



# NATURAL GAS CONVERSION KIT

Model # 4539937  
FOR OUTDOOR USE ONLY

This Natural Gas Conversion Kit can be used **ONLY** with  
Dual Fuel™ grills.

If you have questions or need assistance during assembly, please call 1-800-241-7548

	<b>WARNING</b>	
<ul style="list-style-type: none"><li>• Read and follow all Safety, Assembly, and Use and Care Instructions in this Guide before assembling and cooking with this grill.</li><li>• Failure to follow all instructions in this Use and Care Guide may lead to fire or explosion, which could result in property damage, personal injury or death.</li></ul>		



**CONVERSION-READY**  
**CONVERSIÓN-INMEDIATA**  
Easily converts from (LP) liquid propane to (NG) natural gas  
Conversión fácil de propano líquido (LP) al gas natural (GN)  
Visit the grill accessory aisle for a complete kit.  
Visite el pasillo de accesorios para parrillas para adquirir un kit completo.

Estimated assembly time: 45-60 minutes

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Protected under one or more of the following U.S. Patents: 4,989,579; 5,421,319; 5,458,309; 5,579,755; 5,996,573; 6,114,666; 6,135,104; 6,209,533; 6,279,566; 6,331,108; 6,484,900; 6,526,876; 6,595,197; 6,640,799; 6,640,803; 6,729,873; 6,739,473; 6,749,424; 6,863,100; 6,935,327; 6,951,213; 6,992,935; 7,047,590; D364,535; D372,637; D373,701; D377,735; D383,035; D397,910; D405,643; D406,005; D406,009; D413,043; D413,229; D414,982; D415,388; D416,164; D416,441; D417,587; D417,588; D422,516; D423,876; D428,303; D430,772; D435,396; D436,004; D438,059; D438,060; D438,427; D439,110; D442,505; D443,179; D443,354; D443,464; D447,384; D447,385; D447,909; D448,610; D448,614; D448,615; D448,616; D448,975; D449,492; D450,544; D451,759; D454,028; D454,031; D455,205; D455,206; D456,202; D456,222; D456,223; D457,789; D458,520; D458,760; D458,802; D459,088; D459,148; D459,149; D459,161; D459,163; D459,586; D459,943; D460,312; D460,313; D460,318; D461,359; D465,123; D465,693; D466,307; D466,439; D466,752; D473,414; D474,371; D477,498; D477,501; D477,504; D477,506; D477,746; D478,471; D478,472; D480,914; D491,410; D494,009; D494,413; D498,523; D500,359; D504,048; D530,098; D535,000; Canada: 87,743; 87,744; 97,504; 99,355; 102,037; 104,200; 2,315,567; 2,336,036; France: 010,231; 010,422; 010,590; 010,849; 1,089,646; Germany: 1,089,646; South Korea: 384,565; China: 99,127,066.5; United Kingdom: 2,099,402; 1,089,646. Other Patents Pending.

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TM REVISION 00

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### Call Grill Service Center for Help and Parts

- To order non-warranty replacement parts or accessories please visit us on the web at [www.charbroil.com](http://www.charbroil.com) or call 1-800-241-7548 and one of our friendly and knowledgeable agents will be glad to assist you.

### Safety Symbols

The symbols and boxes shown below explain what each heading means. Read and follow all of the messages found throughout the manual.

	<b>WARNING</b>	
<b>WARNING:</b> Indicates an potentially hazardous situation which, if not avoided, could result in death or serious injury.		

	<b>CAUTION</b>	
<b>CAUTION:</b> Indicates a potentially hazardous situation or unsafe practice which, if not avoided, may result in minor or moderate injury.		

	<b>DANGER</b>	
<b>DANGER:</b> Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.		

## USE AND CARE

### Natural Gas Connections and Service Regulators Above 1/2 psi.

Prior to 1998, all residual gas service regulators were set with an outlet pressure of 7 inches water column.

In the 1998 edition of NFPA 54, the National Fuel Gas Code, a change was made allowing service regulators of 2 and 5 psi.

With this change it was also required that an in line regulator be connected between the service regulator and the appliance regulator if the 2 or 5 psi system is used. This additional regulator is not supplied with the product.

It is possible for a consumer, making the connection themselves, or a plumber, not checking, to tap into a 2 or 5 psi line. If a pressure of 2 psi or greater is supplied to the appliance regulator on certain grills it will shut down and not deliver any gas to the grill. Other concerns are the quick disconnect socket and hose which are only rated to 1/2 psi.

If the quick disconnect socket, hose, and grill are properly connected and still not getting gas, delivery pressure needs to be verified. If pressure is greater than 1/2 psi, make sure that an in line regulator is present.

Once the grill has been over-pressured, the regulator may or may not have been damaged. The best practice is to replace the regulator.

### **CAUTION:**

Read and follow all safety statements, assembly instructions, and use and care directions before attempting to assemble and cook.

### **INSTALLER/ASSEMBLER:**

Leave this manual with consumer.

### **CONSUMER:**

Keep this manual for future reference.

### **WARNING:**

Failure to follow all manufacturer's instructions could result in serious personal injury and/or property damage.

### **CAUTION:**

Some parts may contain sharp edges – especially as noted in the manual! Wear protective gloves if necessary.



## WARNING



### CALIFORNIA PROPOSITION 65

1. Combustion by-products produced when using this product contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

2. This product contains chemicals, including lead and lead compounds, known to the State of California to cause cancer, birth defects or other reproductive harm.

**Wash your hands after handling this product.**



## WARNING



**Do not attempt to repair or alter the hose/valve/regulator for any “assumed” defect. Any modification to this assembly will void your warranty and create the risk of a gas leak and fire. Use only authorized replacement parts supplied by manufacturer.**

### Installation Safety Precautions

- Use grill, as purchased, only with LP (propane) gas and the regulator/valve assembly supplied. A conversion kit must be purchased for use with natural gas.
- Grill installation must conform with local codes, or in their absence of local codes, with either the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Natural Gas and Propane Installation Code, CSA B149.1, or Propane Storage and Handling Code, B149.2, or the Standard for Recreational Vehicles, ANSI A 119.2/NFPA 1192, and CSA Z240 RV Series, Recreational Vehicle Code, as applicable.*
- All electrical accessories (such as rotisserie) must be electrically grounded in accordance with local codes, or *National Electrical Code, ANSI / NFPA 70 or Canadian Electrical Code, CSA C22.1.* Keep any electrical cords and/or fuel supply hoses away from any hot surfaces.
- This grill is safety certified for use in the United States and/or Canada only. Do not modify for use in any other location. Modification will result in a safety hazard.

### Food Safety

Food safety is a very important part of enjoying the outdoor cooking experience. To keep food safe from harmful bacteria, follow these four basic steps:

**Clean:** Wash hands, utensils, and surfaces with hot soapy water before and after handling raw meat and poultry.

**Separate:** Separate raw meats and poultry from ready-to-eat foods to avoid cross contamination. Use a clean platter and utensils when removing cooked foods.

**Cook:** Cook meat and poultry thoroughly to kill bacteria. Use a thermometer to ensure proper internal food temperatures.

**Chill:** Refrigerate prepared foods and leftovers promptly.

For more information call: USDA Meat and Poultry Hotline at 1-800-535-4555 in Washington, DC (202) 720-3333, 10:00 am-4:00 pm .

### How To Tell If Meat Is Grilled Thoroughly

Meat and poultry cooked on a grill often browns very fast on the outside. Use a meat thermometer to be sure food has reached a safe internal temperature, and cut into food to check for visual signs of doneness.

Whole poultry should reach 165° F. Juices should run clear and flesh should not be pink.

Hamburgers made of any ground meat or poultry should reach 160 F, and be brown in the middle with no pink juices. Beef, veal and lamb steaks, roast and chops can be cooked to 145° F. All cuts of pork should reach 160° F.

NEVER partially grill meat or poultry and finish cooking later. Cook food completely to destroy harmful bacteria.

When reheating takeout foods or fully cooked meats like hot dogs, grill to 165° F, or until steaming hot.

**WARNING:** To ensure that it is safe to eat, food must be cooked to the minimum internal temperatures listed in the table on next page.



## DANGER



**If you smell gas:**

1. Shut off 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 your fire department.



## CAUTION



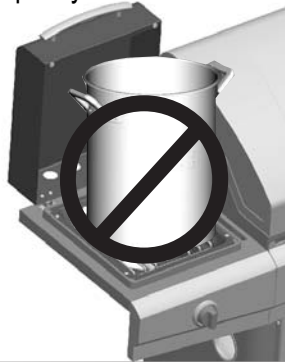
**For residential use only. Do not use for commercial cooking.**

USDA* Safe Minimum Internal Temperatures		
Fish		145°F
Pork		160°F
Egg Dishes		160°F
Steaks and Roasts of Beef, Veal or Lamb		145°F
Ground Beef, Veal or Lamb		160°F
Whole Poultry (Turkey, Chicken, Duck, etc.)		165°F
Ground or Pieces Poultry (Chicken Breast, etc.)		165°F

\*United States Department of Agriculture

## CAUTION

Using pots larger than 6 quarts in capacity could exceed weight limit of the side burner shelf, resulting in failure of grill cart components.



## WARNING

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

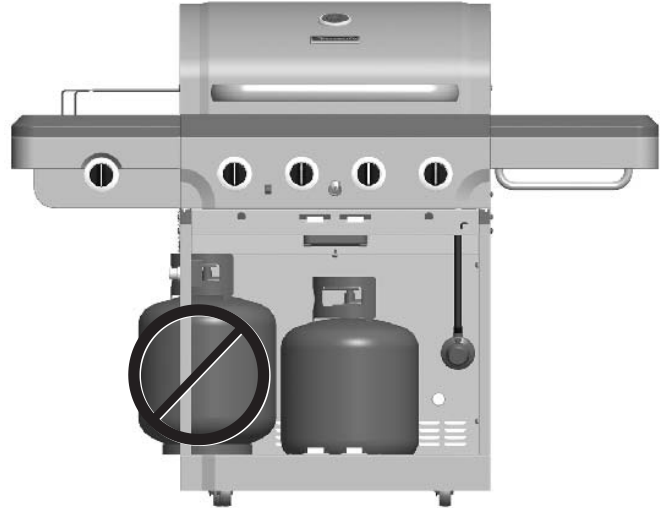
## USE AND CARE



# DANGER



**NEVER** store a spare cylinder under or near the appliance or in an enclosed area.



Never fill a cylinder beyond 80% full.

