

**Sterling®**

**OWNER'S MANUAL**

**Thermal Engineering Corporation**

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Website: [www.tecinfrared.com](http://www.tecinfrared.com)

# Warnings

## FOR YOUR SAFETY

### IF YOU SMELL GAS:

1. **SHUT OFF GAS TO THE APPLIANCE.**
2. **EXTINGUISH ANY OPEN FLAME.**
3. **OPEN LID.**
4. **IF ODOR CONTINUES, IMMEDIATELY CALL YOUR GAS SUPPLIER OR YOUR FIRE DEPARTMENT.**

## FOR YOUR SAFETY

1. **DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**
2. **AN LP CYLINDER NOT CONNECTED FOR USE SHALL NOT BE STORED IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

## Warnings to Customer

DO NOT INSTALL OR OPERATE THIS APPLIANCE WITHOUT HAVING CAREFULLY READ THIS MANUAL. FOR FUTURE REFERENCE, HAVE THIS MANUAL AVAILABLE WHILE USING THIS APPLIANCE AND ALWAYS FOLLOW THE INSTRUCTIONS PROVIDED.

NEVER ATTEMPT TO MAKE CONVERSIONS OR MODIFICATIONS TO YOUR GRILL WITHOUT FIRST OBTAINING WRITTEN INSTRUCTIONS FROM THERMAL ENGINEERING CORPORATION.

DO NOT STORE A SPARE GAS CYLINDER UNDER OR WITHIN 15 FEET OF THIS GRILL, ANY OTHER OPEN FLAME, HEAT PRODUCING APPLIANCE OR HEAT SOURCE. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN A FIRE CAUSING DEATH OR SERIOUS INJURY OR PROPERTY DAMAGE.

DO NOT ALLOW YOUR LP GAS CYLINDER TO BE FILLED BEYOND  $\frac{3}{4}$  FULL.

# Notices

## Notice to Customer

PRIOR TO INSTALLING AND USING THIS APPLIANCE, READ THIS MANUAL FULLY AND CAREFULLY. RETAIN THIS MANUAL FOR FUTURE REFERENCE AND HAVE AVAILABLE AT ALL TIMES. ENSURE THAT ALL PERSONS OPERATING THIS EQUIPMENT CAREFULLY READ AND BECOME FAMILIAR WITH THE INFORMATION IN THIS MANUAL.

THIS UNIT HAS BEEN CAREFULLY INSPECTED AND PACKAGED AT THE FACTORY PRIOR TO SHIPMENT. UPON ARRIVAL, INSPECT THE APPLIANCE CAREFULLY FOR ANY CONCEALED DAMAGE. IMMEDIATELY REPORT ANY DAMAGE TO YOUR AUTHORIZED DEALER.

SHOULD YOU HAVE ANY QUESTIONS REGARDING OPERATION OR USE OF THIS APPLIANCE, CONTACT THERMAL ENGINEERING CORPORATION AT (803) 783-0750 OR 1-800-331-0097.

## Notice to Installer

INSTALLATION MUST CONFORM TO LOCAL CODES OR THE NATIONAL FUEL GAS CODE, ANSI Z223.1/NFPA 54. IN CANADA, INSTALLATION OF THIS PRODUCT SHOULD BE IN ACCORDANCE WITH THE CAN/CGA-B149.1 NATURAL GAS AND PROPANE INSTALLATION CODE. FOLLOWING INSTALLATION, LEAVE THIS OPERATIONS MANUAL WITH THE CONSUMER FOR FUTURE REFERENCE. THIS APPLIANCE IS NOT INTENDED FOR USE ON RECREATIONAL VEHICLES AND/OR BOATS.



NATIONALLY REGISTERED TESTING LABORATORY

U.S. Patent # 4886044

U.S. Patent # 4321857

Des. 266,050

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Revision (08/04)

# Lifetime Limited Warranty

## EXPRESS WARRANTIES

Thermal Engineering Corporation (TEC) warrants this grill to be free of defects in material and workmanship when subjected to normal domestic use and service from the date of purchase.

### LIFETIME

All stainless steel components other than cooking grids and stainless steel burner components are warranted indefinitely. This includes the hood, cooking unit structure, side-shelf, pedestal and cabinet.

### TEN (10) YEARS

All components not covered by the lifetime warranty above are warranted for ten (10) years.

## UNDER THIS WARRANTY

We will, at our option, repair or replace any component part deemed by TEC to be defective when returned to the TEC factory, freight prepaid, within the warranty period. Prior to authorization of repair or replacement, you must supply the date of original purchase and serial number of your grill.

This warranty excludes damage caused by failure to follow the instructions in your Owner's Manual or alteration of the grill's structure or components, or from operator abuse, negligence or accident.

## DISCLAIMER OF IMPLIED WARRANTIES

This warranty excludes incidental and consequential damages. Except as stated above, all other warranties, including *implied warranties of merchantability and fitness for a particular purpose*, are excluded.

If you have questions concerning this warranty, please call your local authorized TEC dealer or call us at (803) 783-0750 or 1-800-331-0097.

### Thermal Engineering Corporation

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Website: [www.tecinfrared.com](http://www.tecinfrared.com)

<b>MODEL #:</b> _____
<b>SERIAL #:</b> _____
<i>(See rating plate found under Drip Tray, back right corner of grill.)</i>
<b>DEALER NAME:</b> _____
<b>DEALER TELEPHONE:</b> _____

*(Complete the above information for future reference.)*

Dear TEC Infra-Red Grill Owner:

Congratulations on selecting a TEC Infra-Red as your grill of choice. You're among a select group who truly appreciate fine cooking and demand the best.

I know you'll be pleased with your grill's performance.

Over the years, we've invested great resources in developing a grill that's truly unique — from the sturdy, long-lasting construction to the unparalleled infra-red cooking process. But I'm sure that's why you selected a TEC grill over all others. You must have seen that our commitment to quality and innovation would provide you with years of satisfying use.

We've developed this manual to give you an overview of your grill and to help you get the most from it. We've included some cooking guidelines for you to use until you develop your own techniques. We've also included vital information about how to set up, operate and maintain your grill safely and correctly, so I urge you to read it carefully before first using your grill. If, after reviewing this information, you have any questions whatsoever, please call your Authorized TEC Dealer or our Customer Service Department for help.

As I'm sure you know, we also offer a complete line of accessories that afford you a wide range of opportunities for new and interesting uses of your grill. Some of them, like our rotisserie, are options familiar to everyone. Others, like our deep fryer and wok, are truly unique enhancements that allow you to be adventuresome and inventive with your grill. Your dealer can tell you more about all the accessories we offer and their many uses.

If you have comments, suggestions, or even compliments, please pass them along to us. We are continually in search of ways we can improve our customers' experiences with their grills, starting when they first remove them from the box and continuing as they use them over the years. Hearing what you feel we could improve, as well as what you especially like about our products and services, is essential to this effort. I hope you'll agree that the product registration form is a convenient, easy way to accomplish this.

Thanks for selecting TEC — I wish you years of great grilling!

Best regards,

THERMAL ENGINEERING CORPORATION

A handwritten signature in black ink, appearing to read "W.H. Best", with a long horizontal flourish extending to the right.

W.H. "Bill" Best  
*Chairman and CEO*

# Contents

**Installation.....4**  
 General Overview  
 Permanent Installation

**Assembly .....5**  
 General Overview  
 Tools Required  
 Side-shelf  
 Pedestal Base  
 In-ground Post Base and Bolt-down Post Base  
 Cabinet Base  
 Roll Back Hood  
 Cooking Grids and Baking Rack

**Gas Connection.....8**  
 General Overview  
 LP Gas Cylinder Safety  
 Installing Your LP Gas Cylinder  
 Removing Your LP Gas Cylinder  
 Quick Disconnect Instructions  
 Permanent Installation  
 Gas Leak Test

**Operation.....11**  
 General Overview  
 Burner Ignition  
 Burner Ignition Without Pilot  
 Low Heat Adjustment  
 Pilot Flame Adjustment  
 Base Brake  
 Hazardous Locations and Conditions

**Infra-red Cooking .....14**  
 General Overview  
 Infra-red Searing Method  
 Helpful Hints in Cooking  
 Flame Flare-up Control  
 Sample Cooking Methods

**Maintenance and Cleaning .....16**  
 General Overview  
 Protection of Burners  
 Cleaning  
 Maintenance  
 Replacement Parts

**Appendix A: Build-in Specifications.....18**

**Appendix B: Accessories .....20**  
 Rotisserie  
 Bar-B-Que Tray  
 Wood Chip Smoker  
 Deep Fryer/Steamer  
 Griddle  
 Wok  
 Sterling® Side-burner

**Appendix C - Replacement Parts.....28**

**Appendix D - Troubleshooting .....29**

# Installation

## General Overview

**WARNING:** THIS GRILL IS DESIGN CERTIFIED FOR USE OUTDOORS ONLY.

THIS GRILL SHOULD NOT BE USED IN A BUILDING, GARAGE OR OTHER ENCLOSED AREA AND IS NOT INTENDED FOR USE ON RECREATIONAL VEHICLES OR BOATS.

The Sterling® is designed for permanent installation on a free-standing masonry or other suitable patio fixture. See Appendix A for complete build-in specifications.

The Sterling can also be attached to the optional pedestal or cabinet base, which have casters for easy movement. It can be locked in place by using the brake mechanism, WHICH SHOULD BE ENGAGED AT ALL TIMES located near the back left corner of the pedestal base or inside the cabinet base at the back left corner. (See BASE BRAKE section on page 13 for more information.)

Figure 1 (see page 5) represents the minimum clearance of a mobile grill to any adjacent combustible construction.

**WARNING:** THIS OUTDOOR COOKING GAS APPLIANCE SHALL NOT BE USED UNDER OVERHEAD COMBUSTIBLE CONSTRUCTION.

## Permanent Installation

If you are installing your grill as a build-in or on the optional Post Base (Sterling II only), it should be located so the ventilation louvers remain clear of all obstructions. The louvers are located in the front surface of the Grill's Housing and at the rear of the Roll Back Hood. Any accumulation of debris will restrict the flow of combustion and/or ventilation air, and may result in improper burner operation or overheating. See Table A.1 for clearance specifications. Installation procedures relating to gas connections for permanent installations can be found in the Gas Connection section of this manual. Build-in opening specifications can be found in Appendix A of this manual.

	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION
Sides	12"	0"
Back	12"	0"

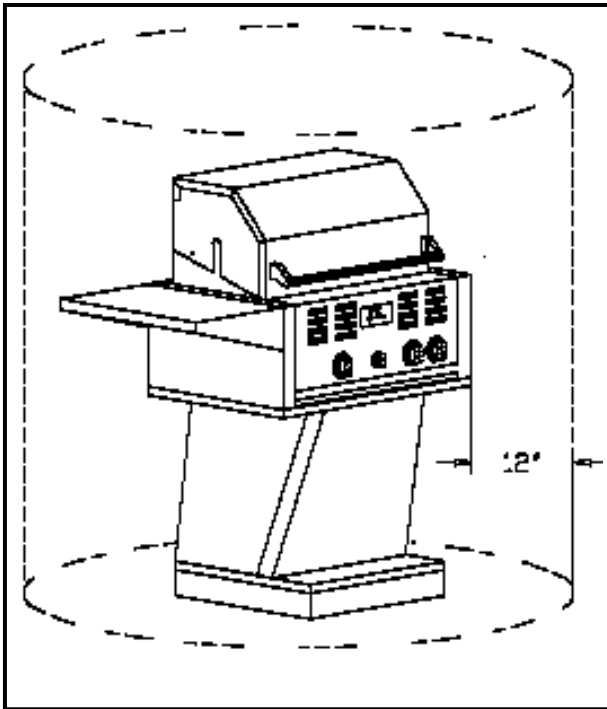
**Table A.1** Clearance Specifications

## Installation continued

The Post Base (Sterling II only) is designed to be installed in a bed of concrete to a depth of 17 1/2". The height of the grill cooking surface should be roughly 38 1/2" from the ground. (See Figure 4 & 5.) The line gas connection is located on the left side of the post. The gas connection is SAE 45° female flare.

