Kalamazoo Echo Gas Grills

USE AND CARE GUIDE



Important Safety Warnings

This appliance is FOR OUTDOOR USE ONLY. It is not to be used inside a garage, other building or any type of enclosed area.

WARNING: Failure to follow the information in this Use and Care Guide exactly may result in fire or explosion, causing property damage, personal injury or death. Read and follow all warnings and instructions before assembling and using the appliance.

WARNING: This appliance is not intended to be installed in or on a boat or recreational vehicle.

DANGER: IF YOU SMELL GAS:

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

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

WARNING: FOR YOUR SAFETY:

- **1.** Do not store or use gasoline or other flammable liquids or vapors 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.

IMPORTANT: Damage caused by a failure to heed the warnings or follow the safety instructions and practices described in this Use and Care Guide is not covered by the warranty.

This Use and Care Guide contains important information necessary for the proper assembly and safe use of the grill.

Read and follow all warnings and instructions before assembling and using the grill.

Follow all warnings and instructions when using the grill.

Keep the Use and Care Guide for future reference.

Thank you for choosing Kalamazoo Outdoor Gourmet cooking equipment.

Because of the high performance nature of Kalamazoo Grills, we recommend familiarizing yourself with this book before using your grill for the first time. Your Use and Care Guide contains important safety information as well as helpful guidance for successful cooking experiences and care. Following the guidance of this book will help ensure many years of outdoor cooking enjoyment.

Should you ever have any questions about cooking with or caring for your Kalamazoo Grill, we are here to help. Contact Kalamazoo Outdoor Gourmet Customer Service at:

+1.800.868.1699

or

customerservice@KalamazooGourmet.com

Please have your model number and serial number ready or include it in your email.

Model Number

K30DB-1-NA	K30DT-1-NA
K42DB-1-NA	K42DT-1-NA
K54DB-1-NA	☐ K54DT-1-NA

Fuel Type

Natural Gas	Liquid Propane Cylinder	 Bulk Liquid Propane

Serial Number

Version 02.21.2025

Table of Contents

Safe Operation	4
Liquid Propane Tank Safety	6
Gas Requirements	8
Leak Testing	13
Locating the Grill	14
Required Clearances	14
Ventilation Hood Information	15
Grill Dimensions	19
Initial Assembly	39
Get to Know Your Grill	44
Grill Controls	48
Lighting Your Grill	51
Ignition System Power Supply	53
Burner Adjustments	55
Valve Adjustments	55
Cooking with Your Grill	61
Caring for Your Grill	69
Troubleshooting	73
Changing Light Bulbs	74
Electrical Diagrams	77
Installation Checklist	81



Important Safety Information

Safe Operation

WARNING: When in use, portions of your grill get hot enough to cause severe burns. Children and pets should never be left alone or unattended in the area where the grill is being used. Never allow children to sit, stand or play on or around the grill.

IMPORTANT: Improper use or installation is dangerous. Because this grill produces intense heat, the risk of accidents or potential injuries is increased. Extreme care must be taken.

Carefully follow all instructions, including the following:

- To reduce the risk of fire, burns or other injury, read this Use and Care Guide thoroughly. Begin by ensuring proper installation and servicing. Do not repair or replace any part of the grill yourself unless it is specifically recommended in this Use and Care Guide. All other service must be carried out by a qualified gas technician.
- Never allow children to operate the grill. Do not store items of interest to children in or around the grill.
- Do not heat unopened food containers in the grill. The build up of pressure resulting from the heat may cause the container to burst.
- Never lean on any part of the grill. When lighting the grill, always pay close attention to what you are doing. Make sure you are aware of which burner you are lighting and can see whether or not it is lit. Make sure you have ready access to the burner valves when you are lighting the burner. Make sure you are pushing in the burner valve to activate the ignition when you attempt to light the burner.
- When the burners are on or the grill is hot, do not touch the grilling surface, warming rack, any part of the grill's interior or any surface of areas surrounding the grilling surface. These areas become extremely hot and may cause severe burns. Likewise, do not touch any part of the grill lid other than the handle. Do not touch any surface of the cleanout trays or open the cleanout when the grill is hot.
- Do not use any cleaner, including water, on a hot grill.
- Be sure all control knobs are in the OFF position and the grill is cool before using any aerosol cleaner on it or near it. The chemical used for aerosol propellant could ignite in the presence of heat.
- Always use dry pot holders or gloves on hot surfaces or cooking tools: moist or damp pot holders or gloves may cause steam burns. Never use a towel or bulky cloth in place of pot holders. Do not let pot holders touch hot portions of the grill or allow them to get near the open flame.
- Do not operate the grill under an unprotected combustible construction. Use only in a well-ventilated area. The grill is for outdoor use only.
- Do not obstruct any of the openings on the grill or otherwise obstruct the flow of combustion and ventilation air. Do not build the grill into any combustible structure that is closer than 6 inches from the sides and back.
- Do not use the grill when there is a strong wind blowing from behind the grill. For installations with a prevailing wind that blows against the rear side of the grill, a wind break may be required for safe operation.
- Keep all gas hoses away from the hot surfaces of the grill, including all external surfaces of the unit.
- Keep all electrical supply cords away from the hot surfaces of the grill, including all external surfaces of the unit.

- Ensure proper installation and servicing by following all instructions in this Use and Care Guide and any other instructions or markings provided with this product. Have your grill installed by a qualified technician. Have the installer show you were the gas supply shut-off value is located and instruct you in its operation so that you can shut-off the gas to the grill.
- If you smell gas, there is likely a problem with the installation. If the connections are not perfectly sealed, you can have a small leak resulting in the faint smell of gas even if the grill appears to be working properly. Close the gas supply shut-off valve and call a qualified technician to locate and resolve the leak.
- Minimum ambient temperature for safe operation is 0°F (-17°C).

SPIDER ALERT: Spiders and other insects are prone to nesting inside burners in outdoor cooking equipment. This can create a very dangerous condition where the gas flow is redirected and can create a fire behind the control panel. This will damage the grill and make it unusable. Frequent inspections and care are recommended. See the care section beginning on page 57.

California Proposition 65 Warning:

The burning of gas cooking fuel generates some by-products that are on the list of substances which are known by the State of California to cause cancer or reproductive harm. California law requires businesses to warn customers of potential exposure to such substances. To minimize exposure to these substances, always operate the grill according to this Use and Care Guide and ensure you provide good ventilation when cooking.

State of Massachusetts:

Massachusetts requires all gas appliances be installed by a plumber or gas fitter carrying the appropriate Massachusetts license.

All permanently-installed natural gas or propane installations require a "T" handle type manual gas valve be installed in the gas supply line to this appliance.

This does not apply to portable propane installations using a 20 pound cylinder.

Important LP Tank Safety Information

A liquid propane cylinder should never be overfilled beyond the cylinder filling capacity. Overfilling may create a dangerous condition.

Overfilled tanks can build up excess pressure. The standard safety device on tanks is the safety relief valve. This valve vents propane gas vapors to relieve excess pressure. These vapors are combustible and can be ignited.

To avoid risk of fire or explosion, take the following safety precautions:

- Never replace the liquid propane regulator or hose with a different type than the model supplied.
- Never use a dented or rusty LP tank.
- Never connect the grill to anything other than the fuel source indicated on the serial plate. Factory conversion kits are available for switching fuel sources. Contact Kalamazoo Outdoor Gourmet or an authorized dealer for details. Conversion kit installation must be done by a qualified technician.
- The LP-gas cylinder must include a collar to protect the cylinder valve from damage.
- Ensure proper ventilation of the cylinder. The cylinder supply system must be arranged for vapor withdrawal.
- The LP-gas supply cylinder to be used must be constructed and marked in accordance with the specifications for LP-gas cylinders, U.S. Department of Transportation (DOT) or the standard for Cylinders, Spheres and Tubes for the Transportation of Dangerous Goods, CAN/ CSA-B339.

