

Cherokee[™]

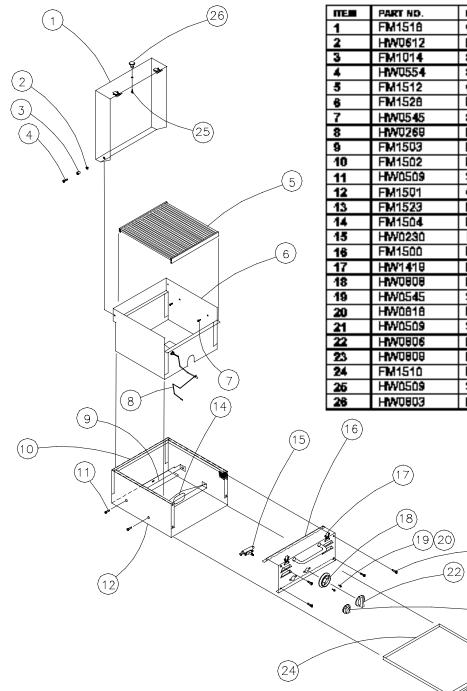
OWNER'S MANUAL

Thermal Engineering Corporation

P.O. Box 868, Columbia, South Carolina 29202-0868 2741 The Boulevard, Columbia, South Carolina 29209 Telephone: (803) 783-0750 Toll-free (800) 331-0097 Fax: (803) 783-0756 Toll-free fax: (888) 581-0286

Website: www.tecinfrared.com

Cherokee - Expanded View



TTE	PART ND.	DESCRIPTION	
1	FM1518	Cover Assembly	1
2	HW0612	Nut, Slover Lock, 1/4-20, S.S.	2
3	FM1014	Spacer / Bushing	2
4	HW0554	Screw, Truss HD, 1/4-20 X 1	2
5	FM1512	Cooking Grid Assembly	1
8	FM1528	Heat Shield Assembly	1
7	HW0545	Screw, Truss HD #10-24 X 1/2" Lg.	4
8	HW0269	Electrode	1
9	FM1503	Rear Burner Support	1
10	FM1502	Rear Body Panel	1
11	HW0509	Screw, Truss HD, #1/4-20 X 1/2" Lg.	4
12	FM1501	Grill Body Panel	1
13	FM1523	Buildhead Fitting Assembly	1
-14	FM1504	Front Burner Support	1
15	HW0230	Igniter, Piezo Electric, Rolary	
16	FM1500	Front Panel	
17	HW1418	Latch, S.S.	
18	HW0808	Bezel	1
19	HW0545	Screw, Round HD., #10-24 X 1/2" Lg.	2
20	HW0818	Kep-nut, #10-24, S.S.	
21	HW0509	Screw, Truss HD., #1/4-20 X 1/2 Lg.	
22	HW0806	Knob, Burner Control	
23	HM0808	Knob, Igniter	1
24	FM1510	Drip Tray	1
26	HW0509	Screw, Trusa HD., #1/4-20 X 1/2 Lg.	
26	HW0803	Knob	

-(23)

Warnings

A DANGER

If you smell gas:

- 1. Shut off gas to the appliance.
- 2. Extinguish any open flame.
- 3. Open lid.
- 4. If odor continues, keep away from the appliance and immediately call your gas supplier or your fire department.

A WARNING

- 1. Do not store spare LP cylinder within 10 feet (3 m) of this appliance.
- 2. Do not store or use gasoline or other flammable vapors or liquids within 25 feet (8 m) of this applicance.

Failure to follow these instructions can result in fire or explosion which could cause property damage, personal injury or death.

Warnings to Customer

THIS APPLIANCE IS NOT INTENDED FOR COMMERCIAL USE. THIS APPLIANCE SHALL BE USED ONLY OUTDOORS AND SHALL NOT BE USED IN A BUILDING, GARAGE OR ANY OTHER ENCLOSED AREA. 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 10 FEET OF THIS GRILL, ANY OTHER OPEN FLAME, HEAT PRODUCING APPLIANCE OR HEAT SOURCE. DO NOT ALLOW YOUR LP GAS CYLINDER TO BE FILLED BEYOND 80% FULL.

THE USE OF ALCOHOL, PRESCRIPTION OR NON-PRESCRIPTION DRUGS MAY IMPAIR YOUR ABILITY TO PROPERLY ASSEMBLE OR SAFELY OPERATE THIS APPLIANCE.

Notices

Notice to Customer

PRIOR TO OPERATING 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 (800) 331-0097.

THIS APPLIANCE IS DESIGN-CERTIFIED BY CSA INTERNATIONAL, AN INTERNATIONALLY RECOGNIZED TESTING LABORATORY, <u>ONLY</u> WHEN SPECIFIED CLEARANCES ARE MAINTAINED.

IN THE U.S., OPERATION OF THIS APPLIANCE SHOULD BE IN ACCORDANCE WITH LOCAL CODES. IN THE ABSENCE OF LOCAL CODES, REFERENCE THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA 54, STORAGE AND HANDLING OF LIQUEFIED PETROLEUM GASES, ANSI/NFPA 58 (LATEST EDITION) OR IN CANADA, CSA B-149.1, NATURAL GAS AND PROPANE INSTALLATION CODE.



