



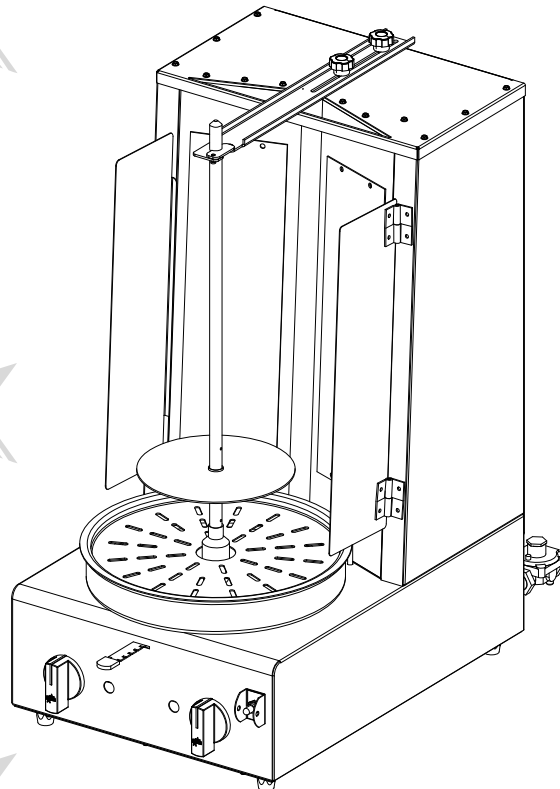
# VERTICAL BROILER

ELECTRIC: VBE30

GAS: VBG30

## Installation and Operation Instructions

2M-Z13927 Rev. B 2/27/14



VBG30

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

**WARNING:** This appliance shall be installed in accordance with current regulations and used only in well-ventilated space. Refer to instructions before installing and using this appliance.

**FOR YOUR SAFETY:** Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

In addition, there should be posted, in a prominent location, detailed instructions to be followed in the event the operator smells gas. Obtain the instructions from the local gas supplier.

Retain this manual for future reference.

