

This Owner's Manual is provided and hosted by [Appliance Factory Parts](#).



# Fire Magic CM540 Owner's Manual

[Shop genuine replacement parts for Fire Magic CM540](#)



[Find Your Fire Magic Grill Parts - Select From 146 Models](#)

----- Manual continues below -----

**FIREMAGIC®**

# CHOICE

MULTI-USER SERIES

## BUILT-IN OUTDOOR GAS GRILLS

CM430i, CM540i, and CM650i

### INSTALLATION AND OWNER'S MANUAL

**INSTALLER:** Leave these instructions with consumer.

**CONSUMER:** Retain for future reference.



CM540i 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.
4. If odor continues, keep away from the appliance and **immediately** call your gas supplier or the fire department.

#### **ONLY TO BE USED OUTDOORS**

**CODE AND SUPPLY REQUIREMENTS:** This 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).

**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.

**This appliance is designed as an attended appliance. **DO NOT** leave this appliance burning when unattended.**

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.

Cooking Grid U.S.  
Patent Nos.  
D857,453  
D862,984

**PFS**  
C US  
Certified to: ANSI Z21.58  
CSA 1.6

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

# - INSTALLATION INSTRUCTIONS ET MANUEL DU PROPRIÉTAIRE -

## GRIL EXTÉRIEUR DE GAZ DU BUILT-IN

**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.
4. Si l'odeur continue, gardez loin de l'appareil et appelez immédiatement votre département de fournisseur ou de feu de gaz.

#### **À UTILISER UNIQUEMENT À L'EXTÉRIEUR**

##### **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 D'OFFRE DE GAZ POUR LA PRESSION APPROPRIÉE D'OFFRE DE GAZ.

#### **⚠ 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.

- 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.

**Cet appareil est conçu comme un appareil surveillé. NE laissez PAS cet appareil brûler sans surveillance.**

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.

**Certifié à la norme: ANSI Z21.58 / CSA 1.6**

**Grille de cuisson Numéros de brevets américains:  
D857,453 D862,984**

**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

GRILL ENCLOSURE / VENTILATION REQUIREMENTS ..... 8

*ENCLOSURE* ..... 9

*WHEN A PROPANE (L.P.) CYLINDER IS USED IN THE ENCLOSURE* ..... 9

INSTALLATION REQUIREMENTS ..... 10

*OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS*..... 10

*REAR WALL CLEARANCES* ..... 11

*BACKSPLASH CLEARANCE (if applicable)* ..... 11

*SIDE WALL / CORNER WALL CLEARANCES (if applicable)* ..... 11

*CONTROL PANEL CLEARANCES* ..... 12

*COMBUSTION AIR AND COOLING AIRFLOW* ..... 12

*GAS-SUPPLY PLUMBING REQUIREMENTS*..... 12

MODEL SPECIFICATIONS..... 13

*COUNTERTOP OVERHANG* ..... 14

*ENCLOSURE VENTILATION* ..... 14

*SUBSTRATE*..... 15

CHOICE MULTI-USER GRILL REPLACEMENT PARTS LIST..... 16

**INSTALLATION**

INSTALLATION ..... 18

*ENCLOSURE PREPARATION*..... 18

*SLIDE THE UNIT INTO THE ENCLOSURE CUTOUT* 18

*CONNECT THE GAS SUPPLY* ..... 19

*LEAK TEST*..... 20

*INSTALL THE FLAVOR GRIDS*..... 20

*INSTALL THE COOKING GRIDS*..... 20

*SECURE THE COOKING GRIDS*..... 21

*LOCK THE CONTROL KNOBS*..... 22

*INSTALL THE DRIP TRAY* ..... 22

**USE, CARE, & SERVICE**

IDENTIFICATION OF GRILL CONTROLS ..... 23

USING THE GRILL ..... 24

LIGHTING (IGNITION) INSTRUCTIONS..... 25

*ELECTRONIC LIGHTING* ..... 25

*SETTING THE TIMER* ..... 25

*MANUAL LIGHTING*..... 25

*SHUTTING OFF THE UNIT*..... 25

SERVICING AND CLEANING ..... 27

*CLEANING YOUR GRILL*..... 27

*CONTROL PANEL REMOVAL* ..... 29

*COOKING GRID REMOVAL* ..... 30

*BURNER REMOVAL*..... 31

*WARMING RACK REMOVAL* ..... 31

*CONVERTING THE GAS TYPE* ..... 32

*AIR SHUTTER ADJUSTMENT / FLAME INSPECTION* 33

*VALVE "LOW" SETTING ADJUSTMENT* ..... 34

TROUBLESHOOTING..... 35

WARRANTY ..... 36

## 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. Maintain a minimum horizontal clearance of 18" (in all directions) from combustible materials/items.
2. Do not block the 1" front air inlet along the bottom of the control panel. See the COMBUSTION AIR AND COOLING AIRFLOW section under INSTALLATION REQUIREMENTS for details.
3. **This unit must be installed so that the required vent openings and surrounding area of the unit enclosure remain clear and free at all times. See the GRILL ENCLOSURE/VENTILATION REQUIREMENTS section for details.**
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 AIR SHUTTER ADJUSTMENT section).
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 and air baffle(s) must be clear and unobstructed. Excessive grease deposits can result in a grease fire.  
If lining the interior firebox with aluminum foil (not recommended), DO NOT block the drip collector holes, air baffle(s), or any ventilation louvers as this will cause a grease fire and/or cause the unit to over heat.
8. Wear gloves and use extreme caution whenever installing and handling this product and its accessories as certain components have sharp edges that can cause personal injury.
9. **Adults MUST be present when this gas appliance is operating. This appliance MUST NOT be left burning when unattended.**

**CAUTION: FOR YOUR SAFETY, you must provide openings in the grill enclosure for replacement air and ventilation (in case of possible leakage from gas connections or propane cylinders). Failure to do so may result in a fire or explosion causing property damage, bodily injury, or death. See the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section for details.**

### **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. KEEP AT A SAFE DISTANCE. A THOROUGH INSPECTION BY A QUALIFIED PROFESSIONAL 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.**

The unit 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 gas appliance, its enclosure, and the propane cylinder enclosure, if any, **MUST** be plumbed and vented in accordance with local building and safety codes and should be approved by local code enforcement officials. This appliance **MUST** be installed and operated according to the information below.

**FAILURE TO PROPERLY VENT THE GRILL ENCLOSURE 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, or the lowest point where gas could accumulate, will eliminate this danger.  
Refer to the **GRILL ENCLOSURE / VENTILATION REQUIREMENTS** section.  
Observe all local codes.
- DO NOT store a spare propane-gas cylinder under or near the **grill** enclosure.

### 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 enclosure, or the highest point where gas could accumulate, will eliminate this danger.  
Refer to the **GRILL ENCLOSURE / VENTILATION REQUIREMENTS** section.  
Observe all local codes.

### INSTALLATION SAFETY GUIDELINES

**THIS UNIT MUST BE INSTALLED SO THAT THE REQUIRED VENT OPENINGS AND SURROUNDING AREA OF THE GRILL ENCLOSURE REMAIN CLEAR AND FREE AT ALL TIMES. See the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section for details.**

**CAUTION: FOR YOUR SAFETY, you must provide openings in the grill enclosure for replacement air and ventilation (in case of possible leakage from gas connections or propane cylinders). Failure to do so may result in a fire or explosion causing property damage, bodily injury, or death. See the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section for details.**

**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 GRILL ENCLOSURE, THE GUIDELINES FOUND IN THE GRILL ENCLOSURE / VENTILATION REQUIREMENTS SECTION MUST BE FOLLOWED.**

## OPERATING THE UNIT SAFELY AND CORRECTLY

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

1. The area around the grill enclosure 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 grill enclosure.
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

- Les bouteilles, les vannes et les tuyaux de propane doivent être entretenus et inspectés avant chaque utilisation. Ils doivent être remplacés en cas de dommages visibles. Si le tuyau est coupé ou présente des signes d'abrasion ou d'usure, il doit être remplacé avant utilisation (**voir e.**).
- Cette unité, lorsqu'elle est utilisée avec une bouteille, doit être connectée à une bouteille standard de gaz propane de 5 gallons (20 lb) équipée d'un dispositif anti-débordement répertorié. L'appareil est obligatoire sur toutes les bouteilles vendues depuis le 1er octobre 1998 afin d'empêcher tout remplissage excessif.
- Les dimensions du cylindre doivent être d'environ 12" (30,5 cm) de diamètre et 18" (45,7 cm) de hauteur. Les bouteilles doivent être construites et marquées conformément aux spécifications du ministère des Transports (DOT) pour les bouteilles à gaz LP ou à la norme relative aux bouteilles, sphères et tubes pour le transport des marchandises dangereuses et à la Commission, CAN / CSA-B339, selon le cas.
- 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 utilisé doivent assortir les spécifications pour le type I par ANSI Z 21.58/CGA 1.6 (voir la fig. 6-1).
- 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 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

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

**ATTENTION:** Tournez toujours la valve principale de cylindre de propane au loin après chaque utilisation, et avant de déplacer l'unité 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.

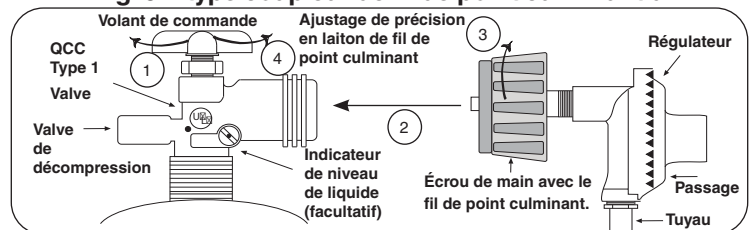
**Inspectez soigneusement** l'ensemble de tuyau chaque fois avant que le gaz soit allumé. Un tuyau fissuré ou effiloché doit être immédiatement remplacé.

Si l'appareil est stocké à l'intérieur, le cylindre doit être disconnecté et a enlevé. Des cylindres Disconnecté doivent être stockés dehors, hors de la portée des enfants, avec les prises de valve fileté 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 de fil de point culminant d'I**



**Pour les besoins de ventilation et d'enceinte au propane,  
Voir la section GRILL ENCLOSURE / VENTILATION REQUIREMENTS.**

# 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

- a. Propane-gas cylinders, valves, and hoses must be maintained in good condition and inspected before each use of appliance. They must be replaced if there is any visible damage. If hose is cut or shows excessive abrasion or wear, it must be replaced before using appliance (see e.).
- b. This unit, when used with a cylinder, should be connected to a standard 5-gallon (20 lb.) propane-gas cylinder equipped with a listed overfilling prevention device. The device has been required on all cylinders sold since October 1, 1998, to prevent overfilling.
- c. 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 U.S. Department of Transportation (D.O.T.) *Specifications for LP-Gas Cylinders*, or the Standard for *Cylinders, Spheres, and Tubes for Transportation of Dangerous Goods and Commission*, CAN/CSA-B339, as applicable.
- d. The cylinder used must include a collar to protect the cylinder valve, and the cylinder supply system must be arranged for vapor withdrawal.
- e. The pressure regulator and hose assembly used must match the specification for Type I by *ANSI Z 21.58/CGA 1.6* (see Fig. 7-1).
- f. The propane-gas cylinder valve must be equipped with a cylinder connection device, described as Type I in the standard defined in paragraph e. above. This device is commonly described as an Acme thread coupler.
- g. 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.

## 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.

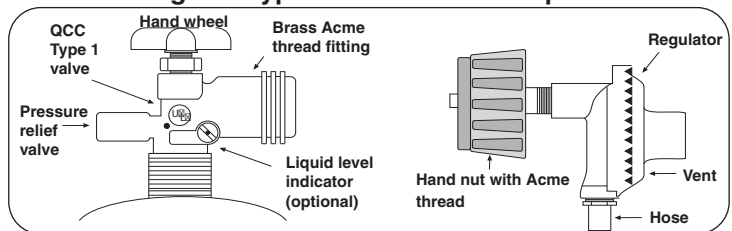
**Carefully** inspect the hose assembly each time before the gas is turned on. A cracked or frayed hose must be replaced immediately.

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

- a. DO NOT store a spare propane-gas cylinder under or near this appliance.
- b. NEVER fill the cylinder beyond 80-percent full.
- c. 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 coupler**



**For propane ventilation and enclosure requirements,  
see the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section.**

# GRILL ENCLOSURE / VENTILATION REQUIREMENTS

Fire Magic GFRC islands are available (CM430i model only). They meet all enclosure and ventilation requirements. For requirements regarding custom-built enclosures, see below.

## VENTILATION (ALL ENCLOSURES)

**For All Piping Systems and All Gas Types:**  
(Natural Gas, Household Propane, L.P. Cylinder)

**FOR YOUR SAFETY, you must provide the openings listed below for replacement air and ventilation of the grill enclosure (in case of possible leakage from gas connections or L.P. cylinders). Failure to do so may result in a fire or explosion causing property damage, bodily injury, or death.**

**One side of the enclosure shall be left completely open to the outside; OR 4 (minimum) ventilation openings MUST be created (reference Fig. 8-1 and Fig. 8-2):**

- **Each opening must have a minimum of 10 sq. in. of free area. The openings must be equally sized. (Total of 40 sq. in. free area.)**
- Two openings must be in the side walls of the enclosure, at the top level, and spaced at a minimum of 90 degrees. The openings must begin 1" or less below the countertop level and end no more than 5" below the countertop level.
- Two openings must be in the side walls of the enclosure, at the floor level, and spaced at a minimum of 90 degrees. The openings must begin 1" or less above the floor level and end no more than 5" above the floor level.

