

Fire Magic[®]
The Ultimate Barbecue



Listing No. 1237

INSTALLER:

These instructions must be left with the consumer

CONSUMER:

Retain for future reference

**DELUXE DROP IN SERIES
OUTDOOR GAS BARBECUE
42,000 BTU**

REVIEWED

By amorales at 11:48 am, 2/28/05



**Brick Opening: 19-1/4" Deep (front to back) x 24-1/4" Wide (right to left)
12" High (top to bottom) Countertop Opening**

INSTALLATION AND OPERATING INSTRUCTIONS

IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION

**FOR YOUR SAFETY
IF YOU SMELL GAS:**

1. Shut off the gas to the appliance.
2. Extinguish any open flame.
3. Open lid if equipped with an oven.
4. If odor continues, immediately call your gas supplier or fire department.

FOR YOUR SAFETY

1. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
2. A propane cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

CODE AND SUPPLY REQUIREMENTS: This barbecue must be installed in accordance with local codes and ordinances, or in the absence of local codes, with the latest *National Fuel Gas Code, ANSI Z223.1*, or *CAN/CGA-B149.1, Natural Gas Installation Code* or *CAN/CGA-B149.2, Propane Installation Code*.

This appliance and its individual shutoff valves must be disconnected from the gas supply piping system when testing the system at pressures in excess of 1/2 psig.

This appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valves during any pressure testing of the gas supply system at pressures up to and including 1/2 psig.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult qualified, professional installer, service agency or the gas supplier.

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Robert H. Peterson Co. • 14724 East Proctor Avenue , • City of Industry, CA 91746

