

# FIREMAGIC®

## CHOICE

### STAND-ALONE OUTDOOR GAS GRILLS C430s & C540s

#### INSTALLATION AND OWNER'S MANUAL

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



C540s shown

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

### SAFETY AND WARNING CODES

#### **⚠ DANGER:**

##### **IF YOU SMELL GAS:**

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

**CODE AND SUPPLY REQUIREMENTS:** This grill must be installed in accordance with local codes and ordinances, or, in the absence of local codes, with either the latest *National Fuel Gas Code (ANSI Z223.1/NFPA 54)*, and *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).

**Proper operation of your grill requires prompt and periodic maintenance. See the SERVICING AND CLEANING section for details.**

#### **⚠ 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.

#### **⚠ 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 service technician, service agency, or the gas supplier.

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.



Certified to: **ANSI Z21.58**  
**CSA 1.6**

# - INSTALLATION INSTRUCTIONS ET MANUEL DU PROPRIÉTAIRE -

## 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 le gaz à l'appareil.
2. Éteignez-vous n'importe quelle flamme nue.
3. Ouvrez le couvercle si équipé d'un four.
4. Si l'odeur continue, gardez loin de l'appareil et appelez immédiatement votre département de fournisseur ou de feu de gaz.

#### **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 RÉGULATEUR ADDITIONNEL DOIT ÊTRE INSTALLÉ AVANT LE GRIL. VOIR LA SECTION DE CONDITIONS

#### **▲ 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.

#### **▲ 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 de l'aide ou des renseignements supplémentaires, consulter un technicien professionnel qualifié de service, une 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.

#### **D'OFFRE DE GAZ POUR LA PRESSON 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 / CSA 1.6**

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

**GETTING STARTED**

INSTALLATION, OPERATION, AND SAFETY INFORMATION ..... 4

GAS SAFETY INFORMATION ..... 5

*WARNING* ..... 5

*WHEN USING PROPANE GAS* ..... 5

*WHEN USING NATURAL GAS* ..... 5

*INSTALLATION SAFETY GUIDELINES* ..... 5

OPERATING THE UNIT SAFELY AND CORRECTLY ..... 5

SAFE USE & MAINTENANCE OF PROPANE GAS CYLINDERS ..... 7

INSTALLATION REQUIREMENTS ..... 8

*OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS* ..... 8

*SIDE AND REAR WALL CLEARANCES* ..... 9

*ENSURE PROPER COMBUSTION AIR AND COOLING AIRFLOW* ..... 10

*GAS-SUPPLY PLUMBING REQUIREMENTS* ..... 10

MODEL SPECIFICATIONS ..... 11

REPLACEMENT PARTS LIST ..... 13

GRILL NOTES PAGE ..... 15

**INSTALLATION**

INSTALLATION ..... 16

*LOCATION PREPARATION* ..... 16

*WHEELS AND CASTERS* ..... 16

*CONNECT THE GAS SUPPLY* ..... 16

*INSTALL THE FLAVOR GRIDS* ..... 17

RIGID SHELF INSTALLATION ..... 19

**USE, CARE, & SERVICE**

IDENTIFICATION OF GRILL CONTROLS ..... 20

USING THE GRILL ..... 21

LIGHTING (IGNITION) INSTRUCTIONS ..... 23

*ELECTRONIC LIGHTING* ..... 23

*MANUAL LIGHTING* ..... 23

*SHUTTING OFF THE UNIT* ..... 23

SERVICING AND CLEANING ..... 24

*CONVERTING THE GAS TYPE* ..... 25

*BURNER AIR SHUTTER ADJUSTMENT* ..... 26

*CONTROL PANEL REMOVAL* ..... 27

*IGNITER BATTERY REPLACEMENT* ..... 28

TROUBLESHOOTING ..... 29

WARRANTY ..... 30

## INSTALLATION, OPERATION, AND SAFETY INFORMATION

1. The outdoor appliance and surrounding area **MUST** remain clear of flammable substances such as gasoline, yard debris, wood, etc.
2. Do not block the 1" front air inlet along the bottom of the control panel.
3. **This unit must be installed so that the vent openings on the cabinet remain clear and free at all times. See the GAS SAFETY INFORMATION section.**
4. **When using propane gas: the propane cylinder, regulator, and rubber hose must be in a location not subject to temperatures above 125° F (51° C).**
5. The flames on each burner burn evenly along the entire burner with a steady flame (mostly blue). If burner flames are not normal, check and clean the orifice and burner/venturi tubes for insects and insect nests. A clogged tube can lead to a fire beneath the unit. A proper flame pattern will ensure safe operation and optimal performance. Adjust the air shutter as needed (see **SERVICING AND CLEANING, AIR SHUTTER ADJUSTMENT**).
6. The in-line gas valve or gas cylinder valve must always be shut OFF when the unit is not in use.
7. The drip collector holes must be clear and unobstructed. Excessive grease deposits can result in a grease fire.

### **IMPORTANT**

**IN THE EVENT OF A GREASE FIRE, IMMEDIATELY SHUT OFF THE MAIN GAS VALVE TO THE UNIT. KEEP THE LID OPEN AND ALLOW THE FIRE TO EXTINGUISH ITSELF. A THOROUGH INSPECTION BY A TRAINED SERVICE TECHNICIAN SHOULD BE CONDUCTED BEFORE FUTURE USE OF YOUR UNIT. THE SERVICE TECHNICIAN WILL CHECK THE SYSTEM FOR GAS LEAKS AND WILL CHECK ALL ELECTRICAL WIRING FOR DAMAGE. ALL GAS LEAKS AND WIRING MUST BE REPAIRED PRIOR TO FUTURE USE.**

**WARNING: NEVER cover more than 75% of the cooking or grill surface with griddles or pans. Overheating will occur, and burners will not perform properly when combustion heat is trapped below the cooking surface.**

**CAUTION: NEVER spray water on a hot gas unit.**

**The grill serial number tag can be found affixed to the grill body behind the control panel (on an aluminum tag) and on the underside of the drip tray handle (on a thermal label). It is recommended that the drip tray first be removed and cleaned / emptied of its contents, then turned over to view. The unit rating label is located inside of the control panel.**

## GAS SAFETY INFORMATION

**WHEN OPERATING THIS GAS APPLIANCE, ALL INSTRUCTIONS AND WARNINGS MUST BE OBSERVED. FAILURE TO DO SO MAY RESULT IN A FIRE OR EXPLOSION CAUSING PROPERTY DAMAGE, BODILY INJURY, OR DEATH.**

### WARNING

This appliance **MUST** be installed and operated according to the information below.

**FAILURE TO PROPERLY VENT THE GRILL CABINET MAY RESULT IN A FIRE OR EXPLOSION CAUSING PROPERTY DAMAGE, BODILY INJURY, OR DEATH.**

A leaking gas connection or valve unintentionally left open will create a hazard.

#### **WHEN USING PROPANE GAS**

- **Propane gas** (also known as **L.P. gas**) is heavier than air and will accumulate or pool in an inadequately vented enclosure or recessed area.
- If a pool of **propane gas** is ignited, an explosion will occur. Adequate venting at the floor level of the cabinet eliminates this danger.
- DO NOT store a spare propane-gas cylinder in or near the unit.

#### **WHEN USING NATURAL GAS**

- **Natural gas** is lighter than air and will accumulate at the top of an inadequately vented enclosure.
- If an accumulation of **natural gas** is ignited, an explosion will occur. Adequate venting at the top of the cabinet eliminates this danger.

#### **INSTALLATION SAFETY GUIDELINES**

**THIS UNIT MUST BE INSTALLED SO THAT THE VENT OPENINGS ON THE CABINET REMAIN CLEAR AND FREE AT ALL TIMES.**

**The gas cylinder, regulator, and rubber hose must be in a location not subject to temperatures above 125° F (51° C).**

**IF A PROPANE CYLINDER IS INSTALLED INSIDE OF THE CABINET, THE GUIDELINES FOUND IN THE **SAFE USE & MAINTENANCE OF PROPANE GAS CYLINDERS** SECTION MUST BE FOLLOWED.**

### **OPERATING THE UNIT SAFELY AND CORRECTLY**

Every time you use the unit, **make sure that:**

1. The area around the unit is clear and free from combustible materials, gasoline and flammable vapors/liquids.
2. There is no blockage of the airflow through the vent openings located on the cabinet.
3. The hose is inspected (if applicable). See **SAFE USE & MAINTENANCE OF PROPANE-GAS CYLINDERS** section.

**DO NOT** store any combustible materials, gasoline, and any other flammable vapors/liquids in the vicinity of the unit. Provide adequate clearance for servicing and operation.

# UTILISATION SÛRE ET ENTRETIEN DES CYLINDRES DE GAZ DE PROPANE

## 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 montage du régulateur de pression et le flexible (Fig. 6-1) fourni avec cet appareil au gaz en plein air (modèles au propane seulement) doit être utilisé. Assemblées d'origine et régulateur de pression et le tuyau de remplacement doivent être ceux spécifiés par le fabricant pour le raccordement d'un dispositif de cylindre de liaison identifiée comme de type I par le ANSI Z 21.58/CGA 1.6 (voir liste des pièces pour les informations de commande).
- 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 régulateur/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. 6-1).

**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 savonneuse. 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.