## 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

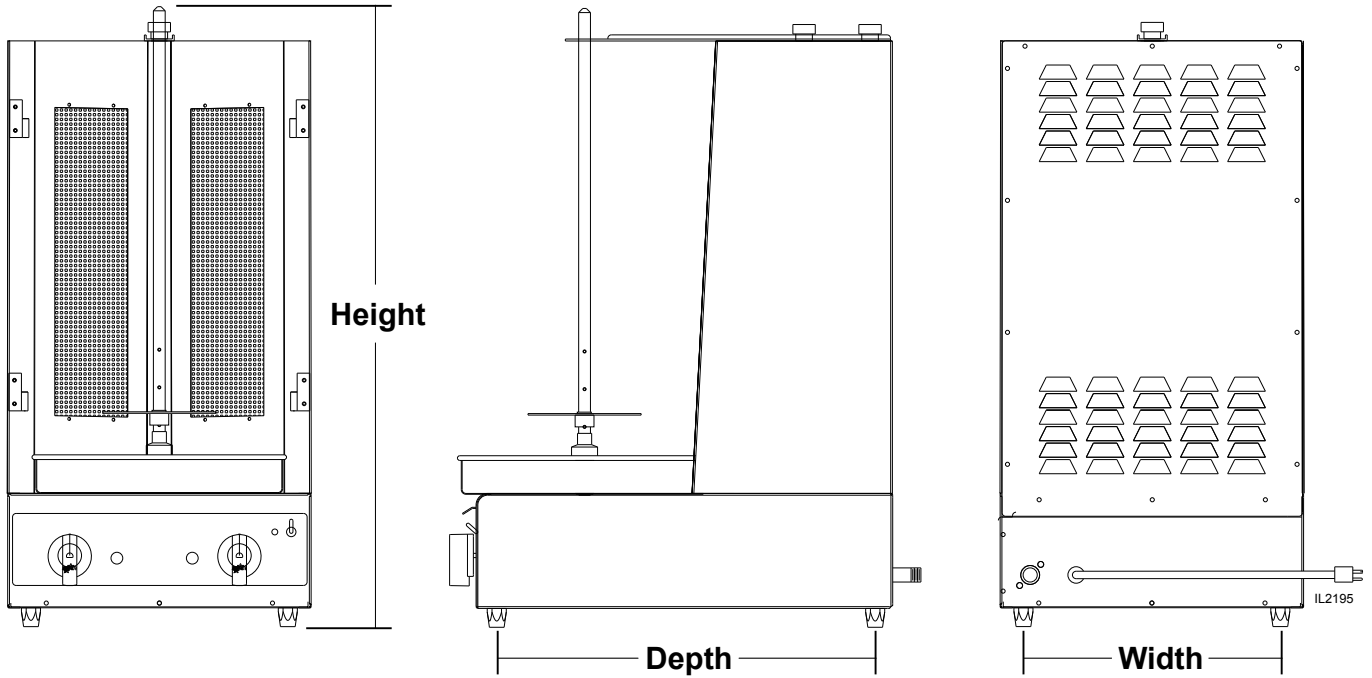
**Fax:** (314) 781-2714

**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

# SPECIFICATIONS



SPECIFICATIONS											
Model No	Width (cm)	Depth (cm)	Height (cm)	Voltage	Gas Type	Total Input BTU's	KW Total	Amps	Plug Type	Aproximate Weight	
										Shipping	Installed
VBE30	16.08"	24.97"	32"	208V	-	-	4.5	21.6	NEMA 6-30P	60	70
				230V	-	-	4.2	18.2			
				240V	-	-	4.5	18.8	NEMA 6-30P		
VBG30	(40.79)	(63.42)	(81.28)	120V	NAT	30,000	-	0.4	NEMA 5-15P		
					LP		-	0.4			

## GENERAL INSTALLATION DATA



### CAUTION

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.

The Star series gas vertical broiler is equipped for the type of gas indicated on the nameplate mounted on the unit. All gas units are shipped from the factory for use with natural gas.

### **-IMPORTANT-**

**Be sure to remove all paper protection and packing material from unit prior to lighting.**

**This appliance should be installed in a non-combustible location only.**

**The installation of the Appliance must conform to the NATIONAL FUEL GAS CODE "ANSI Z223.1 - LATEST EDITION" AND ALL LOCAL GAS COMPANY RULES AND REGULATIONS.**

**IN CANADA INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT CAN/CGA-B149.1 NATURAL GAS INSTALLATION CODE OR CAN/CGA-B149.2 PROPANE INSTALLATION CODE AND LOCAL CODES WHERE APPLICABLE.**

### **NOTICE**

**For your protection, we recommend a qualified installing agency install this appliance. They should be familiar with gas installations and your local gas requirements. In any case, your gas company should be called to approve the final installation.**

This appliance, its pressure regulator and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 PSIG. This appliance and its pressure regulator must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG.

### **EXHAUST CANOPY**

Open broilers 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.

## INSTALLATION INSTRUCTIONS

### 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.

### ASSEMBLY AND INSTALLATION

The unit was shipped fully assembled and ready to plug into a standard outlet specified for its voltage and amp draw. If improper electrical supply is determined, contact a qualified electrician prior to using the unit. Removal and replacement of the power cord and plug will void the warranty. For assistance, contact your local authorized service agent for service or required maintenance.

Place unit on a level surface.

This broiler can be very hot during operation. Use care when carving the meat during use.

Allow enough space around the unit for adequate ventilation. Read all labels on the unit and follow their instructions.

### VENTILATION & CLEARANCES

Local codes prevail. These are the “authority having jurisdiction” as stated by the National Fire Protection Association, Inc. in NFPA 96-Latest Edition. For further ventilation information see below.

A ventilation hood should be used to remove heat and cooking odors. The hood and HVAC installation must meet local codes to gain approval by the authority having jurisdiction. Requirements may vary throughout the country depending on the location by city, county, and state. Obtain information from the authority having jurisdiction to determine the requirements for your installation. Obtain information and review copies of codes or documents that will be used to inspect and approve your installation. Your ventilation hood supplier and HVAC contractor should be contacted to provide guidance.

