

# FIREMAGIC ECHELON

## ECHELON STAND-ALONE OUTDOOR GAS GRILLS E660s, E790s, and E1060s

### INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

**INSTALLER:** Leave these instructions with consumer.  
**CONSUMER:** Retain for future reference.



E790s with double sideburner shown

**IMPORTANT:** READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION OR USE.

### WARNINGS AND SAFETY CODES

#### **⚠ DANGER:**

##### **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, keep away from the appliance and **immediately** call your gas supplier or the fire department.

#### **⚠ WARNING:**

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

**CODE AND SUPPLY REQUIREMENTS:** This outdoor gas grill 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/NFPA 54)*, or *Natural Gas and Propane Storage and Handling Installation Code (CSA-B149.1)*.

This appliance and its dedicated manual shutoff valve must be disconnected from the gas-supply piping system when testing the system at pressures in excess of ½ psig (3.5 kPa).

This appliance must be isolated from the gas-supply piping system by closing its dedicated manual shutoff valve during any pressure testing of the gas-supply system at pressures up to and including ½ psig (3.5 kPa).

#### **⚠ WARNING:**

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. For proper installation, refer to the installation instructions. For assistance or additional information, consult a qualified professional installer, service agency, or the gas supplier.

**Certified to ANSI: Z21.58-2007**

All electrical outlets in the vicinity of the grill must be properly 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*, whichever is applicable.

Keep all electrical-supply cords and fuel-supply hoses away from any heated surface.



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

# - INSTALLATION INSTRUCTIONS ET MANUEL DU PROPRIÉTAIRE -

## ECHELON GRIL EXTÉRIEUR DE GAZ DU PORTATIF

**IMPORTANT:** LISEZ CES INSTRUCTIONS SOIGNEUSEMENT AVANT DE COMMENCER L'INSTALLATION OU L'UTILISATION

### SÛRETÉ ET CODES D'AVERTISSEMENT

#### **DANGER:**

##### **SI VOUS SENTEZ LE GAZ :**

1. Coupez l'admission de gaz de l'appareil.
2. Éteindre toute flamme nue.
3. Ouvrir le couvercle.
4. Si l'odeur persiste, éloignez-vous de l'appareil et appelez immédiatement le fournisseur de gaz ou le service d'incendie.

#### **AVERTISSEMENT:**

1. Ne stockez pas ou n'employez pas l'essence ou d'autres vapeurs et liquides inflammables à proximité de ceci ou d'aucun autre appareil.
2. Un cylindre de propane non relié pour l'usage ne sera pas stocké à proximité de ceci ou d'aucun autre appareil.

#### **CONDITIONS DE CODE ET D'APPROVISIONNEMENT:**

Ce gril doit être installé selon des codes et des ordonnances locaux, ou, en l'absence des codes locaux, avec l'un ou l'autre le plus défunt *Code national de gaz de carburant* (norme ANSI Z223.1/NFPA 54), et *Stockage de gaz naturel et de propane et manipulation du code d'installation* (CSA-B149.1).

Cet appareil et ses différents robinets d'isolement doivent être démontés du gaz-fournissent le système sifflant en examinant le système aux pressions au-dessus du ½ psig (kPa 3.5).

Cet appareil doit être isolé dans gaz-fournissent le système sifflant par fermeture que ses différents robinets d'isolement manuels pendant tous les essais sous pression du gaz-fournissent le système aux pressions jusques et y compris le ½ psig (kPa 3.5).

- Ce gril est pour utilisation à l'extérieur seulement. Si l'appareil est entreposé à l'intérieur, enlever les bouteilles et les laisser à l'extérieur.
- Ne pas ranger le gril immédiatement après l'avoir utilisé. le laisser refroidir avant de le déplacer ou de la ranger. Le non respect de cette mesure de sécurité pourrait entraîner un incendie causant des dommages à la propriété, des blessures ou la mort.
- Ne pas utiliser cet appareil sous une surface combustible.
- Ne pas utiliser cet appareil sous un auvent. Le non respect de cette mesure de sécurité pourrait entraîner un incendie ou des blessures.
- Dégagement minimal entre les parois latérales et l'arrière de l'appareil et la construction combustible (45.7 cm à partir des parois latérales et 45.7cm à partir de l'arrière).
- Le régulateur de pression de gaz prévu avec cet appareil de cuisson à gaz pour l'extérieur doit être utilisé. Ce régulateur est réglé pour une pression de sortie de 5 pouces de colonne de l'eau pour le gaz naturel, et 10 pouces pour le propane.
- LE RÉGULATEUR INCLUS D'APPAREILS EST ÉVALUÉ POUR LE MAXIMUM DE 1/2 (LIVRES PAR POUCE CARRÉ). SI VOTRE OFFRE DE GAZ EST 1/2 PLUS GRAND QUE (LIVRES PAR POUCE CARRÉ), UN

#### **AVERTISSEMENT:**

L'installation inexacte, l'ajustement, le changement, le service, ou l'entretien peuvent causer des dommages ou des dégâts matériels. Référez-vous à ce manuel. Pour l'aide ou l'information additionnelle, consultez un installateur professionnel qualifié, l'agence de service, ou le fournisseur de gaz.

Toutes les sorties électriques à proximité du gril doivent être correctement fondues selon des codes locaux, ou en l'absence de local code, avec le code électrique national, ANSI/NFPA 70, ou le code électrique canadien, CSA C22.1, celui qui est applicable.

Maintenez tout électrique-fournissent des cordes et carburant-fournissent des tuyaux partis de n'importe quelle surface de chauffage.

**RÉGULATEUR ADDITIONNEL DOIT ÊTRE INSTALLÉ AVANT LE GRIL. VOIR LA SECTION DE CONDITIONS D'OFFRE DE GAZ POUR LA PRESSION APPROPRIÉE D'OFFRE DE GAZ.**

- Ne couvrez jamais la surface entière de cuisine ou de gril de gauffreuses ou de casseroles. La surchauffe se produira et les brûleurs ne seront pas très performants quand la chaleur de combustion est emprisonnée au-dessous de la surface à cuire.
- Ne pulvérisez jamais l'eau sur une unité chaude de gaz, comme ceci peut endommager des composants de porcelaine ou de fer de fonte.
- Une fuite de GPL peut causer un incendie ou une explosion si enflammée entraînant des blessures corporelles graves ou la mort.
- Communiquez avec le fournisseur de GPL pour les réparations ou pour disposer de qules bouteille ou du GPL non utilisé.

**Certifié à la norme ANSI : Z21.58-2007**

**INSTALLATEUR :** Laissez ces instructions avec le consommateur.  
**CONSOMMATEUR :** Maintenez pour la future référence.

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**ELECTRICAL SAFETY**

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To protect against electric shock, do not immerse cord or plugs in water or other liquid;

Unplug from the outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts;

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;

Do not let the cord hang over the edge of a table or touch hot surfaces;

Do not use an outdoor cooking gas appliance for purposes other than intended;

When connecting, first connect plug to the outdoor cooking gas appliance then plug appliance into the outlet;

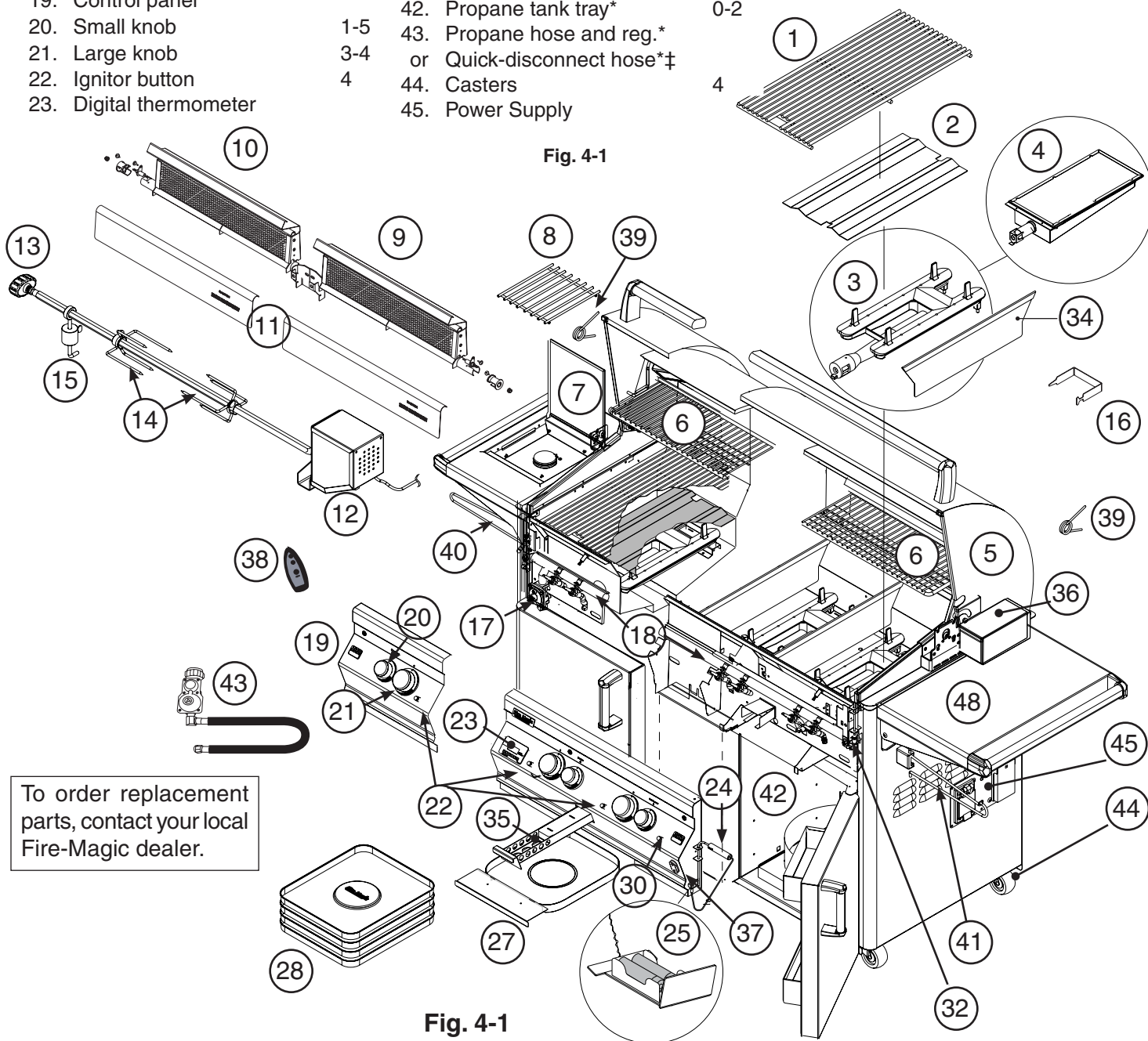
Use only a Ground Fault Interrupter (GFI) protected circuit with this outdoor cooking gas appliance;

Never remove the grounding plug or use with an adapter of 2 prongs.

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.

# SINGLE SIDEBURNER PARTS LIST

No.	Item	qty.	No.	Item	qty.	No.	Item	qty.
1.	Stainless cooking grid	3-4	24.	Meat probe		46.	Extension cord ‡	
2.	Flavor grid	3-4	25.	Therm. batt. pack (3v)		47.	Fire Magic® cookbook ‡	
3.	Main burner	3-4	26.	Wire harness assembly‡		48.	Folding Shelf	1-2
4.	Infrared burner*	0-4	27.	Drip tray				
5.	Oven lid		28.	Drip tray liner	4	*	If equipped	
6.	Warming rack		29.	Ignitor electrode ‡	5-8	†	E1060s grills only	
7.	Sideburner shelf with lid*		30.	Light on/off button		‡	Not shown	
8.	Sideburner grid*		31.	Lights ‡	2-3			
9.	Backburner right/main*		32.	Oven light microswitch				
10.	Backburner left*†		33.	Gas orifices ‡	3-7			
11.	Backburner cover*	0-2	34.	Zone dividers	3-4			
12.	Heavy-duty motor*		35.	Smoker drawer				
13.	HD rot. rod & knob*		36.	Power Hood motor assy.*†				
14.	Meat holder*	2	37.	Power Hood switch*†				
15.	Counterbalance*		38.	Power Hood remote*†				
16.	Grid lifter		39.	Feather-Lite lid springs	2			
17.	Convertible regulator		40.	Tool Holder				
18.	Valve manifold		41.	Papertowel Holder				
19.	Control panel		42.	Propane tank tray*	0-2			
20.	Small knob	1-5	43.	Propane hose and reg.*				
21.	Large knob	3-4	or	Quick-disconnect hose*‡				
22.	Ignitor button	4	44.	Casters	4			
23.	Digital thermometer		45.	Power Supply				





# DOUBLE SIDEBURNER PARTS LIST

No.	Item	qty.	No.	Item	qty.	No.	Item	qty.
1.	Stainless cooking grid	3-4	24.	Meat probe		46.	Fire Magic® cookbook ‡	
2.	Flavor grid	3-4	25.	Therm. battery pack (3v)		47.	Double sideburner cover	
3.	Main burner	3-4	26.	Wire harness assembly‡		48.	Double sideburner grid	
4.	Infrared burner*	0-4	27.	Drip tray		49.	sideburner cap	2
5.	Oven lid		28.	Drip tray liner	4			
6.	Warming rack		29.	Ignitor electrode ‡	5-8	*	If equipped	
7.	Folding Shelf	2	30.	Light on/off button	†	†	E1060s grills only	
8.	Power Supply		31.	Lights ‡	2-3	‡	Not shown	
9.	Backburner right/main*		32.	Oven light microswitch				
10.	Backburner left*		33.	Gas orifices ‡	3-7			
11.	Backburner cover*	0-2	34.	Zone dividers	3-4			
12.	Heavy-duty motor*		35.	Smoker drawer				
13.	HD rot. rod & knob*		36.	Power Hood motor assy.*†				
14.	Meat holder*	2	37.	Power Hood switch*†				
15.	Counterbalance*		38.	Power Hood remote*†				
16.	Grid lifter		39.	Feather-Lite lid springs	2			
17.	Convertible regulator		40.	Tool Holder				
18.	Valve manifold		41.	Papertowel Holder				
19.	Control panel		42.	Propane tank tray*	0-2			
20.	Small knob	1-5	43.	Propane hose and reg.*				
21.	Large knob	3-4	or.	Quick-disconnect hose*‡				
22.	Ignitor button	4	44.	Casters	4			
23.	Digital thermometer		45.	Extension cord ‡				

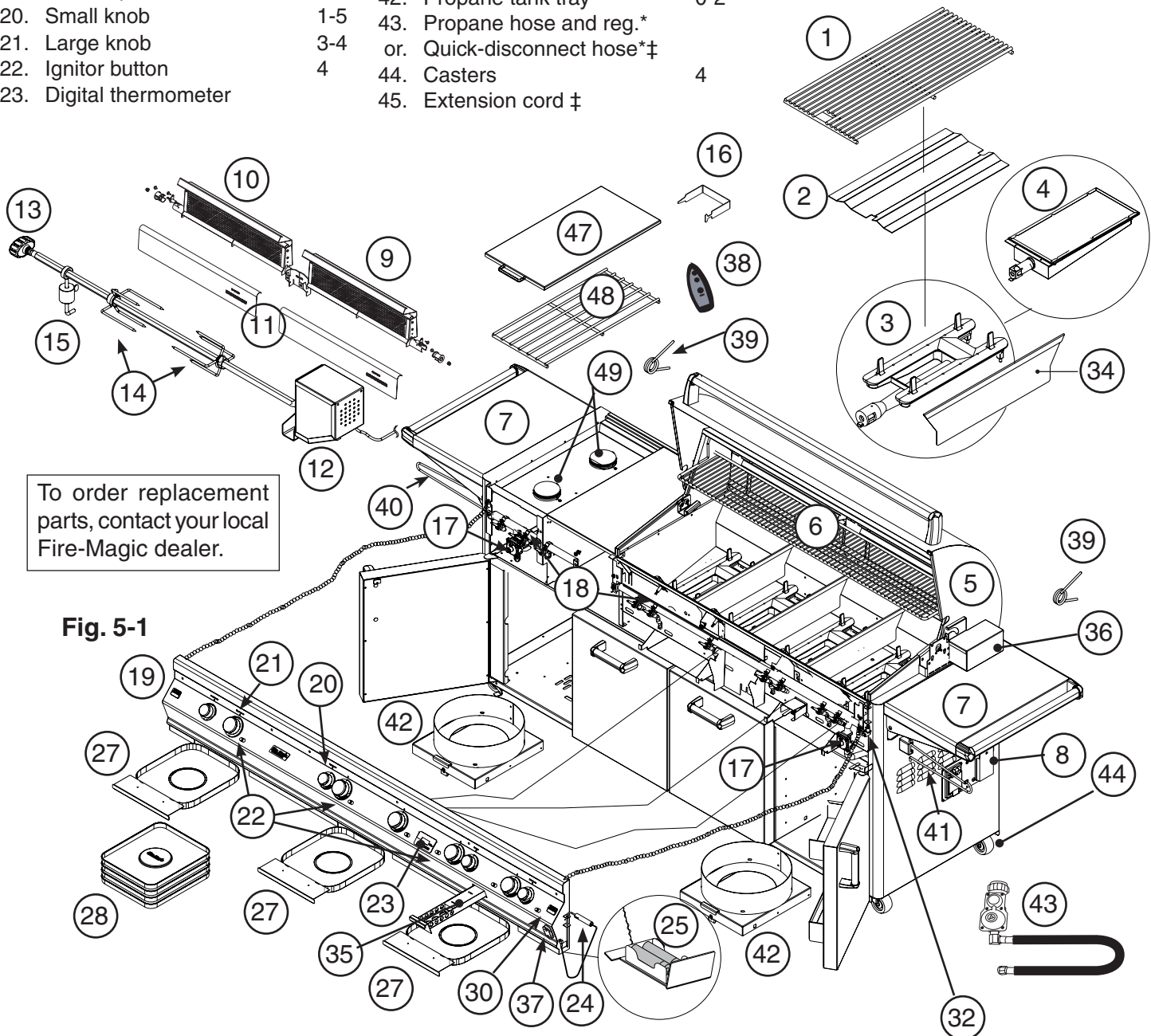


Fig. 5-1

# POWER BURNER PARTS LIST

No.	Item	qty.	No.	Item	qty.	No.	Item	qty.
1.	Stainless cooking grid	3-4	22.	Ignitor button†	4	40.	Tool Holder	
2.	Flavor grid	3-4	23.	Digital thermometer		41.	Paper towel Holder	
3.	Main burner	3-4	24.	Meat probe		42.	Propane tank tray*	0-2
4.	Infrared burner*	0-4	25.	Battery pack (3v)		43.	Propane hose and reg.*	
5.	Oven lid		26.	Wire harness assembly‡		or Quick-disconnect hose*‡		
6.	Warming rack		27.	Drip tray		44.	Casters	4
7.	Folding Shelf	2	28.	Drip tray liner	4	45.	Extension cord ‡	
8.	Power Supply		29.	Ignitor electrode ‡	5-8	46.	Fire Magic® cookbook ‡	
9.	Backburner right/main*		30.	Light on/off button		47.	Power burner cover	
10.	Backburner left*		31.	Lights ‡	2-3	48.	Power burner grid	
11.	Backburner cover*	0-2	32.	Oven light microswitch		49.	Power burner	
12.	Heavy-duty motor*		33.	Gas orifices ‡	3-7	50.	Power burner collimator	
13.	HD rot. rod & knob*		34.	Zone dividers	3-4			
14.	Meat holder*	2	35.	Smoker drawer		*	If equipped	
15.	Counterbalance*		36.	Power Hood motor assy.*†	†		E1060s only	
16.	Grid lifter		37.	Power Hood switch*†	‡		Not shown	
17.	Convertible regulator		38.	Power Hood remote*†				
18.	Valve manifold		39.	Feather-Lite lid springs	2			
19.	Control panel							
20.	Small knob	1-5						
21.	Large knob	3-4						

