

# StarMax<sup>®</sup>

## ELECTRIC GRIDDLES

MODEL

515TGF, 524TGF,  
536TGF, 536TGF-PE, 548TGF

CHROME-MAX MODEL

524CHSF, 536CHSF, 548CHSF

### Installation and Operation Instructions

2M-Z16009 Rev. D 9/01/15



536TGF



ANSI/NSF 4

## 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.

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## 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](http://www.star-mfg.com)  
**E-mail:** [customerservice@star-mfg.com](mailto:customerservice@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:** [customerservice@star-mfg.com](mailto:customerservice@star-mfg.com)

**Website:** [www.star-mfg.com](http://www.star-mfg.com)

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



## 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.

## INSTALLATION

The griddles are equipped for the voltage indicated on the nameplate mounted under the bullnose on the front panel. They 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 this griddle. He should be familiar with electrical installations and all electric codes. Proper connections and power supply are essential for efficient performance. The external wiring should be in conduit or an approved type of flexible cable suitable for operation at the temperature indicated on the wiring diagram, and of a proper size to carry the load. The supply circuit should be properly fused and equipped with a means of disconnecting, as required by local electrical code. **THE BODY OF THE GRIDDLE SHOULD BE GROUNDED (DO NOT GROUND TO A GAS SUPPLY LINE).**

## GENERAL OPERATING PROCEDURES

The Chrome-Max and Star-Max series electric griddles may be wired for operation in the field for either 1-phase or 3-phase power supplies by making line connections at the junction box(es) located at the rear of the unit. Two junction boxes are provided on the 548TGF for making line connections. These may be connected in parallel to one 16KW 3-phase line or on two separate 8KW lines.

### CONNECTING POWER SUPPLY

Detach cover on junction box at rear of unit. There are pigtail leads for the supply connection in the junction box.

### LOCATING AND LEVELING THE UNIT

Do not install the unit closer than 1-inch from a side wall and/or closer than 1-inch from a rear wall. Level unit by adjusting the (4) feet which have an adjustment of 1-3/4" (43.75mm) for accurate leveling and perfect line-up with other Star-Max series units.

### EXHAUST CANOPY

Griddles inherently create a good deal of heat and smoke and should be installed under an efficient exhaust hood with flame proof filters. A vertical distance of not less than 48" shall be provided between the top of the appliance and filters or any other combustible material. Exhaust installation must conform to local codes.

**AIR SUPPLY:** Provisions for adequate air supply must be provided.

## **SEASONING THE GRIDDLE HEATING SURFACE (NON CHROMIUM SURFACE)**

Clean the griddle surface thoroughly. After the griddle has been thoroughly cleaned, it should be seasoned to prevent food from sticking. Before using and after each thorough scouring, season the griddle heating surface in the following manner.

1. Turn temperature control dials to 350°F (177°C).
2. Using a clean cloth, not a spatula, spread a thin film of cooking oil over the griddle cooking surface. This film should remain on the hot griddle surface for half an hour.
3. Remove the excess oil and wipe clean.
4. Apply another film of cooking oil over the hot cooking area for another half hour and again remove excess oil and wipe clean. The griddle surface should now be ready for use.

Even with careful seasoning, food may, to some extent, stick to the griddle cooking surface until the griddle plate is broken in.

## **TEMPERATURE CONTROL**

The temperature controls are combination “ON/OFF” switches and thermostats. Turning the dial knob automatically maintains the selected heat range.

The Star-Max/Chrome-Max electric griddle line has one thermostat for every 12” (30cm) section of griddle that operates independently of one another. Each thermostat controls the section of the griddle above it and may be set at different temperatures as desired.

## **COOKING**

Set the thermostat dial knob at the temperature desired. After a short pre-heating period, the thermostat will automatically maintain the selected temperature.

## **IDLING**

During idle periods, to save on operating costs, lower the temperature setting of the thermostat to about 250°F (121°C). It is not necessary to maintain cooking temperature during idle periods, as the griddle can quickly be reheated to the desired temperature.

## **SIGNAL LIGHTS**

Each thermostat has its own signal light which indicates when the unit’s control knob is not in the off position.

## **GRIDDLE CARE (NON-CHROMIUM SURFACES)**

It takes very little time and effort to keep the griddle attractive and performing at top efficiency. If grease is permitted to accumulate, it will form a gummy cake and then carbonize into a hard substance which is extremely difficult to remove. To prevent this condition, the following suggestions for cleanliness should be followed:

1. After each use, scrape the griddle with a scraper or flexible spatula to remove excess grease and food. A waste drawer is provided for the scrapings. If there is an accumulation of burned on grease and food, the griddle should be thoroughly scoured and reseasoned. Use pumice or griddle stone while the griddle is warm. Do not use steel wool because of the danger of steel slivers getting into the food.
2. Daily, use a clean cloth and a good non-abrasive cleaner to clean the stainless steel body of the griddle. Wipe the polished front with a soft cloth.
3. At least once a day, remove the waste drawer and wash in the same way as an ordinary cooking utensil. The drawers are removed by pulling forward until they are released from their track.

