the corresponding VBL or VGL remote model. Only that information which describes the differences the self-contained models do have is given in this addendum. See the accompanying instruction manual, sent with this addendum, for additional information pertinent to the self-contained models.

Instruction Manual: Eng. #250990 for VBL Models

Instruction Manual: Eng. #250991 for VGL Models

MODEL *	DESCRIPTION	
	PRODUCT	ELECTRICAL REQUIREMENT
VGL-B VBL-B	Fresh Meat/Deli Delicatessen	120 Volt, 60 Hertz 120 Volt, 60 Hertz
VGL-A VBL-A	Fresh Meat/Deli Delicatessen	240 Volt, 60 Hertz 240 Volt, 60 Hertz
VGL-T VBL-T	Fresh Meat/Deli Delicatessen	240 Volt, 50 Hertz 240 Volt, 50 Hertz

* All models are available in 8' and 12' lengths.

INSTALLATION

These self-contained models are shipped with all service valves open and controls pre-set, except the time of day on the defrost timer. There are no shipping bolts to remove from the condensing unit.

Additional information concerning the installation of these models (leveling, drip piping, etc.) is contained in Section II of the instruction manual sent with this addendum.

#250990 for VBL Models

#250991 for VGL Models

ELECTRICAL

All electrical connections are to be made in the wireway located on the back of these models at the right-hand end as shown on page 8.

The number of circuits and amperage requirements for the various models is given in the following tables.

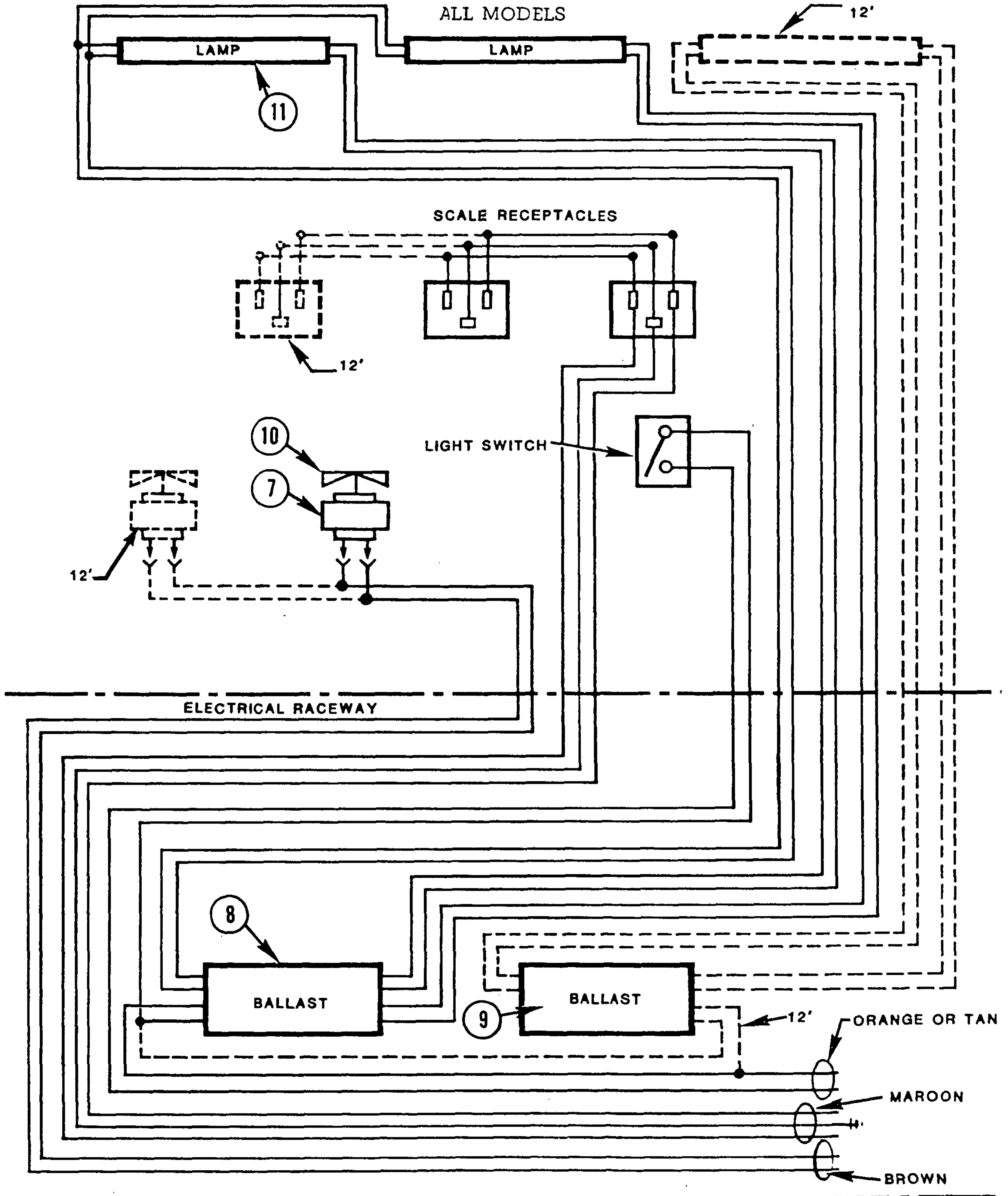
Circuit	VBL-B		VGL-B	
	120 Volt, 1 Phase, 60 Hz			
	Amperages			
	8'		12'	
Lights	1 Row Lights	2 Row Lights	1 Row Lights	2 Row Lights
		0.8	1.6	1.3
Receptacles	15.0		15.0	
Evaporator Fans (1)	0.7		1.4	
Condensing Unit	8.0		11.2	