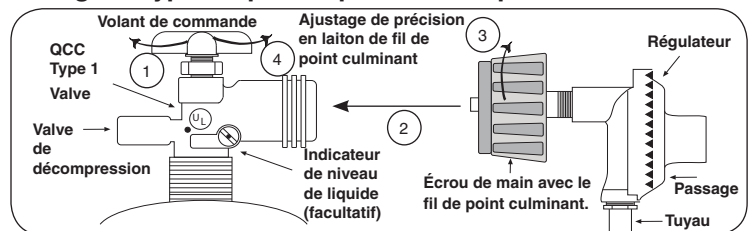
**Inspectez soigneusement** l'ensemble de tuyau chaque fois avant que le gaz soit allumé. Un tuyau fissuré ou effiloché doit être immédiatement remplacé.

Si l'appareil est stocké à l'intérieur, le cylindre doit être disconnected et a enlevé. Des cylindres Disconnected doivent être stockés dehors, hors de la portée des enfants, avec les prises de valve filetées étroitement installées, 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. 6-1 type coupleur rapide de fil de point culminant d'I



## FIXATION DU CYLINDRE DE GAZ DE PROPANE

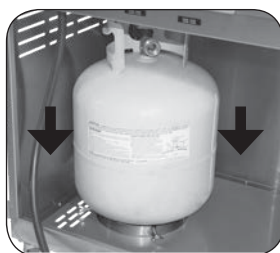


Fig. 6-2

1. Ensemble cylindre-propane gaz dans le manchon de support.



Fig. 6-3

2. Suivez les instructions ci-dessus pour connecter l'alimentation.

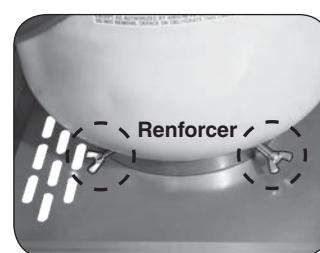


Fig. 6-4

3. Serrer les vis de serrage pour fixer le cylindre.

# 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 unit, 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 used must include a collar to protect the cylinder valve, and the cylinder supply system must be arranged for vapor withdrawal.
- The pressure regulator and hose assembly (Fig. 7-1) supplied with this outdoor gas appliance (L.P. models only) 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/CGA 1.6* (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.

## 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.

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. 7-1).

**Important:** Before using the unit, 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 unit valves and open the main cylinder valve, then check connections with soapy water. Repair any leaks before lighting the unit.

**CAUTION:** Always turn the propane cylinder main valve off after each use, and before moving the unit 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.

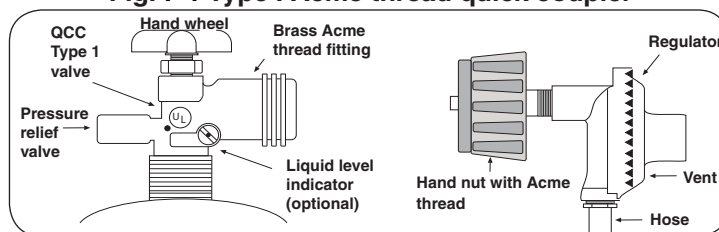
**Carefully** inspect the hose assembly each time before the gas is turned on. A cracked or frayed hose must be replaced immediately.

If the appliance is stored indoors, the cylinder must be disconnected and removed. Disconnected cylinders must be stored outdoors, out of the reach of children, with threaded valve plugs tightly installed, 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. 7-1 Type I Acme thread quick coupler



## SECURING THE PROPANE-GAS CYLINDER

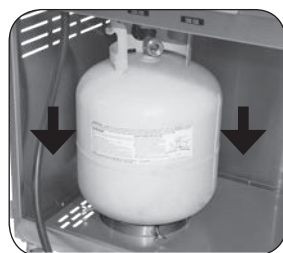


Fig. 7-2

- Set the propane-gas cylinder into the support sleeve.



Fig. 7-3

- Follow the instructions above to connect supply.

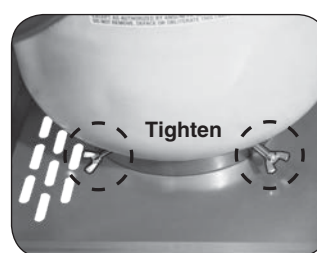


Fig. 7-4

- Tighten the thumb screws to secure the cylinder.

# INSTALLATION REQUIREMENTS

Installation must be performed by a qualified professional service technician.

This unit is designed for outdoor use only. **DO NOT** use this unit inside a building, garage, or enclosed area. **DO NOT** use this unit in or on a recreational vehicle or boat.

**The unit must have a minimum clearance of 18" from combustible materials/items in all directions.**

## OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS

A minimum 5 foot clearance is required between the cooking surface and the overhead construction.

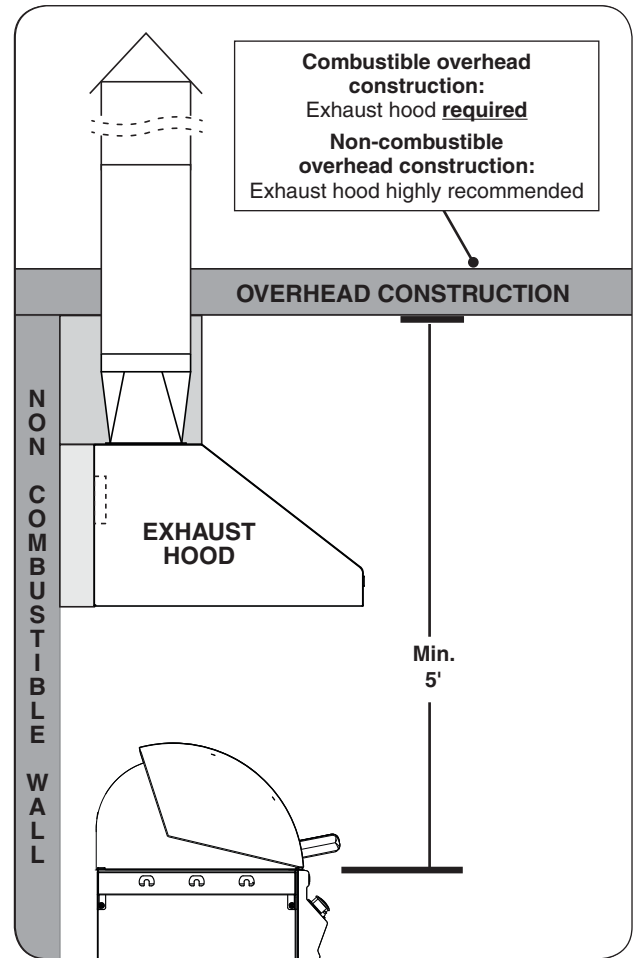
When installed under combustible overhead construction, the area above the cooking surface of the unit **must** be covered with an exhaust hood. The exhaust hood provides the protection for the combustible overhead construction. See exhaust hood information below and Fig. 8-1.

**Important:** **DO NOT** use this appliance under **unprotected** combustible overhead construction.

When installed under overhead non-combustible construction, an exhaust hood is highly recommended; see exhaust hood information below and Fig. 8-1.

### Exhaust Hood

When using an exhaust hood, the area above the cooking surface of the grill must be covered with a hood larger than the cooking area of the grill, and with a minimum of 1200 CFM (cubic feet per minute) for proper outdoor application.



**Fig. 8-1** Overhead requirements



## SIDE AND REAR WALL CLEARANCES

For the minimum clearances between the unit and any side or rear walls, your setup must fall within one (or more) of the following:

### A. Clearance between unit and strictly non-combustible wall

(i.e. brick wall, see Fig. 9-1)

- The unit must have a minimum of 4" right, left, and rear clearance from any non-combustible wall.  
(To allow for proper ventilation and prevent dangerous overheating.)

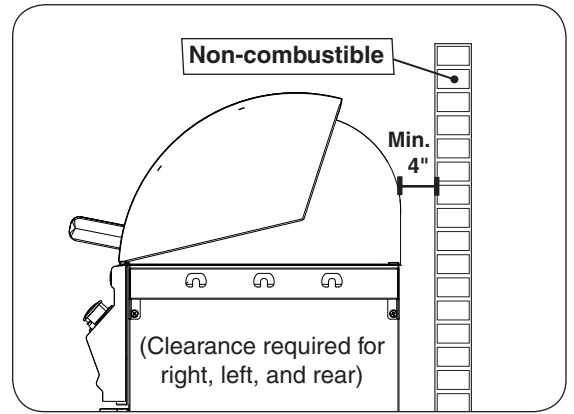
### B. Clearance between unit and a protected combustible wall

(i.e. a non-combustible wall in front of a combustible wall to serve as a barrier. This can be accomplished by brick, or a metal stud finished with non-combustible substrate, see Fig. 9-2)

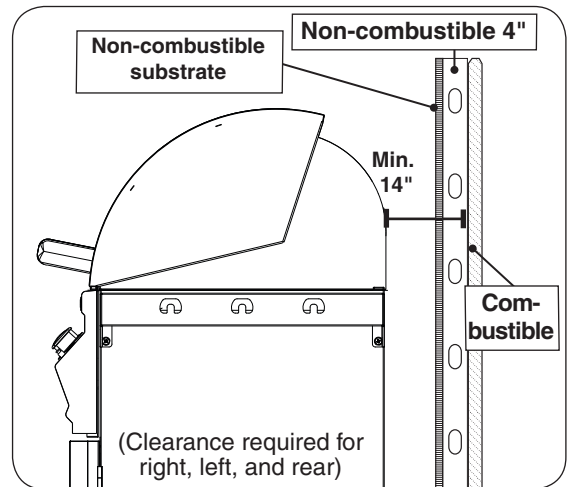
- The unit must have a minimum of 14" right, left, and rear clearance from the protected combustible wall.  
(The 4" non-combustible material plus an additional 10" clearance between the unit and protected wall.)