NATIONALLY REGISTERED TESTING LABORATORY

U.S. Patent # 4886044 U.S. Patent # 4321857

© Thermal Engineering Corporation Revised 11/04 -- Z21.89b-2004/CSA 1.18b-2004

Lifetime Limited Warranty

EXPRESS WARRANTIES

Thermal Engineering Corporation (TEC) warrants this, TEC[®] Cherokee[™] Portable Gas Grill to be free of defects in material and workmanship when subjected to normal domestic use and service from the date of purchase as follows:

LIFETIME

The entire stainless steel outer structure is warranted indefinitely.

FIVE (5) YEARS

All components not covered by the lifetime warranty above are warranted for five years.

UNDER THIS WARRANTY

We will, at our option, repair or replace any component part deemed by TEC to be defective when returned to a Authorized TEC Dealer or to our 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 Cherokee.

This warranty excludes damage caused by failure to follow the instructions in your Owner's Manual or alteration of the Cherokee'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 1-800-331-0097.

THERMAL ENGINEERING CORPORATION

P.O. Box 868, Columbia, South Carolina 29202-0868 2741 The Boulevard, Columbia, South Carolina 29209 Telephone: (803) 783-0750 Toll free: (800) 331-0097 Facsimile: (803) 783-0756 Toll free: (888) 581-0286 Website: www.tecinfrared.com

MODEL #:	CH-10SS		
SERIAL #:			
	(See rating plate on back panel.)		
DEALER NAME:			
DEALER TELEPHONE:			
(Complete the above information for future reference.)			



Dear TEC[®] Cherokee[™] Owner:

Congratulations on selecting a TEC[®] Cherokee[™] Portable Gas Grill. You're among a select group who truly appreciate fine cooking and demand the best. I know you'll be pleased with the Cherokee's performance. Over the years, we've invested great resources in developing high quality gas grills that are truly unique — from their sturdy, long-lasting construction to the unparalleled infra-red burner systems and the wide array of optional accessories. The Cherokee was designed for those who want to be able to take these features wherever they go! It is also ideal for those who want the finest gas grill available today but don't have enough space for our full-sized grills.

We've put together this manual to give you an overview of your, TEC[®] Cherokee[™] and to help you get the most from it. We've included vital information about how to set up, operate and maintain the grill safely and correctly, so I urge you to read it carefully before first using your Cherokee. If, after reviewing this information, you have any questions whatsoever, please call your Authorized TEC Dealer or our Customer Service Department for assistance.

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 our products, 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.

Thanks for selecting TEC!

Best regards, THERMAL ENGINEERING CORPORATION

David H. O'Kelly President

Contents

Location4				
General Overview				
Location of Cherokee				
Gas Connection 5 General Overview LP Gas Cylinder Safety Connecting Your LP Gas Cylinder Disposable LP Gas Connection Quick Disconnect Instructions Gas Leak Test Natural Gas Connection				
Operation9				
General Overview Burner Ignition Burner Ignition Without Sparker Extinguishing Burner Flame Burner Low Heat Adjustment Hazardous Locations and Conditions				
Infra-red Cooking				
Cleaning and Maintenance				
Appendix A. Expanded View of Burner16				
Appendix B. Accessories17				
Appendix C. Replacement Parts20				
Appendix D. Troubleshooting21				

Location

General Overview

Proper location and use is essential to insuring safe and continued trouble-free operation. Any alterations made to the appliance without prior written consent from Thermal Engineering Corporation will void the product's warranty.

In the U.S., operation of this appliance must conform to local codes or, in the absence of local codes, *the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58; or CSA B149.1, Natural Gas and Propane Installation Code.*

Location of Cherokee

WARNING: THIS APPLIANCE SHOULD NOT BE LOCATED CLOSER THAN 8 INCHES TO ANY ADJACENT COMBUSTIBLE SURFACE OR UNDER ANY OVERHEAD UNPROTECTED COMBUSTIBLE CONSTRUCTION.

WARNING: THE APPLIANCE IS DESIGN-CERTIFIED FOR USE OUTDOORS <u>ONLY</u> AND NOT INTENDED TO BE INSTALLED IN OR ON RECREATIONAL VEHICLES AND/OR BOATS. THIS APPLIANCE MUST BE ON A LEVEL, STABLE SURFACE IN AN AREA CLEAR OF COMBUSTIBLE MATERIAL. AN ASPHALT SURFACE (BLACKTOP) MAY NOT BE ACCEPTABLE FOR THIS PURPOSE.

When considering stationary locations for your appliance, keep these important factors in mind. The TEC[®] CherokeeTM must be located outdoors <u>only</u>. As with any gas appliance, harmful carbon monoxide gas is produced during the combustion process that should not be allowed to accumulate in a confined space. Also, since hot air rises above the Cherokee while in operation, covered locations should be avoided. Do not locate the Cherokee where an overhang or awning may cover it.

Minimum clearances must be maintained when operating this appliance. Refer to Table A.1 for clearance specifications on combustible locations. The determination of whether a location is combustible or non-combustible construction is made by the local fire marshal, building inspector or the local safety authority having jurisdiction.