CLEARANCES		
	Combustible Construction	Non-Combustible Construction
Floor	0"	0"
Sides	12"	
Back	3"	

### ELECTRIC MODEL

The broilers are equipped for the voltage indicated on the nameplate mounted on the unit. They will operate on alternating current (AC) only. Before making any electrical connection to this unit, check that the power supply is adequate for the voltage, amperage and requirements stated on the nameplate.

Disconnect the unit from the power source before installing or removing any parts. Be absolutely sure that the ground connection for the receptacle is properly wired. Do not connect equipment to power without proper ground connections. Improper grounding may result in personal injury or fatality.



**WARNING**

Before making any electrical connection be sure to read the data plate located on the unit.



**WARNING**

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

## **INSTALLATION INSTRUCTIONS continued**

### **GAS MODEL**

Check unit nameplate for correct gas supply to the appliance. Be sure to remove all paper protection and packing material from the unit prior to lighting. Provide adequate air supply and ventilation to the appliance.

A manual shut-off valve (not supplied) should be installed upstream from the unit & within 6 ft of the appliance.

### **-IMPORTANT-**

**The installation of the Appliance should conform to the NATIONAL FUEL GAS CODE "ANSI Z223.1 - LATEST EDITION" AND ALL LOCAL GAS COMPANY RULES AND REGULATIONS.**

**IN CANADA INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT CAN/CGA-B149.1 NATURAL GAS INSTALLATION CODE OR CAN/CGA-B149.2 PROPANE INSTALLATION CODE AND LOCAL CODES WHERE APPLICABLE.**

For your protection, we recommend a qualified installing agency install this appliance. They should be familiar with gas installations and your local gas requirements. In any case, your gas company should be called to approve the final installation.

This appliance, its pressure regulator and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of ½ PSIG. This appliance and its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressure equal to or less than ½ PSIG.

### **AIR SUPPLY**

Provisions for adequate air supply must be furnished.

### **AIR INTAKES IN BOTTOM**

Make certain the air intake openings in the bottom & back of the appliance are not obstructed. They are essential for proper combustion and operation of the appliance.

### **EXHAUST CANOPY**

It is essential that facilities be provided to carry off fumes and gases.

### **CHECKING FOR GAS LEAKS**

Before lighting, check all joints in the gas supply line for leaks. **DO NOT USE OPEN FLAME TO CHECK FOR LEAKS.** Use soap and water solution.

### **LIGHTING AND SHUT DOWN**

1. Turn all valves to "OFF" position
2. Wait 5 minutes
3. Turn pilot lighting valve adjustment screw counter clockwise ¼ turn and then light standing pilot, and adjust flame height to 1/4" inch
4. Turn "ON" gas valves to light main burner
5. For complete shut down, shut off gas valves and then turn down pilot valve adjusting screw to shut off pilot gas.

## **INSTALLATION INSTRUCTIONS continued**

### **BURNER OPERATION**

Each burner is controlled by an individual high-low, on-off valve. A variety of broiling temperatures may be obtained by turning the burner valve knob to any position between ON and LO. It is possible through this arrangement to have a high heat or searing section, while having a low heat finishing or holding section. For the searing operation, turn the valve counter clockwise for the section to a position of "ON" or close to it. For holding or finishing, turn the valves closer to the "LO" position on the dial. You select the heat pattern you like, and set the valves accordingly. Be sure burners are staying fully lit when set in low positions.

### **CLEANING**

An oven type cleaner can be used to clean all stainless steel surfaces. DO NOT spray cleaner into burners. Cover burners with foil to protect them while cleaning, being certain to remove the foil when finished.

Be sure to clean the unit daily after each use.