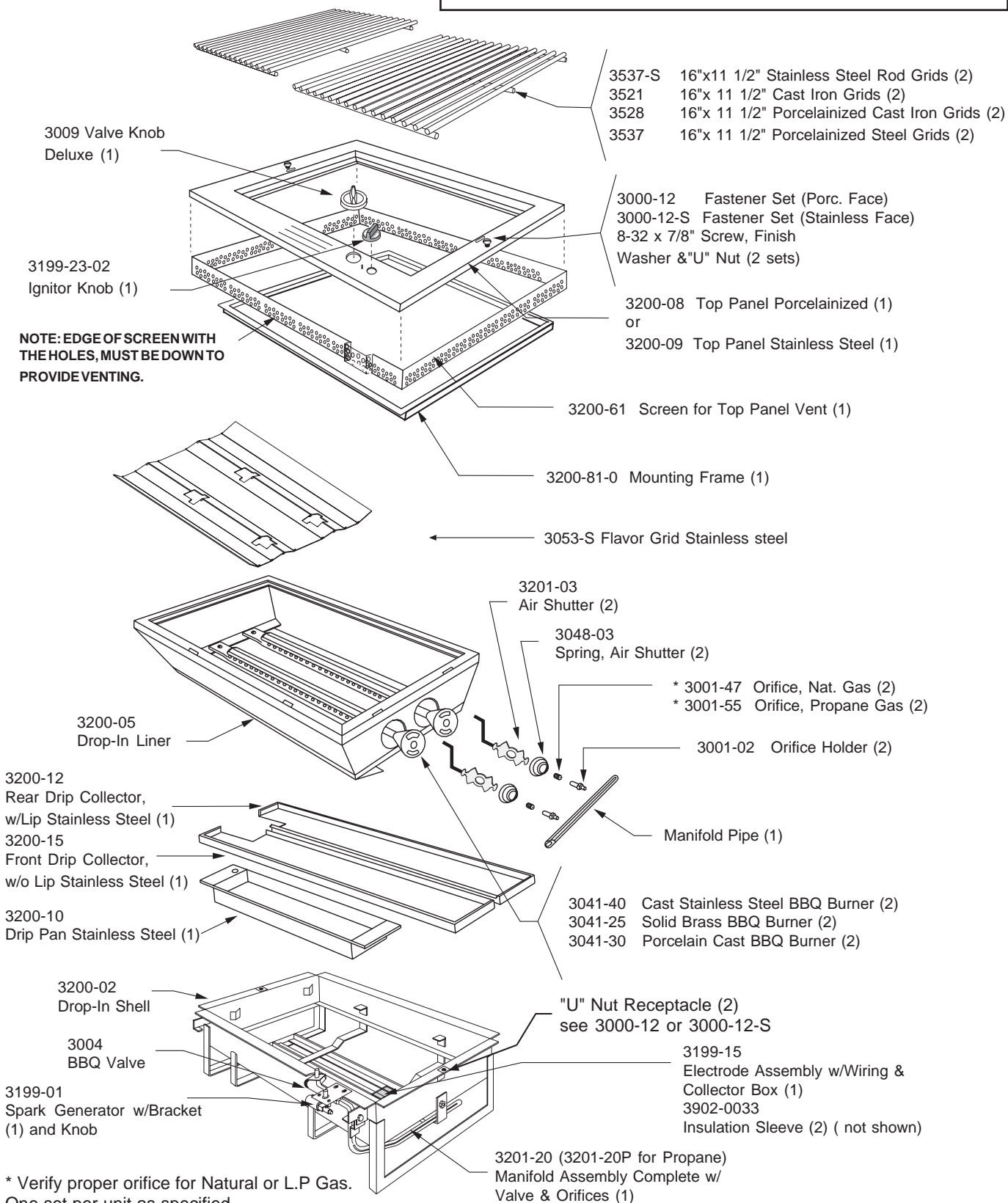
FIRE MAGIC DELUXE DROP-IN SERIES GAS BARBECUE PARTS LIST

INSTRUCTIONS FOR FIRE MAGIC BARBECUE MODELS NO. 3220 thru 3221

TOOLS REQUIRED FOR INSTALLATION

- #2 (Medium) Phillips screwdriver
- Two medium size adjustable wrenches or pliers
- *3/8" wrench or 3/8" socket screwdriver
- Pipe joint compound resistant to all gases

***Note:** 3/8" socket if orifice change is required.



* Verify proper orifice for Natural or L.P Gas. One set per unit as specified.

PLANNING FOR INSTALLATION OF THE DELUXE DROP-IN BARBECUE

WHERE TO INSTALL YOUR BARBECUE

Fire Magic Barbecues are designed for outdoor use only.

WARNING: Drop-in models must be installed in masonry or other type of fireproof surroundings. This unit is not insulated and must be installed with a clearance from combustible materials of 18" on the sides and the back. This appliance shall not be located under overhead unprotected combustible construction.

With our insulating liner (**Deluxe Drop-In - Part# 3200-50**) you can safely install your Fire Magic Barbecue in a wood cabinetry, stucco or other combustible enclosure.

Do not install this unit under unprotected flammable surfaces. Do not install or use this appliance inside a building, garage, or any other enclosed area including recreational vehicles or boats.

INSTALLER NOTE: This barbecue must be installed so that it can be removed in the event service should be necessary. Any protrusion into the barbecue enclosure from either side, which is less than 11 1/4" from the counter top, may obstruct the frame and prevent the unit from dropping into place (see "Gas Supply Plumbing Requirements", on page 4).

INSURING PROPER COMBUSTION AIR AND COOLING AIR FLOW

The 1/2" vent space between the top panel of the unit and the counter top must be left clear with cork mounting pads resting on counter top. Blockage of air flow causes overheating and poor combustion. Vent screen, part # 3200-61, is provided to cover this opening (see vent screen installation on page 6).

VENTILATION OF ENCLOSURES

When using propane gas, take EXTREME CAUTION to ensure ample ventilation of gas vapor. Propane gas vapor is invisible and heavier than air. A DANGEROUS EXPLOSION could occur, resulting in SERIOUS INJURY OR LOSS OF LIFE, if propane gas is allowed to accumulate and is then ignited.

Only one propane gas cylinder may be located in an enclosure. Extra or spare cylinders must be stored outdoors out of the reach of children and outside of any building, garage or other enclosed area. **READ AND FOLLOW ALL WARNINGS PROVIDED WITH PROPANE GAS CYLINDERS.** Never locate a cylinder under or near the barbecue unless sufficient ventilation and shielding is provided to prevent any heating of the cylinder, regulator and rubber hose.