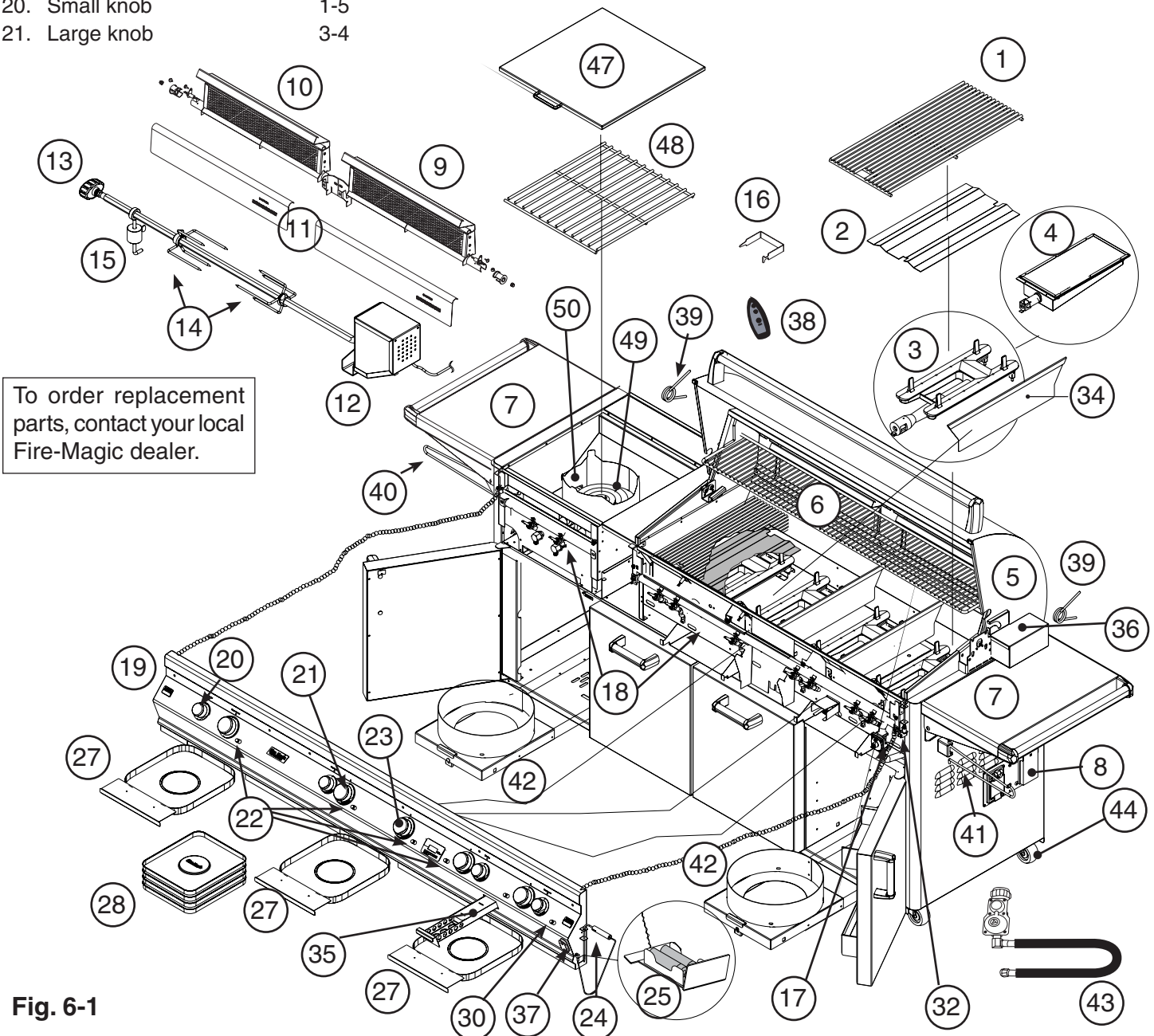
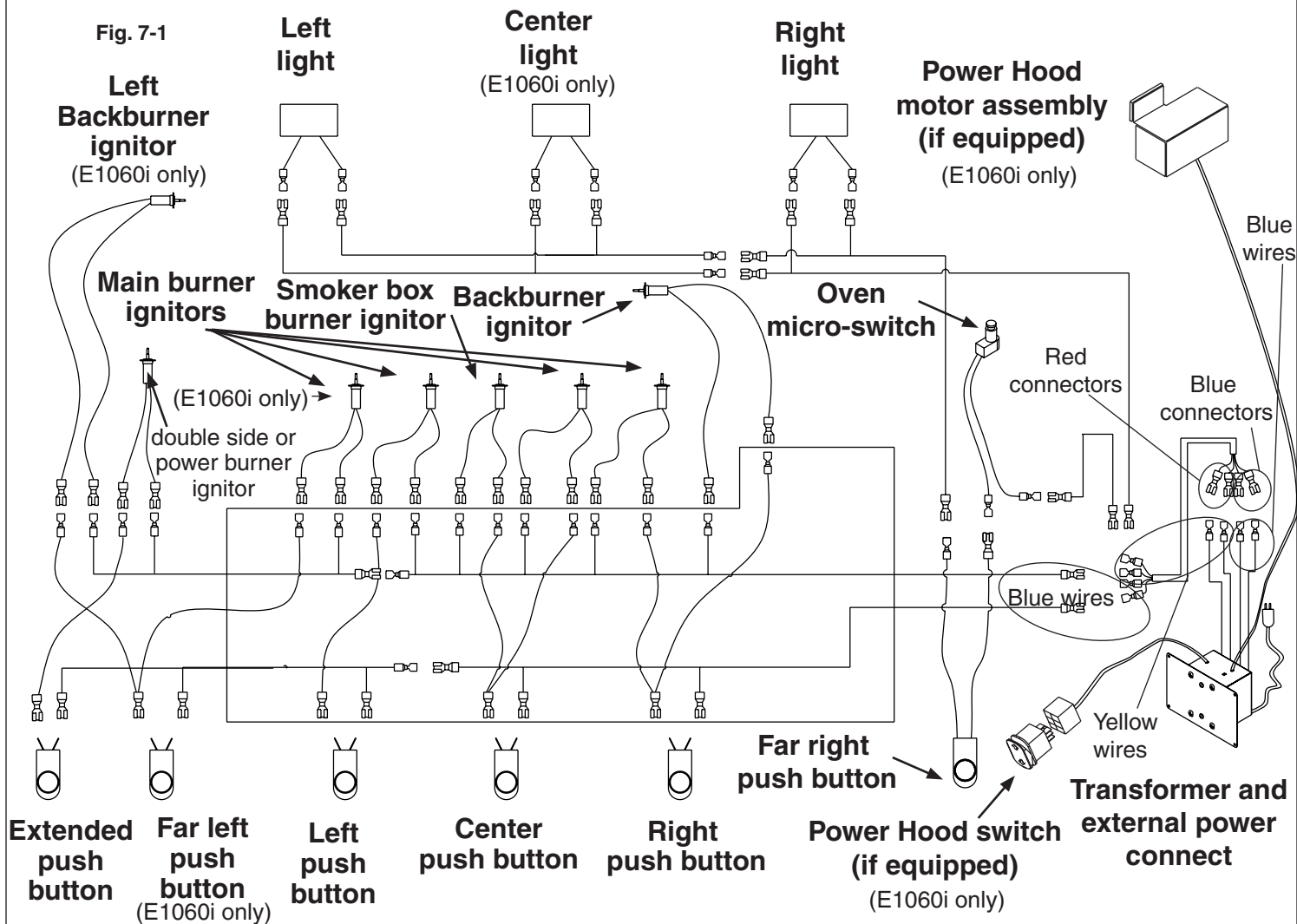


Fig. 6-1

## WIRING DIAGRAM



### ELECTRICAL CONNECTIONS

This grill requires 110 volt AC power to operate.

Use a grounded electrical extension cord rated for outdoor use to connect the grill to line power.

#### **WARNING**

##### Electrical Grounding Instructions

For your protection against shock hazard, this outdoor-cooking gas-appliance is equipped with a three-pronged (grounding) electrical connector. This appliance should be connected to a properly grounded three-prong receptacle using a grounding extension cord rated for outdoor use. Do not cut or remove the grounding prong from the connector.

### OVEN LIGHTS

To turn on the oven lights, open the oven, then push the button on the far right of the grill control panel (see SUPPLIED ITEMS list) until it clicks.

The lights will automatically turn off when the oven door is closed and then turn on again when it is reopened (much like the light in your refrigerator.) If the lights do not come on, check your electrical connection.

**Fire-Magic® Model Specifications Table**

Table 1	E660s	E790s	E1060s
Main burner BTU N/P orifice drill size	25,000 #42/#54	32,000 #38/#53	30,000 #40/#53
Backburner BTU N/P orifice drill size	19,000 #47/#55	23,000 #42/#55	15,000 #49/#56
Sideburner BTU N/P orifice drill size	10,000 #53/#63	10,000 #53/#63	10,000 #53/#63
Smoker drawer burner BTU N/P orifice drill size	2,500 #68/#77	2,500 #68/#77	2,500 #68/#77
Infrared searing burner BTU N/P orifice drill size	24,000 #45/#55	24,000 #45/#55	24,000 #45/#55

**Fig. 8-1**

Rear hood gap



**CAUTION:** DO NOT operate the grill with air blowing into or across the rear hood gap (Fig. 8-2). This can cause poor performance and/or dangerous overheating of the control panel. Orient the grill so that any prevailing wind blows against the front of the grill (Fig. 8-3).

**Fig. 8-2**



## GRILL SAFETY INFORMATION

1. The outdoor grill and surrounding area **MUST** remain clear of flammable substances such as gasoline, yard debris, wood, etc.
2. The airflow through the vent space located below the control panel must remain unobstructed.
3. When using propane gas:
  - a. **The required ventilation openings in the enclosure must be clear of debris.**
  - b. **The propane cylinder, regulator, and rubber hose must be in a location not subject to temperature above 125° F (51° C).**
4. The flames on each burner burn evenly along the entire burner with a steady flame (mostly blue with yellow tipping). If burner flames are not normal, check the orifice and burner for insects or insect nests. Adjust the air shutter as needed (see AIR SHUTTER ADJUSTMENT)
5. The in-line gas valve or gas cylinder valve must always be shut OFF when the grill is not in use.
6. The drip collector holes must be clear and unobstructed. Excessive grease deposits can result in a grease fire.
7. The backburner, sideburner, or IR burner cover must be removed before using the burner.



## INSTALLATION REQUIREMENTS

This grill is designed for outdoor use only. **DO NOT** use this grill under unprotected flammable surfaces. **DO NOT** use this grill inside a building, garage, enclosed area, or an unprotected covered area (see EXHAUST REMOVAL below). **DO NOT** use this grill in or on a recreational vehicle or boat.

**IMPORTANT:** This unit is **NOT** insulated, and therefore the unit, when in operation, must be located with a minimum of 20" (50.7 cm) of side and back clearance from unprotected combustible materials such as wood, plastic, or stucco with wood framing.

The control panel **MUST** remain removable for servicing and air shutter adjustment (see PARTS LIST).

### ENSURING PROPER COMBUSTION AIR AND COOLING AIRFLOW

Proper airflow (Fig. 9-1) **MUST** be maintained for the grill to perform as it was designed. If airflow is blocked, overheating and poor combustion will result. Do not block the 1" (2.5 cm) front air inlet along the bottom of the control panel or more than 75% of the cooking grid surface with pans or griddles.

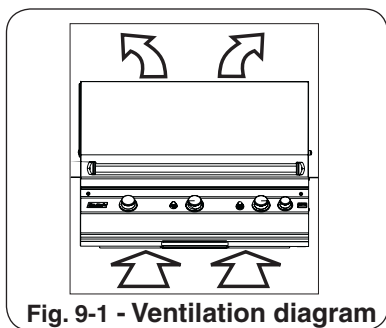


Fig. 9-1 - Ventilation diagram

**Note:** The 1" (2.5 cm) front air space also allows access to the drip tray.

### EXHAUST REMOVAL

If installed or used under a patio roof, the cooking grid area must be fully covered by an exhaust hood with a chimney. An exhaust fan with a rating of 1,000 CFM (cubic feet per minute) (472 liters per second) or more may be necessary to effectively remove smoke and other cooking by-products from the area under the hood. This outdoor grill must not be used under overhead combustible construction. **THIS UNIT MUST NOT BE LOCATED IN A FULLY ENCLOSED AREA OF ANY KIND.**

### CONNECTING THE GAS SUPPLY

- Use 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 36" or 48" flex connector with 1/2" flare to 1/2" pipe adapter on one end and a 1/2" flare female fitting on the other end is suitable for most installations.

**CAUTION:** Use only C.S.A.-listed stainless-steel flex connectors.

### WARNING

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

- Turn OFF the gas supply at the source.** 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.**
- Turn all burner valves to 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.**

## INSTALLING THE STAND-ALONE GRILL

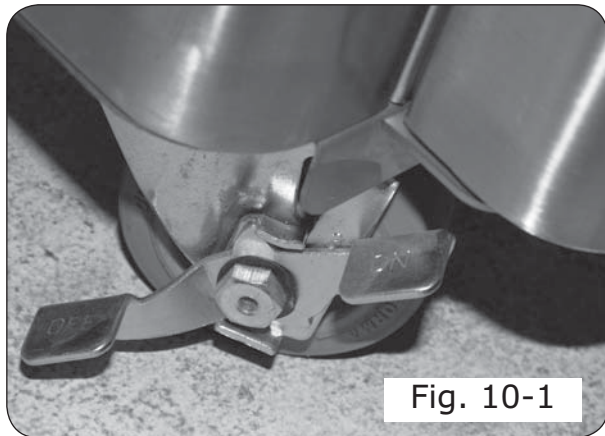
### LOCATION PREPARATION

Prepare a flat, level surface capable of supporting the weight of the portable grill and convenient to the gas supply if connecting to a gas line.

### WHEELS AND CASTERS

To lock a caster press down on the side of the lever with the word "OFF" stamped on it until it stops and the caster will not turn. To unlock, press down on the side stamped "ON."

Caster in locked position



### CONNECTING THE GAS SUPPLY

For propane units, read the safety warnings and follow the instructions at the bottom of the section **SAFE USE AND MAINTENANCE OF PROPANE GAS CYLINDERS** for connecting a portable propane tank.

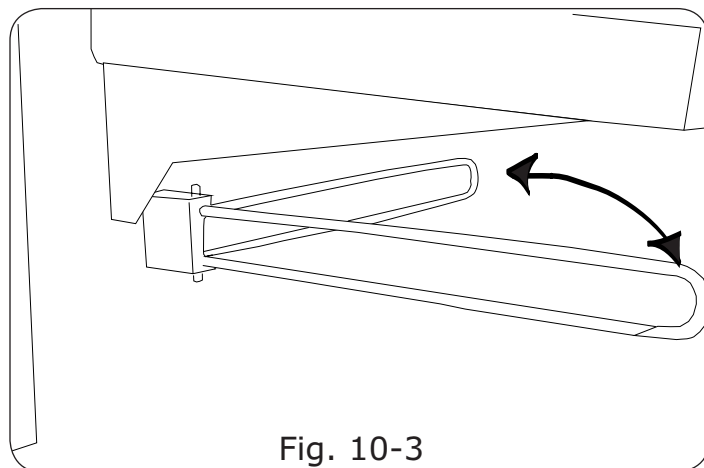
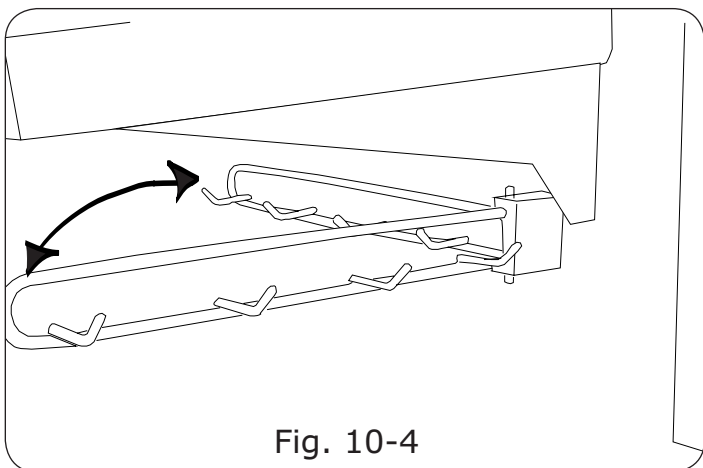
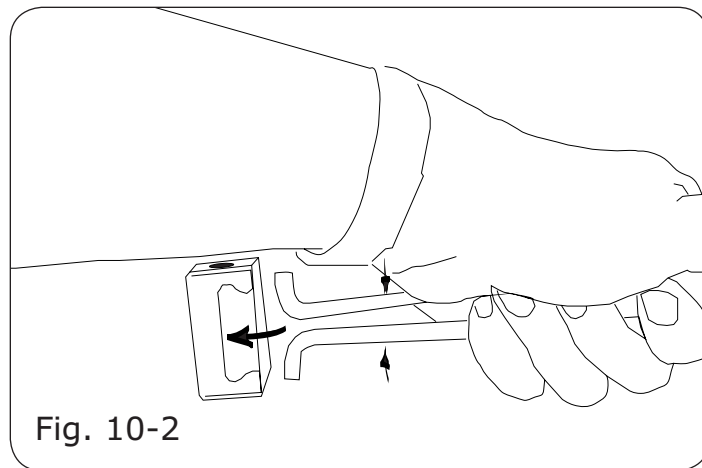
For natural gas units, see **CONNECTING TO A HOUSEHOLD GAS SUPPLY** under **CONVERTING THE GAS TYPE** near the end of this manual for requirements for hookup to a household gas supply.