### C. Clearance between unit and combustible wall

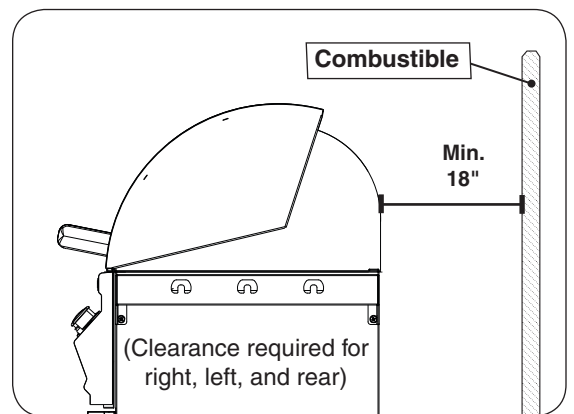
- The unit must have a minimum of 18" right, left, and rear clearance from any combustible wall (see Fig. 9-3).



**Fig. 9-1** Clearance 'A' Diagram



**Fig. 9-2** Clearance 'B' Diagram



**Fig. 9-3** Clearance 'C' Diagram

## INSTALLATION REQUIREMENTS (Cont.)

The control panel **MUST** remain removable for servicing (see SERVICING AND CLEANING, Control Panel Removal section).

### ENSURE PROPER COMBUSTION AIR AND COOLING AIRFLOW

Proper airflow (front-to-back, Fig. 10-1) **MUST** be maintained for the unit to perform as it was designed. If airflow is blocked, overheating and poor combustion will result. Do not block the 1" front air inlet along the bottom of the control panel.

**CAUTION:** Wind blowing into or across the rear oven lid vent (Fig. 10-2) can cause poor performance and/or dangerous overheating. Orient the grill so that the prevailing wind blows toward the front of the grill (Fig. 10-3). **A wind deflector is available for purchase to assist in proper airflow during windy conditions**. See Table 1 for model numbers. Follow the instructions included with the wind deflector for installation.

### GAS-SUPPLY PLUMBING REQUIREMENTS

For natural gas or a household propane system, rigid  $\frac{1}{2}$ " or  $\frac{3}{4}$ " black steel pipe or local code-approved pipe is required to conduct the gas supply to the unit. Contact your local gas supplier. Connect this pipe to the C.S.A.-approved quick connect hose (attached). Apply only joint compounds that are resistant to all gasses to all male pipe fittings except flare fittings. Make sure to tighten every joint securely.

**Note:** If  $\frac{1}{2}$ " pipe is used with **natural gas**, it should be no longer than 20'.

**Important:** **A shut-off valve (not included) in the gas line is required.** It provides for safety when the unit is not in use and for convenient maintenance and repair. It must be installed within 6 feet of the unit. Use a pipe joint compound resistant to all gasses on all male fittings except flare fittings.

### GAS SUPPLY AND MANIFOLD PRESSURES:

For **natural gas** - normal 7" water column (w.c.), minimum 5", maximum 10  $\frac{1}{2}$ ". For **propane gas** - normal 11" w.c., minimum 10", maximum 13".

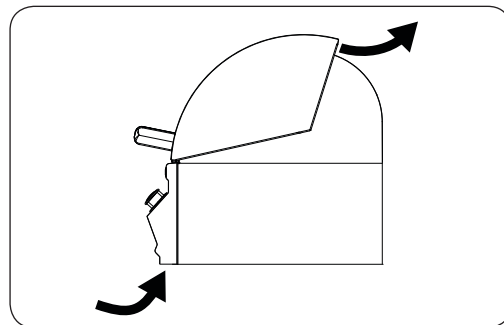


Fig. 10-1 Airflow diagram

### INCORRECT



**YOU MUST PROTECT REAR OVEN VENT FROM PREVAILING WIND**

Fig. 10-2 Airflow direction - INCORRECT

### CORRECT



**PLACE GRILL SO PREVAILING WIND BLOWS TOWARD FRONT OF GRILL**

Fig. 10-3 Airflow direction - CORRECT

## MODEL SPECIFICATIONS

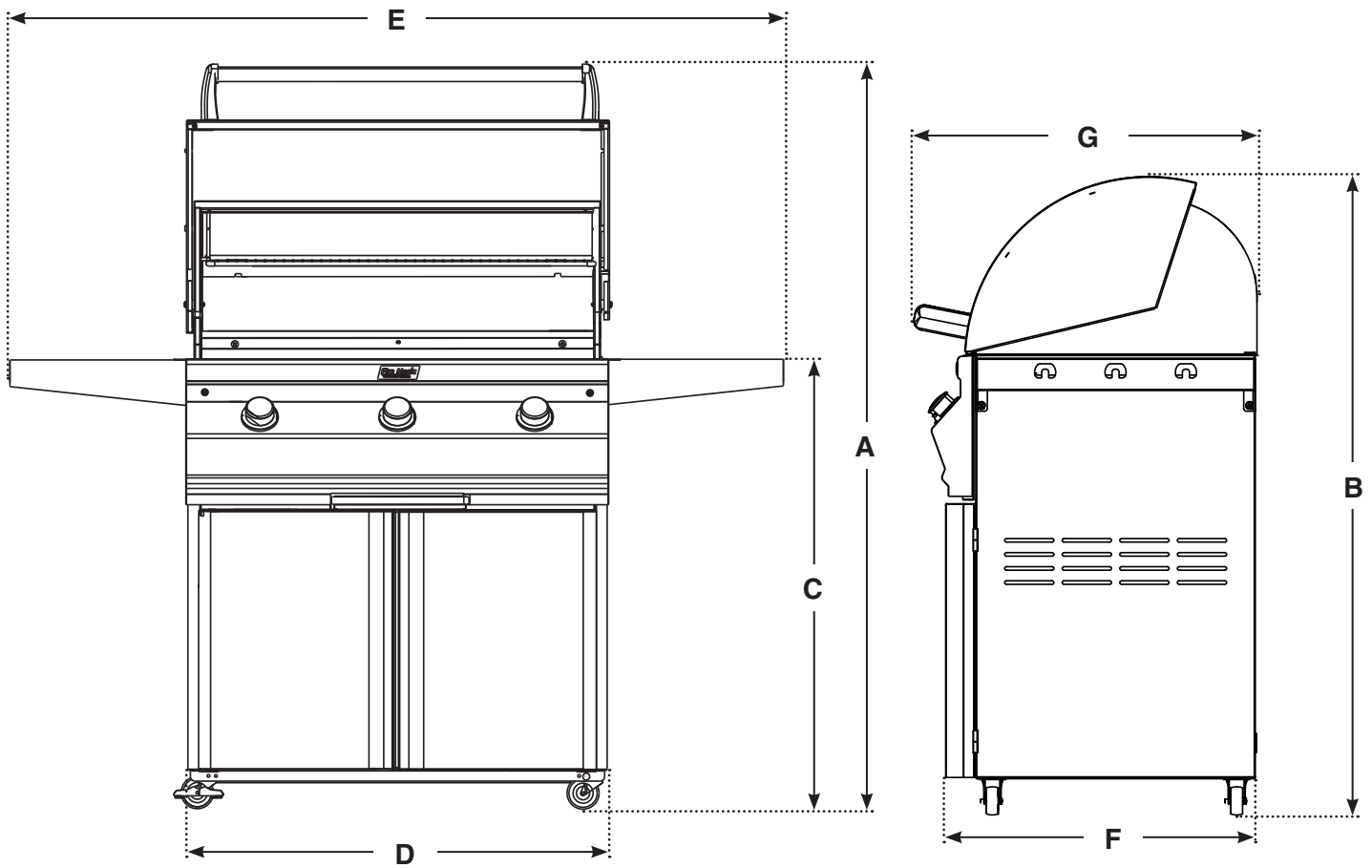
	C430s	C540s
Main burner quantity	2	3
N/P orifice drill size	#43 / #54	#45 / #55
Wind deflector model # (not included)	23728-18	23732-18
Battery quantity	1	
Battery type	9-volt	

