# Sandwich Merchandiser

MODELS SM27, SM27-2L, SM39, SM51, SM63, SM75 Service Manual Serial Numbers 122562 and Higher





# BKI LIMITED WARRANTY 2812 Grandview Dr. • Simpsonville, SC 29680 • USA (864) 963-3471 • Toll Free: (800) 927-6887 • Fax: (864) 963-5316

WHAT IS COVERED	<ul> <li>This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:</li> <li>The equipment has not been accidentally or intentionally damaged, altered or misused;</li> <li>The equipment is properly installed, adjusted, operated and maintained in accordance with national and local codes, and in accordance with the installation and operating instructions provided with this product.</li> <li>The serial number rating plate affixed to the equipment has not been defaced or</li> </ul>
	removed.
WHO IS COVERED	This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.
COVERAGE PERIOD	<ul> <li>Warranty claims must be received in writing by BKI within one (1) year from date of installation or within one (1) year and three (3) months from data of shipment from the factory, whichever comes first.</li> <li>COB Models: One (1) Year limited parts and labor.</li> <li>COM Models: Two (2) Year limited parts and labor. COM convection ovens also have a two (2) year door warranty.</li> <li>CO1 Models: Two (2) Year limited parts and labor. Five (5) Year limited door warranty.</li> <li>BevLes Products: Two (2) Year limited parts and labor.</li> <li>Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from BKI, whichever comes first.</li> </ul>
WARRANTY COVERAGE	This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service representative up to (100) miles round trip and (2) hours travel time and performed during regular, weekday business hours.
EXCEPTIONS	Any exceptions must be pre-approved in advance and in writing by BKI. The extended door warranty on convection ovens years 3 through 5 is a parts only warranty and does not include labor, travel, mileage or any other charges.
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	Any exceptions must be pre-approved in advance and in writing by BKI. The extended door warranty on convection ovens years 3 through 5 is a parts only warranty and does not include labor, travel, mileage or any other charges. <ul> <li>Negligence or acts of God,</li> <li>Thermostat calibrations after (30) days from equipment installation date,</li> <li>Air and gas adjustments,</li> <li>Light bulbs,</li> <li>Glass doors and door adjustments,</li> <li>Fuses,</li> <li>Adjustments to burner flames and cleaning of pilot burners,</li> <li>Tightening of screws or fasteners,</li> <li>Failures caused by erratic voltages or gas suppliers,</li> <li>Unauthorized repair by anyone other than a BKI Factory Authorized Service Center,</li> <li>Damage in shipment,</li> <li>Alteration, misuse or improper installation,</li> <li>Thermostats and safety valves with broken capillary tubes,</li> <li>Freight - other than normal UPS charges,</li> <li>Ordinary wear and tear,</li> <li>Failure to follow installation and/or operating instructions,</li> </ul>

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## Introduction

Congratulations! You have chosen a **Sandwich Merchandiser** that will give you many years of fine service from the original manufacturer, **BKI**.

The **BKI** name and trademark on this unit assures you of the finest in design and engineering — that it has been built with care and dedication — using the best materials available. Attention to the operating instructions regarding proper installation, operation, and maintenance will result in long lasting dependability to insure the highest profitable return on your investment.



PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING THE UNIT. If you have any questions, please contact your **BKI** Distributor. If they are unable to answer your questions, contact the **BKI** Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

## Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.



### Safety Signs and Messages

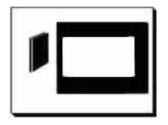
The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

	This message indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
<b>A</b> WARNING	This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
<b>A</b> CAUTION	This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
NOTICE	This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.
Safe Work Practi	Ces



#### Beware of High Voltage

This equipment uses high voltage. Serious injury can occur if you or any untrained or unauthorized person installs, services, or repairs this equipment. Always Use an Authorized Service agent to Service Your Equipment.



#### Keep this manual with the Equipment

This manual is an important part of your equipment. Always keep it near for easy access. If you need to replace this manual, contact:

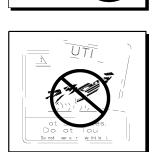
#### BKI

Technical Services Department 2812 Grandview Drive Simpsonville, S.C. 29680 Or call toll free: 1-800-927-6887 Outside the U.S., call 864-963-3471

#### **Protect Children**

Keep children away from this equipment. Children may not understand that this equipment is dangerous for them and others.

NEVER allow children to play near or operate your equipment.

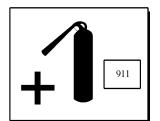


#### Keep Safety Labels Clean and in Good Condition

Do not remove or cover any safety labels on your equipment. Keep all safety labels clean and in good condition. Replace any damaged or missing safety labels. Refer to the Safety Labels section for illustration and location of safety labels on this unit. If you need a new safety label, obtain the number of the specific label illustrated on page 4, then contact:

#### BKI

Technical Services Department 2812 Grandview Drive Simpsonville, S.C. 29680 Or call toll free: 1-800-927-6887 Outside the U.S., call 864-963-3471

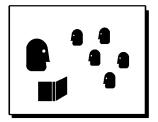


#### **Be Prepared for Emergencies**

Be prepared for fires, injuries, or other emergencies.

Keep a first aid kit and a fire extinguisher near the equipment. You must use a 40pound Type BC fire extinguisher and keep it within 25 feet of your equipment.

Keep emergency numbers for doctors, ambulance services, hospitals, and the fire department near your telephone.