Propane Cylinder Enclosures

To prevent invisible combustible gas from accumulating in the cylinder enclosure, you must provide adequate ventilation. This is accomplished by **EITHER** one side of the gas cylinder enclosure left completely open to the outside **OR** by providing four (4) ventilation openings. Two openings are to be at the cylinder valve level (Approx. 16" above the floor) and at opposite walls of the enclosure. Two more openings must be at the floor level at opposite sides of the enclosure. The floor level openings must start at the floor and shall extend no higher than 5" above the floor. Each opening must have a minimum of 10 square inches (64.5 cm²) of free area. To achieve the proper ventilation, you may drill a series of holes, omit the grout from masonry joints or replace a brick with a hardware cloth screen. If the floor in the cabinet is raised and the space beneath the cabinet is open to the outside, the lower ventilation openings may be in the floor.

FOR YOUR SAFETY, you must provide these openings for drainage, replacement air and cross ventilation of any storage area exposed to possible leakage from gas connections, the barbecue or propane gas cylinder.

IMPORTANT: Read additional requirements for safe use of propane gas and gas cylinders below.

HOUSEHOLD PROPANE GAS SERVICE

Consult your gas supplier for ventilation and regulator requirements when connecting to a **HOUSEHOLD** propane supply.

Note: Only Fire Magic Barbecue models with the suffix -PA- in the model number are approved by C.S.A. for self contained propane cylinders. Supplemental instructions are supplied with each self contained unit.

ELECTRICAL OUTLETS

Electrical outlets in the vicinity of the barbecue, which might be used for rotisserie motors or other appliances, must be properly grounded.

Installer and User Note: Keep electrical supply cords away from all heated surfaces.

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We reserve the right to amend product specifications without prior notice.

EXHAUST REMOVAL

If installed under a patio roof, the cooking grid area should be fully covered by a chimney and exhaust hood. An exhaust fan with a rating of at least 1000 CFM may be necessary to efficiently remove smoke and other cooking by-products from the covered area. Installation in fully-enclosed patio areas is not recommended.

GAS SUPPLY PLUMBING REQUIREMENTS:

Rigid 1/2" black steel pipe is required to conduct the gas supply into the barbecue enclosure for connection to the unit. Pipe joint compound which is resistant to all gases should be applied to all male fittings and all joints tightened securely. Do not use pipe joint compound to connect flare fittings.

The pipe should terminate near the front and center of the enclosure, no more than 5" from the counter top. Installation will be simplified if the pipe enters the enclosure vertically from the bottom, at least 6" in from each side and within 8" of the front wall (Figure 1).

If the pipe does not come up against the front wall, it can easily be run along the enclosure floor and turned up to rise within 5" of the counter top, tight against the front wall (leaving space only to connect fittings, Figure 2).

SAFETY NOTE: An external valve in the gas line is necessary for safety when your barbecue is not in use. It also provides for convenient maintenance and repair. A removable key is recommended.

GAS SUPPLY AND MANIFOLD PRESSURE:

For **Natural Gas** - Normal 7" w.c. (Water Column), Minimum 3 1/2", Maximum 10 1/2"

For **Propane Gas** - Normal 11" w.c., Minimum 8", Maximum 13"

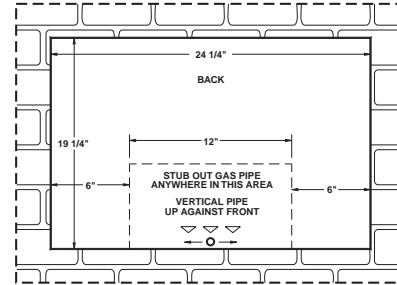


Figure 1 - Top View

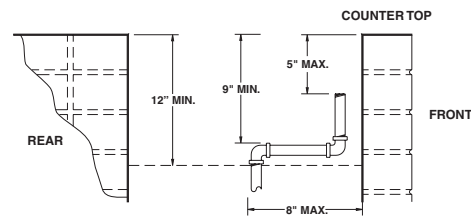


Figure 2 - View from Left

INSTALLING YOUR FIRE MAGIC DELUXE DROP-IN BARBECUE

Perform the following checks before installing your barbecue:

CHECK BARBECUE FUEL ORIFICE SIZE

Fire Magic Barbecues are equipped with orifices for natural gas unless otherwise indicated. For use with propane gas, smaller orifices must be installed to avoid hazardous overheating. The orifice size for **Natural Gas** is #47 (drill size) and for **Propane Gas**, the orifice size is #55 (drill size).

