

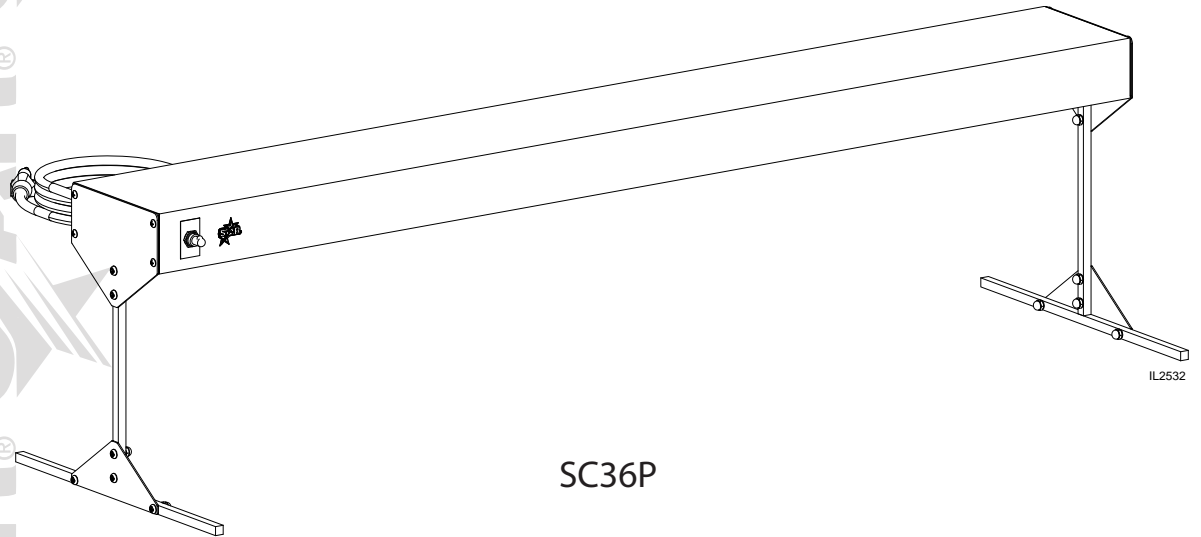
STAR[®]

STRIP HEATERS

MODEL
SC18, SC24, SC30, SC36,
SC42, SC48, SC60, SC72

Installation and Operation Instructions

2M-Z16424 Rev. - 10/31/2012



IL2532

SAFETY SYMBOL



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

RETAIN THIS MANUAL FOR FUTURE REFERENCE NOTICE

Using any part other than genuine Star factory supplied parts relieves the manufacturer of all liability.

Star reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star International Holdings Inc., Company exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance.

Please record the model number, serial number, voltage and purchase date in the area below and have it ready when you call to ensure a faster service.

Model No. _____
Serial No. _____
Voltage _____
Purchase Date _____

Authorized Service Agent Listing

Reference the listing provided with the unit

OR

for an updated listing go to:

Website: www.star-mfg.com
E-mail Service@star-mfg.com

Service Help Desk

Business Hours: 8:00 am to 4:30 p.m. Central Standard Time

Telephone: (314) 678-6303

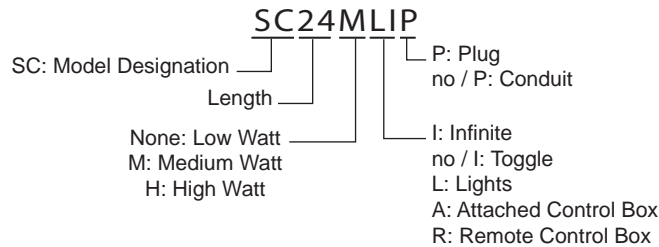
Fax: (314) 781-2714

E-mail Parts@star-mfg.com
Service@star-mfg.com
Warranty@star-mfg.com

Website: www.star-mfg.com

Mailing Address: Star International Holdings Inc., Company
10 Sunnen Drive
St. Louis, MO 63143
U.S.A