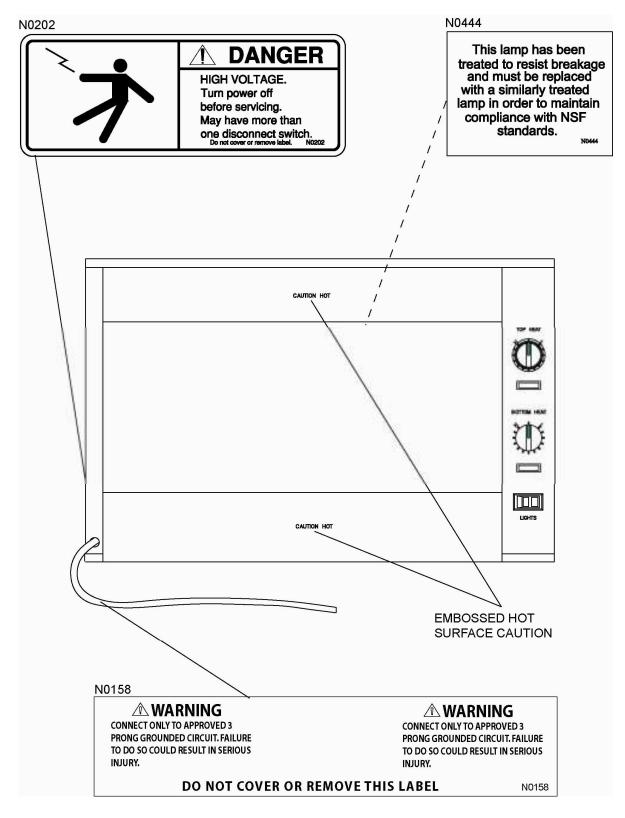
#### Know your responsibilities as an Employer

- Make certain your employees know how to operate the equipment.
- Make certain your employees are aware of the safety precautions on the equipment and in this manual.
- Make certain that you have thoroughly trained your employees about operating the equipment safely.
- Make certain the equipment is in proper working condition. If you make unauthorized modifications to the equipment, you will reduce the function and safety of the equipment.

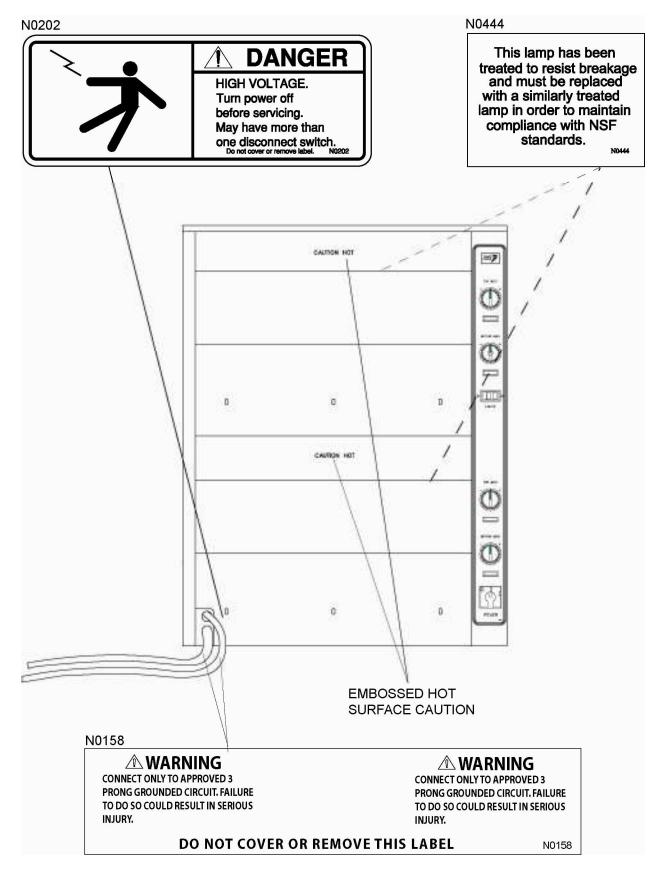


#### **Safety Labels**

Models SM27, SM39, SM51, SM63, SM75



#### Model SM27-2L



## Installation

## **A**WARNING

Serious injury, equipment damage or death could result if attempting to install this unit yourself. Ensure that an authorized BKI service agent installs the unit.

## Instructions For Shipping Damage

You are responsible for filing all freight claims with the delivering truck line. Inspect all cartons and crates for damage when they arrive. If there is damage noted to shipping crates or cartons, or, if a shortage is found, note this on the bill of lading (all copies) before signing.

If damage is detected when the equipment is uncrated, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your equipment. Ask for an immediate inspection of your concealed damage item. Crating material MUST be retained to show the inspector from the truck line.

## **Electrical Information**

## WARNING

Electrocution, equipment failure or property damage could result if an unlicensed electrician performs the electrical installation. Ensure that a licensed electrician perform the electrical installation in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI NFPA 70-20XX.

This unit, when installed by an authorized BKI service agent, must be wired for use in accordance with all applicable local, state, and federal codes. For specific electrical requirements and connections refer to the wiring diagram attached to the unit or provided in the Service Manual.