IF YOU ARE NOT SURE YOU HAVE THE CORRECT BARBECUE BURNER ORIFICE SIZE

a. Remove the cooking grids and flavor grid from your barbecue.

b. If the gas supply has been connected, make sure the burner valve is in the 'OFF' position. Then pull the knobs from their stems. Use a phillips screwdriver to turn the face fastener screws counterclockwise to release the face and remove it from the barbecue. Make sure to retain the screws and finish washers until you are ready to reattach the face.

Note: Carefully lift the face away from the frame. The spark generators for the ignition system are attached to the inside of the face panel. The spark generator need not be detached, but the wires must be unplugged from the generators before the face is removed.

c. Using a flat blade screwdriver, pry the burner retaining clip from rear wall of the barbecue frame (see Figure 3). Remove the burner by; 1) Pulling it to the front of the barbecue, 2) Lift the far end out of the notch, 3) Pull the burner away from the manifold, taking care not to lose air shutter and spring, which may become detached when the burner is removed.

d. Using a 3/8" socket, remove orifice from the orifice holder on the burner manifold and check the number stamped on the face (see barbecue fuel orifice size above). Repeat for each burner as necessary.

e. If your barbecue is not orificed for the gas supply you plan to use, replace them with the orifices supplied with the barbecue or orifices supplied by your local dealer.

f. After checking orifice drill size or replacing the orifice, install the air shutter spring and the air shutter over the orifice holder fitting, between the burner and the burner manifold, in the order and position shown in Figure 3.

g. Replace the burners in the holding groove, ensuring that the brass orifice and orifice holder fittings project deeply into the burners. Replace the burner retaining clips.

CONNECT THE GAS SUPPLY TO BARBECUE

a. You will need a C.S.A. approved stainless steel flex connector to bring the gas supply from the gas line stub to the valve manifold. A 1/2" x 24" flex stainless steel connector is suitable for most installations. A 1/2" female flare fitting is required to connect to the unit. **Only listed stainless steel connectors** should be used to connect the barbecue to the gas line inside the enclosure.

CAUTION: Use only stainless steel flex connectors that are C.S.A. listed.

WARNING: A rubber or plastic connector will rupture or leak, resulting in an explosion or serious injury if used inside the barbecue enclosure.

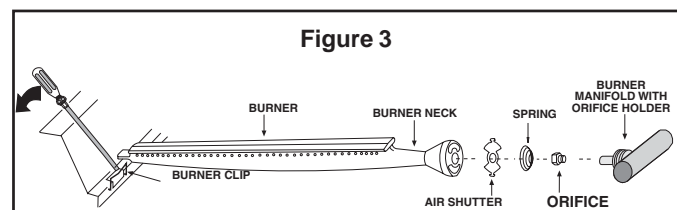


Figure 3

b. Make sure that your gas supply is turned 'OFF'. Then connect the 1/2" pipe adapter fitting supplied with the stainless steel flex connector to the gas supply stub. Use pipe joint compound that is resistant to all gasses on the male pipe fitting and tighten securely. Do not use pipe joint compound to connect the flare fittings.

c. Lower your barbecue into place, making sure not to pinch or kink the gas connector. The unit may be supported above the counter by blocks inserted under the flanges at each side of the frame (Figure 4).

d. If the pipe does not come up against the front wall, it can easily be run along the enclosure floor and turned up to rise within 5" of the counter top, tight against the front wall (leaving space only to connect fittings).

e. Connect the flex connector to the flare fitting on the manifold inlet. Support the manifold inlet fitting with a wrench to avoid applying excessive torque to the manifold assembly while tightening this connection securely. Do not use pipe compound on flare fittings.

Make sure the barbecue burner valve is in the 'OFF' position. Turn the gas supply on. Then carefully check all gas connections for leaks with a brush and soapy water before lighting. **NEVER USE A MATCH OR OPEN FLAME TO TEST FOR LEAKS.**

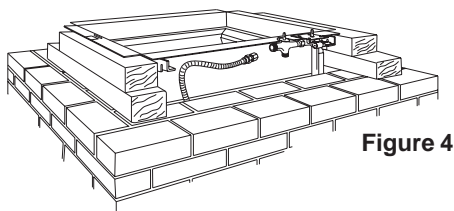


Figure 4

g. Refer to the 'Air Shutter Adjustment' instructions below before replacing barbecue face and knobs.