**Table 1** - Product Specifications

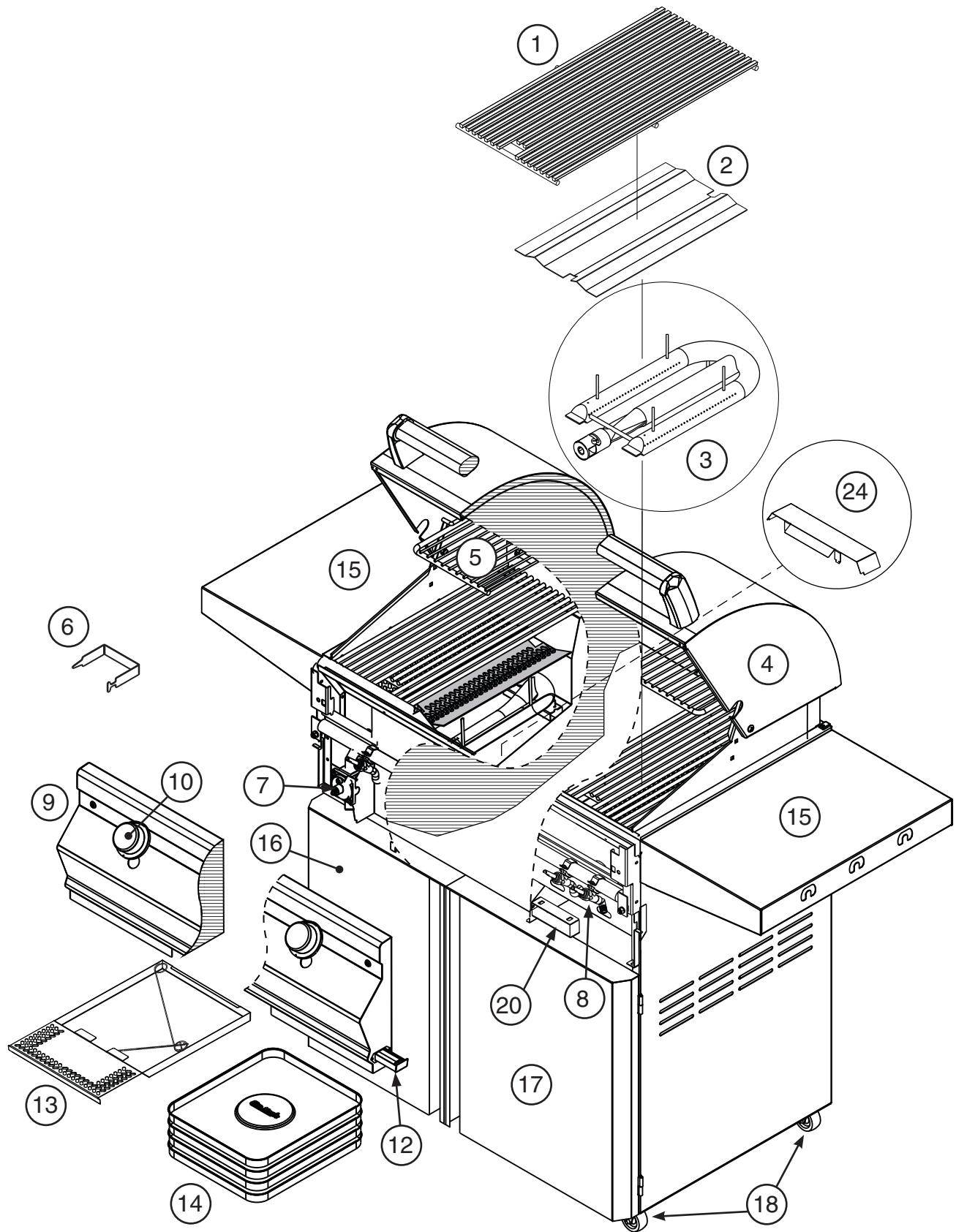
## MODEL SPECIFICATIONS (cont.)

Model	Height			Width		Depth	
	Floor to top (with oven)		Floor to top of shelf (C)	Left to right		Front to back	
	Open (A)	Closed (B)		Cart base (D)	Shelf to shelf (E)	Cart base (F)	Maximum outer (G)
<b>C430s</b>	57"	50"	36 1/2"	26 1/2"	51 1/2"	22"	24 3/4"
<b>C540s</b>	57"	50"	36 1/2"	33"	58"	22"	24 3/4"

**Table 2 - Grill Dimensions**



# REPLACEMENT PARTS LIST



To order replacement parts, contact your local Fire Magic® dealer.

## REPLACEMENT PARTS LIST (cont.)

Item	Description	C430s		C540s	
		Part No.	Qty.	Part No.	Qty.
1.	Stainless cooking grid (set of 2 or 3)	3542-DS-2	1	23543-DS-3	1
2.	Flavor grid (set of 2 or 3)	3063-S-2	1	3064-S-3	1
3.	Main burner	3042-60	2	3042-60	3
4.	Oven lid	23729-57	1	23733-57	1
5.	Warming rack*	3672S-M	1	3673S-M	1
6.	Grid lifter	3519	1	3519	1
7.	Convertible regulator	PR-4	1	PR-4	1
8.	Valve manifold	24130-28	1	24170-28	1
9.	Control panel assembly	24330-36	1	24170-36	1
10.	Control knob	3015	2	3015	3
11.	Oven hood thermometer †	23305	1	23305	1
12.	Igniter battery holder assy (9v)	24180-38	1	24180-38	1
13.	Drip tray	3085	1	3085	1
14.	Drip tray liner (set of 4)	3557	1	3557	1
15.	Rigid shelf	24-C-01	2	24-C-01	2
16.	Door (left)	24330-29L	1	24370-29L	1
17.	Door (right)	24330-29R	1	24370-29R	1
18.	Caster kit (set of 4)	24-C-35	1	24-C-35	1
19.	Electrode & collector box assy †	3199-45	2	3199-45	3
20.	Igniter module	3199-51	1	3199-44	1
21.	Natural gas orifice(s) †	3001-43-2	1	3001-45-3	1
22.	Propane gas orifice(s) †	3001-54-2	1	3001-55-3	1
23.	Propane regulator / hose assy †	5110-07	1	5110-07	1
	or Natural Gas QD hose †	5110-03	1	5110-03	1
24.	Air baffle	24194-40	1	24194-40	1

\* If equipped

† Not shown

---

## GRILL NOTES PAGE

---

Please use this page to record any information about your grill that you may want to have at hand.

## INSTALLATION

### LOCATION PREPARATION

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

### WHEELS AND CASTERS

To lock a caster press down on the left lever until it stops and the caster will not turn. To unlock, press down on the right lever.

### CONNECT THE GAS SUPPLY

For connecting a propane unit to a portable propane tank, read the safety warnings and follow the instructions in the section SAFE USE AND MAINTENANCE OF PROPANE GAS CYLINDERS.

For household propane or natural gas units:

- 1. Turn OFF the gas supply at the source.** The quick disconnect hose is pre-installed on the valve manifold at the manufacturer. Run the hose through the hole in the bottom rear of the stand-alone unit, to the gas supply.
- 2. A shut-off valve is required within 6 feet of the unit.**  
Connect the quick connect hose to the shut-off valve OR gas supply using a pipe joint compound resistant to all gasses (see Fig. 16-2). Tighten securely.
- 3. 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.**

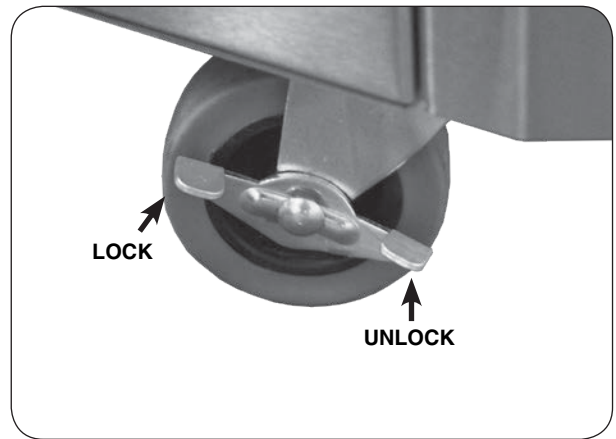


Fig. 16-1 Lock/unlock wheels

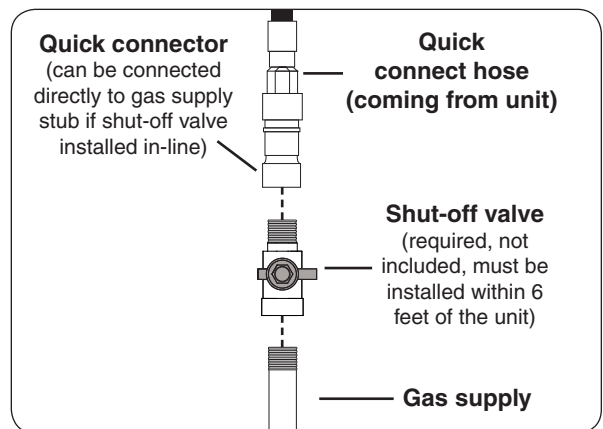


Fig. 16-2 Connecting to a gas line



## INSTALL THE FLAVOR GRIDS

Place the flavor grids directly onto the studs on the burners. See Fig. 17-1. **The slightly larger grids are designed to be placed over the outside burners, and the slightly smaller grid(s) over the inner burner(s).** The flavor grids allow heat from the burners to be evenly distributed throughout the cooking area.

## INSTALL THE COOKING GRIDS

**Note:** Wear heat-resistant gloves if necessary.

**Note:** Do not leave the lifter on any hot surfaces.

1. With the prongs facing downward, insert the notched-end of the lifter between two grid rods, then rotate, as shown in Fig. 17-2, A & B.

**Note:** To balance, insert the notched-end of the lifter in the middle front half of the cooking grid.

2. Insert the rear pointed-end of the lifter between the same two rods (Fig. 17-2, B) and carefully lift the cooking grid and place onto the front and rear grid rests of the grill (see Fig. 17-3). Repeat for all other cooking grids.