## Important Installation Instructions

NOTICE

LEVELING THE UNIT: Your SM should be level for best operating results. The unit may be leveled by placing shims under the base. The shims must be made of metal or other non-combustible material. If you have any questions, please contact your **BKI** Distributor. If they are unable to answer your questions, contact the **BKI** Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

## NOTICE

COUNTERTOP INSTALLATIONS: To conform to NSF Standard 4, countertop models are designed to be sealed to the supporting surface using an NSF approved Silicone sealant. BKI recommends Dow Corning RTV # 732 Multi-purpose Sealant. If you have any questions, please contact your **BKI** Distributor. If they are unable to answer your questions, contact the **BKI** Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

## NOTICE

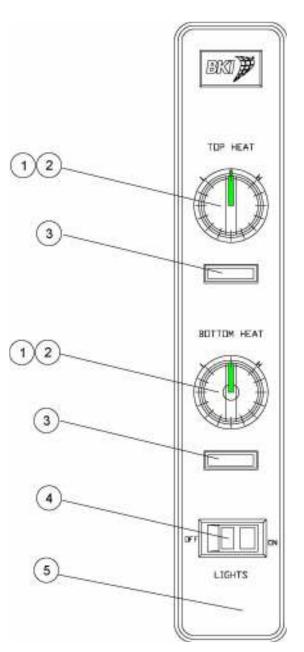
*This unit is designed for pre-packaged foods only.* If you have any questions, please contact your *BKI* Distributor. If they are unable to answer your questions, contact the *BKI* Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

## **Replacement Parts**

Use the information in this section to identify replacement parts. To order replacement parts, call your local BKI sales and service representative. Before calling, please note the serial number on the rating tag affixed to the unit.

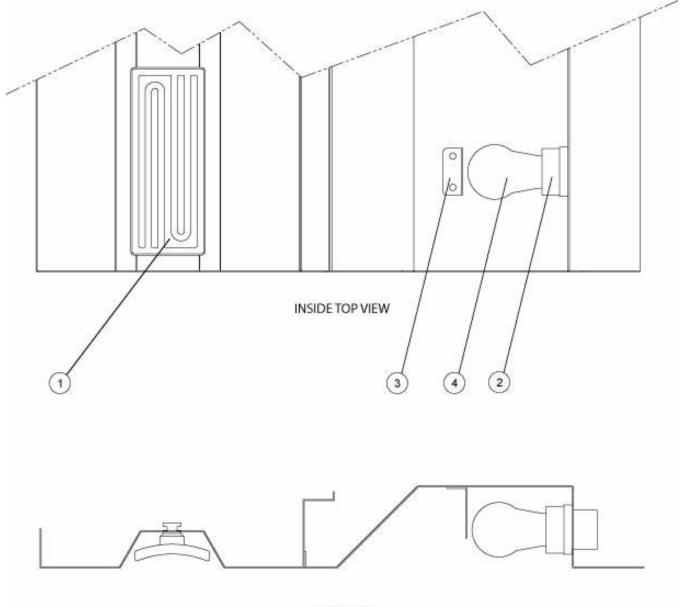
Models SM27, SM39, SM51, SM63, SM75

**Control Panel Assembly** 



ITEM #	PART #	QTY	DESCRIPTION
1	K0040	2	KNOB, S/S STRAT T0075
2	S0141	2	SWITCH, INFINITE 240V-1245
3	PL0003	2	PILOT LIGHT, 250V RECT BLK BEZEL
4	S0319	1	SWITCH, RKR DPST 15A 250V
5	N0476	1	DECAL, CTL PNL SM

## Inside Top Assembly



SIDE VIEW

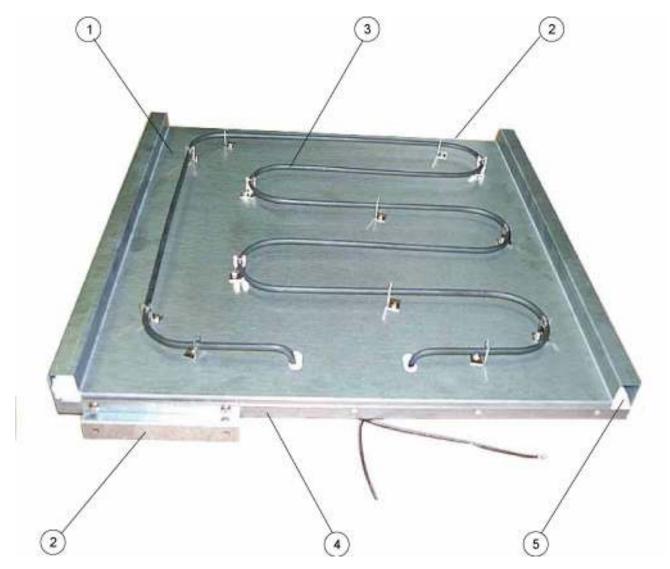
ITEM #	PART #	QTY	DESCRIPTION
1	C0056	2	CERAMIC HEATER 650W FULL SIZE 220/240V (SM27)
	C0080	2	CERAMIC HEATER 120V 400W (SM39)
	C0064	2	CERAMIC HEATER 250W FULL SIZE (SM39)
	C0057	2	CERAMIC HEATER 400W FULL SIZE 220/240V (SM39)
	C0060	2	CERAMIC HEATER 120V 250W FULL SIZE (SM51)
	C0064	2 2 2	CERAMIC HEATER 250W FULL SIZE (SM51)
	C0056	2	CERAMIC HEATER 650W FULL SIZE 220/240V (SM51)
	C0064	3	CERAMIC HEATER 250W FULL SIZE (SM63)
	C0057	3	CERAMIC HEATER 400W FULL SIZE 220/240V (SM63)
	C0056	3	CERAMIC HEATER 650W FULL SIZE 220/240V (SM75)
2	LH0001	3	LAMPHOLDER, RD PORCELAIN 650W (SM27)
		4	LAMPHOLDER, RD PORCELAIN 120V 400W (SM39)
		4	LAMPHOLDER, RD PORCELAIN 250W (SM39)
		4	LAMPHOLDER, RD PORCELAIN 400W (SM39)
		5	LAMPHOLDER, RD PORCELAIN (SM51)
		5	LAMPHOLDER, RD PORCELAIN 250W CERAMIC (SM51)
		5	LAMPHOLDER, RD PORCELAIN C0056 650W (SM51)
		7	LAMPHOLDER, RD PORCELAIN (SM63)
		7	LAMPHOLDER, RD PORCELAIN 400W (SM63)
		8	LAMPHOLDER, RD PORCELAIN C0056 650W (SM75)
3	FA42106312	3	LIGHT GUARD 650W (SM27)
		4	LIGHT GUARD 120V 400W (SM39)
		4	LIGHT GUARD 250W (SM39)
		4	LIGHT GUARD 400W (SM39)
		5	LIGHT GUARD (SM51)
		5	LIGHT GUARD C0056 650W (SM51)
		7	LIGHT GUARD (SM63)
		7	LIGHT GUARD 400W (SM63)
		8	LIGHT GUARD C0056 650W (SM75)
4	B0553	3	BULB, TUFFSKIN 40W 250V (SM27)
	B0066	4	BULB, 40A15 130V PTFE COATED (SM39)
	B0553	4	BULB, TUFFSKIN 40W 250V (SM39)
	B0553	5	BULB, TUFFSKIN 40W 250V (SM51)
	B0066	5	BULB, 40A15 130V PTFE COATED (SM51)
	B0553	7	BULB, TUFFSKIN 40W 250V (SM63)
	B0553	8	BULB, TUFFSKIN 40W 250V (SM75)