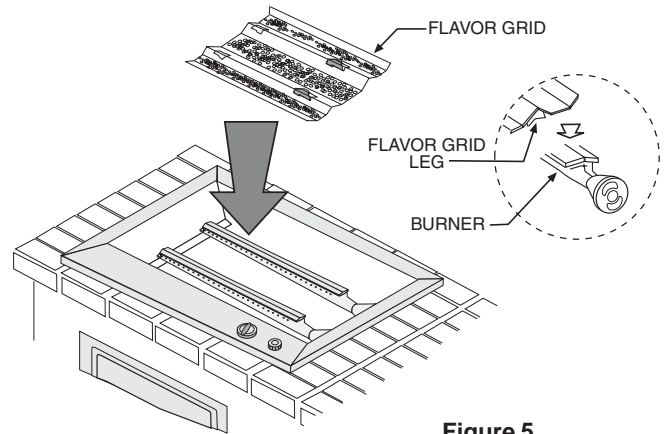


Figure 5

INSTALL THE FLAVOR GRID

Place the flavor grid directly on the burners (Figure 5). Center the grid over the burners with the open side up. This allows heat from the burners to be evenly distributed throughout the cooking area. The flavor grid heats and cools quickly, making your Fire Magic Barbecue very responsive to the changes you specify in grill temperature.

The flavor grid is made of stainless steel and is rust resistant. It may be cleaned with standard oven cleaners.

ADJUSTING YOUR BARBECUE

IMPORTANT: This barbecue will not light and will not heat evenly or cook properly unless the air shutters are adjusted following installation (reference 'Air Shutter Adjustment', below).

The burner air shutters are controlled by the two wire levers at the far right side of the cooking grill (Figure 6). Light the barbecue in accordance with the manual lighting instructions found on page 8 and burn for 5 minutes with the valves on 'HIGH' and the oven open.

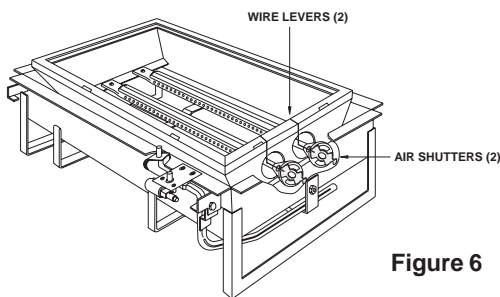


Figure 6

AIR SHUTTER ADJUSTMENT

After burning for 5 minutes, open the air shutters until the flames lift off, or appear not to be touching the burners. Then begin closing the air shutters until the flames appear to burn while touching the burner ports (Figure 7B). You may then see short yellow tips on the flames. If flames are a lazy yellow, open the air shutters until the flame is blue with yellow tipping.

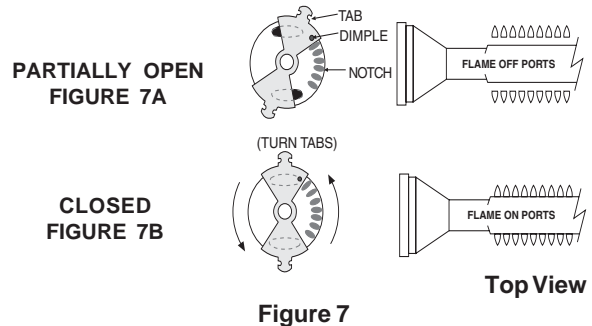


Figure 7

NOTE: Barbecues in some installations achieve a better air/gas mixture and **will ignite more quickly** if the valve is first turned beyond High to Medium or Low for lighting.

ADJUSTING THE FLAME

The barbecue valve is fully adjustable to any position between 'HIGH' and 'LOW'. The first position is High, the second Medium and the final Low. Flame height can also be set anywhere between the High, Medium, and Low settings for all cooking requirements and tastes.

Height of the flame with the **valve in low position** may be regulated by means of a small adjusting screw in the center of the valve stem. This screw is accessible by removing the plastic valve knob which pulls straight off the end of the valve stem.

ADJUSTING YOUR BARBECUE (cont.)

VENT SCREEN INSTALLATION

1. Take the top panel off by removing the valve and ignitor knobs and turning the screw fasteners counterclockwise to release.
2. Place the screen around the outside upper flange of the shell.
3. Place the top panel over the screen and turn the screw fasteners clockwise to tighten.