## INSTALL THE DRIP TRAY

Your grill includes a pack of four drip tray liners. Place a liner into the drip tray as shown in Fig. 17-4, and fully insert the drip tray into the bottom front of the control panel.

**Note:** The liner must fit under the rear lip and two front tabs found on the drip tray.

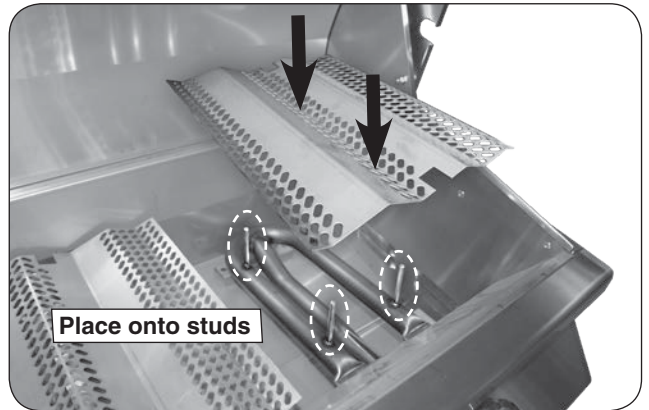


Fig. 17-1 Install flavor grids

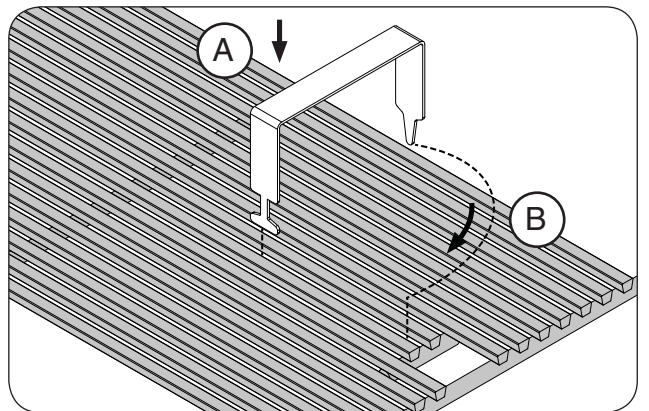


Fig. 17-2 Install cooking grids



Fig. 17-3 Install cooking grids

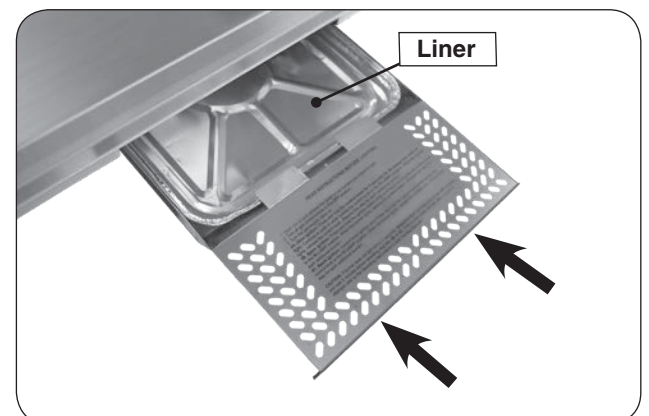
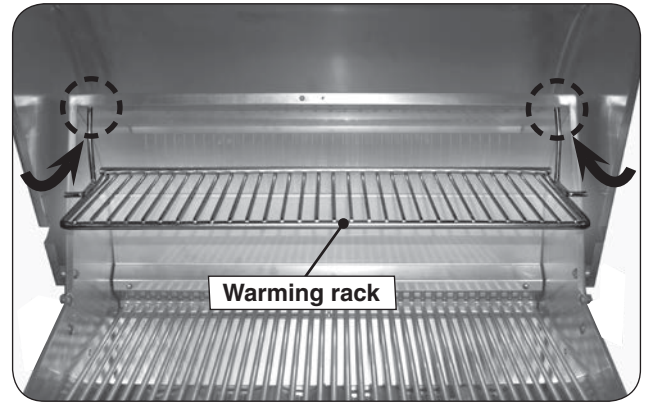


Fig. 17-4 Install drip tray

**INSTALL THE WARMING RACK**

The warming rack (Fig. 18-1) is packed separately. To install the warming rack, carefully insert the rack hangers into the two holes in the back of the inner oven hood, then lower the front of the rack to a level position.



**Fig. 18-3** Install warming rack

## RIGID SHELF INSTALLATION

This barbecue comes with two rigid shelves that must be attached. These can be attached using the four support screws provided and a Phillips-head screwdriver.

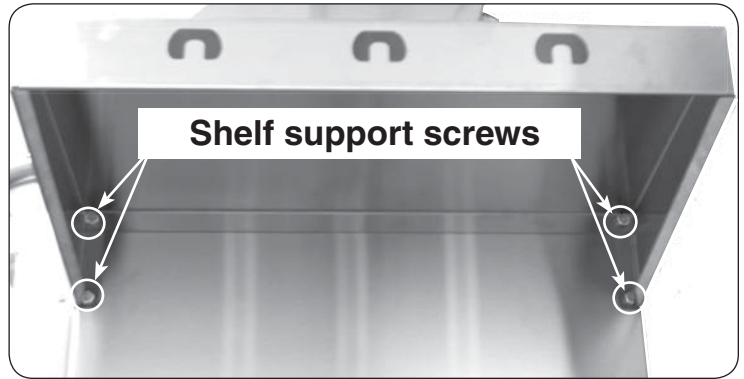
**Important:** Take caution to **not cross-thread** when tightening the screws.

1. Insert the top two screws into the side of the barbecue and screw them in about half way.
2. Line up the larger, bottom portion of the two keyhole openings with the two top screws and fit the two keyhole openings over the two screws. With the shelf pushed all the way against the side of the barbecue, lower the shelf so that the screws lock into the narrower, upper portions of the keyholes.

**Note:** The shelf will now stay in place on it's own.

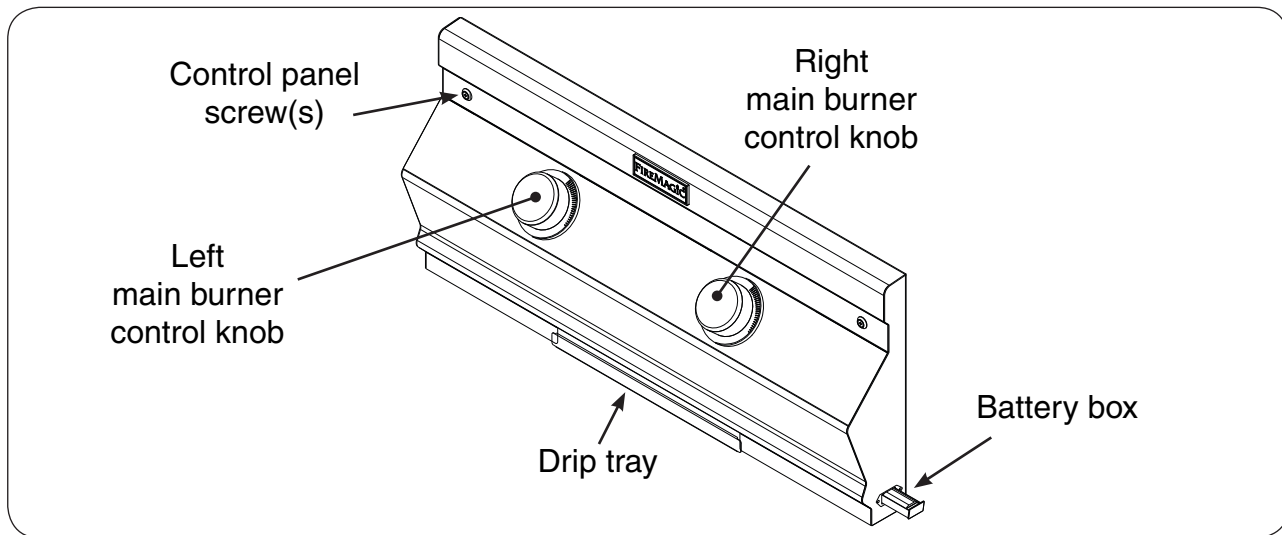
3. Insert the bottom two screws into their holes and tighten them all the way.
4. Finally, tighten the upper two screws, completely.

To detach, reverse the process above.