## GRIDDLE CARE (CHROMIUM SURFACES)

It takes very little time and effort to keep this Industrial Chromium griddle surface sparkling clean and performing at top efficiency. **DO NOT** allow grease to accumulate as it will carbonize and become difficult to remove. To prevent this condition the following cleaning suggestions should be followed:

1. Remove excess grease and food regularly with a 4" (100mm) wide Razor Sharp type scraper and wipe surface with a damp cloth if desired.
2. Following the scraping, for end of the day cleaning, a damp cloth and a non-silicated, non-abrasive, non-chlorinated cleaner such as Bon-Ami may be used to wipe surface clean, followed by wiping with a clean wet cloth.
3. Follow steps 2 and 3 from Griddle Care (Non-Chromium Surfaces) above.



**CAUTION**

1. **Never** use pumice, griddle stones, or abrasives on a chromium surface.
2. **Never** strike a chromium griddle surface with a sharp instrument or spatula edge.
3. **Never** use steel wool.
4. **Never** use commercial liquid grill cleaner on the griddle surface.
5. **Abusing** surface voids the warranty.

## MAINTENANCE AND REPAIRS

Contact the factory, a service representative, or a local service company for service or required maintenance.

## CHROME-MAX GRIDDLE SURFACE LIMITED WARRANTY EXCLUSIONS

Your Chrome-Max griddle has been designed to give you many years of cooking reliability and requires minimum maintenance to keep the chrome surface in its original condition. All Chrome-Max griddle surfaces are warranted for a period of 5 years against manufacturing defects to the original owner from the date of installation. This limited warranty is void if it is determined by Star Manufacturing International Incorporated or one of its authorized representatives that the chrome surface has been misused or abused or subjected to the following situations:

1. Improperly installed.
2. Incorrect voltage applied to electric Chrome-Max units allowing the surface to overheat and discolor.
3. The misuse of any instrument or tool which scratches or makes indentations in the surface which could cause the surface to peel, flake, or chip off.
4. The use of any chemical or abrasive cleaning solution, griddle brick, stone, screen or other cleaning products which could damage and affect the performance of the chrome surface.
5. The neglect of daily routine maintenance to the chromium surface.

### 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 Dura-Tec coatings is one year under normal use and reasonable care. This warranty does not apply if damage occurs to 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

1. Travel time and mileage rendered beyond the 50 mile radius limit
2. Mileage and travel time on portable equipment (*see below*)
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
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.**