## Components

PART #	QTY	DESCRIPTION	PICTURE
R0168	1	RACK, SHELF 22.75 X 22.875 (SM27)	
R0161	2	RACK, SHELF 17 3/8 X 22 7/8 SM (SM39)	
R0162	1	RACK, SHELF 22 7/8 X 29 3/8 SM (SM51)	
R0161	1	RACK, SHELF 17 3/8 X 22 7/8 SM (SM51)	
R0162	2	RACK, SHELF 22 7/8 X 29 3/8 SM (SM63)	
R0169	2	RACK, SHELF 22.875 X 35.375 (SM75)	
MA42102211	7	DIVIDER, SM51	
			and the second

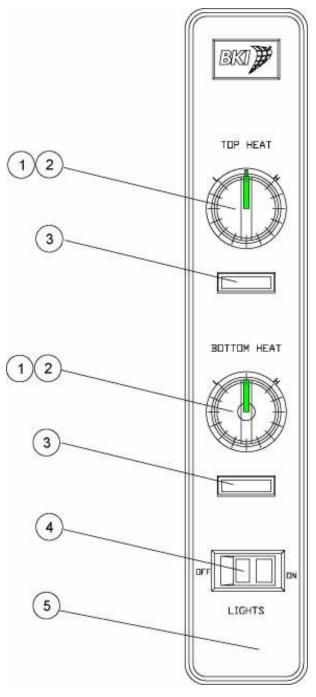
## Model SM27-2L

## 120V Calrod Assembly



ITEM #	PART #	QTY	DESCRIPTION
1	FC42110509	1	CALROD MOUNT SM27
2	FB31212718	2	CALROD PAN SUPPT.BRKTS.SFW
3	C0110	1	CALROD, 120V 375W
4	FC42110609	1	INSUL COVER SM27
5	10005	2	INSULATION, 1"TK

## **Control Panel Assembly**



ITEM #	PART #	QTY	DESCRIPTION	
1	K0040	4	KNOB, S/S STRAT T0075	
2	S0029	4	SWITCH, INFINITE 120V-1246	
3	PL0005	4	PILOT LIGHT, 125V	
4	S0356	1	SWITCH, ROCKER 16A 250V	
5	N0529	1	DECAL, CTL PNL SFW	
6	S0006	1	SWITCH, 30A 2P ON/OFF	

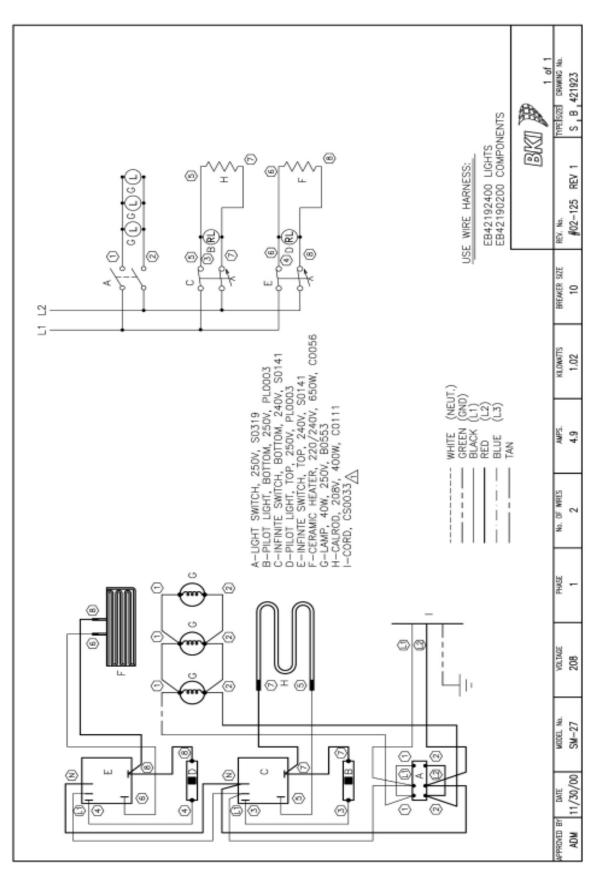
### Components

PART #	QTY	DESCRIPTION	PICTURE
B0066	6	BULB, 40A15 130V PTFE COATED	
C0060	4	CERAMIC HEATER 250W 120V FULL SIZE	
C0080	2	CALROD, 120V 400W CERAMIC	
CS0024	2	CORD SET, 12/3 SJTO 8' 30"LEAD	Q
LH0021	6	LAMPHOLDER, #62602 HI TEMP	re la companya de la
MB31213011	6	DIVIDER BAR SFW	
FB31211003	1	SIGN HOLDER SANDWICH SIDE SFW	