Dimensions						
Model	Length	Height	Single Model		Dual Model	
			Width	Width w Lights	Width	Width w Lights
SC18	18" (45.7 cm)	2.5" (5.1 cm)	6" (15.25 cm)	9" (22.9 cm)	15" (38.1 cm)	18" (45.7 cm)
SC24	24" (61.0 cm)					
SC30	30" (76.2 cm)					
SC36	36" (91.4 cm)					
SC42	42" (106.7 cm)					
SC48	48" (121.9 cm)					
SC60	60" (152.4 cm)					
SC72	72" (182.9 cm)					



2M-Z16424; Strip-Heater

Electrical Specifications			
MODEL NO.	VOLTS	WATTS	AMPS.
SC18HP	120	375	3.1
SC18H	120	375	3.1
SC24P	120	375	3.1
SC24	120	375	3.1
SC24HP	120	525	4.4
SC24H	120	525	4.4
SC24HI	120	525	4.4
SC24HL	120	645	5.4
SC24DH	120	1050	8.8
SC24DHL	120	1170	9.8
SC24MIP	120	675	5.6
SC24MR	120	675	5.6
SC24H	208	525	2.5
SC24MR	208	675	3.2
SC30	120	475	4.0
SC30HP	120	685	5.7
SC30H	120	685	5.7
SC36P	120	600	5.0
SC36	120	600	5.0

Electrical Specifications			
MODEL NO.	VOLTS	WATTS	AMPS.
SC36HP	120	825	6.9
SC36H	120	825	6.9
SC36HI	120	825	6.9
SC36HL	120	1005	8.4
SC36DH	120	1650	13.8
SC36DHL	120	1830	15.3
SC36MIP	120	1025	8.5
SC36MR	120	1025	8.5
SC36H	208	825	4.0
SC36MR	208	1025	4.9
SC42HP	120	925	7.7
SC42H	120	925	7.7
SC48P	120	825	6.9
SC48	120	825	6.9
SC48HP	120	1125	9.4
SC48H	120	1125	9.4
SC48HI	120	1125	9.4
SC48HL	120	1105	9.2
SC48DH	120	1850	15.4

Electrical Specifications			
MODEL NO.	VOLTS	WATTS	AMPS.
SC48DHL	120	2490	20.8
SC48MIP	120	1325	11.0
SC48MR	120	1325	11.0
SC48H	208	1125	5.4
SC48MR	208	1325	6.4
SC60P	120	1075	9.0
SC60	120	1075	9.0
SC60HP	120	1425	11.9
SC60H	120	1425	11.9
SC60HI	120	1425	11.9
SC60MIP	120	1725	14.4
SC60MR	120	1725	14.4
SC60H	208	1425	6.9
SC60MR	208	1725	8.3
SC72HP	120	1750	14.6
SC72H	120	1750	14.6
SC72MR	120	2100	17.5
SC72H	208	1750	8.4
SC72MR	208	2100	10.1

GENERAL INFORMATION

This equipment is designed and sold for commercial use only by personnel trained and experienced in its operation and is not sold for consumer use in and around the home nor for use directly by the general public in food service locations.

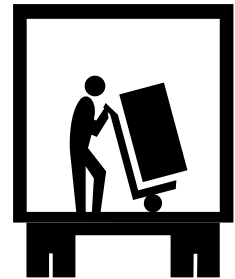
Before using your new equipment, read and understand all the instructions & labels associated with the unit prior to putting it into operation. Make sure all people associated with its use understand the units operation & safety before they use the unit.

All shipping containers should be checked for freight damage both visible and concealed. This unit has been tested and carefully packaged to insure delivery of your unit in perfect condition. If equipment is received in damaged condition, either apparent or concealed, a claim must be made with the delivering carrier.

Concealed damage or loss - if damage or loss is not apparent until after equipment is unpacked, a request for inspection of concealed damage must be made with carrier within 15 days. Be certain to retain all contents plus external and internal packaging materials for inspection. The carrier will make an inspection and will supply necessary claim forms.

UNCRATING AND INSPECTING

Unpack the unit and components from the shipping container. Remove all visible packing material and those from inside the cooking chamber. If damage is discovered, file a claim immediately with the carrier that handled the shipment. Do not operate the unit if it was damaged during shipping.



ELECTRICAL INSTALLATION



WARNING

The strip heater is equipped for the voltage indicated on the nameplate. It will operate on alternating current (AC) only.