• **The openings must remain unobstructed:**

The clearance between the openings and any items outside of the enclosure is a minimum of 6". The clearance between the openings and any items within the enclosure is a minimum of 2". See Fig. 8-2.

**When an L.P. cylinder is used in the enclosure, additional requirements exist, see the following section.**

It is acceptable to use RHP venting panels (PN 5510-01). Contact your dealer.

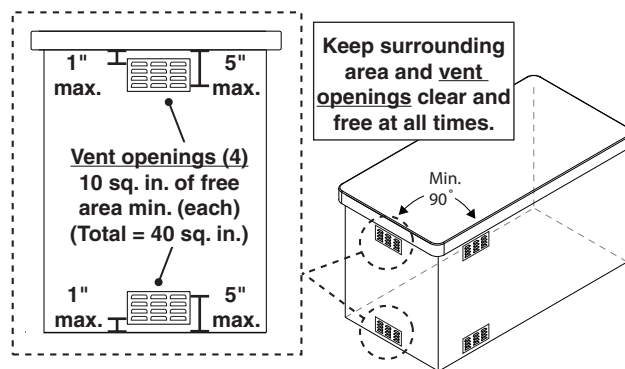
**KEEP THE REQUIRED VENT OPENINGS AND SURROUNDING AREA OF THE ENCLOSURE CLEAR AND FREE AT ALL TIMES.**

**WARNING:** Ventilation openings in side walls shall not communicate directly with other enclosures of the outdoor cooking gas appliance.

**When installing this unit in a combustible enclosure, an RHP insulating liner must be used. Reference Table 1 for liner model #.**

### Ventilation Requirements:

- Minimum 4 openings  
(2 per side wall - spaced at min. 90 degrees)
- Top openings: within 5" of countertop (see below)
- Bottom openings: within 5" of floor (see below)
- Each vent opening: min. 10 sq. in. of free area  
(Total = 40 sq. in. free area)



Note: Vent openings example shown. Your design may vary.

Fig. 8-1 Ventilation detail

- 6" min. clearance between all vent openings and any items outside of enclosure
- 2" min. clearance between all vent openings and any items within enclosure

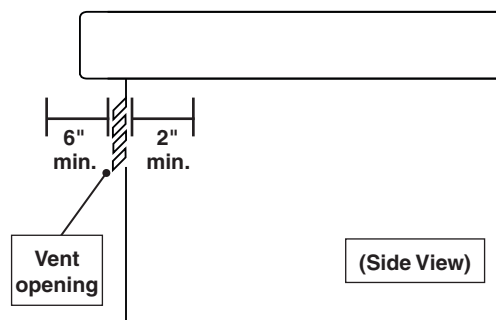


Fig. 8-2 Vent openings clearance

## GRILL ENCLOSURE / VENTILATION REQUIREMENTS (cont.)

### ENCLOSURE

- The countertop **MUST** be constructed of non-combustible materials. The enclosure can be constructed of combustible or non-combustible materials.
- Access to the interior of the enclosure is required for ease of installation and service.
- For combustible enclosures, an insulating liner is always required (see Table 1).

### WHEN A PROPANE (L.P.) CYLINDER IS USED IN THE ENCLOSURE

When a propane (L.P.) cylinder is installed inside of the enclosure, the additional guidelines below **MUST** be followed. FAILURE TO DO SO MAY CAUSE DAMAGE TO YOUR UNIT AND/OR PERSONAL INJURY. Refer to Fig. 9-1 and 9-2.

- Only a C.S.A. listed stainless steel flex connector must be connected to the unit.
- The regulator/hose assembly coming from the cylinder must only be connected to the above mentioned flex connector. A 1/2" male-to-male flare adapter will be required (not included). **DO NOT connect the regulator/hose assembly directly to the unit.**
- A non-combustible heatshield must be installed to protect the regulator/hose assembly and cylinder valve.
- The cylinder must rest at least 2" above the ground.
- An additional vent opening is recommended in the access door near the cylinder and at the gas connection level (minimum 10 sq. in. of free area).

RHP offers an "access door with tank tray and louvers" which includes a heatshield that rests directly above the L.P. cylinder, a tray, and louvers to meet the cylinder install requirements. The door is shown in Fig. 9-3. Contact your dealer for ordering information.

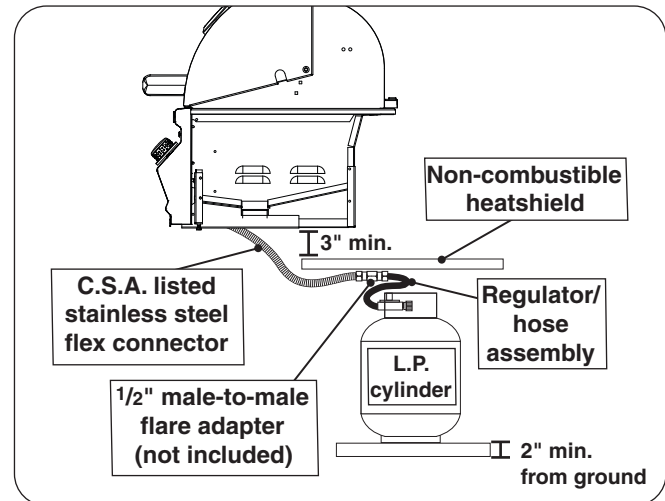


Fig. 9-1 L.P. cylinder orientation

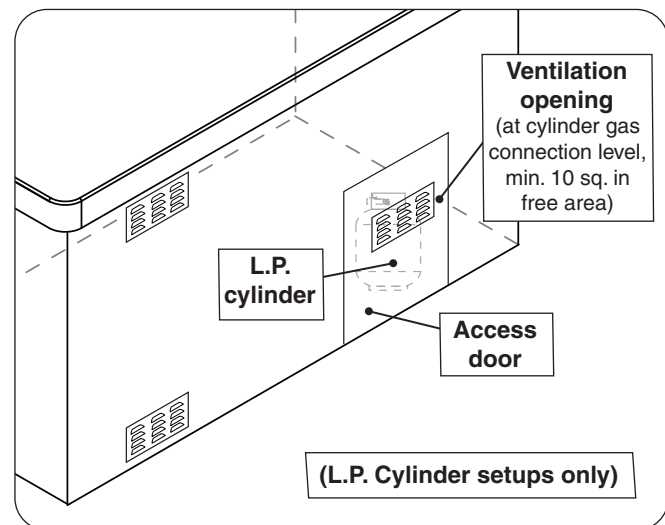


Fig. 9-2 Additional ventilation opening for L.P. cylinder

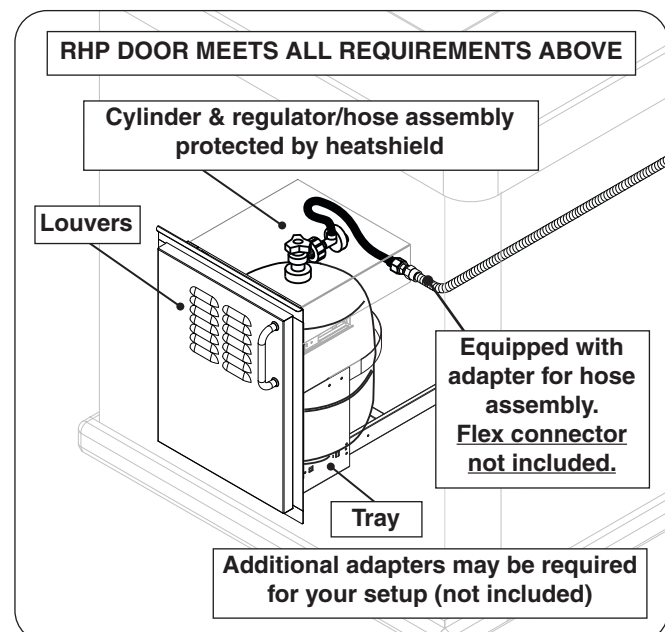


Fig. 9-3 Optional door w/ tank tray & louvers

# 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.

## OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS

A minimum 5 foot clearance is required between the countertop 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. 10-1.

**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. 10-1.

### 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) rated exhaust fan for proper outdoor application.

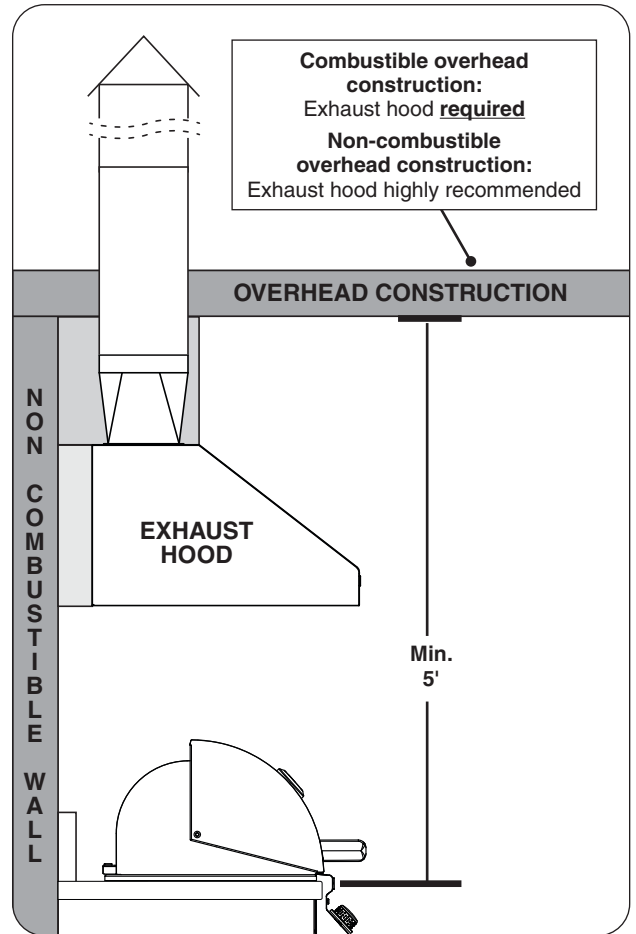


Fig. 10-1 Overhead requirements

## REAR WALL CLEARANCES

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

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

(i.e. brick wall, see Fig. 11-1)

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

### B. Clearance between unit and a protected combustible rear 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. 11-2)

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

### C. Clearance between unit and combustible rear wall

- The unit must have a minimum clearance of 18" from the combustible rear wall (see Fig. 11-3).

## BACKSPLASH CLEARANCE (if applicable)

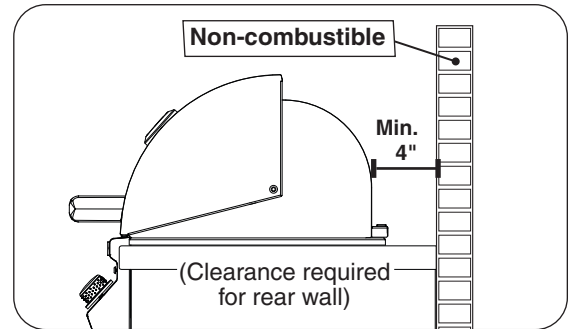
If a non-combustible backsplash exists, it must have a minimum of a 4" clearance from the rear of the unit (to allow for proper ventilation and prevent dangerous overheating). See Fig. 11-4.

**Important:** This 4" backsplash clearance must first be met prior to any non-combustible walls beginning behind it.

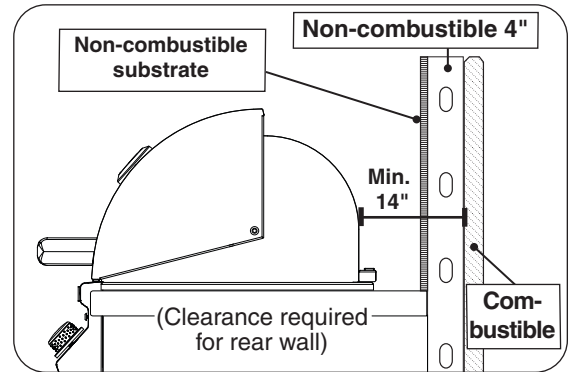
## SIDE WALL / CORNER WALL CLEARANCES (if applicable)

The unit must have a minimum clearance of 24" from any side walls (to account for variables in airflow that could affect performance). See Fig. 11-5.