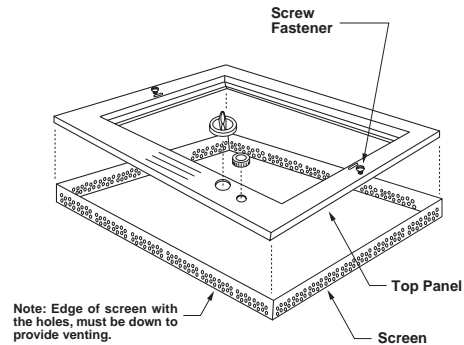


Figure 8

BARBECUE SAFETY AND MAINTENANCE

SAFETY INFORMATION

Every time you use your barbecue, make sure that:

1. The area around the barbecue is clear of flammable substances such as gasoline, yard debris, wood, etc.
2. There is no blockage of the air flow through the vent space located below the face of the unit.
3. When using propane gas:
 - a. The special ventilation openings in the enclosure are kept free and clear of debris.
 - b. If connected to a propane cylinder, the rubber hose attached to the regulator is carefully inspected before each use.
 - c. The propane cylinder, regulator and rubber hose are installed in a location not subject to heating above 125° F (51° C).
4. The burner flames burn evenly along both sides of each burner with a steady flame (mostly blue with yellow tipping). See 'Air Shutter Adjustment' on page 5. If burner flames are not normal, check the orifice and burner for insects or insect nests (see page 4 under 'Checking Barbecue Fuel Orifice Size', for burner removal and replacement).
5. The drip collector holes are clear and unobstructed. Excessive grease deposits can result in a grease fire.
6. The drip pan has been emptied.
7. The in-line gas valve or gas cylinder valve is always shut-off when the barbecue is not in use.

DRIP COLLECTION SYSTEM

The drip collection system consists of 2 drip collectors and a drip pan. Prior to use, lift out the flavor grid. Insert and **slide the drip pan to the far left end** of the track provided at the bottom of the frame.

NOTE: The drip pan and 2 drip collectors are designed to be removed and replaced without removing the burners.

The flavor grids must be removed for access to the drip collectors and pan. This should be done while the unit is cool and the grid replaced again before lighting.

The drip collectors should be installed to rest under the burners, in the center of the unit, on the straps above the drip pan. The drain holes must be to the left end of the unit, and the collector with the hooking lip should be nearer the back of the unit and hooked over the other collector. When properly placed, the collectors will lie flat on the straps and direct any dripping from above or runoff from the liner to the drip pan.

To install the collectors, they must be tilted and inserted between the burners and under the left end of the liner first, until they will clear the liner at the right end before lowering to the straps and centering in place for use. The collectors may be unhooked and pushed apart for removal of the drip pan without removing the collectors or burners.

PREPARING THE BARBECUE FOR COOKING

To extend the life of your Fire Magic Barbecue, follow these steps prior to cooking:

1. Begin by heating the unit at a normal cooking temperature for several minutes.
2. Then open the control valve to the 'HIGH' setting to burn off residue remaining from prior use.
3. When the barbecue has heated sufficiently, set heat to the desired cooking level.
4. When using a smoke oven, closing the cover during the preheat period will accelerate the preparation process. Do not operate unattended at high flame as cooking temperatures will quickly be exceeded.

WARNING: Never cover the *entire* cooking or grill surface with griddles or pans. Overheating will occur and burners will not perform properly when combustion heat is trapped below the cooking surface.

CAUTION: Never spray water on a hot barbecue as this may damage the unit.

USE AND CARE OF YOUR FIRE MAGIC BARBECUE

FLAVOR FROM WOOD CHIPS OR CHARCOAL

Convenient ***Fire Magic Gourmet Grilling Chips** are sold in several different popular wood types. These chips are pre-moistened and sealed in cans which can be opened, by lifting the tabbed lid, before placing the entire can on the flavor grid to add natural wood smoke flavor to the food you grill. There is no mess to clean up. Just discard the can of ashes after there is no longer any wood smoke aroma.