The Post Base is constructed of stainless steel, which is highly corrosion resistant. However, a suitable means of corrosion protection should be used, as necessary, due to corrosion conditions at the installation site.

The installation of your grill must conform to local codes or, in absence of local codes, the National Fuel Gas Code ANSI Z223.1/NFPA 54. In Canada, the installation must conform to local codes and/or the Natural Gas and Propane Installation Code CAN/CGA-B149.1.



**Figure 1.** Clearance To Combustible Construction

**WARNING:** THIS OUTDOOR COOKING GAS APPLIANCE SHALL NOT BE USED UNDER OVERHEAD COMBUSTIBLE CONSTRUCTION.

## Assembly

### General Overview

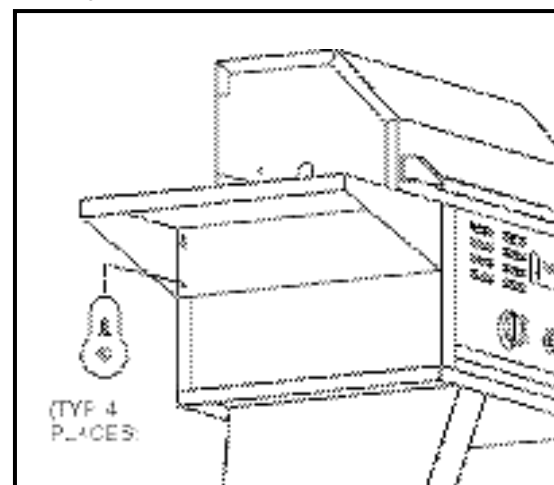
Sterling grills are designed for easy assembly. Both the Sterling II and Sterling III are available with assembled hood. You can choose from our optional bases and side-shelves to customize your grill. Assembly procedures for each of these options follow.

### Tools Required

- Flat head screwdriver
- Phillips screwdriver (#2)
- Ratchet with 7/16" socket or 7/16" end wrench

### Side-shelf

1. Use the four (4) 1/4" - 20 x 1/2" L Phillips-head screws from the plastic bag that contained this Owner's Manual and the TEC® Cookbook.
2. Thread two (2) Phillips-head screws approximately 1/4" into the two (2) top threaded holes of the grill side panel.
3. Using the keyholes on the Side-shelf, place the Side-shelf on the 1/4" screws. Ensure that the screws slide to the top of the keyhole slots.
4. Tighten the two (2) top screws until the Side-shelf is flush but not tight against the grill side panel of the Sterling gas grill.
5. Connect the remaining two (2) screws through the Side-shelf and into the bottom two (2) threaded holes of the grill side panel.
6. Tighten all four (4) screws firmly.

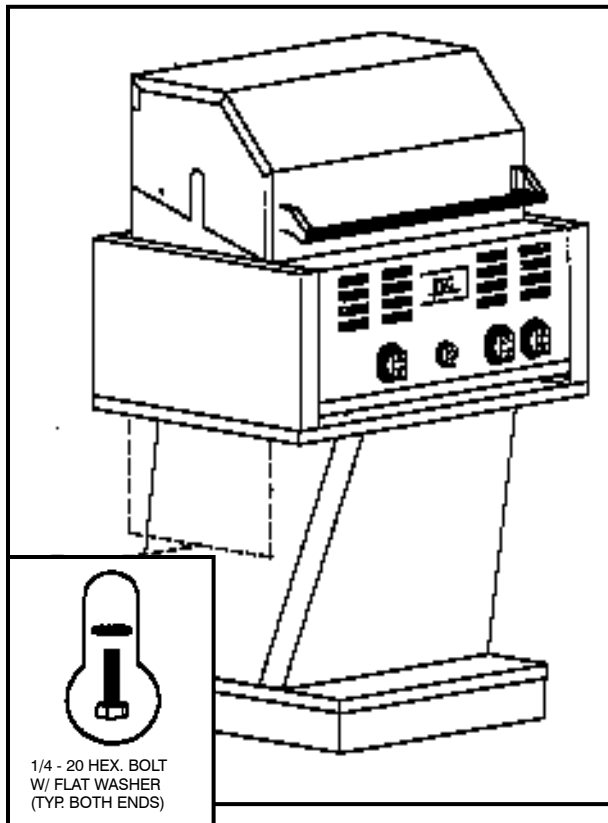


**Figure 2.** Side-shelf Attachment

# Assembly continued

## Pedestal Base (Sterling II and III)

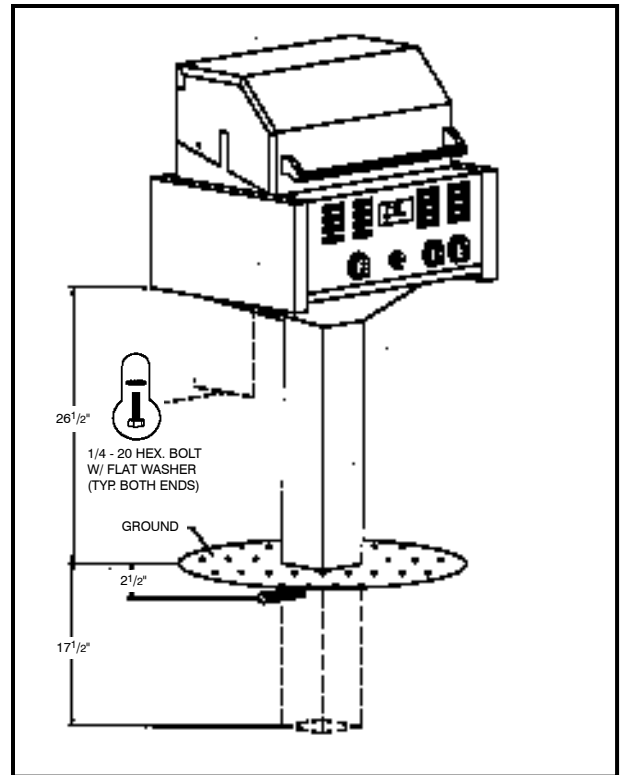
1. Remove the Pedestal Base from the packaging materials and set it on a level surface.
2. Place the Grill Housing on the Pedestal Base and align the round mounting holes in the Base with the threaded inserts in the Housing.
3. Fasten the Housing to the Base with the supplied hardware. (Hardware needed: Four (4) each  $1/4 - 20 \times 1/2$ " L hex head bolts and flat washers.) (See Figure 3.)



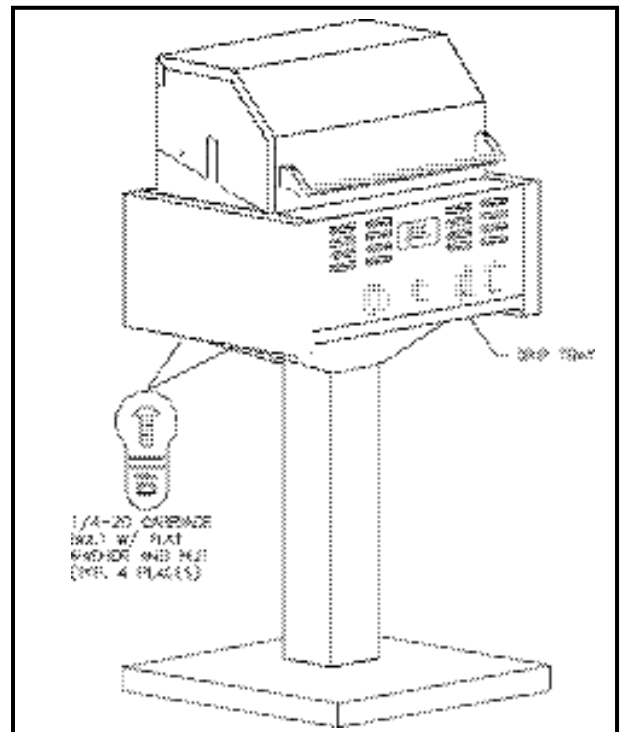
**Figure 3.** Pedestal Base

## In-ground Post Base and Bolt-down Post Base (Sterling II Only)

1. Install the In-ground or Bolt-down Post Base in accordance with the instructions accompanying Post Base.
2. Fasten the Housing to the Base with the supplied hardware. (Hardware needed: Four (4) each  $1/4 - 20 \times 1/2$  L hex head bolts and flat washers.) (See Figures 4 & 5.)



**Figure 4.** In-ground Post (Sterling II Only)

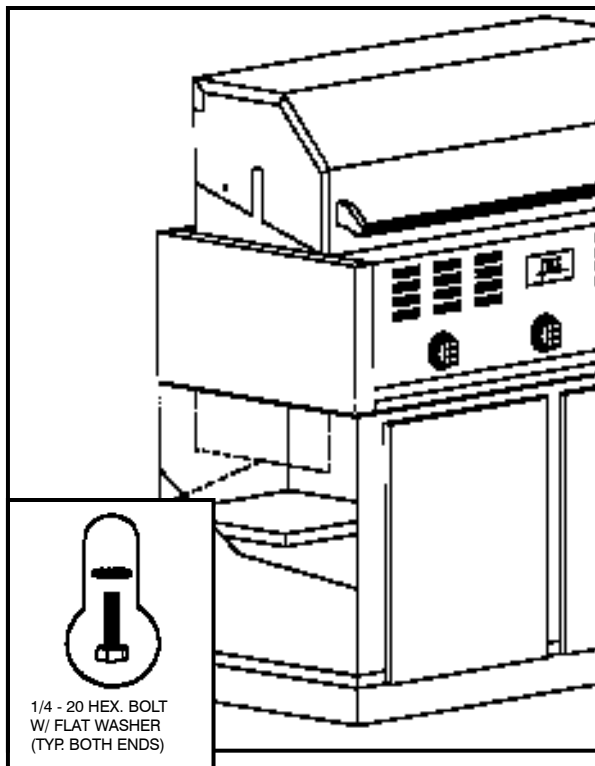


**Figure 5.** Bolt-down Post (Sterling II Only)

## Assembly continued

### Cabinet Base (Sterling II and III)

1. Remove the Cabinet Base from the packaging materials and set it on a level surface.
2. Place the Grill Housing on the Cabinet Base and align the round mounting holes in the Base with the threaded inserts in the Housing.
3. Fasten the Housing to the Base with the supplied hardware. (Hardware needed: Four (4) each  $\frac{1}{4}$ -20 x  $\frac{1}{2}$ "L hex head bolts and flat washers.) (See Figure 6.)

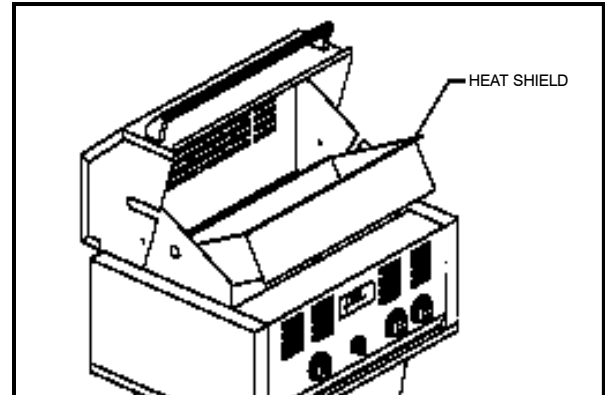


**Figure 6.** Cabinet Base

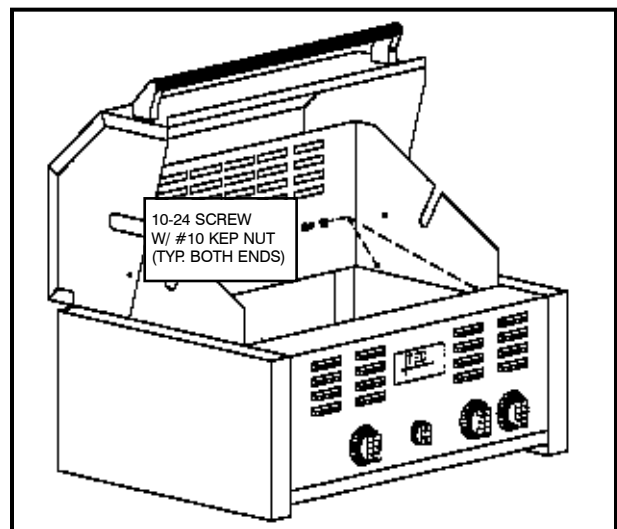
### Roll Back Hood (Sterling II and III)

1. Remove the Roll Back Hood from the packaging materials.
2. Remove the Heat Shield from the Grill Housing. (See Figure 7.)
3. Set the Hood in place on the Grill Housing.
4. Fasten the Hood to the Grill Housing with the supplied hardware. (Hardware needed: Four (4) each #10-24 x  $\frac{1}{2}$ "L screws and nuts.) (See Figure 8.)