### INSTALL THE TOOL HOLDER AND PAPER TOWEL HOLDER

The rectangular mounting bracket for the tool holder and the paper towel holder come pre-attached to the sides of the cart.

Unpack the holder portion, squeeze the open ends together slightly, and install them into the mounting bracket (see Fig. 10-2). Next, release the hanger so that the ends extend out through the holes in the top and bottom of the mounting bracket (Fig. 10-3, 10-4).

When not in use, the racks may be folded back against the wall of the grill (Fig. 10-3, 10-4).



# SAFE USE & MAINTENANCE OF PROPANE-GAS CYLINDERS

## IMPORTANT FOR YOUR SAFETY

### READ AND FOLLOW ALL WARNINGS PROVIDED WITH THE PROPANE-GAS CYLINDER.

When operating this appliance with a propane-gas cylinder, these instructions and warnings **MUST** be observed.

**FAILURE TO DO SO MAY RESULT IN A SERIOUS FIRE OR EXPLOSION.**

## CYLINDER/CONNECTOR REQUIREMENTS

- Propane-gas cylinders, valves, and hoses must be maintained in good condition and must be replaced if there is visible damage to either the cylinder or valve. If the hose is cut or shows excessive abrasion or wear, it must be replaced before using the gas appliance (see **e.**).
- This outdoor grill, when used with a cylinder, should be connected to a standard 5-gallon (20 lb.) propane-gas cylinder equipped with an OPD (Overfill Prevention Device). The OPD has been required on all cylinders sold since October 1, 1998, to prevent overfilling.
- Cylinder dimensions should be approximately 12" (30.5 cm) in diameter and 18" (45.7 cm) high. Cylinders must be constructed and marked in accordance with the *Specifications for Propane Gas Cylinders of the U.S. Department of Transportation (D.O.T.)* or the National Standard of Canada, *CAN/CSA-B339, Cylinders, Spheres, and Tubes for Transportation of Dangerous Goods*.
- The cylinder must include a collar to protect the cylinder valve, and the cylinder supply system must be arranged for vapor withdrawal.
- The pressure regulator(s) and hose assembly *supplied* with this outdoor-cooking gas appliance must be used. Original and replacement pressure regulator and hose assemblies must be those specified by the manufacturer for connection with a cylinder connecting device identified as Type I by the *ANSI Z 21.58-2007/CGA 1.6-2007* (see PARTS LIST for ordering information).
- The propane-gas cylinder valve must be equipped with a cylinder connection coupling device, described as Type I in the standard defined in paragraph **e.** above. This device is commonly described as an Acme thread quick coupler.
- If the propane-gas cylinder comes with a dust plug, place the dust cap on the cylinder valve outlet whenever the cylinder is not in use.

The use of pliers or a wrench should not be necessary. Only cylinders marked "propane" may be used.

**To disconnect:** Turn the hand nut counterclockwise until detached (Fig. 11-1).

**Important:** Before using the grill, and after each time the cylinder is removed and reattached, check the hose for wear (see **a.**) and check all connections for leaks. Turn off the grill valves and open the main cylinder valve, then check connections with soapy water. Repair any leaks before lighting the grill.

**CAUTION:** Always turn the propane cylinder main valve off after each use, and before moving the grill and cylinder or disconnecting the coupling. This valve must remain closed and the cylinder disconnected while the appliance is not in use, even though the gas flow is stopped by a safety feature when the coupler is disconnected.

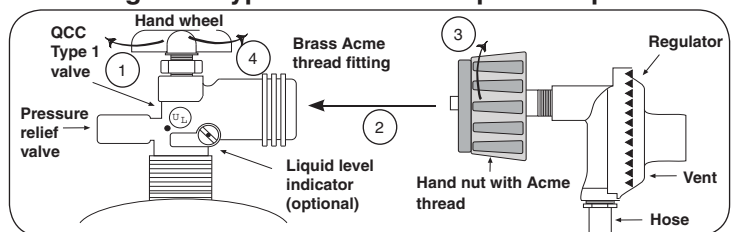
**Carefully** inspect the hose assembly each time before the gas is turned on. A cracked or frayed hose should be replaced immediately.

If the appliance is stored indoors, the cylinder must be disconnected and removed. **Cylinders must be stored out of doors, out of the reach of children,** and must not be stored in a building, garage, or any other enclosed area.

## FOR YOUR SAFETY

- DO NOT store a spare propane-gas cylinder under or near this appliance.
- NEVER fill the cylinder beyond 80-percent full.
- IF THE INFORMATION IN **a.** AND **b.** IS NOT FOLLOWED EXACTLY, A FIRE CAUSING DEATH OR SERIOUS INJURY MAY OCCUR.

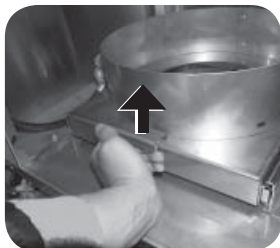
**Fig. 11-1 Type I Acme thread quick coupler**



## QUICK COUPLER OPERATION

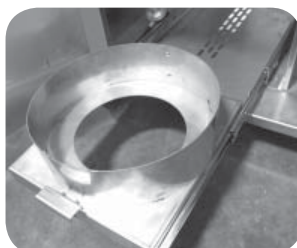
**To connect the regulator/hose assembly to the propane-gas cylinder valve fitting:** Press the hand nut on the regulator over the Acme thread fitting on the cylinder valve. Turn the hand nut clockwise to engage the threads and tighten until snug.

## SECURING THE PROPANE-GAS CYLINDER



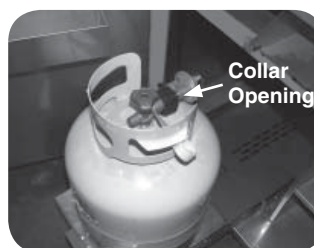
**Fig. 11-2**

- Lift latch handle to unlock tray and pull outward.

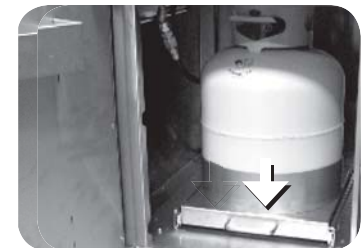


**Fig. 11-3**

- Set propane-gas cylinder into the sleeve of the extended tray with base inserted into center hole and collar opening to back. Follow instructions above to connect supply.



**Fig. 11-4**



**Fig. 11-5**

- With gas cylinder in place and connected, slide tray back into cart and lock latch handle by pushing firmly downward.

## IMPORTANT POUR VOTRE SÛRETÉ

### LISEZ ET SUIVEZ TOUS LES AVERTISSEMENTS ÉQUIPÉS DE VOTRE CYLINDRE DE GAZ DE PROPANE.

En actionnant cet appareil avec un cylindre de gaz de propane ON DOIT observer ces instructions et avertissements.

**LE MANQUE DE FAIRE AINSI PEUT AVOIR COMME CONSÉQUENCE UNE INCENDIE OU UNE EXPLOSION SÉRIEUSE.**

## CYLINDRE ET CONDITIONS ET

### CARACTÉRISTIQUES DE CONNECTEUR

- Des cylindres et les valves de gaz de propane doivent être maintenus en bon état et doivent être remplacés s'il y a des dommages évidents au cylindre ou à la valve.
- Ce gril, une fois utilisé avec un cylindre, devrait être relié à un gallon de la norme 5 (20lb.) cylindre de gaz de propane équipé d'un OPD (remplissez au-dessus du niveau le dispositif d'empêchement). L'OPD a été exigé sur tous les cylindres vendus depuis octobre 1.1998 pour empêcher le remplissage excessif.
- Les dimensions de cylindre devraient être approximativement 12" (30.5cm) de diamètre et 18" (45.7cm) hauts. Des cylindres doivent être construits et marqués selon les caractéristiques pour des cylindres de gaz de propane du département des ETATS-UNIS du transport (D.O.T.) ou le niveau national du Canada, du CAN/CSA-B339, des cylindres, des sphères et des tubes pour le transport des marchandises dangereuses.
- Le cylindre doit inclure un collier pour protéger la valve de cylindre et le circuit d'alimentation de cylindre doit être assuré le retrait de vapeur.
- Le régulateur de pression et l'ensemble de tuyau (fig. 12-1) fourni avec cet appareil à cuire extérieur de gaz doivent être utilisés. Les régulateurs d'original et de pression de remplacement et les ensembles de tuyau doivent être ceux indiqués par le fabricant pour le raccordement avec un dispositif se reliant de cylindre identifié comme type I par la norme ANSI Z 21.58-2007/CGA 1.6-2007 avec la norme ANSI Z 21.58a -1998 d'addenda et CGA 1.6a - M98.
- La valve de cylindre de gaz de propane doit être équipée d'un dispositif d'accouplement de raccordement de cylindre, décrit comme type I dans la norme définie dans le e. de paragraphe ci-dessus. Ce dispositif est généralement décrit comme coupleur rapide de fil de point culminant.
- Si votre cylindre de gaz de propane vient avec une prise de la poussière, placez le bouchon anti-poussière sur la sortie de valve de cylindre toutes les fois que le cylindre n'est pas en service.

## OPÉRATION DE COUPLEUR RAPIDE

**Pour relier le regulator/hose à l'ajustage de précision de valve de cylindre de gaz de propane:** Serrez l'écrou de main sur le régulateur au-dessus de l'ajustage de précision de fil de point culminant sur la valve de cylindre. Tournez l'écrou de

main dans le sens des aiguilles d'une montre pour engager les fils et pour serrer jusqu'à ce que douillettement. L'utilisation des pinces ou de la clé ne devrait pas être nécessaire. Seulement le propane marqué par cylindres doit être employé.

**Pour débrancher:** Tournez l'écrou de main dans le sens contraire des aiguilles d'une montre jusqu'à isolé (fig. 12-1).

**Important:** Avant d'employer le gril, et ensuite chaque fois que le cylindre est enlevé et rattaché, examinez tous les raccordements pour déceler les fuites. Arrêtez les valves de gril et ouvrez la valve principale de cylindre, puis vérifiez les raccordements avec de l'eau savonneux. Réparez toutes les fuites avant d'allumer le gril.

**ATTENTION:** Tournez toujours la valve principale de cylindre de propane au loin après chaque utilisation, et avant de déplacer le gril et le cylindre, ou débrancher l'accouplement. Cette valve doit rester fermée et le cylindre a débranché alors que l'appareil n'est pas en service, quoique l'écoulement de gaz soit arrêté par un dispositif de sûreté quand le coupleur est débranché.

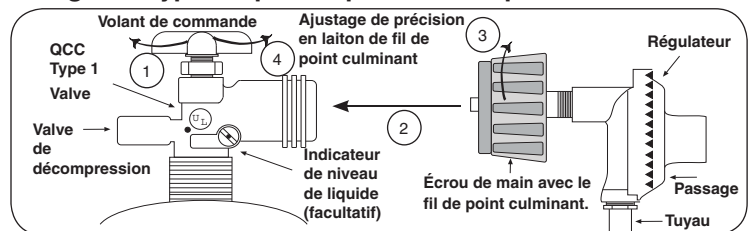
**Inspectez soigneusement** l'ensemble de tuyau chaque fois avant que le gaz soit allumé. Un tuyau criqué ou frangé devrait être remplacé immédiatement.

Si l'appareil est stocké à l'intérieur, le cylindre doit être débranché et enlevé. Des cylindres doivent être stockés hors des portes, hors de l'extension des enfants, et ne doivent pas être stockés dans un bâtiment, le garage, ou n'importe quel autre secteur inclus.

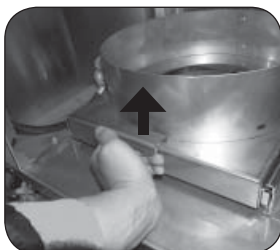
## POUR VOTRE SÛRETÉ

- Ne stockez pas un cylindre de gaz disponible de propane dessous ou ne vous approchez pas de cet appareil.
- Ne remplissez jamais cylindre au delà de 80 pour cent de plein.
- SI L'INFORMATION DANS "A" ET "B" N'EST PAS SUIVIE EXACTEMENT, UN FEU CAUSANT LA MORT OU DES DOMMAGES SÉRIEUX PEUT SE PRODUIRE.

**Fig. 12-1 type coupleur rapide de fil de point culminant d'I**

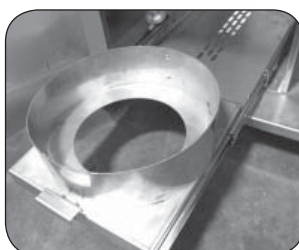


## FIXATION DU CYLINDRE DE GAZ DE PROPANE



**Fig. 12-2**

1. Soulevez la poignée de verrouillage pour ouvrir le plateau et pour tirer à l'extérieur.



**Fig. 12-3**

2. Placez le cylindre de gaz de propane gaintement sur le plateau avec la base insérée dans le trou central et le collier s'ouvrant au dos. Suivez les instructions de relier ci-dessus l'approvisionnement.



**Fig. 12-4**

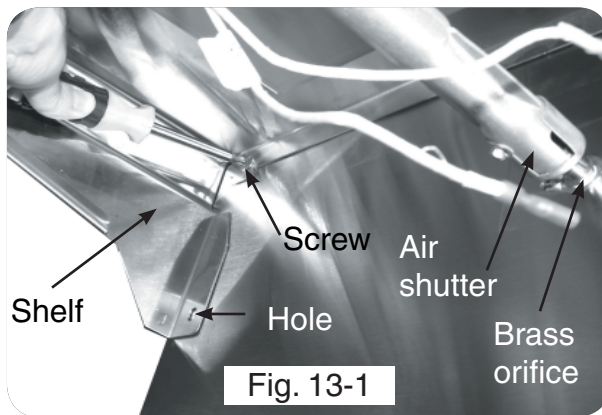


**Fig. 12-5**

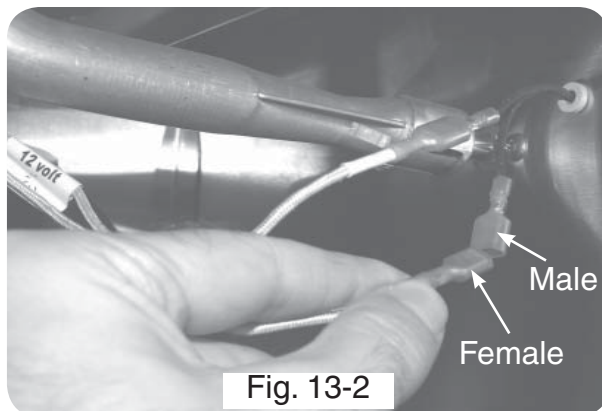
3. Avec le cylindre de gaz en place et relié, glissez le plateau de nouveau dans la poignée de verrouillage de chariot et de serrure en poussant fermement en bas.



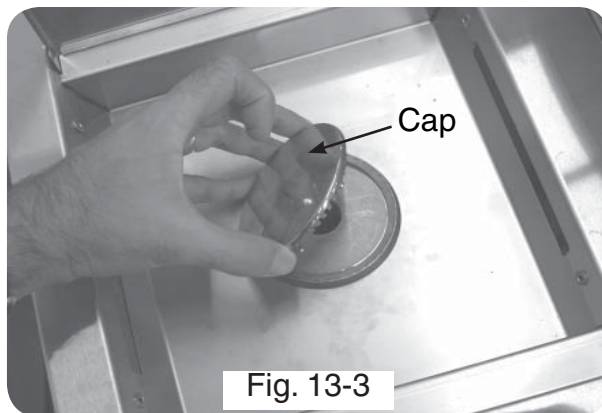
## INSTALLING THE SIDEBURNER SHELF



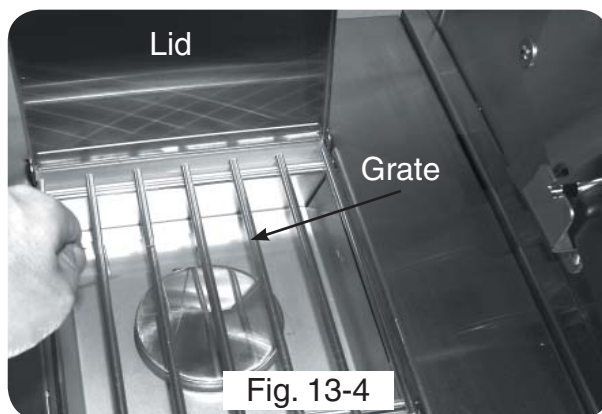
Air-shutter orifice placement - under shelf



Connecting the ignitor wires



Placing the burner cap



Final look

This shelf comes separate from the grill for convenience in shipping. The sideburner shelf must be installed using the following instructions before hooking up the grill to a gas source.