You may also add wood chips, wood chunks or the natural wood charcoal of your choice to the flavor grid. We recommend placing wood outside the direct cooking zone or wrapping it in perforated aluminum foil. Soaking wood before use will slow burning and increase smoke flavor. Wood and charcoal ash will remain in the flavor grid after use. The grid can be easily removed and cleaned when the unit has fully cooled.

CARE OF STAINLESS STEEL COMPONENTS

Your barbecue has a stainless steel oven and front panel, the following care instructions will keep your unit looking and working like new. Stainless steel components are constructed of the finest prime grade type 304 stainless steel. Meticulous attention has been given to maintain the attractive finish throughout the manufacturing process. Like the stainless steel used in commercial kitchens, your barbecue requires regular cleaning and occasional buffing to maintain its bright, clean appearance.

Deposits of dirt and grease can be removed easily with ***Fire Magic Foaming Barbecue and Grill Cleaner**. Deposits should be removed before they are allowed to bake onto the finish. To remove more stubborn deposits, use a scouring pad recommended for stainless steel. Be sure to always rub in the direction of the polishing lines (Figure 9). Oven cleaner may be used, according to manufacturer's instructions, to remove cooked-on food deposits. Special cleaning agents and polishing pads recommended for stainless steel are available at your local barbecue dealer, hardware store or supermarket.

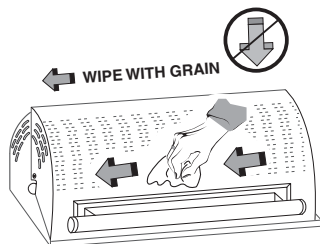


Figure 9 - Always rub with the grain

CAUTION: Never use ordinary steel wool or steel brushes on stainless steel. Tiny particles left behind may rust and stain the finish. Abrasive pads recommended for restoring the grain in stainless steel will, over a period of time, scratch or dull the surface of glass or porcelain-coated products.

*Item sold by your nearest Fire Magic Dealer

BURNER MAINTENANCE

Fire Magic Burners are constructed of heavy-duty cast stainless steel (cast brass and porcelainized cast iron burners are also available) and will withstand many years of outdoor use, if ordinary precautions are taken. Once or twice a year inspect the burners and determine if scale is building up excessively. Burners can be removed and scraped to remove debris or scale from ports. Spray cast iron with vegetable oil occasionally to inhibit oxidation. Replace burners immediately if they show any signs of weak or thin walls. Refer to the bottom of page 4, Figure 3 for installing burners.

STAINLESS STEEL COOKING GRIDS

Fire Magic Stainless Steel Cooking Grids are finished with a special matte (satin) finish. This special matte-finish provides a more stick-resistant cooking surface that makes outdoor barbecuing easy and enjoyable. And, because it is made of type 304 stainless steel, you'll enjoy a lifetime of outdoor cooking. For best cooking performance, follow the simple steps of 'Care and Maintenance' after every use. Fire Magic Stainless Steel Cooking Grids are warranted for as long as you own them.

CARE AND MAINTENANCE (Stainless Steel Grids)

To maintain your stainless steel cooking grids we recommend lightly brushing the grids after use with a brass or stainless steel wire brush. Before use, brush again if necessary and spray a light coat of vegetable oil over the cooking surface. Discoloration or stubborn food particles can be removed with a heavy-duty abrasive or stainless steel scouring pad. Grills can also be washed in an automatic dishwasher or cleaned with strong cleaning solutions, including oven cleansers. We do not recommend ordinary steel or wire brushes, which may leave tiny metal particles on the grids which cause discoloration, but not permanent damage.

PORCELAIN COATED CAST IRON GRIDS

Fire Magic Porcelain-Coated Cast-Iron Grids are coated with a special high-temperature porcelain in a matte (satin) finish. This special matte-finish porcelain coating provides a stick-resistant cooking surface that makes outdoor barbecuing easy and enjoyable. And, because it resists corrosion, the finish also increases cooking grid durability to provide years of cooking enjoyment. For best cooking performance, the wide side of the grid bars should face up.

CARE AND MAINTENANCE (Porcelain Coated)

A spray coat of vegetable oil and light brushing with a brass grid brush before and after use is all it takes to maintain cooking readiness and ensure long life.