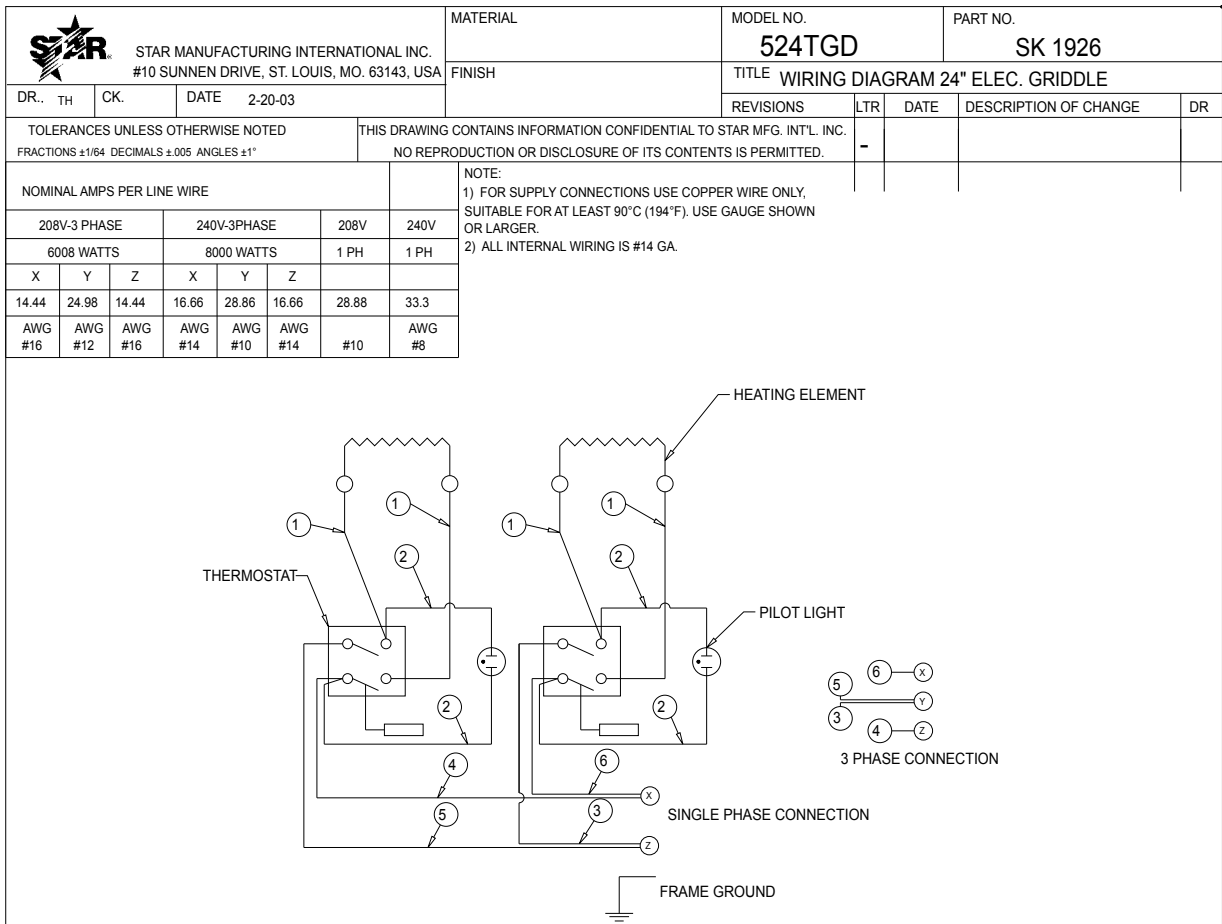
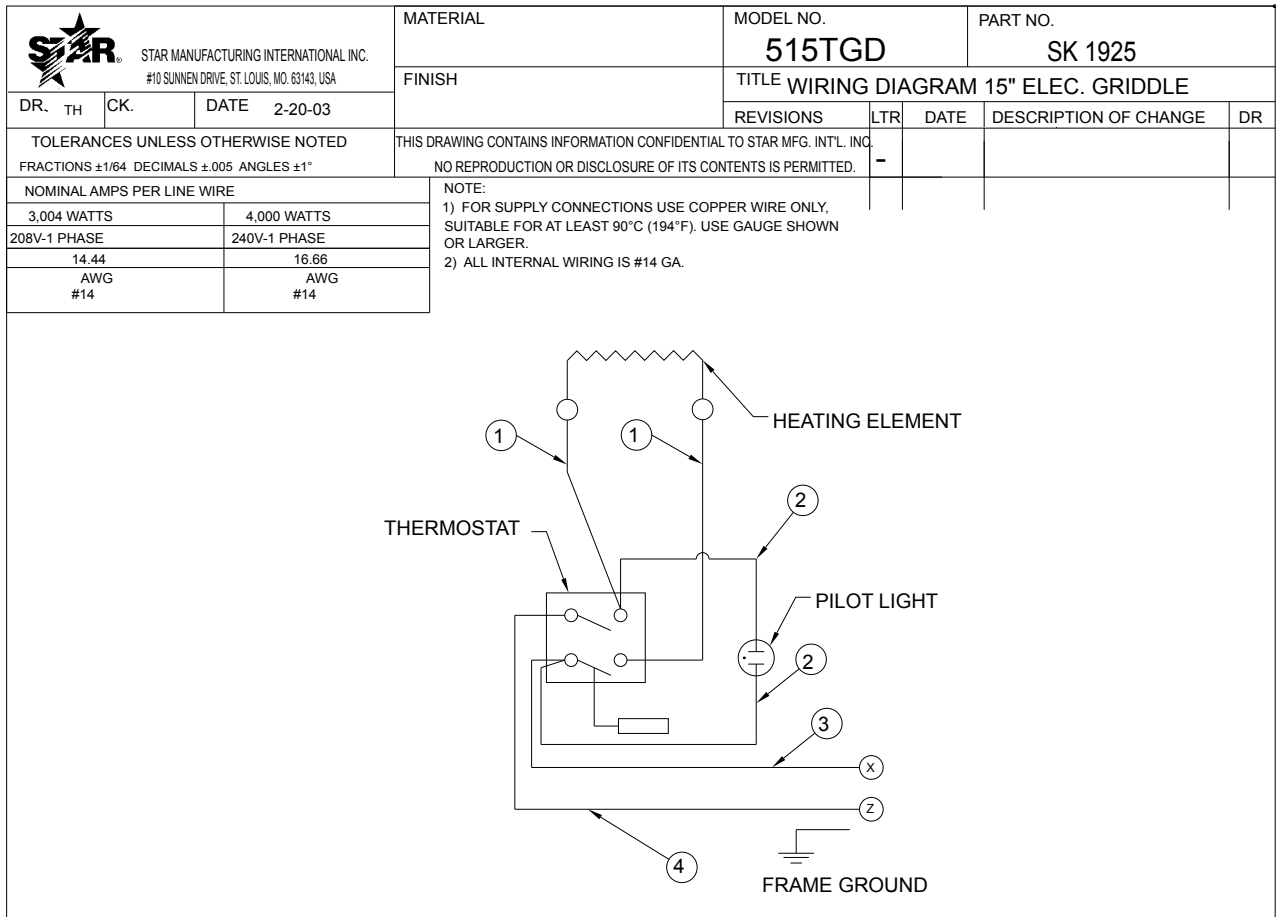
### ALL:

- \* 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

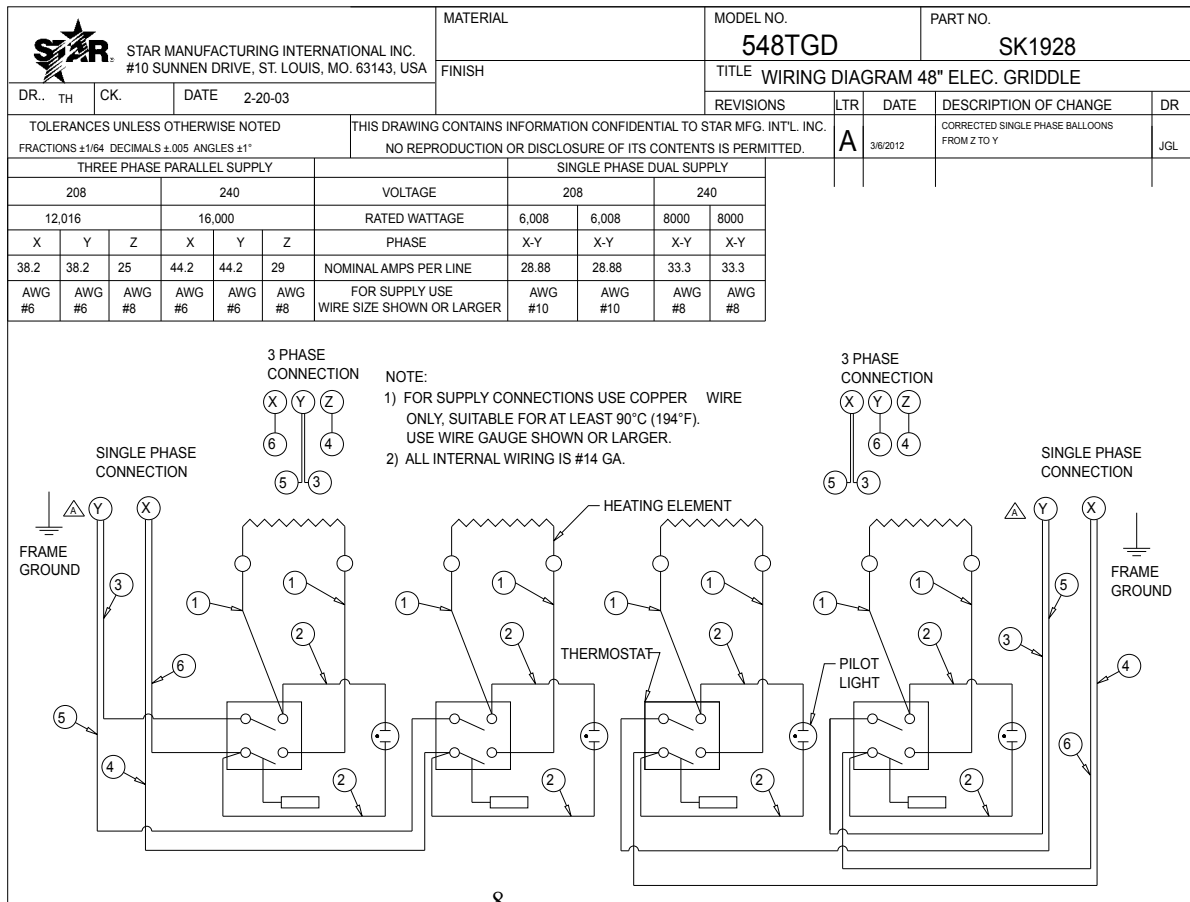
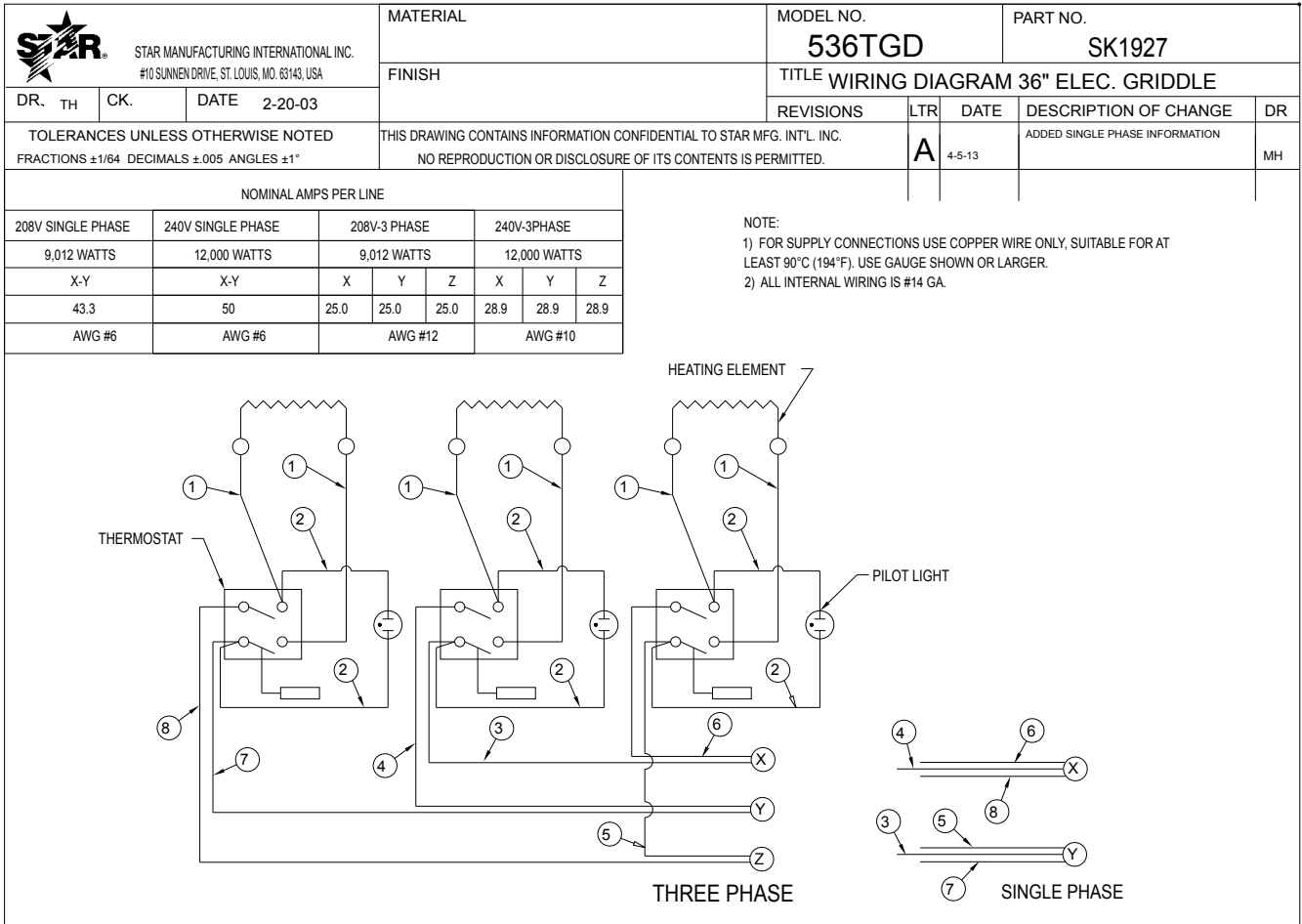
The foregoing warranty is in lieu of any and all other warranties expressed or implied and constitutes the entire warranty.