(1) VBL Models Only

Circuit	VBL-A		VBL-T		VGL-A		VGL-T	
	230 Volt, 1 Phase, 50/60 Hz							
	Amperages							
	8'				12'			
Lights	1 Row Lights	2 Row Lights	1 Row Lights	2 Row Lights	1 Row Lights	2 Row Lights	1 Row Lights	2 Row Lights
		0.8	0.9	1.3	1.3			
Receptacles	8.0				8.0			
Evaporator Fans (1)	0.3				0.6			
Condensing Unit	4.8				4.8			

(1) VBL Models Only

CASE WIRING DIAGRAM
ALL MODELS

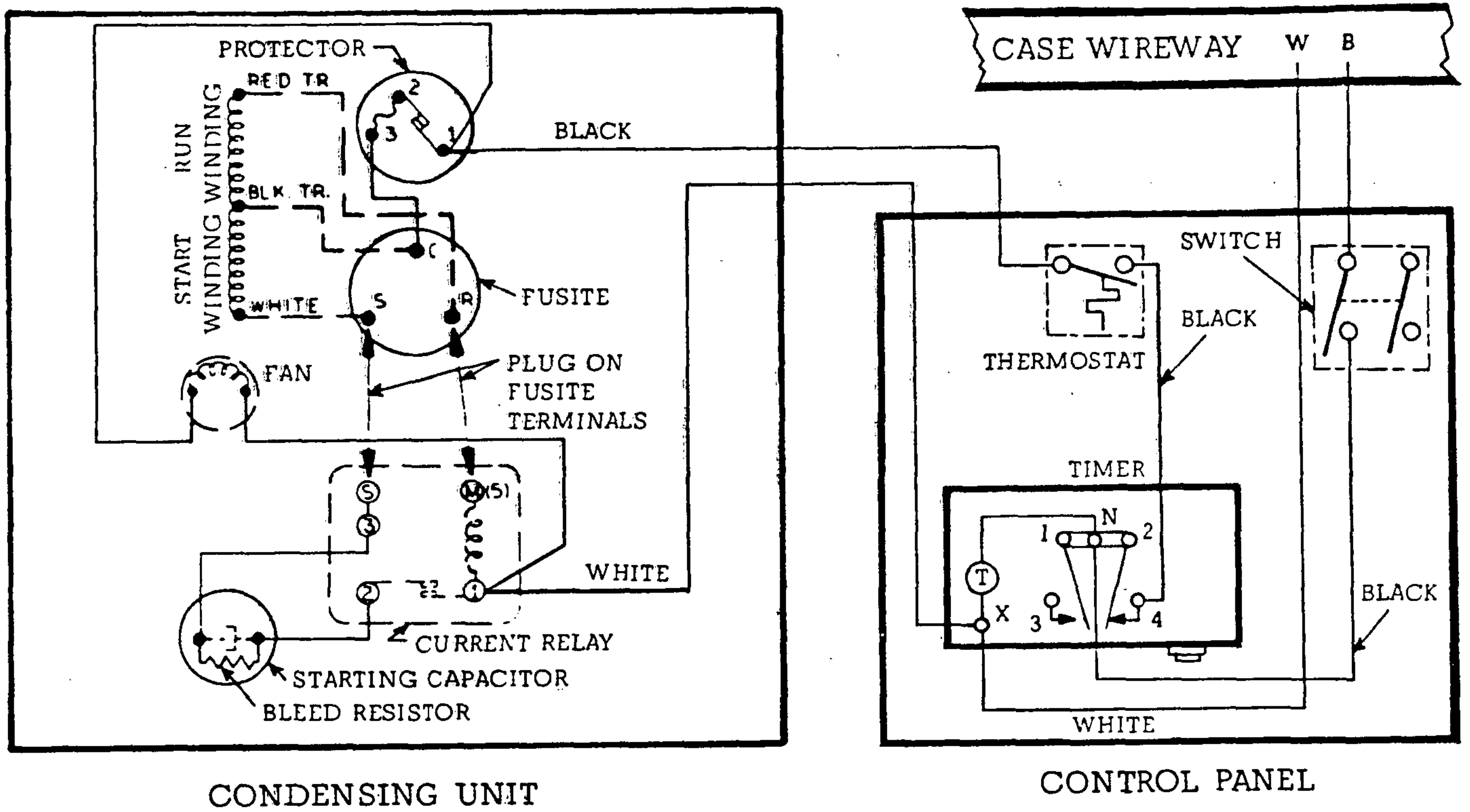


CAUTION: MERCHANDISER MUST BE GROUNDED

CONDENSING UNIT - CONTROL PANEL WIRING DIAGRAM

MODELS

VBL-8B/VGL-8B
(120 V., 1 PH, 60 HZ)



CONDENSING UNIT

CONTROL PANEL

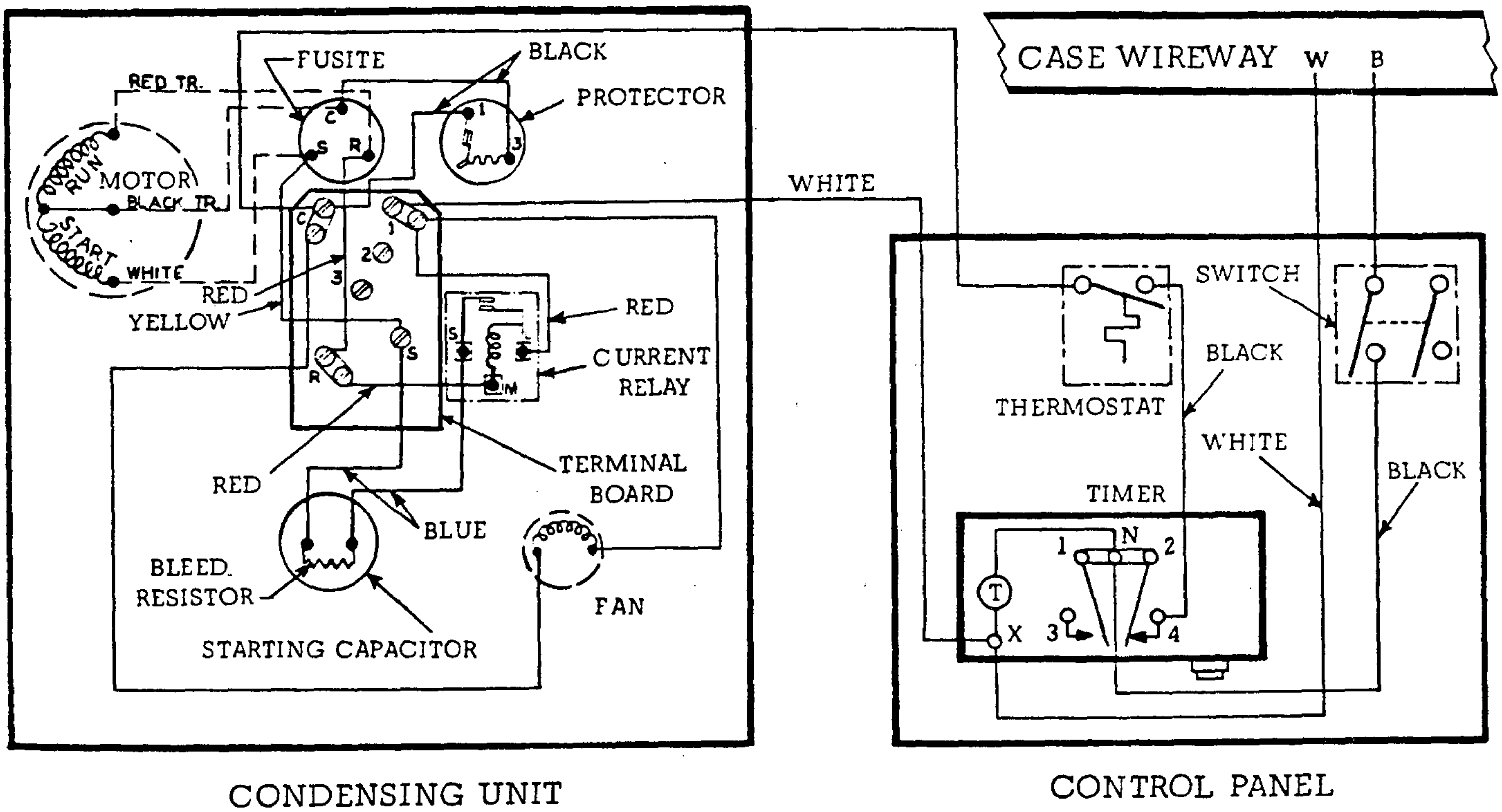
CONDENSING UNIT - CONTROL PANEL WIRING DIAGRAM