- The cylinder should be mounted such that the pressure relief valve outlet is not oriented toward the normal operating position of the user.
- When the grill is not in use, the gas must be turned off at the supply cylinder.
- The grill may be stored indoors, but only if the cylinder is disconnected and removed from the grill. An LP cylinder MUST NEVER BE STORED INDOORS.
- 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.
- The pressure regulator and hose assembly supplied with the grill must be used. Replacement pressure regulators and hose assemblies must be the type specified by Kalamazoo Outdoor Gourmet. For replacement parts, contact Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699.

DANGER:

Do not route the gas supply hose or locate a propane cylinder in a way that may create a tripping hazard. Tripping over, or getting caught on, a gas supply hose may tip the grill over or damage the hose, creating serious risk of injury and fire.



Required ventilation for built-in LP-gas cylinder structures:

An enclosure for an LP-gas cylinder shall be ventilated by openings at both the upper and lower levels of the enclosure (See Figure 2). The effectiveness of the opening(s) for purposes of ventilation shall be determined with the LP-gas supply cylinder in place. This shall be accompanied by one of the following:

- 1. One side of the enclosure shall be completely open; or
- **2.** For an enclosure having four sides, a top and a bottom:
 - a. At least two ventilation openings shall be provided in the side walls of the enclosure, located within 5 in (217 mm) of the top of the enclosure, equally sized, spaced at a minimum of 90 degrees (1.57 rad), and unobstructed. See Figure 2. The opening(s) shall have a total free area of not less than 1 in²/lb (14.2 cm²/kg) of stored fuel capacity.
 - b. Ventilation opening(s) shall be provided at floor level of the enclosure and shall have a total free area of not less than 1/2 in²/lb (7.1 cm²/kg) of stored fuel capacity. If ventilation openings at floor level are in a side wall, there shall be at least two openings. (See Figure 2) The bottom of the openings shall be 1 in (25.4 mm) or less from the floor level and the upper edge no more than 5 in (127 mm) above the floor level. The openings shall be equally sized, spaced at a minimum of 90 degrees and unobstructed.
 - **c.** Every opening shall be a minimum of a 3/16 inch (4.8 mm) diameter.
 - **d**.Ventilation openings in side walls shall not communicate directly with other enclosures of the outdoor cooking gas appliance.
 - e. A door on the enclosure to gain access to the cylinder is acceptable, provided it is non locking and can be opened without the use of tools.

- **3.** Some means of retention (chain, bracketry, cutout) must be used to hold cylinder in place inside enclosure.
- There shall be a minimum clearance of 2 in (50.8 mm) between the floor of the LP-gas cylinder enclosure and the ground.



DANGER:

- A. Do not store a spare LP-gas cylinder under or near this appliance;
- B. Never fill the cylinder beyond 80 percent full; and
- C. If instructions A and B are not followed exactly, a fire causing death or serious injury may occur.

Liquid Propane Gas Requirements (20-Pound Cylinder)

Verify the type of gas your grill has been configured for by the factory by checking the serial tag inside the cleanout tray of the grill. Grills configured for liquid propane (LP) gas are orificed differently than grills configured for natural gas (NG). Grills configured for use with 20-pound LP cylinders (Type 1) are shipped with a dual-stage LP regulator hose assembly (see Figure 3).

Connection: LP regulator hose assembly (included) connects to the grill via 0.5" NPT male with a 0.375" flare adapter (included).

Input Pressure via LP regulator hose assembly: 11.0" W.C. (27.4 mbar)

Manifold Pressure: 8" W.C. (19.9 mbar)

To connect the LP regulator hose assembly to the LP tank, first make sure the main valve on the tank is completely closed. Make sure also that all control valves on the front of the grill are OFF.



IMPORTANT: Always close the main valve on the tanl before disconnecting or transporting the tank.

IMPORTANT: After connecting a fresh LP tank, you may need to purge air from the system. Before lighting, open the main valve on the tank. Turn the control valves on the grill to the HIGH position for about 15 seconds to purge air from the system. Turn the control valves on the grill OFF and wait 5 minutes for any gas to clear. Finally, continue with the normal lighting procedure.

The installation must conform with local codes. In the absence of local codes, the installation must conform with the National Fuel Gas Code, ANSI Z223.1/NFPA 54; Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58; Natural Gas and Propane Installation Code, CSA B149.1; or Propane Storage ar Handling, CSA B149.2.



SECONDARY 10" W.C. PRESSURE REGULATOR CONNECTS TO GRILL. DUAL-STAGE 11" W.C. PRESSURE REGULATOR HOSE CONNECTS TO SECONDARY REGULATOR



FIGURE 4 (Built-in Model shown with K-42DBC-LVP Base Cabinet designed for proper

Bulk Gas Plumbing Information

IMPORTANT: An installer-supplied safety shut-off valve MUST be installed at the gas supply line connection point for the grill. The valve should be easily accessed and located between 3 and 20 feet away from the grill.

All gas connections should be made by a qualified technician. The installation and all installersupplied parts must conform to local codes. In the absence of local codes, the installation and all parts should conform to the *National Fuel Gas Code, ANSI Z223.1/NFPA 54* or *Natural Gas and Propane Installation Code, CSA B149.1.* Cooktops to be connected to a fixed fuel piping system must use rigid pipe, semi-rigid tubing, and/or a connector that complies with the Standard for Connectors for Outdoor Gas Appliances and Manufactured Homes, ANSI Z21.75/CSA 6.27.

IMPORTANT: Always close gas supply shut-off valve before disconnecting the grill gas supply hose.

All pipe sealants must be an approved type.

IMPORTANT: Diameter and length of the gas supply pipe may limit the pressure and BTU delivery of gas to the grill. The installer must ensure proper delivery to the grill or it will not operate properly.

The appliance must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of 1/2 psi (3.5 kPa).

During any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa), the appliance must be isolated from the system by closing the supply shut-off valve.

Bulk Supply Liquid Propane Gas Requirements

Verify the type of gas your grill has been configured for by the factory by checking the serial tag inside the cleanout tray of the grill. Grills configured for liquid propane (LP) gas are orificed differently than grills configured for natural gas (NG). Grills configured for use with a bulk LP supply are shipped with a gray hose with a quick-connect fitting.

Connection: 1/2" NPT male. Quick-connect hose assembly (included) connects to the grill via 0.625" flare fitting.

Input Pressure: 11.0" W.C. (27.4 mbar)

Manifold Pressure: 8" W.C. (19.9 mbar)

All pipe sealants must be an approved type and safe for use with LP gas.



Natural Gas Requirements

Verify the type of gas your grill has been configured for by the factory by checking the serial tag inside the door of the grill cabinet. Grills configured for natural gas (NG) are orificed differently than grills configured for liquid propane (LP) gas. Grills configured for use with natural gas are shipped with a gray hose with a quick-connect fitting.

Connection: 1/2" NPT male. Quick-connect hose assembly (included) connects to the grill via a 0.625" flare fitting.

Input Pressure: 7.0" W.C. (17.4 mbar)

Manifold Pressure: 4.0" W.C. (10 mbar)



High Altitudes

For all gas types, the stated BTU ratings of this appliance apply to installation at sea level.

With increased altitude, there is decreased atmospheric pressure. The National Fuel Gas Code recommends down-rating burner BTUs by 4% for every 1,000 feet (305 meters) of altitude above 2,000 ft (610 meters) to ensure complete combustion while operating at higher altitudes. Please call Kalamazoo Customer Service at +1.800.868.1699 for a high altitude kit for your appliance.

Leak Testing

Although gas connections on the grill are leak tested at the factory prior to shipment, a complete test must be performed after installation due to possible mishandling during shipping or installation.

Periodic checks are also recommended. Immediately check for leaks if you smell gas.

Never use an open flame to look for leaks.

Before Testing: Extinguish all open flames. Do not smoke.

You will need a spray bottle, a brush or a rag. For LP units using a 20-pound cylinder, a full cylinder should be used.