Location continued

COMBUSTIBLE AND NON-COMBUSTIBLE CONSTRUCTION				
	Sides	8"		
	Back	8"		

Table A.1 Clearance Specifications

The appliance ventilation louvers must remain clean and clear of debris to avoid any obstruction to the flow of combustion and ventilation air. Reference Table A.1 for clearance specifications.

See the section labeled HAZARDOUS LOCATIONS AND CONDITIONS for further information you need to assure safe location and operation of the Cherokee.

Gas Connection

General Overview

WARNING: WHEN PURCHASED FOR USE WITH PROPANE GAS, THE CHEROKEE GRILL COMES WITH A REGULATOR ASSEMBLY THAT USES TYPE I CYLINDER CONNECTION DEVICE FOR USE WITH A 5-20 LB. CYLINDER. THIS QUICK-CONNECT TYPE DEVICE SHOULD ONLY BE USED WITH A TYPE I TANK VALVE CYLINDER CONNECTION. A REGULATOR FOR USE WITH A 16.4 OZ. DISPOSABLE GAS CYLINDER IS ALSO PROVIDED (SEE REGULATOR CONNECTION).

WARNING: THE GAS SUPPLY HOSE SHOULD BE INSPECTED PRIOR TO EACH USE. DO NOT USE A GAS HOSE THAT HAS ABRASIONS, CUTS OR EXCESSIVE WEAR. A WORN HOSE MUST BE REPLACED PRIOR TO USE. THE REPLACEMENT HOSE 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.

WARNING: THE GAS SUPPLY MUST BE TURNED OFF AT THE LP-GAS SUPPLY CYLINDER AND THE LP-GAS SUPPLY CYLINDER MUST BE DISCONNECTED FROM THE REGULATOR WHEN THIS OUTDOOR COOKING GAS APPLIANCE IS NOT IN USE.

LP Gas Cylinder Safety

NOTICE: AN LP GAS CYLINDER IS NOT PROVIDED FROM THE FACTORY WITH THIS GRILL. HOWEVER, ONLY C.F.R.49 APPROVED 5-20 LB. 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*

Gas, Regulator	Supply Pressure (in. WC (kPa))	Operating Pressure (in. WC (kPa))	Main Burner Orifice Size (DMS/DIA.)	Burner Input (BTU/HR (W))
LP Model HW0266	125 PSI (861), Max	11.0 (2.7)	57 (0.0430")	14,000 (4104)
LP Model HW0267	125 PSI (861), Max	11.0 (2.7)	57 (0.0430")	14,000

Table A.2. Gas Supply Specifications

Gas Connection continued

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 80% 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 in well ventilated areas only.

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

Connecting Your LP Gas Cylinder

WARNING: A MINIMUM OF 12 INCHES OF CLEARANCE MUST BE MAINTAINED ON ALL SIDES OF THE UNIT TO THE LP GAS SUPPLY CYLINDER WHEN USING THE REGULATOR WITH HOSE ASSEMBLY. THE LP GAS SUPPLY CYLINDER MUST BE LOCATED IN A SAFE POSITION TO PREVENT TRIPPING (SEE FIGURE 2).

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

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

NOTICE: THE GAS MUST BE TURNED OFF AT THE SUPPLY CYLINDER AND THE GAS CYLINDER MUST BE DISCONNECTED FROM THE REGULATOR 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 1). 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 8 below. If you are still unable to complete the connection, replace the valve and regulator.

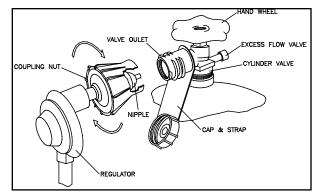


Figure 1. Coupling Assembly

Procedure for LP Gas Cylinder Connection (5-20 Lbs.)

- 1. In order to make sure the Cylinder Valve is fully closed, turn the Handwheel clockwise until it stops.
- 2. Turn the burner control OFF.
- 3. Move your grill to an open area that is level.
- 4. Place the Gas Cylinder in a safe location maintaining 12 inches of clearance on all sides and locating the cylinder and hose in a position to prevent tripping (see Figure 2 on pg. 7). Remove the protective caps from the Cylinder Valve outlet and Nipple as necessary.
- 5. Inspect the Coupling Nut, Nipple and Cylinder Valve for any damage, dirt or debris. Remove any dirt or debris. Replace any damaged parts prior to use.
- 6. Inspect Regulator and Hose Assembly for damage, dirt or debris. Remove any dirt or debris. Replace any damaged parts prior to use.
- 7. Remove the protective cover from the appliance connection. Attach the hose end of the Regulator to the appliance using the "Quick Disconnect Instructions" (see Figure 5 on pg. 8).
- With the Regulator in your hand, insert the Nipple into the Cylinder Valve Outlet. Make sure the Nipple is centered in the Cylinder Valve Outlet. Tighten the Coupling Nut by hand, making sure not

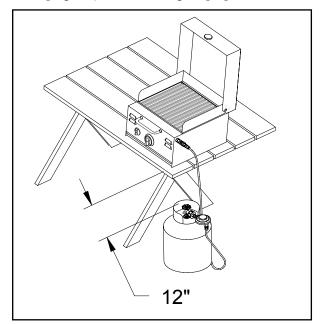


6

Gas Connection continued

to cross-thread the connection.