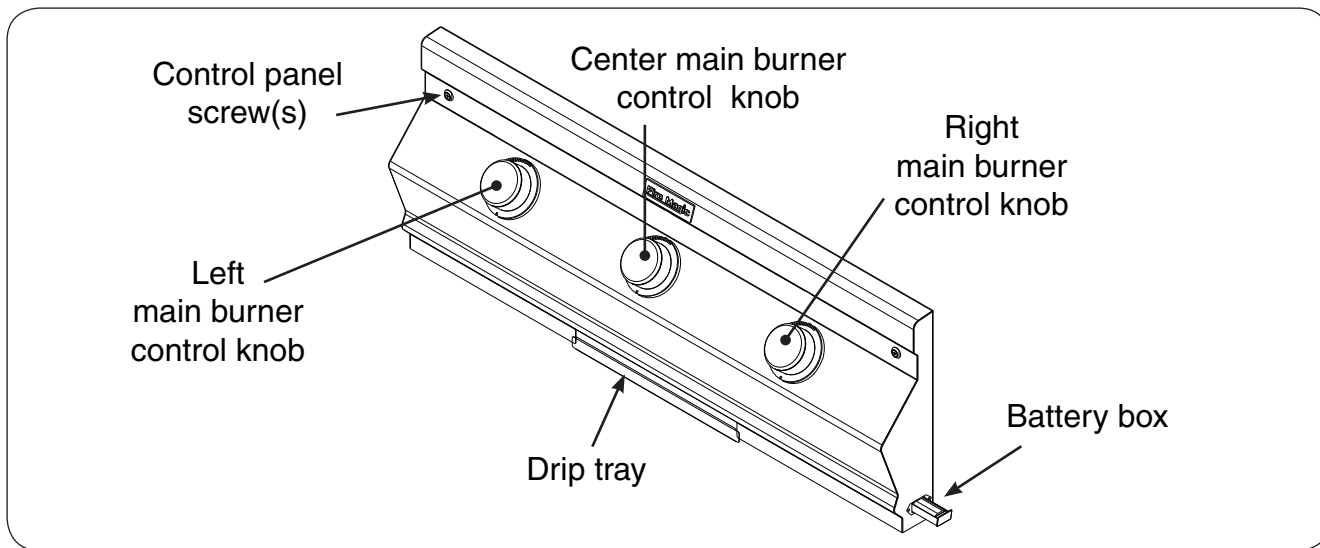


View from under right shelf

# IDENTIFICATION OF GRILL CONTROLS



**Fig. 20-1** C430 controls



**Fig. 20-2** C540 controls

## USING THE GRILL

### BEFORE INITIAL USE

Ensure that:

- the grill has been properly installed and leak tested by a qualified professional service technician and as instructed in this manual.
- you have read and understand all of the information in this manual.

### BEFORE EACH USE

Ensure that:

- you smell around the appliance area for gas. If you smell gas (and all control knobs are in the **OFF** position), immediately shut off the gas supply and contact a qualified professional service technician or the gas supplier for inspection.
- the vent openings and surrounding area of the unit are clear and free at all times.
- the cooking area and drip tray are clean, and the drip tray is properly installed.
- you inspect all piping and hoses for damage, cuts, wear, and tear. Replace any damaged components prior to use.

### OPERATION

- **The grill becomes HOT during use. NEVER touch any part of the cooking area or surrounding hot surfaces with bare hands. Use long-handled insulated BBQ tools and wear an insulated glove / oven mitt.**
- **Always keep your face and body as far from the grill as possible during use. Avoid wearing loose-fitting clothing as they could ignite.**
- **NEVER use charcoal or any other solid-fuel in the grill.**
- **NEVER leave the grill unattended during use.**
- **NEVER cover more than 75% of the cooking or grill surface with griddles or pans to prevent overheating.**

After reading and understanding all bullets above, follow these steps to light and use your grill:

1. Light the grill per the LIGHTING INSTRUCTIONS section.
2. Turn the control knobs to the HI-LIGHT position, close the hood, and allow the grill to preheat for 15 minutes or until desired cooking temperature is reached.
3. Place the food on the grill and cook as desired. Monitor the flames and temperature, and adjust the heat setting if necessary.
4. See the sections below and the following pages for all other information regarding use.

### WIND CONSIDERATIONS

Proper airflow (front-to-back, Fig. 21-1) **MUST** be maintained for the grill to perform as it was designed. See the INSTALLATION REQUIREMENTS section for details.

When using the grill in windy conditions, the wind can disrupt the airflow and cause overheating. To prevent overheating during windy conditions, do not leave the hood closed with the burners on high for more than 15 minutes.

### AFTER EACH USE

1. Brush the cooking grids to remove all residue.
2. Operate on high with hood closed for 10-15 minutes to burn off all grease.
3. Cover the grill once it has completely cooled.

**Note:** For additional cleaning, refer to the SERVICING AND CLEANING section.

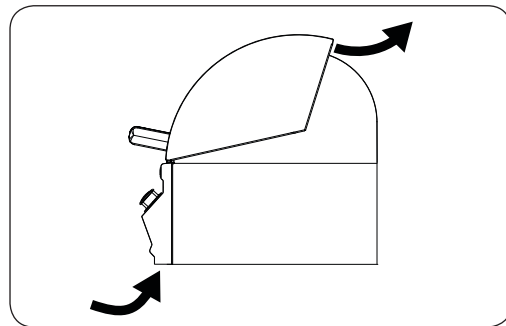


Fig. 21-1 Airflow diagram

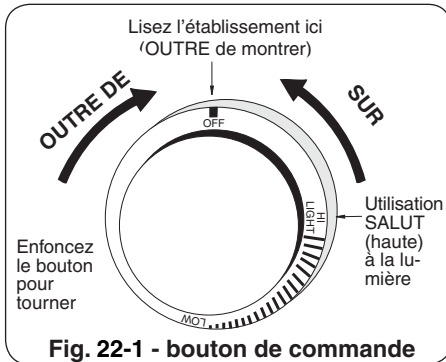
# ALLUMAGE DES INSTRUCTIONS (D'ALLUMAGE)

Lisez toutes les instructions avant l'allumage, et suivez ces instructions chaque fois vous lumière le unité.

## ÉCLAIRAGE ÉLECTRONIQUE

**Note:** L'éclairage électronique exige une batterie installée de 9 volts avec une bonne charge.

1. Ouvrez les couvercles ou enlevez les couvertures des brûleurs pour être Lit.
2. Tournez tous les boutons de commande de gaz à leurs positions de repos.
3. Allumez le gaz à sa source.



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

4. Diminuez le bouton de commande désiré pendant 5 secondes, puis, et tout en pressant le tour il dans le sens contraire des aiguilles d'une montre dans la position LÉGÈRE de HI. Une fois que le brûleur s'allume, libérez le bouton.

**ATTENTION :** Si un brûleur ne s'allume pas dans cinq (5) secondes d'allumer le bouton de commande, enfoncez le bouton et tournez-le à la position de repos. ATTENDEZ CINQ (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 Lit.

## ÉCLAIRAGE MANUEL

**ATTENTION:** Attendez toujours cinq (5) minutes le gaz pour se dégager après que n'importe quelle tentative non réussie d'éclairage.

1. Suivez les étapes 1 à 3 (à gauche).
2. Insérez un allumeur brûlant de butane de long-baril, une allumette brûlante de long-tige, ou une allumette brûlante tenue par un support de prolongation de fil par la grille à cuire s'ouvrant au dessus du brûleur (fig. 22-2).
3. Tout en maintenant le match ou flamme du briquet au dessus du brûleur, appuyez sur le bouton de commande et en appuyant son tour dans le sens antihoraire à la position HI LIGHT. Enlevez l'allumeur ou assortissez quand le brûleur s'allume, et libérez le bouton de commande.
4. Si le brûleur ne se allume pas dans les cinq (5) secondes de tourner le bouton de commande, enfoncez immédiatement le bouton et tournez la valve à AU LOIN. ATTENDEZ CINQ (5) MINUTES avant de répéter les étapes 2 à 4 des instructions manuelles d'éclairage.

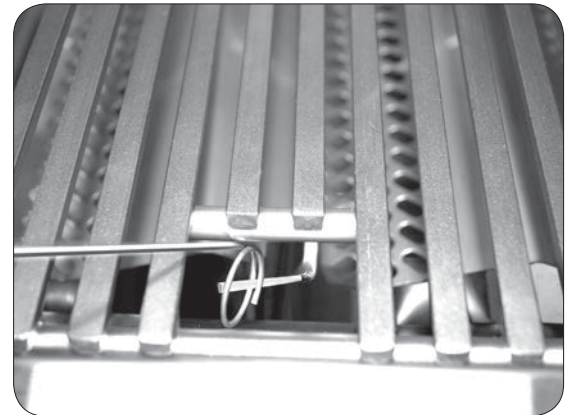


Fig. 22-2 - Éclairage manuel

## ARRÊT DU UNITÉ

Pour couper le unité, diminuez chaque bouton de commande de valve et tout en pressant tour il dans le sens des aiguilles d'une montre à la position de repos.

Fermez toujours la valve de la fourniture de gaz après chaque utilisation du unité.

### EN EMPLOYANT UN RÉSERVOIR DE PROPANE PORTATIF

Des réservoirs de propane sont équipés d'un dispositif d'arrêt de sûreté qui peut ne pas causer le bas ou aucunes pression de gaz/flamme aux brûleurs si le fonctionnement et l'allumage des instructions ne sont pas suivis exactement (voir la note importante dans la section de dépannage pour plus de détails.)

# LIGHTING (IGNITION) INSTRUCTIONS

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

## ELECTRONIC LIGHTING

**Note:** Electronic lighting requires an installed 9-volt battery with a good charge.

1. Open lid(s) or remove cover(s) from burner(s) to be lit.
2. Turn all gas control knob(s) to their **OFF** position(s).
3. Turn on the gas at its source.

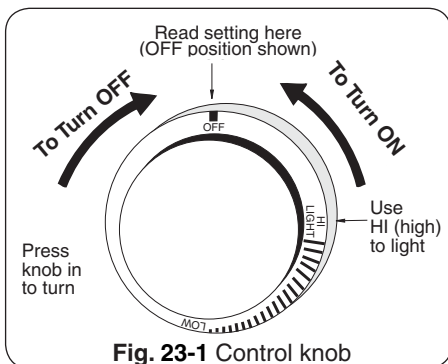


Fig. 23-1 Control knob

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

4. Depress the desired control knob **for 5 seconds**, then, while pressing turn it counterclockwise to the **HI LIGHT** position. Once the burner lights, release the knob.