IMPORTANT: Homeowners should only check for leaks on the gas connections that are external to the grill. If the valves or other internal connections need to be checked, please call a qualified technician or Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699.

To Conduct the Test: Make a soap solution of one part liquid dish soap and one part water.

Make sure all grill control valves are in the OFF position. Turn the gas supply ON. Use a spray bottle, brush or rag to apply the mild soap solution to all connections from the supply line or LP cylinder to the connection on the grill. Check all connections. Soap bubbles will appear at any connections with a leak. Turn OFF the gas supply and tighten any leaky connections. Recheck, applying more mild soap solution.

IMPORTANT: Do not use the grill until all connections have been checked and do not leak.

Electrical Connection

The grill requires AC power for ignition, the control panel lighting, and rotisserie motor functionality. It must be connected with an outdoor-rated, grounded electric extension cord.

The grill, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

See additional electrical precautions on page 41.

Grill Location

- For ease of use and safe operation, it is recommended the grill be placed on a level surface.
- Do not place the grill in a location where the rear lid openings are likely to be exposed to strong wind. Wind from behind may prevent the heat of the grill from venting properly, causing the front of the grill, including the control panel and control knobs to become dangerously hot. A wind break wall is recommended for installations where the prevailing wind may be a problem.



- Do not place the grill where it is likely to be bumped into or inadvertently touched by passers by. It is recommended that the counter top or other surface extend 9 inches beyond the sides and back of the grill as a safety clearance to protect people from injury.
- Do not place the grill on a surface that is unable to safely support the weight of the grill or may cause it to be unstable.
- Never place the grill where the gas hose creates a safety hazard (see Figure 2). Tripping over an exposed gas hose may create a gas leak or create other serious safety hazards.

- This outdoor cooking gas appliance must only be used outdoors and must not be used in a building, garage, or any other enclosed area;
 - An appliance is considered to be outdoors if installed with shelter no more inclusive than with walls on three sides, but with no overhead cover; all openings must be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings;
 - 2. An appliance is considered to be outdoors if installed with shelter no more inclusive than within a partial enclosure that includes an overhead cover and no more than two sidewalls. The sidewalls may be parallel, as in a breezeway, or at right angles to each other; all openings must be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings; or
 - 3. An appliance is considered to be outdoors if installed with shelter no more inclusive than within a partial enclosure that includes an overhead cover and three sidewalls, as long as 30% or more of the horizontal periphery of the enclosure is permanently open. All openings must be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings.
- The grill is not intended to be installed in or on a boat or recreational vehicle.

REQUIRED CLEARANCES

IMPORTANT: Do not build the grill into a combustible enclosure. Maintain at least 6 inches of clearance between the sides and back of the grill and any combustible surface, or use an insulating surround provided by Kalamazoo Outdoor Gourmet. NEVER place the grill underneath an unprotected overhead combustible structure or surface.

Installing a Vent Hood

A properly-installed hood can sometimes be used to address the safety restrictions regarding overhead combustible structures. Please check your local building codes to confirm if this is an option for your installation.

Important information:

- Outdoor ventilation hoods will not "suck" smoke into the hood. The smoke must collect naturally within the capture area of the hood, where the fan can then exhaust the smoke.
- Breezes, together with the lack of any sealed system or controlled recovery air, make it unlikely in many situations that all of the smoke will be collected.
- A standard residential ventilation hood **does not** make it okay to use an outdoor grill in a building, breezeway, shed or other such enclosed area.
- The bottom of the vent hood must be located no more than 36 inches above the grill grates. The closer the hood is positioned to the grill grates, the more effectively it will capture smoke.
- The front of the vent hood must be positioned at least 4 inches beyond the front of the grill. If the hood is positioned too far back relative to the grill, the smoke will be more likely to roll out in front of the hood.



Notice for Countertop Fabricators

The countertop should be adhered directly to the tops of the cabinets using silicone adhesive. See detailed instructions in the cabinetry installation manual.

A 1-inch overhang is recommended on all sides. The recommended position of the Kalamazoo Echo Grill will notch the front edge of the countertop 1 inch around the control panel. A The countertop should extend below the trim ledge of the grill behind the control panel.

The back plane of the control panel should be flush with the front plane of the cabinetry or other base structure.

The seam between the control panel and the body of the Kalamazoo cooktop **G** should be in front of the countertop.

When the Echo Grill is installed in the Kalamazoo base cabinet, the grill support pads should be adjusted to create a 1/8 inch (3mm) gap between the top of the countertop and bottom of the grill trim ledge. Drop-in grills that are not installed in Kalamazoo cabinetry may rest directly on the countertop.

A drip edge **(B)** is recommended around the perimeter of the countertop.

Undercounter refrigeration should not bear the load of, or be adhered to the countertops.

The optimum recommended countertop thickness when using the Kalamazoo base cabinet with the Echo drop-in grill is 1.25 inches (32mm). Maximum is 2 inches (51mm). Minimum is 1 inch (25mm).













Product Dimensions

K30DB Built-in Grill







WIDTH INCLUDING RIVETS AND ACCESS COVER



















<u>0.20"</u> [5mm]

















DIM	ENSION	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	NOTES
W	PRIMARY CUTOUT WIDTH	28.25" / 718 mm	29.5" / 750 mm	40.25" / 1023 mm	41.5" / 1054 mm	52.25' / 1328 mm	53.5' / 1359 mm	MAIN CHASSIS WIDTHS: K30DB 28.125° / 715 mm; K42DB 40.125° / 1020 mm; K54DB 52.125° / 1324 mm
0	PRIMARY CUTOUT HEIGHT	10" / 254 mm	11.675" / 297 mm	10" / 254 mm	11.675" / 297 mm	10" / 254 mm	11.675" / 297 mm	MAIN CHASIS IS 10° / 254 mm TALL
D	PRIMARY CUTOUT DEPTH	24.25" / 616 mm	25.375" / 645 mm	24.25" / 616 mm	25.375" / 645 mm	24.25" / 616 mm	25.375" / 645 mm	FROM FACE OF STRUCTURE, NOT INCLUDING COUTNERTOP OVERHANG
G	FRONT COUNTERTOP NOTCH WIDTH	30" / 762 mm	NA	42' / 1067 mm	NA	54' / 1372 mm	NA	REQUIRED IF THERE IS A FRONT COUTNERTOP OVERHANG
G	GAS HOSE ENTRANCE CENTER LINE	5.27" / 134 mm	NA	9" / 229 mm	NA	15" / 381 mm	NA	5" / 127mm OPENING FOR GAS CONNECTION. HOSE MAY PASS THROUGH REAR OR BOTTOM AS NEEDED
8	ECHO 4, 5 ELECTRICAL CORD PASS-THROUGH			3.14" / 80 mm	NA	9.14" / 232 mm	NA	4° / 102mm OPENING REQURED FOR GROUNDED ELECTRICAL EXTENSION CORD CENTERED 2' / 51mm TO 3' / 76mm FROM REAR OF CUTOUT
6	ECHO 3 ELECTRICAL CORD PASS-THROUGH	-1.75" / -44 mm	NA					4° / 102mm OPENING REQURED FOR GROUNDED ELECTRICAL EXTENSION CORD CENTERED 2° / 51mm TO 3° / 76mm FROM REAR OF CUTOUT
Optional K-DBC30 Base Cabinet



COUNTERTOP RESTS ON THIS SURFACE









28 7/8" [735mm]






Initial Assembly

Initial Assembly

Your grill does not require any major assembly, but some pieces are wrapped individually to prevent shipping damage.

- A. If not already attached, secure the gas hose to brass supply fitting on the grill. The gas hose connection is a flare fitting. No sealant is required. Tighten with a wrench and check for leaks before use.
- **B.** Insert the CLEANOUT TRAY into the bottom of the grill chassis, tilting over the roller bearings.
- C. Place the CLEANOUT PANS into the cleanout tray.
 WARNING: Never open the cleanout tray or touch the cleanout pans when the grill is hot.
- **D.** Position the HEAT DIFFUSERS above the main burners inside the grill.