An over filled or improperly stored cylinder is a hazard due to possible gas release from the safety relief valve.

If you see, smell or hear gas escaping, immediately get away from the LP cylinder/appliance and call your fire department.

This could cause an intense fire with risk of property damage, serious injury or death.

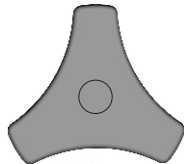
### LP Cylinder Removal, Transport and Storage

1. Turn OFF all control knobs and LP cylinder valve. Turn coupling nut counterclockwise by hand only - do not use tools to disconnect. Loosen cylinder screw beneath bottom shelf, then lift LP cylinder up and out of cart. Install safety cap onto LP cylinder valve. Always use cap and strap supplied with valve. **Failure to use safety cap as directed may result in serious personal injury and/or property damage.**
2. A disconnected LP cylinder in storage or being transported must have a safety cap installed (as shown). Do not store an LP cylinder in enclosed spaces such as a carport, garage, porch, covered patio or other building. Never leave an LP cylinder inside a vehicle which may become overheated by the sun.
3. Do not store an LP cylinder in an area where children play.

## LP Cylinder

The LP cylinder used with your grill must meet the following requirements:

1. Use LP cylinders only with these required measurements: 12" (30.5cm) (diameter) x 18" (45.7cm) (tall) with 20 lb. (9kg) capacity maximum.
2. LP cylinders must be constructed and marked in accordance with specifications for LP cylinders of the U.S. Department of Transportation (DOT) or for Canada, CAN/CSA-B339, cylinders, spheres and tubes for transportation of dangerous goods. Transport Canada (TC). See cylinder collar for marking.
3. LP cylinder valve must have:
  - Type 1 outlet compatible with regulator or grill.
  - Safety relief valve.
  - UL listed Overfill Protection Device (OPD). This OPD safety feature is identified by a unique triangular hand wheel. Use only LP cylinders equipped with this type of valve.
4. LP cylinder must be arranged for vapor withdrawal and include collar to protect LP cylinder valve. Always keep LP cylinder in upright position during use, transit or storage.



OPD Hand Wheel



LP cylinder in upright position for vapor withdrawal

## LP (liquefied Petroleum Gas)

LP gas is nontoxic, odorless and colorless when produced. **For Your Safety**, LP gas has been given an odor (similar to rotten cabbage) so that it can be smelled.

LP gas is highly flammable and may ignite unexpectedly when mixed with air.

### LP Cylinder Filling

Use only licensed and experienced dealers.

LP dealer **must purge new cylinder** before filling.

Dealer should NEVER fill LP cylinder more than 80% of LP cylinder volume. Volume of propane in cylinder will vary by temperature.

A frosty regulator indicates gas overfill. Immediately close LP cylinder valve and call local LP gas dealer for assistance.

Do not release liquid propane (LP) gas into the atmosphere. This is a hazardous practice.

To remove gas from LP cylinder, contact an LP dealer or call a local fire department for assistance. Check the telephone directory under "Gas Companies" for nearest certified LP dealers.

## LP Cylinder Exchange

Many retailers that sell grills offer you the option of replacing your empty LP cylinder through an exchange service. Use only those reputable exchange companies that inspect, precision fill, test and certify their cylinders. **Exchange your cylinder only for an OPD safety feature-equipped cylinder as described in the "LP Cylinder" section of this manual.**

Always keep new and exchanged LP cylinders in upright position during use, transit or storage.

**Leak test new and exchanged LP cylinders BEFORE connecting to grill.**

### LP Cylinder Leak Test

#### For your safety

Leak test must be repeated each time LP cylinder is exchanged or refilled.

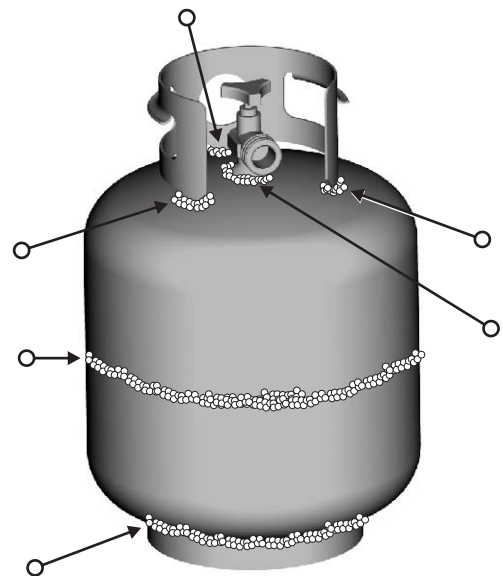
Do not smoke during leak test.

Do not use an open flame to check for gas leaks.

Grill must be leak tested outdoors in a well-ventilated area, away from ignition sources such as gas fired or electrical appliances. During leak test, keep grill away from open flames or sparks.

Use a clean paintbrush and a 50/50 mild soap and water solution. Brush soapy solution onto areas indicated by arrows in figure below.

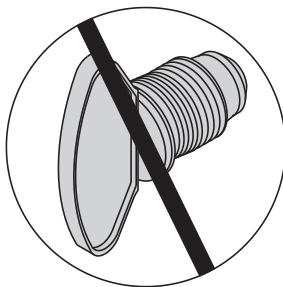
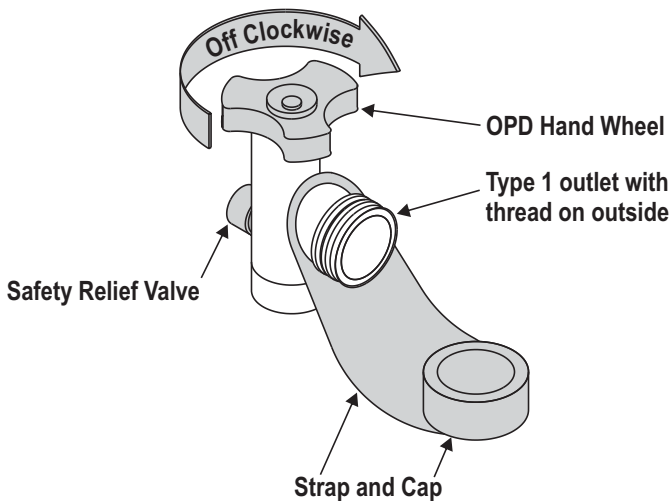
**Do not use household cleaning agents.** Damage to gas train components can result.



	<b>WARNING</b>	
<b>If "growing" bubbles appear do not use or move the LP cylinder. Contact an LP gas supplier or your fire department!</b>		

## Connecting Regulator to the LP Cylinder

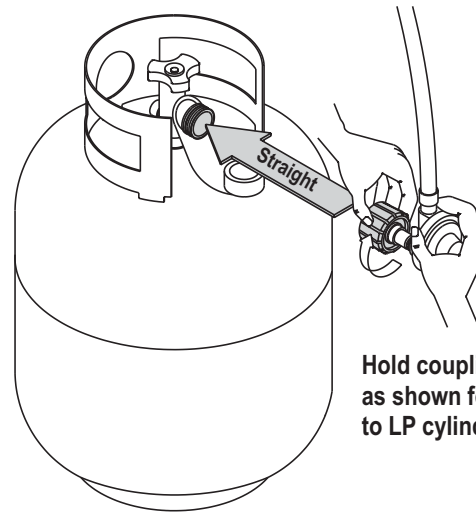
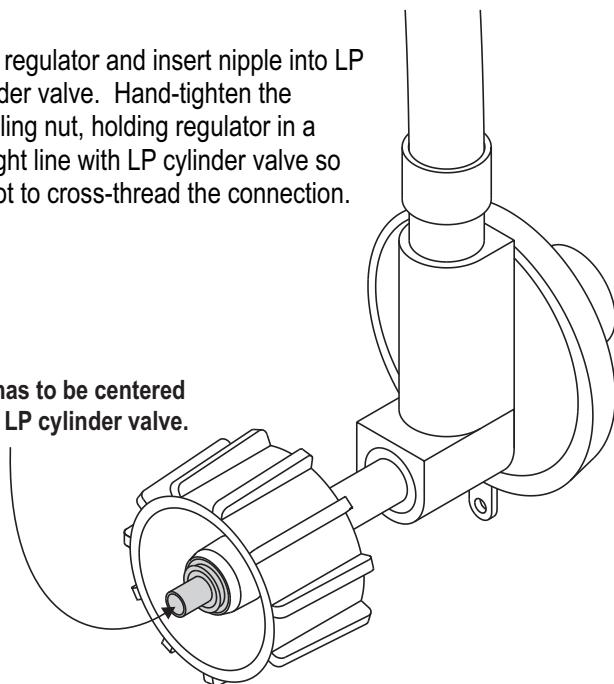
1. LP cylinder must be properly secured onto grill. (Refer to assembly section of your grill manual).
2. Turn all control knobs to the OFF position.
3. Turn LP cylinder OFF by turning hand wheel clockwise to a **Full Stop**.
4. Remove the protective cap from LP cylinder valve. Always use cap and strap supplied with valve.



**Do not use a POL transport plug (plastic part with external threads)! It will defeat the safety feature of the valve.**

5. Hold regulator and insert nipple into LP cylinder valve. Hand-tighten the coupling nut, holding regulator in a straight line with LP cylinder valve so as not to cross-thread the connection.