- 9. To disconnect after use, ensure that the Burner Output Knob is in the OFF position, close the Cylinder Valve by turning the Handwheel clockwise until it stops.
- 10. Loosen the Coupling Nut by turning it counterclockwise.
- 11. Disconnect the hose end of the Regulator Assembly from the appliance using the "Quick Disconnect Instructions". Place the cap on the appliance connection. Place dust cap on cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve outlet that is provided with the cylinder valve. Other types of caps or plugs may result in leakage of propane.





Disposable LP Gas Cylinder Connection

(Type No. 600 connection)

WARNING: ONLY 16.4 OZ. DISPOSABLE CYLINDERS, MARKED "PROPANE" OR "LP-GAS" MUST BE USED. THE LP-GAS SUPPLY CYLINDER MUST BE DISCONNECTED FROM THE REGULATOR WHEN THIS OUTDOOR COOKING GAS APPLIANCE IS NOT IN USE.

CAUTION: WHEN ATTACHED, THE TOP OF THE 16.4 OZ. DISPOSABLE CYLINDER MUST BE ATTACHED TO THE REGULATOR AND THE BOTTOM OF THE CYLINDER MUST REST ON THE SURFACE SUPPORTING THE APPLIANCE. WHEN PROPERLY INSTALLED, THE CYLINDER SHOULD REST AT AN APPROXIMATE ANGLE OF 45° FROM AN UPRIGHT POSITION (SEE FIGURE 4) OR A FULLY UPRIGHT POSITION (SEE FIGURE 3). THIS WILL ENSURE PROPER VAPOR WITHDRAWAL.

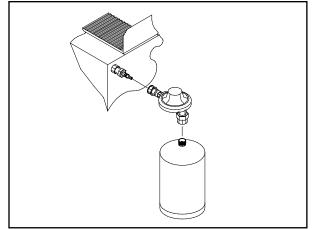


Figure 3. Disposable Cylinder Attachment

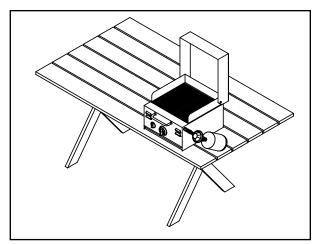


Figure 4. Disposable Cylinder Location

Procedure for Disposable LP Gas Cylinder Connection (16.4 oz.)

- 1. Insure that the Burner Output Knob is in the OFF position (see Figure 7 on pg. 10).
- 2. Inspect the Regulator for damage, dirt or debris. Remove any dirt or debris. Replace Regulator if damaged.
- Remove the protective cover from the appliance connection. Attach the Regulator to the appliance using the "Quick Disconnect Instructions" (see Figure 5 on pg. 8).

Gas Connection continued

- 4. Remove the protective cover from the 16.4 oz. disposable supply cylinder (save the protective cover in order to place it on the cylinder after use).
- 5. Inspect the 16.4 oz. disposable LP-gas supply cylinder (especially the threaded connection) for damage, dirt or debris. Remove any dirt and debris. Replace cylinder if damaged.
- 6. Gently thread the 16.4 oz. disposable LP-gas supply cylinder into the Regulator, making sure not to cross thread the connection. DO NOT FORCE THE CYLINDER INTO THE REGULATOR.
- 7. CAUTION: When installed, the top of the 16.4 oz. disposable LP-gas supply cylinder must be attached to the Regulator and the bottom of the cylinder must rest on the surface supporting the appliance. When properly installed, the cylinder must rest at an approximate angle of 45° from an upright position (see Figure 4). This will ensure proper vapor withdrawal.
- 8. To disconnect, ensure that the Burner Output Knob is in the OFF position, unthread the LP-gas cylinder from the Regulator. Place the protective cover on the cylinder.
- 9. Disconnect the Regulator Assembly using the "Quick Disconnect Instructions" (see figure 5). Place the protective cover on the appliance connection.

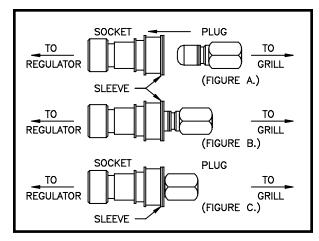


Figure 5. Quick Disconnect Fittings

Quick Disconnect Instructions

Procedure

- 1. To connect, push sleeve of socket, toward the regulator (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 OPENS THE CONNECTION ALLOWING GAS TO FLOW).
- 4. To disconnect, push sleeve back and pull out plug, (THIS AUTOMATICALLY CLOSES THE CONNECTION TURNING OFF THE GAS FLOW).

Gas Leak Test

WARNING: DO NOT USE OPEN FLAME TO PERFORM LEAK TEST.

Open flame should not be used in the area around the Cherokee during this test. This procedure should be carried out each time the gas connection is disconnected.

- 1. Ensure that the Burner Output Knob is in the OFF position (see Figure 6 on pg. 10).
- 2. Open the appliance's gas supply cylinder valve slowly. Apply heavy soapy water or similar solution to all connections including those made at the factory.
- 1. Ensure that the Burner Output Knob is in the OFF position (see Figure 6 on pg. 10).
- 2. Open the appliance's gas supply cylinder valve slowly. Apply heavy soapy water or similar solution to all connections including those made at the factory
- 3. Inspect all connections for presence of bubbles. If bubbles appear, close shut-off valve and tighten connections. Repeat steps 1 and 2 above until bubbles cease.