- **E.** Place the COOKING GRATES into the grill above the heat diffusers.
- **F.** Position the WARMING RACK at the desired level on the WARMING RACK SUPPORTS **G**.
- **H.** See page 33 for rotisserie rod installation instructions.
- I. If not already attached, mount the CONTROL KNOBS onto the valve stems.
- J. For K42DT and K54DT Freestanding Grills only, Heavy duty LEVELING CASTERS can be used level the grill once it is positioned in its final location.



For K42DT and K54DT Freestanding Grills only, raise the foot when moving the grill. Once in position lower the feet as needed to level the grill. Use a 7/8" crescent wrench to turn the adjustment knob if you need extra leverage.





Operation

Get to Know Your Grill

- **A. Warming Rack:** The warming rack can be used for warming food or for cooking food more slowly than on the primary cooking surface. The height can be adjusted according to your preference. The warming rack stows out of the way at the back of the grill for using the rotisserie spit.
- B. Warming Rack Supports: The warming rack rests on the supports on the sides and rear of the grill.



- **C.** Rotisserie Burner(s): Infrared burners for optional use with rotisserie spit system. Rotisserie cooking can be done using heat from the rotisserie burner(s) OR heat from below.
- **D. Rotisserie Spit and Forks:** Use for rotisserie cooking. Always balance the food on the spit as well as possible by centering its weight around the spit. Secure the food tightly with the rotisserie forks and tighten the thumb screws well. Butchers string may be used in addition to the rotisserie forks to hold rolled roasts securely. Always wear protective gloves and use caution when handling a hot rotisserie spit. Beware of the sharp point on the rotisserie spit. Keep the rotisserie spit away from children when hot and when not in use.

The rotisserie motor uses an indirect chain drive system to rotate the rotisserie spit. The spit inserts first through the opening on the RIGHT and then backs into the drive socket on the LEFT. The pointed end of the rotisserie spit rod should always point to the RIGHT.



- **E. Primary Cooking Surfaces:** The grill grates are crafted from thick stainless steel plate that is laser-cut into a pattern that promotes browning and prevents small foods from falling through.
- **F. Heat Diffusers:** Heavy gauge stainless steel diffusers sit between the burners and cooking surfaces. The special patterns and angles diffuse the main burner heat.
- G. Main Burners: These stainless steel burners provide the primary heat for the grill.
- H. Main Control Panel: See the following section on grill controls.





K. Cleanout Tray: The cleanout tray holds the cleanout pans. It can be fully removed for cleaning by tilting up and over the roller bearings when fully-extended.

Do not open the cleanout when the grill is hot.

Use caution when opening the cleanout all the way. If pulled out to quickly or forcefully, the drawer catch might be bypassed and the cleanout could fall or the pans could spill.

L. Electrical System Power Cord: This cord connects the power for the ignition system, the rotisserie motor, and task lighting. Use a customer-supplied single-outlet outdoor-rated extension cord to connect this short cord provided by Kalamazoo Outdoor Gourmet to an outdoor-rated GFI outlet.



For freestanding models (right), remove the louvered panel on the back of the grill to access the power cord. Run the customer-supplied extension cord down through the grommeted hole and out the bottom of the grill.

FIGURE 14



- **M. Propane Cylinder Area:** For the K42DT and K54DT freestanding models, access the LP cylinder by opening the cabinet door(s).
- **N. LP Cylinder Retention Strap:** For the K42DT and K54DT plumbed for use with an LP cylinder, secure the cylinder using the included strap.
- **O.** LP Hose Hook: For the K42DT and K54DT freestanding models, the hose hook can be used to keep the hose and regulator out of the way while changing cylinders.



Grill Controls

Each grill control knob corresponds to an individual burner control. The symbol to the right of the knob indicates which type of burner and the burner position that knob controls. The electronic ignition system works with one burner at a time. Activate the electronic ignition point by pressing inward on the control knob.

FIGURE 16



Main Burner Controls: Controls the flame on the main burners. Grills have three or four main burners depending on the model.



Rotisserie Burner Control(s): Controls the flame on the rotisserie burner(s). Grills have one or two rotisserie burners depending upon the model.



Rotisserie Motor On/Off Switch: Activates the rotisserie motor. Requires grill to be plugged into an outdoor GFI outlet (120V).



Lights On/Off Switch: Activates the interior task lighting.

FIGURE 17



OFF POSITION

'0' indicates the valve is in the fully closed position.

See "Lighting Your Grill" on page 39.



HIGH/START POSITION

'1' indicates the valve is in the fully open position. Push in on the knob to turn it counter-clockwise from the OFF position to HIGH/START.



LOW POSITION

Without pushing in on the knob, turn counter clockwise for the range of burner control between HIGH and LOW.

Control Bezel Lights

- A flashing white light indicates the hot surface ignition is active and the valve stem is pressed inward. The flash interval timing is one second to aid in following the proper lighting procedure as described on page 39.
- A flashing blue light indicates the valve stem is pressed inward, but the ignition system has timed out and turned off.
- A steady orange glow indicates the system senses heat at the burner.
- A steady blue glow is shown when the system is booting up after being connected to power.

Before You Cook

A quick safety check should be performed before each time you use the grill.

- 1. Clean and inspect the gas hose. If there is evidence of abrasion, wear, cuts or leaks, do not use the grill. The hose must be replaced prior to using the grill. Replace the hose assembly with the exact type specified by Kalamazoo Outdoor Gourmet.
- 2. Ensure the gas hose is clear of the grill. Keep the fuel supply hose away from all surfaces of the grill.
- **3.** Check that the area near the grill is clear of combustible materials and vapors, including alcohol, gasoline, aerosol containers and dry goods. Keep electrical cords from being in contact with any surfaces of the grill.
- **4.** Do not use the grill with overly loose-fitting clothing, especially loose sleeves that may come in contact with the hot surfaces inside or outside the grill.
- 5. Have insulated gloves with long cuffs ready and available.

While You are Cooking

- 1. Never move the grill while it is in use or when it is hot.
- 2. The use of alcohol, prescription or non-prescription drugs may impair your ability to properly assemble or safely operate the grill.
- **3.** Do not touch the grill lid, any surfaces inside or around the cooking surfaces, or any surfaces inside the cleanout while the grill is hot. These surfaces can cause serious burns.
- **4.** Be very careful transporting hot food. Sauces, juices and oils can cause serious burns to yourself or those around you.
- 5. Only use a brass or stainless steel bristle brush, or wooden grate scraper, to clean the cooking surfaces and warming rack. Wear insulated gloves with long cuffs to protect your hands.
- 6. Never empty the drip pans while the grill or the contents of the pans are hot.

Follow all warnings and instructions when using this appliance.

This appliance is not intended for and should never be used as a heater.

This appliance is not intended for commercial use.

Lighting Your Grill

Before lighting your grill, be sure you have followed the instructions in this Use and Care Guide regarding proper setup, placement, gas connections leak testing (see page 13) and safe operation (see page 4), all of which precede this page.

IMPORTANT: Do not use the grill if the odor of gas is present at any time. Follow leak testing procedures before using the grill.

Standard Lighting Procedure:

- 1. Open the grill lid.
- 2. Make sure all control knobs are in the OFF position.
- **3.** Turn the main gas supply on.
- **4.** To light one burner at a time, press the control knob inward firmly. The bezel light should flash white. Continue pressing in for 5 seconds, which is 5 flashes of the bezel light. This pre-heats the hot-surface igniter.
- 5. While keeping the knob pressed inward firmly, rotate the knob 90 degrees counter-clockwise to the HIGH/START position (see Figure 16). This begins the flow of gas.
- 6. Keep pressing inward. Listen and watch for the burner to ignite. If the burner does not ignite within five seconds return the valve back to the OFF position. Wait five minutes for the gas to clear before trying again to light the burner.
- 7. Once the burner has lit, you must continue pressing in on the valve while the safety thermocouple heats up. This can take up to 20 seconds.
- **8.** Release the control knob. The flame should stay lit and the bezel light should change to a steady orange glow.