5. Replace the Heat Shield.



**Figure 7.** Heat Shield



**Figure 8.** Roll Back Hood

### Cooking Grids and Baking Rack (Sterling II and III)

1. Remove the Cooking Grids and Baking Rack from the packaging materials.
2. Set the Cooking Grids in place with the open side of the channels facing up and the holes toward the rear of the grill. Set the Baking Rack in place inside the Roll Back Hood.



# Gas Connection

## General Overview

**WARNING:** THE GAS SUPPLY HOSE SHOULD BE INSPECTED PRIOR TO EACH USE. DO NOT USE A GAS HOSE THAT HAS ABRASION, CUTS OR EXCESSIVE WEAR. IF ABRASION, CUTS OR EXCESSIVE WEAR IS EVIDENT, THE GAS SUPPLY HOSE MUST BE REPLACED BEFORE USE. REPLACEMENT ASSEMBLY MUST BE SPECIFIED BY TEC.

**WARNING:** WHEN YOUR GRILL IS STORED INDOORS, REMOVE AND STORE THE LP GAS CYLINDER OUTDOORS IN A PROTECTED, COOL AND DRY LOCATION OUT OF REACH OF CHILDREN. THE CYLINDER SHOULD NOT BE STORED IN A BUILDING, GARAGE OR ANY OTHER ENCLOSED AREA.

Follow the procedures outlined in this section closely to ensure safe and proper grill operation. The Sterling grill is offered in one of two gas configurations: LP or Natural gas. The pressure regulator and hose used for the LP gas configuration varies depending on the type of base used. Reference Table A.2 below for regulator specifications. Grills that do not use LP gas with standard 20 lb. LP cylinder must be installed by qualified personnel. This includes all Natural gas and permanently installed units. Gas regulators specified by TEC should be used at all times.

PLEASE NOTE: When any burner using propane fuel exceeds the capacity of the propane cylinder to vaporize the fuel, the cylinder pressure can decrease to the extent that the appliance will not burn properly.

Refer to Table A.2 below for gas supply specifications or see rating plate located at the grill's right rear corner below Drip Tray.

**Table A.2.** Gas Supply Specifications

GAS, REGULATOR AND BASE TYPE	SUPPLY PRESSURE (IN. WC (kPa), MAX/MIN)	OPERATING PRESSURE (IN. WC (kPa))	MAIN BURNER ORIFICE SIZE (DMS / DIA.)	BURNER OUTPUT (BTU/HR. (W)/EA.)
Natural model RV-47L (NG) stationary or post	14.0 (3.4)/5.0 (1.2)	4.0 (1.0)	46 (0.0810")	18,500 (5,422)
LP model RV-47L (LP) stationary or post	14.0 (3.4)/12.0 (3.0)	11.0 (2.7)	55 (0.0520")	18,500 (5,422)
LP model 150 w/ hose pedestal or cabinet	125 psi (861), max	11.0 (2.7)	55 (0.0520")	18,500 (5,422)

## LP Gas Cylinder Safety

**WARNING:** WHEN PURCHASED FOR USE WITH LP GAS, THE STERLING GRILL COMES WITH A REGULATOR ASSEMBLY THAT USES A TYPE I CYLINDER CONNECTION DEVICE. THIS DEVICE SHOULD ONLY BE USED WITH A TYPE I TANK VALVE CYLINDER CONNECTION.

**NOTICE:** AN LP GAS CYLINDER IS NOT PROVIDED FROM THE FACTORY WITH THIS GRILL. HOWEVER, ONLY APPROVED 20 LB. LP GAS CYLINDERS CONSTRUCTED AND MARKED IN ACCORDANCE WITH THE SPECIFICATIONS FOR LP GAS CYLINDERS OF THE U.S. DEPARTMENT OF TRANSPORTATION (D.O.T) OR NATIONAL STANDARD OF CANADA, CAN/CGA-B339, CYLINDERS, SPHERES AND TUBES FOR THE TRANSPORTATION OF DANGEROUS GOODS; AND COMMISSION, SHOULD BE USED. ALL APPROVED CYLINDERS MUST BE EQUIPPED WITH AN INTEGRAL COLLAR DESIGNED TO PROTECT THE CYLINDER VALVE FROM DAMAGE, AS WELL AS A LISTED OVERFILL PROTECTION DEVICE. DO NOT USE OR TRY TO REPAIR A DAMAGED LP GAS CYLINDER AT ANY TIME. CONTACT YOUR LOCAL LP GAS SUPPLIER FOR REPLACEMENT. ALSO, YOU SHOULD ALWAYS OBSERVE THE FOLLOWING PRECAUTIONS:

- Store spare or extra gas cylinders at least 15 feet from this grill or other open flame, heat-producing appliance or heat source.
- Do not fill your gas cylinder beyond  $3/4$  full.
- Gas cylinders come with a pressure relief valve. If a cylinder is subjected to excess heat, the relief valve will open and let highly flammable gas vapor and/or liquid escape. Therefore, do not store gas cylinders near an open flame or source of heat. Store cylinders only in well ventilated areas.

**WARNING:** FAILURE TO FOLLOW THE ABOVE PRECAUTIONS COULD RESULT IN A FIRE CAUSING DEATH OR SERIOUS INJURY OR PROPERTY DAMAGE.

# Gas Connection continued

## Installing Your LP Gas Cylinder

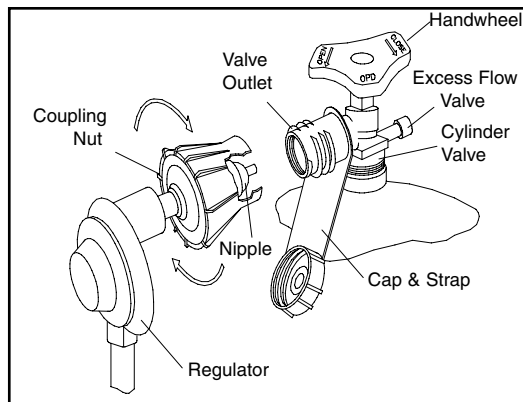
**NOTICE:** FOR YOUR SAFETY, ONLY USE THE REGULATOR AND HOSE ASSEMBLY PROVIDED AS ORIGINAL EQUIPMENT WITH YOUR GRILL. REPLACEMENT ASSEMBLIES MUST ALSO BE SPECIFIED BY TEC.

**NOTICE:** A FIRE EXTINGUISHER FOR CLASS A, B, C & D FIRES SHOULD BE READILY AVAILABLE AT ALL TIMES.

**WARNING:** THE VENTILATION/ACCESS OPENING, IN THE REAR OF THE PEDESTAL, MUST BE FREE AND CLEAR FROM DEBRIS. THE GAS MUST BE TURNED OFF AT THE SUPPLY CYLINDER WHEN THE GRILL IS NOT IN USE.

Be sure to set the gas cylinder upright so the Cylinder Valve is at the top. This will ensure proper vapor withdrawal.

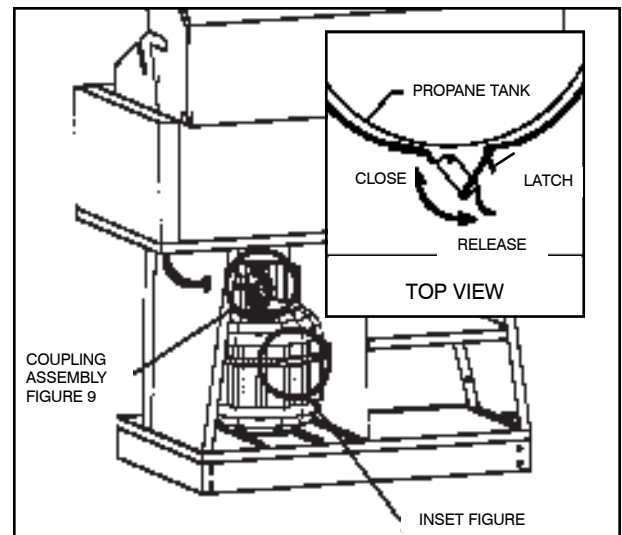
When you connect your cylinder to the grill, you will feel the coupling nipple seal when there is slight resistance. (See Figure 9.) Turn about one-half to three-quarters further to complete the connection. Tighten only by hand; do not use tools. If you cannot complete the final connection, disconnect the regulator and repeat step 7, below. If you are still unable to complete the connection, replace the valve and regulator!



**Figure 9.** Coupling Assembly

### Procedure:

1. In order to make sure the Cylinder Valve is fully closed, turn the Handwheel clockwise until it stops.
2. Turn all burner and pilot controls OFF.
3. Move your grill to an open area that's level and engage the Base Brake. (See Figure 17.)
4. Place the gas cylinder in the space provided in the Base. Remove the protective caps from Cylinder Valve Outlet and Nipple, as necessary.
5. Inspect the Coupling Nut, Nipple and Cylinder Valve. See if there is any damage, dirt or debris. Remove dirt or debris. Replace damaged parts prior to use.
6. Inspect Regulator and Hose Assembly. See if there is any damage, dirt or debris. Remove dirt or debris. Replace damaged parts prior to use.
7. With the Regulator in your hand, insert the Nipple into the Cylinder Valve. Make sure the Nipple is centered in the Cylinder Valve outlet. Tighten the Coupling Nut by hand, making sure not to cross-thread the connection.



**Figure 10.** Gas Tank Placement

**WARNING:** KEEP THE VENTILATION OPENINGS OF THE CYLINDER ENCLOSURE FREE AND CLEAR OF DEBRIS.

## Gas Connection continued

### Removing Your LP Gas Cylinder

#### Procedure:

1. Close the Cylinder Valve by turning the Handwheel clockwise until it stops.
2. Release the latch and remove the cylinder from grill.
3. Loosen the Coupling Nut by turning it counter-clockwise.

### Quick Disconnect Instructions

(See Figure 11.)

#### Procedure:

1. To connect, push back Sleeve of Socket. (See Figure A.)
2. Insert Plug (See Figure B.), release Sleeve.
3. Push Plug until Sleeve snaps forward locking Plug in Socket (See Figure C.). (THIS AUTOMATICALLY TURNS ON GAS.)
4. To disconnect, push sleeve back and pull out plug. (THIS AUTOMATICALLY SHUTS OFF GAS.)

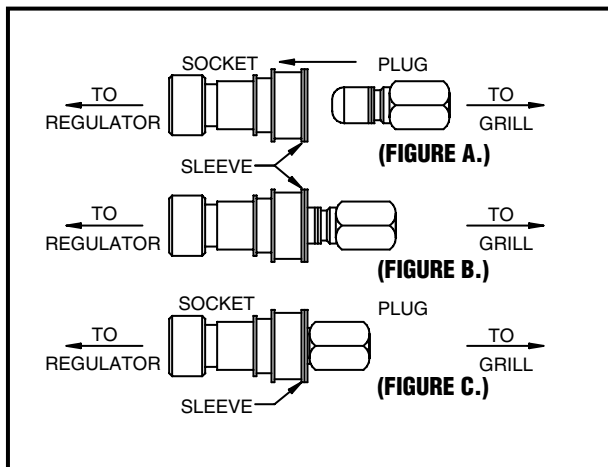


Figure 11. Quick Disconnect Fittings

### Permanent Installation

**CAUTION:** GAS PIPING TO YOUR GRILL MUST BE IN ACCORDANCE WITH LOCAL CODES. IN THE ABSENCE OF LOCAL CODES, USE THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA 54 (LATEST EDITION) OR CAN/CGA B-149.1, NATURAL GAS AND PROPANE INSTALLATION CODE.