## Wiring Diagrams

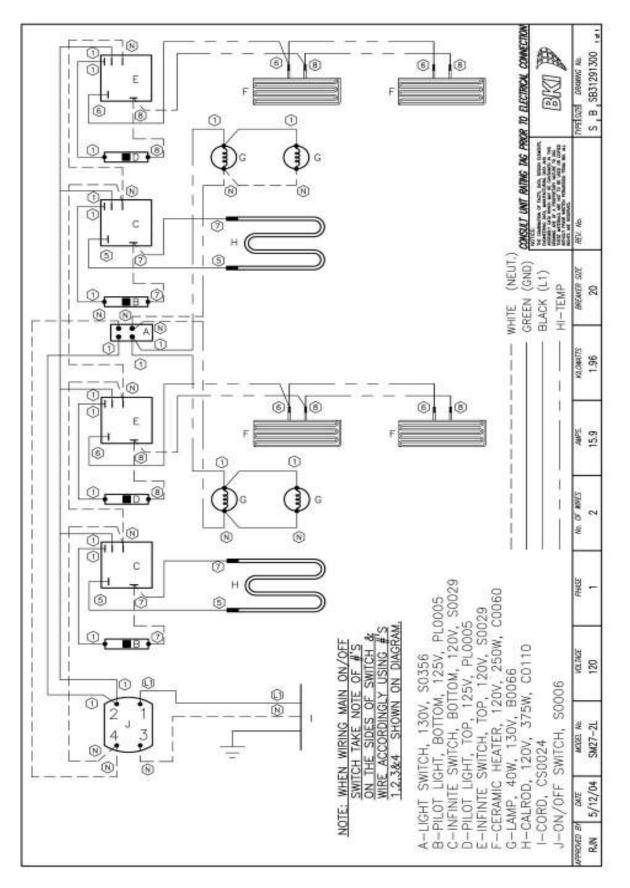
Refer to the table below to find the wiring diagram associated with your unit.

Wiring Diagram	Part #	Figure #	Page #
SM27 (208V/1 Phase)	SB42192300	Figure 1	14
SM27-2L (120V/1 Phase)	SB31291300	Figure 2	15
SM39 (120V/1 Phase)	SB42191700	Figure 3	16
SM39 (208V or 240V/1 Phase with 400W Calrod)	SB42191100	Figure 4	17
SM39 (208V/1 Phase with 600W Calrod)	SB42191800	Figure 5	18
SM51 (120V/1 Phase with 600W Calrod)	SB42190300	Figure 6	19
SM51 (120V/1 Phase with 800W Calrod)	SB42190500	Figure 7	20
SM51 (208V or 240V/1 Phase with 600W Calrod)	SB42190000	Figure 8	21
SM51 (208V or 240V/1 Phase with 800W Calrod)	SB42191600	Figure 9	22
SM63 (208V or 240V/1 Phase with 400W Calrod)	SB42191200	Figure 10	23
SM63 (208V or 240V/1 Phase with 500W Calrod)	SB42192200	Figure 11	24
SM75 (208/1 Phase with 600W Calrod)	SB42191900	Figure 12	25