**Nipple has to be centered into the LP cylinder valve.**



**Hold coupling nut and regulator as shown for proper connection to LP cylinder valve.**

## Connecting Regulator to the LP Cylinder (Con't.)

6. Turn the coupling nut clockwise and tighten to a **Full Stop**. The regulator will seal on the back-check feature in the LP cylinder valve, resulting in some resistance. **An additional one-half to three-quarters turn is required to complete the connection. Tighten by hand only - do not use tools.**

### NOTE:

If you cannot complete the connection, disconnect regulator and repeat steps 5 and 6. If you are still unable to complete the connection, **do not use this regulator!**

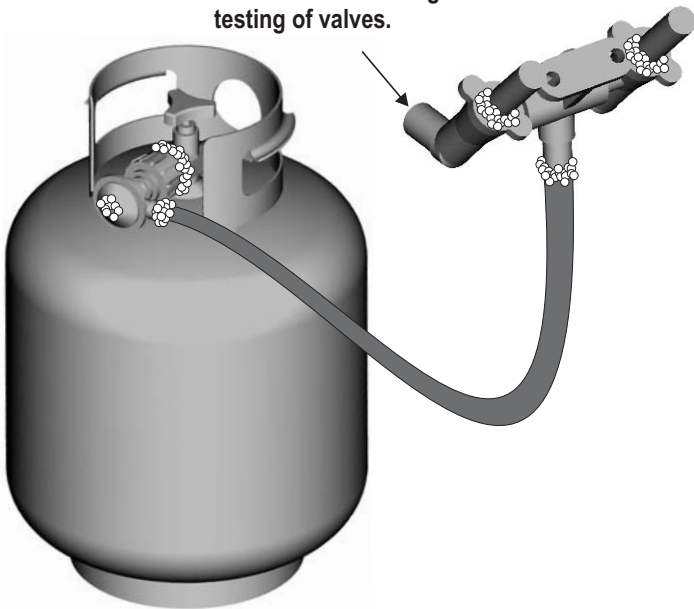
	<b>DANGER</b>	
<p>Do not insert any tool or foreign object into the valve outlet or safety relief valve. You may damage the valve and cause a leak. Leaking propane may result in explosion, fire, severe personal injury, or death.</p>		

	<b>WARNING</b>	
<p>Outdoor gas appliance is not intended to be installed in or on a boat.          Outdoor gas appliance is not intended to be installed in or on an RV.          Never attempt to attach this grill to the self-contained LP gas system of a camper trailer or motor home.          Do not use grill until leak-tested.          If a leak is detected at any time, <b>STOP</b> and call the fire department.          If you cannot stop a gas leak <b>IMMEDIATELY</b> close LP cylinder valve and call LP gas supplier or your fire department!</p>		

## Leak Testing Valves, Hoses and Regulator

1. Turn all control knobs to the OFF position.
2. Be sure regulator is tightly connected to LP cylinder.
3. Completely open LP cylinder valve by turning hand wheel counterclockwise. If you hear a **rushing sound**, turn gas off immediately. There is a major leak at the connection. **Correct before proceeding.**
4. Brush soapy solution onto areas circled below.

Never remove threaded orifice at end of valve during leak testing of valves.

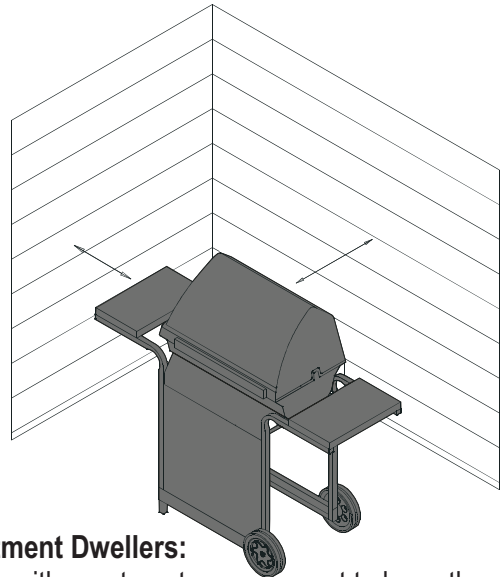


5. If "growing" bubbles appear there is a leak. Close LP cylinder valve immediately and retighten connections. If leaks cannot be stopped do not try to repair. Call for replacement parts. Order new parts by giving the serial, model number and name and part number of items needed (see parts list) to the Grill Service Center at 1-888-430-7870.
6. Always close LP cylinder valve after performing leak test by turning hand wheel clockwise.



### For Safe Use of Your Grill and to Avoid Serious Injury:

- Do not let children operate or play near grill.
- Keep grill area clear and free from materials that burn.
- Do not block holes in sides or back of grill.
- Check burner flames regularly.
- Use grill only in well-ventilated space. **NEVER** use in enclosed space such as carport, garage, porch, covered patio, or under an overhead structure of any kind.
- Do not use charcoal or ceramic briquets in a gas grill. (Unless briquets are supplied with your grill)
- Use grill at least 3 ft. from any wall or surface.** Maintain 10ft. clearance to objects that can catch fire or sources of ignition such as pilot lights on water heaters, live electrical appliances, etc.



### Apartment Dwellers:

Check with apartment management to learn the requirements and fire codes for using an LP gas grill in your apartment complex. If allowed, use outside on the ground floor with a three (3) foot clearance from walls or rails. Do not use on or under balconies.



**NEVER attempt to light burner with lid closed. A buildup of non-ignited gas inside a closed grill is hazardous.**

**Never operate grill with LP cylinder out of correct position specified in assembly instructions.**



**Always close LP cylinder valve and remove coupling nut before moving LP cylinder from specified operation position.**

## Safety Tips

- Before opening LP cylinder valve, check the coupling nut for tightness.
- When grill is not in use, turn off all control knobs and LP cylinder valve.
- Never move grill while in operation or still hot.
- Use long-handled barbecue utensils and oven mitts to avoid burns and splatters.
- Maximum load for sideburner and side shelf is 10 lbs.
- The grease tray **must** be inserted into grill and emptied after each use. Do not remove grease tray until grill has completely cooled.
- Clean grill often, preferably after each cookout. If a bristle brush is used to clean any of the grill cooking surfaces, ensure no loose bristles remain on cooking surfaces prior to grilling. It is not recommended to clean surfaces while grill is hot.
- If you notice grease or other hot material dripping from grill onto valve, hose or regulator, turn off gas supply at once. Determine the cause, correct it, then clean and inspect valve, hose and regulator before continuing. Perform a leak test.
- Keep ventilation openings in cylinder enclosure (grill Cart) free and clean of debris.
- Do not store objects or materials inside the grill cart enclosure that could block the flow of combustion air to the underside of either the control panel or the firebox bowl.
- The regulator may make a humming or whistling noise during operation. This will not affect safety or use of grill.
- If you have a grill problem see the "Troubleshooting Section" of your grill manual.
- If the regulator frosts, turn off grill and LP cylinder valve immediately. This indicates a problem with the cylinder and it should not be used on any product. Return to supplier!

	<h2>CAUTION</h2>	
<p>Putting out grease fires by closing the lid is not possible. Grills are well ventilated for safety reasons.</p> <p>Do not use water on a grease fire. Personal injury may result. If grease fire develops, turn knobs and LP cylinder off.</p> <p>Do not leave grill unattended while preheating or burning off food residue on Hi. If grill has not been regularly cleaned, a grease fire can occur that may damage the product.</p>		




	<h2>WARNING</h2>	
<p>Turn controls and gas source or tank OFF when not in use.</p>		

	<h2>CAUTION</h2>	
<p>If ignition does NOT occur in 5 seconds, turn the burner controls OFF, wait 5 minutes and repeat the lighting procedure. If the burner does not ignite with the valve open, gas will continue to flow out of the burner and could accidentally ignite with risk of injury.</p>		

## Ignitor Lighting

**Do not lean over grill while lighting.**




**Light burners one at a time.**

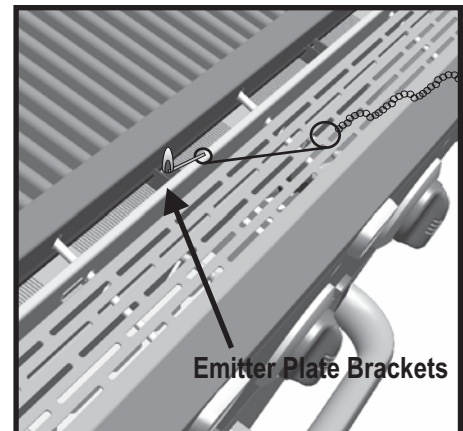
1. Turn **OFF**  all Gas Burner Control Valves.
2. Turn **ON** gas source or tank.
3. Open lid during lighting.
4. To ignite turn burner control valve to .
5. Push and hold **ELECTRONIC IGNITOR** button until the burner lights.
6. If ignition does not occur in 5 seconds, turn the burner controls **OFF** , wait 5 minutes, and repeat the lighting procedure.
7. Ignite remaining burners by repeating steps 4 through 6 for each burner.

If ignition still does not occur, follow match-lighting instructions.

## Main Burner Match-Lighting



**Do not lean over grill while lighting.**

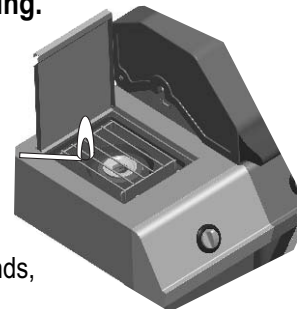
1. Turn **OFF**  all Gas Burner Control Valves.
2. Open lid during lighting. Turn **ON** gas source or tank.
3. Place match into match holder (hanging from side of cart). Light match, place into lighting hole for desired burner to light. The lighting holes are located at the front of the cooking grates between the emitter plate mounting brackets.
4. Push in and turn control knob to high  position for the desired burner to light. Be sure burner lights and stays lit.
5. If ignition does not occur in 5 seconds, turn the burner controls **OFF** , wait 5 minutes, and repeat the lighting procedure.
6. Ignite remaining burners by repeating steps 3 through 5 for each burner.