**CAUTION:** THE GAS SUPPLY MUST BE TURNED OFF AT THE GRILL WHEN THIS APPLIANCE IS NOT IN USE.

When ordered for use with Natural gas, the Sterling grill comes adjusted to operate with Natural gas. Qualified personnel should install the gas line. A Shut-off Valve at the grill is required. This Valve must be design certified by CSA International. When using the optional Post Base, you must use the Regulator and separate hose supplied with the Post Base. Specifications for gas supply requirements are listed in Table A.2 on page 8.

The grill and Shut-off Valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of  $\frac{1}{2}$  PSIG (3.5 kPa).

The grill must be isolated from the gas supply piping system by closing its individual manual Shut-off Valve during any pressure testing of the system at test pressures equal to or less than  $\frac{1}{2}$  PSIG (3.5 kPa).

### Gas Leak Test

**WARNING:** DO NOT USE OPEN FLAME TO PERFORM LEAK TEST!

**WARNING:** DO NOT ATTEMPT TO USE THE GRILL WHEN YOU SMELL GAS OR FAIL A GAS LEAK TEST.

Make sure there is no open flame near the grill during the test. Test for leaks every time the gas connection is disconnected.

#### Procedure:

1. Turn all controls OFF.
2. Open the Gas Supply Valve slowly. Apply soapy water solution to all connections including factory connections.
3. Look for bubbles around the connections. If bubbles can be seen, close the Valve and tighten the connection where the bubbles are. Then, repeat steps 1 and 2. Make sure you don't over-tighten the connections.
4. Proceed with grill use.

# Operation

## General Overview


**NOTICE:** THE BURNER VENTURI TUBES SHOULD BE INSPECTED FOR SPIDER WEBS AND OTHER OBSTRUCTIONS PRIOR TO EACH USE. IF ANYTHING IS FOUND, CLEAN THE TUBES COMPLETELY. A CLOGGED TUBE CAN LEAD TO A FIRE BENEATH THE GRILL.

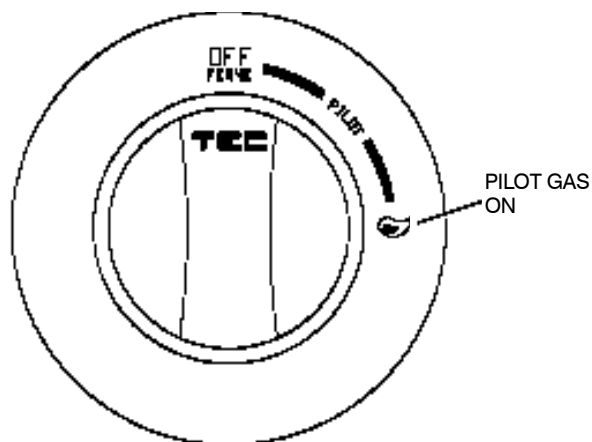
**NOTICE:** NEVER PLACE FOOD OVER A BURNER THAT IS NOT IN OPERATION. FOOD DRIPPINGS WILL NOT BE INCINERATED AND THE SMALL PORTS MAY BECOME CLOGGED. THE BURNER SHOULD NOT COME IN CONTACT WITH WATER OR OTHER CLEANING FLUIDS. IT COULD DAMAGE THE BURNER, CAUSING IT TO FUNCTION IMPROPERLY.

All Sterling grills are equipped with a Pilot Burner. A Pilot makes lighting your grill safer. In addition, this safety feature will re-ignite the burner if it goes out while you are cooking. Pilot Burners take a certain amount of time to ignite because gas must first flow from the gas cylinder to the pilot tip. When lighting the Pilot, be sure to use the following instructions.



## Burner Ignition

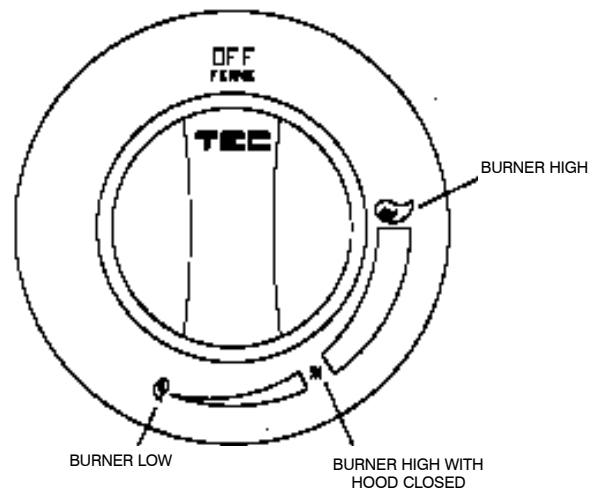
### Procedure:

1. Open the Hood, ensure all valves are closed and that the cooking surface of the grill is not covered.
2. For LP gas, open the Gas Valve on Cylinder. For Natural gas, open the Gas Valve in the main line.
3. Depress and turn the Pilot Output Knob to  (ON). (See Figure 12.)




**Figure 12.** Pilot Output Knob

4. Slowly rotate the Igniter Knob clockwise twice and check for pilot flame. (See Figure 14.) If a flame is not present, turn the Pilot Valve Knob to OFF and wait 5 minutes. Then repeat steps 3 and 4.
5. Rotate the Burner Output Knobs to  (HIGH). (See Figure 13.) If the burners do not ignite within 5 seconds, turn Burner Output Knobs to OFF and wait 5 minutes, and repeat.
6. Operate on  (HIGH) until burners glow uniformly, then turn the Burner Output Knobs to the desired cooking level.
7. To extinguish the flame, depress and rotate the Burner Output Knobs and the Pilot Output Knob to OFF.
8. For LP gas, close the Gas Cylinder Valve by turning the handwheel clockwise. For Natural gas, close the gas valve in the main line.



**Figure 13.** Burner Output Knob

**CAUTION:** WHEN COOKING WITH HOOD CLOSED, THE KNOB POSITION MARKED  IS THE MAXIMUM TEMPERATURE SETTING TO BE USED. THE BURNER OUTPUT SHOULD NEVER BE INCREASED BEYOND THIS POSITION WITH THE HOOD CLOSED.



## Burner Ignition Without Pilot

**CAUTION:** DO NOT HOLD A MATCH ABOVE THE SCREEN WHEN LIGHTING THE BURNER MANUALLY. PLACE THE MATCH DIRECTLY ON THE BURNER SCREEN, THEN PULL YOUR HAND AWAY FROM THE GRILL.

## Operation continued

If your pilot/spark ignition system is not working properly, the burner may be ignited manually, using a match. Use the following procedure to do so.

### Procedure:

1. Open the Hood, ensure all valves are closed and that the cooking surface of the grill is not covered.
2. For LP gas, open the Gas Valve on Cylinder.  
For Natural gas, open the Gas Valve in the main line.
3. Remove the right Cooking Grid. Ignite the match. Place the match directly on the burner screen above the right half of the burner.
4. Confirm that the match is still burning. Depress and turn the right Burner Output Knob to (HIGH). Once it is lit, depress and turn the left and center (on Sterling III) burners to  (HIGH). If any burner fails to ignite within 5 seconds, turn the Burner Output Knob of that burner to OFF, wait five minutes, then repeat.
5. Operate on  (HIGH) until the burners glow uniformly, then turn the Burner Output Knobs to desired cooking level.
6. To extinguish the flame, depress and rotate the Burner Output Knobs and the Pilot Valve Knob to OFF.
7. For LP gas, close the Gas Cylinder Valve by turning the Handwheel clockwise. For Natural gas, close the gas valve in the main line.

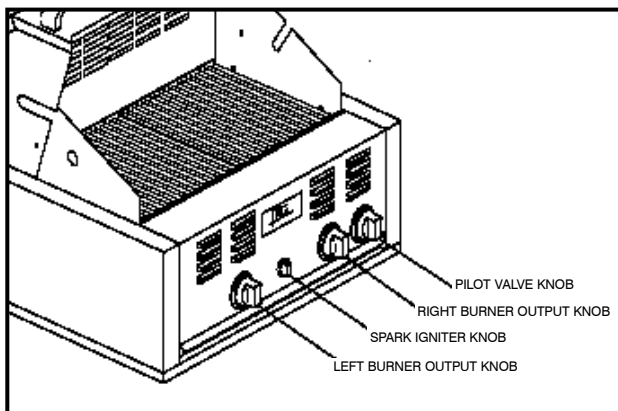


Figure 14. Grill Knobs

## Low Heat Adjustment

**WARNING:** NEVER ADJUST THE BURNER SO LOW THAT IT MAY GO OUT DURING USE. DO NOT OPERATE GRILL WITH DISENGAGED LOW HEAT ADJUSTING SCREW.

The Low Heat Adjusting Screw only applies to the burner operation at the LOW setting. Any efforts to make adjustments at another setting will go unnoticed until the burner is turned to LOW where it may involuntarily extinguish while gas is still flowing. This condition is unsafe and therefore adjustments should only be made from the LOW setting while keeping a close eye on changes.

The burner's LOW heat output is preset at the factory. If you need to adjust this setting due to a particular cooking style, follow the instructions below.

### Procedure:

1. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners turn red.
2. Turn the Burner Output Knob to the LOW position and wait until the temperature drops and stabilizes.
3. Remove the Burner Output Knob from the valve stem. (See Figure 15.)
4. Insert a small blade screwdriver into the valve stem.
5. Turn the Low Heat Adjusting Screw clockwise to reduce the LOW heat intensity or counter-clockwise to increase the LOW heat intensity.

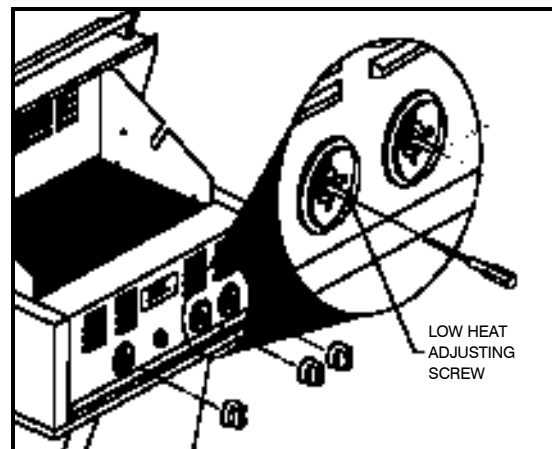


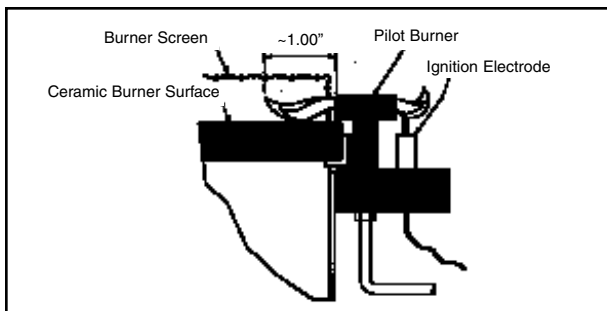
Figure 15. Low Heat Adjustment

# Operation continued

## Pilot Flame Adjustment

Pilot flame length is preset at the factory, but can be adjusted. Flame length should be approximately 1" from the pilot burner's hood. Make sure the burner is not in operation and that all other gas valves are OFF prior to adjusting the pilot. This procedure should not be performed while the grill is hot. Use a small flat-head screwdriver and the following procedure to make pilot adjustments. **Procedure:**

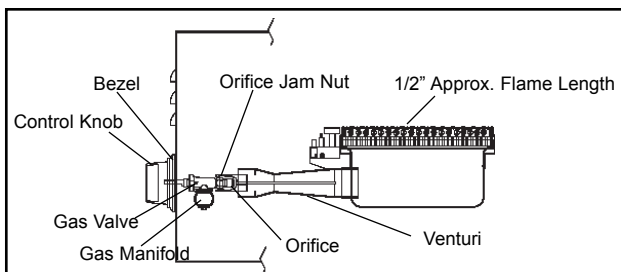
1. Ignite the pilot following Steps 1 through 4 of the Burner Ignition Procedure.
2. Remove the Pilot Output Knob from the valve stem.
3. Insert a 1/8" flat-blade screwdriver into the valve stem.
4. While visually observing the pilot flame, rotate the pilot adjustment screw counter-clockwise to increase the flame length or clockwise to decrease the flame length. The flame should be approximately 1" long. (See Figure 16.)