**WARNING**

**DO NOT USE STEEL WOOL OR ABRASIVE CLEANERS TO CLEAN THE STAINLESS STEEL SURFACES.**

Visit our Website at: [www.star-mfg.com](http://www.star-mfg.com)

Email: [customerservice@star-mfg.com](mailto:customerservice@star-mfg.com)

### 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.

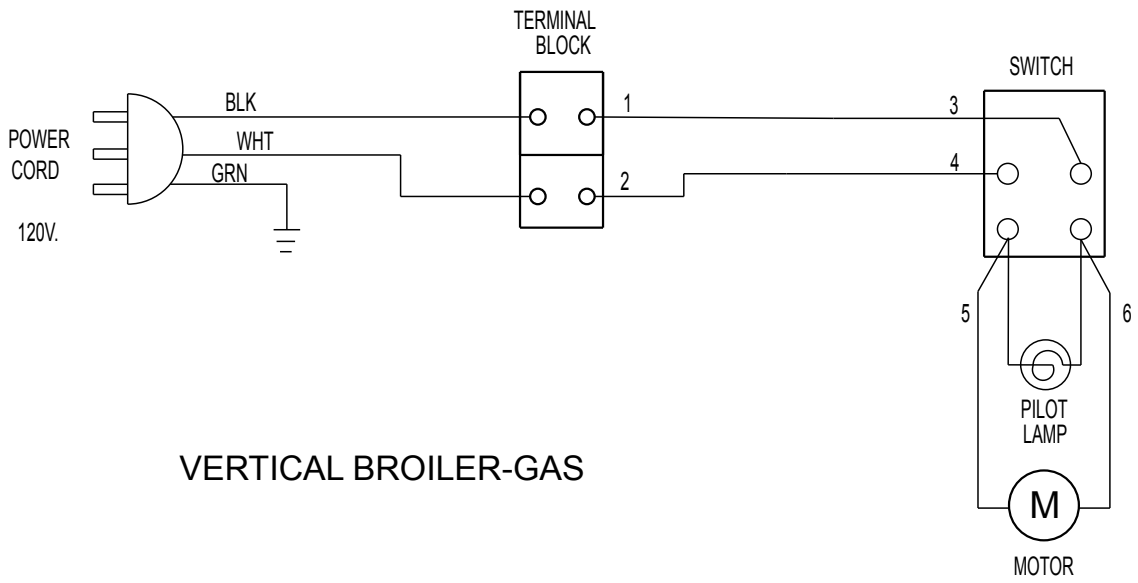
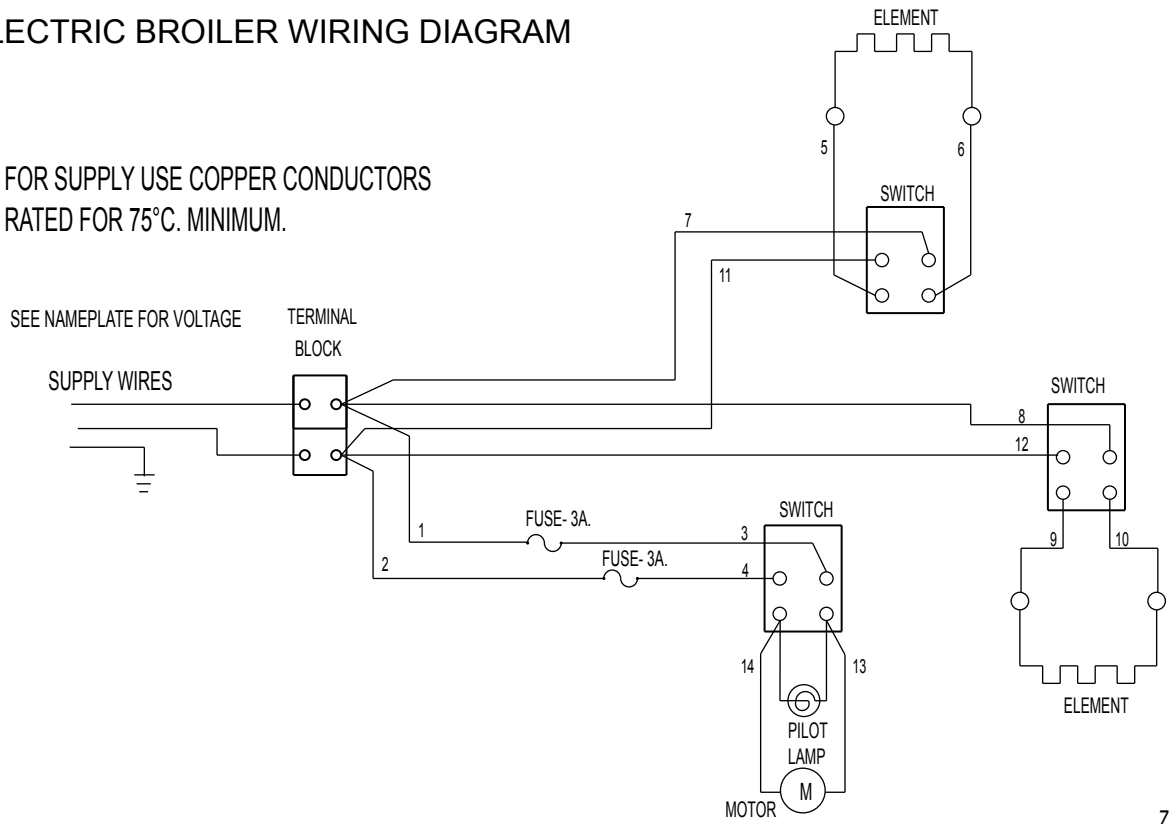
### FOR ASSISTANCE