Operation

General Overview

WARNING: NEVER ATTEMPT TO USE THIS OR ANY OTHER GAS APPLIANCE WHEN YOU SMELL GAS. DO NOT LEAVE THIS APPLIANCE UNATTENDED. KEEP CHILDREN AND PETS AWAY FROM THE APPLIANCE AT ALL TIMES.

WARNING: THIS APPLIANCE IS NOT INTENDED FOR AND SHOULD NOT BE USED AS A HEATER. DO NOT MOVE THIS APPLIANCE WHILE IN OPERATION. ALLOW THE UNIT TO COOL BEFORE MOVING OR STORING.

WARNING: THE BURNER VENTURI TUBE SHOULD BE INSPECTED FOR SPIDER WEBS AND OTHER OBSTRUCTIONS PRIOR TO EACH USE (SEE FIGURE 11). IF ANYTHING IS FOUND, CLEAN THE TUBE COMPLETELY. A CLOGGED TUBE CAN LEAD TO A FIRE BENEATH THE UNIT.

CAUTION: THE COVER <u>MUST</u> BE OPEN DURING BURNER OPERATION AND THE HOOD/HEAT SHIELD ASSEMBLY SHOULD BE IN PLACE AT ALL TIMES DURING BURNER OPERATION.

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.

NOTICE: TEC RECOMMENDS THAT A FIRE EXTINGUISHER FOR CLASS A, B, C AND D FIRES BE READILY AVAILABLE AT ALL TIMES.

Burner Ignition

Procedure

Please read instructions before lighting.

- 1. Open cover.
- 2. Ensure gas supply cylinder Valve is closed. Ensure Burner Output Knob is in the OFF position (see Figure 6).
- 3. Open the Valve on the gas supply cylinder.
- 4. Depress and rotate Burner Output Knob to HIGH setting.
- 5. Slowly rotate Rotary Spark Knob clockwise twice, and check for burner flame.
- 6. If a flame is not present immediately, turn Burner Output Knob to OFF position, leave the cover open, and wait 5 minutes. Then repeat steps 3 through 6

until ignition occurs.

7. Rotate Burner Output Knob to desired cooking level.

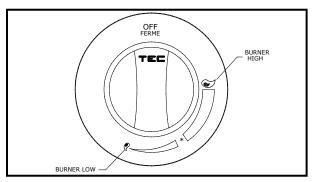


Figure 6. Burner Output Knob

Burner Ignition Without Sparker

Procedure

Please read instructions before lighting.

- 1. Open cover.
- 2. If ignition does not immediately take place, turn Burner Valve Knob to OFF and wait 5 minutes. Then repeat the lighting procedure.
- 3. Insure all Valves are closed.
- 4. Open the Valve on the gas supply cylinder.
- 5. Place a match into the match wand provided. Ignite the match. Using the match wand, place the lit match approximately 1/4" above the burner screen.
- 6. Ensure the match is lit. If not, repeat step 5.
- 7. Depress and rotate the Burner Control Knob to ON. Check for a burner flame. If a flame is not present, turn the Burner Control Valve Knob to OFF, leave the cover open, and wait 5 minutes. Then repeat the lighting procedure.

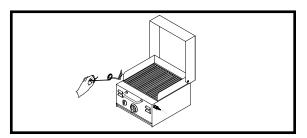


Figure 7. Burner Ignition Without Sparker

Operation continued

Extinguishing Burner Flame Procedure

- 1. Depress and rotate Burner Output Knob to OFF.
- 2. Close the Valve on the gas supply cylinder.
- 3. Disconnect the regulator assembly using the "Quick Disconnect Instructions" on Page 9. Place the protective cover on the appliance connection.

Burner Flame

The Burner Flame should be approximately 1/2" tall when the burner is in operation. The burner flame may not be visual in bright light. The ceramic surface and the burner screen will heat up to red hot after 3-5 minutes on HIGH. The ceramic surface will lose its color and a blue flame will be visual when the burner is turned down to LOW.

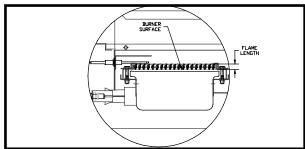


Figure 8. Burner Flame

Burner Low Heat Adjustment

NOTICE: THE LOW HEAT POSITION OF THE FLAME MUST BE STABLE AND SHOULD NOT WAIVER ON THE BURNER SURFACE. NEVER ADJUST THE BURNER SO LOW THAT IT MAY GO OUT DURING USE.

The burner's Low Heat Output is preset at the factory. If it should be necessary to adjust this setting due to a particular cooking style or different environmental conditions, follow the instructions below.

The Low Heat Adjustment Screw only affects burner operation at the Burner LOW setting. Any efforts to make adjustments at another setting will have no effect until the burner is turned to Burner LOW, where the burner may involuntarily extinguish while gas is still flowing. This condition is unsafe, therefore adjustments should ONLY be made with the Burner Output Knob at the Burner LOW setting while visually monitoring changes (See Figure 9).