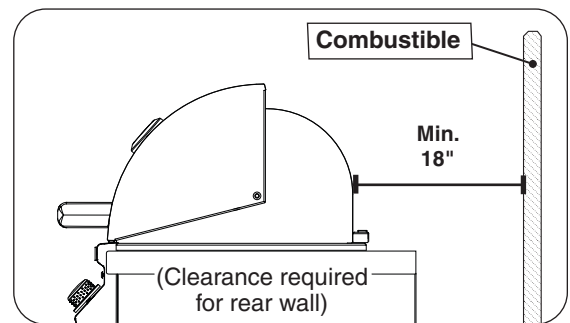
Clearances continued on following page



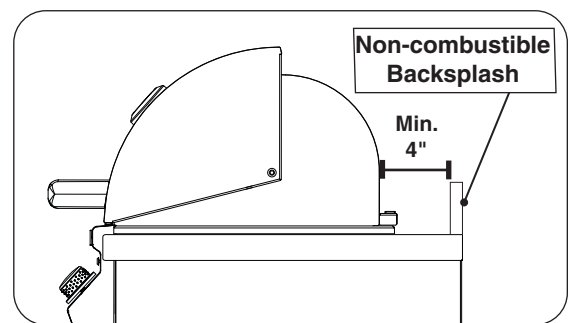
**Fig. 11-1** Clearance 'A' Diagram



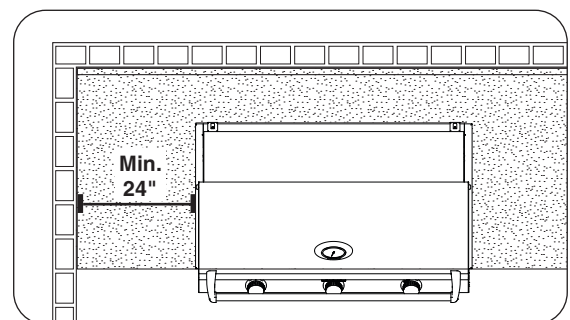
**Fig. 11-2** Clearance 'B' Diagram



**Fig. 11-3** Clearance 'C' Diagram



**Fig. 11-4** Backsplash clearance



**Fig. 11-5** Side/corner wall clearance

## INSTALLATION REQUIREMENTS (Cont.)

### CONTROL PANEL CLEARANCES

- The control panel **MUST** have a minimum side clearance of 6" from any obstructions/side walls. See Fig. 12-1.
- The control panel **MUST** remain removable for servicing (see CONTROL PANEL REMOVAL section). Any adjacent countertops must not obstruct the panel from being removed.

### COMBUSTION AIR AND COOLING AIRFLOW

Proper airflow (front-to-back, Fig. 12-2) **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. 12-4) can cause poor performance and/or dangerous overheating. Install the grill so that the prevailing wind blows toward the front of the grill (Fig. 12-3). **A wind deflector is included (pre-installed) to assist in proper airflow during windy conditions.**

### GAS-SUPPLY PLUMBING REQUIREMENTS

The gas supply is to be routed into the enclosure, near the unit. Your individual installation may vary. **Observe the National Fuel Gas Code and all local codes. Leak test at all connections.**

**The gas supply must be sized to provide minimum inlet pressure at the maximum flow rate (BTU/hr).** Undue pressure loss will occur if the pipe is too small, or the run is too long. Gas supply pipe must be 1/2" minimum interior diameter. If the gas line is longer than 20', a larger diameter line may be necessary. Refer to the NFPA 54 guidelines for further details.

**DO NOT use a rubber hose within the unit enclosure.**

A C.S.A. approved stainless steel flex connector is included and pre-installed to the valve manifold, and routes to the gas supply. A flare-to-NPT adapter is provided for 1/2" pipe.

Use a pipe joint compound resistant to all gasses on all NPT pipe fittings. Make sure to tighten every fitting securely. **Do not use pipe joint compound to connect flare fittings.**

**Important:** **A shut-off valve (not included) in the gas supply 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 and must be easily accessible. Use a pipe joint compound resistant to all gasses on all NPT pipe fittings **except flare fittings.**

### GAS SUPPLY AND MANIFOLD PRESSURES:

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

**Note:** An additional regulator may be needed to meet these requirements.

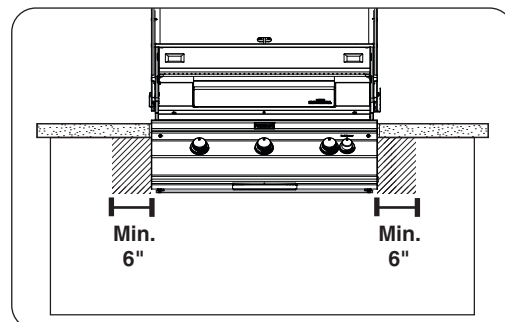


Fig. 12-1 Control panel clearances

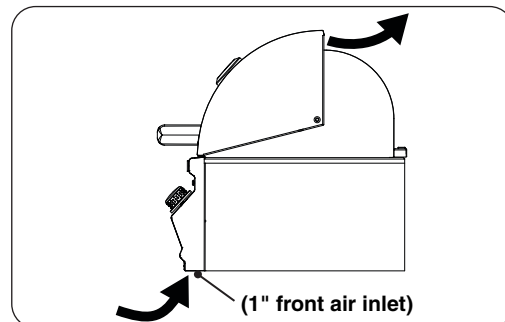


Fig. 12-2 Airflow diagram

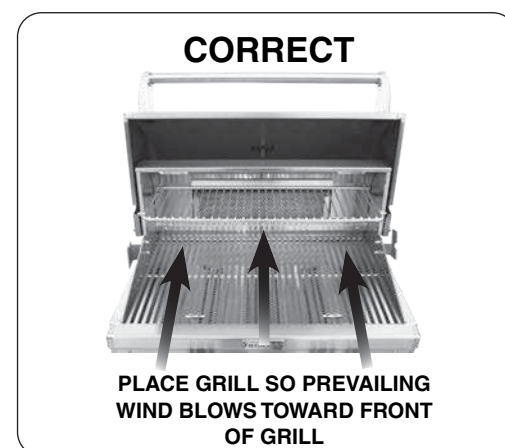


Fig. 12-3 Airflow direction - CORRECT

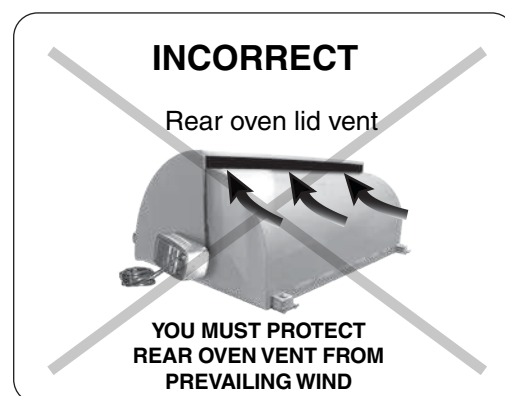


Fig. 12-4 Airflow direction - INCORRECT

## MODEL SPECIFICATIONS

		CM430i	CM540i	CM650i
Main burner	Quantity	2	3	3
	N/P orifice drill size	#41 / #54	#43 / #55	#41 / #54
	N/P air shutter opening *	3/8" / 5/16"	3/8" / 5/16"	3/8" / 5/16"
Fire Magic insulating liner model # (not included) †		23130-52	23150-52	3177-52

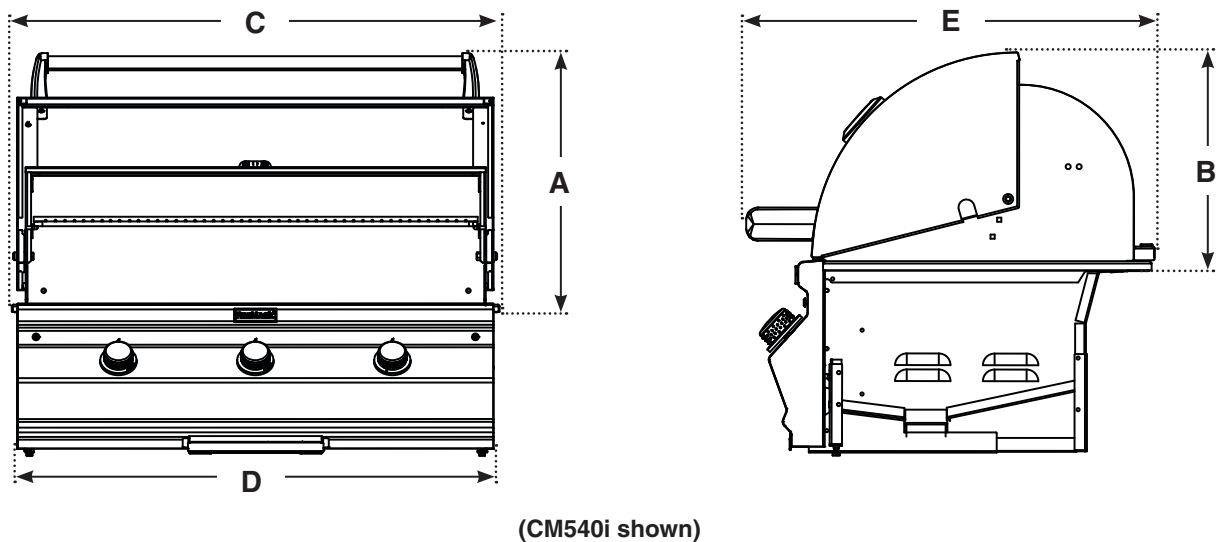
\* These are air shutter factory settings. These settings may require adjustment due to gas conversion, altitude, or other local conditions. See AIR SHUTTER ADJUSTMENT / BURNER FLAME INSPECTION section.

† **Note:** If installing this grill in a combustible enclosure, the correct insulating liner must be used. Consult liner instructions for counter cutout dimensions and installation.

**Table 1 - Product Specifications**

Model	Height		Width		Depth
	(Top to bottom)		(Left to right)		(Front to back)
	Bottom of hanger to top (with oven)		Maximum width (C)	Control panel width (D)	Maximum depth (E)
	Open (A)	Closed (B)			
<b>CM430i</b>	20 3/4"	13 5/8"	27 5/8"	26"	25 3/4"
<b>CM540i</b>	20 3/4"	13 5/8"	34 1/8"	32 1/2"	25 3/4"
<b>CM650i</b>	20 3/4"	13 5/8"	39 3/4"	38 1/4"	25 3/4"

**Table 2 - Grill Dimensions**



**Fig. 13-1**

	CM430i	CM540i	CM650i
<b>A</b> Countertop to unit bottom <b>cutout*</b>	11 1/2"	11 1/2"	11 1/2"
<b>B</b> Side to side non-combustible <b>cutout*</b>	25 1/2"	32"	37 3/4"
<b>C</b> Front to back non-combustible <b>cutout*†</b>	19 1/2"	19 1/2"	19 1/2"
<b>D</b> Control panel width non-combustible <b>cutout‡</b>	26 1/2"	33"	38 3/4"
<b>E</b> Timer box width enclosure wall cutout	6 1/2"	6 1/2"	6 1/2"
<b>F</b> Timer box height enclosure wall cutout	6 1/2"	6 1/2"	6 1/2"

\* **Note:** If installing this grill in a combustible enclosure, the correct insulating liner must be used. Consult liner instructions for counter cutout dimensions and installation.

† Includes any substrate at front wall of enclosure (in the area the rear of the control panel is to sit flush against). See **SUBSTRATE** section on next page.

‡ Only applicable for non-combustible enclosures that have countertops with an overhang (see illustration and section below).