MODELS

VBL-12B/VGL-12B
(120 V., 1 PH, 60 HZ)

VBL-8 & 12A/VGL-8 & 12A
(208/230 V., 1 PH, 60 HZ)

VBL-8 & 12T/VGL-8 & 12T
(208/230V., 1 PH, 50 HZ)



CONDENSING UNIT

CONTROL PANEL

REFRIGERATION

All refrigeration components and controls have been factory installed and set to control refrigeration temperature as outlined in Section III of the accompanying VBL or VGL instruction manual.

The condensing unit has been charged with R-12 refrigerant as shown in the following Table.

All service valves are shipped in an open position. There are no hold down bolts or straps to remove.

REFRIGERANT CHARGE

MODEL	R-12 REFRIGERANT (LBS.)	
	8'	12'
VGL-A	8	8
VGL-B	5	7
VGL-T	8	8
VBL-A	8	8
VBL-B	5	5
VBL-T	8	8

START-UP AND ADJUSTMENT

Set defrost timer dial to the correct time of day. Turn on condensing unit with the toggle switch located on the control panel. (See the following illustration for location).

Check the defrost timer settings. They should be pre-set as shown in the following tables.

DEFROST TIMER SETTINGS

VBL MODELS

DEFROST TIME	LENGTH
2 AM	60 MIN.

VGL MODELS

DEFROST TIME*	LENGTH
8 PM	110 MIN.

*This defrost time is to insure a complete defrost and drainage of all defrost water.