DO NOT CONNECT TO DIRECT CURRENT (DC).

The installation of the electric griddle should conform to the:

NATIONAL ELECTRIC CODE AND ALL LOCAL ELECTRIC CODES AND ORDINANCES AND THE LOCAL ELECTRIC COMPANY RULES AND REGULATIONS

For your protection we recommend that a qualified electrician install the strip heater. He should be familiar with electrical installations and all electric codes. Proper connections and power supply are essential for efficient performance. The supply circuit should be properly fused and equipped with a means of disconnecting, as required by local electrical code.

1. Refer to the product nameplate. Verify the electrical service power. Voltage and phase must match the nameplate specifications. Wiring the warmer to the wrong voltage can severely damage the unit or cause noticeably decreased performance.
2. Available electrical service amperage must meet or exceed the specifications listed on the specification sheet provided with the warmer.
3. This unit must be connected to an appropriate building ground.

NOTE: Wire gauge, insulation type and temperature rating, as well as type, size and construction of conduit, must meet or exceed applicable specifications of local codes and of the National Electrical Code.

ELECTRICAL INSTALLATION continued

Conduit Connection

Units supplied with conduit connections have had all internal connections pre-wired and must be installed using angle brackets. All final electrical connections **MUST** be performed by a licensed electrician familiar with all local codes and ordinances.

Units containing a conduit connection **MUST** have a permanent mounting.

Supply Wire	
Circuits	Minimum AWG Copper wire needed
up to 15 amps	No. 14
15 to 20 amps	No. 12
20 to 25 amps	No. 10
25 to 30 amps	No. 8

Power Cord

120V Units provided with a power cord have been installed at the factory. These units can use either the portable leg assemblies or a permanent mount. If a permanent mount is used a 3" gap must be maintained from all adjacent surfaces.

Units with portable leg assemblies must have a power cord.



WARNING

DO NOT CUT OR REMOVE THIS PLUG OR GROUNDING PRONG FROM THE PLUG.

CONNECT/PLUG UNIT INTO DEDICATED A.C LINE ONLY SPECIFIED ON THE DATA PLATE OF THE UNIT.

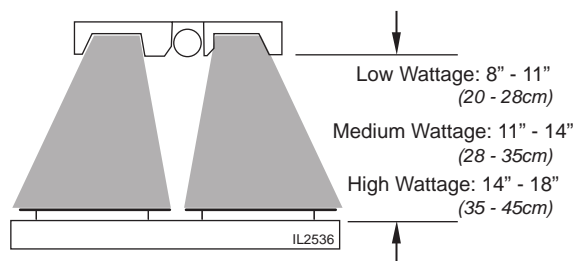
INSTALLATION



TO REDUCE THE RISK OF FIRE, THE APPLIANCE IS TO BE INSTALLED IN NON-COMBUSTIBLE SURROUNDINGS ONLY, WITH NO COMBUSTIBLE MATERIAL WITHIN 18" (45.7 cm) OF THE SIDES, FRONT OR REAR OF THE APPLIANCE OR WITHIN 40" (101.6 cm) ABOVE THE APPLIANCE. THE APPLIANCE IS TO BE MOUNTED ABOVE SURFACES OF NON-COMBUSTIBLE CONSTRUCTION WITH NON-COMBUSTIBLE SURFACES AND SURFACE FINISH, WITH NO COMBUSTIBLE MATERIAL AGAINST THE UNDERSIDE.

Adjustable Angle Bracket Mounting

Mounting a strip heater with angle brackets permanently attaches the unit to the underside of a non-combustible surface. Units can be mounted to the underside of a flat shelf or one with a rolled/flanged edges. Adjustable angle brackets provide the necessary gap between the unit and a combustable surface.



Note: Single, portable units can be mounted to a combustable surface as long as a 3" clearance is maintained between the top of the unit and the combustable surface.

IMPORTANT

Before installation refer to the recommended clearance requirements for your specific unit.

Flanged Shelf Mounting

In situations where the mounting surface has a flanged edge, it is important that the minimum clearance is calculated from the top of the unit to that flanged edge, and not the mounting surface. This prevents an excess of excessive heat build-up.