### 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.

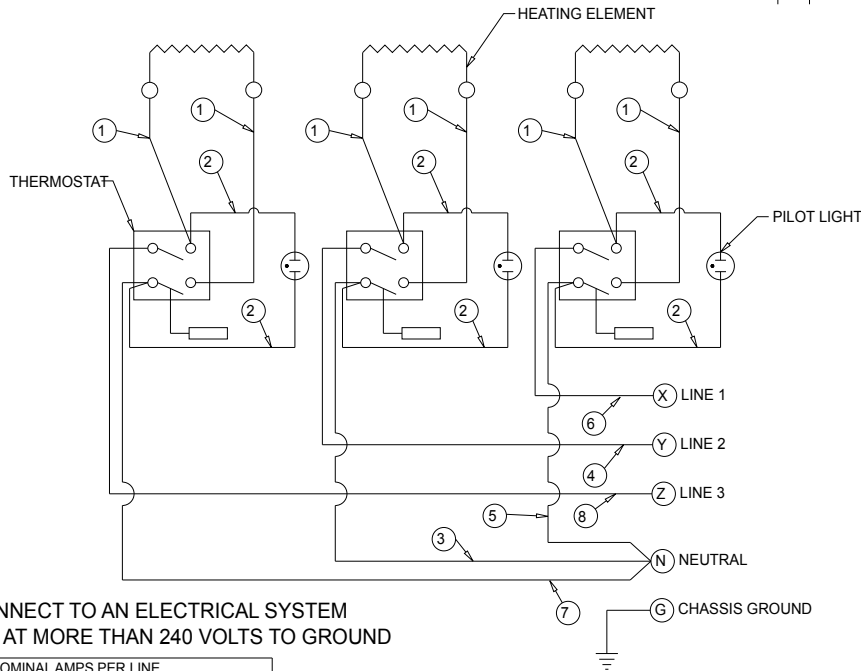


2M-Z16009 Star-Max Electric Griddle






 <b>STAR MANUFACTURING INTERNATIONAL INC.</b> #10 SUNNEN DRIVE, ST. LOUIS, MO. 63143, USA			MATERIAL	MODEL NO.	PART NO.
			FINISH	536TGD 220/230V	SK2204
DR.	TH	CK.	DATE	TITLE	
			6-9-06	WIRING DIAGRAM 3 PHASE 5 WIRE	
TOLERANCES UNLESS OTHERWISE NOTED			THIS DRAWING CONTAINS INFORMATION CONFIDENTIAL TO STAR MFG. INT'L. INC.		
FRACTIONS ±1/64 DECIMALS ±.005 ANGLES ±1°			NO REPRODUCTION OR DISCLOSURE OF ITS CONTENTS IS PERMITTED.		
REVISIONS		LTR	DATE	DESCRIPTION OF CHANGE	DR
		-			