## Side Burner Match-Lighting





**Do not lean over grill while lighting.**

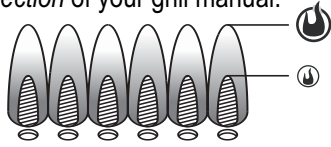
1. Open lid during lighting. Turn **ON** gas source or tank.
2. Place lit match near burner.
3. Turn sideburner knob to high  position.  
Be sure burner lights and stays lit.
4. If ignition does not occur in 5 seconds, turn the burner controls **OFF** , wait 5 minutes, and repeat the lighting procedure.






## Burner Flame Check

Remove cooking grates and troughs. Light burners, rotate knobs from  to . You should see a smaller flame in  position than seen on . Perform burner flame check on side burner, also. Always check flame prior to each use. If only low flame is seen refer to "Sudden drop or low flame" in the *Troubleshooting Section* of your grill manual.



## Turning Grill Off

Turn all knobs to **OFF**  position. Turn LP cylinder off by turning hand-wheel clockwise to a full stop.

## Ignitor Check

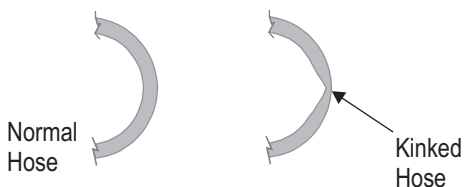
Turn Gas OFF at LP cylinder. Press and hold electronic ignitor button. "Click" should be heard and spark seen each time between collector box or burner and electrode. See "Troubleshooting" in your grill manual if no click or spark.

## Valve Check

**IMPORTANT: Make sure gas is OFF at LP cylinder before checking valves.** Knobs lock in **OFF** position. To check valves, first push in knobs and release, knobs should spring back. If knobs do not spring back, replace valve assembly before using grill. Turn knobs to **LOW** position then turn back to **OFF** position. Valves should turn smoothly.

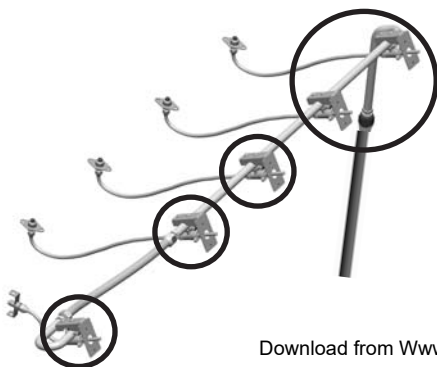
## Hose Check

Before each use, check to see if hoses are cut or worn. Replace damaged hoses before using grill. Use only valve/hose/regulator specified by manufacturer.



## Leak Testing

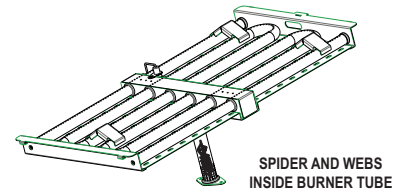
1. Turn all grill control knobs to **OFF**.
2. Be sure gas hose is tightly connected to gas source.
3. Completely open gas source. If you hear a *rushing sound*, turn gas off immediately. There is a major leak at the connection. **Correct before proceeding.**
4. Brush soapy solution onto area circled below.



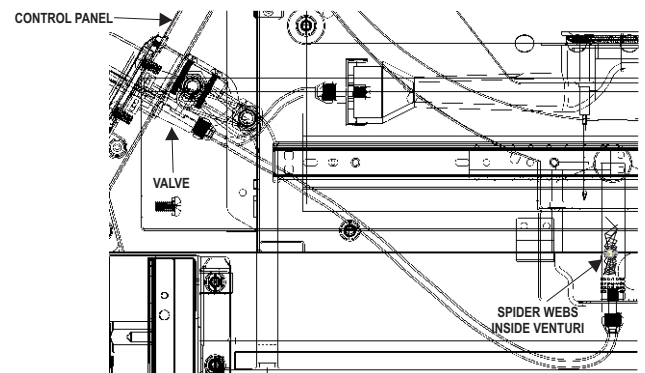
5. If "growing" bubbles appear, there is a leak. Close gas source immediately and tighten connection. **If leaks cannot be stopped do not try to repair.** Call for replacement parts. Order new parts by giving the serial, model number and name of items needed to the Grill Service Center at 1-888-430-7870.
6. Always close gas source after performing leak test.



## SPIDER ALERT!



*If you notice that your grill is getting hard to light or that the flame isn't as strong as it should be, take the time to check and clean the venturi's.*



In some areas of the country, spiders or small insects have been known to create "flashback" problems. The spiders spin webs, build nests and lay eggs in the grill's venturi tube(s) obstructing the flow of gas to the burner. The backed-up gas can ignite in the venturi behind the control panel. This is known as a flashback and it can damage your grill and even cause injury.

To prevent flashbacks and ensure good performance the burner and venturi assembly should be removed from the grill and cleaned before use whenever the grill has been idle for an extended period.

## General Grill Cleaning

Do not mistake brown or black accumulation of grease and smoke for paint. Interiors of gas grills are not painted at the factory (**and should never be painted**). Apply a strong solution of detergent and water or use a grill cleaner with scrub brush on insides of grill lid and bottom. Rinse and allow to completely air dry. **Do not apply a caustic grill/oven cleaner to painted surfaces.**

## General Grill Cleaning(con't.)

**Plastic parts:** Wash with warm soapy water and wipe dry. Do not use citrisol, abrasive cleaners, degreasers or a concentrated grill cleaner on plastic parts. Damage to and failure of parts can result.

**Porcelain surfaces:** Because of glass-like composition, most residue can be wiped away with baking soda/water solution or specially formulated cleaner. Use non-abrasive scouring powder of stubborn stains.

**Painted surfaces:** Wash with mild detergent or non-abrasive cleaner and warm soapy water. Wipe dry with a soft non-abrasive cloth.

**Stainless steel surfaces:** To maintain your grill's high quality appearance, wash with mild detergent and warm soapy water and wipe dry with a soft cloth after each use. Baker-on grease deposits may require the use of an abrasive plastic cleaning pad. Use only in direction of brushed finish to avoid damage. Do not use abrasive pad on areas with graphics.

**Cooking surfaces:** If a bristle brush is used to clean any of the grill cooking surfaces, ensure no loose bristles remain on cooking surfaces prior to grilling. It is not recommended to clean cooking surfaces while grill is hot.

## Cleaning the Burner Assembly

Follow these instructions to clean and/or replace parts of burner assembly or if you have trouble igniting grill.

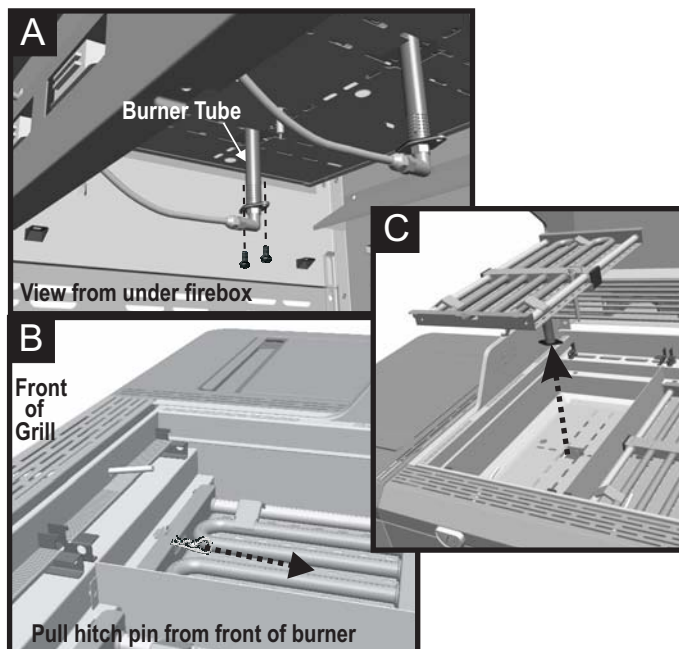
1. Turn gas OFF at control knobs and LP cylinder.
2. Remove grease tray from back of grill.
3. Open doors, remove tank heat shield and grease pan from underneath the firebox.
4. Remove screws that hold orifice holder with the burner tube.

### Figure A.

5. Remove cooking grates and radiator plates.
6. Remove hitch pin from front of the burner to disengage it.

### Figure B.

7. Carefully lift up the burner enough to expose the electrode wire. Detach wire from electrode underneath the burner.
8. Carefully take out the burner to clean. **Figure C.**
9. While cleaning, make sure that the igniter wire is not bent or broken.



We suggest three ways to clean the burner tubes. Use the one easiest for you.

- A. Bend a stiff wire (a light weight coat hanger works well) into a small hook. Run the hook through each burner tube several times.

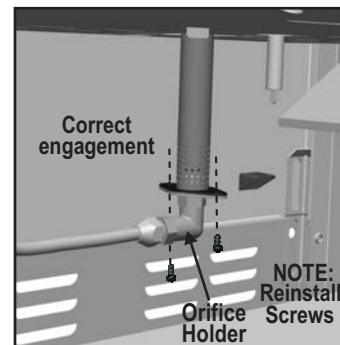


- B. Use a narrow bottle brush with a flexible handle (do not use a brass wire brush), run the brush through each burner tube several times.
- C. **Wear eye protection:** Use an air hose to force air into the burner tube and out the burner ports. Check each port to make sure air comes out each hole.

10. Wire brush entire outer surface of burner to remove food residue and dirt.
11. Clean any blocked ports with a stiff wire such as an open paper clip.
12. Check burner for damage, due to normal wear and corrosion some holes may become enlarged. If any large cracks or holes are found replace burner.

**VERY IMPORTANT: Burner tubes must be properly connected to orifice holders.**

**See illustration at right.**



13. After cleaning put the burner back into the firebox and attach the electrode wire onto the electrode connector under the burner.
14. Place burner into position and reinstall the hitch pin.
15. Under the firebox, attach the orifice holder with the burner tube with the screws previously removed.
16. Replace the grease pan, tank heat shield, grease tray, radiator plate and cooking grates.