IMPORTANT: This grill uses safety valves to help protect you and your property. These valves are connected to thermocouples designed to sense when there is flame coming from the burner. Once the burner is lit, it takes up to 20 seconds for the thermocouple to heat up. During this time, the safety device must be bypassed by pressing fully inward on the control knob. It is very important to observe the burner has successfully lit during this time. If it has not successfully lit, gas will be flowing into the grill, which can result in serious injury.

If you stop pressing in before the thermocouple has heated up, the safety device will cut off the flow of gas to the burner and the flame will go out. You will have to reignite the burner. After returning the control knob to the OFF position, follow steps 4 through 7 above.

IMPORTANT: Do not operate the infrared rotisserie burner(s) at the same time as the primary grill burners.

Manual Lighting Procedure:

Main Burners

- 1. Open the grill lid
- **2.** Make sure all control knobs are in the OFF position.
- 3. Turn the main gas supply on.
- 4. Insert a lighter wand through the manual lighting hole in the cooking surface (A) and the heat diffuser (B) so that the tip of the lighter is near the burner (C). Ignite the lighter. Keeping your face well away from the cooking surfaces, press in the control knob and turn it to the HIGH position (see Figure 17). Ignition should take place within 4 to 5 seconds. If the burner does not light within 4 to 5 seconds, turn the knob to the OFF position and wait 5 minutes for the gas to dissipate before trying again. Once the burner has lit, you must continue pressing in the control knob until the thermocouple has heated up. This can take up to 20 seconds. If you release the control knob too early, the safety device will stop the gas flow.



5. Repeat with other burners as needed.

Rotisserie Burner(s)

- 1. Open the grill lid
- 2. Make sure all control knobs are in the OFF position.
- 3. Turn the main gas supply on.
- 4. Keeping your face well away from the unit, hold a match or lighter wand in front of the rotisserie burner. Press in the ROTISSERIE BURNER control knob (see Figure 16) and turn it to the HIGH position. Ignition should take place within 4 to 5 seconds. If the burner does not light within 4 to 5 seconds, turn the knob to the OFF position and wait 5 minutes for the gas to dissipate before trying again. Once the burner has lit, you must continue pressing in the control knob until the thermocouple has heated up. This can take up to 20 seconds. If you release the control knob too early, the safety device will stop the gas flow.

Ignition System Power Supply

The ignition system utilizes a hot surface electronic ignition system with an AC power supply.

Plugging in the Grill

A short, factory-supplied cord is connected to the grill's electronic control box inside the back of the grill. Run a customer-supplied, single-plug, grounded, outdoor-rated extension cord into the grill chassis through the opening in the floor pan that is protected by the rubber grommet, or directly out the back of the grill. Connect the customer-supplied cord to the short, factory-supplied cord. For freestanding models, see

Be certain to connect the power to a GFI outlet. Check that the grill's central system is receiving power by turning on the rotisserie motor (see page 36).



ELECTRICAL PRECAUTIONS:

- 1. To protect against electric shock, do not immerse cord or plugs in water or other liquid;
- 2. Unplug from the outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts;
- 3. Do not operate any outdoor cooking gas appliance with a damaged cord, plug, or after the appliance malfunctions or has been damaged in any manner. Contact the manufacturer for repair;
- 4. Do not let the cord hang over the edge of a table or touch hot surfaces;
- 5. Do not use an outdoor cooking gas appliance for purposes other than intended;
- 6. When connecting, first connect plug to the outdoor cooking gas appliance then plug appliance into the outlet;
- 7. Use only a Ground Fault Interrupter (GFI) protected circuit with this outdoor cooking gas appliance;
- 8. Never remove the grounding plug or use with an adapter of 2 prongs; and
- 9. Use only extension cords with a 3 prong grounding plug, rated for the power of the equipment, and approved for outdoor use with a W-A marking.

Flame Characteristics

Every burner is tested and adjusted at the factory for proper performance. If a burner is not operating properly, it may be due to variations in the local gas supply or because of an obstructed air shutter or orifice. Flames should be stable without lifting from the burner. The flames should burn cleanly without creating any sooty residue.

Main Burner Flame Characteristics:

- The flame should be blue and stable with only a small amount of orange, if any, at the tips. There should be little noise and no lifting.
- On HIGH, the inner cone (see Figure 19:A) should be approximately 3/8 inch long.
- On HIGH, the outer cone (see Figure 19:B) should be approximately
 1 inch high.

Visually compare the flames in your grill and adjust if necessary, using the instructions that follow.

FIGURE 19

Rotisserie Burner Flame Characteristics:

The flame should be blue and stable. It should be an even blanket over the entire burner, and the burner ceramics should glow red within a couple of minutes of lighting.

Burner Adjustments

IMPORTANT: A sooty flame is usually caused by dirt, debris or spider nests blocking the air shutter or orifice. This is a dangerous condition. The grill should NOT be used until the problem is rectified. If you are not comfortable addressing the issue yourself, please hire a qualified technician or contact Kalamazoo Outdoor Gourmet Customer Service at +1.800.868.1699.

To Adjust the Main Burner Air Shutter:

The main burner air shutters are easily accessed after carefully removing the main control panel (see page 44). Ensure all of the control knobs on the grill are in the OFF position. Remove the control knobs from the main control panel, and then remove the two quarter-turn fasteners that secure the control panel (see Figure 22:C). Carefully lower the control panel to disengage it from the keyways on the

body of the grill (see Figure: 22:E). You can rest the control panel on the cleanout tray while you disengage the wiring harness connections to free the control panel.

Adjust the main burner air shutters (see Figure 20:A) by loosening the lock screw (see Figure 20:B). The grill is factory adjusted so that the air shutter is about 50% open. If the flames are too orange, the burners may need more combustion air. Adjust the air shutter to a more open position.

Too much air may cause the flames to "lift off" the burner. This is a dangerous condition that must be avoided. Do not open the air shutter too far. Too much air will also make it more difficult to light the burner. You may test burn the grill to fine-tune the air shutter by mounting the control knob without re-installing the control panel. You will have to light the burner manually because the electronic ignition system is disengaged. Light only the burner to be adjusted and fine-tune the air shutter. Adjustments should be made with the burner on HIGH.



Once adjusted to a stable flame that burns cleanly and does not lift, turn the burner OFF. Tighten the lock screw.



FIGURE 21

To Adjust Burner LOW Settings (All Burners):

The low setting on the main burners can be adjusted WITHOUT removing the control panel. A long and thin flat-blade screw driver is needed to make the adjustments. Light the burner and set it to LOW.

Remove the control knob and the valves stem insert (if applicable). Insert the screw driver into the opening in the center of the valve stem (see Figure 20:C, Figure 21:A). Turn the adjustment screw until the flame on the burner is the minimum stable flame height. The flame should be steady at all ports around the burner. The flame should not be easily blown out without quickly reestablishing itself.

FIGURE 20

R

To Remove the Control Panel:

- 1. Open the cleanout tray (A). The control panel can be rested on the cleanout tray while you are working.
- 2. Remove the control knobs (B).
- **3.** Remove the quarter-turn fasteners (C).
- **4.** Allow the control panel (D) to slide down on the keyways (E).
- **5.** Gently pull the control panel forward to access the wiring harness.
- 6. Carefully disconnect the Molex connectors for each electronic control bezel, plus the blade connectors for the rotisserie motor and task lighting switches.



To Reinstall the Control Panel:

- Reconnect the Molex connectors to each control bezel and the blade connectors for the rotisserie and task lighting switches.
- 2. Position the keyway holes on the control panel over the studs on the body of the grill.
- **3.** Slide the control panel upward until the holes for the quarter-turn fasteners are aligned with the receivers on the body of the grill.
- 4. Reinstall the quarter-turn fasteners.