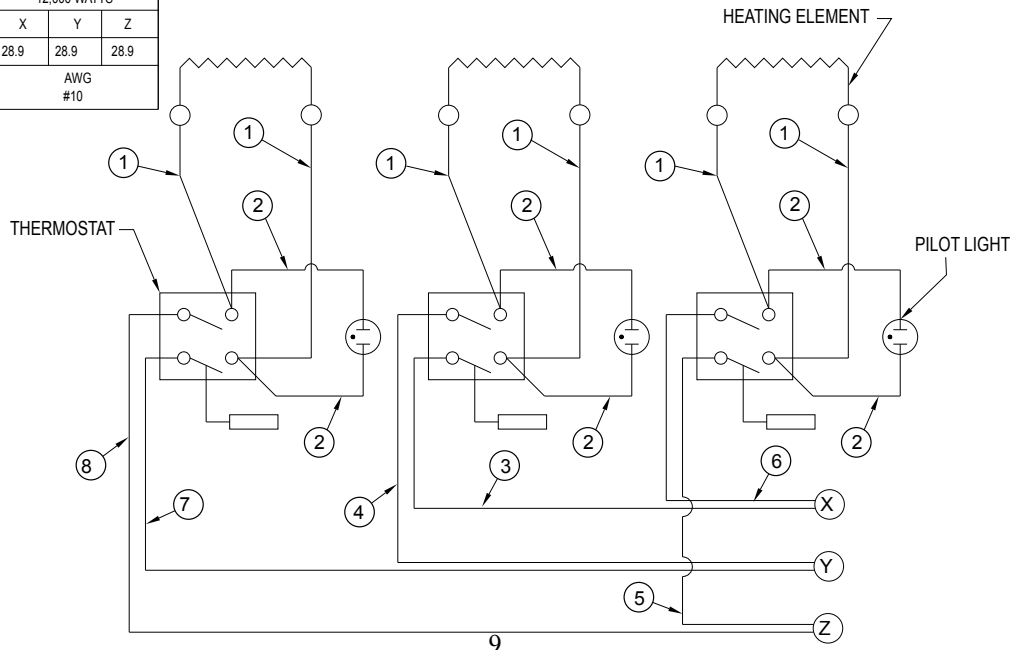
NOMINAL AMPS PER LINE							
220/380V Y				230/400V Y			
10083 WATTS				11020 WATTS			
X	Y	Z	N	X	Y	Z	N
15.3	15.3	15.3	15.3	16	16	16	16

FOR SUPPLY CONNECTIONS USE COPPER WIRE ONLY, SUITABLE FOR AT LEAST 90°C (194°F). #10 AWG OR LARGER.