## Storing Your Grill

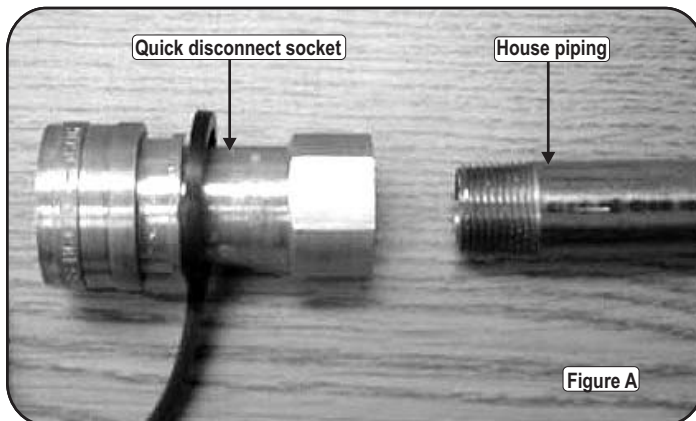
- Clean cooking grates.
- Store in a dry location.
- When LP cylinder is connected to grill, store outdoors in a well-ventilated space and out of reach of children.
- Cover grill if stored outdoors. Choose from a variety of grill covers offered by manufacturer.
- Store grill indoors ONLY if LP cylinder is turned off and disconnected, removed from grill and stored outdoors.
- When removing grill from storage, follow "Cleaning the Burner Assembly" instructions before starting grill.

This unit should be hard plumbed using components that meet National Fuel Gas Code.

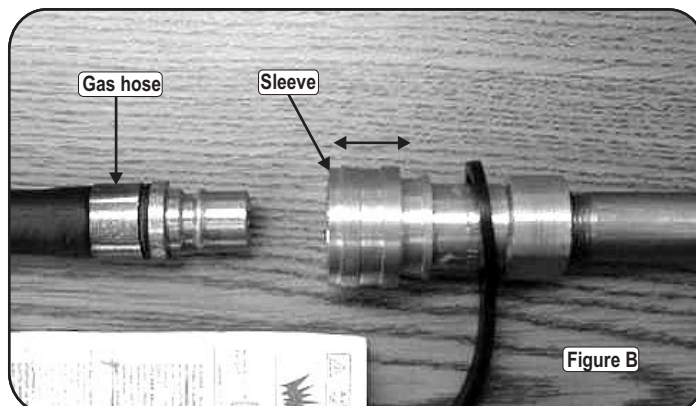


### Connecting Your Grill to the Natural Gas Source.

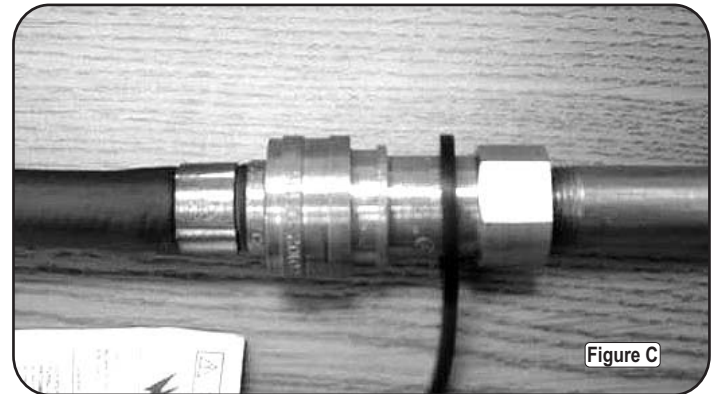
1. A professionally-installed shut-off valve between the supply piping and the socket is recommended, but not required, by the National Fuel Gas Code. Socket connection must be made outdoors.
2. Coat the gas supply pipe nipple with gas resistant pipe dope or approved teflon tape. Screw socket onto gas supply pipe (house gas source) as shown in **Figure A** below, and wrench-tighten.



3. Pull back the sleeve on the quick disconnect socket and insert the unattached end of the gas hose into the socket. Release the sleeve and continue pushing the hose into the socket until the sleeve snaps into the locked position. See **Figure B**.



4. When the quick disconnect socket and the gas hose are connected, a valve in the socket opens automatically to permit full gas flow. When the gas hose is disconnected, the valve in the socket instantly and positively shuts off the flow of gas. Because the valve in the socket positively shuts off the flow of gas, the grill can be disconnected from the gas source by disconnecting the gas hose from the quick disconnect socket. The socket should be left attached to the gas source (house piping). **Figure C**, below, shows properly connected hose and socket.

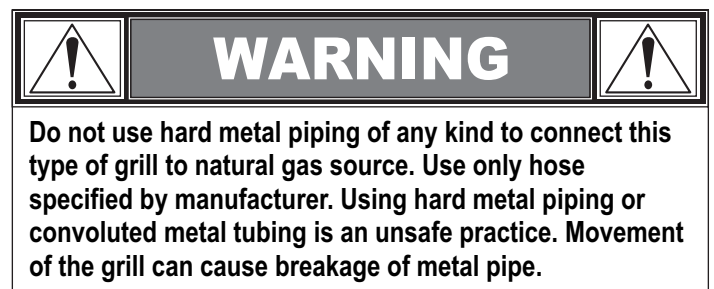


With proper assembly, the gas hose cannot be removed without pushing the quick disconnect sleeve back. To disconnect, push sleeve back and pull plug out of sleeve (this automatically shuts off gas).

**Please Note:** Hose and assembly are C.S.A. listed for natural gas, manufactured gas, mixed gas and for liquefied petroleum and for LP Gas-Air mixtures on basis of 0.64 specific gravity for 1000 BTU's per cubic foot of gas at 0.3 in. water column pressure drop. Only ANSI Z21.54 approved hoses should be used with this grill.

The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing on that system at test pressures in excess of 1/2 psig (3.5kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5kPa).



**PARTS LIST/DIAGRAM****Note: Illustrations are not to scale.**

<u>Key</u>	<u>Qty.</u>	<u>Description</u>	<u>Part No.</u>
A.....	3.....	Main Burner Natural Gas Bezel.....	80004350
B.....	1.....	Sideburner Natural Gas Bezel.....	80004350
C.....	1.....	Orifice Driving Tool.....	80004378
D.....	1.....	10 ft., 3/8" Natural Gas Hose.....	3496263
E.....	3.....	Main Burner NG Orifice (Yellow Dot- #55).....	80018401

**A****B****C****D**#55  
Yellow Dot**E****Tools required for assembly:**

Orifice Driving Tool - Provided

Adjustable Wrench - Not provided

Standard #2 Phillips Screwdriver - Not provided

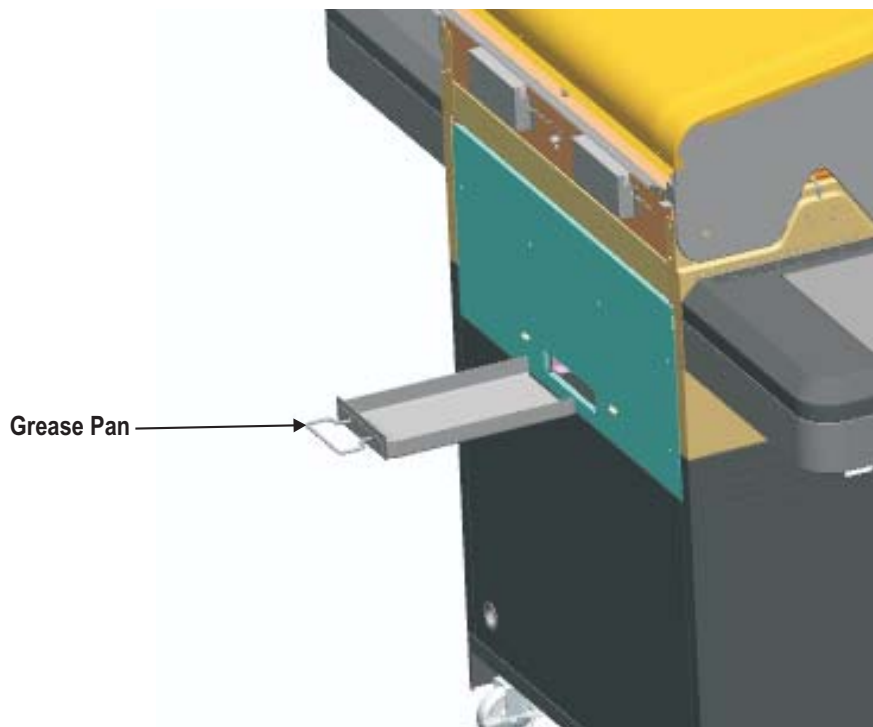
NOTE: Magnetic tip screwdrivers are recommended, but not required.