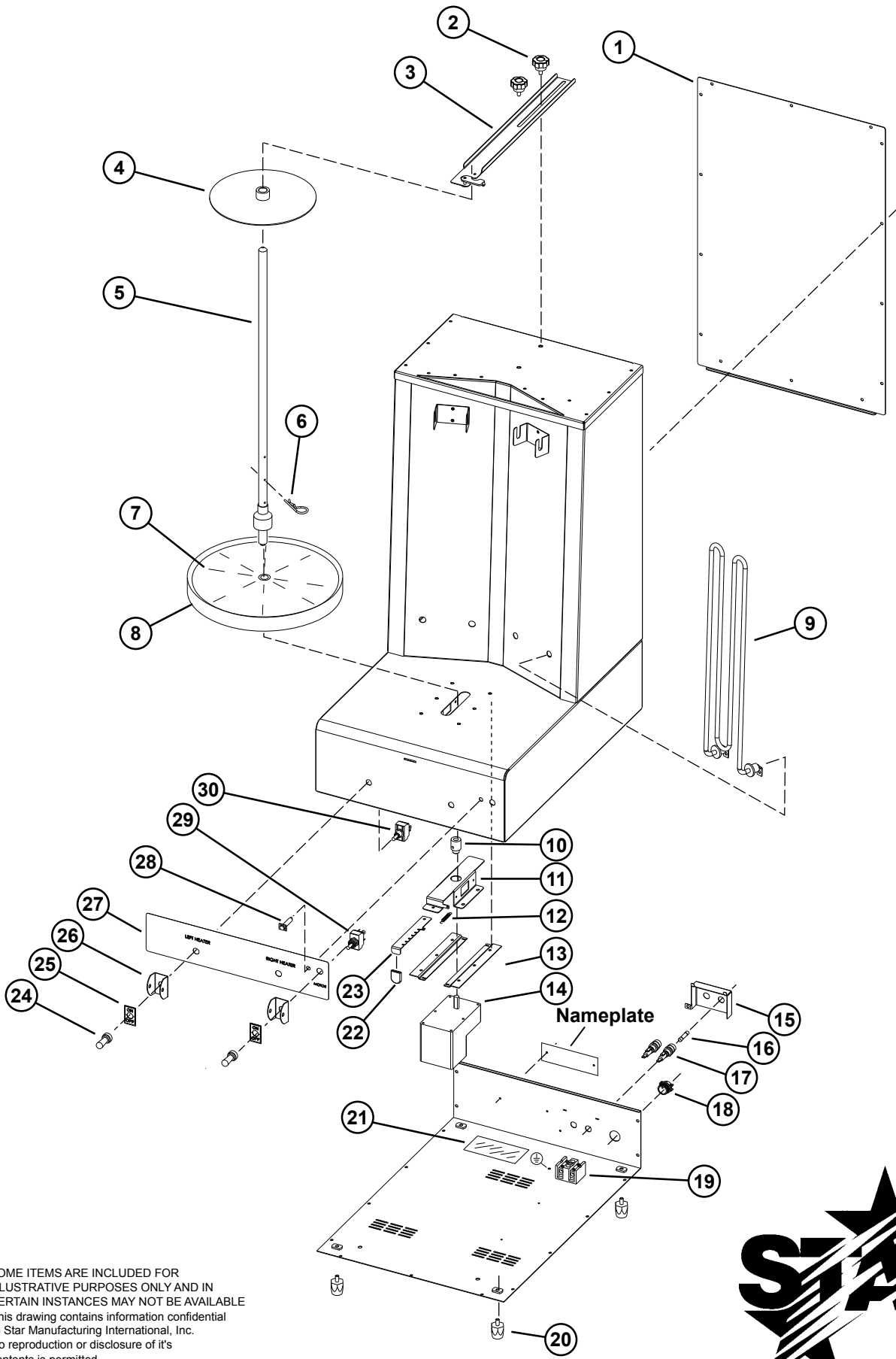
Should you need any assistance regarding the Operation or Maintenance of any Star equipment; write, phone, fax or email our Service Department. In all correspondence mention the Model number and the Serial number of your unit, and the voltage or type of gas you are using.