FIGURE 22

0

E

D

To Clean the Main Burner Air Shutter:

Gently brush away debris from the screen using an old toothbrush.

Rotisserie Burner(s):

These burners have no air shutters and need no combustion air mixture adjustment. The LOW settings can be adjusted in the same manner as the Main Burners. Set the LOW adjustment so that the rotisserie burners do not easily blow out when operating on LOW.



Cooking Tips



Cooking with Your Kalamazoo Grill

IMPORTANT: Kalamazoo grills are high-performance pieces of equipment that get very hot. Use caution when working with the grill and do not leave the grill unattended. Use insulated gloves with a long cuff to protect your hands and forearms from heat.

Essential Equipment

- Leather insulated gloves with long cuffs to protect your hands and forearms
- Stiff, dense stainless steel brush or a grate scraper for cleaning the cooking surfaces
- Long-handled grill tongs (18" long)

Other Helpful Accessories

- Cast iron skillets, dutch ovens, fajita pans and other cookware
- Thin and flexible turner for burgers and delicate fish fillets
- Silicon basing brushes
- Kalamazoo laser-cut custom grilling surfaces with patterns optimized for cooking meat, fish and vegetables

IMPORTANT: Before cooking, become familiar with all the information in this Use and Care Guide regarding safe operation of your grill.

Preheating

Always preheat the grill before beginning to cook. Preheat the grill with the lid closed.



Grilling Basics: Grilling Better

A few key skills make grilling more satisfying and successful. The following tips and tricks represent some of the best of what we have learned from cooking with fire over the years.

Whole Chicken More than rotisserie, "Beer Can" or other popular methods for cooking a whole chicken, we prefer to butterfly and roast it. Butterflying a chicken (also called spatchcock) lays the bird flat for quicker and more even cooking. A butterflied chicken can be cooked at higher temperatures, so you are able to more easily achieve a nice, crispy skin and perfectly cooked meat. Whether using a barbecue rub or simply brushing the bird with olive oil, this is our favorite way to prepare chicken. It takes about 35 minutes for a whole fryer laid directly on the grill grate in the indirect cooking zone at 500°F. Remove the bird when the juices from a prick in the thigh meat run clear or when an instant-read meat thermometer reads 165°F. (The USDA recommends 180°F. See page 55 for a complete Food Temperature Chart.)

To butterfly a chicken, use kitchen shears to cut out the backbone and discard it. Without cutting through the breast meat, snip the breast bone part way down the middle from the top. Open the chicken out flat with the skin-side-up. The thighs should point in toward the middle with the drumsticks pointing out the back. Tuck the wings up and under as shown in the photo at left.

Chicken Breasts The challenge with cooking a boneless chicken breast perfectly is the shape: thick at one end and pointed at the other. For even grilling, a "palliard," which flattens the breast to a uniform thickness, will yield juicy and tender results throughout. Place the breast between two layers of heavy plastic (split open a zip-top freezer bag and place it between the layers) and then pound it to about 1/2-inch thick. Brush each breast with olive oil, sprinkle with salt and grill directly over a hot fire for a few minutes per side until cooked through but still juicy and tender.

Burgers First, try to select USDA Choice grade beef or better. Kalamazoo recommends 85/15 grass-fed ground beef for the best flavor. Chef Bobby Flay offers a tip to compensate for the way a juicy burger plumps up on the grill. By recessing the patty in the middle before cooking, the burger becomes flat when it plumps up. Just use your fingers to recess the middle of each patty a bit from both sides.

The next step in a perfect burger is to brush it with olive oil. This helps form the flavorful crust that is one of the hallmarks of a great burger. Grill the burgers directly over a mediumhot fire (about 450°F), turning only once, until it is cooked to the desired doneness. When cooking for larger parties, it can be a good idea to cook an extra, sacrificial burger. Break into this burger a couple of minutes before you expect the burgers to be cooked to medium to check your timing. Continue cooking to at least medium-well, an internal temperature of 160°F.

Skirt Steak Skirt steak should be cooked quickly over a hot fire to medium doneness — no more, no less. Squeeze a lime over the steak, then brush it with olive oil, sprinkle it with salt and toss it over a wood fire. When prepared properly, skirt steak is tender and full of flavor. After letting it rest a few minutes, slice skirt steak across the grain to compensate for its stringy character.

Filet Mignon, Ribeye or New York Strip Our favorite way to cook a thick steak (at least 1.5 inches) is to sear it directly over a hot fire and then move it to an indirect cooking zone, close the lid and let it coast up to temperature for 15 to 20 minutes. This creates a nicely browned exterior crust and a tender, juicy center. Lightly oil and salt the steaks before they hit the grill. The searing is done at about 900°F, and the indirect time is spent at about 500°F. Flip, turn and move the steaks every 5 minutes during the indirect cooking time.

Let the steaks rest for 10 minutes after coming off the grill before cutting into them.

Pork Chops Our favorite way to cook chops is super-thick and with the bone. A 3-inch-thick chop can be seared over direct heat for a minute or two and then get smoke-roasted for up to 30 minutes at 500°F. For the juiciest chops, try brining them before cooking. As with steaks, give chops a light brushing with olive oil and a little salt before they go onto the grill.

Salmon Salmon is one of the most popular fishes on the



grill. We prefer fillets to steaks, so that is the cut we'll walk through. Squeeze a little lemon over the fillets, brush them with olive oil and sprinkle with salt. Cook them in the direct cooking zone at 500°F with the skin-side up. When the fish starts to draw up away from the surface at the edges and the skin is pulling flat across the top, it is time to turn them over. This usually takes 6 to 8 minutes. Continue cooking with the skin-side down until the fish flakes cleanly under gentle pressure. When done, you can slide the turner between the meat and the skin, removing the meat and leaving the skin behind on the grill to crisp up and serve separately to those who appreciate it.

Shrimp The secret to great grilled shrimp is great big shrimp. For the grill, the bigger the better. Devein the shrimp with a slit down the back that also partially butterflies the shrimp. Grill over medium-high direct heat, turning once, until the flesh down in the slit turns opaque. Remove from the grill immediately.

Asparagus or Green Beans Grilled green vegetables make a great side dish. The technique for grilling green beans and asparagus is the same, and the secret is to use a little lemon juice.

Prepare the grill for cooking over a direct fire with a grilling temperature of 500°F. A Kalamazoo Outdoor Gourmet lasercut vegetable grill surface — sized so that the veggies won't fall down into the fire — is very helpful. Whisk together equal parts lemon juice and olive oil. Toss in the cleaned and trimmed asparagus or green beans to coat. Remove the vegetables from the oil and lemon mixture and put them in the direct grilling zone, being careful not to drop too much oil into the grill. Move them around on the grill until nicely marked, then remove them while still crisp. Season with a little salt and serve them quickly.

Pick up more tips, including cooking videos, online at KalamazooGourmet.com.



Food+Fire

Food+Fire is the Kalamazoo Outdoor Gourmet cookbook, featuring more than 170 recipes. Get your copy at KalamazooGourmet.com. All of the recipes in the next section were taken from Food+Fire.

"This is serious food, big-flavored food alive with the primal flavors of smoke and fire. And this is a serious book designed to help you up your grill game and take your barbecue to the next level."