### INSTALLING THE SIDEBURNER SHELF →

1. Remove the protective plastic from the grill, sideburner, and sideburner lids by carefully peeling it off with your fingers. Do not use tools.
2. Hold the sideburner shelf up against the left side wall of the grill so that the holes in the shelf line up with the four (4) threaded screw holes in the side wall and the air-shutter end of the sideburner venturi tube fits around the brass orifice protruding from the side of the cart.

**WARNING:** It is critical for safety and for the proper function of the sideburner that the sideburner venturi tube with air shutter be centered around and completely cover the gas orifice.

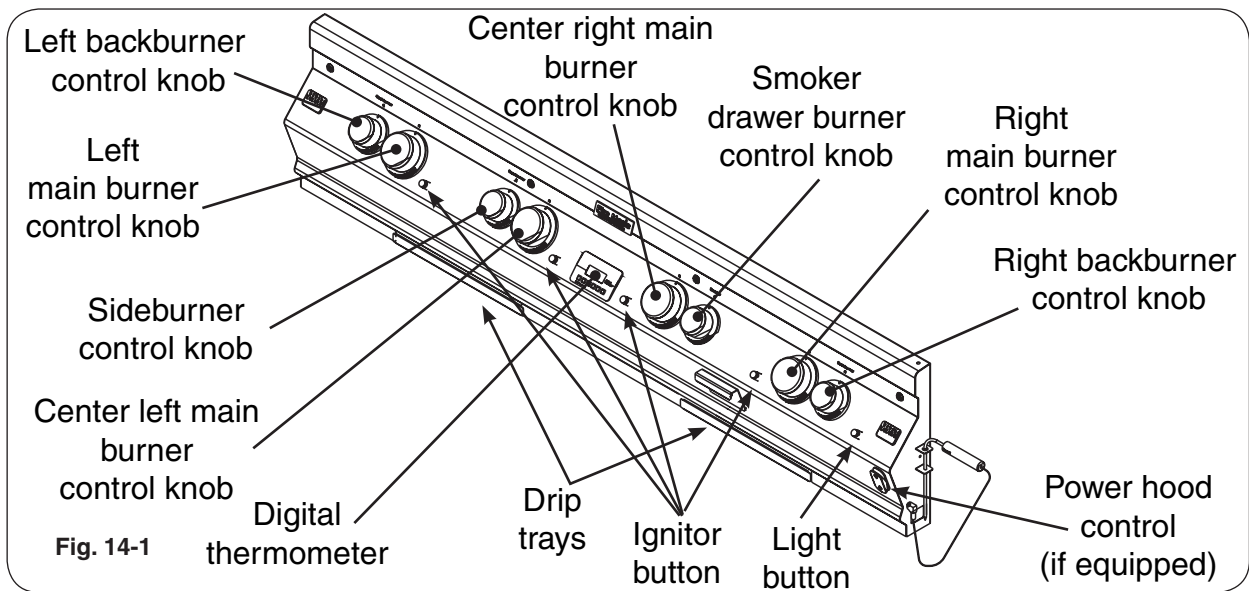
3. Insert and start screws with fingers and then tighten using a nut driver, wrench, or ratchet.

**Note:** Upon completion, the air shutter must still fit around the brass orifice.

4. Connect the female connectors on the ends of the hot surface ignitor wires to the male connectors coming from inside the grill.
5. Place the burner cap on top of the burner, as shown in Fig. 13-3.
6. Place the grid so that it rests on the front and back lips of the sideburner opening (Fig. 13-4).
7. Proceed to the section on AIR SHUTTER ADJUSTMENT and complete the installation by adjusting the air shutter. This will also test the sideburner installation.

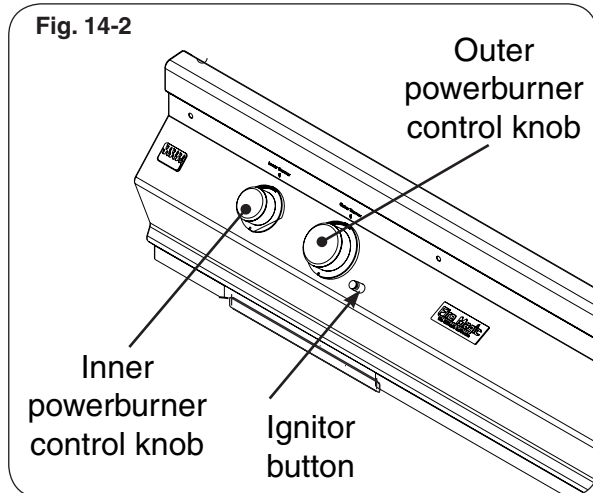
# IDENTIFICATION OF GRILL CONTROLS

## E1060s control locations



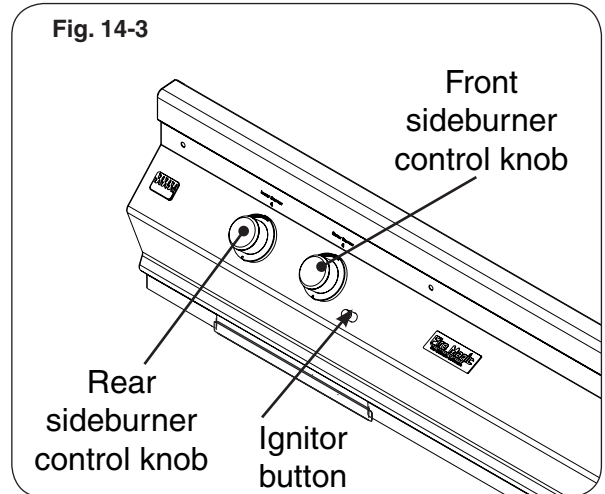
## Powerburner control locations\*

Fig. 14-2



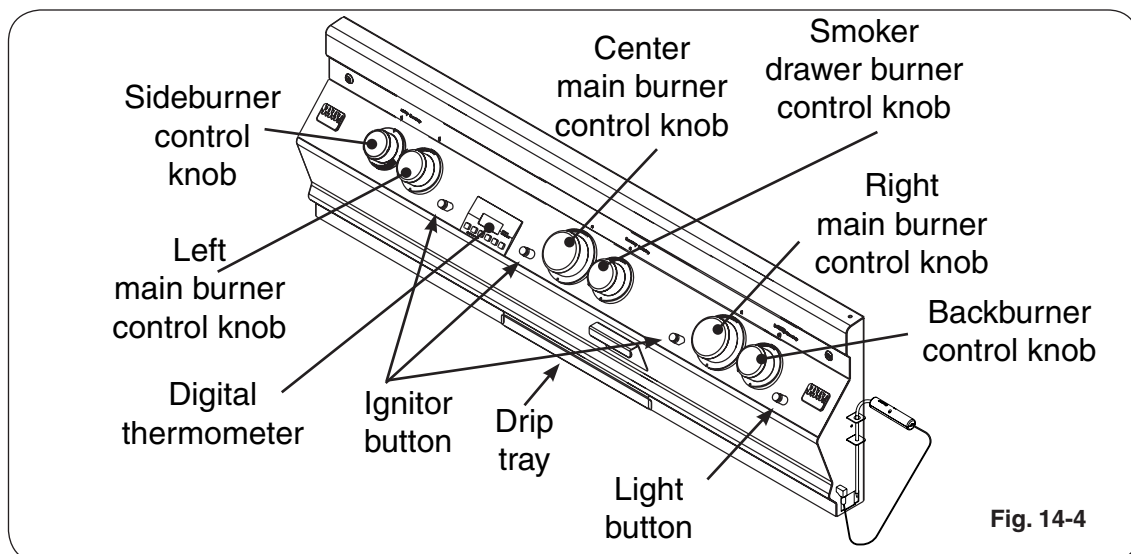
## Double sideburner control locations

Fig. 14-3



**\*Important:** To light the inner burner, use the ignitor button to light the outer burner first. (Follow LIGHTING INSTRUCTIONS in this manual.) The inner burner can be lit off of the outer burner flame, without the use of the ignitor, once the outer burner is lit.

## E660s and E790s control locations



## OPTIONAL POWERHOOD

The Fire Magic® Power Hood is available only as an Echelon E1060 factory shipped option. Read the following before using the grill.

**Important:** Grill must be connected to electrical power to open and close lid by motor.

### OPENING AND CLOSING THE LID BY REMOTE OR CONTROL PANEL ROCKER SWITCH ➔

**Note:** See below for manual operation procedure.

While set up for motorized opening and closing, the lid may be controlled either by the black rocker switch on the right side of the control panel or by the remote control included with units configured with the motorized lid option.

The rocker switch will lock in any one of three positions: **up**—commanding the lid to open, **down**—commanding the lid to close, and **center**—allowing the lid to hold its current position and respond to remote control.

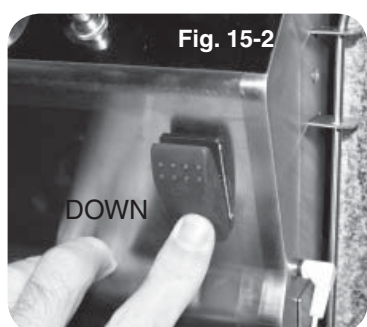
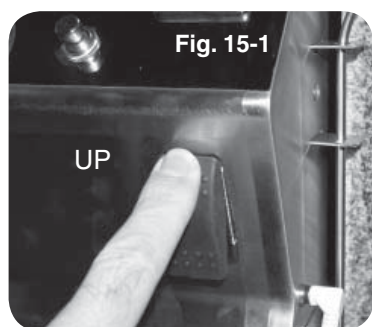
For safety reasons, the rocker switch on the control panel will always override the remote control.

To enable remote control of the lid, set the rocker switch to center.

To open the lid, press and hold the **open** button on the remote until the lid reaches the desired location. Then release the remote buttons, and the lid will stay in place.

To close the lid, press and hold the **close** button on the remote until the lid reaches the desired location. Then release the remote buttons, and the lid will stay in place.

If the rocker switch is left in the **down** position, remote up commands will affect the lid only as long as the remote button is held. When released, the motor will move the lid back to the closed state. With the rocker switch in the **up** position, the remote has no effect.



### CONFIGURING THE LID FOR MANUAL OPENING AND CLOSING ➔

#### **WARNING**

**If the grill has been on recently, all Power Hood components are potentially hot. Wait for grill to cool before beginning this procedure or wear heat-resistant gloves.**

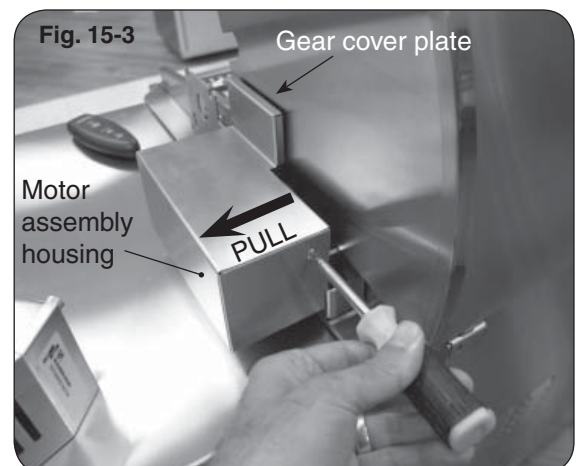
**CAUTION:** Do not push or pull on the lid or its handle while it is configured for automatic operation. This could result in damage to the grill.

To configure the lid for manual opening and closing, simply remove the locking bolt using the following procedure. This procedure requires the use of the Allen wrench supplied with this option.

1. Open the lid completely, then set the rocker switch to the center position and disconnect electrical power to the unit.
2. Use a Phillips screwdriver to remove the stainless-steel motor assembly housing screw. Pull the top of the housing first up and then outward away from the lid until the top of the shroud clears the lip of the motor mount beneath, then remove the housing completely and set it aside (Fig. 15-1).
3. Use the Allen wrench to loosen and remove the lid motor assembly locking bolt and washer (Fig. 16-1).

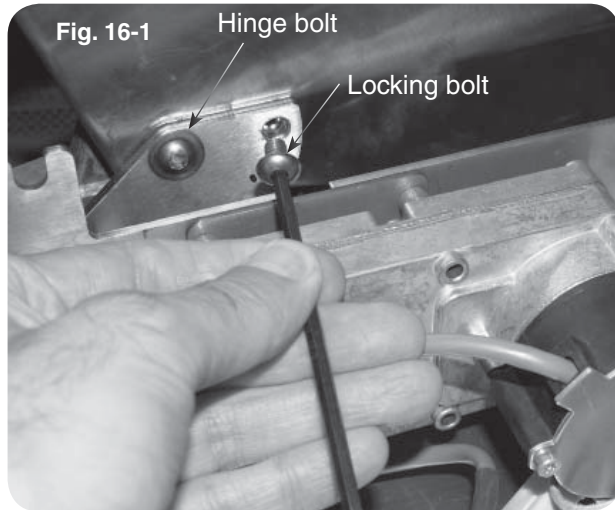
**Important:** Keep this bolt and washer for later use in converting the unit back to automatic lid operation.

4. Replace the motor assembly housing and refasten.





## OPTIONAL POWERHOOD



### CONFIGURING THE LID FOR AUTOMATIC OPENING AND CLOSING

The unit is shipped in this configuration, but if you have configured it for manual operation and wish to use the automatic open/close function again, follow this procedure to configure for automatic operation:

1. Follow steps 1-4 on the previous page except screw in the locking bolt in step 3.
2. Switch the receiver to the AUTO position (see SYNCHRONIZING TRANSMITTER AND RECEIVER instructions below).

### TURNING ON THE TRANSMITTER

The transmitter has a AUTO/OFF switch, a sync. switch and an indicator LED on it. The AUTO/OFF switch must be in the Auto position for the remote transmitter to control the motorized oven lid.

### INSTALLING/CHANGING THE BATTERIES IN THE TRANSMITTER

Slide open the battery access door on the back of the Power Hood remote. Remove the 12-volt camera battery and replace it. Close the access door and follow the instructions on synchronizing the remote below.

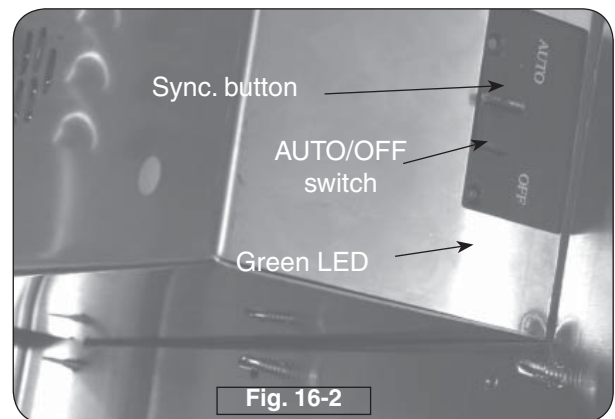
### SYNCHRONIZING TRANSMITTER AND RECEIVER

The first time you turn on the transmitter or after changing batteries in the transmitter, it is necessary to synchronize the transmitter with the receiver.

To do this, use a pen to press in the synch button on the receiver (Fig. 16-2). The green LED will begin to flash. While the LED is flashing, press either the up or down button on the remote transmitter. The LED will go out. Then press the On/Off button on the transmitter.

The units are now synchronized. Test this by commanding the lid up or down as appropriate.

The units may be synchronized at any time.





## LIGHTING (IGNITION) INSTRUCTIONS

Read all instructions before lighting, and follow these instructions each time you light the grill.

### ELECTRONIC LIGHTING

**Note:** Grill must be connected to 110VAC power for electronic lighting.

1. Open lids or remove covers from burners to be lit.
2. Turn all gas control knobs to their **OFF** positions.
3. Turn on the gas at its source.

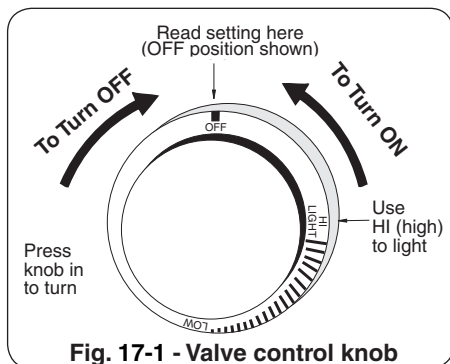


Fig. 17-1 - Valve control knob

**Note:** DO NOT turn on more than one valve at a time for either electronic or manual lighting.

**When lighting the power burner always light the outer burner first.**

4. Press and hold the ignitor button nearest the control knob for the burner to be lit. Continue to hold in the ignitor button for five (5) seconds. The tip of the ignitors will glow orange. Keep holding the ignitor button while depressing the control knob and turning the knob to the **HI LIGHT** position. Once the burner lights, release the ignitor button.

**CAUTION:** If a burner does not light within five (5) *seconds* of turning on the control knob, depress the knob and turn it to the **OFF** position. **WAIT FIVE (5) MINUTES** before repeating step 4. If you smell gas, follow the instructions on the cover of this manual. If the burners still do not light after several attempts, refer to the instructions for manual lighting.

5. Repeat step 4 for each additional burner to be lit.

**Note:** If the burner must be lighted manually, visually inspect the ignitor in the lighting tube (Fig. 17-2) while holding down the ignitor button. If it does not glow orange, check the electrical connections.

**Important:** When lighting the burner under the flavor/smoker drawer, first remove the drawer so that the burner can be easily seen. Then replace the drawer after the burner is lit.

### WHEN USING A PORTABLE PROPANE TANK

Propane tanks are equipped with a safety shutdown device that may cause low or no gas pressure/flame at the burners if operating and lighting instructions are not followed exactly (See important note in the TROUBLESHOOTING section for more details.)