**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.

## 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, a burning long-stem match, or a burning match held by a wire extension holder through the cooking grid opening to the top of the burner (Fig. 23-2).
3. While holding the match or lighter flame at the top of the burner, depress the control knob and while pressing turn it counterclockwise to the **HI LIGHT** position. Remove the lighter or match when the burner lights, and release the control knob.
4. If the burner does not light within five (5) seconds of turning the control knob, **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.

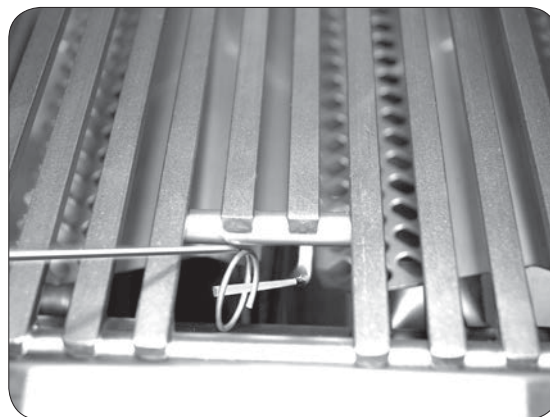


Fig. 23-2 - Manual lighting

## SHUTTING OFF THE UNIT

To shut off the unit, depress each valve control knob and while pressing turn it clockwise to the **OFF** position.

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

## SERVICING AND CLEANING

APPLIANCE MUST BE COMPLETELY COOL WHEN CLEANING. DO NOT SPRAY ANY CLEANER OR LIQUIDS ON THE APPLIANCE WHEN HOT.

**The appliance MUST be cleaned as instructed below to prevent grease build-up and other food deposits.**

**A clean and well maintained appliance prevents the risk of grease/fat fires. See INSTALLATION, OPERATION, AND SAFETY INFORMATION section.**

**AFTER EACH USE:** preheat the unit, brush the cooking grids to remove all residue, and operate on high (hood closed) for 10-15 minutes to burn off all grease.

**EVERY 10 COOKOUTS:** clean the unit as instructed below.

### COOKING GRIDS

Before and after each use, clean the cooking grids with a grill brush. Before initial use and periodically, it is suggested that the cooking grids be washed with a mild soap and warm water solution.

### INTERIOR

THE **BURNER PORTS** MUST BE KEPT CLEAN TO ENSURE PROPER IGNITION AND OPERATION.

Remove the burner (see the CHECK BURNER ORIFICES section) and clean the ports as required. Also inspect and clean the burner inlet for insects and nests. A clogged burner can lead to a fire in the bottom of the appliance.

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

Be careful not to get oven cleaner on the outside surface of the appliance as it can permanently damage the finish.

### EXTERIOR

Stainless steel surfaces when exposed to temperatures produced by the grilling process will change color. The stainless steel will change color from silver to brown and blue. This can be removed by using stainless steel cleaner.

Clean your appliance by first using stainless steel grill cleaner to remove grease and dirt. Always wipe with the grain (See Fig. 24-1). Next, apply stainless steel polish and wipe down using polish wipes to restore the stainless steel color.

If your appliance is installed in a seaside (salt air) or poolside (chlorine) location, it will be more susceptible to corrosion and must be maintained/cleaned more frequently. Do not store chemicals (such as chlorine or fertilizer) near your stainless steel appliance.

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 prompt and periodic maintenance. If not attended to promptly, permanent pitting may occur.

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

### DRIP TRAY

**The drip collector allows you to brush or scrape residue from the grill's inner liner into the drip tray. Regular cleaning of the grill's interior with oven cleaner will help prevent grease/fat fires.**

After each use, wait for the grill to cool and carefully pull out the drip tray to check it. When a tray 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 (see INSTALLATION - INSTALL THE DRIP TRAY section if needed).

If a tray liner is not installed, carefully remove the drip tray and empty the contents. Replace the tray.

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 (if applicable).

### PROTECTING YOUR APPLIANCE FROM THE WEATHER

An optional cover will protect your appliance when not in use. Allow to cool before covering. Please specify the model number and serial number of your appliance when ordering a cover.



Fig. 24-1 Wipe with grain



### CONVERTING THE GAS TYPE

**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.

#### Apply Conversion Label

This grill comes from the factory configured for one type of gas as marked on the label inside the cabinet.

**When the grill is converted, the label for the new gas (included at original shipping) MUST be filled out and applied next to the existing label mentioned above.**

#### Convert Regulator

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. 25-1, A). Holding the cap vertical (see Fig. 25-1, B), the letters at the bottom of the plastic stalk indicate the gas type for which the regulator is currently configured.

If the text on the bottom of the regulator stalk does not match the gas type 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.

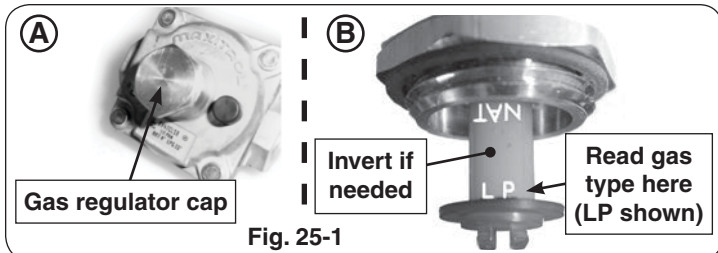


Fig. 25-1

#### Convert Gas Orifices

When converting the grill to a different gas type, each burner's orifice must be replaced with the corresponding orifice for the new gas.

See Table 1 to determine the proper orifice sizes for each burner.

**See the following section for details on orifice conversion.**

**Important:** 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.**

### Connect To New Gas Supply

Plumb the unit as appropriate for the new gas supply. (Additional components may be needed for your specific setup.) **Be sure to leak test at all connections.**

Natural-gas to propane-gas conversions using a tank internal to a portable grill require installation of a propane tank holder (not included). This tank holder must be purchased separately from the manufacturer.

### Convert/Check Main Burner Orifices

1. Remove the cooking grid and flavor grid from above the burner you are working and set them aside.
2. Locate the burner. Slightly pinch and remove the burner clip (located over the rear center of the burner) from the burner support and set aside.
3. Carefully lift the burner from the burner support and out from the hole in the forward fire wall (see Fig. 25-2).
4. Use a  $\frac{3}{8}$ " hex nut driver to remove the exposed orifice (Fig. 25-3). Check orifice. If needed, replace it with the correct orifice for the new gas.
5. 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.

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

6. Re-install the burner clip around the burner and into the holes in the burner support.
7. Replace the flavor grid and then the cooking grid so that the cut-out section is in front.
8. Repeat these steps for each main burner.

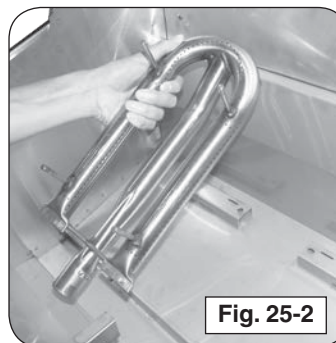


Fig. 25-2

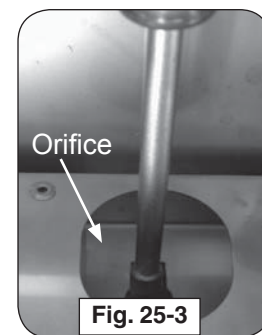


Fig. 25-3

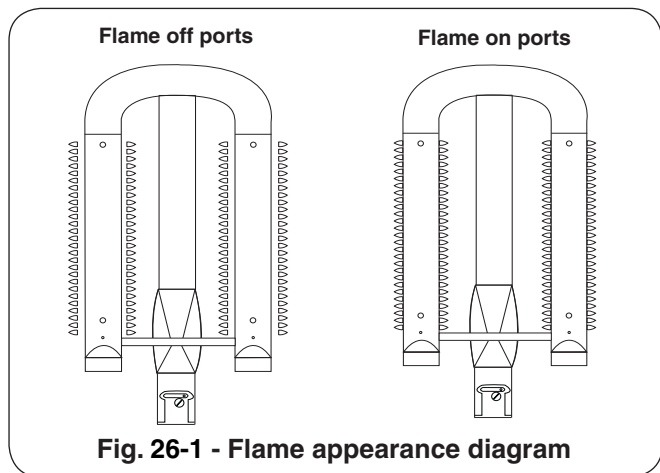
**BURNER AIR SHUTTER ADJUSTMENT**

**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(s)**

Flames from a properly adjusted main burner with no wind or breeze present will appear fairly steady, consistent, and mostly blue. If the tip of a flame were to turn orange, it should only do so briefly and then become blue again. The flames will appear to burn while touching the burner ports (see Figure 26-1).

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.



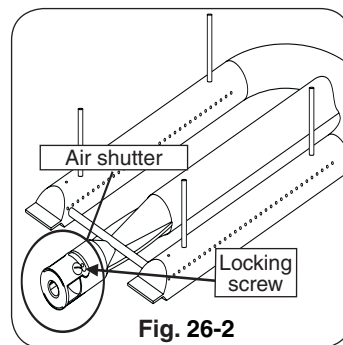
**Fig. 26-1 - Flame appearance diagram**

**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 1-2).



**Fig. 26-2**

2. Adjust the air shutter opening by loosening the adjustment screw with a screwdriver, then turn the air shutter to open or close it (see Fig. 26-2).