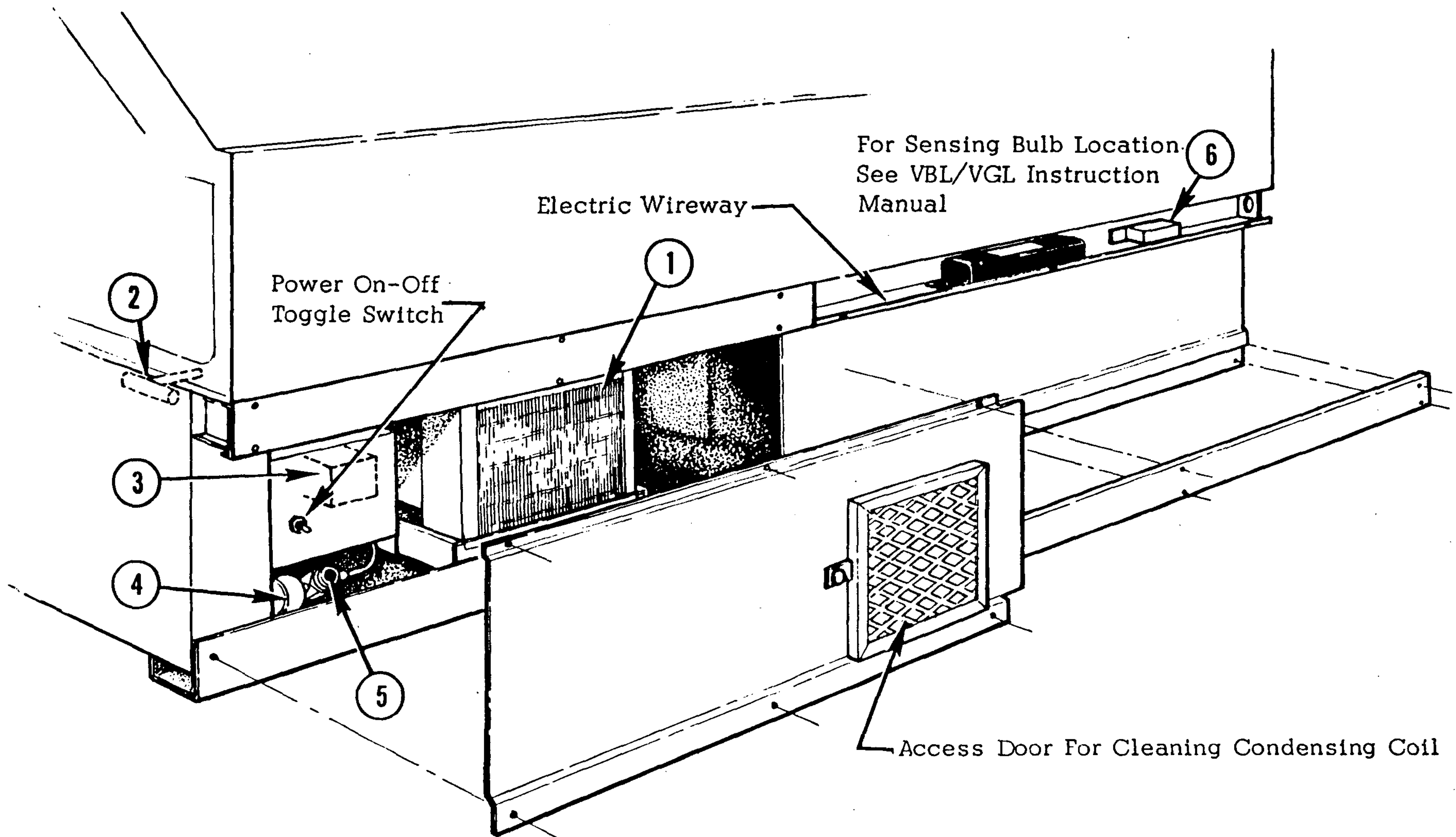
USER'S INSTRUCTIONS

The refrigeration condensing unit is located so that the condensing coil is at the rear of the case, protected by access door with grillwork. This door can easily be opened to inspect the condenser for dirt and debris. It is important for proper and efficient refrigeration performance that the condensing coil be kept clean.

LOCATION DRAWING

ALL MODELS

Remove rear panels shown below for access



VBL-B/VGL-B
REPLACEMENT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION
1.	140217	Condensing Unit-Copeland #FAAH-A033- IAA-104, 8' cases only
	140218	Condensing Unit-Copeland #FBAH-0052- IAA-199, 12' cases only
2.	108895	Evaporator Pressure Regulator-Sporlan #ORIT-6-0/50, 8' and 12' cases
3.	047449	Defrost Timer-Paragon #8245-OB, 8' and 12' cases
4.	112403	Drier-Sporlan #C-082, 8' and 12' cases
5.	120517	Sightglass-Sporlan #SA-12FM, 8' and 12' cases
6.	261933	Thermostat-White Rodgers #1710-4, 8' and 12' cases
7.	047000	Evaporator Fan Motor-General Electric #GE5KSP51CL160H 9W 120V, 8' and 12' cases, VBL models only
8.	147080	Ballast-Advance #HPFR/S 2-40W 120V, 8' and 12' cases
9.	147082	Ballast-Advance #HPFR/S 1-40W 120V, 12' case only
10.	124150	Fan Blade-Morrill #FV800CW30S, 8' and 12' cases, VBL Models only, Fan Blade embossed side toward motor
11.	020725	Fluorescent Lamp-#F40T12/CWX, 8' and 12' cases