Procedure

- 1. Follow Burner Ignition procedures and operate Cherokee for approximately 5 minutes.
- 2. Turn the Burner Output Knob to the Burner LOW position and wait until the flame stabilizes.
- 3. Remove Burner Output Knob from valve stem.
- Insert small blade type screwdriver into valve stem to engage recessed Low Heat Adjustment Screw. Turn <u>clockwise to reduce</u> low heat intensity, or turn <u>counter-clockwise to increase</u>. This adjustment affects the flame at the LOW setting ONLY.

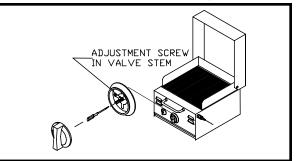


Figure 9. Low Heat Adjustment

Hazardous Locations and Conditions

- Do not use your Cherokee closer than 8" to any combustible surface (wood wall or wooden fences, etc.). Do not use your Cherokee under any overhead unprotected combustible construction (i.e., wood, canvas, plastic, etc.).
- Do not obstruct the flow of combustion and ventilation air.
- This appliance should <u>only</u> be used outdoors in a well-ventilated space and must not be used in a building, garage, or any other enclosed area.
- Keep all flammable substances away from this appliance. These include aerosols and aerosol containers, gasoline and similar liquids, paper and paper products, and containers of grease, paint, etc.
- Avoid wearing flammable and/or loose clothing such as neckties, scarves, etc., while using the Cherokee.

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 food 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 incinerate on contact with the burner and convert into flavorful vapors that cook back up into your food.

Searing Method

- 1. Follow the Burner Ignition procedures and operate the grill for 5 minutes or until the ceramic burners glow orange.
- 2. Set the Burner Output Knob 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 1 to 3 minutes).

During the searing process, flashing may occur when juices vaporize on contact with the Cooking Grid and Burner surface. The flashes and smoke greatly enhance the flavor by "char-cooking" your food.

Helpful Hints In Cooking

- 1. Cover the Drip Tray with foil. This helps with clean-up. Be careful not to cover the ventilation openings at front of the Drip Tray.
- 2. Use the proper cooking tools, long handled tongs, spatula, knife, mitts and 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.
- 3. 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.
- 4. Start slowly. Infra-red grilling is unlike other outdoor cooking methods. It may take you time to perfect the fast cooking process. As a benchmark, foods that generally cook in 20 minutes or less on conventional grill, 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 13.

Flame Flare-up Control

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

To minimize flame flare-ups:

- Use Cooking Grid with U-shape Channels facing up.
- Trim excess fat from meat.
- Preheat the grill for 5 minutes before each use.
- Reduce heat and reposition food while cooking.
- Move the food to the rear until the flare-up has diminished.
- Prevent excess grease build up by periodically cleaning the Cooking Grid.

Infra-red Cooking continued

Sample Cooking Methods

Use this chart as a cooking guide. Cooking times may vary, depending on thickness of food.

FOOD	CONTROL SETTING	TOTAL COOKING TIME	
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. each side	20 - 25 min.	
	Balance medium-low to low fire		
Chicken Breast 3/4" Thick, Filleted	High fire 2 min. each side	8 - 10 min.	
Hot Dogs	Medium-Low	4-6 min.	
Pork Chops	Medium	6 min. per side	
Spare Ribs	High fire 5 min.	20 min. per side	
	Low to finish	Turn often	
Lamb Chops	High fire 5 min.	15 min. per side	
	Medium to finish		
Fish 1 lb.	Medium-Low	6-8 min. per side	
Shrimp, Shelled	Medium-Low	3-4 min. per side	
Kabobs	Medium-Low	4-5 min. per side (2 sides)	



Cleaning and Maintenance

General Overview

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 cover OPEN. This is referred to as the "BURN OFF" phase.

Protection of Burner

The Burner of your grill is designed to provide a long life of satisfactory performance. However, there are steps you must take to prevent cracking of the Burner's ceramic surface, which will cause the Burner 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 Grid 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 Burner to function properly, hot air created by the Burner must have a way to escape the grill. If the hot air is not allowed to escape, the Burner may become deprived of oxygen, causing them to backfire, especially if the Burner output is set at HIGH. If this occurs repeatedly, the ceramic 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 Grid provide sufficient open space). Also, never cover the ventilation louvers with foil or other materials that prevent air flow. Specifically:

Do not cover the entire surface with foil, a large pan, etc.

WATER OR OTHER LIQUIDS - When the burner 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 douse water into the grill to control a flare-up.
- Never expose the Burners to the risk of soaking by rainfall, sprinklers or otherwise. Further, do not attempt to operate your grill in the open air while it is raining. Finally, after you use the grill, close the cover as soon as you turn the burners OFF so that, if it rains, the Burner 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 surface for evidence of possible water soaking. If the ceramic appears to be wet, remove the Burner from the grill and turn them upside down to empty any water from the Burner body. After draining all the water, place the Burner indoors and allow it to dry thoroughly. Also, empty any water standing in the grill's Drip Tray. Then, reinstall the Burner. After testing for gas leaks around all fittings as described in the section entitled GAS LEAK TEST on page 9, you should be able to resume normal use of your grill.

For further Burner maintenance instructions, see MAINTENANCE section.