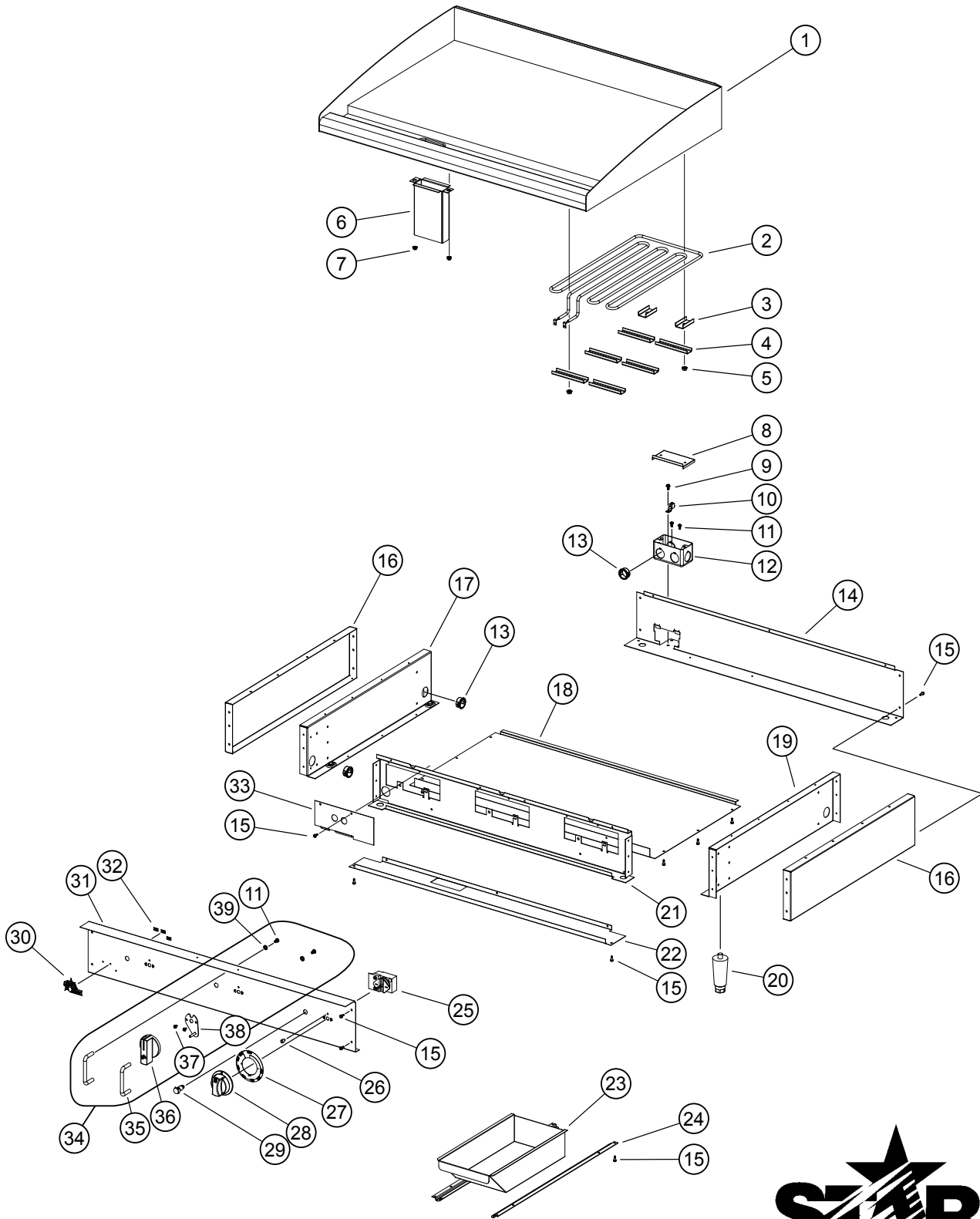
 <b>STAR MANUFACTURING INTERNATIONAL INC.</b> #10 SUNNEN DRIVE, ST. LOUIS, MO. 63143, USA			MATERIAL	MODEL NO.	PART NO.
			FINISH	536TGF-PE	SK2624
DR.	MH	CK.	DATE	TITLE	
			10-23-12	WIRING DIAGRAM 536TGF-PE	
TOLERANCES UNLESS OTHERWISE NOTED			THIS DRAWING CONTAINS INFORMATION CONFIDENTIAL TO STAR MFG. INT'L. INC.		
FRACTIONS ±1/64 DECIMALS ±.005 ANGLES ±1°			NO REPRODUCTION OR DISCLOSURE OF ITS CONTENTS IS PERMITTED.		
REVISIONS		LTR	DATE	DESCRIPTION OF CHANGE	DR
		-			

NOMINAL AMPS PER LINE					
208V-3 PHASE			240V-3PHASE		
9,012 WATTS			12,000 WATTS		
X	Y	Z	X	Y	Z
25.0	25.0	25.0	28.9	28.9	28.9
AWG #12			AWG #10		

NOTE:  
 1) FOR SUPPLY CONNECTIONS USE COPPER WIRE ONLY, SUITABLE FOR AT LEAST 90°C (194°F). USE GAUGE SHOWN OR LARGER.  
 2) ALL INTERNAL WIRING IS #14 GA.