Table 3 - Cutout Dimensions

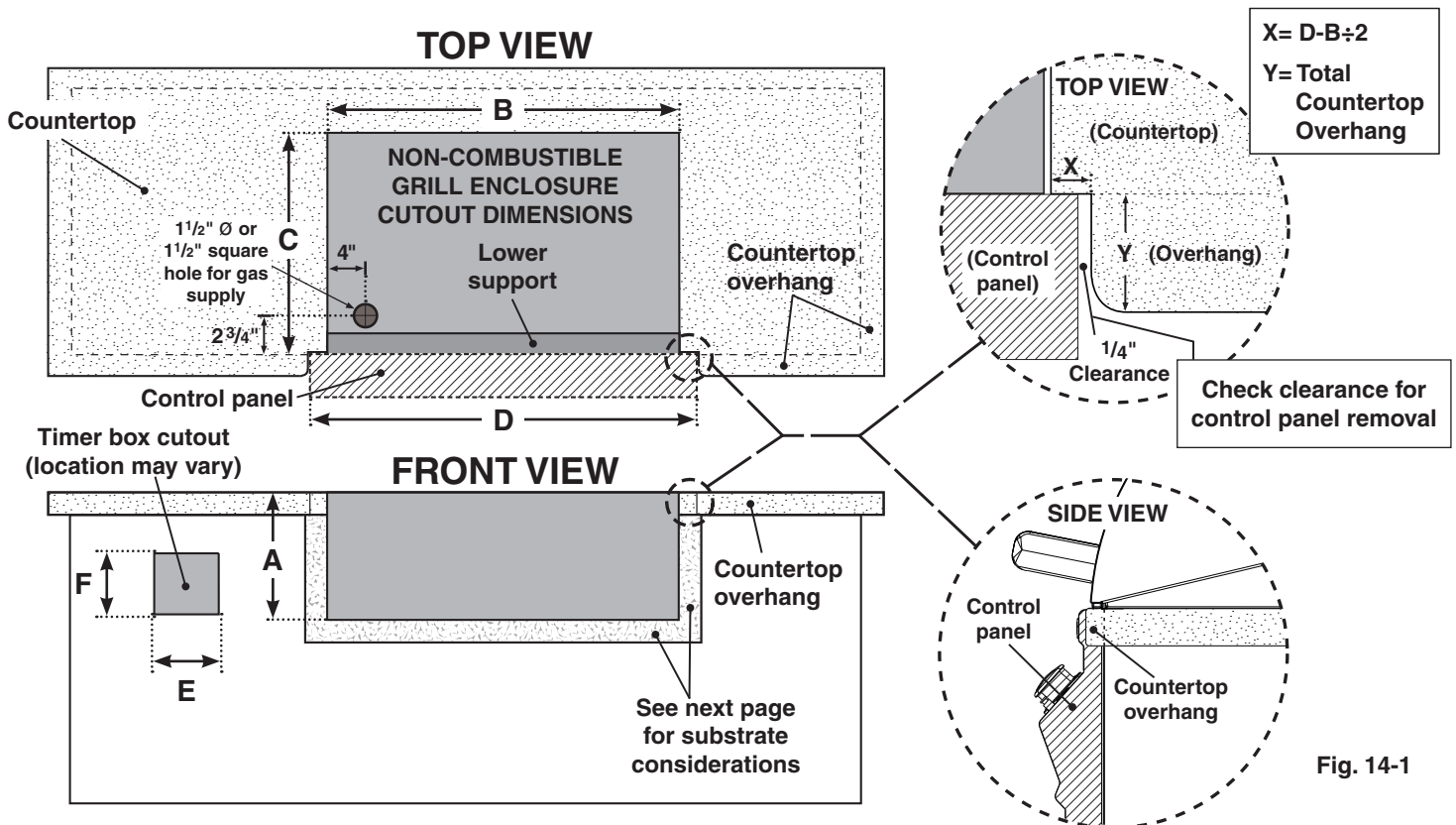


Fig. 14-1

**COUNTERTOP OVERHANG**

The control panel is designed to sit flush against the grill enclosure front wall. If the **non-combustible enclosure** countertop extends beyond the front wall, creating a countertop overhang, it must be cut flush with the front wall for the width of the control panel or a gap will be created exposing the forward portions of the left and right side grill fire walls. See illustrations above.

**ENCLOSURE VENTILATION**

FOR YOUR SAFETY, you must provide openings in the grill enclosure for replacement air and ventilation (in case of possible leakage from gas connections or propane cylinders). Failure to do so may result in a fire or explosion causing property damage, bodily injury, or death. See the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section for details.

**SUBSTRATE**

When adding any substrate to the grill enclosure front wall (including tiles, stone, etc.), consider the following:

**Substrate Behind Control Panel**

Substrate + countertop "front to back" cutout must equate to **Dim. C** (see previous page) when the substrate sits flush behind the control panel.

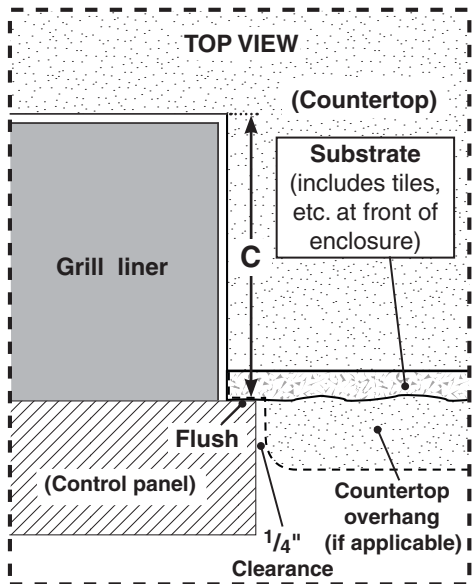


Fig. 15-1

**Substrate Alongside Control Panel**

Any additional substrate alongside the control panel does not need to be considered in **Dim. C** (see previous page), however a 1/4" clearance on each side (same as overhang) and below is required.

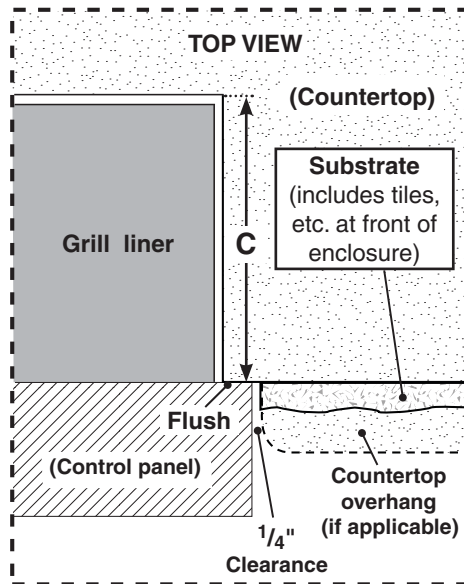
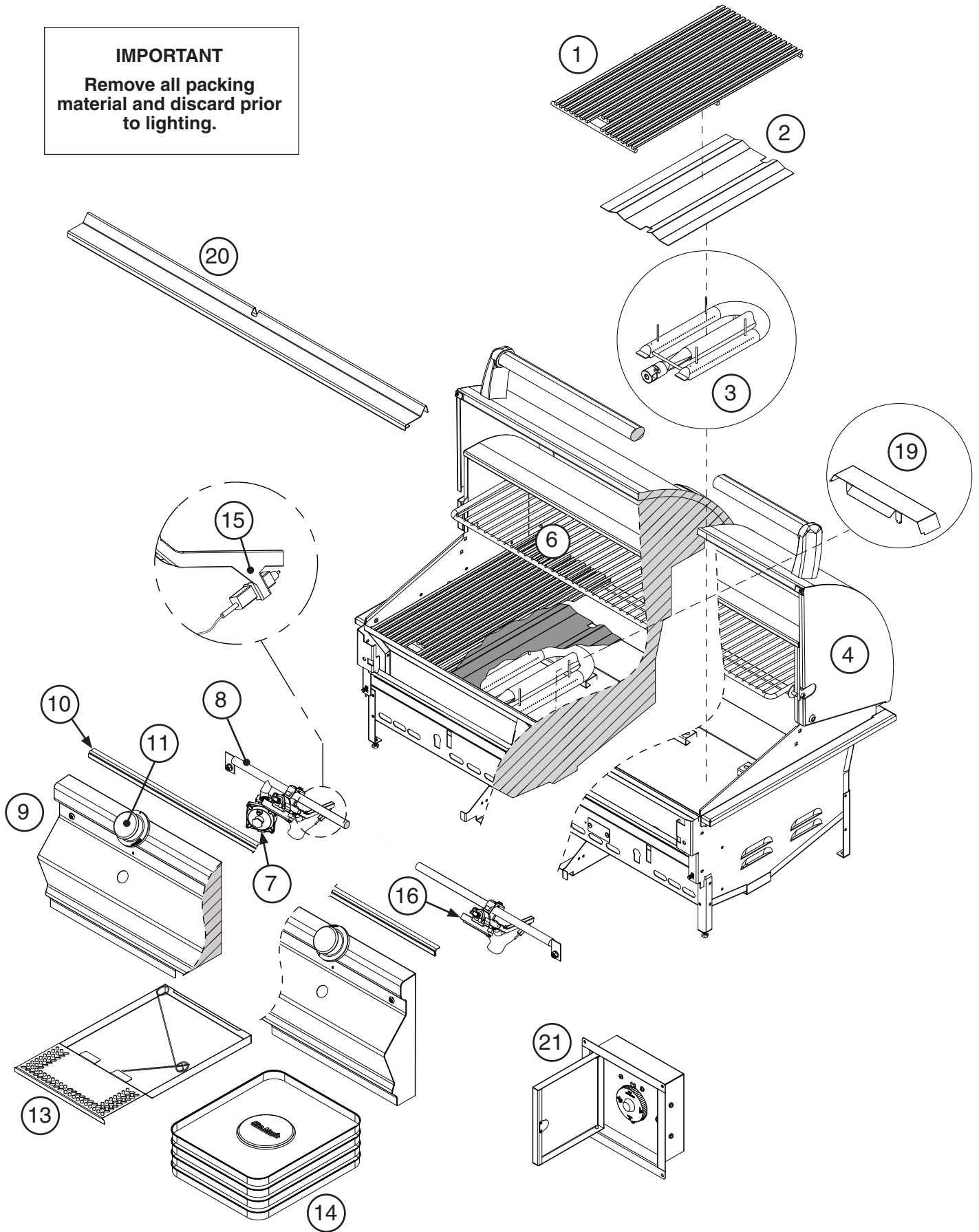


Fig. 15-2

# CHOICE MULTI-USER GRILL REPLACEMENT PARTS LIST

## IMPORTANT

Remove all packing material and discard prior to lighting.



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

## CHOICE MULTI-USER GRILL REPLACEMENT PARTS LIST (Cont.)

Item	Description	CM430i		CM540i		CM650i	
		Part No.	Qty.	Part No.	Qty.	Part No.	Qty.
1.	Stainless cooking grid (set of 2 or 3)	3542-DS-2	1	23543-DS-3	1	3542-DS-3	1
2.	Flavor grid (set of 2 or 3)	3063-S-2	1	3064-S-3	1	3065-S-3	1
3.	Main burner	3042-60	2	3042-60	3	3042-60	3
4.	Oven hood	23729-58	1	23733-58	1	23734-50	1
5.	Oven lid spring *	23729-71	1	23729-71	1	23729-71	1
6.	Warming rack	3672S-B	1	3673S-B	1	3675S-B	1
7.	Convertible regulator	PR-4	1	PR-4	1	PR-4	1
8.	Valve manifold	24131-12	1	24171-12	1	24181-12	1
9.	Control panel assembly	24131-02	1	24171-02	1	24181-01	1
10.	Cooking grid locking channel	24131-03	1	24171-03	1	24181-02	1
11.	Control knob w/ locking screw	3026CM	2	3026CM	3	3026CM	3
12.	Oven lid thermometer w/ bezel *	23307	1	23307	1	23307	1
13.	Drip tray with match holder	3093	1	3093	1	3093	1
14.	Drip tray liner (set of 4)	3557	1	3557	1	3557	1
15.	Main burner igniter assy only	3199-50	2	3199-50	3	3199-50	3
16.	Main burner valve w/ igniter assy	3026	2	3026	3	3026	3
17.	Natural gas orifice(s) *	3031-41-2	1	3031-43-3	1	3031-41-3	1
18.	Propane gas orifice(s) *	3031-54-2	1	3031-55-3	1	3031-54-3	1
19.	Air baffle	24194-40	1	24194-40	1	24194-40	1
20.	Wind deflector	23729-19	1	23733-19	1	23745-20	1
21.	Timer box	5520-11T	1	5520-11T	1	5520-11T	1

\* Not shown

## INSTALLATION

**DO NOT** lift the unit from the control panel when installing.

### ENCLOSURE PREPARATION

Construct the enclosure according to your individual preference, while following the guidelines found in the ENCLOSURE REQUIREMENTS section.

Consult Table 3 for non-combustible enclosure cut-out dimensions (grill and timer box). An RHP insulating liner must be used if any supporting construction is combustible. Consult the instructions that come with the liner for dimensions and additional installation information before beginning the installation.

This outdoor built-in grill must be supported by the stainless-steel hanger extending from the upper portion of the grill. The hanger rests on the left, right, and back of the countertop and on the two front support adjustment bolts located below the control panel on the left and right sides (see Fig. 18-3).

The control panel is designed to sit flush against the enclosure front wall (see Fig. 18-1). If the non-combustible enclosure countertop extends beyond the front wall, creating a countertop overhang (see Fig. 18-2), it must be cut flush with the front wall for the width of the control panel or a gap will be created exposing the forward portions of the left and right side grill fire walls. Reference the MODEL SPECIFICATIONS section.

### SLIDE THE UNIT INTO THE ENCLOSURE CUTOUT

1. Carefully slide the unit into the cutout in the enclosure.

**Important:** Ensure the gas connections are clear, undamaged, and completely inserted into the opening, and that the unit is correctly inserted without any obstructions between it and the countertop.

2. Rotate the front support adjustment bolts to the left to raise and to the right to lower the respective side of the appliance. Use a  $\frac{7}{16}$ " open-end wrench as needed. See Fig. 18-3.