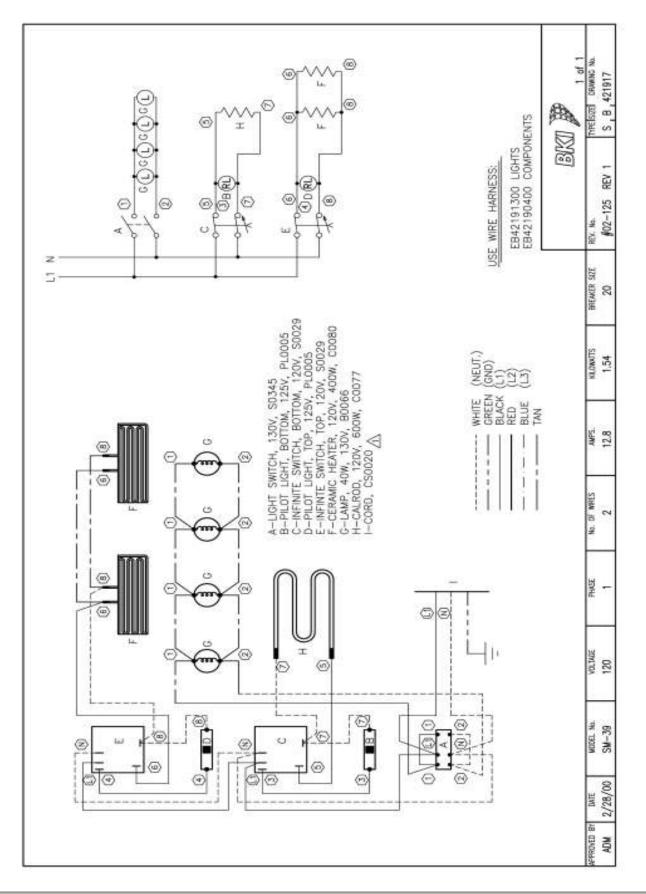


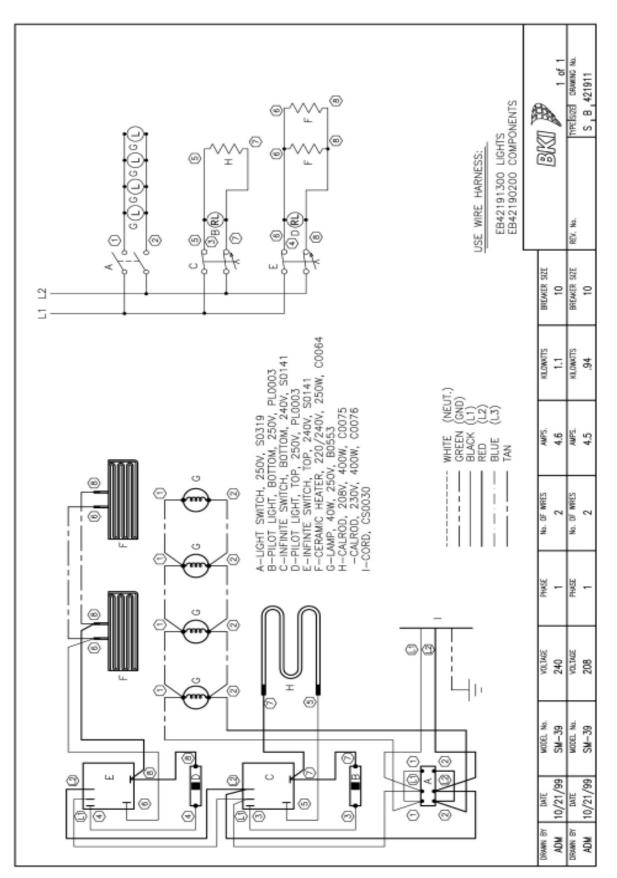
#### Figure 1. SM27 (208V/1 Phase)