**Figure 16.** Pilot Light Adjustment

## Burner Flame

The burner flame should be approximately 1/2" tall when the burner is in operation (See Figure 16a).

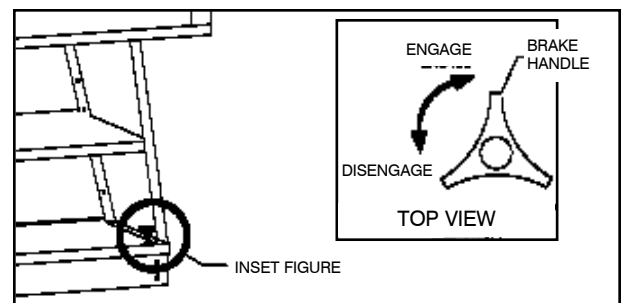


**Figure 16a.** Burner Flame and Orifice Location

**WARNING:** EACH GAS ORIFICE MUST BE PROPERLY LOCATED ON THE ORIFICE BRACKET, ATTACHED TO THE VENTURI ON THE BURNER ASSEMBLY. AN IMPROPERLY LOCATED ORIFICE CAN LEAD TO BODILY INJURY AND PROPERTY DAMAGE. THE PROPER LOCATION IS SHOWN IN FIGURE 16A.

## Base Brake

Your Sterling grill, whether you have the Pedestal or Cabinet Base, comes equipped with a Brake mechanism for use while the grill is stationary. The Brake is located at the left rear corner of either Base. You can engage the Brake by turning the Brake Handle clockwise until you feel resistance. (See Figure 17.) Turn the Brake Handle one half turn past this point for full engagement. You can disengage the Brake by reversing the above procedure.



**Figure 17.** Base Brake

## Hazardous Locations and Conditions

- When cooking, keep your grill at least one foot from combustible surfaces (wood, wall or wooden fence, etc.) and from under combustible material (i.e. wood, canvas, plastic, etc.).
- Do not block the flow of combustion and ventilation air.
- Only use your grill outside in a well-ventilated area. Do not cook in a building, garage, or other enclosed area.
- Keep flammable substances away from the grill, including aerosols and aerosol containers, gasoline and similar liquids, paper and paper products, containers of grease, paint, etc.
- Never leave your grill unattended while it is ON.
- Never use water to control a flare-up.
- Do not wear flammable and/or loose clothing, such as long sleeves, neckties, scarves, etc., while using the grill.

# Infra-red Cooking

## General Overview

Now that you are ready to begin cooking, you can enjoy cooking outdoors quickly and effortlessly. In minutes, you can enjoy steaks, hamburgers, poultry, pork chops, roasts, fish and other foods. You can also cook more slowly if you wish. TEC's optional accessories are designed to enhance your grill's versatility.

## Infra-red Searing Method

Searing is a process that seals juices in food by cooking with intense heat for a short period of time. The juices stay in the meat where they belong and the outside gets coated with flavorful grilling aroma. For best results, follow these procedures when cooking.

The intense Infra-red energy generated by your TEC grill has many advantages. For example, meat is evenly cooked throughout. Also, grease and food particles burn up on contact with the burner and change into flavorful vapors that cook back into your food.

### Searing Method:

1. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners turn red.
2. Set the Burner Output Knobs to HIGH and place the food on Cooking Grid for 1-2 minutes, or until food lifts without sticking.
3. Turn the food and repeat Step 2.
4. Depending upon your taste, continue cooking on HIGH, turning the food frequently, or adjust the Burner Output Knob between LOW and "medium" and continue cooking until the food is cooked to your satisfaction. Turn as necessary (generally every one to three minutes).

During the searing period, flashing might occur when juices vaporize on contact with the Cooking Grid and burner surfaces. The flashes and smoke greatly enhance the flavor by "char-cooking" your food.

The intense Infra-red energy generated by your TEC grill has other advantages. For example, food is evenly cooked throughout. Also, upon contact with the Cooking Grids and burners, drippings vaporize into flavorful smoke that cooks back into the food.

## Helpful Hints in Cooking

1. Cover the Drip Tray with foil. Be careful not to cover the ventilation openings at front of the Drip Tray. This helps with clean-up, too.
2. Line the inner walls of the Heat Shield with foil.
3. Use the proper tools. Long handled tongs, spatula, knife, and mitts or a hot pad for handling hot items. When turning or moving foods, use tongs or a spatula, instead of a fork. Piercing the food with a fork lets the natural juices and flavor escape.
4. Monitor meat temperature. Bring large cuts of meat, roast, or fowl to room temperature before cooking. Smaller meat cuts such as hamburgers, wieners, or small steaks may be cooked directly from the refrigerator. Note: TEC does not recommend cooking portion meats from a frozen state.
5. Start slowly. Infra-red grilling is unlike other outdoor cooking methods. It may take you time to get used to the fast cooking process. As a benchmark, foods which generally cook in 20 minutes or less on conventional grills cook in about one-half the conventional time on a TEC Infra-red grill. Please refer to the section entitled SAMPLE COOKING METHODS on page 15.

## Flame Flare-up Control

**NOTICE:** NEVER DOUSE A FLARE-UP WITH WATER. IT WILL DAMAGE THE BURNER!

To minimize flame flare-ups:

- Use Cooking Grids with U-shape facing up.
- Trim excess fat from meat.
- Preheat the grill for 3 minutes before each use.
- Reduce heat and reposition meat while cooking.
- Move the meat to the rear until the flare-up has diminished.
- Prevent excess grease build up by periodically cleaning Cooking Grids.

# Infra-red Cooking continued

## Sample Cooking Methods

Unless otherwise noted, these cooking guidelines require *cooking with hood open*. Use this chart as a cooking guide. *Cooking times may vary, depending on thickness of food.*

<b>FOOD</b>	<b>CONTROL SETTING</b>	<b>TOTAL COOKING TIME</b>
Steak 1" Thick	High fire 2 min. each side	4 min. - Rare
	High fire 2 min. each side. Balance "medium" fire	6 min. - Medium
	High fire 2 min. each side. Balance "medium" fire	8 min. - Well Done
Hamburger 1/2" Thick	High fire 2 1/2 min. each side	5 min. - Medium
	High fire 3 min. each side	6 min. - Well Done
Chicken - Parts	High fire, 2 min. per side Balance medium low to low fire	20 to 25 min.
Chicken Breast 3/4" Thick, <i>Filletted</i>	High fire, 2 min. each side	8 to 10 min.
Hot Dogs	Medium-Low	4-6 min.
Pork Chops	Medium	6 min. per side
Spare Ribs	High fire 5 min. Low to finish	20 min. per side Turn often
Lamb Chops	High fire 5 min. Medium to finish	15 min. per side
Fish 1 lb.	Medium-Low	6-8 min. per side
Shrimp, <i>Shelled</i>	Medium-Low	3-4 min. per side
Kabobs	Medium-Low	4-5 min. per side (2 sides)
<b>COOK WITH HOOD CLOSED</b>		
Potatoes	Medium-Low	45-60 min. per side
Corn on the Cob	Medium-Low	20-30 min. per side
Onions	Medium-Low	20-30 min. per side
Lobster 1-1 1/2 lbs.	Medium-Low	15 min. per side
<b>COOK ON ROTISSERIE WITH HOOD OPEN</b>		
Chicken - Whole	High fire 10 min. Balance "medium" fire	1 hour, 20 min.
Rib-eye Roast	High fire 10 min. Balance "medium" fire	15 min./lb. - Rare
		20 min./lb. - Medium
		25 min./lb. - Well Done
Pork Roast	High fire 10 min. Balance "medium" fire	Always cook well done
		25 min./lb
Turkey 12-13 lbs.	Low fire, <i>Cook with hood closed</i>	3 hours, 30 min. until 175°F internal temp.



# Maintenance and Cleaning

## General Overview

The Sterling requires very little maintenance. However, a periodic inspection of orifice openings and venturi inlets to clear obstructions to gas flow is recommended. Proper care, maintenance and cleaning will help ensure long life of your grill. Periodic cleaning will help avoid accumulations of flammable grease, fats, and other debris.

Because of the high intensity of the Infra-red burner, any drippings and food particles that fall onto the burner surface are immediately incinerated. However, some debris and residue may remain. To remove this residue after cooking, turn the grill on HIGH for 5-10 minutes with the hood OPEN. The most important way to maintain the performance of the Infra-red burner is to do this after each use.

This procedure will leave some ash on the surface of the Burner Head. If it accumulates in excessive amount, it will clog the small ports in the ceramic surface. To prevent this blockage, remove the Cooking Grid and the Burner Screen, and vacuum the burner surface with a low-suction vacuum cleaner every six months, or as necessary. When completing this procedure be careful not to scrape or strike the ceramic with the suction device, which may damage the ceramic. The ceramic surface of the burner is fragile and must be handled carefully.

## Maintenance

### Protection of Burners

The burners of your grill are designed to provide a long life of satisfactory performance. However, there are steps you must take to prevent cracking of the burner's ceramic surfaces, which will cause the burners to malfunction. Following are the most common causes of cracks and the steps you must take to avoid them. **Damage caused by failure to follow these steps is not covered by your grill warranty.**

**IMPACT WITH HARD OBJECTS** - Never allow hard objects to strike the ceramic. You should take particular care when inserting or removing Cooking Grids and accessories into or from the grill. If objects such as these fall onto the ceramic, it is likely to crack the ceramic.

**IMPAIRED VENTILATION OF HOT AIR FROM GRILL** - In order for the burners to function properly, hot air created by the burners must have a way to escape the grill. If the hot air is not allowed to escape, the burners may become deprived of oxygen, causing them to backfire, especially if the burner output is set at HIGH. If this occurs repeatedly, the burners may crack. This is the reason your grill was designed with ventilation louvers, and the accessories were designed to leave open space at the grill surface. These design features give the hot air an escape route. Accordingly, never operate your grill with very little or no open space at the cooking surface (the Cooking Grids provide sufficient open space).

Also, never cover the ventilation louvers with foil or other materials that prevent air flow. Specifically:

- Do not operate the grill on HIGH fire with the hood closed. The Burner Output Knobs indicate the maximum gas setting ★ you can use with the hood closed. (See Figure 12 on page 11.)
- Do not use accessories in combinations that cover more than 75% of the cooking surface with solid metal. For example, on a two-burner unit, do not use the deep fryer/steamer over one burner and the griddle over the other burner simultaneously. Leave one side open. Appendix B, Accessories, contains further instructions as to proper use of accessories and warnings about improper use.
- Do not cover the entire surface with foil, a large pan, etc.

**WATER OR OTHER LIQUIDS** - When the burners are in operation, their intense heat is normally sufficient to vaporize any drippings, marinades or sauces that contact the surface as a by-product of grilling. This does not include water thrown into the grill to douse a flame. Cold liquid contacting a hot surface in substantial amounts can cause the surface to break. Also, if the ceramic or interior of a burner becomes wet while not in use, later operation of the burner can create steam, which may produce enough pressure to crack the ceramic. In addition, repeated soaking of the ceramic will cause it to swell and expand. This expansion will create pressure on the ceramic and cause it to crack and crumble.

- Never throw water into the grill to control a flare-up.
- Never expose the burners to the risk of soaking by rainfall, sprinklers or otherwise. We recommend that

## Maintenance and Cleaning continued

you keep your grill covered with a heavy duty vinyl cover at all times when it is not in use. Your dealer should have TEC covers designed specifically for your grill for this purpose. Further, do not attempt to operate your grill in the open air while it is raining. Finally, after you use the grill, close the hood as soon as you turn the burners OFF so that, if it rains, the burners will not be exposed to direct rainfall.