Installing Angle Brackets:

1. Place unit on a surface with element side down.
2. Remove the 4 screws on each side.
3. Place the adjustable angle bracket in position and re-install the screws, repeat on opposite end.
Note: make certain you maintain the required minimum clearance.
4. Place the unit into position and adhere using appropriate hardware (not included).

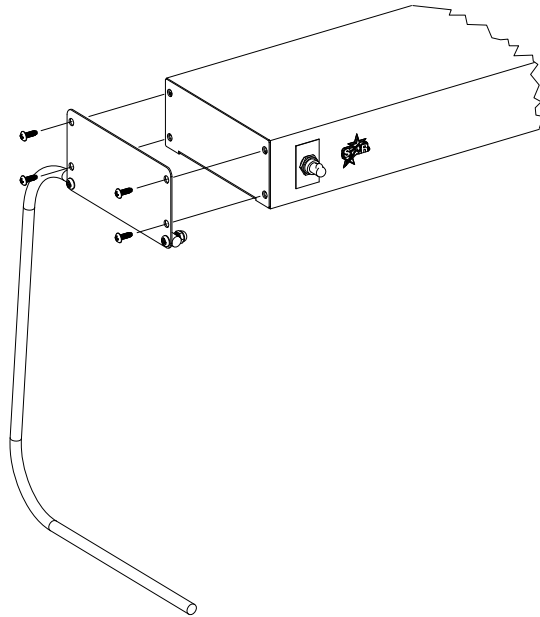
INSTALLATION continued

Installing Portable Legs

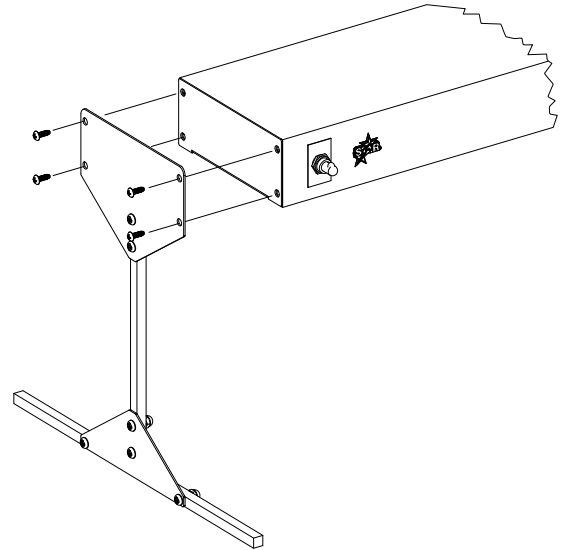
Single strip heaters containing a power cord can have portable leg assemblies like the C-Leg & T-Leg Stands shown here.

DO NOT PLACE ANYTHING ON TOP OF THE STRIP HEATERS, THE SURFACE GETS HOT.

1. Position the unit upside down, it must be unplugged.
2. Remove the 4 screws on each side.
3. Line up the Portable stand (C or T) and secure with hardware previously removed. Install the same to both sides.
4. Turn unit over and place into position.



C-Leg Portable Stand



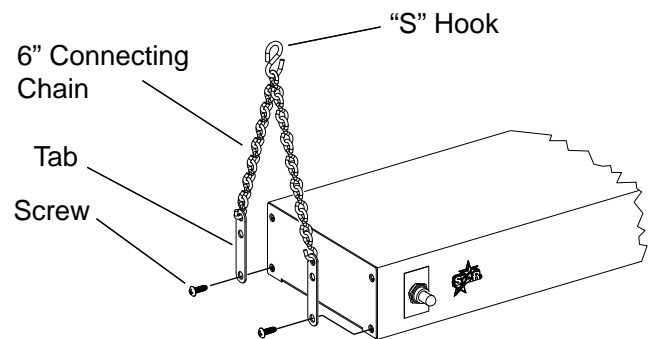
T-Leg Portable Stand

IL2534

Installing Chain Suspended Units

Single, 120V units containing a power cord can be mounted using a chain suspension assembly as shown here.