# ELECTRIC BROILER WIRING DIAGRAM

FOR SUPPLY USE COPPER CONDUCTORS  
RATED FOR 75°C. MINIMUM.





SOME ITEMS ARE INCLUDED FOR ILLUSTRATIVE PURPOSES ONLY AND IN CERTAIN INSTANCES MAY NOT BE AVAILABLE  
 This drawing contains information confidential to Star Manufacturing International, Inc.  
 No reproduction or disclosure of its contents is permitted.



# PARTS LIST

February 27, 2014, Rev B

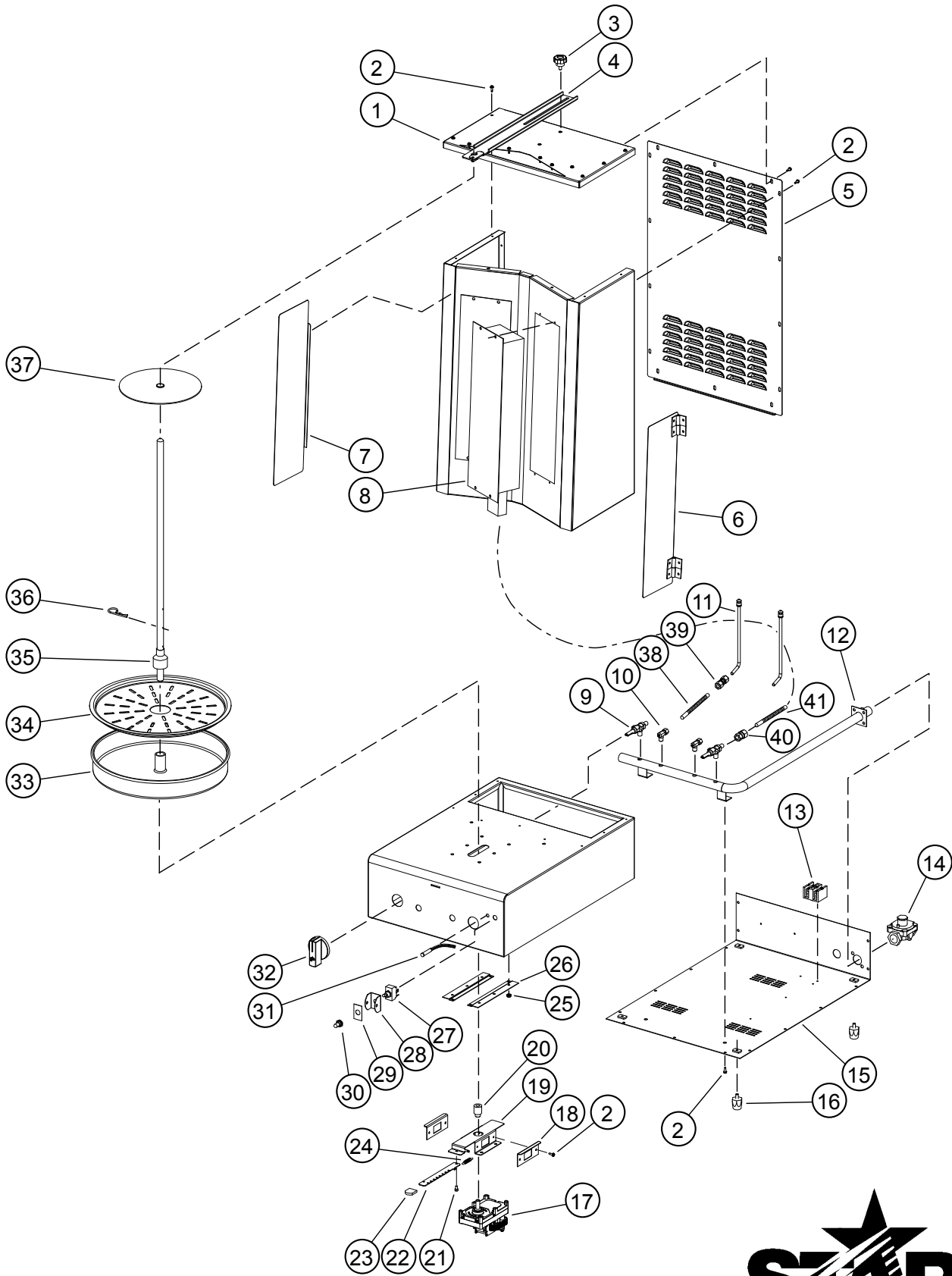
VERTICAL ELECTRIC BROILER - VBE30				
Fig No	Part Number	Description	Qty	Application
1	K8-Z13909	BACK PANEL	1	
2	2R-Z9686	KNOB, DAVIES 2860AP 1/4-20	2	
3	K8-VB0002	V.B. TOP ROD HOLDER BRKT	1	
4	K8-VB0012	V.B. MEAT SUPPRT PLATE	1	
5	2V-VB0006	V.B. MEAT ROD ASSY.	1	
6	2C-Z13914	HAIRPIN COTTER PIN	1	
7	2D-Z13935	DRIP PAN TOP	1	
8	2V-VB0001	V.B. GREASE PAN-COLLAR	1	
9	2N-Z13882	HEATER ELEMENT - 208V	2	VBE30-208V
	2N-Z13883	HEATER ELEMENT - 240V		VBE30-240V, VBE30-230V