Cleaning and Maintenance continued

Cleaning and Storage

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

Drip Tray

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

Cooking Grid

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

Storage and Transport

Caution: Always allow the grill to cool before handling or storing. Place the Cooking Grid in the Drip Tray when transporting. Always store the grill in its upright cooking position. Storage of this appliance indoors is permissible only if the cylinder is disconnected and removed from teh appliance. Cylinders must be stored outdoors, out of the reach of children, and must not be stored in a building, garage or any other enclosed area.

Maintenance

The Cherokee requires very little maintenance. However, a periodic inspection of orifice openings and venturi inlets to clear obstructions to gas flow is recommended.

Burner Head

The most important way to maintain the performance of the Infra-red Burner is to operate the grill on HIGH for at least 5 minutes 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 vacuum the burner surface with a low-suction vacuum cleaner or sweep away ashes with a soft bristle brush, every six months, or as necessary. When performing 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.

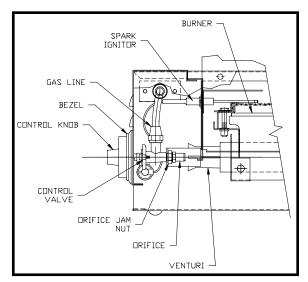


Figure 10. Combustion Components

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 10.

Appendix A: Cherokee Expanded View of Burner

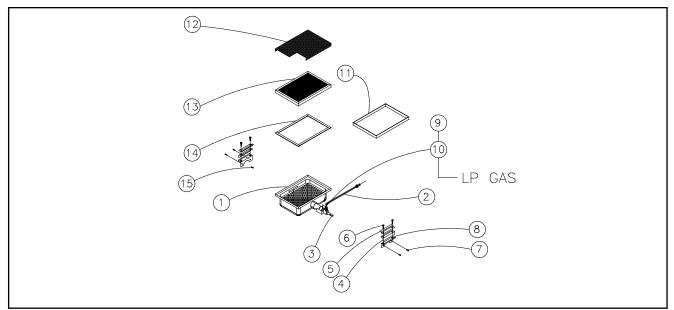


Figure 11. Cherokee Expanded View

ITEM	PART NO.	DESCRIPTION	QUANTITY
1	FM1525	Burner Body Weldment	1
2	FM1537	Tubing Assembly, Gas supply.	1
3	HW0264	Valve, Burner	1
4	FM1520	Ceramic Burner Clamp	2
5	FM1521	Screen Retainer Clamp	2
6	HW0555	Screw, Hex HD, 1/4-20 X 1-1/2" Lg., S.S.	1
7	HW2505	Screw, Slotted Hex HD, 10-24 X 1-1/2" Lg., S.S.	2
8	FM1519	Burner Head Clamp	2
9	HW0609	Nut, Lock, 3/8-27, Bras	1
10	HW020257	Orifice #57	1
11	FM1130	Burner Head Rail	1
12	FM1527	Burner Screen	1
13	FM1124	Burner Head Assembly	1
14	HW0311, HW0312	Fiberfrax, 1/8" Thick	2
15	HW2505	Screw, Slotted Hex HD, 10-24 X 1-1/2" Lg., S.S	1

Appendix B: Accessories

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. (Please note that the Deep Fryer / Steamer is a combined accessory giving you frying, as well as steaming capabilities.)

A WARNING:

- 1. In the event of rain while cooking with oil / grease, cover the cooking vessel immediately and turn off the appliance burner and gas supply. Do not attempt to move the appliance or cooking vessel.
- 2. When cooking with oil / grease, do not allow the oil / grease to exceed 350°F (177°C). Do not store or use extra cooking oil in the vicinity of this or any other appliance.
- 3. Do not leave oil / grease unattended.

Deep Fryer Use

CAUTION: DO NOT CLOSE COVER 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.

OIL WILL BURN IF OVERHEATED. DO NOT LEAVE UNATTENDED WHILE HEATING. IF SMOKING OCCURS, REDUCE HEAT. IN THE EVENT OF AN OIL/GREASE FIRE, DO NOT ATTEMPT TO EXTINGUISH WITH WATER. USE TYPE BC DRY CHEMICAL FIRE EXTINGUISHER OR SMOTHER FIRE WITH DIRT, SAND OR BAKING SODA, OR COVER FRYER WITH STEAMER LID UNTIL COOLED.

- 1. Remove the Cooking Grid.
- 2. After removing the Steamer attachment, place the Deep Fryer over the 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 Burner and operate the grill for 5 minutes or until

the ceramic Burner glows orange.

- 5. Let the 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 is sufficient for frying.
- 6. Turn Burner control dial between MEDIUM and LOW. Do not leave the burner on HIGH.
- 7. Place the food into Deep Fryer with long-handled utensils.
- 8. After cooking, turn the burner to OFF. Let the grill and cooking oil or water cool to room temperature before attempting to remove the Deep Fryer/Steamer.

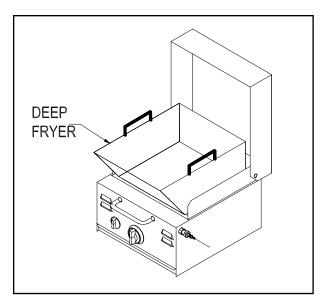


Figure 12. Deep Fryer

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



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.