- Steven Raichlen



Food Temperature Chart

Beef Steaks	Gourmet	USDA
Rare	120°F	140°F
Medium-rare	130°F	150°F
Medium	140°F	160°F
Medium-well	150°F	170°F
Beef Roasts	Gourmet	USDA
Rare	125°F	140°F
Medium-rare	135°F	150°F
Medium	145°F	160°F
Medium-well	160°F	170°F
Beef Burgers	Gourmet	USDA
	160°F	160°F +
Lamb Racks	Gourmet	USDA
Rare	125°F	140°F
Medium-rare	135°F	150°F
Medium	145°F	160°F
Medium-well	160°F	170°F
Lamb Chops	Gourmet	USDA
Rare	125°F	140°F
Medium-rare	135°F	150°F
Medium	145°F	160°F
Medium-well	160°F	170°F
Pork Chops	Gourmet	USDA
Medium-well	160°F	
Well done	180°F	170°F
Veal Chops	Gourmet	USDA
Medium-rare	135°F	
Medium	145°F	150°F
Medium-well	160°F	160°F
Whole Chicken	Gourmet	USDA
	170°F	180°F
Whole Turkey	Gourmet	USDA
	170°F	180°F

Doneness of meat should always be determined using an instant-read meat thermometer inserted in the thickest part of the meat and away from the bone.

While USDA temperature guidelines are valuable for food safety, we find them often overdone, especially on the grill. Many restaurants cook to temperatures aligned more with the "gourmet" column shown here. This requires close attention to safe food-handling guidelines.

Rolled Beef Roasts

As with ground meat, surface bacteria may get worked into the center of rolled beef roasts. Therefore, they should be cooked to an internal temperature of 160°F.

Fish

Fish is thoroughly cooked when it turns opaque and the meat flakes cleanly under firm pressure.

Shrimp and Lobster Tails

Shrimp and lobster are fully cooked when the flesh turns opaque.


Product Care

Caring for Your Grill

Your Kalamazoo Outdoor Gourmet grill is made from high-quality 304 (or 316L if you opted for marine-grade) stainless steel and engineered for durability. Simple care and cleaning will provide a lifetime of service...

Grilling Surfaces

Before each cooking session, after the grill has preheated, use a grate scraper or a grill brush with stiff stainless steel bristles to clean the grilling surface.

After each cooking session, run all of the main burners on high with the lid closed for 10 to 20 minutes before shutting it down. This will help burn away drippings and residue on the grilling surface and in the hopper.

ALWAYS use a stainless steel bristle brush or a brass or wooden grate scraper for cleaning your grilling surface. Do not use brushes or scrapers of other metals with the exception of brass. Brass grill brushes will not harm your grilling surface, but we find that stainless steel brushes last much longer and are a better investment.

NEVER use steel wool on your cooking surfaces. It will leave small amounts of mild steel behind, embedded into the grain of the stainless steel, and it will cause rust.

NEVER use chemicals to clean your grilling surface.

Your laser-cut surfaces should be kept clean, dry and BLACK. Treat them as you would a cast iron skillet. The darker the finish, the better.

Before using your surfaces for the first time, they need to be seasoned with oil. Remove the cold surfaces from your grill and use a cloth rag to wipe vegetable oil over the entire surface of each. Place the surfaces back into the grill. Light the grill and run all main burners on HIGH for about 60 minutes. The goal is to turn the surfaces brown. The more you use your grill, the more thoroughly seasoned your surfaces will become. Ideally you want your surfaces to become black and remain that way. You can re-season your surfaces at any time. Re-seasoning may be necessary if your grill sits idle for long periods of time or you cook highly-acidic foods.

Cleanout Pans

Empty and clean your cleanout pans on a regular basis. We recommend doing so before every cooking session. Because they are reasonably sized, the pans can be cleaned in the sink using hot water and normal dish soap.

Do not open the cleanout tray or empty the cleanout pans if the grill is hot.

Exterior Cleaning

The most difficult part of cleaning your grill is removing the burnt-on food and grease from around the cooking area. Start by using a citrus-based or organic degreaser to remove everything that isn't burnt on. Next, we recommend using powdered Bar Keepers Friend with a soft, microfiber towel. Be careful to follow the grain direction of the stainless steel to avoid scratches. With a little elbow grease, Bar Keepers Friend will remove most stains and discoloration. For real problem areas, a Scratch-B-Gone kit can be used to restore the factory finish. After these steps, rinse off all cleaners, wait for the grill to dry, and then apply stainless steel polish.

Saltwater Environments

Oceanfront environments with salt air and sea spray will require regular maintenance and cleaning to prevent rust. Clean stainless steel surfaces at least two times a month to keep the chemical reaction caused by the salt from gaining a foothold on your equipment. With regular cleaning, your equipment will look like new for a lifetime. To achieve maximum corrosion and stain resistance, the surface of the stainless steel must be kept clean. Should some rust spots occur, they can be easily removed with Bar Keepers Friend or a Scratch-B-Gone kit.

Interior Cleaning

It is a good idea to occasionally burn off residue in your grill. Run the grill with the main burners on high with the lid closed for at least 90 minutes. This will burn off accumulated residue and dry everything out. The more you use sauces or grill fatty foods, the more frequently you should do this burn cycle.

The inside of the grill lid will darken over time. We recommend cleaning it annually. You will need to use Bar Keepers Friend (recommended) and a lot of elbow grease or a harsh oven cleaner (not recommended). If you choose to use oven cleaner: do not get it into the ceramic rotisserie burner; do not get it on igniters; do not get it on the electronics or wires; do not get it on the cooking surface; and do make sure you thoroughly rinse off all of the cleaner before cooking on your grill. Be careful when rinsing off the oven cleaner not to stain your patio. Again, we strongly recommend the use of Bar Keepers Friend and discourage the use of oven cleaner.

Main Burner Care

The burners should be visually inspected and cleaned four times a year.

To access the burners, first make sure the grill is completely cooled. Ensure the grill control valves are in the OFF position and turn off the main gas supply. Remove the cooking surfaces and the heat diffusers. Release the burner (Figure 23:A) from the burner support bracket at the rear (Figure 23:B) by removing the retaining pin (Figure 23:C). You can now lift the burner off the burner support bracket from the rear and then slide it rearward off the orifice (Figure 23:F).

Visually inspect each burner to confirm it is structurally sound and that none of the ports are clogged. Shine a flashlight through the end of the venturi (see Figure 23:E) to inspect for any blockage.

Carefully clean the burner using a brass brush. Clogged burner ports may be cleared with a small metal pick. Do not use a toothpick or anything else that could break off inside the burner ports.

After cleaning the burners, reinstall them into the grill. Slide the venturi end of the burner through the hole in the interior grill box toward the front of the grill and seat the burner opening over the orifice (Figure 23:F) mounted on the valve. Lower the burner onto the burner brackets (Figure 23:B) so that the post (Figure 23:D) on the bottom rear of the burner drops through the corresponding hole in the burner bracket. You must make sure the opening at the front of the burner is centered over the brass orifice and securely engaged (Figure 23:F and 20:D). Once you have confirmed this, reinsert the locking pin under the bracket to secure the burner. The retention pins must be installed before using the grill.



Orifice Cleaning:

Clogged orifices create a dangerous condition that must be resolved before the grill may be used. If you are not entirely comfortable with the procedure, please use a qualified technician or contact Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699.

To clean and inspect the main burner orifices, remove the control panel according to the instructions beginning on page 44. Remove the main burners according to the instructions on page 59. Use a 1/2" wrench to carefully thread the orifices (Figure 24:A) off the valve bodies (Figure 24:B). Shine a flashlight through the orifice to look for any obstructions. Remove obstructions with a needle. Use extreme care not to enlarge the hole. Reinstall and tighten the orifice. Reinstall the burners according to the instructions on page 59. Test fire the burners and check for proper flame characteristics.

FIGURE 24



Troubleshooting

The troubleshooting tips here are for general information only. The information may save you the trouble of a service call. If your grill requires service, contact Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699.

You smell gas:

- Turn off the grill immediately. Follow the leak check procedures on page 13. Contact Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699 for assistance.
- If the leak is related to the grill connection and cannot be addressed immediately, turn of the gas supply shutoff valve.
- If the leak is before the gas supply shutoff valve, call the appropriate local emergency services for gas leaks.

Grill won't light:

Does the hot surface igniter glow red when you press in and hold the control knob? If not, do you have the grill plugged in to an AC outlet?