**Estimated assembly time: 45-60 minutes**

# Main Burner Conversion

1

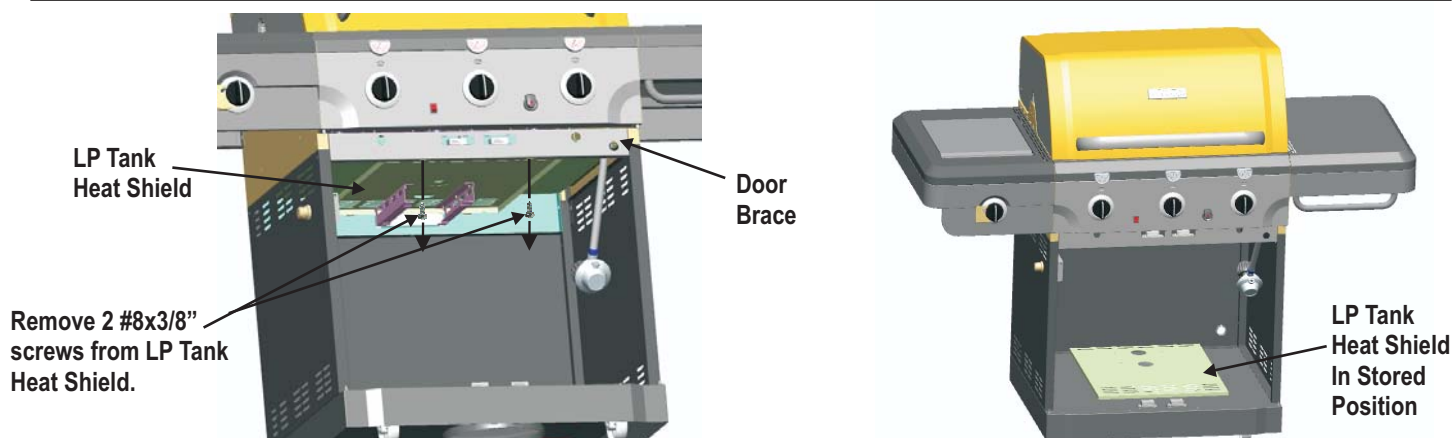
- First, make sure all control knobs are in the OFF position, LP tank valve is closed, and tank is disconnected from regulator and removed from grill.
- Next, from rear of grill, remove grease pan..



2

## Remove LP tank Heat Shield

- Open the cabinet doors. Remove any stored items from the cabinet.
- Using a #2 Phillips screwdriver, remove the two #8x3/8" screws that attach the LP Tank Heat Shield to the door brace. **Note: The rear of the LP Tank Heat Shield is held in place with tabs and slots.**
- Holding the front of the LP Tank Heat Shield, rotate it down and pull it forward to disengage the rear tabs from the back panel.
- Place the LP Tank Heat Shield on the bottom shelf for storage.



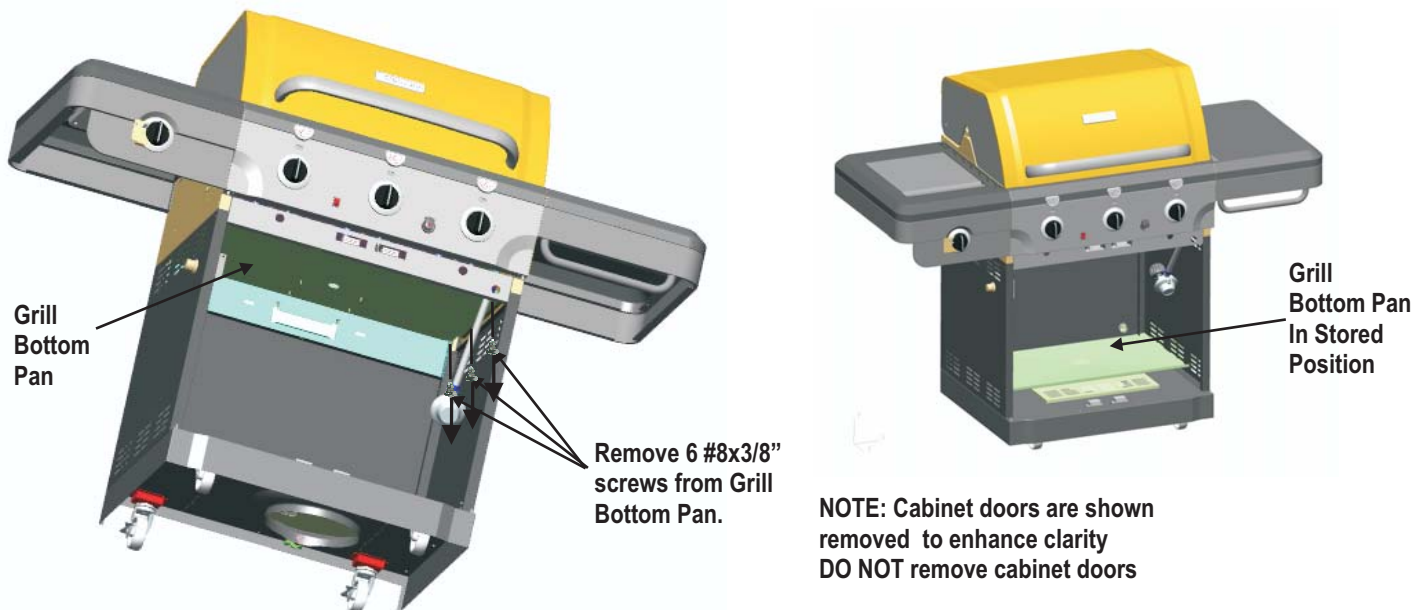
**NOTE: Cabinet doors are shown removed to enhance clarity  
DO NOT remove cabinet doors**

# Main Burner Conversion (Cont.)

3

## Remove Grill Bottom Pan

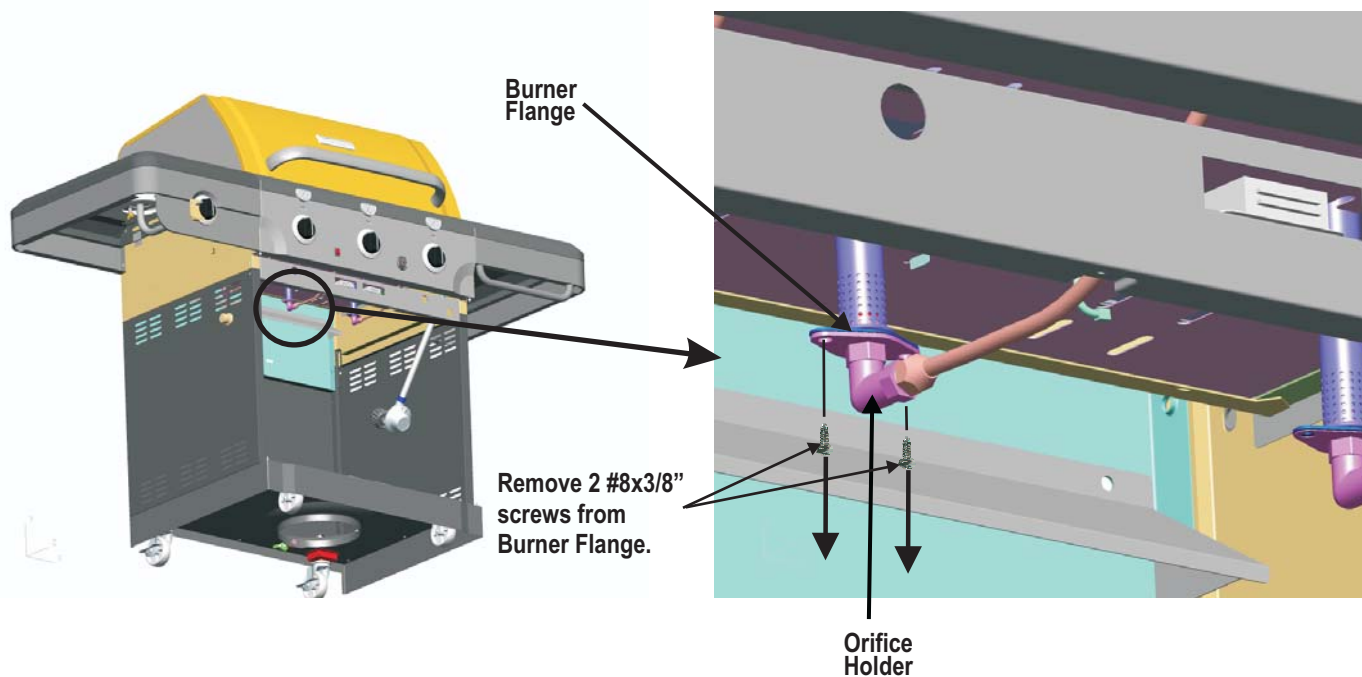
- Using a #2 Phillips screwdriver, remove the six #8x3/8" screws that attach the Grill Bottom Pan to the underside of grill.
- Holding the front of the Grill Bottom Pan, rotate it down and pull it forward to remove it.
- Place the Grill Bottom Pan on the bottom shelf for storage.



4

## Remove LP Orifices

- Using a #2 Phillips screwdriver, remove the two #8x3/8" screws that attach the Orifice Holder to the burner flange. Repeat for each Orifice Holder.