**Important:** The bolts **MUST** be used to provide support to the hangers.

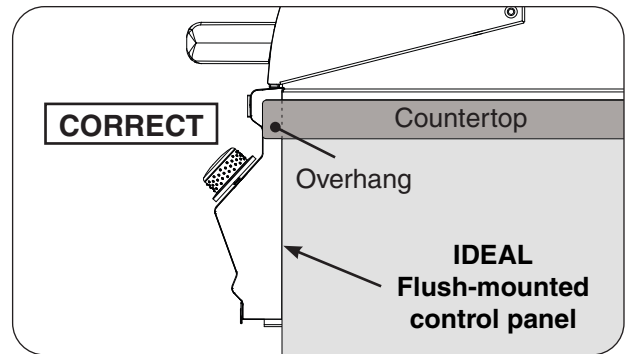


Fig. 18-1 Countertop overhang - correct cutout

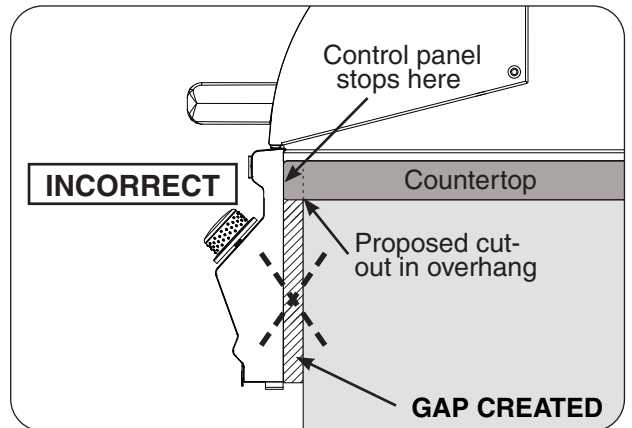


Fig. 18-2 Countertop overhang - incorrect cutout

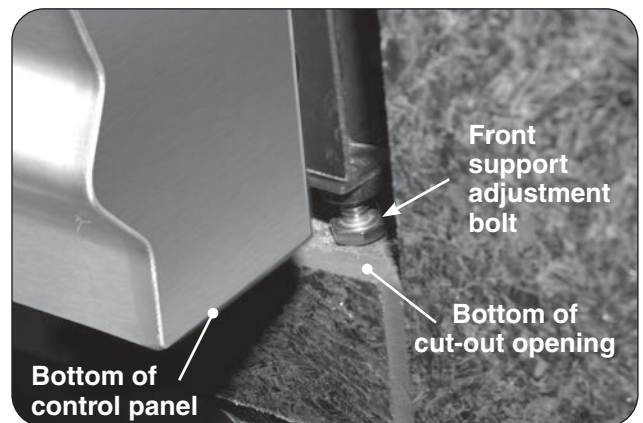


Fig. 18-3 Front support adjustment bolts

## CONNECT THE GAS SUPPLY

### To Connect To Propane Cylinder:

Read the safety warnings and follow the instructions in the section SAFE USE AND MAINTENANCE OF PROPANE GAS CYLINDERS.

**Note:** When a propane cylinder is installed inside of the enclosure, the guidelines found in the GRILL ENCLOSURE / VENTILATION REQUIREMENTS section **MUST** be followed.

### To Connect To Natural Or Household Propane Gas Supply:

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

#### **WARNING**

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

- Before connecting the gas supply to your appliance, pressures **MUST** be tested and **MUST NOT** exceed 10.5" w.c. for Nat. gas and 13" w.c. for L.P. gas. An additional regulator may be required.
- Refer to the GAS SUPPLY PLUMBING REQUIREMENTS section for all details on the gas supply and its setup.

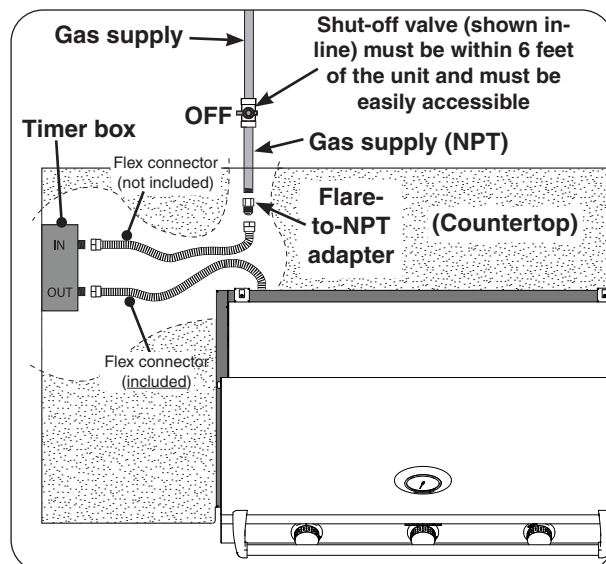
1. **Turn OFF the gas supply at the source.**
2. Locate the flex connector attached to the grill, and route it under the left side of the grill to the timer box area.
3. Using two wrenches, connect the flex connector coming from the grill to the 1/2" **flare adapter labeled OUT**. See Fig. 19-1. Ensure the connection is tightened securely.
4. **Connect gas source to IN:** Using two wrenches, connect a flex connector (not included) to the 1/2" **flare adapter labeled IN**. See Fig. 19-1. Ensure the connection is tightened securely.
5. Route the flex connector coming from the timer box to the gas supply stub (see Fig. 19-1).
6. A shut-off valve is required within 6 feet of the unit and must be easily accessible.

#### ***If shut-off valve is installed in-line:***

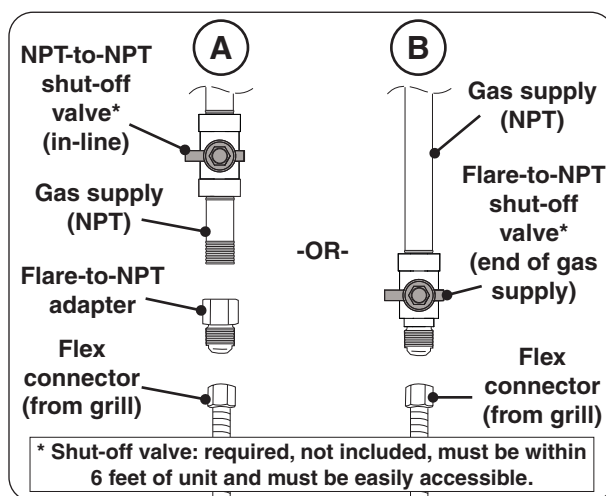
- Install the supplied flare-to-NPT adapter to the gas supply (NPT) using a pipe joint compound resistant to all gasses (see Fig. 19-2, A). Tighten securely.
- Connect the flex connector to the adapter (see Fig. 19-2, A). Tighten securely.

#### ***If shut-off valve is connected to end of gas supply stub:***

- Connect the flex connector to the shut-off valve (flare) (see Fig. 19-2, B). Tighten securely.



**Fig. 19-1** Household LP & Nat. gas diagram



**Fig. 19-2** Connecting to a gas line

### LEAK TEST

Turn all burner valves to the **OFF** position. Turn on the gas supply, and test at all connections for leaks using a soapy water solution. If bubbles appear, a leak is present. Turn off the gas and tighten at all connections. Repeat until no leaks are present. If a leak persists, turn off the gas supply and contact the local gas company or dealer. **NEVER USE A FLAME TO CHECK FOR LEAKS.**

**Once the leak test is complete, turn off the gas supply and proceed.**

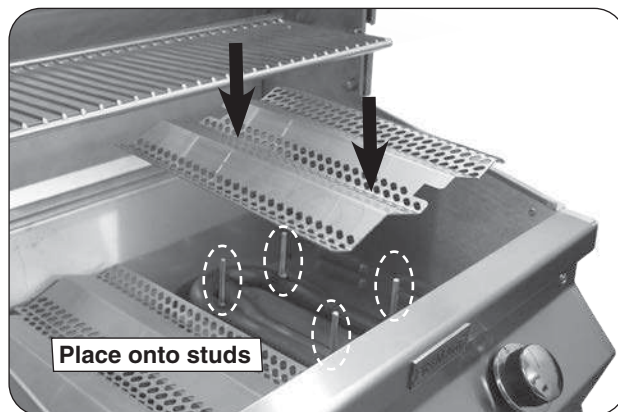
### INSTALL THE FLAVOR GRIDS

Place the flavor grids directly onto the studs on the burners (see Fig. 20-1). **For 540i and 650i models, the slightly larger grids are designed to be placed over the outside burners, and the slightly smaller grid over the inner burner.** The flavor grids allow heat from the burners to be evenly distributed throughout the cooking area.

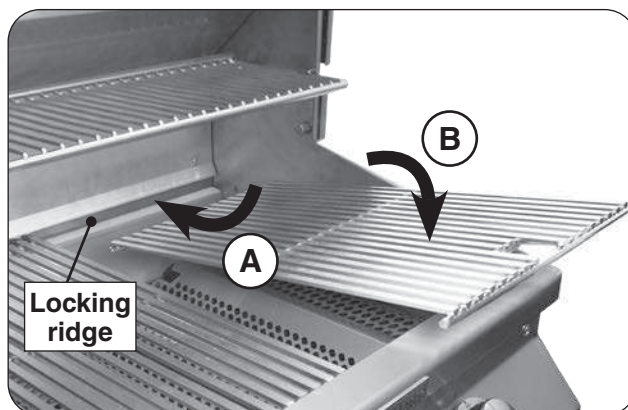
### INSTALL THE COOKING GRIDS

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

1. Carefully place the rear of a cooking grid between the locking ridge of the rear wall (see Fig. 20-2, A). Then, carefully place the front of the cooking grid onto the front grid rest of the grill (see Fig. 20-2, B).
2. Repeat for the other grids.



**Fig. 20-1** Install flavor grids



**Fig. 20-2** Install cooking grids

## SECURE THE COOKING GRIDS

### Remove control knobs and control panel

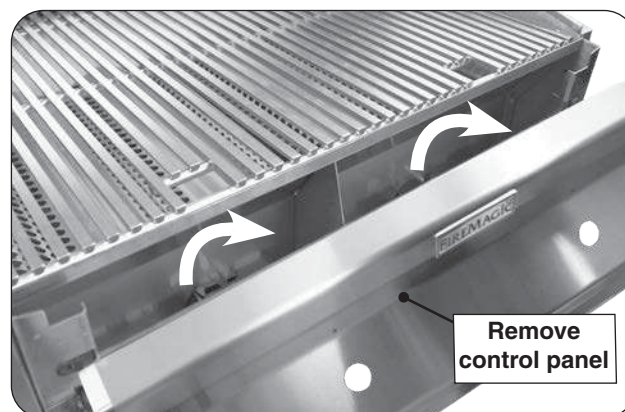
1. Turn the control knobs to the OFF position and turn off the gas supply to the unit.
2. Pull the control knobs from the stems and set aside (see Fig. 21-1).
3. Using a Phillips screwdriver, unscrew and remove the control panel fastener screws and washers (located on the left and right front face of the control panel). Retain the screws for later re-installation. See Fig. 21-1.
4. Carefully remove the control panel by lifting and pulling the control panel from the frame. Set control panel aside (see Fig. 21-2).

### Install cooking grid locking channel

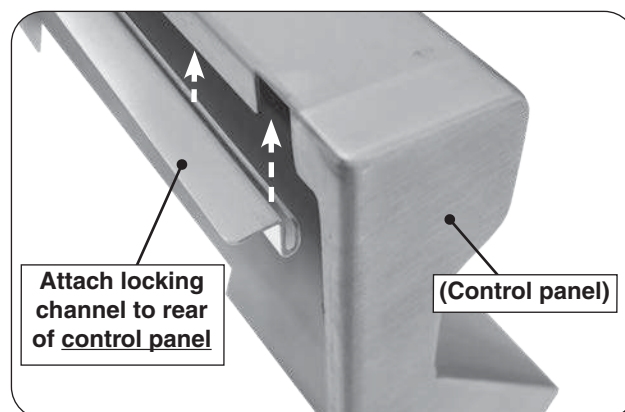
1. Attach the cooking grid locking channel to the rear top lip of the control panel (see Fig. 21-3).
2. With the channel attached to the control panel, carefully reinstall the control panel back onto the grill. Ensure the locking channel is laying flat on the cooking grids. See Fig. 21-4.
3. Reinstall the two screws to secure the control panel.
4. Insert the control knobs onto the valve stems. Ensure the control knobs are in the OFF position.



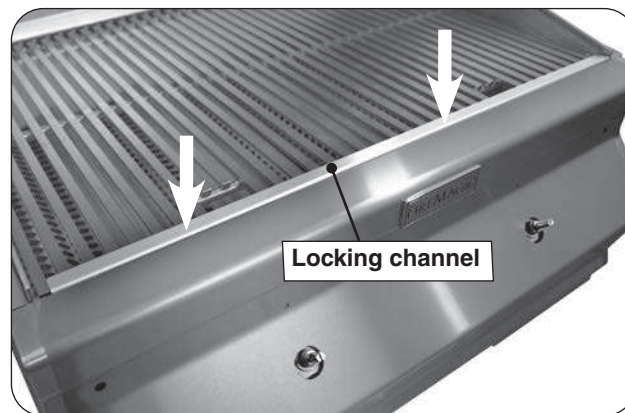
**Fig. 21-1** Remove knobs and screws



**Fig. 21-2** Remove control panel



**Fig. 21-3** Attach cooking grid locking channel



**Fig. 21-4** Install cooking grid with locking channel

### LOCK THE CONTROL KNOBS

1. Turn the control knobs to the OFF position and turn off the gas supply to the unit.
2. Remove the rubber grip from the control knob (see Fig. 22-1).
3. Insert the included .078" (2mm) hex key through the small hole located on the side of the knob and fully tighten the screw (see Fig. 22-2).
4. Replace the rubber grip.
5. Repeat this process for the remaining knobs.