10	2A-Z13899	DRIVE COLLAR-MOTOR	1	
11	K8-Z13908	MOTOR SUPPORT BRACKET	1	
12	2P-Z13918	RETURN SPRING	1	
13	K8-Z13912	SLIDE SUPPORT BRACKET	2	
14	2U-Z13886	MOTOR - 208/240V	1	
16	2E-30900-15	FUSE 3 AMP AGC	2	
17	2E-30901-02	FUS HLDR FOR 15AMP FUSE	2	
18	2E-31200-01	BOX CONNECTOR 3/8"	1	
19	2E-30500-08	TRM BLOCK 2 POLE SMALL 95	1	
20	2A-Z11501	FOOT 1" SOLID RUBBER	4	
21	2M-Z13920	WIRING DIAGRAM-ELECTRIC	1	
22	2I-Z14377	END CAP-FLAT GRIP 3/4"	1	
23	K8-Z13910	MOTOR PULL BAR	1	
24	2I-05-07-0013	BOOT SWITCH	3	
25	2M-12-07-0038	LABEL ON & OFF	3	
26	Z1-70-07-0343	SWITCH GUARD	3	
27	2M-Z13925	FRONT LABEL-ELECTRIC	1	
28	2J-31601-01	PILOT LT 250V 6LEAD BLK	1	
29	2E-Z12020	SWITCH-TOGGLE 2P ST	1	
30	2E-30330	SWITCH ON OFF TOGGLE 20A	2	
NI	2D-Z13928	MEAT CATCH PAN	1	
NI	2E-Z10181	CORD SET 12/3, 6-30P 80IN	1	
NI	K8-VB0010	V.B. HEAT SHIELD ASSY	1	
NI	K8-VB0011	V.B. HEAT SHIELD ASSY	1	