#### Figure 2. SM27-2L (120V/1 Phase)

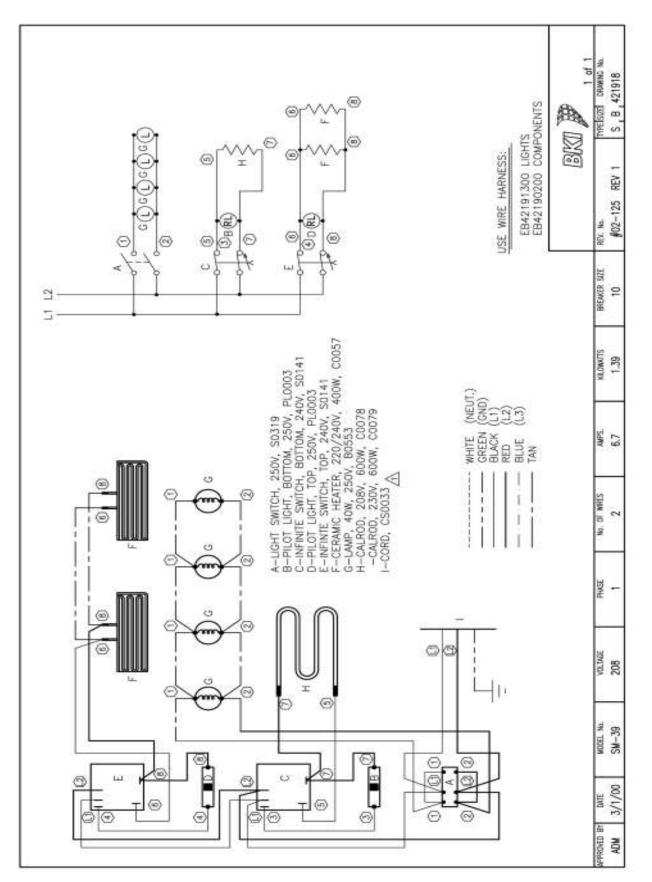


#### Figure 3. SM39 (120V/1 Phase)

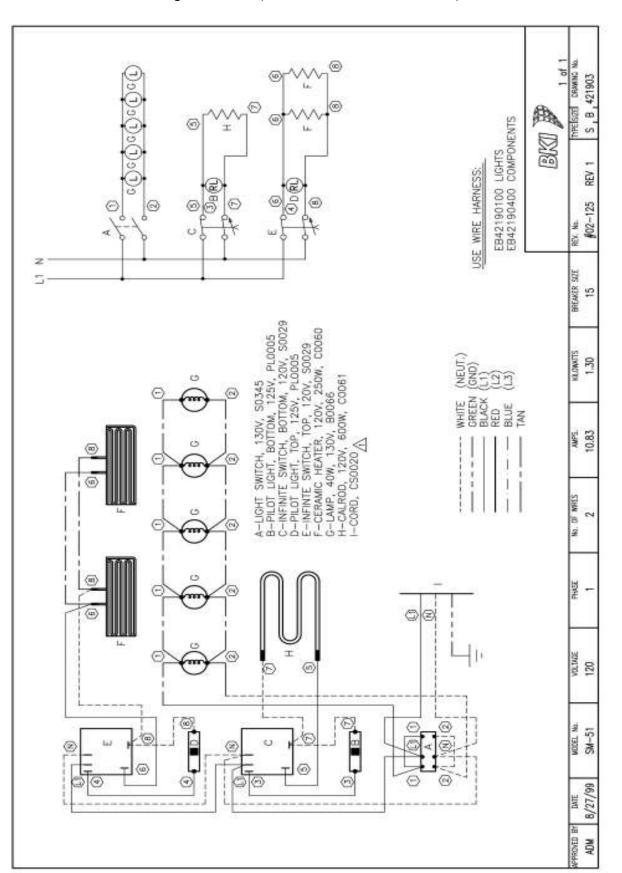




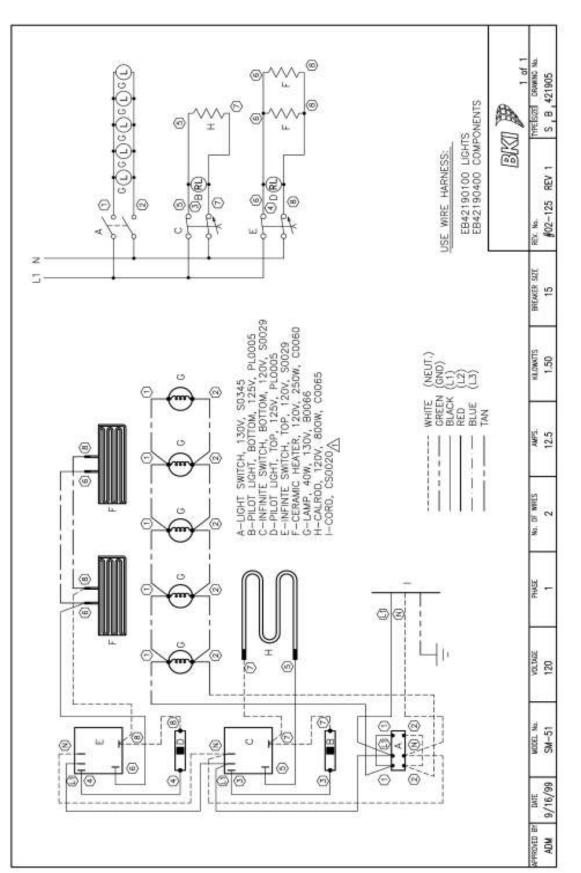
#### Figure 4. SM39 (208V or 240V/1 Phase with 400W Calrod)



#### Figure 5. SM39 (208V/1 Phase with 600W Calrod)



#### Figure 6. SM51 (120V/1 Phase with 600W Calrod)



#### Figure 7. SM51 (120V/1 Phase with 800W Calrod)

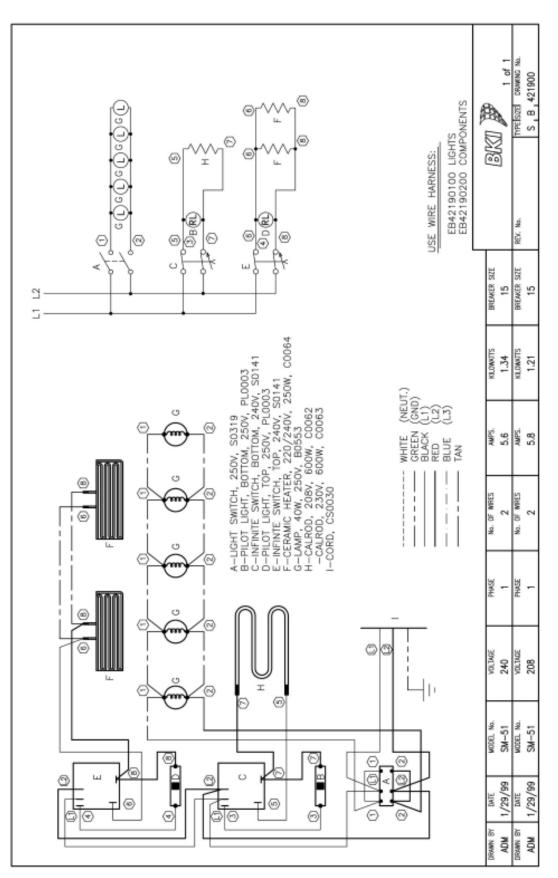


Figure 8. SM51 (208V or 240V/1 Phase with 600W Calrod)

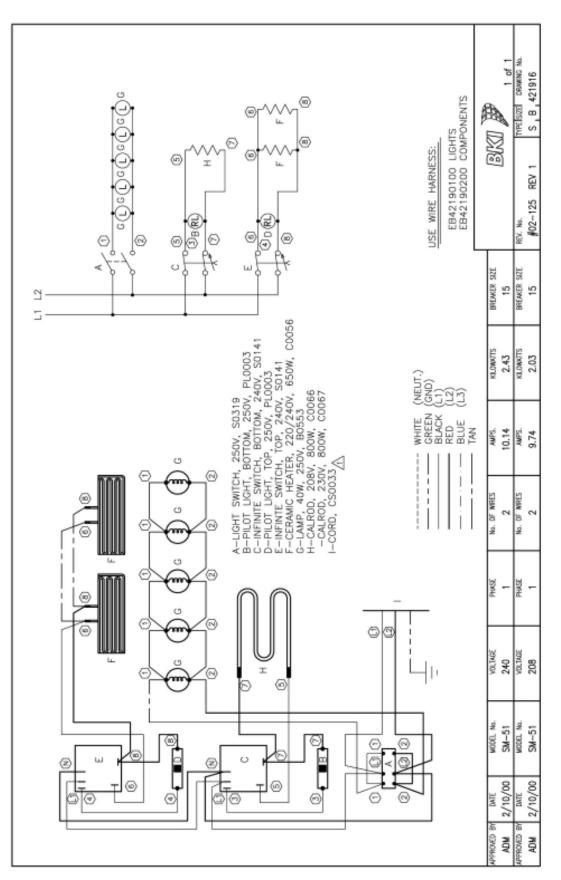


Figure 9. SM51 (208V or 240V/1 Phase with 800W Calrod)