### MANUAL LIGHTING

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

1. Follow steps 1 through 3 (left).
2. Insert either a burning long-barrel butane lighter or a burning long-stem match through the cooking grid opening to the top of the lighting tube. (Fig. 17-2). For backburners, hold the flame against the perforated material of the backburner. For sideburners, hold the flame against the burner.
3. While holding the match or lighter flame at the top of the lighting tube or next to the burner (sideburner and backburner only), depress the appropriate valve knob and turn it counterclockwise to the **HI LIGHT** position. The burner will light.
4. If the burner does not light, **immediately depress the knob and turn the valve to OFF. WAIT FIVE (5) MINUTES** before repeating steps 2 through 4 of the MANUAL LIGHTING instructions.

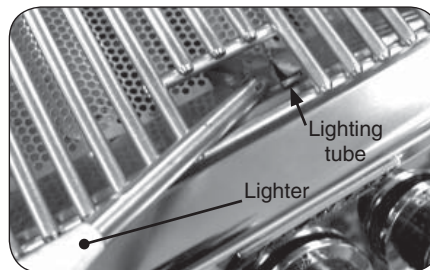


Fig. 17-2 - Manual lighting

### SHUTTING OFF THE GRILL

To shut off the grill, push in each valve control knob and turn it clockwise to the **OFF** position.

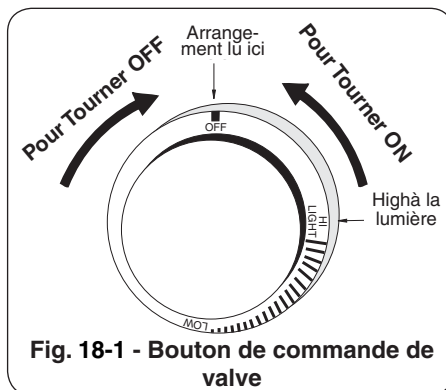
Always close the valve from the gas supply after each use of the grill.

## ALLUMER DES INSTRUCTIONS (D'ALLUMAGE)

Lisez l'instruction entière avant que s'allumant et suivez ces instructions chaque fois vous lumière le grill.

### ÉCLAIRAGE ÉLECTRONIQUE

1. Ouvrez tous les couvercles et enlevez toutes les couvertures.
2. Arrêtez tous les boutons de commande de gaz à leurs positions.
3. Allumez le gaz à sa source.



**Note:** N'ouvrez pas plus d'une valve à la fois pour l'éclairage électronique ou manuel.

**En allumant la lumière de brûleur de puissance toujours le brûleur externe d'abord.**

4. Appuyez sur et jugez le bouton d'ignitor le plus proche le bouton de commande pour que le brûleur soit s'est allumé. Continuez à se tenir dans le bouton d'ignitor pendant 5 secondes. Le bout de l'ignitor rougeoiera orange. Continuez à tenir le bouton d'ignitor tout en enfonçant le bouton de commande et en tournant le bouton dans la position **HI LIGHT**. Une fois que le brûleur s'allume, libérez le bouton d'ignitor.

**ATTENTION:** Si les brûleurs ne s'allument pas dans 5 secondes d'allumer le bouton de commande, enfoncez le bouton et tournez-là à la position de repos. **ATTENDEZ 5 MINUTES** avant de répéter l'étape 4. Si vous sentez le gaz, suivez les instructions sur la couverture de ce manuel. Si les brûleurs ne s'allument toujours pas après que plusieurs tentatives, se rapportent aux instructions pour l'éclairage manuel.

5. Répétez l'étape 4 pour que chaque brûleur additionnel soit s'est allumé.

**Important:** En allumant le brûleur sous le tiroir de flavor/smoker, enlevez d'abord le tiroir de sorte que le brûleur puisse être facilement vu. Remplacez alors le tiroir après que le brûleur soit se soit allumé.

### POUR LE PROPANE SEULEMENT

Les réservoirs de propane sont équipés d'un dispositif d'arrêt de sûreté qui peut ne pas causer le bas ou aucun gaz pressure/flame aux brûleurs si le fonctionnement et allumer des instructions ne sont pas suivis exactement.

### ÉCLAIRAGE MANUEL

**ATTENTION:** Attendez toujours 5 minutes le gaz à l'espace libre après que n'importe quelle tentative non réussie d'éclairage.

1. Suivez les étapes 1 à 3 (à gauche).
2. Passez un allumeur brûlant de butane de long-baril ou une allumette brûlante de long-tige dans les grilles à cuire au dessus du tube d'éclairage. (Fig. 18-2). Pour des backburners, tenez la flamme contre le matériel perforé du backburner. Pour des sideburners, tenez la flamme contre le brûleur.
3. Tout en tenant l'allumette ou la flamme plus légère à côté du brûleur ou le dessus du tube d'éclairage, enfoncez le bouton approprié de valve et tournez-le dans le sens contraire des aiguilles d'une montre dans la position **HI LIGHT**. Le brûleur s'allumera.
4. Si le brûleur ne s'allume pas, enfoncez **immédiatement** le bouton et tournez le bouton de commande de brûleur à **OFF**. **ATTENDEZ 5 MINUTES** avant de répéter les étapes 2 à 4 des INSTRUCTIONS MANUELLES d'ÉCLAIRAGE.

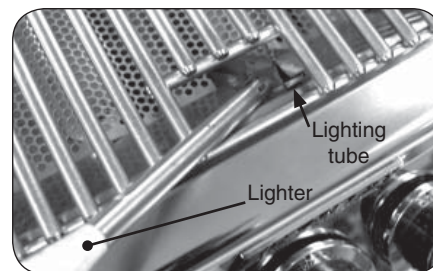


Fig. 18-2 - Éclairage manuel

### EN COUPANT LE GRIL

Pour couper le grill, enfoncez chaque bouton de commande de valve et tournez-le dans le sens des aiguilles d'une montre à la position de **OFF**. Fermez toujours la valve à l'offre de gaz après chaque utilisation du grill.

# ECHELON DIGITAL THERMOMETER

Your Echelon outdoor gas grill comes with a digital thermometer with built-in timer.



Fig. 19-1

The thermometer is located on the control panel between the control knobs.

Plug in meat probe as shown in Fig. 19-6.

Thermometer 2 'AA' battery access (Fig 19-7).

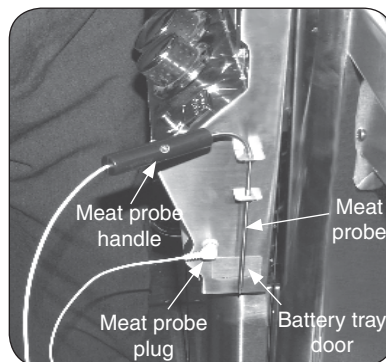


Fig. 19-5

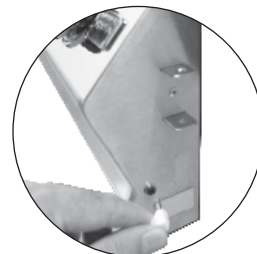


Fig. 19-6



Fig. 19-7

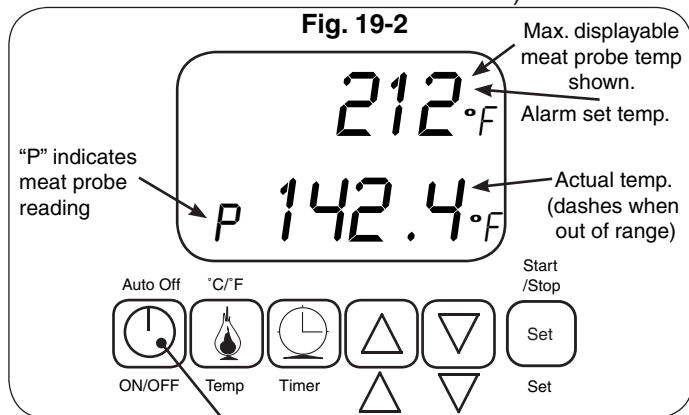
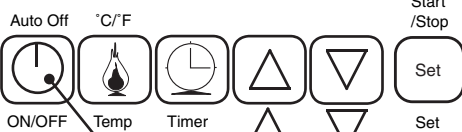


Fig. 19-2

"P" indicates meat probe reading

Max. displayable meat probe temp shown.  
Alarm set temp.

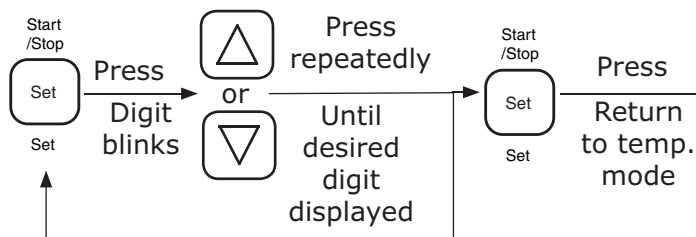
Actual temp. (dashes when out of range)



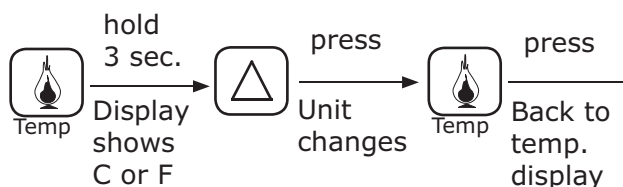
Press and hold to turn thermometer on or off.

Press any button to turn backlight on for 5 seconds

## Setting temperature alarm



## Changing temperature units (Celcius/Farenheit)



## Setting and starting the count-down timer

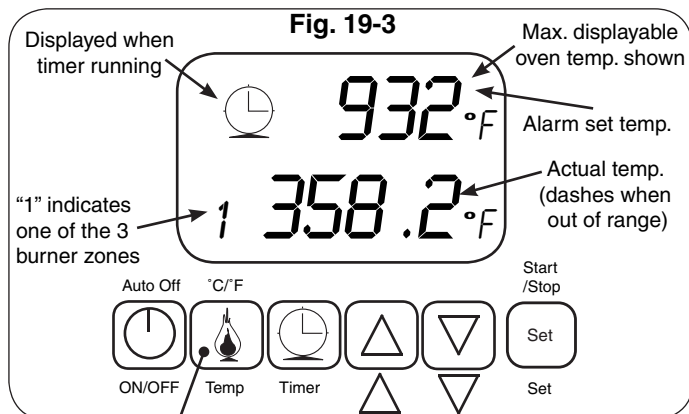
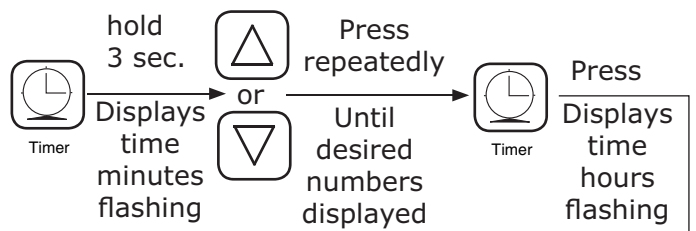


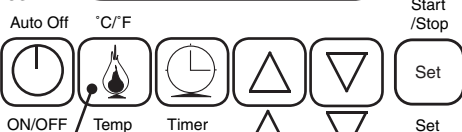
Fig. 19-3

Displayed when timer running

Max. displayable oven temp. shown.  
Alarm set temp.

"1" indicates one of the 3 burner zones

Actual temp. (dashes when out of range)



Press once to start/stop temp. alternation between probe and oven or return to temp. display mode from another mode.

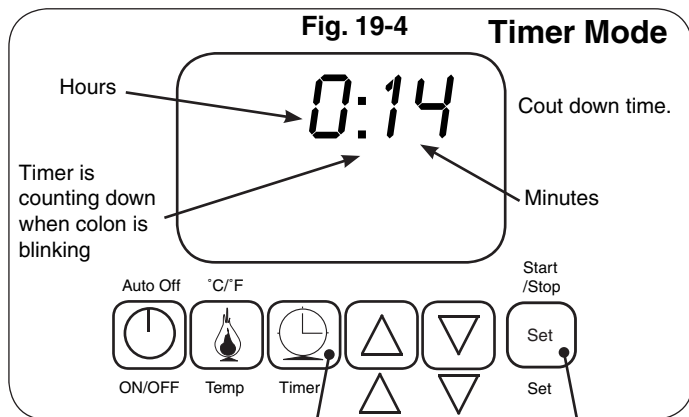


Fig. 19-4

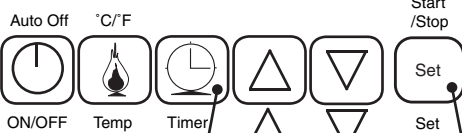
## Timer Mode

Hours

Count down time.

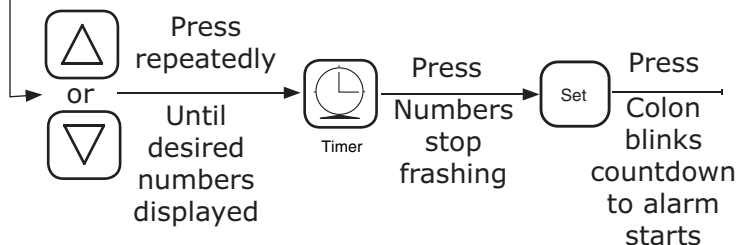
Timer is counting down when colon is blinking

Minutes



Press once to enter timer mode.

Press to enter/exit set time mode.



**Note:** Press any key to silence alarm when beeping. Alarm will not sound if timer is turned off.

## ROTISSERIE INSTRUCTIONS

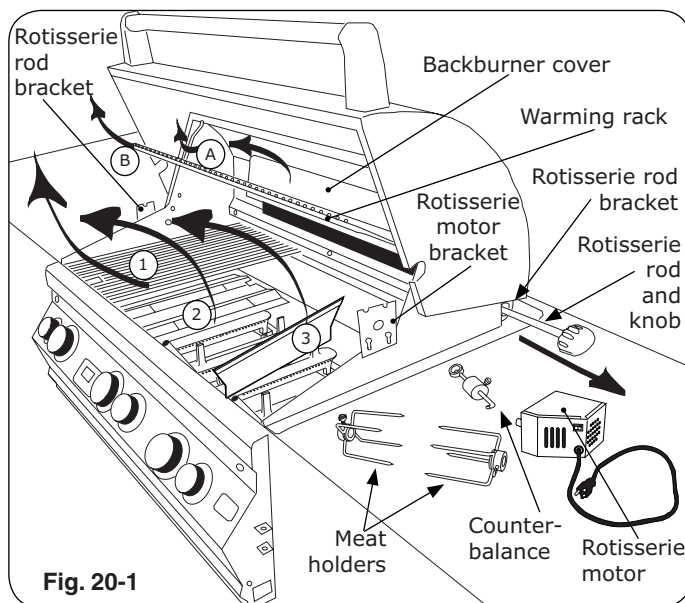


Fig. 20-1

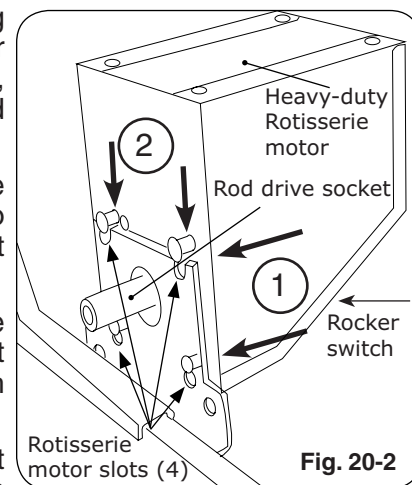


Fig. 20-2

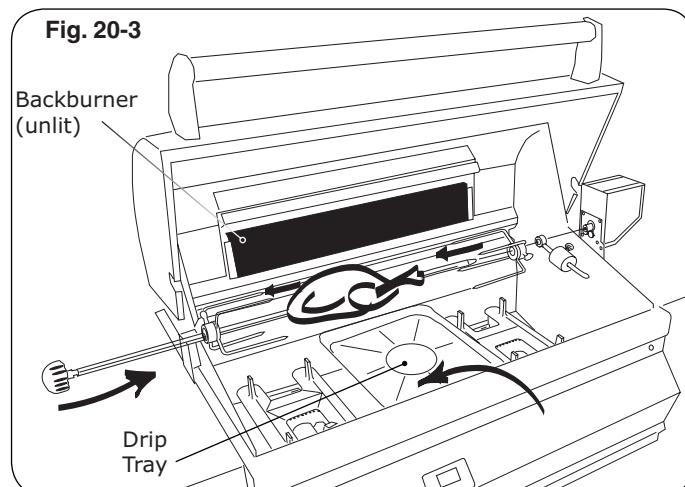


Fig. 20-3

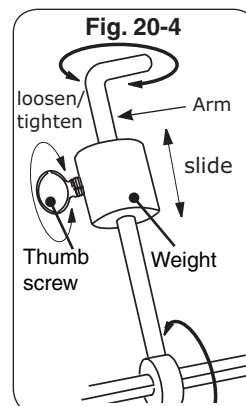


Fig. 20-4

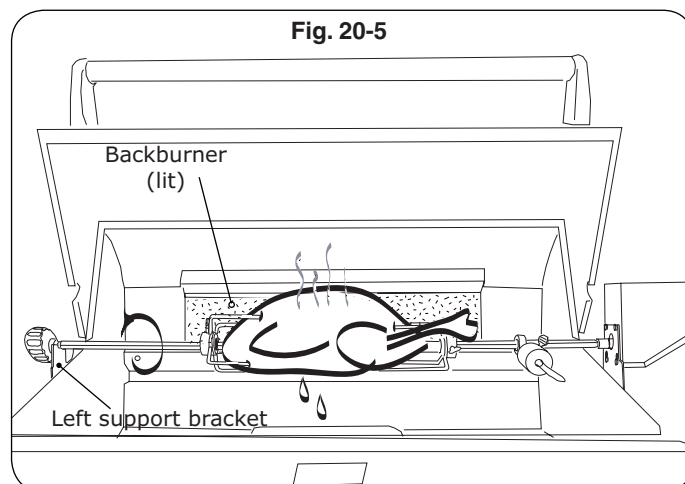


Fig. 20-5

1. Remove warming rack, backburner cover, cooking grids, flavor grids, and zone separators.
2. Slide rotisserie motor fully onto motor bracket (right side, Fig. 20-2).
3. Remove rotisserie rod from rear bracket (Fig. 20-1) attach knob if necessary.
4. Slide left meat holder onto rod as shown in Fig. 20-3 and tighten screw.
5. Slide meat onto rod and into holder (Fig. 20-3).
6. Slide right meat holder onto rod and into meat (Fig. 20-3). Tighten screw.
7. Support both ends of the rod so it spins freely (do not grip tightly). Allow the rod to rotate until the heavy side of the meat points downward.
8. The counterbalance may then be attached to even weight distribution. Slide counterbalance onto rod next to the meat holder. Loosen the arm and point it upward opposite the heavy side of the meat. Tighten the arm.
9. Slide the counterbalance weight up or down the arm until the rod rotates most evenly then tighten thumb screw (Fig. 20-5).
10. Insert the pointed end of the rod into the motor drive socket and the groove next to the knob into the left support bracket.
11. To keep drippings off the burners and simplify cleanup, place Fire Magic® drip tray liners under the meat, if desired.
12. Plug-in the rotisserie motor and press the rocker switch to start (Fig. 20-6).
13. Light backburner per lighting instructions in this manual or on drip tray handle and close oven lid.