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

PAGE 1  
OF 1



**Star International Holding, Inc.**



MODEL: VBG Gas Vertical Broiler



SK2567, Rev. A 12/17/2014

# PARTS LIST

February 27, 2014, Rev B

VERTICAL BROILER GAS: VBG30				
Fig No	Part No	Qty	Description	Application
1	K8-VB0003	1	V.B. TOP ASSY	
2	2C-Z6925	70	SCREW #8X1/2 HEXW B SS	
3	2R-Z9686	2	KNOB, 1/4-20	
4	K8-VB0002	1	V.B. TOP ROD HOLDER BRKT	
5	K8-Z13909	1	BACK PANEL	
6	K8-VB0011	1	V.B. HEAT SHIELD ASSY	
7	K8-VB0010	1	V.B. HEAT SHIELD ASSY	
8	2N-Z13929	2	GAS INFRARED BURNER W/	
9	2V-Z6939	2	VALVE HI-LO	
10	2V-6671	2	VALVE-LINCOLN BRASS#3817	
11	2F-Z13900	2	PILOT TUBE & ORIFICE	
12	2K-Z18292	1	MANIFOLD, VBG	
13	2E-30500-08	1	TRM BLOCK 2 POLE SMALL 95	
14	2J-Z9207	1	PRESSURE REGULATOR RV47	
15	K8-VB0004	1	V.B. BOTTOM ASSY. GAS	
16	2A-Z11501	4	FOOT 1" SOLID RUBBER	
17	2U-Z13885	1	MOTOR-120V	
18	K8-Z13911	2	MOTOR RAIL BRACKET	
19	K8-Z13908	1	MOTOR SUPPORT BRACKET	
20	2A-Z13899	1	DRIVE COLLAR-MOTOR	
21	2C-Z13887	1	SHOULDER SCREW 8X32 TH.	
22	K8-Z13910	1	MOTOR PULL BAR	
23	2I-Z14377	1	END CAP-FLAT GRIP 3/4"	
24	2P-Z13918	1	RETURN SPRING	
25	2C-08-07-0207	7	NUT 10-24 HEX STL NP	
26	K8-Z13912	2	SLIDE SUPPORT BRACKET	
27	2E-Z12020	1	SWITCH-TOGGLE 2P ST	
28	Z1-70-07-0343	1	SWITCH GUARD	
29	2M-12-07-0038	1	LABEL ON & OFF	
30	2I-05-07-0013	1	BOOT SWITCH	
31	2J-31601-09	1	PILOT LAMP 120V BLACK	
32	2R-Z0934	2	KNOB	
33	2V-VB0001	1	V.B.GREASE PAN-COLLAR	
34	2D-Z13935	1	DRIP PAN TOP	
35	2V-VB0006	1	V.B. MEAT ROD ASSY.	
36	2C-Z13914	1	HAIRPIN COTTER PIN	
37	K8-VB0012	1	V.B. MEAT SUPPRT PLATE	
38	2K-Z13933	2	PILOT TUBE, 1/4"	
39	2K-70101-122	2	BRASS COUPLING 1/4" COMP	
40	2A-Z0790	2	FITTING STRAIGHT	
41	2K-Z13936	2	BURNER TUBE 3/8"	
NI	2A-Z13931	2	LP ORFICE	LP ONLY
NI	2M-Z13926	1	FRONT LABEL-GAS	
NI	2M-Z13922	1	WIRING DIAGRAM-GAS	
NI	K8-VB0013	1	V.B. POWER CORD ASSY	



Star International Holding, Inc.





**STAR INTERNATIONAL HOLDINGS INC. COMPANY**

Star - Holman - Lang - Wells - Bloomfield - Toastmaster

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