1. Overhead surface should be sturdy enough to withstand the weight of the unit.
2. Prepare the overhead mountings to receive the "S" hook so the distance between them match the width of the unit.
3. Remove the two top screws on each side of the unit as shown here.
4. Using the screws just removed, install the tabs, one on each corner.
5. Hook one end of each of the 6" Connecting Chain assemblies to each tab just installed.
6. Hook the other ends of the 6" Connecting Chain



Chain Suspension System

IL2535

OPERATION

INITIAL START-UP

Before using the unit for the first time, wipe down the surface a damp cloth with some mild detergent. Let the unit heat up without product for approximately 30 minutes. The unit may emit a certain amount of smoke as the surfaces reaches its operating temperature. Do not be alarmed, as the smoke is caused by oils associated with the manufacturing process and will stop when the burn off is complete. Wipe surface clean when complete.

OPERATION

Controls

- Toggle Switch; Turns "ON/OFF" the heating element, on 120V turns lights "ON/OFF"
- Light Switch: Turns "ON/OFF" lights *(208/240V only)*
- Infinite Switch: Allows you to set the element to a setting that works best for you.
(120V units only)



CAUTION

CERTAIN SURFACES ARE EXTREMELY HOT DURING OPERATION AND CARE SHOULD BE TAKEN WHILE USING THIS UNIT.

CLEANING

To keep your strip heater looking new and operating properly follow the following steps on a daily basis.

1. Turn the power off to all heating elements and allow unit to cool.
2. Once cooled, remove the Pan Rail and wash with warm water and mild detergent.
3. Wipe exterior surface of unit using a soft damp cloth, warm water and mild detergent.
4. Stubborn stains can be removed using a non-abrasive cleaner.



CAUTION

DO NOT IMMERSE UNIT IN WATER OR HOSE DOWN WITH WATER TO CLEAN. USE A DAMP SOFT CLOTH WITH A VERY MILD SOAP TO WIPE DOWN OUTSIDE OF THE WARMER.

MAINTENANCE

LIGHT BULB REPLACEMENT

To replace the bulb, remove the element guard by removing screws, **(NOTE: element guard is extremely hot and should be allowed to cool)** set the screws and guard aside. With unit cool, remove the bad bulb and replace with a NSF standard bulb made for food holding and display area, for replacement bulb contact a qualified Star service agent or call Star parts department at 314-678-6303.

2M-Z16424; Strip-Heater

THOROUGHLY INSPECT YOUR UNIT ON ARRIVAL

This unit has been tested for proper operation before leaving our plant to insure delivery of your unit in perfect condition. However, there are instances in which the unit may be damaged in transit. In the event you discover any type of damage to your product upon receipt, you must immediately contact the transportation company who delivered the item to you and initiate your claim with same. If this procedure is not followed, it may affect the warranty status of the unit.

LIMITED EQUIPMENT WARRANTY

All workmanship and material in Star products have a one (1) year limited warranty on parts & labor in the United States and Canada. Such warranty is limited to the original purchaser only and shall be effective from the date the equipment is placed in service. Star's obligation under this warranty is limited to the repair of defects without charge, by the factory authorized service agency or one of its sub-agencies. Models that are considered portable (*see below*) should be taken to the closest Star service agency, transportation prepaid.

- > Star will not assume any responsibility for loss of revenue.
- > On all shipments outside the United States and Canada, see International Warranty.
- * The warranty period for the Ultra-Max, Hot Plates, Griddles, Charbroilers is (3) years parts & labor.
- * The warranty period for the Star-Max, Charbroilers, Griddles, Hot Plates, Fryers & Finishing Oven is (2) years parts & labor.
- * The warranty period for the JetStar six (6) ounce & Super JetStar eight (8) ounce series popcorn machines is two (2) years.
- * The warranty period for the Chrome-Max Griddles is five (5) years on the griddle surface. See detailed warranty provided with unit.
- * The warranty period for Teflon/Dura-Tec coatings is one year under normal use and reasonable care. This warranty does not apply if damage occurs to Teflon/Dura-Tec coatings from improper cleaning, maintenance, use of metallic utensils, or abrasive cleaners, abrasive pads, product identifiers and point-of-sale attachments, or any other non-food object that comes in continuous contact with the roller coating. This warranty does not apply to the "non-stick" properties of such materials.
- > This warranty does not apply to "Special Products" but to regular catalog items only. Star's warranty on "Special Products" is six (6) months on parts and ninety (90) days on labor.
- > This warranty does not apply to any item that is disassembled or tampered with for any purpose other than repair by a Star Authorized Service Center or the Service Center's sub-agency.
- > This warranty does not apply if damage occurs from improper installation, misuse, wrong voltage, wrong gas or operated contrary to the Installation and Operating instructions.
- > This warranty is not valid on Conveyor Ovens *unless* a "start-up/check-out" has been performed by a Factory Authorized Technician.