**Important:** Turn the backburner to low or off when stopping the rotisserie, to prevent overcooking meat.

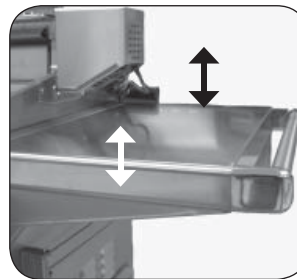


## USING THE FOLDING SHELF

### FOLDING SHELF OPERATION

- A.** To lower the shelf first fold the rack beneath out of the way, then grasp the middle of the shelf on both sides and lift upward so that the inner lip of the shelf, along the side of the grill, lifts out of the locking slot. Then use the handle to allow the end of the shelf to slowly rotate down as pictured to the right.
- B.** To raise the shelf, perform the opposite of A. above.

**CAUTION:** Do **NOT** place fingers near hinge when closing.



Shelf  
up & locked



Being  
lowered or  
raised



Shelf  
down

## PAPER TOWEL HOLDER

This Fire Magic® grill comes with a fold-away paper towel holder and tool rack.

To use the paper towel holder:

1. The folding shelf must be extended and locked.
2. Flip the wire holder forward so that it locks into the extended position.
3. Slide a roll of paper towels over the rounded end of the paper towel holder.

When not in use, the rack may be folded back against the wall of the cart.

Extend or retract the tool holder on the opposite side of the grill in the same way (see Fig. 21-4).

**CAUTION:** The paper towel holder must be folded back against the grill before lowering the folding shelf (see above). Failure to do so could result in damage to the grill.

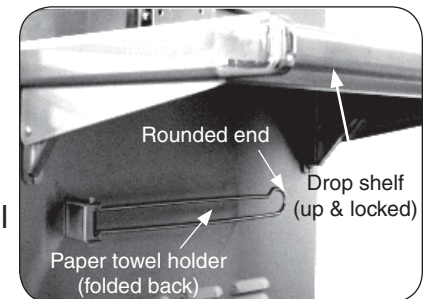


Fig. 21-2

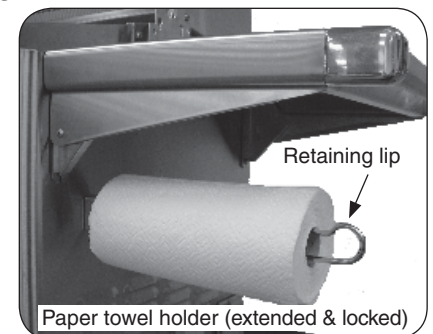


Fig. 21-3

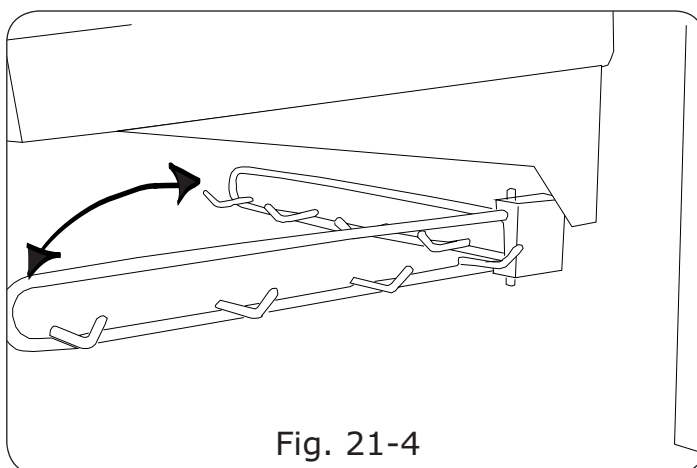


Fig. 21-4

## POWER-BURNER INSTALLATION

1. Place the flame collimator over the burner with the tabs and cutouts resting on the inner shell, as shown in Fig. 22-1. Flex the front of the collimator towards the burner until the cutouts fit down around the ignitor support. This will lock your collimator into place. The flame collimator acts as a barrier for windy conditions and creates higher BTU concentration to the support grid.
2. Place the cooking grid and the cover over the power burner.

## POWER-BURNER SAFETY

The left knob controls the inner burner and the right knob controls the outer burner

**CAUTION:** THE POWER BURNER IS HOT. DO NOT TOUCH WITH BARE SKIN.

Be sure the power burner has good ventilation and is free of debris and away from flammable substances before lighting.

Properly burning flames are mostly blue with yellow tipping and are steady and spread evenly around the burner.

## STAINLESS STEEL POWER-BURNER COVER

**Note:** The cover is free-standing and is not hinged in the back.

Use the built-in handle to remove the cover.

## ORIFICE INSPECTION, AND REPLACEMENT

1. Remove the cover, cooking grid, and flame collimator. Compress the collimator front to back to release the front lock then rotate up as shown in Fig. 22-1.
2. Lift the back of the power burner up out of the locator hole while moving the two necks of the burner toward the back of the grill, away from their respective gas orifices.

**CAUTION:** THE POWER BURNER IS HEAVY.

3. Use a  $\frac{3}{8}$ " socket driver to reach into the empty burner space from the top and remove each of the two gas orifices protruding from the front fire-wall of the grill in turn. Take care that the springs near the orifice remain attached.

4. Consult Table 1 at the beginning of this document to determine the proper orifice size for each of the inner (right) and outer (left) burners based on the type of gas being used.

## WARNING

**YOU MUST USE THE SPECIFIED ORIFICE (SEE TABLE 1) FOR THE GRILL TO OPERATE SAFELY AND EFFECTIVELY.**

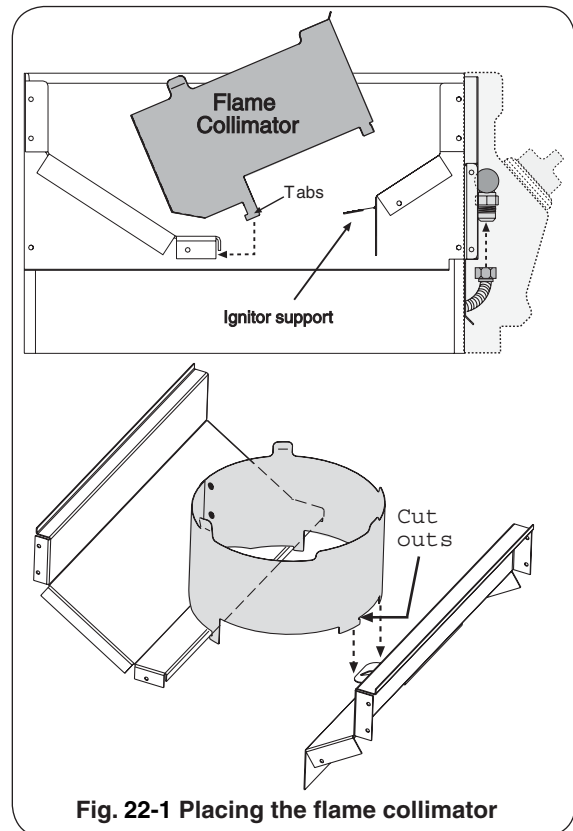


Fig. 22-1 Placing the flame collimator

## WOK COOKING

When using a wok for stir fry or other cooking, remove the cooking grid and place the wok directly on top of the collimator.



Fig. 22-2

## CAUTION:

A wok has a rounded bottom and may slide on the collimator, causing hot liquid to spill out of it.

## OPTIONAL INFRARED BURNER OPERATION

The Fire Magic® infrared (IR) searing burner (optional) cooks with a powerful radiant heat.

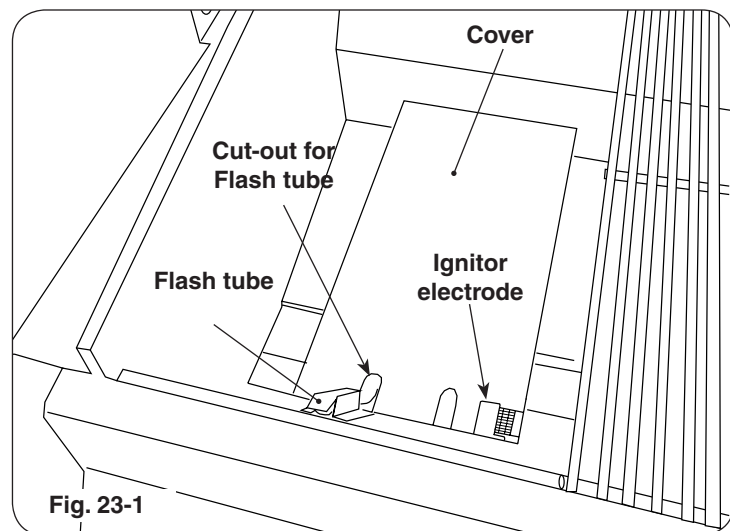


Fig. 23-1

Light the infrared burner following the LIGHTING INSTRUCTIONS in this manual or printed on the drip tray. Follow these guidelines when operating the Infrared burner:

- DO NOT place food on the cooking grid until the IR burner glows orange (Fig. 23-3). Drippings are heated and evaporate instead of sticking to and impairing burner function.
- When not in use, **always** cover the infrared burner with the stainless-steel cover. This protects the burner from drippings (from other cooking), airborne particles, and foreign objects (Fig. 23-2).
- Do not strike or scratch the burner ceramic as it may chip, crack, or break (Fig. 23-2).

**Note:** Digital thermometer does not give accurate readings for infrared burners.

**Important:** When grilling with the infrared burner, always place a cooking grid above it. The cooking grid must be removed for rotisserie cooking.

**CAUTION:** Never attempt to operate the IR burner with the protective cover in place.

### WARNING

Only handle the infrared burner cover when the grill is cold or with a well-insulated long-handled tool or heat resistant gloves.

#### SIDE VIEW (with cover on)

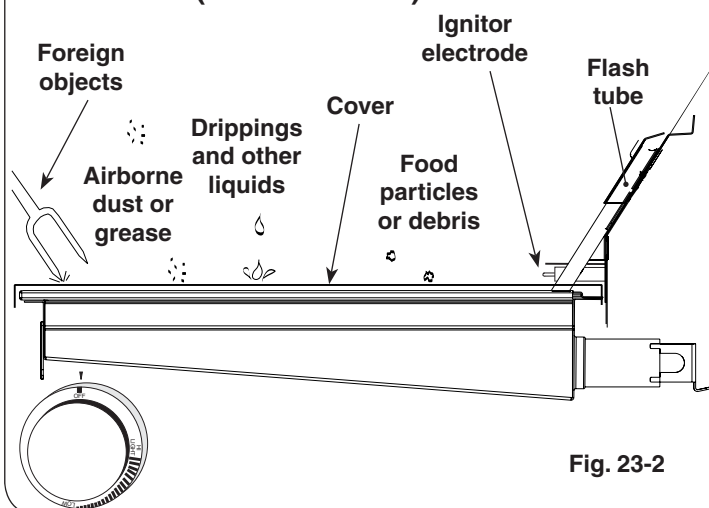


Fig. 23-2

Burner ceramic must be protected with cover when burner is not in use.

#### SIDE VIEW (burner on HI LIGHT and glowing orange)

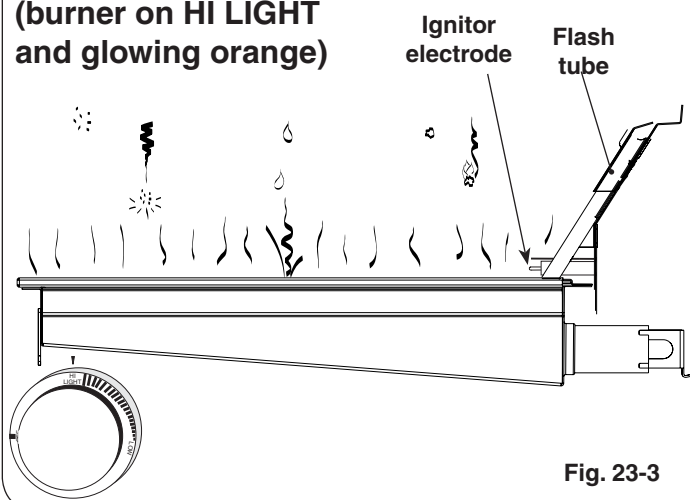


Fig. 23-3

Drips and particles evaporate before hitting infrared burner when cooking at the maximum setting.

## ACCESSORIES

### THE GRILL BRUSH (OPTIONAL)

Purchase a Fire Magic® stainless-steel grill brush (sold separately) to keep your grill cleaner. It comes with scraper for large particles and a replaceable head with brass bristles for overall cleaning.



Fig. 24-1

Grill brush with replacement head

### THE WARMING RACK

The warming rack (Fig. 24-2) is packed separately.

To install the warming rack, lift the front of the rack up slightly and insert the rack hangers into the two holes in the back of the inner oven hood just above the backburner. Then lower the front of the rack into a level position to lock the rack in place.

To remove the warming rack, lift up on the front of the rack until the rack hangers pull free from their supporting holes.

**Note:** Removing the warming rack before using the rotisserie will leave more clearance for the meat being cooked.



Fig. 24-2 Warming rack in place inside oven

### THE COOKING GRID LIFTER

Hold the grid lifter by gripping the center section with the prongs pointing down (use an oven mitt or heavy glove if the grill is hot). Insert the notched end of the grid lifter into the cooking grid, in front of the midway point (front to back; Fig. 24-3), and central (left to right; Fig. 24-4). Twist the grill lifter (clockwise or counterclockwise) so the handle is parallel to the grill rods. This “seats” the spiked end of the grid lifter between two rods, enabling you to safely lift out the grid. Lift slowly and adjust the grid lifter, if necessary, for balance.

### THE DRIP PAN

The drip collection system allows you to brush or scrape excess dried residue from the grilling area directly into the drip pan (see PARTS LIST for drip pan location). To simplify cleanup when using the rotisserie, you may place a baking pan or foil under the rotisserie on top of the burners to collect the drippings. Clean the drip pan after each use.



Fig. 24-3

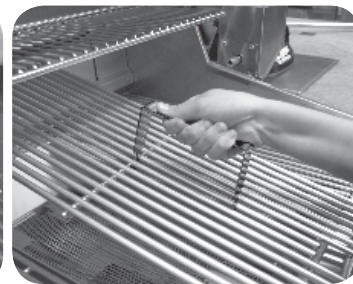


Fig. 24-4

Placement of the grid lifter in cooking grid

### THE FLAVOR GRID(S)

Place each flavor grid directly over a burner or burner pair. Center each grid over the burner, oriented as in Fig. 24-6.

**Note:** This allows heat from the burners to be evenly distributed throughout the cooking area. The flavor grids heat and cool quickly, making the grill very responsive to changes in heat from the burners.

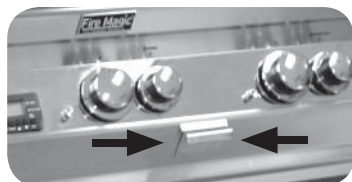


Fig. 24-5

Wood chip smoker drawer

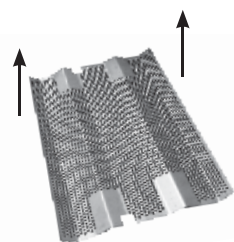


Fig. 24-6

Edges angle upward

### FLAVOR FROM WOOD CHIPS OR CHARCOAL

You can add wood chips, wood chunks, or the natural wood charcoal of your choice to the flavor drawer (Fig. 24-5) or the flavor grid (Fig. 24-6). Heat wood chips in the flavor drawer by lighting the smoker burner using the smoker control and zone 2 ignitor. When using 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 and drawer after use. Either can be easily removed and cleaned when unit has fully cooled. The flavor drawer is water-tight, allowing liquid flavorings to be added as well.