Steamer Use

- 1. Remove the Cooking Grid.
- 2. Place the Deep Fryer/Steamer over the Burner.
- Fill the bottom of Fryer with 1/2" to 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 Burner.
- 4. Place the Steamer Screen in the bottom of Deep Fryer. Cover with the lid.
- 5. Follow the Burner Ignition procedures for the Burner and operate the grill for 5 minutes or until the ceramic Burner glows orange.
- 6. Let the right Burner stay on HIGH for 4 to 8 minutes to allow water to boil.
- 7. Turn the Burner control dial between MEDIUM and LOW. Do not leave the burner on HIGH.
- 8. Remove the lid and add the food.
- 9. Cook until desired texture is attained.
- 10. After cooking, turn the burner to OFF. Let the grill and water cool to room temperature before removing Deep Fryer/Steamer.

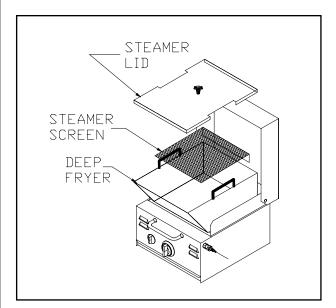


Figure 13. Steamer

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

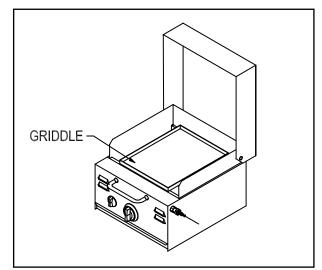
Appendix B: Accessories continued

Griddle

The Griddle provides a surface for you to use your grill for pan frying foods such as bacon, eggs, sausage, french toast and pancakes, and also for blackening fish and meats. After each use, the Griddle should be thoroughly washed with warm soap and water, dried and rubbed with cooking oil to season the griddle, prior to storing.

Griddle Use

- 1. Remove the Cooking Grid.
- 2. Place the Griddle over the Burner.
- 3. Follow the Burner Ignition procedures for the Burner and operate the grill for 5 minutes or until the ceramic burner glow orange.
- 4. Adjust Burner Output to between MEDIUM and LOW for frying, or between MEDIUM and HIGH for blackening.
- 5. 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.



Appendix C: Replacement Parts

Contact your Authorized TEC Dealer regarding information on replacement parts and accessories. Following is a list of replacement parts and accessories.

 ORDER NO.	DESCRIPTION
СНВА	Burner Assembly (less screen)
STBP	Burner Head
CHBS	Burner Screen
CHBCVL	Gas Valve, Burner, Propane
STBK	Knob, Burner
STIK	Knob, Igniter
CHCG	Cooking Grid
CHDT	Drip Tray
CHHS	Heat Shield
CHCVR	Cover
HW0266	Regulator, with hose, LP gas (for use with 5-20 lbs. gas cylinders)
HW0267	Regulator, LP gas (for use with 16.4 oz. disposable LP-gas cylinders)
ORI57	Orifice, LP gas, #57
ST30IGN	Igniter
CHSPKR	Sparker (with wire)
CHFRST	Deep Fryer/Steamer
FRBK	Fryer Basket
CHFGSM	Griddle

Appendix D: Troubleshooting

PROBLEM	PROBABLE CAUSE	REMEDY
Burner output at HIGH setting is too low. (Rumbling noise and fluttering blue flame at burner surface.)	 a. Lack of gas b. Kinked regulator hose. c. Insufficient gas pressure despite ample gas supply. d. Dirty or clogged orifice. e. Venturi tube obstructed by spider webs, wasp nest, or other foreign matter. f. Cracked burner. 	 a. Check gas level in LP gas cylinder, if applicable. b. Reposition regulator hose, as necessary. c. Adjust regulator, as necessary. d. Clean burner orifice. e. Clean out all obstructions from venturi tube. f. Contact Authorized TEC Dealer. Replace ceramic burner head.
Burner output at LOW setting is too hot (or too cool).	a. Low heat setting is adjusted too high (or too low).	a. Reduce (or increase) low heat setting following procedures on page 12.
Burner backfires (during operation burner abruptly makes a loud "woosh" sound, followed by a continuous blow- torch type sound and grows dim). In all cases, turn Burner Output Knob to OFF position and let it cool for at least 2 minutes.	 a. Overloaded with grease drippings or build-up, clogging ports. b. Burner overheated due to inadequate ventilation (too much cooking surface covered). c. Cracked ceramic. d. None of the above. Probable cause is leak in packing within or under ceramic burner head. Also, this can occur through breaks in welds of burner box. Both are manufacturer's defects to which your warranty applies. 	 a. Relight burner and burn at a HIGH setting for at least 5 minutes or until ceramic uniformly glows orange. b. Remove any object or accessories which may be covering more than 75% of the cooking service. Allow the burner to cool for approximately 2 minutes, then relight the burner. DO NOT OPERATE THE GRILL WITH COVER CLOSED. c. Allow burner to cool and inspect very closely for cracks (which may be nearly invisible). If cracks are found, contact Authorized TEC Dealer to replace burner head. d. Contact Authorized TEC Dealer. Packing under burner head should be replaced. If backfiring continues, burner body welds should be inspected for holes, and/or burner head should be replaced.