PARTS WARRANTY

Parts that are sold to repair out of warranty equipment are warranted for ninety (90) days. The part only is warranted, the labor to replace the part is **NOT** warranted.

SERVICES NOT COVERED BY WARRANTY

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Travel time and mileage rendered beyond the 50 mile radius limit 2. Mileage and travel time on portable equipment (<i>see below</i>) 3. Labor to replace such items that can be replaced easily during a daily cleaning routine, ie; removable kettles on fryers, knobs, grease drawers on griddles, etc. 4. Installation of equipment 5. Damages due to improper installation 6. Damages from abuse or misuse 7. Operated contrary to the Operating and Installation Instructions 8. Cleaning of equipment 9. Seasoning of griddle plates | <ol style="list-style-type: none"> 10. Voltage conversions 11. Gas conversions 12. Pilot light adjustment 13. Miscellaneous adjustments 14. Thermostat calibration and by-pass adjustment 15. Resetting of circuit breakers or safety controls or reset buttons 16. Replacement of bulbs 17. Replacement of fuses 18. Repair of damage created during transit, delivery, & installation OR created by acts of God |
|---|--|

PORTABLE EQUIPMENT

Star will not honor service bills that include travel time and mileage charges for servicing any products considered "Portable" including items listed below. These products should be taken to the Service Agency for repair:

- * The Model 510FD, 510FF Fryer.
- * The Model 526TOA Toaster Oven.
- * The Model J4R, 4 oz. Popcorn Machine.
- * The Model 518CMA & 526CMA Cheese Melter.
- * The Model 12MC & 15MC & 18MCP Hot Food Merchandisers.
- * The Model 12NCPW & 15NCPW Nacho Chip/Popcorn Warmer.
- * All Hot Dog Equipment **except Roller Grills & Drawer Bun Warmers.**
- * All Nacho Cheese Warmers **except Model 11WLA Series Nacho Cheese Warmer.**
- * All Condiment Dispensers **except the Model HPD & SPD Series Dispenser.**
- * All Specialty Food Warmers **except Model 130R, 11RW Series, and 11WSA Series.**
- * All QCS/RCS Series Toasters **except Model QCS3 & RCS3 Series.**
- * All Fast Steamer Models **except Direct Connect Series.**

ALL:

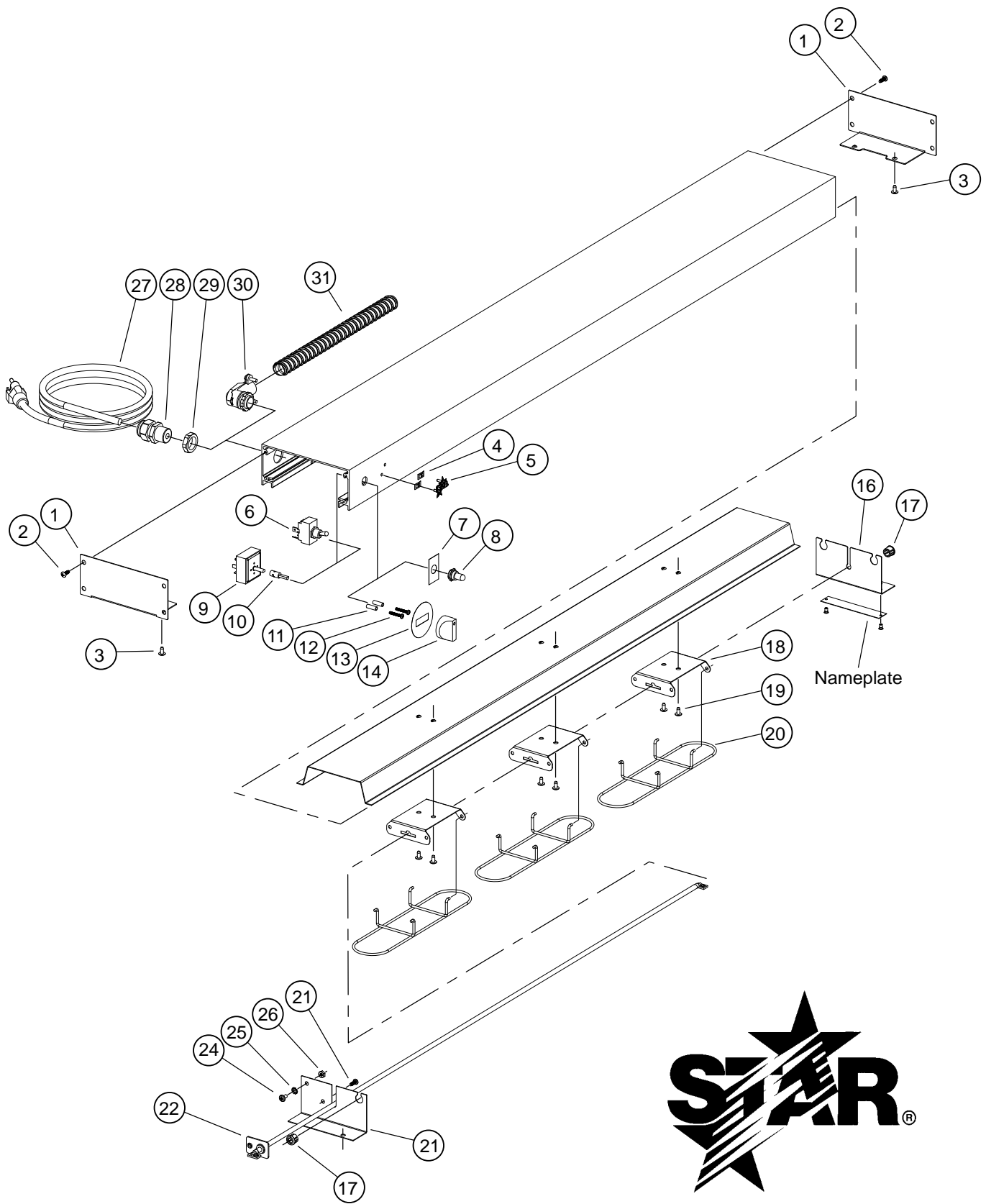
- * Pop-Up Toasters
- * Butter Dispensers
- * Pretzel Merchandisers
(Model 16PD-A Only)
- * Pastry Display Cabinets
- * Nacho Chip Merchandisers
- * Accessories of any kind
- * Sneeze Guards
- * Pizza Ovens
(Model PO12 Only)
- * Heat Lamps
- * Pumps-Manual

The foregoing warranty is in lieu of any and all other warranties expressed or implied and constitutes the entire warranty.

FOR ASSISTANCE

Should you need any assistance regarding the Operation or Maintenance of any Star equipment; write, phone, fax or email our Service Department. In all correspondence mention the Model number and the Serial number of your unit, and the voltage or type of gas you are using.