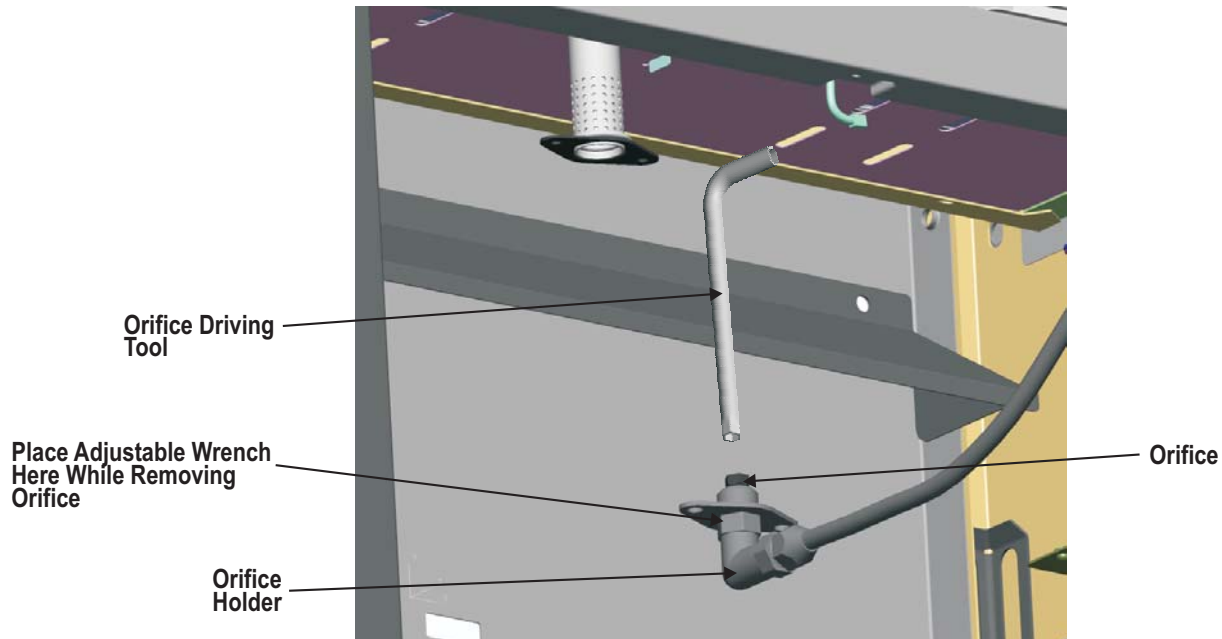


# Main Burner Conversion (Cont.)

5

## Remove LP Orifices

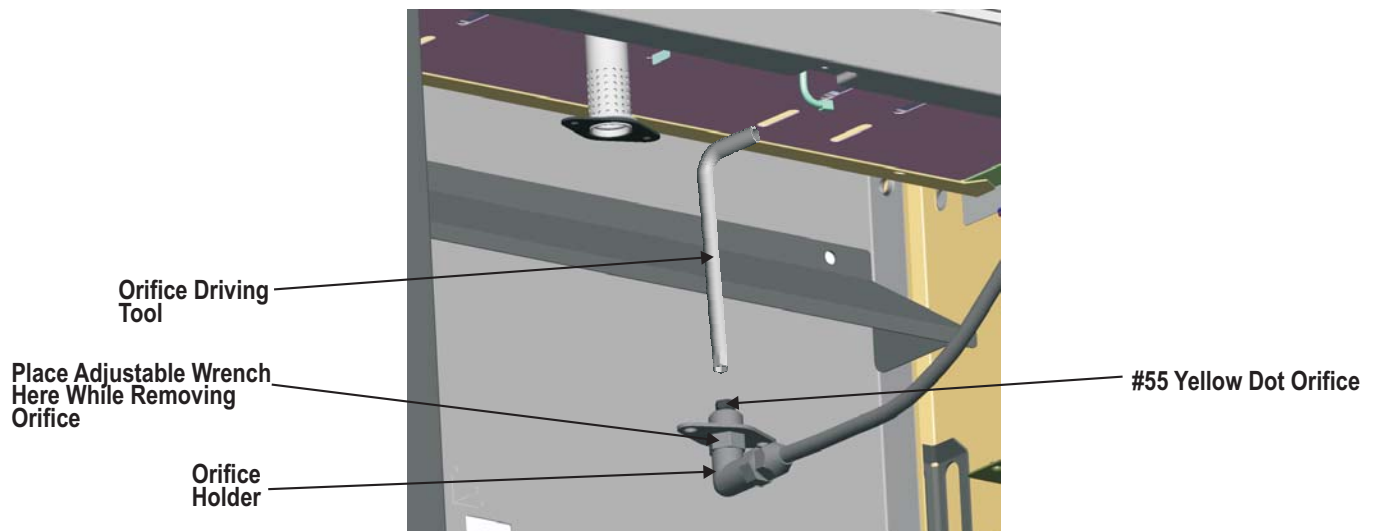
- Pull the Orifice Holder and the gas tubing away from the Burner Flange. The gas tubing is flexible and will allow sufficient clearance to complete this conversion. **DO NOT twist or crimp the Gas Tubing. To do so may result in Gas Leakage.**
- Using an adjustable wrench, not provided, place the wrench securely on the Orifice Holder in the area shown below.
- While holding the adjustable wrench firmly, use the Orifice Driving Tool to loosen and remove the Orifice by turning it counter-clockwise.
- Save the removed orifice for converting back to LP gas.



6

## Install Natural Gas (NG) Orifices

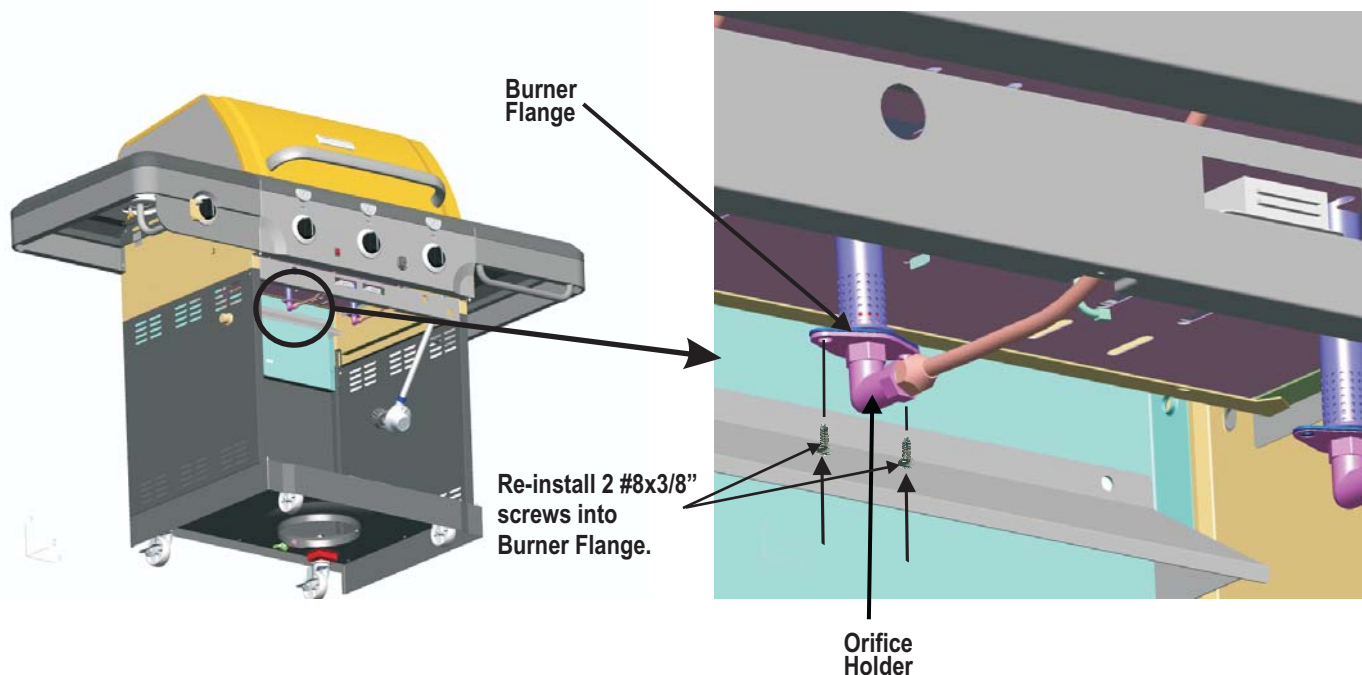
- Using your fingers, thread the Main Burner NG Orifice(#55 Yellow Dot Orifice) into each orifice holder 2-3 turns, clockwise.
- Using an adjustable wrench, not provided, place the wrench securely on the Orifice Holder in the area shown below.
- While holding the adjustable wrench firmly, use the Orifice Driving Tool to tighten each Orifice by turning it clockwise. **NOTE: Tighten the orifice sufficiently to prevent gas leakage. DO NOT over-tighten. DO NOT use any tool other than the Orifice Driving Tool!**



# Main Burner Conversion (Cont.)

7

- Using a #2 Phillips screwdriver, reinstall the two #8x3/8" screws that attach the Orifice Holder to the burner flange. **Repeat for each Orifice Holder. DO NOT over-tighten the Orifice Holder screws.**



8

## Replace Main Burner Bezels and Control Knobs

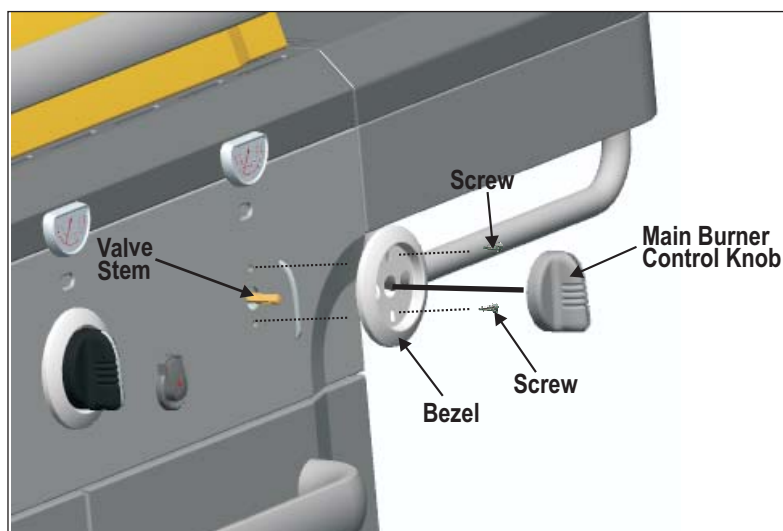
**NOTE: REPLACE ONE BEZEL AT A TIME. DO NOT REMOVE ALL THE BEZELS AT THE SAME TIME.**

- Pull the Burner Control Knobs off of Valve Stems.
- Remove screws and washers that secure each Bezel to the Control Panel. Remove Bezels. Save removed Bezels for converting back to LP Tank Gas.
- Install new Natural Gas Bezels provided with Kit (see illustration below) in place of old Bezels onto Control Panel, and secure using previously removed screws and washers. **Assure proper alignment with control knob before fully tightening. Note: New bezels will change the rotation for the control knob to properly control ignition and flames for your grill.**
- Press Control Knobs back onto Valve Stems. Make adjustments needed to Bezels for free movement of Control Knobs.