- If you find standing water in your grill (because of exposure to rainfall, etc.), examine the ceramic burner surfaces for evidence of possible water soaking. If the ceramic appears to be wet, remove the burners from the grill and turn them upside down to empty any water from the burner box. After draining all the water, place the burners indoors and allow them to dry thoroughly. Also, empty any water standing in the grill's Drip Tray. Then, reinstall the burners. After testing for gas leaks around all fittings as described in the section entitled GAS LEAK TEST on page 10, you should be able to resume normal use of your grill.

### Cleaning

**CAUTION:** ALWAYS ALLOW THE GRILL TO COOL BEFORE CLEANING. DO NOT ALLOW WATER TO MAKE CONTACT WITH THE BURNER SURFACE, AT ANY TIME.

#### Drip Tray

Remove soiled foil and rinse with soap and water. Re-cover the Drip Tray with foil.

#### Heat Shield

Remove soiled foil and re-cover. If necessary, the Heat Shield may be removed for further cleaning.

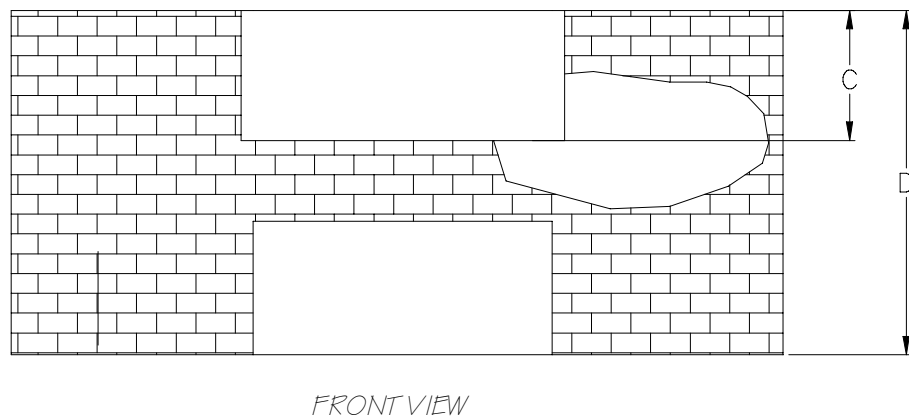
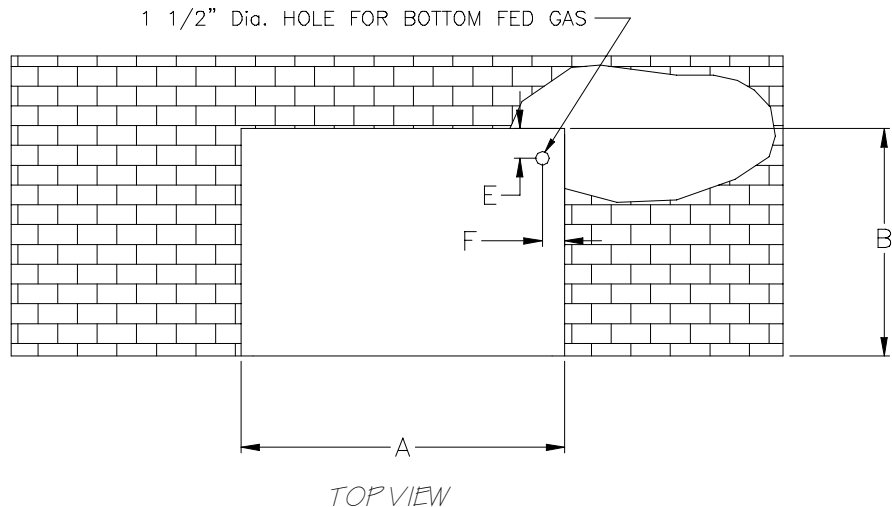
#### Cooking Grids

Leave the Cooking Grids in place for 5-10 minutes while the burners are on HIGH and the hood OPEN. The Cooking Grids may also be removed and cleaned with a brass or stainless steel bristle brush and soapy solution. Standard oven cleaners may be used for further cleaning. Rinse the Cooking Grids thoroughly with clean water before using.

### Replacement Parts

If you need Replacement Parts or Accessories, contact your TEC Authorized Dealer. See Appendix C of this manual for a listing of Replacement Parts and Accessories.

# Appendix A: Sterling Build-in Specifications

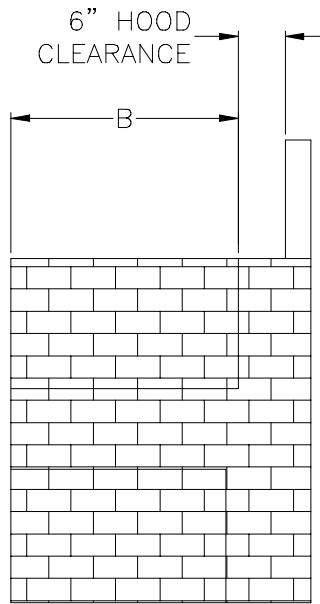


## NOTES

- \* Space must be left below unit to run and store gas line and shut-off valve.
- The carriage bolts (8 places) located on both sides of the grill must be removed to install the grill properly.
- TEC recommends that the insulated sleeve be on-site prior to construction of fixture.
- Using these dimensions there should be an approximate trim overhang of 7/16" on all sides.
- All units should be sealed between the grill and the insulated sleeve (6 sides) with clear or gray silicone caulk (350° F maximum temperature).
- If shims are required to square the unit up, place the shims between the spacer channel located on the sides of the insulated sleeve and the walls of the build-in structure.

# Appendix A: Sterling Build-in Specifications continued

DIMENSION	STERLING II		STERLING III		SIDE BURNER	
	NONCOMBUSTIBLE CONSTRUCTION	COMBUSTIBLE <sup>1</sup> CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE <sup>1</sup> CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE <sup>1</sup> CONSTRUCTION
A	30-1/2	33-5/8	43	46-1/8	16-1/4	19-3/8
B	21-7/8	23-9/16	21-7/8	23-9/16	21-7/8	23-9/16
C	11-7/8	13	11-7/8	13	8	8-7/8
D <sup>2</sup>	35-5/8	35-5/8	35-5/8	35-5/8	35-5/8	35-5/8
E	2-3/8	3-7/16	2-3/8	3-7/16	1-1/8	2-3/4
F	1-1/8	2-7/16	1-1/8	2-7/16	14-3/8	15-7/8



SIDE VIEW

IMPORTANT NOTES:

- 1) INSULATED SLEEVE REQUIRED TO INSTALL OUTDOOR COOKING GAS APPLIANCE IN COMBUSTIBLE CONSTRUCTION.
- 2) RECOMMENDED ENCLOSURE HEIGHT.
- 3) THIS OUTDOOR COOKING GAS APPLIANCE IS NOT INTENDED FOR USE ON RECREATIONAL VEHICLES AND/OR BOATS.
- 4) MINIMUM CLEARANCE FROM SIDES AND BACK OF UNIT TO COMBUSTIBLE CONSTRUCTION, 12 INCHES FROM SIDES AND 12 INCHES FROM BACK.
- 5) DO NOT USE THIS APPLIANCE UNDER OVERHEAD COMBUSTIBLE CONSTRUCTION.
- 6) TEC RECOMMENDS THAT THE GRILL BE ON SITE PRIOR TO CONSTRUCTION OF FIXTURE.

# Appendix B: Accessories

## Rotisserie

Cooking versatility is a trademark of the TEC grills. With the Rotisserie, you can add a new and exciting dimension to cooking. The Rotisserie can be used in direct Infra-red cooking or with the Bar-B-Que Tray (a deflector pan) for indirect Infra-red cooking.

## Installing Rotisserie

### Tools Required

- 3/8" wrench
  - Flat head screwdriver
1. Attach the Rotisserie bracket to the stationary hood wall with two (2) 10-32 x 1/2" screws and two (2) keep nuts (supplied).
  2. Position the Rotisserie Motor on the Rotisserie Bracket and plug it into a grounded outlet.

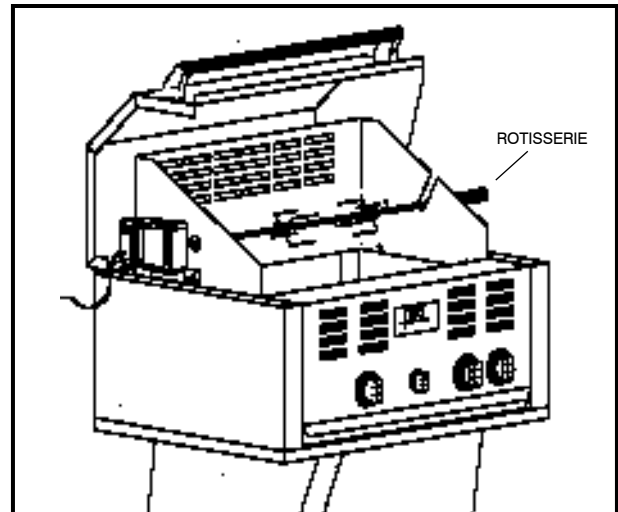
## Rotisserie Use

**CAUTION:** DO NOT USE THE ROTISSERIE IN THE RAIN.

1. The Cooking Grids may be removed or left in place.
2. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners glow red.
3. Position the spit-rod in center of the meat, and tighten the forks into the ends of the meat. Make sure the meat is evenly balanced on the rod. Turn the Rotisserie ON.
4. You may cook with the hood open or closed. If you close the hood, do not turn the temperature up higher than the ★ position indicated on the Burner Output Knobs, and monitor the food to ensure it is not over cooking.
5. When you are finished cooking, be sure to turn both burners to OFF.

For best results, refer to the Infra-red Cooking section of this manual.

The TEC Rotisserie has not been tested by CSA International.



**Figure 18.** Rotisserie

## Appendix B: Accessories continued

### Bar-B-Que Tray

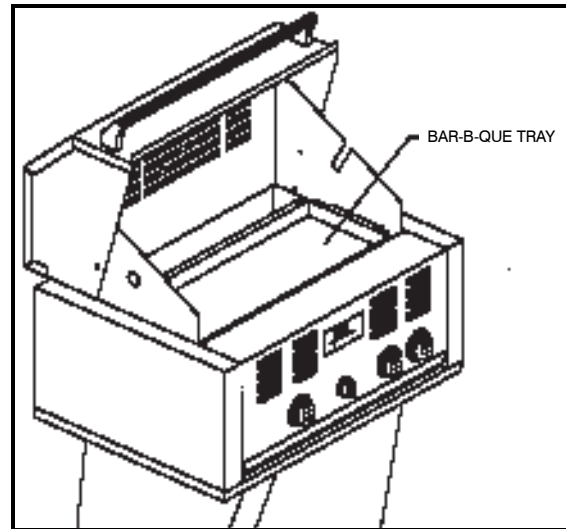
The primary purpose of the Bar-B-Que Tray is to deflect the Infra-red heat so that it does not contact the food directly. This permits slower cooking primarily with a convection cooking process. It also catches excess drippings and eliminates flare ups. You can use the Bar-B-Que Tray in conjunction with the Rotisserie for slower cooking and unique flavoring.

**CAUTION:** USING THE BAR-B-QUE TRAY ON HIGH HEAT FOR A PROLONGED PERIOD OF TIME COULD CAUSE BURNERS TO OVERHEAT.

### Bar-B-Que Tray Use

1. Remove both Cooking Grids.
2. Place the Bar-B-Que Tray in the grill, suspending it from side to side. **Water or wine should be added to the Bar-B-Que Tray to prevent it from warping. Repeat this process throughout the cooking process so that the liquid level is maintained. Be careful not to spill liquid onto the burners.**
3. The Cooking Grids may be replaced or left out.
4. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners glow red.
5. Turn the Burner Output Knobs to the desired temperature.
6. For best results, close the Hood. If you close the Hood, make sure the temperature is no higher than the ★ position indicated on the Burner Output Knobs.
7. For lower heat, turn one burner to OFF and the other burner to LOW.
8. When you are finished cooking, be sure to turn all burners to OFF. Allow the grill and Bar-B-Que Tray to cool before attempting to remove the Bar-B-Que Tray.