2M-Z16009 Star-Max Electric Griddle



SOME ITEMS ARE INCLUDED FOR  
ILLUSTRATIVE PURPOSES ONLY AND IN  
CERTAIN INSTANCES MAY NOT BE AVAILABLE

**MODEL - 524TGF, 524CHSF**



**STAR MANUFACTURING INTERNATIONAL, INC.**

SK2597

REV. B

9/01/15

2M-Z16009 Star-Max Electric Griddle

# PARTS LIST

September 1, 2015, Rev. D

Model: 515TGD, 524TGF, 536TGF and 548TGF Star-Max/Chrome-Max Electric Griddles				
Fig No	Part No.	Qty	Description	Application
1	G3-515311	1	GRIDDLE PLATE STUDDED	515TGF
	G3-524313		GRIDDLE PLATE STUDDED	524CHSF
	G3-524314		GRIDDLE PLATE STUDDED	524TGF
	G3-524315		DIVIDED PLATE ASSEMBLY	524TGF-DIV
	G3-536313		GRIDDLE PLATE STUDDED	536TGF
	G3-536315		GRIDDLE PLATE ASSY 536DIV	536TGF-DIV
	G3-536316		GRIDDLE PLATE ASSY WELDED	536TGF-PE
	G3-536314		GRIDDLE PLATE STUDDED	536CHSF
	G3-548312		GRIDDLE PLATE STUDDED	548TGF
	G3-548313		GRIDDLE PLATE STUDDED	548CHSF
2	2N-Z5948	1/2/3/4	HEATING ELEMENT	
3	G3-Z5973	2/4/6/8	ELEMENT CLAMP SHORT	
4	G3-Z16135	6/12/18/24	HEATER ELEMENT CLAMP SM	
5	2C-6517	8/16/24/32	NUT 1/4-20 HEX STL NP	
6	G3-615304	1	CHUTE ASSEMBLY	515
	G3-624304			524 / 536 / 548
7	2C-Z2893	4	NUT 10-24 HEX STL	
8	G3-Y7788	1	BOX COVER	515 / 524 / 536
		2		548
	H1-Z9843	1	CONNECTION BOX COVER	536TGF-230V
	G3-Z19326	1	COVER - CONNECTION BOX	536TGF-PE
9	2C-Y2295	1 / 2	SCREW 10X3/8 STL HEX GREEN	515, 524, 536 / 548
10	2C-Y2344	1	GROUND LUG	515 / 524 / 536
		2		548
11	2C-1512	2 / 4	SCREW 10-24X3/8 RHP STL	515, 524, 536 / 548
		14		536TGF-PE
12	2E-Y7327	1	ELECTRICAL BOX	515 / 524 / 536
		2		548
	H1-Z9842	1	SUPPLY CONNECTION BOX	536TGF-230V
	G3-Z19325	1	BOX - SUPPLY CONNECTION	536TGF-PE
13	2K-Z6183	3	BUSHING	515 / 524 / 536
		6		548
14	G3-Z5950	1	REAR PANEL	515
	G3-Z5952			524
	G3-Z5954			536
	G3-Z5956			548
	G3-Z9848			536TGF-230V
	G3-Z19324		REAR PANEL 536TGF-PE	536TGF-PE
15	2C-8833	Various	SCREW 8-18X1/2 HEX STL NP	ALL
16	G3-Z5945	2	SIDE PANEL	ALL
17	G3-624302	1	SIDE LINER ASSEMBLY LEFT	ALL
18	G3-Z5993	1	BOTTOM PANEL	515
	G3-Z5994			524
	G3-Z5995			536
	G3-Z5996			548

2M-Z16009 Star-Max Electric Griddle

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
INCLUDE MODEL AND SERIAL NUMBER**

**PAGE 1  
OF 2**

Some items are included for illustrative purposes only and in certain instances may not be available.



**Star Manufacturing International, Inc.**

# PARTS LIST

September 1, 2015, Rev. D

Model: 515TGD, 524TGF, 536TGF and 548TGF Star-Max/Chrome-Max Electric Griddles					
Fig No	Part No.	Qty	Description	Application	
19	G3-624303	1	SIDE LINER ASSEMBLY RIGHT	ALL	
20	2A-Z5942	4	FOOT	ALL	
21	G3-Z5905	1	CENTER WALL	515	
	G3-Z5915			524	
	G3-Z5925			536	
	G3-Z5935			548	
22	G3-Z5997	1	FRONT BOTTOM PANEL	515	
	G3-Z5998			524	
	G3-Z5999			536	
	G3-Z6001			548	
23	G3-Y7046	1	GREASE DRAWER	ALL	
24	G3-Z6036	2	DRAWER SLIDE	ALL	
25	2T-Z5958	1/2/3/4	THERMOSTAT	ALL	
26	2C-Z8547	AR	BOLT, KNOB STOP	ALL	
27	2M-Z15451	1/2/3/4	LABEL ELECT T-STAT LG	515 / 524 / 536 / 548	
	2M-Z18125	3	LABEL - KNOB	536TGF-PE	
28	G3-624329	1/2/3/4	KNOB ASSY LG E-T KEYR	515 / 524 / 536 / 548	
29	2J-Y6690	1/2/3/4	PILOT LIGHT	515 / 524 / 536 / 548	
30	2M-Z15804	1	STAR-MAX LOGO	ALL	
31	G3-Z15793	1	FRONT PANEL	515	
	G3-Z15794			524	
	G3-Z15795			536	
	G3-Z15709			FRONT PANEL 5136	536TGF-230V
	G3-Z19764			FRONT PANEL w/KNOB GUARD HOLES	536TGF-PE
	G3-Z15796			FRONT PANEL	548
32	2C-8477	3	CLIP .125 PO STL PHOS	ALL	
33	G3-Z5947	1/2/3/4	COVER	515 / 524 / 536 / 548	
34	PS-524318		KNOB GUARD KIT	OPTIONAL ACCESSORY	
35	2A-Z13272	6	KNOB GUARD	536TGF-PE	
36	2R-Z8892	3	KNOB, THERM. ELEC. S-MAX, PLASTIC	536TGF-PE	
37	2C-200067	6	SCREW 6-32X1/4 THP SS	536TGF-PE	
38	G3-Z19058	3	KNOB STOP BRACKET	536TGF-PE	
39	2C-200177	12	WASHER #10 EXT STL ZP	536TGF-PE	
NI	2E-Z5969	1	WIRE SET	515	
NI	2E-Z5970	1/2	WIRE SET	524 / 548	
NI	2E-Z5971	1	WIRE SET	536	
NI	2E-Z19258	1	CORD SET 8/4 50 AMP LOCK	536TGF-PE	

## STAR INTERNATIONAL HOLDINGS INC. COMPANY

Star - Holman - Lang - Wells - Bloomfield - Toastmaster

10 Sunnen Drive, St. Louis, MO 63143 U.S.A.

(314) 678-6303

www.star-mfg.com