Fig. 22-1 Remove rubber grips

### 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. 22-3, 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.

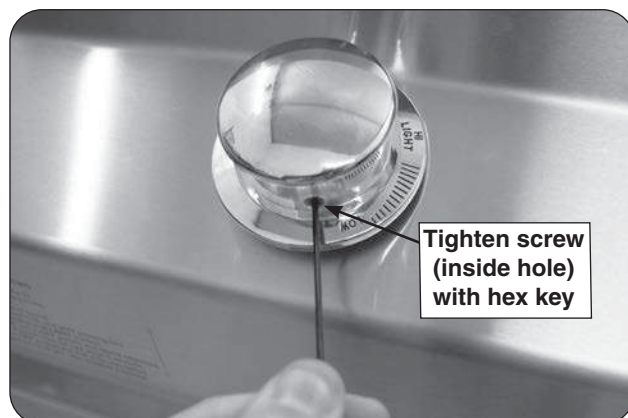


Fig. 22-2 Tighten screw to lock knobs

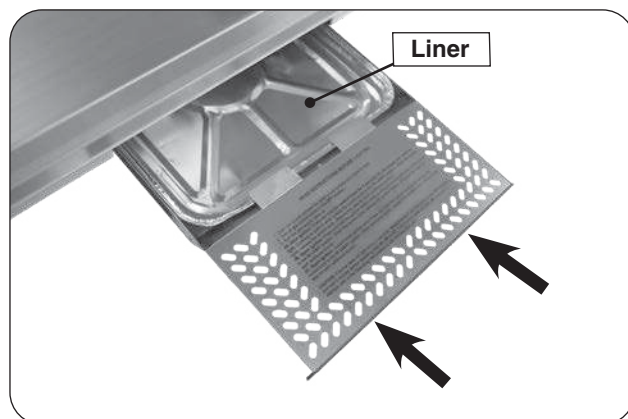


Fig. 22-3 Install drip tray

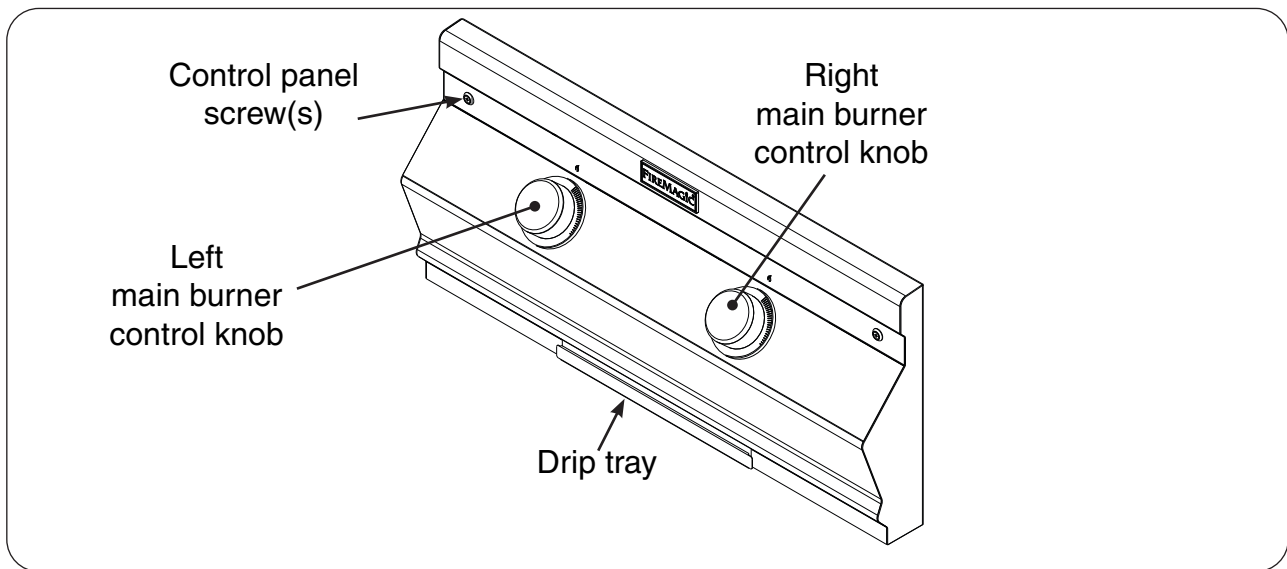
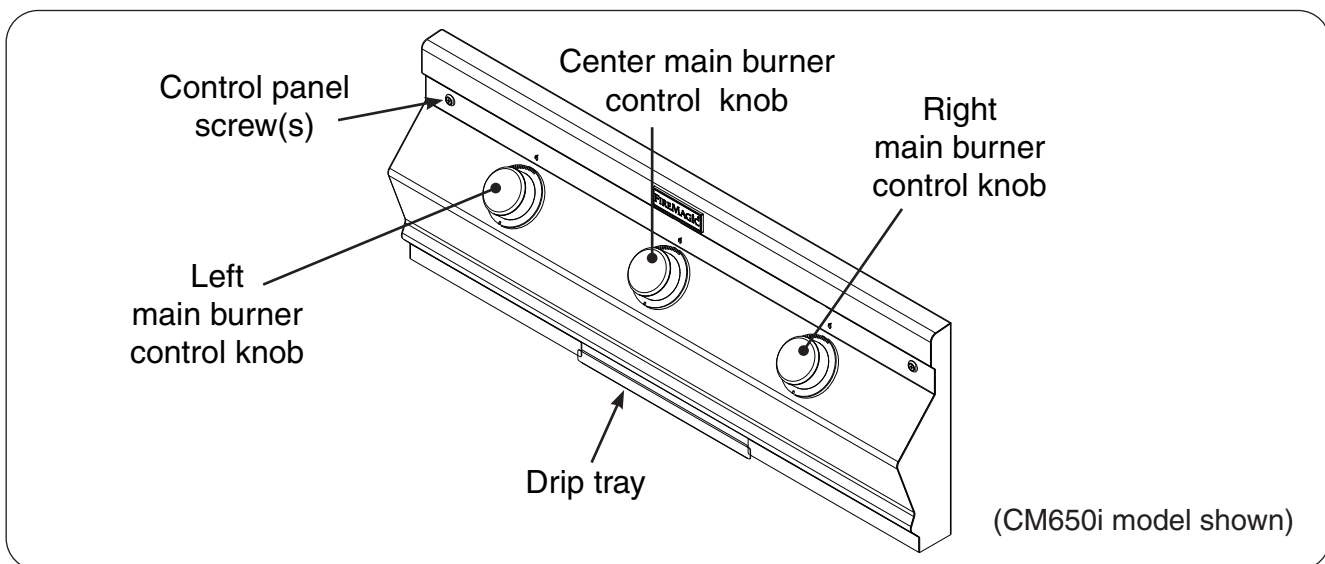


Fig. 23-1 CM430i controls



(CM650i model shown)

Fig. 23-2 CM540i and CM650i controls

# USING THE GRILL

## BEFORE INITIAL USE

Ensure that:

- the unit 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 required vent openings and surrounding area of the enclosure are clear 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 unit 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 unit as possible during use. Avoid wearing loose-fitting clothing as they could ignite.**
- **This appliance is designed as an attended appliance. DO NOT leave this appliance burning when unattended.**
- **NEVER cover more than 75% of the cooking surface with griddles or pans to prevent overheating.**
- **After each use, turn the control knob(s) to the OFF position and turn off the gas supply to the unit.**

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 the 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. 24-1) MUST be maintained for the unit to perform as it was designed. See the INSTALLATION REQUIREMENTS section for details.

When using the unit 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.

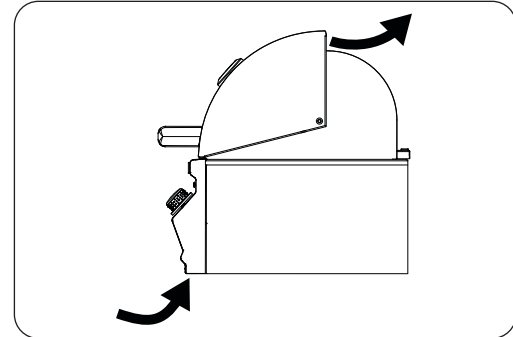
## AFTER EACH USE

1. Operate on high with hood closed for 10-15 minutes to burn off all grease.
2. Turn off the grill and brush the cooking grids to remove all residue.

**CAUTION:** Use long-handled insulated BBQ tools and wear an insulated glove / oven mitt.

3. When the grill is cool, check and clean the drip tray. Then cover the grill.

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



**Fig. 24-1** Airflow diagram

# LIGHTING (IGNITION) INSTRUCTIONS

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

## SPARK IGNITION LIGHTING

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

1. Open the oven hood.
2. Turn all gas control knob(s) to their **OFF** position(s).
3. Turn on the gas at its source.

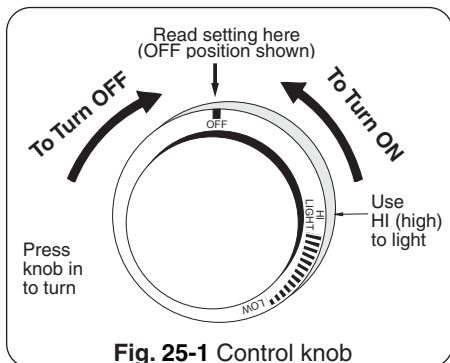


Fig. 25-1 Control knob

4. Set timer control knob to the desired cooking time.
5. Depress the desired control knob, and while pressing turn it counterclockwise to the **HI LIGHT** position. Once the burner lights, release the knob.

**Note:** Turning the knob will create a “click” sound and ignite the burner. If there is no ignition, immediately turn to **OFF** position and repeat sequence quickly until the burner ignites.

**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 5. 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.

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

## SETTING THE TIMER

To use, set the dial (turn clockwise) to the desired time to shut off. The dial is marked in 3 twenty minute increments (any position in between is an estimate of that set time). The timer dial will auto rotate (counter-clockwise) and will shut off the gas supply when the dial reaches **OFF** (i.e. the time is completed).

**Important:** When using the timer for periods of less than twenty minutes, you must first turn the dial past twenty minutes (to activate), then return (counter-clockwise) to the desired amount of time. This will ensure proper timer operation. See Fig. 25-4.

## MANUAL LIGHTING

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

1. Follow steps 1 through 4 (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. 25-2).
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.

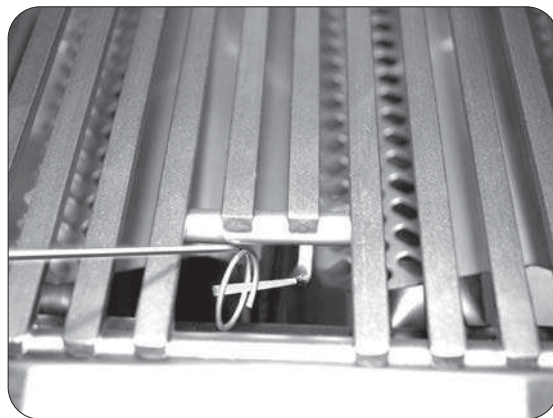


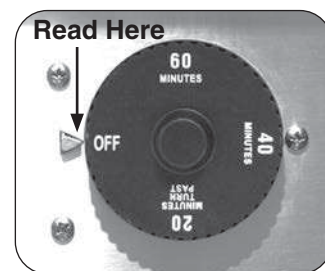
Fig. 25-2 - Manual lighting

## 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.

Fig. 25-4



Timer knob in OFF position

# ALLUMAGE DES INSTRUCTIONS (D'ALLUMAGE)

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

## ÉCLAIRAGE À ÉTINCELLES

**Note:** NE PAS ouvrir plus d'une vanne à la fois pour l'allumage commandé ou l'allumage manuel.

1. Ouvrez la hotte du four.
2. Tournez tous les boutons de commande de gaz à leurs positions de repos.
3. Allumez le gaz à sa source.

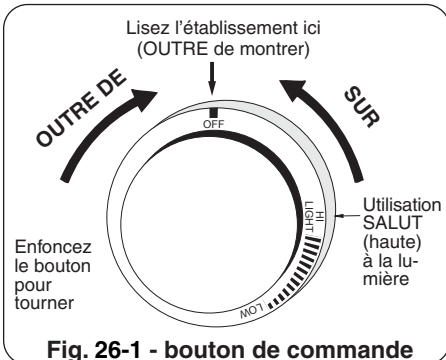


Fig. 26-1 - bouton de commande

4. Placez le bouton de commande de temporisateur au temps de cuisson.
5. Appuyez sur le bouton de commande souhaité et, tout en appuyant sur cette touche, tournez-le dans le sens inverse des aiguilles d'une montre jusqu'à la position **HI LIGHT**. Une fois le brûleur allumé, relâchez le bouton.

**Note:** Tourner le bouton crée un « clic » et allume le brûleur. S'il n'y a pas d'allumage, mettez-le immédiatement sur **OFF** et répétez la séquence rapidement jusqu'à ce que le brûleur s'allume.

**ATTENTION :** Si un brûleur ne s'allume pas dans deux ou trois (2-3) secondes suivant la mise sur le bouton de commande, appuyez sur le bouton et le tourner vers la position **OFF**. **ATTENDEZ CINQ (5) MINUTES** avant de répéter l'étape 5. 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.