VBL-T/VGL-T
REPLACEMENT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION
1.	255176	Condensing Unit-Copeland #FBA-0052-IAG-199, 8' and 12' cases
2.	108895	Evaporator Pressure Regulator-#ORIT-6-0/50, 8' and 12' cases
3.	124003	Defrost Timer-Paragon #8245-21B 8' and 12' cases
4.	112403	Drier-Sporlan #C-082, 8' and 12' cases
5.	120517	Sightglass-Sporlan #120517, 8' and 12' cases
6.	261933	Thermostat-White Rodgers #1710-4, 8' and 12' cases
7.	037627	Evaporator Fan Motor-General Electric #GE5KSP51 9W 230V, 8' and 12' cases, VBL Models only
8.	147081	Ballast-Advance #HPFR/S 2-40W 220V, 8' and 12' cases
9.	147083	Ballast-Advance #HPFR/S 1-40W 220V, 12' case only
10.	124150	Fan Blade, Morrill #FV800CW40S, 8' and 12' cases, VBL Models only, Fan Blade embossed side toward motor
11.	020725	Fluorescent Lamp-#F40T12/CWX, 8' and 12' cases

**VBL-A/VGL-A
REPLACEMENT PARTS LIST**

ITEM NO.	PART NUMBER	DESCRIPTION
1.	148841	Condensing Unit-Copeland #FBAH-0052-IAV-199, 8' and 12' cases
2.	108895	Evaporator Pressure Regulator-Sporlan #ORIT-6-0/50, 8' and 12' cases
3.	047449	Defrost Timer-Paragon #8245-20B, 8' and 12' cases
4.	112403	Drier-Sporlan #C-082, 8' and 12' cases
5.	120517	Sightglass-Sporlan #SA-12FM, 8' and 12' cases
6.	261933	Thermostat-White Rodgers #1710-4, 8' and 12' cases
7.	037627	Evaporator Fan Motor-General Electric #GEKSM51ECG3737 9W 230V, 8' and 12' cases, VBL Models only
8.	147084	Ballast-Advance #HPFR/S 2-40W 220V, 8' and 12' cases
9.	147085	Ballast-Advance #HPFR/S 1-40W 220V, 12' case only
10.	124150	Fan Blade-Morrill #FV800CW30S, 8' and 12' cases, VBL Models only, Fan Blade embossed side toward motor
11.	020725	Fluorescent Lamp-#F40T12/CWX, 8' and 12' cases

REPAIRING ALUMINUM COIL

The aluminum coils used in Hussmann refrigerated cases may be easily repaired in the field. Materials for repair are found at refrigeration wholesalers.

Hussmann recommends the following solders and techniques:

1. Zinc based 720°F solder. This solder makes a strong durable repair and is also cathodic protection, preventing corrosion of the tubing near the repair. This does not need a coating over the solder area. It may be 95% to 98% zinc with the remainder aluminum. Solders in this group are made by:

Platt Brothers
Box 1030
Waterbury, CT
(203) 753-4194

New Products, Inc.
269 Freeman Street
Brooklyn, NY 11222

Mathiessen and Hegler Zinc Company
Lasalle, IL

Three major differences between soldering aluminum and copper must be followed for best results. a. The heat must be applied on the opposite side of the tube from the solder. b. While keeping the solder molten, wire brush under the solder pool. c. Move the flame back and forth along the tube to prevent melting the tube.

2. Solders with lower melting point (600°F or less). Solders that contain metals other than the zinc and aluminum combination above will require a protective coating. This coating must be flexible to withstand defrosts. Windshield sealant by 3M, sold in auto parts stores, is one good material.
3. Solder/flux the same technique may be used with all these solder/flux systems. Heat from the back side of the tube, keep rubbing the solder on the fluxed repair area until it melts. Continue heating carefully until the solder flows, wetting the tube. Wash flux off with very hot water, dry, coat with windshield sealant. Use two coats and extend coat at least 1" each way from the solder to be sure of good coverage.

Some solder manufacturers are:

#505 Solder and #505 Flux:

Allweld Alloys
2027 Laura Avenue
Huntington Park, Ca
(213) 583-9004

Alu-Sol 45D Multicore Solder:

Multicore Solders
Westbury, CT 11590
(516) 334-7450

Strongset #509 (5) and 509 Flux:

All-State Welding Alloys Co.
Toronto, Canada

Eutector-Alutin 51-S Solder and
Alutin 51 Flux:

Eutectic Corporation
40-45 172 nd Street
Flushing, NY