PROTECTING PARTS AND FINISH

Barbecue covers will protect the finish and extend the life and appearance of Fire Magic Barbecues equipped with smoke ovens. The covers are designed to protect the finish against scratches, corrosion and oxidation. Each cover has been cut and sewn by hand to fit a particular smoke oven model. Flaps extend from the sides and back. In windy areas, place weights on the flaps or inside the sleeve on the flaps to keep the cover from blowing off.

LIGHTING INSTRUCTIONS

Follow these instructions each time you light your Fire Magic Barbecue.

FOR AUTOMATIC LIGHTING:

1. Read these instructions before lighting.
2. Open the lid of the smoke oven.
3. Turn the barbecue gas valve to the 'OFF' position.
4. Turn on the gas at the source outside of the barbecue enclosure.
5. Push the gas valve and turn to 'HIGH' then immediately turn the ignitor knob several times in the direction of the arrows.

CAUTION: If the burners do not light, IMMEDIATELY turn the valve to 'OFF' and WAIT 5 MINUTES before repeating step 5. If the burners still do not light, refer to the instructions below for manual lighting.

NOTE: Barbecues frequently achieve a better air/gas mixture and **will ignite more quickly** if the valve is first turned beyond High to Medium or Low for lighting.

FOR MANUAL LIGHTING:

CAUTION: Always wait 5 minutes for gas to clear after any unsuccessful lighting attempt.

1. Follow steps 1 through 4 above.
2. Insert either a burning long-barrel butane lighter, a burning long-stem match or a burning match held by a wire extension holder (Figure 11) through the grill to the burners below the flavor grid.
3. While holding the match or lighter flame next to the burner, depress the valve knob and turn it counterclockwise to the 'HIGH' position.
4. If the burner does not light, IMMEDIATELY turn the valve to 'OFF' and WAIT 5 MINUTES before repeating steps 2 through 4 of the manual lighting instructions.

Replacement parts may be obtained from your nearest Fire Magic dealer. For assistance in locating a dealer you may contact the factory at the address below.

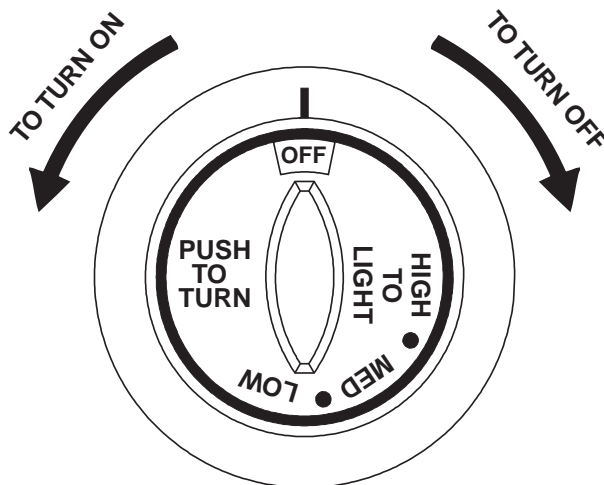


Figure 10



Figure 11 - Match Holder

REMEMBER: FOR SAFE MANUAL LIGHTING, PLACE A BURNING MATCH OR BUTANE LIGHTER BESIDE THE BURNER - THEN TURN ON THE GAS (Figure 12).

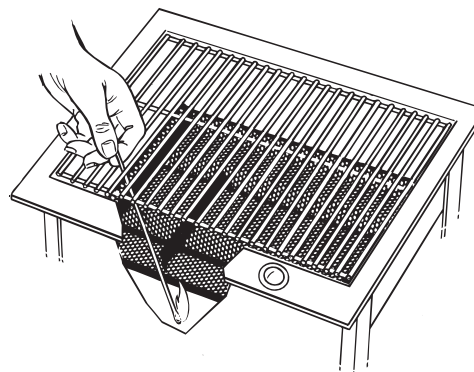


Figure 12 - Manual Lighting

IF YOU SMELL GAS

1. Shut off gas to the appliance.
2. Extinguish any open flame.
3. Open lid if equipped with oven.
4. If the odor continues, immediately call your gas supplier or fire department.

ROBERT H. PETERSON CO.

Quality Check

Date: _____

Orifice # (MAIN): _____

Orifice # (OTHER): _____

Leak Test: _____

Burn Test: _____

Gas Type: NAT / PROPANE

Model #: _____

Serial #: _____

Air Shutter: _____

Inspector: _____