2M-Z16424; Strip-Heater



2M-Z16424; Strip-Heater



Model: Strip Heaters w/o Lights

SK2619 Rev. - 9/7/2012

Parts List

October 31, 2012

Model: SC18, SC24, SC30, SC36, SC42, SC48, SC60, SC72 Strip Heaters (non-lighted)				
Fig No	Part Number	Description	Quantity	Application
1	D5-Z15915	COVER, END, 6 WIDE	2	
2	2C-Z15735	SCR.8-32X1/2 F RHP STL NP	8	
3	2C-6349	SCREW #8X3/8 B THP STL NP	4	
4	2C-8477	CLIP .125 PO STL PHOS	2	
5	2M-Z15305	STAR LOGO, SMALL	1	
6	2E-Z16266	SWITCH,TOGGLE,DPST,150C	1	
7	2M-12-07-0038	LABEL ON & OFF	1	
8	2I-05-07-0013	BOOT SWITCH	1	
9	2J-Z14323	INFINITE CONTROL-120V	1	
10	2V-Z16288	EXTENSION, SHAFT	1	
11	2C-Z15947	SPACER, INFINITE CONTROL	2	
12	2C-Z16287	SCR. 4MMX0.7X25MM RHP SS	2	
13	2M-Z16531	LABEL,-DIAL	1	
14	2R-Z14443	KNOB-1.56" DIA X 1"	1	
16	D5-Z15917	PNL,EL MT,NON-BKHD,6 IN.	1	
17	2K-Z2895	BUSHING HEYCO OCB-500	2	
18	D5-Z16035	BRACKET, ELEMENT, COMMON	1	SC18, SC24
			2	SC30, SC36
			3	SC42, SC48
			4	SC60
			5	SC72
19	2C-6349	SCREW #8X3/8 B THP STL NP	2 per bracket	
20	2B-Z15628	ELEMENT GUARD,HEAT STRIP	1	SC18, SC24
			2	SC30, SC36
			3	SC42, SC48
			4	SC60
			5	SC72
21	D5-Z15916	PNL,EL MT,BULKHD SD,6 IN.	1	
22	2N-Z15554-24	EL.,STD,24",120V,375W	1	SC24
	2N-Z15554-30	EL.,STD,30",120V,475W		SC30
	2N-Z15554-36	EL.,STD,36",120V,600W		SC36
	2N-Z15554-48	EL.,STD,48",120V,825W		SC48
	2N-Z15554-60	EL.,STD,60",120V,1075W		SC60
	2N-Z15558-18	EL.,MED, 18",120V,375W		SC18M
	2N-Z15558-24	EL.,MED,24",120V,525W		SC24M
	2N-Z15558-30	EL.,MED,30",120V, 685W		SC30M
	2N-Z15558-36	EL.,MED,36",120V, 825W		SC36M
	2N-Z15558-42	EL.,MED,42",120V, 925W		SC42M
	2N-Z15558-48	EL.,MED,48",120V, 1125W		SC48M
	2N-Z15558-60	EL.,MED,60",120V, 1425W		SC60M
	2N-Z15558-72	EL.,HIGH,72",120V,1750W		SC72M
	2N-Z15559-24	EL,HIGH, 24" 120V, 675W		SC24H
	2N-Z15559-36	EL.,HIGH,36",120V, 1025W		SC36H
	2N-Z15559-48	EL.,HIGH,48",120V, 1325W		SC48H
	2N-Z15559-60	EL.,HIGH,60",120V, 1725W		SC60H
	2N-Z15561-24	EL.,MED,24",208V, 525W		SC24M-208V
	2N-Z15561-36	EL.,MED,36",208V, 825W		SC36M-208V
	2N-Z15561-48	EL.,MED,48",208V, 1125W		SC48M-208V
2N-Z15561-60	EL.,MED,60",208V,1425W	SC60M-208V		
2N-Z15561-72	EL.,MED,72",208V,1750W	SC72M-208V		
23	2C-Z15735	SCR.8-32X1/2 F RHP STL NP	1	
24	2C-200014	SCREW 8-32X3/8 THP SS	1	
25	2C-200176	WASHER #8 EXT SS	1	
26	2C-Z6758	NUT 8-32 HEX SS	1	

Model: SC18, SC24, SC30, SC36, SC42, SC48, SC60, SC72 Strip Heaters (non-lighted)

Fig No	Part Number	Description	Quantity	Application
27	2E-6272	CORD SET 14-3 SJTO 6-8	1	
28	2K-Z15730	CORDGRIP, LIQUID TIGHT, NYLON	1	
29	2C-Z15731	LOCKNUT, NYLON	1	
30	2K-34136X	FTG FLEX CON 90 X 1/2 MOD	1	
31	2E-Z15932	FLEX. CONDUIT,1/2 X 36 LG	1	
NI	D5-Z15790-24	INSULATION,6" WIDE, 24"	1	SC24
	D5-Z15790-30	INSULATION,6" WIDE, 30"		SC30
	D5-Z15790-18	INSULATION,6" WIDE, 18"		SC18
	D5-Z15790-36	INSULATION,6" WIDE, 36"		SC36
	D5-Z15790-48	INSULATION,6" WIDE, 48"		SC48
	D5-Z15790-60	INSULATION,6" WIDE, 60"		SC60
	D5-Z15790-72	INSULATION,6" WIDE, 72"		SC72