6. Répétez l'étape 5 pour que chaque brûleur additionnel soit Lit.

## ÉTABLISSEMENT DU TEMPORISATEUR

Pour l'utiliser, placez le sélecteur (tourner dans le sens horaire) à l'heure souhaitée pour couper. Le cadran est marqué en 3 tranches d'une minute vingt (Toute position entre les deux est une estimation du fait que le temps). Le cadran de la minuterie rotation automatique (sens anti-horaire) et coupera l'alimentation en gaz lorsque la molette atteint **OFF** (le temps est terminé).

**Important:** Lorsque vous utilisez la minuterie pour des périodes de moins de vingt minutes, vous devez d'abord tourner le cadran au-delà de vingt minutes (pour l'activer), puis retour (sens anti-horaire) à la quantité désirée de temps. Cela permettra d'assurer le bon fonctionnement de la minuterie. Voir Fig. 26- 4.

## 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 4 (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. 26-2).
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.

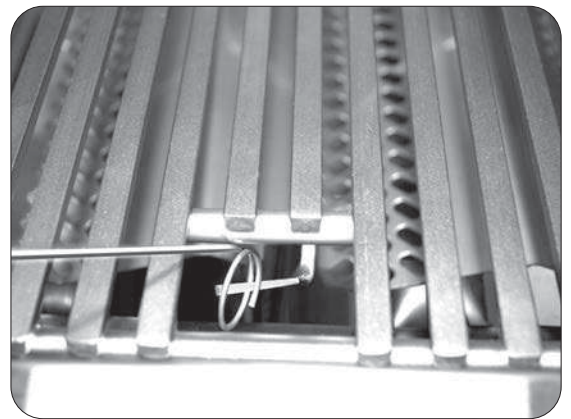


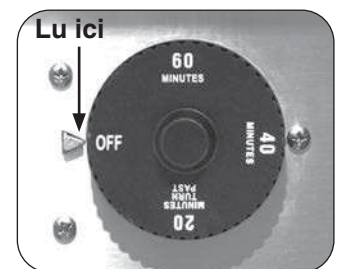
Fig. 26-2 - Éclairage manuel

## 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.

Fig. 26-4



Bouton de temporisateur **AU LOIN** (temporisateur de 3 heures montré)

## SERVICING AND CLEANING

**Your grill requires regular cleaning and maintenance.** Refer to these instructions for details. Performing these procedures will ensure proper operation, appearance, and safety.

### WARNINGS

- Prior to servicing or cleaning make sure the unit is completely cool, the control knobs are turned to the OFF position, and the gas supply is shut off (as applicable and unless otherwise stated).
- Wear appropriate gloves and safety glasses during any servicing or cleaning.
- DO NOT spray any cleaner or liquids on the grill when hot.
- The grill **MUST** be cleaned regularly to prevent grease build-up and other food deposits. A clean and well maintained grill prevents the risk of grease build-up and grease fires.
- Verify proper operation after servicing or deep cleaning.
- See INSTALLATION, OPERATION, AND SAFETY INFORMATION section for additional related information.

### CLEANING YOUR GRILL

#### Before Each Use

1. **Inspect and clean the exterior surfaces of the unit:** With a cool grill, clean any dust, grease, splatter, or spills as needed with a damp clean cloth.

#### After Each Use

1. **Perform a burn-off and clean the cooking grids:** Operate the grill on high with the hood closed for 15 minutes to burn-off food and grease and allow for an easier cooking grid clean. Then turn OFF the grill and use a grill brush to clean the cooking grids of all residue. Use long-handled insulated BBQ tools and wear an insulated glove / oven mitt.
2. **Check and clean your drip tray:** When the grill is cool, carefully remove the drip tray and dispose of contents appropriately. If tray is equipped with a liner, dispose of the liner. Clean tray in a soapy water solution if needed. For tough deposits, a copper pad can be used. Rinse and dry completely. Replace a new liner and insert the tray back into the grill. Order more drip tray liners through your local dealer.
3. **Cover your grill:** Once the grill is dry and cool, cover your grill with a Fire Magic protective cover (not included).

#### Twice A Year (or as needed) - Deep Clean

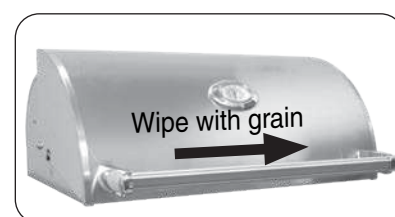
1. **Interior of grill:** In addition to cleaning the cooking grids and drip tray, a deep clean of the interior of the grill, burners, and all components **MUST** be performed twice year (or as needed depending on use). Refer to the CARE, CLEANING, & MAINTENANCE GUIDE manual provided with your grill, or simply scan the QR code on the right.



**Important:** The burner ports and carry-over ports/slots **MUST** be kept clean to ensure proper ignition and operation. The guide provides all details on cleaning.

2. **Exterior of grill:** With a cool grill, use a grill cleaner (or a soapy water solution) and a clean cloth to remove grease and dirt from the outside of the grill. For tough deposits, a copper pad can be used. Always wipe with the grain. Rinse and dry completely. Then follow up with a stainless steel cleaner and a clean cloth. **DO NOT** use other cleaners or chemicals.

If this routine cleaning is not performed, the stainless steel may become dull and develop surface rust (due to use and atmospheric conditions). If left uncleaned, significant damage and pitting may occur.



**Fig. 27-1** Wipe with grain

**Important:** **DO NOT** use steel wool, any other metal tools, or any other cleaners/chemicals to clean the exterior other than recommended above. Such items promote rust.

**Note:** Due to the nature of stainless steel, temperatures produced by the grilling process will cause discoloration. This can be reduced by routine cleaning.

## SERVICING AND CLEANING (cont.)

### For Environments High In Salt, Chloride, Or Other Corrosive Chemicals

When this grill is installed in a corrosive environment such as near the ocean (salt air), poolside (chlorine and/or pool chemicals) or any other location with exposure to high salt/chloride content or corrosive chemicals/solutions, it will be more susceptible to corrosion and **MUST** be maintained/cleaned **more frequently**.

- **DO NOT** store any corrosive chemicals (chlorine, hydrochloric acid, fertilizer, etc.) near your stainless steel grill.
- **DO NOT** allow any corrosive materials (masonry dust, debris, etc.) to settle on your stainless steel grill.
- These environments, chemicals, and materials may cause the 304 stainless steel to develop surface rust and consequently pitting. Under these conditions the grill exterior **MUST** be cleaned at least monthly. Inspect your grill often and clean accordingly.

### Protecting Your Grill

An optional Fire Magic protective cover will protect your grill when not in use. Install the cover on a cool and dry grill. **DO NOT** cover a damp grill. During high humidity or after rainy conditions, remove the cover to dry trapped moisture if present. (If the cover is installed over a damp grill it can cause surface rust.)

Ensure that the **INSIDE** of the cover is DRY before putting it back on the grill.

### CONTROL PANEL REMOVAL

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

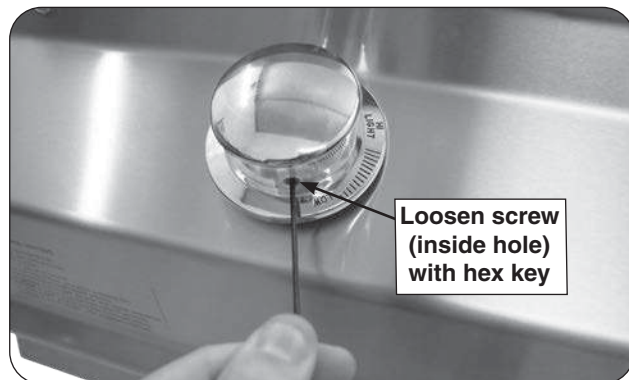
1. Turn the control knobs to the **OFF** position and turn off the gas supply to the unit.
2. Remove the rubber grip from a control knob (see Fig. 29-1).
3. Insert the included .078" (2mm) hex key through the small hole located on the side of the knob and loosen the screw (see Fig. 29-2).
4. Pull the control knob from the stem to fully remove.
5. Repeat for the other knobs.
6. Remove the drip tray.
7. 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). See Fig. 29-3. Retain the screws for later re-installation.
8. Carefully remove the control panel by lifting and pulling the control panel from the frame (see Fig. 29-4).

**Note:** Ensure the cooking grid locking channel remains attached to the control panel when reinstalling. See **INSTALLATION - SECURE THE COOKING GRIDS** section for details.

**WARNING:** During reinstallation: prior to opening the gas shut-off valve, be sure the control knobs are in the OFF position.



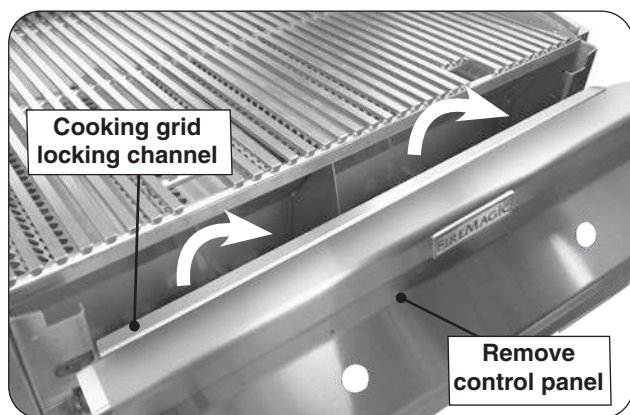
**Fig. 29-1** Rubber grips removal



**Fig. 29-2** Loosen screw to free knob



**Fig. 29-3** Screws removal

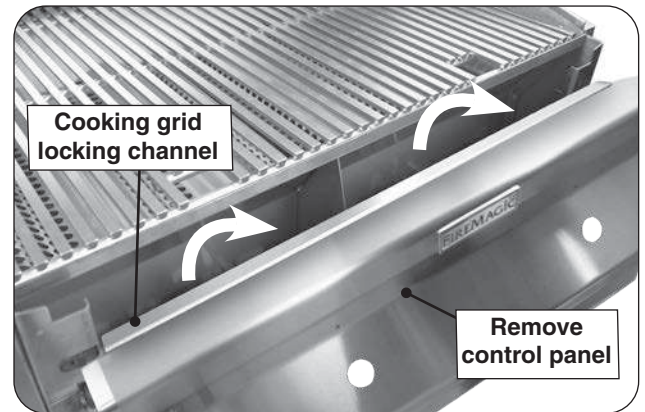


**Fig. 29-4** Control panel removal

### COOKING GRID REMOVAL

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

1. Turn the control knobs to the **OFF** position and turn off the gas supply to the unit.
2. Remove the control panel. Ensure the cooking grid locking channel is removed along with the control panel (see Fig. 30-1). See the **CONTROL PANEL REMOVAL** section for details.
3. Carefully remove the cooking grids (see Fig. 30-2).



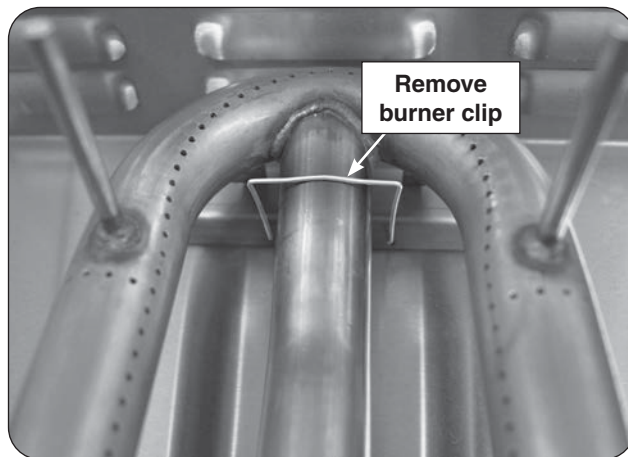
**Fig. 30-1** Control panel / grid locking channel removal



**Fig. 30-2** Cooking grids removal

### BURNER REMOVAL

1. Remove the control panel, cooking grids, and flavor grids and set them aside. See the CONTROL PANEL REMOVAL and COOKING GRID REMOVAL sections for details.
  2. Locate the burner clip (located over the rear center tube of the burner) and slightly pinch and remove the clip from the burner support. See Fig. 31-1.
  3. Carefully lift the burner from the burner support anchor peg holes and out from the hole in the forward fire wall.
  4. To replace the burner, slide 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 burner support anchor peg holes.
- Note:** It is critical to the continued safe functioning of the burners that the orifices are centered and completely inside the burner gas inlets.
5. Re-install the burner clip around the burner and into the holes in the burner support.
  6. Replace the flavor grids, cooking grids, and control panel.



**Fig. 31-1** Main burner removal

### WARMING RACK REMOVAL

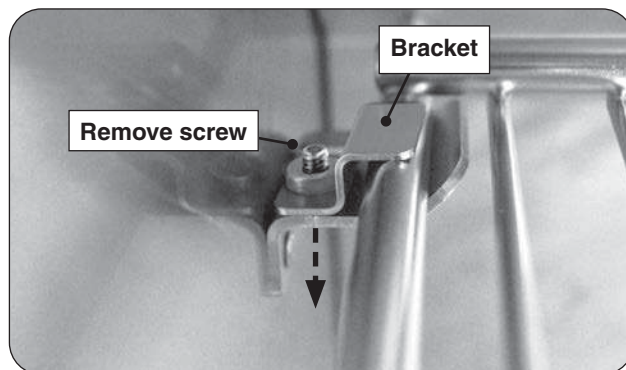
**Note:** Wear heat-resistant gloves if necessary.