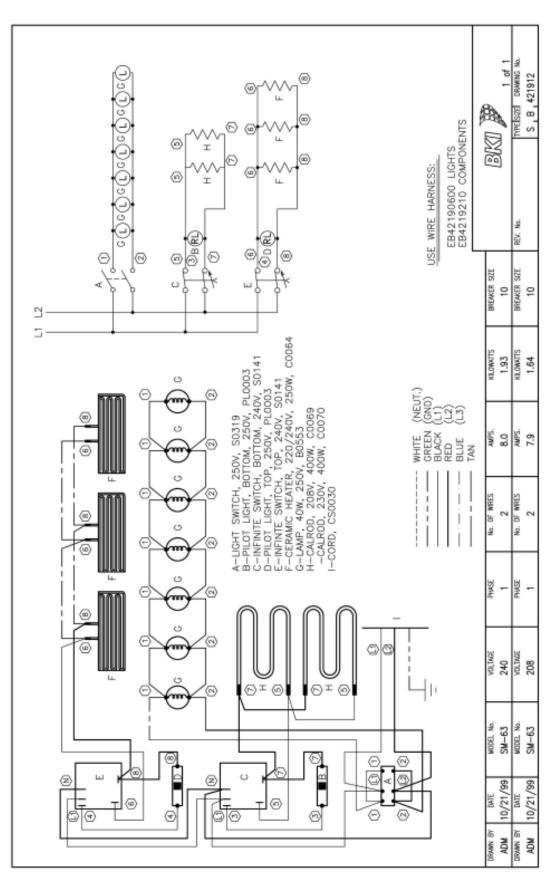


Figure 10. SM63 (208V or 240V/1 Phase with 400W Calrod)

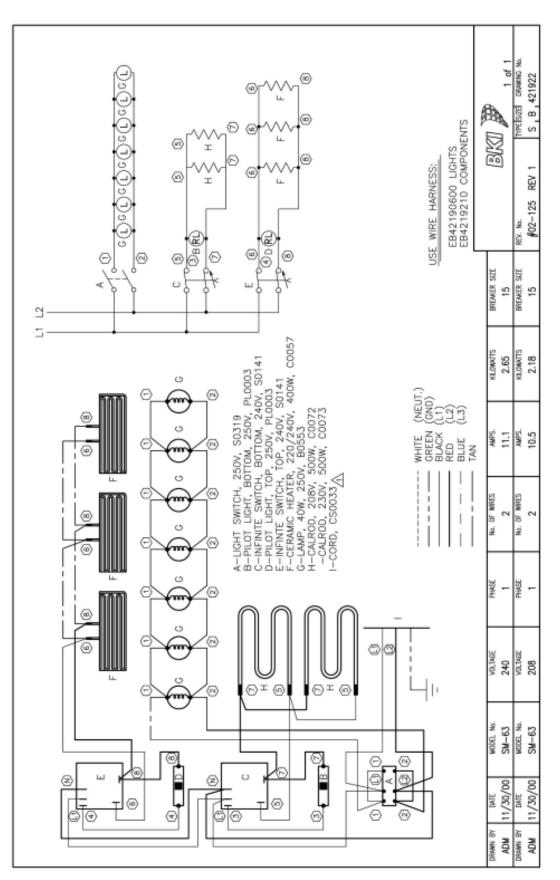


Figure 11. SM63 (208V or 240V/1 Phase with 500W Calrod)

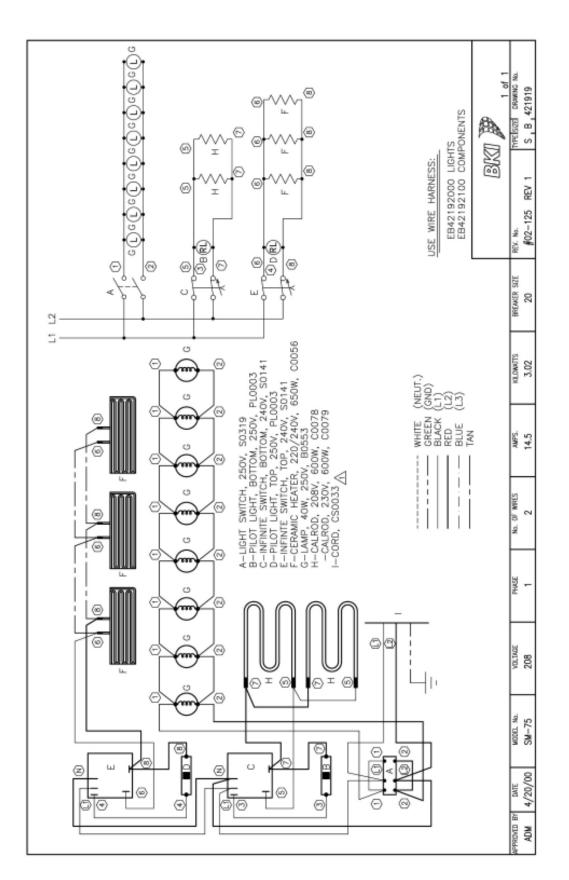


Figure 12. SM75 (208/1 Phase with 600W Calrod)



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CS-TM-028.01

#### **REVISION HISTORY**

REVISION	DATE	REVISED BY	DESCRIPTION
01	03/27/13	KW	Initial Release-Supersedes all previous
			releases