If you are running off of AC power and any of the hot surface igniters are not glowing, call Kalamazoo Outdoor Gourmet customer service.

If the igniter glows, but the burner won't light, verify that it is an ignition problem and not a gas problem by manually lighting the burner (see page 40).

Grill won't get to temperature:

- If the grill does not get hot within 10 minutes of starting, check the flame height of the main burners. On HIGH, the flames on the main burners should be approximately 1 inch tall. If they are not, check the following:
 - LP cylinder has enough gas to deliver proper pressure. Refill the tank if necessary. In some situations in cold ambient temperatures, an LP cylinder will ice up, creating a drop in pressure. If this happens, turn off the tank and let it warm up before trying again. A full tank is less likely to ice up than a tank that is less than half full.
 - Main gas supply is fully on and not only partially opened.
 - Main burners are clean and in good working order (see page 59).
 - Orifices are clear and not clogged. A clogged orifice creates a dangerous situation. Do not use the grill until the issue has been resolved (see instructions on page 60).
- If the fuel has been switched from liquid propane gas to natural gas, part of the process to convert the oven includes larger orifices. It is not safe to burn natural gas with liquid propane orifices (neither is it safe to burn the other way around). If you suspect a conversion was done improperly, do not use the grill and contact Kalamazoo Outdoor Gourmet customer service at +1.800.868.1699.

Changing Light Bulbs

Your Kalamazoo Outdoor Gourmet grill is equipped with halogen task lighting. Replacement bulbs are available at most hardware stores. The following instructions describe how to change the light bulbs.

Light Bulb Specifications

T3 Halogen Bulb 10 Watts 12 Volts

Tools Needed

- Flat-head screwdriver
- Needle-nosed pliers
- Nitrile gloves

Before Changing Bulbs

Unplug the grill from your electric power supply. Turn off the gas supply.

Do Not Touch the New Bulb with

Bare Hands

Touching a halogen bulb with your bare hands can shorten its useful life. Wear nitrile gloves while handling the replacement bulb(s), or use a clean cloth towel to protect the bulb(s).

To Change the Bulb(s)

- 1. Open the grill lid and locate the lights. Clean the light lenses as needed.
- Find the retainer clip for the light lens located at the same end of the light housing as the screw. Pry the clip away from the light housing using a flat-head screwdriver. It is completely normal for this to deform the clip. Simply bend it back into shape using needle-nosed pliers.



LIGHTS

FIXED LENS RETAINER

- **3.** Lower the light lens past the retainer to remove the lens and clip from the light housing.
- **4.** Remove the used bulb by pulling it straight out of the socket in line with the pins on the bulb.





- **5.** Install the new bulb into the socket, taking care to use clean gloves or cloth to handle the new bulb.
- **6.** Seat the bulb fully into the socket using firm pressure.
- **7.** If necessary, bend the clip back into the original profile of right-angle bends. Position the clip onto the light lens.



8. Place the light lens onto the light housing by first securing the non-clip end into the fixed lens retainer and then firmly pressing the lens and retainer clip into the housing. The lens should click back into place and be fully retained.



Electrical Diagrams

K30D Series Wiring Diagram



K42D Series Wiring Diagram



KalamazooGourmet.com

K54D Series Wiring Diagram





Installation Checklist

Instal	lation	Checklist
nistai		Checking

Installer should initial next to each item:

Specified clearances maintained.

No overhead combustible structure.

Strong wind is not expected from behind the grill, or a wind break wall has been built.

Initial assembly completed — all tape and internal packaging removed:

Cleand

out tray installed in grill

- Drip pans installed in cleanout tray
- Control knobs installed
- Warming rack installed (place in stowed position to allow rotisserie rod installation)
- Rotisserie rod and forks installed
- Primary cooking surfaces installed
- Grill connected to grounded, outdoor-rated extension cord and GFI circuit.

Hot surface igniter glows when each burner control knobs is held in.

Interior task lights working.

Rotisserie motor working.

Each burner control valve low setting adjusted to minimum stable flame height.

Main burners light within 4 to 5 seconds following lighting procedure.

Rotisserie burner(s) light within 4 to 5 seconds following lighting procedure.

External manual shut-off valve is installed and accessible.
Homeowner informed of external shut-off valve location as well as shut-off valve inside grill (model-dependant).
Unit and supply connections have been tested and are free of leaks:
LP cylinder connected to dual-stage regulator at 11" water column pressure
OR
Bulk LP supply regulated to 11" water column pressure
OR
Natural gas supply at 7" water column pressure
Lid opens and closes freely without binding or excessive noise.
Leave this Use and Care Guide with the homeowner.

HOMEOWNER: Please ensure the installer completes the checklist, explaining each item to you. The installer should initial each item above and sign below.

Installer Signature

Date



Craftsmanship to a Higher Standard

We began our journey as Kalamazoo Sheet Metal more than a century ago. As a custom sheet metal fabrication shop, the family-owned company relied on its reputation for craftsmanship. Through the years, a focus on custom food and dairy processing equipment evolved. The "dairy standard" describes a flawless fit and finish level for stainless steel welding. Every seam has to be finished perfectly so that the equipment is easily cleaned and kept free from bacteria. Kalamazoo Sheet Metal excelled at this, but also served architectural firms and the pharmaceutical industry on a wide variety of projects.

The Birth of the Hybrid Fire Grill[™] More than 15 years ago, the founder's great grandson was running the business, but he wanted to do something more. And so he set out to design the world's best grill. Leveraging the skills of the company's stainless steel craftsmen and women as well as his own passionate creativity, the first Kalamazoo Hybrid Fire Grill was born. It did not follow the conventional industry template. A heavy-gauge welded frame offered lasting durability. Casters from industrial dumpsters gave warning of its ruggedness. A deep, hopper-like firebox improved the heat dynamics and made it easier to clean. And, above all, it was designed to combine the convenience of a gas grill with the superior cooking capabilities of a charcoal grill. The outcome was a gigantic departure from the previous expectations of stainless steel grill.

The Birth of a New Company These unique grills developed a passionate and loyal following over the next few years. The focus slowly shifted exclusively to outdoor cooking equipment, but it was still the same craftspeople putting their skills into every bend, weld and stroke of the hand-rubbed finish. The "dairy standard" was (and is) still alive and well.

Before long, we pioneered the first modular outdoor kitchens. The seamless rain gutter that keeps our outdoor kitchen cabinetry weather-tight is the same rain gutter we used to fabricate into the wash-down electrical enclosures on that dairy equipment.

Today, more than a century after our humble beginnings, we are the industry leader in outdoor kitchens. Every piece of Kalamazoo's equipment is still built by hand with the same dedication to quality and craftsmanship. We build it to order, and we ship directly from our factory in Kalamazoo, Michigan to homes all over the globe. When each grill has been through the process of cutting, forming, welding, finishing, assembly and testing, it is signed by the people who made it with their own hands.



Kalamazoo Accessories

Food + Fire The indispensable Kalamazoo cookbook, of which Steven Raichlen says, " "This is serious food, big-flavored food—alive with the primal flavors of smoke and fire. And this is a serious book designed to help you up your grill game and take your barbecue to the next level."



Grill Master's Essential Accessories Long-cuffed leather gloves and precision 16-inch tongs both protect your hands above a hot grill.

Steak Knives A beautiful, wood-fired steak deserves a beautiful steak knife. Treat yourself to Kalamazoo's stunning collection of knives.

All accessories can be ordered by calling +1.800.868.1699 or purchased online at KalamazooGourmet.com.



All specifications and other information contained in this Use and Care Guide are based on the latest product information available at the time of printing. Because Kalamazoo Outdoor Gourmet is always focused on product improvement, we reserve the right to make changes at any time. This includes all specifications of the product.

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Replacement parts can be ordered from Kalamazoo Outdoor Gourmet Customer Service. Email customerservice@kalamazoogourmet.com or call +1.800.868.1699.