1. Locate the warming rack locking brackets found on the rear left and right side of the warming rack (see Fig. 31-2).
2. Use a short-handled Phillips screwdriver to remove the screw from a locking bracket. Then remove the bracket. See Fig. 31-3.
3. Repeat for the other bracket.
4. Carefully remove the warming rack by lifting the front end up from the hooks, then outward.

**Important:** When reinstalling, place cardboard (or similar) on the cooking grid surface to prevent the screws from falling down into the unit.



**Fig. 31-2** Warming rack locking brackets



**Fig. 31-3** Warming rack locking bracket removal

### 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 behind the control panel.

**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 (see CONTROL PANEL REMOVAL section), 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. 32-1, A). Holding the cap vertical (see Fig. 32-1, 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.

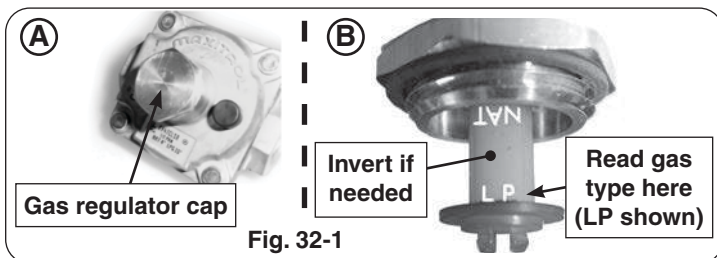


Fig. 32-1

#### 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 MODEL SPECIFICATIONS TABLE, Table 1 at the beginning of this document to determine the proper orifice sizes for each burner.

**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.**

1. Remove the control panel, cooking grids, and flavor grids and set them aside. See the CONTROL PANEL REMOVAL and COOKING GRID REMOVAL sections for details.
2. Remove the burners. See BURNER REMOVAL section for details.

3. Use a  $\frac{3}{8}$ " hex nut driver to remove the exposed orifice (Fig. 32-3). Check orifice. If needed, replace it with the correct orifice for the new gas.

4. Replace the burners.

**Note:** It is critical to the continued safe functioning of the burners that the orifices are centered and completely inside the burner gas inlets.

5. Replace the flavor grids, cooking grids, and control panel.

#### 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.**

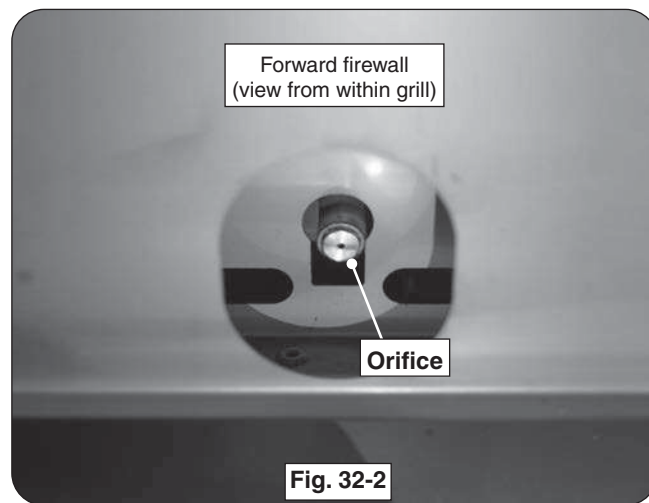


Fig. 32-2

### AIR SHUTTER ADJUSTMENT / BURNER FLAME INSPECTION

**Important:** Air shutters are preset at the factory (see Table 1 in MODEL SPECIFICATIONS). However, gas conversion, altitude, or other local conditions may make it necessary to adjust the air shutters.

**Note:** To verify proper settings, the flames of the burners should be visually checked for proper flame appearance and behavior. Light the grill with the burner(s) on HI setting. Allow at least 2 minutes to burn. See below and Fig. 33-1. The flames should:

- be blue and stable with little to no yellow tips
- burn quietly, and appear to touch the burner

If the flames appear unstable, yellow, noisy, or lift away from the burner, follow the steps below.

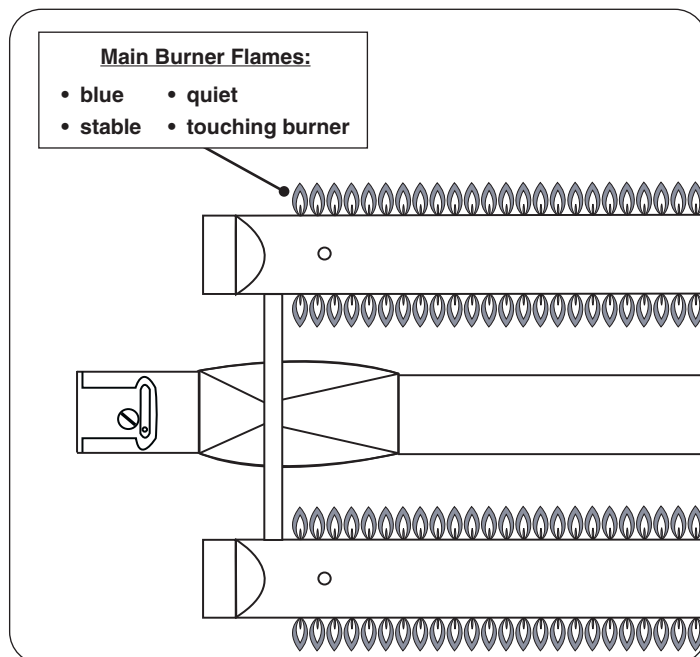
#### Main Burner

**Begin with a completely cool grill.** Remove the burners (see BURNER REMOVAL section). First ensure the burner orifice, ports, venturi tubes, and air shutter are all clear of any insect or insect nests. If they are blocked, clean them, reinstall the burners, and reinspect the flames. If adjustment is still needed, **allow the unit to cool**, remove the burner, and proceed to the steps below.

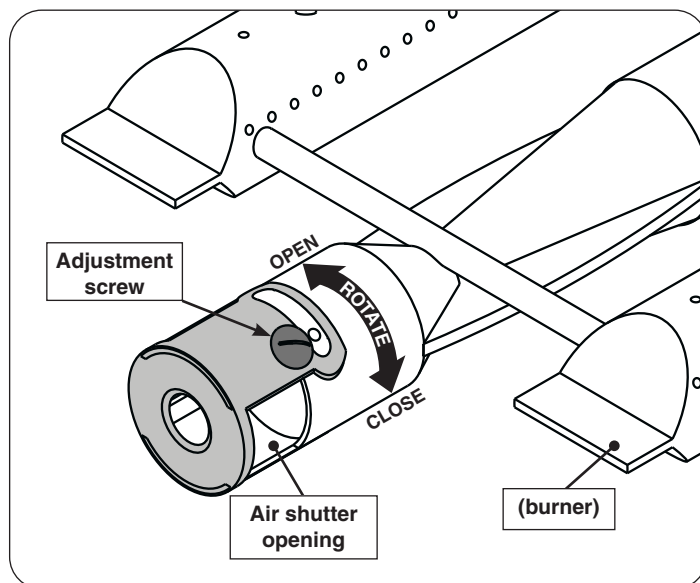
1. To adjust the air shutter, loosen the adjustment screw with a flathead screwdriver. Then rotate the shutter to open or close it. See Fig. 33-2 for details.
  - Begin with the appropriate factory setting for your model (see Table 1 if needed).
  - If the flames were excessively yellow (insufficient air), open the shutter to allow more air to the burner. If the flames were noisy and lifting off the burner in some areas, close the shutter to allow less air to the burner. Adjust accordingly.

**Note:** Make minimal adjustments. Very small changes result in major changes in flame appearance.

2. Reinstall the burner, light the grill with the burner on HI, and observe the flames. If needed, allow the grill to completely cool, and repeat the adjustment process until the proper flame is achieved.
3. Once finished, allow the grill to completely cool, remove the burner, and tighten the adjustment screw. Reinstall the burner and all other components that were removed.
4. Repeat for all other main burners as needed.



**Fig. 33-1** Proper flame appearance



**Fig. 33-2** Main burner air shutter adjustment detail

### VALVE "LOW" SETTING ADJUSTMENT

Stability of the "low" setting on the burners may vary due to wind direction, grill configuration, and grill position. If your burner goes out when set on low, the valve "low" setting needs adjustment.

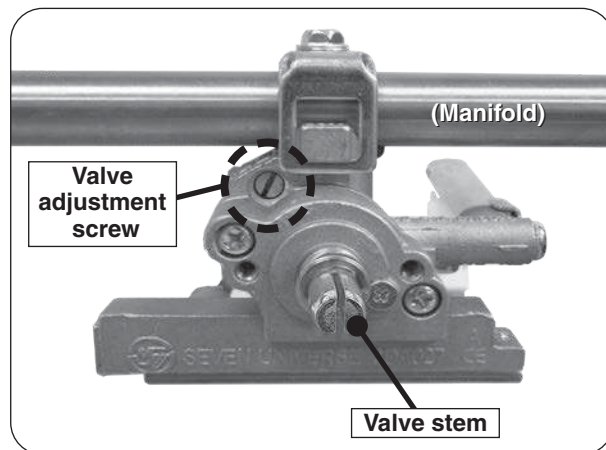
**Note:** Adjustments MUST only be performed by a qualified professional service technician.

#### To adjust the valve "low" setting:

1. Ensure the unit is completely cool and the knobs are in the OFF position.
2. Remove the control panel, cooking grids, and flavor grids and set them aside. See the CONTROL PANEL REMOVAL and COOKING GRID REMOVAL sections for details.
3. Re-install the control knobs on the valve stems with the control panel removed.
4. Light the burner on HIGH, then turn the burner to LOW setting. While the burner is lit, remove the control knob from the valve.
5. Locate the FLATHEAD adjustment screw found above the valve stem and below the manifold (see Fig. 34-1).
6. Using a flathead screwdriver, slowly turn the adjustment screw a little at a time (30° to 45°) in either direction. Adjust the screw as needed until the flame is approximately 1/4" in height from all the burner ports, and the flames are stable.

**CAUTION:** Only adjust the FLATHEAD screw. Adjusting other screws may result in a dangerous gas leak.

7. Once the appropriate setting is reached, re-install the control knob and shut off the burner valve.
8. Repeat this procedure for other burner valves, if needed.
9. Re-install the flavor grids, cooking grids, control panel, and any other components that were removed.



**Fig. 34-1** Valve adjustment screw location

## 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. Improper air shutter adjustment</li> <li>2. No spark generated at the valve</li> <li>3. Low gas pressure</li> <li>4. Front carry-over port</li> <li>5. Igniter malfunction</li> <li>6. Igniter electrode sparking to firebox and not to flame tube</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust air shutters.</li> <li>2. Retry to light. If ignition failure continues, contact dealer for valve replacement.</li> <li>3. Have the gas co. check supply pressure.</li> <li>4. Clean burner ports.</li> <li>5. Contact dealer for replacement.</li> <li>6. Adjust flame tube to ensure it receives the spark.</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 a qualified professional service technician check for proper gas supply, setup, and pressure.</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 MULTI-USER GRILLS AND ACCESSORIES LIMITED WARRANTY

When used in a multi-user setting\* including but not limited to apartment complexes, multi-family dwelling complexes, schools, hotels, fire stations, police stations, etc.

\*Excluding restaurants and settings where the grill usage is primarily commercial.

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

Fire Magic® Stainless steel grill housing, burners, stainless steel cooking grids, valves, inner liners and manifold assemblies are warranted for **FIVE (5) YEARS**.

Fire Magic® exterior Glass Fiber Reinforced Concrete (GFRC) grill island systems are warranted for **ONE (1) YEAR**.

All other components, except batteries, 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. This warranty is valid only with proof of purchase, commence on the date of purchase, and terminates (both as to original and any replacement products) on the anniversary date of the original purchase of the product per 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 Installation and Owner's Manual, accidental damage, improper handling, improper storage, improper installation, **lack of required routine maintenance** (as specified in the Installation and Owner's Manual), electrical damage, local gas impurities or failure to protect against combustibles. Product must be installed (and gas must be connected) as specified in the Installation and Owner's Manual 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. Warrantied 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,  
AND CLICK ON PRODUCT REGISTRATION. THANK YOU FOR YOUR PURCHASE.**

### COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

**This appliance is approved for installation in the state of Massachusetts subject to the following requirements: Install this appliance in accordance with 248 C.M.R., the Rules and Regulations Governing Plumbers and Gas Fitters. The installer or service agent must be a plumber or gas fitter licensed in the Commonwealth of Massachusetts. The flexible gas line connector used must not exceed 36 inches (92 centimeters) in length. The individual manual shut-off must be a T-handle type valve, listed and approved by the state of Massachusetts.**

<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>	<b>Nat. / L.P.</b>	<b>Air Shutter:</b>	_____
					<b>Inspector:</b>	_____

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