The TEC Bar-B-Que Tray has not been tested by CSA International.



**Figure 19.** Bar-B-Que Tray

## Appendix B: Accessories continued

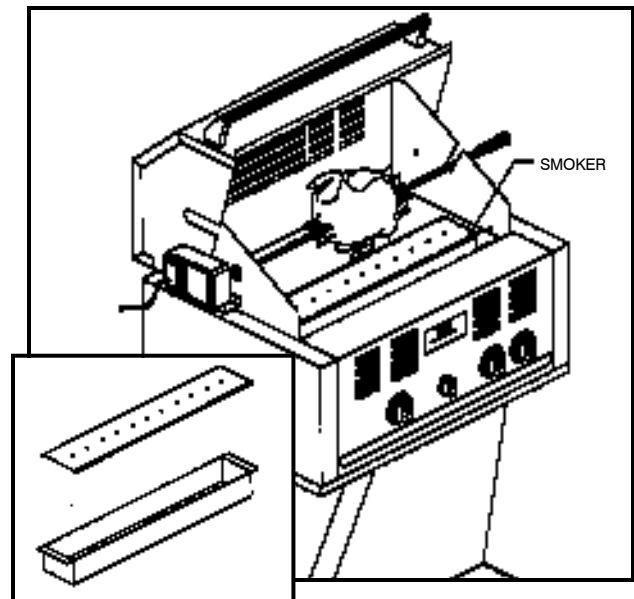
### Wood Chip Smoker

With the Wood Chip Smoker, delicious smoked flavor can enhance your char-cooked foods. Damp hickory and maple wood chips have been used to enhance the flavor of meat for years, but you can create your own flavors by using various types of seasonings such as cloves, garlic or bay leaves.

### Wood Chip Smoker Use

1. Fill the Smoker with wood chips.
2. Add water and let the chips soak for at least 30 minutes. For maximum flavor allow wood chips to soak for several hours or overnight.
3. Drain the water from the Smoker.
4. Remove the Cooking Grids.
5. Place the Smoker above the front portion of burner.
6. Reposition the Cooking Grids.
7. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners turn red.
8. Turn the control dials to LOW.
9. For best results always close the Hood when using the Smoker. If you close the Hood, make sure the temperature is no higher than the ★ position indicated on the Burner Output Knobs.
10. When you are finished cooking, be sure to turn all burners to OFF. Allow the grill and Smoker to cool before attempting to remove Smoker.

The TEC Wood Chip Smoker has not been tested by CSA International



**Figure 20.** Wood Chip Smoker

## Appendix B: Accessories continued

### Deep Fryer/Steamer

The Deep Fryer lets you cook foods that have been traditionally limited to indoor cooking. It's great for frying chicken, french fries, shrimp or fish; or boiling corn or potatoes and for cooking stews. .

To use this accessory on the RIGHT side of the unit, follow the procedures below. To use it on the LEFT side, reverse the references to LEFT and RIGHT.

### Deep Fryer Use (Shown over RIGHT burner)

**CAUTION:** DO NOT CLOSE HOOD WHILE USING THIS ATTACHMENT FOR FRYING. HOT COOKING OIL CAN CAUSE BURNS. ALWAYS WEAR OVEN MITTS WHEN USING THE DEEP FRYER AND USE EXTREME CAUTION WHEN HANDLING HOT COOKING OIL OR WATER.

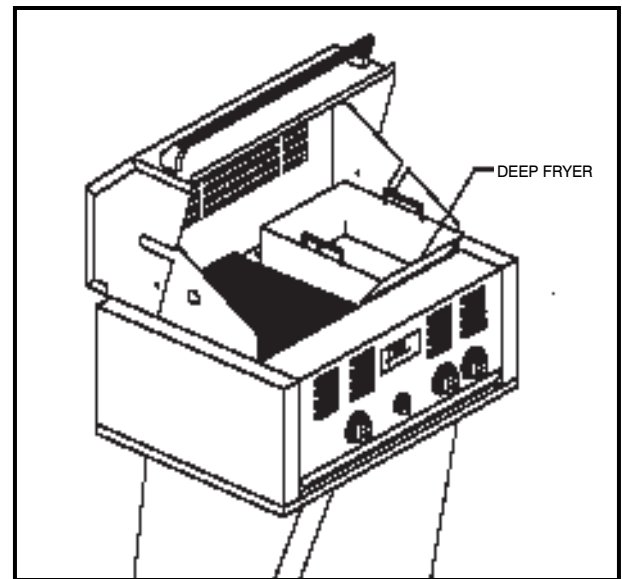
DO NOT OPERATE YOUR GRILL WITH THIS ACCESSORY IN COMBINATION WITH OTHER ACCESSORIES, SUCH AS THE FRYING GRIDDLE OR OTHER OBJECTS THAT RESULT IN COVERING 75% OR MORE OF THE REMAINING COOKING SURFACE. ALWAYS LEAVE AT LEAST 25% OF THE SURFACE OPEN FOR VENTILATION.

OIL WILL BURN IF OVERHEATED. DO NOT LEAVE UNATTENDED WHILE HEATING. IF SMOKING OCCURS, REDUCE HEAT. IF OIL CATCHES FIRE, TURN OFF HEAT AND EXTINGUISH WITH A CLASS A, B, C & D FIRE EXTINGUISHER, OR COVER FRYER WITH STEAMER LID UNTIL COOLED. DO NOT PUT WATER ON HOT OR FLAMING OIL!

1. Remove the RIGHT Cooking Grid.
2. After removing the Steamer attachment, place the Deep Fryer over the RIGHT burner.
3. Fill the Deep Fryer one-third full with cooking oil or water (one-gallon). DO NOT OVERFILL.
4. Follow the Burner Ignition procedures for the LEFT burner and operate the grill for 5 minutes or until the ceramic burner turns red.
5. After making certain the LEFT Burner is burning properly, light the RIGHT burner. If you are not going to use the left burner, turn it to OFF.

6. Let the right burner stay on HIGH for 4 to 8 minutes to properly heat cooking oil or water. We suggest you use a candy thermometer to check the temperature of the oil or water. Normally, 350°F to 375°F is sufficient for frying.
7. Turn RIGHT burner control dial between "medium" and LOW. Do not leave the right burner on HIGH.
8. Place the food into Deep Fryer with long-handled utensils.
9. After cooking, turn the burner(s) to OFF. Let the grill and cooking oil or water cool to room temperature before attempting to remove the Deep Fryer/Steamer.

The TEC Deep Fryer has not been tested by CSA International.



**Figure 21.** Deep Fryer (Shown over RIGHT burner)



## Appendix B: Accessories continued

### Steamer

The Steamer is great for steaming vegetables like broccoli, new potatoes, carrots or cauliflower. It's also ideal for seafood such as shrimp, clams and oysters. The Steamer is used together with the Deep Fryer.

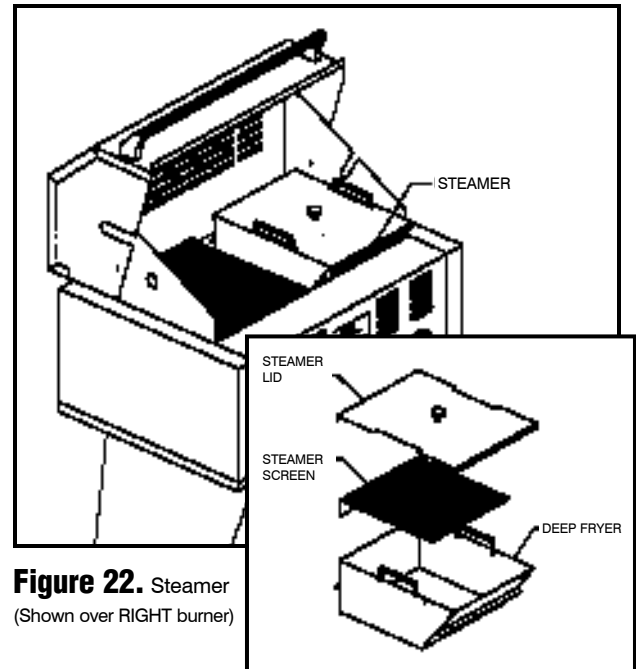
**CAUTION:** STEAM CAN CAUSE SERIOUS BURNS. ALWAYS WEAR OVEN MITTS. USE EXTREME CAUTION WHEN REMOVING STEAMER LID.

DO NOT OPERATE YOUR GRILL WITH THIS ACCESSORY IN COMBINATION WITH OTHER ACCESSORIES, SUCH AS THE FRYING GRIDDLE OR OTHER OBJECTS THAT RESULT IN COVERING 75% OR MORE OF THE REMAINING COOKING SURFACE. ALWAYS LEAVE AT LEAST 25% OF THE SURFACE OPEN FOR VENTILATION.

### Steamer Use (Shown over RIGHT burner)

1. Remove the RIGHT Cooking Grid.
2. Place the Deep Fryer/Steamer over the RIGHT burner.
3. Fill the bottom of Fryer with  $\frac{1}{2}$ " to  $\frac{3}{4}$ " of water. Repeat this throughout the cooking process so that the liquid level is maintained. Be careful not to spill liquid onto the burners.
4. Place the Steamer Screen in the bottom of Fryer. Cover with the lid.
5. Follow the Burner Ignition procedures for the LEFT burner and operate the grill for 5 minutes or until the ceramic burner turns red.
6. After making certain the LEFT Burner is burning properly, light the RIGHT burner. If you are not going to use the left burner, turn it to OFF.
7. Let the right burner stay on HIGH for 4 to 8 minutes to allow water to boil.
8. Turn RIGHT burner control dial between "medium" and LOW. Do not leave the right burner on HIGH.
7. Remove the lid and add the food.
8. Cook until desired texture is attained.
9. After cooking, turn the burner to OFF. Let the grill and water cool to room temperature before removing Deep Fryer/Steamer.

The TEC Steamer has not been tested by the CSA International.



**Figure 22.** Steamer  
(Shown over RIGHT burner)

## Appendix B: Accessories continued

### Griddle

This Griddle provides a surface for you to use your grill for pan frying foods such as bacon, eggs, sausage, french toast and pancakes, and for blackening fish and meats. It may be used over the right or left burner. After each use, the Griddle should be thoroughly washed with warm soap and water, dried and rubbed with cooking oil to prevent rusting.

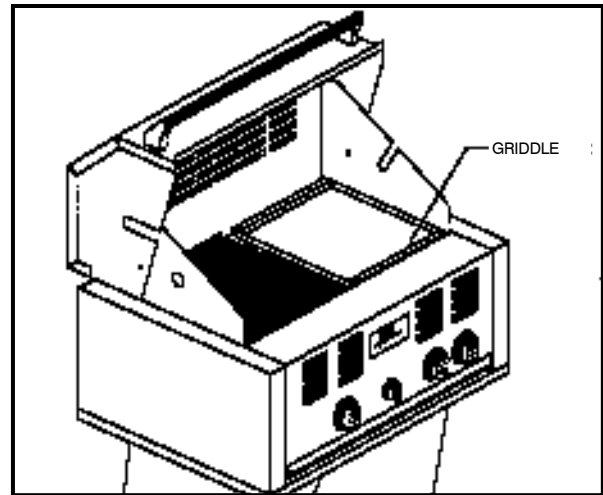
To use this accessory on the RIGHT side of the unit, follow the procedures below. To use it on the LEFT side, reverse the references to LEFT and RIGHT.

**CAUTION:** DO NOT OPERATE YOUR GRILL WITH THIS ACCESSORY IN COMBINATION WITH OTHER ACCESSORIES, SUCH AS THE FRYING GRIDDLE OR OTHER OBJECTS THAT RESULT IN COVERING 75% OR MORE OF THE REMAINING COOKING SURFACE. ALWAYS LEAVE AT LEAST 25% OF THE SURFACE OPEN FOR VENTILATION.