<b>Shutter Setting</b>	<b>Flame Condition</b>
<b>Open too far</b>	<b>Flames shorten and lift off the burner</b>
<b>Ideal setting</b>	<b>Blue flames just touching burner</b>
<b>Closed too far</b>	<b>“Lazy” flames with orange in them</b>

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.
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 mostly blue (see Fig. 26-1).
6. Replace the burner clip, flavor grid, and cooking grid.

Repeat these steps for each main burner.

### CONTROL PANEL REMOVAL

1. Turn the control knob(s) to the OFF position and turn off the gas supply to the unit.
2. Pull the control knob(s) from the stems and set aside.
3. Remove the drip tray.
4. Using a Phillips screwdriver, unscrew and remove the control panel fastener screws and washers (located on the left and right front face of the control panel). Retain the screws for later re-installation.
5. Carefully open the control panel by lifting and pulling the control panel from the frame, allowing it to rest on the internal chain(s).

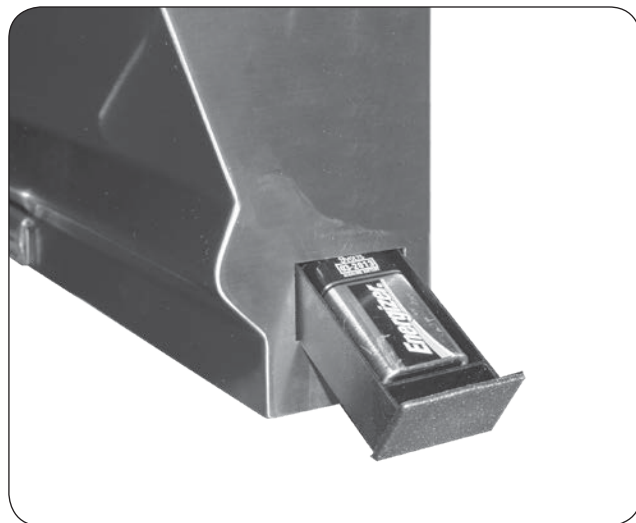
**Important:** During reinstallation; prior to opening the gas shut-off valve, be sure the control knob(s) are in the OFF position.

**IGNITER BATTERY REPLACEMENT**

1. Carefully pull out the existing 9-volt battery holder located on the right side of the control panel.

**Note:** It may be necessary to lift the drawer up slightly before it will pull out.

2. Disconnect the battery from the connector and replace it connecting the new battery and close the drawer (see Fig. 28-1).



**Fig. 28-1** Replace igniter battery

## TROUBLESHOOTING

If you have trouble with the unit, 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 unit, please contact your local dealer.

PROBLEM	POSSIBLE CAUSE	CORRECTION
<b>Ignition system failure</b>	<ol style="list-style-type: none"> <li>1. Low battery.</li> <li>2. Improper air shutter adjustment</li> <li>3. Ignition wire disconnected</li> <li>4. Low gas pressure</li> <li>5. Igniter malfunction</li> <li>6. Igniter switch malfunction on valve</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace igniter battery.</li> <li>2. Adjust air shutters.</li> <li>3. Plug wires back into ignition switches.</li> <li>4. Have the gas co. check supply pressure.</li> <li>5. Contact dealer for replacement.</li> <li>6. Contact dealer for replacement.</li> </ol>
<b>Insufficient heat / low flame</b>	<ol style="list-style-type: none"> <li>1. Burner ports partially blocked by debris</li> <li>2. Improper air-shutter adjustment</li> <li>3. Using propane orifice for natural gas</li> <li>4. Low gas pressure/flame (propane)</li> <li>5. Low gas pressure/flame (natural)</li> <li>6. L.P. regulator hose cracked due to age</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove burners and clean out ports.</li> <li>2. Adjust air shutters.</li> <li>3. Check/change orifices.</li> <li>4. Shut off all valves, including propane tank, and follow lighting instructions exactly. (See important note* below.)</li> <li>5. Have the gas co. check pressure at unit.</li> <li>6. Replace L.P. regulator hose.</li> </ol>
<b>Uneven heating</b>	<ol style="list-style-type: none"> <li>1. Burner ports partially blocked by debris</li> <li>2. Small spiders or insects in burner</li> <li>3. Improper air shutter adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove burners and clean out ports.</li> <li>2. Inspect burners and orifices for spider webs or other debris that may block flow.</li> <li>3. Adjust air shutter.</li> </ol>
<b>Burner goes out on LOW</b>	<ol style="list-style-type: none"> <li>1. Valve "Low" setting needs adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Light burner on HIGH, immediately turn to LOW setting. Remove knob from valve and using a small flat screwdriver, slowly turn the adjustment screw in the stem, a little at a time (30° to 45°), in either direction, until the flame is approximately 1/4" in height from burner ports.</li> </ol>

**\* 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:** 1) Shut off all grill valves. 2) Shut off tank valve. 3) Open and close a main burner valve. 4) Open tank valve. 5) Follow the LIGHTING INSTRUCTIONS. 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.

# WARRANTY

## PETERSON FIRE MAGIC GRILLS AND ACCESSORIES LIMITED WARRANTY

Robert H. Peterson Co. ("RHP") warrants your Fire Magic® grill to be free from defects in material and workmanship.

Fire Magic® cast stainless-steel burners, stainless-steel cooking grids, and stainless-steel housings are warranted for as long as you own your Fire Magic® grill -- **LIFETIME**. (Except as noted below.)

Fire Magic Choice stainless steel tubular burners are warranted for **TWENTY (20) YEARS**.

Fire Magic® brass valves, inner liners, manifold assemblies, porcelain housings (including ovens and barbecue faces), and backburner assemblies (except ignition parts) are warranted for **FIFTEEN (15) YEARS**.

Fire Magic® Electric Grills, including stainless steel grid, and housings are warranted for **TEN (10) YEARS**.

Fire Magic® Infra-red burners, flavor grids, Charcoal stainless steel grills, and Smokers are warranted for **FIVE (5) YEARS**; except for the charcoal pan, charcoal grid, wood pellet screen, thermometer, and ash tray; which are warranted for **ONE (1) YEAR**.

Fire Magic® sideburners and all other Fire Magic® grill components (except ignition and electronic parts) are warranted for **THREE (3) YEARS**.

Fire Magic® ignition systems (excluding batteries), electronic components (including lights and thermometers), and grill accessories are warranted for **ONE (1) YEAR**.

### A COPY OF YOUR SALES SLIP FOR PROOF OF PURCHASE IS REQUIRED

This warranty applies to the original purchaser for products which are installed in the United States or Canada and which are operated and maintained as intended for single family residential usage. This warranty is valid only with proof of purchase, shall commence on the date of purchase, and shall terminate (both as to original and any replacement products) on the anniversary date of the original purchase of the product stated on the above schedules.

This warranty covers defects in material and workmanship. This warranty **does not** cover parts which become defective as a result of negligence, misuse, use not in compliance with the Owner's Manual/Installation Instructions, accidental damage, improper handling, improper storage, improper installation, **lack of required routine maintenance** (as specified in the Owner's Manual/Installation Instructions), electrical damage, local gas impurities or failure to protect against combustibles. Product must be installed (and gas must be connected) as specified in the Owner's Manual/Installation Instructions by a **qualified professional installer**. Modifications to products which are not specifically authorized will void this warranty. Accessories, parts, valves, remotes, etc. when used must be Peterson products or this warranty is void. Warranted items will be repaired or replaced at Peterson's sole discretion. This warranty **does not** apply to rust, corrosion, oxidation, or discoloration unless the affected part becomes inoperable.

This warranty **does not** cover labor or labor related charges, except as provided by separate specific written programs from the Peterson Co. All repair work must be performed by a qualified professional service person and requires prior approval of Peterson.

Peterson may require the defective product or part to be returned to the factory to determine the cause of failure. Peterson will pay freight charges if the product or part is determined to be defective. This warranty does not cover breakage in shipment from our (Independent) distributor to its customer if the damage is determined to have occurred during that shipment.

This warranty specifically excludes liability for **indirect, incidental**, or consequential damages. Some states and provinces 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 vary from state to state or province.

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

When contacting your Peterson dealer or the R. H. Peterson Co., please provide the following information:

- Your name, address, telephone number, e-mail
- Sales receipt showing where purchased and date purchased
- Model number, serial number of product, date code
- Relevant information: installer, additions, repairs, when defect was first noted

**TO REGISTER YOUR PRODUCT ONLINE GO TO: [WWW.RHPETERSON.COM](http://WWW.RHPETERSON.COM),  
AND CLICK ON PRODUCT REGISTRATION. THANK YOU FOR YOUR PURCHASE.**

<b>Quality Check</b>			<b>Date:</b> _____			
<b>Burner Orifices</b>	<b>Nat.</b>	<b>L.P.</b>	<b>Leak Test:</b>	_____	<b>Model#:</b>	_____
<b>Main:</b>	_____	_____	<b>Burn Test:</b>	_____	<b>Serial#:</b>	_____
<b>Other:</b>	_____	_____	<b>Gas Type:</b>	<u>Nat. / L.P.</u>	<b>Air Shutter:</b>	_____
					<b>Inspector:</b>	_____