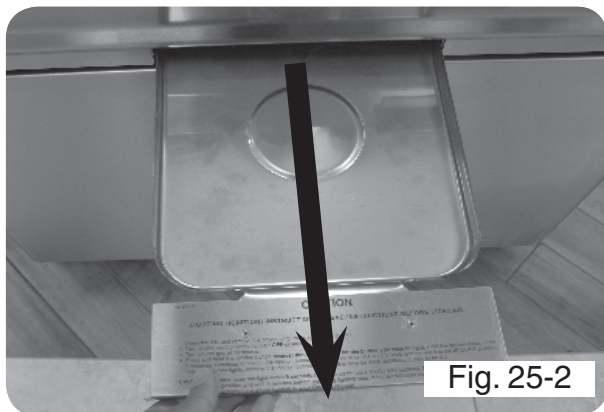


Fig. 25-2

Pull out the drip tray

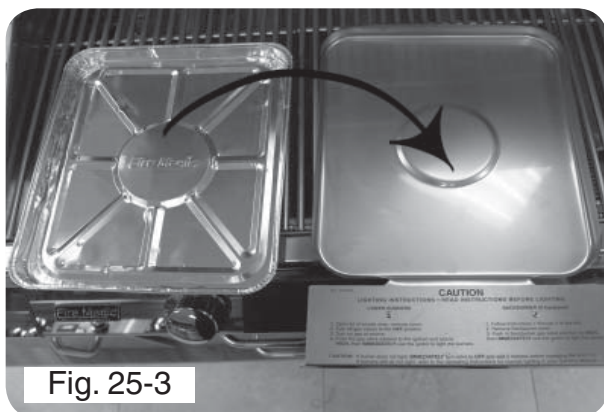


Fig. 25-3

remove a drip tray liner from the package

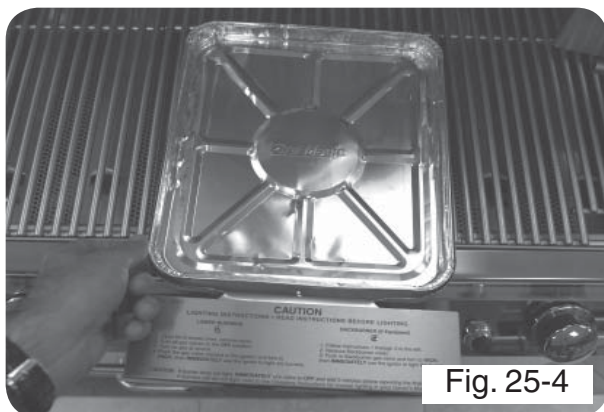


Fig. 25-4

Place the drip tray liner

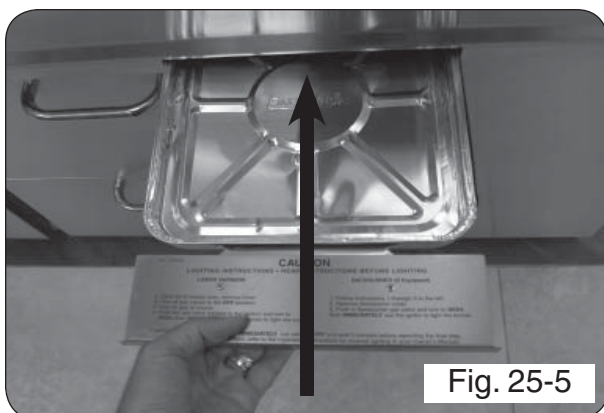


Fig. 25-5

Carefully slide the tray with liner back into the opening

Drippings from grilling flow through specially designed channels and collect in the drip tray. Check the drip tray regularly and empty when required.

Fig. 25-1



Your grill includes a pack of four (4) Fire Magic® drip tray liners (Fig. 25-1). For your convenience in cleanup, place a liner into the drip tray before grilling.

To fit a liner into the drip tray, pull out the tray (Fig. 25-2) and set it on a flat, level surface (Fig. 25-3). Place the liner in the drip tray as shown in Fig. 25-4 and carefully insert the tray back under the control panel (Fig. 25-5).

After each use, wait for the grill to cool and carefully pull out the drip tray to check it. When a liner is nearing full, carefully lift it out of the drip tray, lifting with both hands to keep the tray level until it is safely discarded. Then insert a new drip tray liner.

Order more drip tray liners through your local Fire Magic® dealer.

**Note:** The foil tray liner is also useful for setting on burners to cover them and catch drippings directly during rotisserie only cooking.

**Note:** There are easy to follow lighting instructions etched onto the top of the drip tray handle.

## REPLACING HALOGEN BULBS

Fire Magic® Echelon grills are all engineered with the conveniences of electrical power for illuminating and igniting the grill.

To replace any Magnum oven light, follow the instructions below.

### **WARNING**

To protect from potentially sharp sheet metal and glass, wear gloves and safety glasses during this procedure.

1. Turn all burner control knobs to the **OFF** position and shut off the gas supply to the grill at the source (tank valve for propane units or gas line shut-off valve for natural gas units.)
2. Disconnect supply of external electrical power to the grill.

**CAUTION:** Wait for the grill, oven, lens, light bulb, and fixture to cool before proceeding to the next step.

3. Open the oven lid.

**Important:** Place one hand directly below the glass lens and prepare to catch it when it is detached.

4. Carefully insert a standard flat head screwdriver or thin plastic spatula between the glass lens and the stainless steel on which the light is mounted

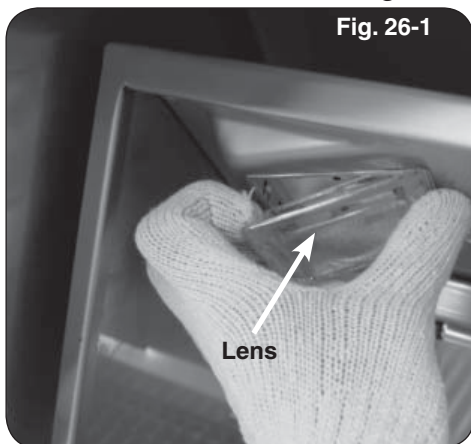


Fig. 26-1

and gently pry the glass lens out in such a way that the stainless steel is not scratched (twisting the screwdriver handle, for instance). Catch the lens and set it safely aside.

**Note:** You may wish to take this opportunity to clean the lens with a standard household window cleaner and then dry it completely.

5. Wearing a pair of gloves, reach into the fixture, gently grab the bulb, and pull it straight out of the fixture so that the two pins at the base of the bulb come all the way out.

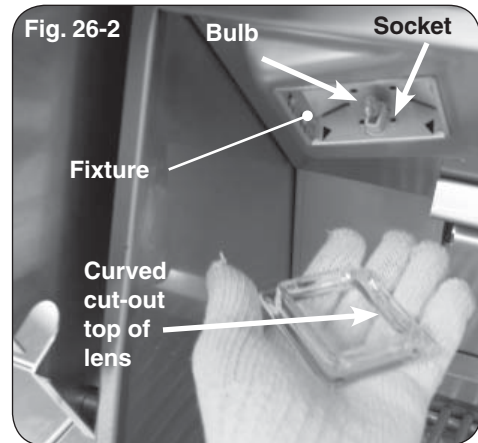


Fig. 26-2

**Important:** Bulb is halogen. DO NOT TOUCH with bare hands. Oils from hands drastically reduce bulb life.

**Note:** It may be helpful to rock the bulb gently backward and forward while pulling it out.

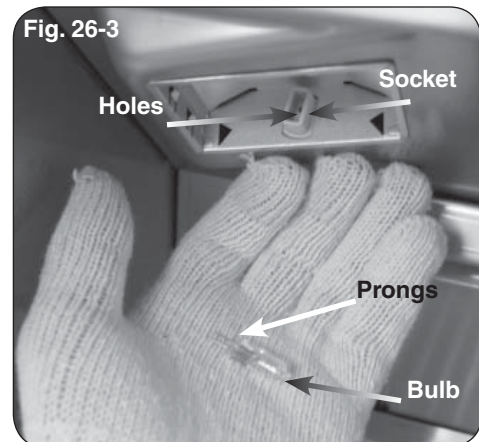


Fig. 26-3

6. Inspect the old bulb for broken glass or filament.

**Note:** It may be beneficial to test a suspect bulb in one of the other light fixtures known to be working and turn the power back on to be certain the bulb is actually not working.

7. Insert the new bulb into the socket so that both pins slide all the way into the two holes in the bottom of the socket.
8. Place the lens back into the fixture opening with the curved cut-out on the bottom and snap it back into place.

## CARE & CLEANING

### CARE AND CLEANING

Your new Fire Magic® grill represents the latest and most advanced technology available. In order to continue to enjoy the benefits of your grill and to protect your investment, we recommend the following:

Cover your grill with a Fire Magic® cover when not in use (see section below).

Clean it with Fire Magic® stainless-steel grill cleaner at least once a month (see Fig. 27-1).

**Note:** Due to the nature of stainless steel, surface iron oxide deposits may appear. Do not be alarmed – these deposits are removable with stainless-steel cleaner through periodic maintenance.

Check and clean the burner ports and carry-over slits for blockage at least annually by removing the burner (see orifice changing instructions) and visually inspecting the burner inlet for insects and nests. A clogged burner can lead to a fire beneath the grill.

The inside of the grill may be cleaned periodically with oven cleaner if desired. Follow the oven cleaner instructions for proper use.

By following these recommendations, you will enjoy the beauty and power of your grill for many years to come.



Fig. 27-1 - Wipe with grain

## OPTIONAL COVER

### PROTECTING YOUR GRILL

An optional heavy-duty cover will protect your grill's finish and preserve your investment. The water-repellent material will protect your grill from the weather.

Make sure to give the model number of your grill when ordering a cover.

**Important:** Allow your grill to cool before covering.

**Important:** Always close the gas-supply shutoff valve to the grill. If storing the grill for a long period of time, disconnect the grill from the gas supply completely.

Always check the burners before using the grill if it has been unused over a long period. Look for obstructions that may hamper performance and safe operation of your grill.



Fig. 27-2



## TROUBLESHOOTING

If you have trouble with this Fire Magic® grill, please use this list to identify the problem. By trying one or more of the solutions to the possible cause, you should be able to solve the problem. If this list does not cover your present problem, or if you have other technical difficulties with the grill, please contact your local Fire Magic® dealer or visit our web site at [www.rhpeterston.com](http://www.rhpeterston.com).

PROBLEM	POSSIBLE CAUSE	CORRECTION
<b>Ignition system failure</b>	<ol style="list-style-type: none"> <li>1. Low battery.</li> <li>2. Improper airshutter adjustment</li> <li>3. Ignition wire disconnected</li> <li>4. Low gas pressure</li> <li>5. Front carry-over port</li> </ol>	<ol style="list-style-type: none"> <li>1. Hook external power to grill.</li> <li>2. Adjust air shutters.</li> <li>3. Plug wires back into ignition switches.</li> <li>4. Have the gas co. check pressure at grill.</li> <li>5. Clean burner ports.</li> </ol>
<b>Insufficient heat</b>	<ol style="list-style-type: none"> <li>6. Improper air shutter adjustment</li> <li>7. Using propane orifice for natural gas</li> <li>8. Low gas pressure/flame (propane)</li> <li>9. Low gas pressure/flame (natural)</li> </ol>	<ol style="list-style-type: none"> <li>6. Adjust air shutters.</li> <li>7. Check/change orifices.</li> <li>8. Shut off all valves, including propane tank, and follow lighting instructions exactly. (See important note* below.)</li> <li>9. Have the gas co. check pressure at grill.</li> </ol>
<b>Uneven heating</b>	<ol style="list-style-type: none"> <li>10. Burner ports partially blocked by debris</li> <li>11. Small spiders or insects in burner</li> <li>12. Improper air shutter adjustment</li> </ol>	<ol style="list-style-type: none"> <li>10. Remove burners and clean out ports.</li> <li>11. Inspect burners and orifices for spider webs or other debris that may block flow.</li> <li>12. Adjust air shutter.</li> </ol>
<b>Thermometer malfunction</b>	<ol style="list-style-type: none"> <li>13. Battery charge low</li> </ol>	<ol style="list-style-type: none"> <li>13. Replace batteries. Check connections to batteries.</li> </ol>
<b>Rotisserie noisy</b>	<ol style="list-style-type: none"> <li>14. Rotisserie out of balance</li> </ol>	<ol style="list-style-type: none"> <li>14. Adjust rotisserie counterbalance.</li> </ol>
<b>Rotisserie doesn't turn but lights work</b>	<ol style="list-style-type: none"> <li>15. Elec. socket circuit breaker is tripped</li> </ol>	<ol style="list-style-type: none"> <li>15. Reset circuit breaker (See Fig. 28-1).</li> </ol>

**Fig. 28-1**

**Table 2**



**To reset the cart electrical outlets press in hard on the reset (upper) button until you hear an audible click.**

**Note:** The main power feed to the cart must be on for the reset switch to function. Open the grill oven lid and turn on the lights to verify that the grill has electrical power before resetting the breaker.

**\* Important:** Propane tanks are equipped with a safety shutdown device that may cause low or no gas/flame at the burners if operating and lighting instructions are not followed exactly. If you suspect the propane tank safety shutoff is in effect, shut off all burner control valves and the propane tank valve. Then read and follow the LIGHTING INSTRUCTIONS exactly. Lighting instructions are located in your owner's manual and printed on the grill's metal drip tray. If the problem persists, continue troubleshooting, or contact your local dealer or R. H. Peterson for assistance.



## CONVERTING THE GAS TYPE

### REGULATOR CONVERSION

The gas regulator, located behind the control panel, must be set for the type of gas used to fuel the grill. To check the regulator setting, remove the cap in the center of the regulator (Fig. 29-1). Holding the cap vertical (see Fig. 29-2), the letters at the bottom of the plastic stalk indicate the gas type for which the regulator is currently configured. If the bottom of the regulator stalk does not indicate the gas connected to the grill, remove the stalk from the cap, invert, and replace into center of cap. Replace cap on the regulator, screwing down until snug.

**Gas Regulator**  
**Note the cap on top.**

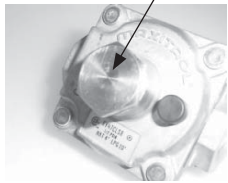


Fig. 29-1



**Read gas type here. (LP shown)**  
**Fig. 29-2**

### GAS ORIFICE CONVERSION

This Fire Magic® grill comes from the factory configured for one type of gas as marked on the label behind the control panel. When the grill is converted, this label must be replaced or updated to identify the new gas.

Each burner has a brass orifice, which can be replaced and must match the gas being used. When converting the grill to a different gas, each burner's orifice must be replaced with the corresponding orifice for the new gas.

Natural-gas to propane-gas conversions using a tank internal to a portable grill require installation of a propane tank holder (not included) for safety and compliance with the ANSI standards referenced on the cover of this document. This tank holder must be purchased separately from the manufacturer.

Consult Table 1 at the beginning of this document to determine the proper orifice sizes for each burner.

It is critical to the operation of each burner that its orifice be fully inserted into the center of its orifice opening.

#### **WARNING**

**Hazardous overheating will occur if a natural-gas orifice is used with propane gas.**

**CAUTION:** Make sure the grill is at a safe temperature and isolated from gas and electrical supplies before beginning.

For your safety, exercise caution, and make sure you have adequate hand protection, such as gloves, when handling metal parts.

Required tools:

- Phillips-head screwdriver (#2 medium)
- Needle-nose pliers
- $\frac{3}{8}$ " hex nut driver (deep socket)
- $\frac{5}{16}$ " hex nut driver

### CHANGING THE MAIN BURNER ORIFICES

1. Remove the cooking grid from above the burner you are working on by lifting it first from the front and set it aside.
2. Remove the flavor grid from above the burner you are working on and set it aside.
3. Remove the cotter pin from the left or right rear burner anchoring peg by pulling it straight out of the cotter pin hole using fingers or needle-nose pliers (Fig. 29-3).

**CAUTION: The burner is heavy.**

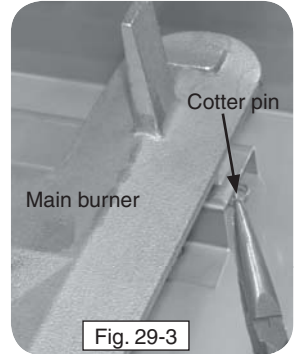


Fig. 29-3

4. Lift the back end of the burner out of the anchor peg holes, then move the burner toward the back of the grill to clear the gas inlet and set it aside.
5. Use a  $\frac{3}{8}$ " hex nut driver to remove the exposed orifice (Fig. 29-4) and replace it with the correct orifice for the new gas. (See Table 1 at the beginning of this document for orifice sizes.)
6. Replace the burner by first sliding the open cylindrical end of the burner around the orifice, enveloping it and centering on it, then lower the back end anchor pegs into the anchor peg holes.

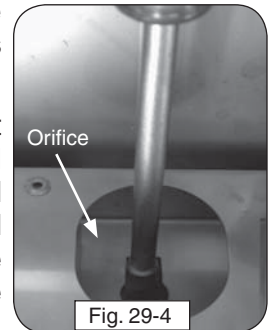


Fig. 29-4

**Note:** It is critical to the continued safe functioning of the burner that the orifice is centered and completely inside the burner gas conduit.

7. Reinsert the cotter pin into the right rear burner anchor peg using fingers or needle-nose pliers.
8. Replace the flavor grid and then the cooking grid so that the cutout section of the cooking grid is lined up with the lighting tube.

Repeat these steps for each main burner.

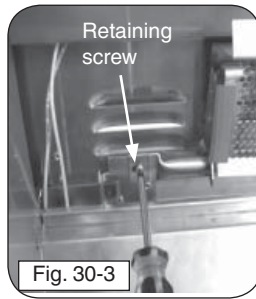
### CHANGING THE BACKBURNER ORIFICE (IF EQUIPPED)

1. Remove the warming rack if installed and set it aside.
2. Remove the backburner cover.
3. Unscrew all backburner access plate screws using a Phillips-head screwdriver and set them aside.

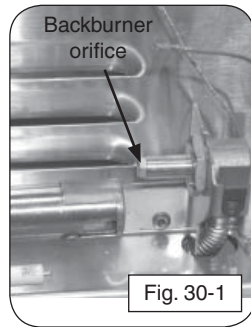
## CONVERTING THE GAS TYPE

### CHANGING THE SIDEBURNER ORIFICE →

4. Remove the backburner plate by pulling the bottom toward the front of the grill and rotating it upward and outward until the two top tabs attached to back wall of the oven can be removed from the slots in the top of the plate.
5. Remove the backburner assembly retaining screw on the lower left of the backburner using a Phillips-head screwdriver and set it aside.



6. Pull the backburner assembly to the left, clear of the orifice, and then rotate the top forward and downward and lay it face down across the cooking grids or main burners.



**CAUTION:** Be careful not to damage the wires connected to the backburner assembly.

7. Use a  $\frac{3}{8}$ " hex nut driver to remove the exposed orifice and replace it with the correct orifice for the gas being converted to (See Table 1 for size).
8. Replace the backburner assembly and reinsert the retaining screw. Center the backburner assembly so that the backburner plate will fit over it. Tighten the retaining screw using a Phillips-head screwdriver.
9. Replace the backburner plate by first inserting the tabs above into the slots in the top of the plate and then rotating the bottom downward and inward.
10. Replace all the backburner plate screws using a Phillips-head screwdriver.