### Griddle Use (Shown over RIGHT burner)

1. Remove the RIGHT Cooking Grid.
2. Place the Griddle over the RIGHT burner.
3. Follow the Burner Ignition procedures for the LEFT burner and operate the grill for 5 minutes or until the ceramic burner turns red.
4. After making certain the LEFT Burner is burning properly, light the RIGHT burner. If you are not going to use the LEFT burner, turn it to OFF.
5. Adjust Burner Output to between “medium” and LOW for frying or between “medium” and HIGH for blackening.
6. Turn the burner to OFF when you are finished cooking. Let the grill and Griddle cool to room temperature before removing the Griddle.

The TEC Frying Griddle has not been tested by CSA International.



**Figure 23.** Griddle (Shown over RIGHT burner)

## Appendix B: Accessories continued

### Wok

Enjoy stir-fry cooking on your TEC grill with the Wok accessory. Using high temperature, you can quickly cook chicken, beef, shrimp or assorted vegetables. After each use, the Wok should be thoroughly washed with soap and warm water and dried and rubbed with cooking oil to prevent rusting.

The Wok accessory may be used over the RIGHT or LEFT burners. To use this accessory on the RIGHT side of the unit, follow the procedures below. To use it on the LEFT side, reverse the references to LEFT and RIGHT.

**CAUTION:** DO NOT OPERATE YOUR GRILL WITH THIS ACCESSORY IN COMBINATION WITH OTHER ACCESSORIES, SUCH AS THE FRYING GRIDDLE OR OTHER OBJECTS THAT RESULT IN COVERING 75% OR MORE OF THE REMAINING COOKING SURFACE. ALWAYS LEAVE AT LEAST 25% OF THE SURFACE OPEN FOR VENTILATION.

### Wok Use (Shown over RIGHT burner)

1. Remove the RIGHT Cooking Grid.
2. Place the Wok support over the RIGHT burner.
3. Place the Wok in the Wok support.
4. After making certain the LEFT Burner is burning properly, light the RIGHT burner. If you are not going to use the LEFT burner, turn it to OFF.
5. Adjust Burner Output to desired heat setting.
6. After cooking, make sure the burner is turned to OFF. Let the grill and Wok cool before attempting to remove Wok.

The TEC Wok has not been tested by CSA International.

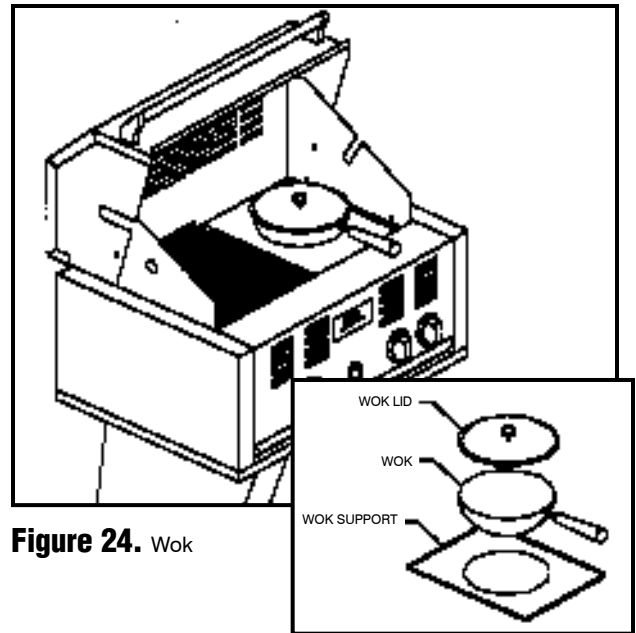


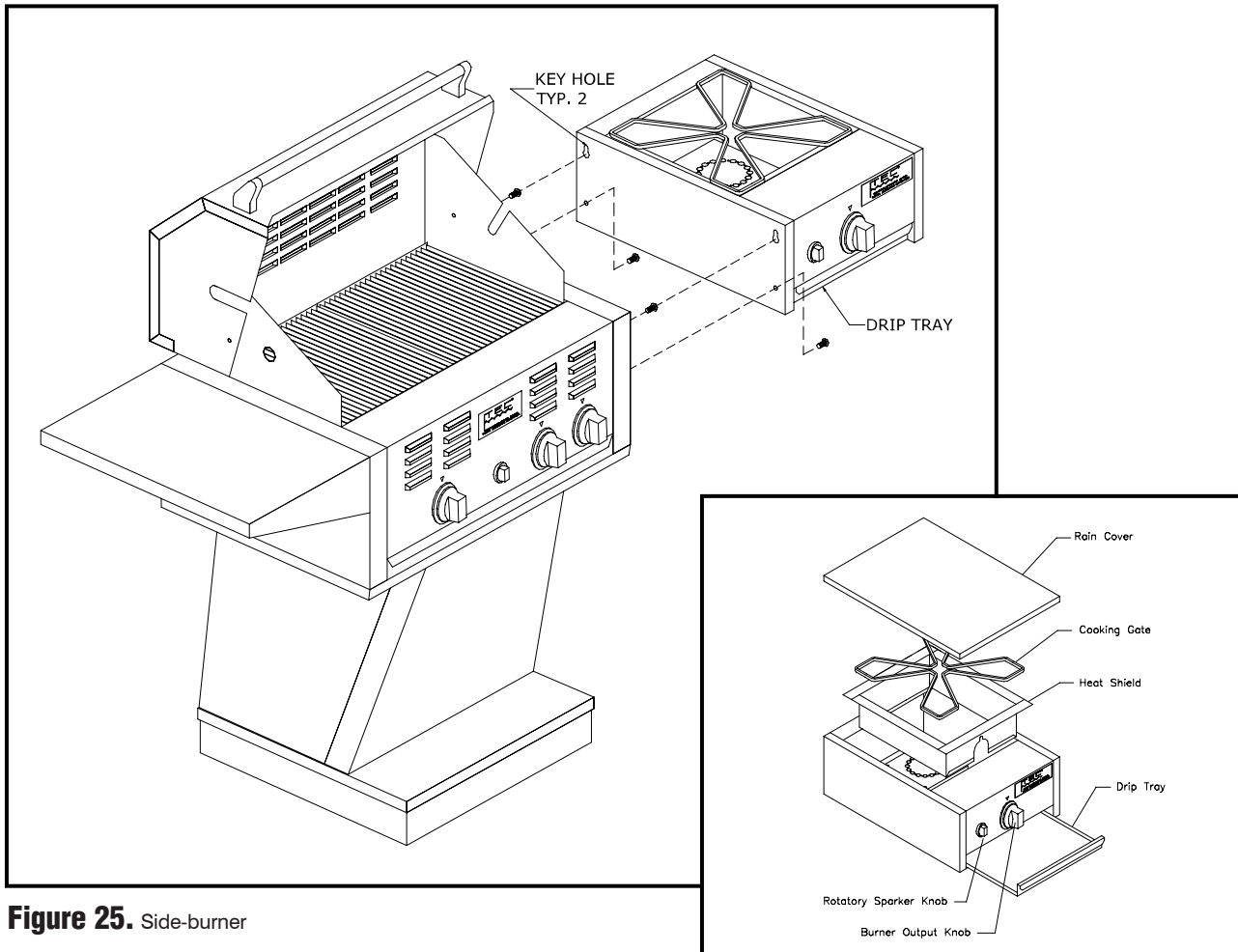
Figure 24. Wok

# Appendix B: Accessories continued

## Sterling® Side-burner

A Sterling® Side-burner allows you to have the versatility of a cook-top attached to your gas grill. Sterling® Side-burner is available in Natural Gas or LP, and is configured for attachment to the RIGHT side only of the following Sterling® Gas Grills: SSG-40LSB, SSG-40NSB, SSG-60LSB and SSG-60NSB. Reference the Sterling® Side-burner Owner's Manual for additional instructions.

The Sterling® Side-burner has been tested and approved by CSA International.



**Figure 25.** Side-burner

# Appendix C: Replacement Parts

ORDER NO.	DESCRIPTION
STBA .....	Burner Assembly (less screen)
STBP .....	Burner Head
STBS.....	Burner Screen
STBCV .....	Gas Valve, Burner
STPCV .....	Gas Valve, Pilot
STBK .....	Knob, Burner
STPK .....	Knob, Pilot
STIK.....	Knob, Igniter
STCG .....	Cooking Grid, set of two
ST30DT (for Sterling II) .....	Drip Tray .....
ST30HH (for Sterling II).....	Hood Handle Kit .....
ST30WR (for Sterling II).....	Baking Rack .....
ST30HS (for Sterling II) .....	Heat Shield.....
REG26LP.....	Regulator, w/ hose, LP gas
REGLP .....	Regulator, LP gas (build-in applications)
REGNT .....	Regulator, Natural gas (build-in applications)
ORI48 .....	Orifice, Natural gas, #48
ORI56 .....	Orifice, LP gas, #58
STIGN .....	Igniter
	ST43DT (for Sterling III)
	ST43HH (for Sterling III)
	ST43WR (for Sterling III)
	ST43HS (for Sterling III)

# Appendix D: Troubleshooting

PROBLEM	PROBABLE CAUSE	REMEDY
Pilot will not light	<ul style="list-style-type: none"> <li>a. Lack of gas</li> <li>b. Obstruction in pilot orifice</li> <li>c. Defective piezo igniter</li> <li>d. Dirty ignition electrode</li> </ul>	<ul style="list-style-type: none"> <li>a. After turning Pilot Output Knob to ON position, wait approximately 20-30 seconds for air to purge gas supply line before turning Igniter Knob. Fill LP gas cylinder, if applicable. Adjust pilot following the Pilot Flame Adjustment procedures outlined on Page 13.</li> <li>b. Clean pilot orifice</li> <li>c. Replace piezo igniter</li> <li>d. Clean pilot electrode</li> </ul>
Burner output at HIGH setting is too low. (Rumbling noise and fluttering blue flame at burner surface.)	<ul style="list-style-type: none"> <li>a. Lack of gas</li> <li>b. Kinked regulator hose.</li> <li>c. Insufficient gas pressure despite ample gas supply.</li> <li>d. Dirty or clogged orifice.</li> <li>e. Venturi tube obstructed by spider webs, wasp nest, or other foreign matter.</li> <li>f. Cracked burner.</li> </ul>	<ul style="list-style-type: none"> <li>a. Check gas level in LP gas cylinder, if applicable.</li> <li>b. Reposition regulator hose, as necessary.</li> <li>c. Adjust regulator, as necessary.</li> <li>d. Clean burner orifice.</li> <li>e. Clean out all obstructions from venturi tubes.</li> <li>f. Contact TEC Authorized Dealer. Replace ceramic burner head.</li> </ul>
Burner output at LOW setting is too hot (or too cool).	<ul style="list-style-type: none"> <li>a. Low heat setting is adjusted too high (or too low).</li> </ul>	<ul style="list-style-type: none"> <li>a. Reduce (or increase) low heat setting following procedures on Page 12.</li> </ul>
Burner backfires (during operation burner abruptly makes a loud “woosh” sound, followed by a continuous blow-torch type sound and grow dim).	<ul style="list-style-type: none"> <li>a. Overloaded with grease drippings or build-up, clogging ports.</li> <li>b. Burner overheated due to inadequate ventilation (too much cooking surface covered or operation of grill on high fire with hood closed).</li> <li>c. Cracked ceramic.</li> <li>d. None of the above. Probable cause is leak in packing within or under ceramic burner head. Also can occur through breaks in welds of burner box. Both are manufacturer’s defects to which your warranty applies.</li> </ul>	<p>In all cases turn Burner Output Knob to OFF position and let it cool for at least two minutes. Then:</p> <ul style="list-style-type: none"> <li>a. Relight burner and burn at a HIGH setting for at least five minutes or until ceramic uniformly glows red.</li> <li>b. Remove any object or accessories which may be covering more than 75% of the cooking service. Allow the burner to cool for approximately two minutes, then relight the burner. <b>DO NOT OPERATE THE GRILL ON HIGH FIRE WITH HOOD CLOSED.</b></li> <li>c. Allow burner to cool and inspect very closely for cracks (which may be nearly invisible). If cracks are found, contact TEC Authorized Dealer to replace burner head.</li> <li>d. Contact TEC Authorized Dealer. Packing under burner head should be replaced. If backfiring continues, burner box welds should be inspected for holes and/or burner head should be replaced.</li> </ul>

# Notes