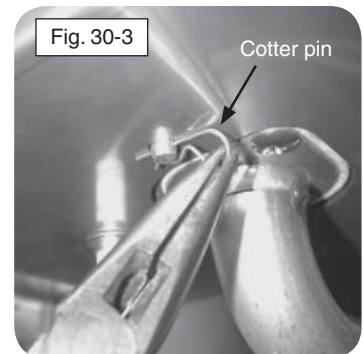
### CHANGING AN INFRARED BURNER ORIFICE (IF EQUIPPED) →

1. Remove the cooking grid from above the burner on which you are working by lifting it first from the front and set it aside.
2. Unscrew both lighting tube hex head screws with a  $\frac{3}{8}$ " hex nut driver.
3. Remove the infrared burner by lifting the back of the burner up so that both tabs are freed from their slots, then lift the burner toward the back of the fire box and upward. Set the burner aside.
4. Use a  $\frac{3}{8}$ " hex nut driver to remove the exposed orifice and replace it with the proper orifice for the new gas (see Table 1 for sizing).
5. Replace the infrared burner by first sliding it over the orifice, then lowering the two tabs under the back of the burner into the slots in the back burner rest.
6. Reattach the lighting tube and replace the grid so that the cut-out section is in front.

1. Lift the sideburner lid. Then remove the grill and sideburner cap and set them aside.
2. Locate and remove the cotter pin from the sideburner assembly underneath the sideburner shelf using needle-nose pliers. Set it aside.
3. From the top of the sideburner shelf, lift the sideburner upward while rotating the attached tubing underneath away from the orifice near the cart wall. Set it aside.
4. Use the nut driver to remove the exposed orifice and replace it with the correct orifice for the gas being converted to. (See Table 1 for correct orifice sizes based on burner type and gas type.)

**Note:** To protect the manifold threads when placing the new orifice, start the threading manually, and then tighten with the nut driver.

5. Rotate the burner assembly back into place over the orifice and firmly seated in the shelf.
6. Reinsert the cotter pin underneath the sideburner assembly using needle-nose pliers. It may be necessary to push downward on the burner assembly from above to fully expose the cotter pin hole. Rotate the inserted cotter pin so that it is flush with the underside of the shelf.
7. Replace the burner cap by centering it on the sideburner assembly and making sure it drops in place.
8. Replace the grill with the grating running front to back so that it drops fully down onto the shelf, allowing the lid to close completely over it.



## BURNER AIR SHUTTER ADJUSTMENT

### AIR SHUTTER ADJUSTMENT

**Important:** Air shutters are preset at the factory based on the gas the grill is built to burn. However, altitude or other local conditions may require air shutter adjustment for proper combustion.

### MAIN BURNER

Flames from a properly adjusted main burner with no wind or breeze present will appear fairly steady, consistent, and almost entirely blue. The extreme tips of the flames may be light yellow. If the tip of a flame were to turn orange, it should only do so briefly and then become blue or light yellow again. The flames will appear to burn while touching the burner ports (see Figure 31-1).

If the flames have orange in them and appear to undulate slowly from side to side, or if some of them appear to lift off the burner instead of touching it, then adjust the air shutter, as instructed below.

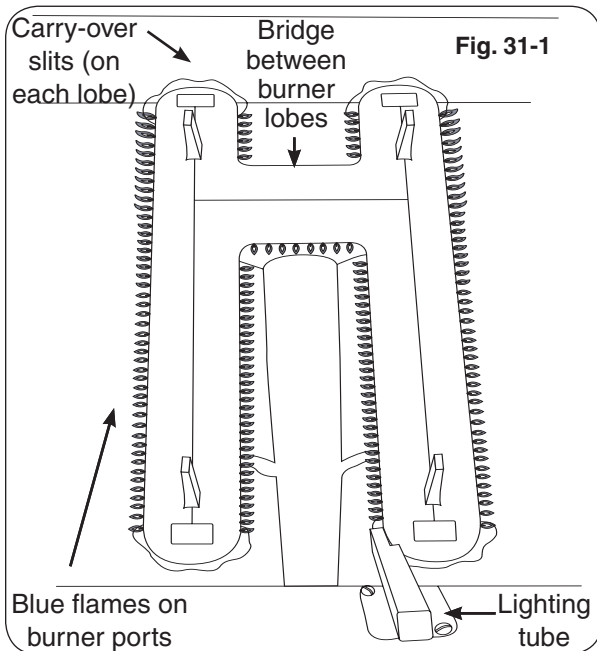


Fig. 31-1

**CAUTION:** Turn all burner control knobs to the **OFF** position and turn off the gas supply at the source before removing or adjusting a burner.

### **WARNING**

Wait for the burner to be cool or use heavily insulated heat-resistant gloves when handling the burner.

1. Follow the safety precautions and steps for main burner removal in the **CHANGING THE MAIN BURNER ORIFICES** section (steps 1-4).
2. Adjust the air shutter opening by loosening the adjustment screw with a screwdriver, then sliding the air shutter backward or forward to open or close the air shutter opening (see Fig. 31-2).

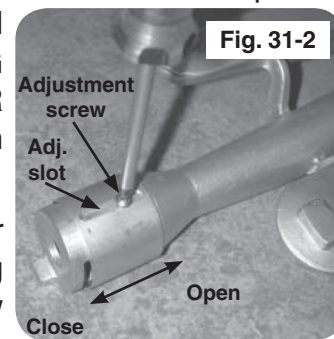


Fig. 31-2

Shutter Setting	Flame Condition
Open too far	Flames shorten and lift off the burner
Ideal setting	Blue flames just touching burner (may have light-yellow tips)
Closed too far	“Lazy” flames with orange in them

Too large an air shutter opening will allow too much air into the burner, which will cause the flames first to shorten and then to appear to lift up off the ports. For the bottom of the flames to move closer to the ports, close the air shutter more.

If the air shutter opening is too small or closed, the flames will present consistently orange tips and become “lazy,” slowly undulating back and forth.

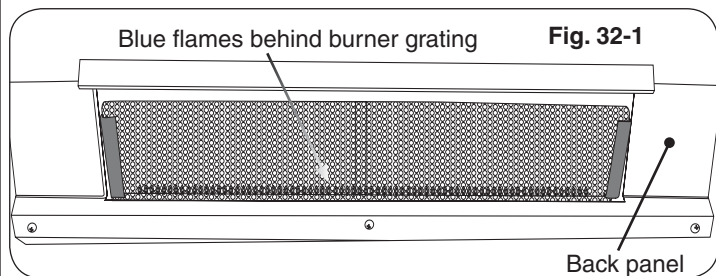
For propane gas, ideal settings tend to be just slightly open. For natural gas, which generally requires less primary air than propane, the main burner air shutter may be nearly closed.

3. Adjust the air shutter opening and then replace the burner (steps 6-8 in the **CHANGING THE MAIN BURNER ORIFICES** section)
4. Follow the lighting instructions in this manual to light the burner.
5. Repeat steps 1-4 until the flames appear to touch the burner ports, burning fairly steadily and almost entirely blue with occasional light-yellow tips (see Fig. 31-1).



## BACKBURNER

The backburner is set at the factory and will not require adjustment unless this unit is converted or used at an elevation above 2,000 ft.



Flames from a properly adjusted backburner will appear as a horizontal line of even blue flames along the bottom of and behind the backburner grating. The grating itself will glow red after it heats up.

**Note:** It is normal for the backburner to smoke when it is first used. Burning the backburner on **HI LIGHT** for approximately 15 minutes will eliminate the smoking.

If, instead of being blue and even, the backburner flames appear to have orange in them and waver slowly left and right, or if the flames appear to lift off the burner, adjust the backburner air shutter by following the steps below.

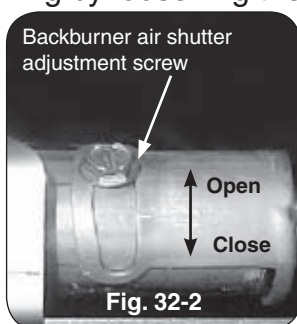
The backburner air shutter adjustment is located behind the right side of the access panel in the back of the oven, above the cooking grid.

**Note:** It is only necessary to remove the backburner back panel, not the backburner, when adjusting the backburner air shutter.

1. Follow the safety precautions and steps for backburner back panel removal (steps 1-4) in the CHANGING THE BACKBURNER ORIFICE section.

**CAUTION:** The backburner air shutter can be safely adjusted with the backburner lit if it is adjusted using a long-handled screwdriver or well-insulated fire and heat-resistant gloves.

2. Adjust the air-shutter opening by loosening the adjustment screw with a screwdriver, then sliding the air shutter backward or forward to open or close the air shutter opening (see Fig 32-2). Watch the backburner flames while adjusting the air shutter.



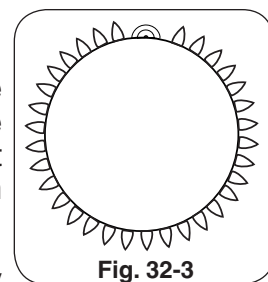
Too large an air shutter opening will allow too much air into the burner, which will cause the flames first to shorten and then to appear to lift up off the ports. For the bottom of the flames to move closer to the ports, close the air shutter more.

If the air shutter opening is too small or closed, the flames will present consistently orange tips and become "lazy," slowly wavering left and right.

3. Continue adjustment until the flames appear to touch the burner ports, burning fairly steadily, consistently, and almost entirely blue with some light-yellow tips (see Fig. 32-1), then retighten the backburner air shutter adjustment screw.
4. Replace the burner access plate (step 8 in the CHANGING THE BACKBURNER ORIFICE section).

## SIDEBURNER

The sideburner is set at the factory and will not require adjustment unless this unit is converted or used at an elevation above 2,000 ft.



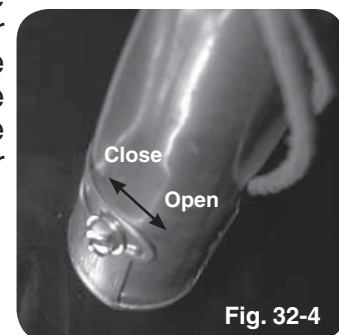
The flames from a properly adjusted sideburner will touch the burner ports and appear mostly blue with light-yellow tips.

If they are orange, "lazy," or lift off the burner ports, then adjust the sideburner air shutter using the following steps.

The sideburner air shutter is located underneath the sideburner shelf on the left side of the unit, near the wall of the cart. It can safely and easily be adjusted while the sideburner is lit.

**CAUTION:** Do not touch the sideburner or the shelf around it. They will be hot while adjusting the sideburner air shutter.

1. Light the sideburner following the lighting instructions in this manual.
2. Loosen the sideburner air shutter adjustment screw, then use the tip of the screwdriver to open or close the air shutter until the flames appear blue and touch the burner ports.
3. Retighten the adjustment screw.





## BURNER AIR SHUTTER ADJUSTMENT (Continued)

### POWER BURNER

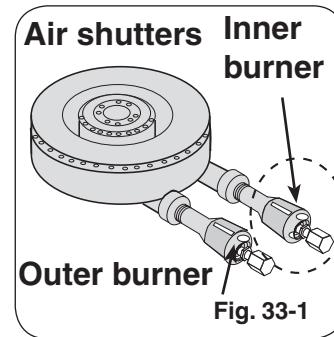
Power burner air shutter adjustment is located on dual necks of the power burner where they connect with the gas manifold and orifices, as show in Fig. 33-1.

**CAUTION:** NEVER handle a hot burner.

To adjust the air shutters:

1. Remove the cooking grid and collimator.
2. Lift the back of the burner upward so that the pin in the bottom back clears the hole in the burner rest.
3. Move the burner back away from the front of the grill while continuing to lift the back upward so that it clears the rear fire wall.
4. Turn the shutter to the desired opening size and replace the burner to test the effect on the flame.

Burner flames should be blue with yellow tips.



### ADJUSTING THE LOW FLAME SETTING

After changing gas orifices and adjusting the regulator to burn a new gas, adjust the height of the flame **with a valve in LOW position so that is is low without going out**. Use the small adjusting screw in the center of the valve stem. This screw is accessible by removing the valve knob, which pulls straight off the end of the valve stem.

## SAFETY

The right knob controls the front burner and the left knob controls the back burner.

**CAUTION:** THE SIDEBURNER MUST COOL DOWN BEFORE HANDLING OR ADJUSTMENT.

Do not operate the sideburner with the cover closed.

Be sure the sideburner has good ventilation, is free of debris, and is away from flammable substances before lighting.

Properly burning flames are mostly blue with yellow tipping and are steady and spread evenly around the burner.

## STAINLESS STEEL SIDEBURNER COVER

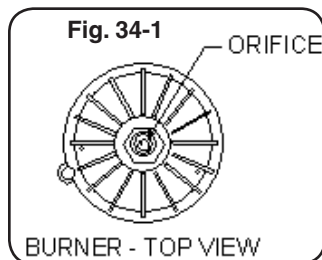
**Note:** The cover is free-standing and is not hinged in the back.

To remove the cover, carefully lift off using the built in handle.

To replace the cover, put the back of the cover into position against the back inner lip of the sideburner grill rest and then lower the front into position so that it covers the side burner opening entirely.

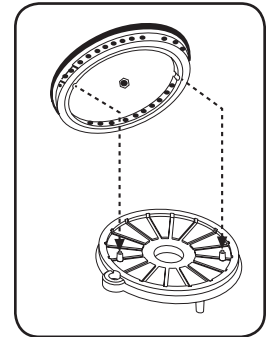
## ORIFICE CHECKING

1. Remove the cover and then the grid. Set them aside.
2. Lift the brass burner caps off of both front and back sideburners and set them aside.
3. Look down into the hole at the center of the burner, using a flashlight if necessary, and read the number stamped on the top of the brass gas orifice (see Fig. 34-1).
4. Compare the number with the orifice size information for your gas type in the MODEL SPECIFICATIONS TABLE under the gas type



of this grill. Each sideburner must have the correct gas orifice for the grill to operate safely and effectively as it was designed.

5. Replace the burner caps so that they are centered over their respective burners with the slightly rounded part of the burner cap pointing upward. The notches in the burner cap must fit over the studs protruding from the burner base for the cap to be properly seated.



**Fig. 34-2 Positioning the Burner Cap**

6. Replace the grid and the cover as appropriate.

## ORIFICE CONVERSION

1. Follow steps 1. and 2. under ORIFICE CHECKING.
2. Pull the metal tube up out of the center of each burner, taking note of the upper end that has the lip on it. Set it aside.
3. Use a  $15/16$ " wrench to carefully loosen and then remove the brass nut holding each burner in place and set it aside.
4. Remove the burner control knobs from the face plate by pulling them gently away from the face plate. Set them aside.
5. Pull the wood-chip drawer completely out from the front of the grill and set it aside.
6. Remove the faceplate from the front of the grill by unscrewing the screws on the left and right sides using the Phillips-head screwdriver and then lifting the faceplate first upward so that it clears the "lid closed" switch on the left side and then shift it to the right until it is free of the grill. Gently lower the top of the faceplate until it rests securely by the internal chain with it's base resting against the grill.
7. Reach into the space underneath the double side burner and pull out each brass burner in turn carefully bending the flexible metal tubing still attached.

8. Replace the orifice using a  $\frac{3}{8}$ " hex nut driver.

**Note:** It will help to start the brass orifice with your fingers to avoid cross threading it.

9. Replace each brass burner by bending the connected metal tubing back into place so that the threaded top of the burner sticks through from underneath the burner hole and screw it in using the brass nut and the  $\frac{15}{16}$ " wrench.

**Important:** Do not over tighten.

10. Follow steps 5 and 6 under ORIFICE CHECKING.

### **ADJUSTING THE FLAME**

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

Turn the screw to the right to reduce the flame height at the low setting and to the left to increase it.

**Note:** The double sideburner has no air-shutter adjustment.

## WARRANTY

**PLEASE COMPLETE AND RETURN YOUR REGISTRATION CARD, WHICH IS INCLUDED WITH YOUR FIRE MAGIC® GRILL**

**LIFETIME WARRANTY** - Fire Magic® cast stainless-steel burners, stainless-steel rod cooking grids, and stainless-steel housings are warranted for as long as you own your Fire Magic® grill.

**FIFTEEN-YEAR WARRANTY** - Fire Magic® cast brass burners, brass valves, backburner assemblies (except ignition parts), and manifold assemblies are warranted for 15 years from the date of purchase of your Fire Magic® grill.

**THREE-YEAR WARRANTY** - Fire Magic® sideburners and all other Fire Magic® grill components (except ignition and electronic parts) are warranted for three (3) years from the date of purchase of your Fire Magic® grill.

Fire Magic® ignition systems (excluding batteries), electronic components (including lights and thermometers), and grill accessories are warranted for one (1) year from date of purchase.

### PLEASE KEEP A COPY OF YOUR SALES SLIP FOR PROOF OF PURCHASE

This warranty applies to the original purchaser and to single family residential use only. It commences from date of purchase, and is valid only with proof of purchase.

This warranty does not cover parts becoming defective through misuse, accidental damage, electrical damage, improper handling, storage, and/or installation. Product must be installed (and gas must be connected) as specified in the instructions or operator's manual, by a **qualified professional installer**. Accessories, parts, valves, remotes, etc., when used must be Peterson Co. product.

This warranty **does not** apply to rust, corrosion, oxidation, or discoloration, unless the affected component becomes inoperable. It **does not** cover labor or labor-related charges.

This warranty specifically excludes liability for **indirect, incidental**, or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specified legal rights, and you may have other rights that may vary from state to state.

For additional information regarding this warranty, or to place a warranty claim, contact the R.H. Peterson dealer where the product was purchased.

## ROBERT H. PETERSON CO.

Quality Check

Date: \_\_\_\_\_

Orifice # (Main): \_\_\_\_\_

Orifice # (Other): \_\_\_\_\_

Leak Test: \_\_\_\_\_

Burn Test: \_\_\_\_\_

Gas Type: NAT. / PROPANE

Model #: \_\_\_\_\_

Serial #: \_\_\_\_\_

Air Shutter: \_\_\_\_\_

Inspector: \_\_\_\_\_