**Natural Gas Bezel  
80004350**

**NOTE: Replace only one  
bezel at a time!**



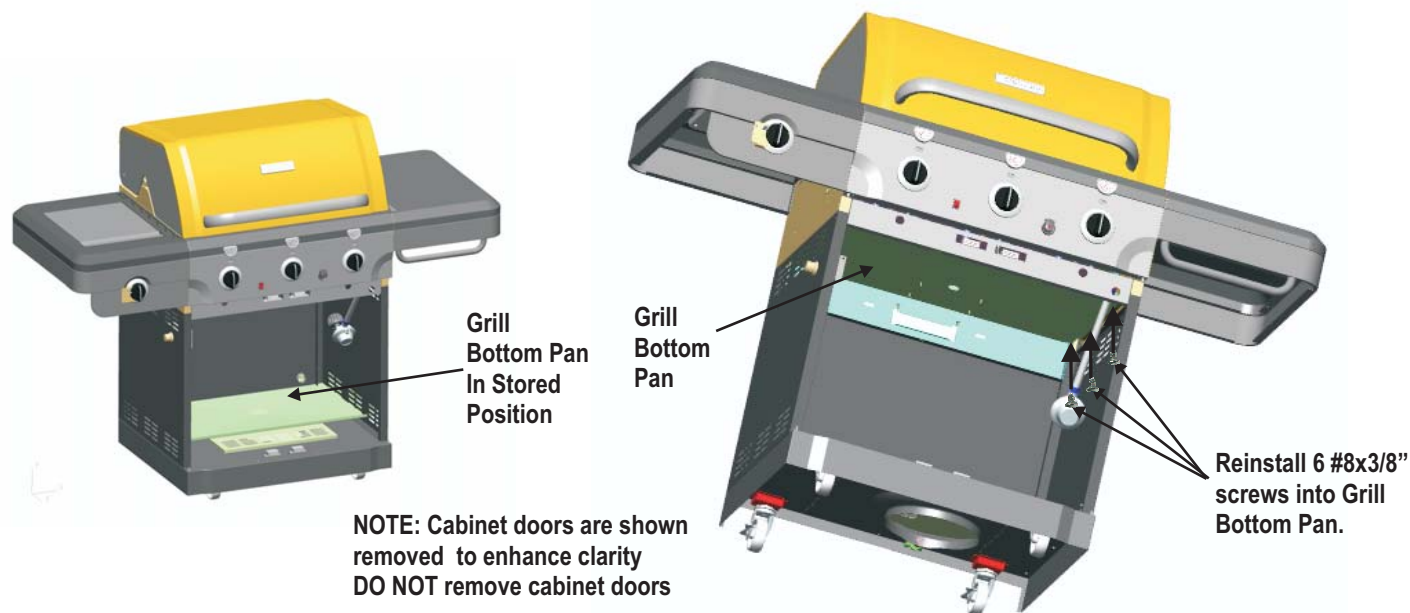


# Main Burner Conversion (Cont.)

9

## Reinstall Grill Bottom Pan

- Holding the front of the Grill Bottom Pan, rotate it up and push it backwards to reposition the Grill Bottom Pan.
- Using a #2 Phillips screwdriver, reinstall the six #8x3/8" screws that attach the Grill Bottom Pan to the underside of grill. **DO NOT over-tighten the screws.**

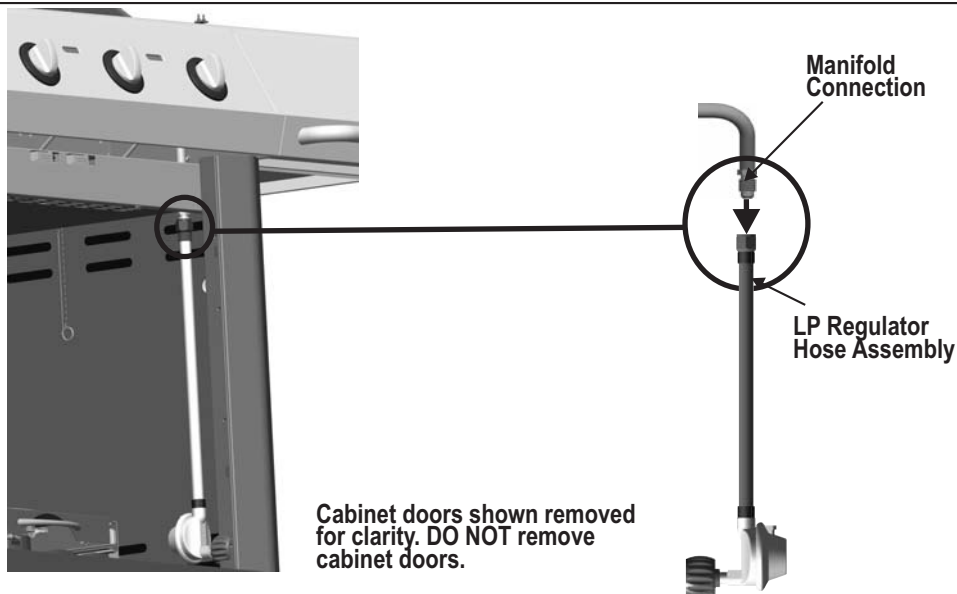


Before reinstalling Tank Heat Shield proceed to "Natural Gas Hose Conversion" below.

# Natural Gas Hose Conversion

10

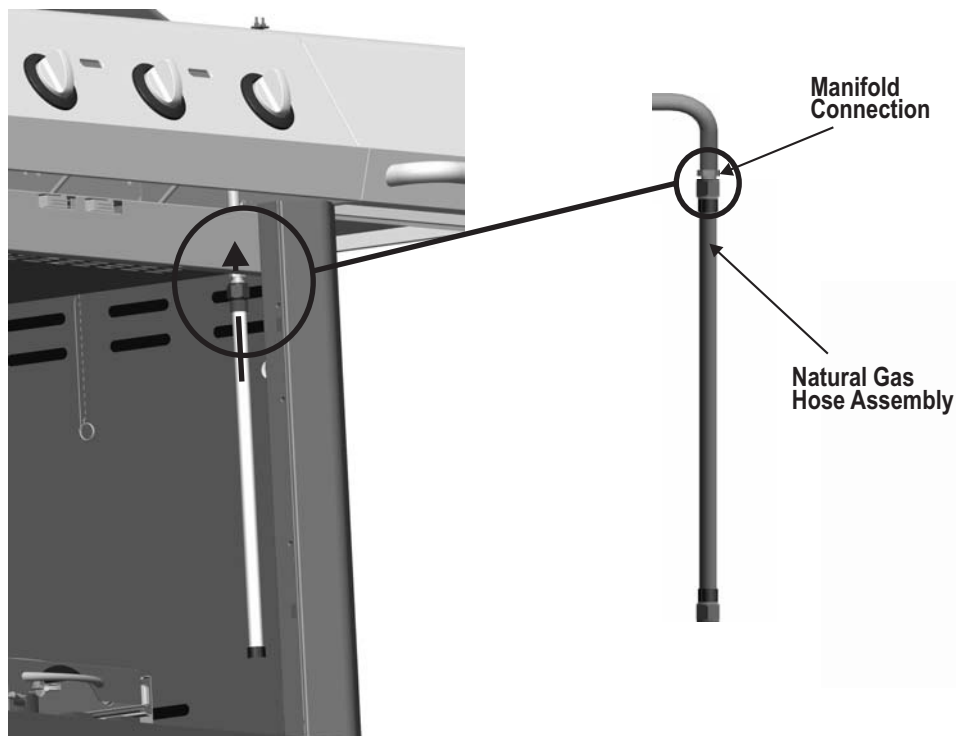
- Manifold connection is located on the right hand side and toward the front and inside of the cart.
- Using a wrench, not provided, remove LP Regulator Hose Assembly from Manifold Connection. Save removed LP Manifold Connection for converting back to LP Tank Gas.



# Natural Gas Hose Conversion (Con't.)

11

- Secure the Natural Gas Hose Assembly using an adjustable wrench, not provided, to Manifold Connection.

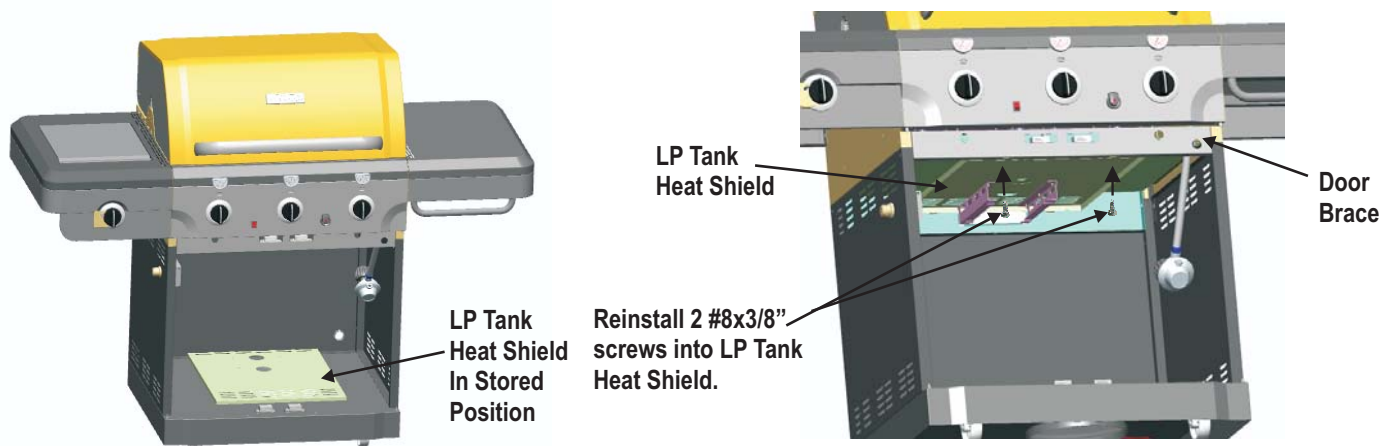


# Main Burner Conversion (Cont.)

12

## Reinstall LP tank Heat Shield

- Insert tabs without screw holes (at rear of heat shield) into back panel slots.
- Align the tabs with screw holes at the front of the heat shield to the door brace.
- Carefully insert the #8x3/8" screws through the tabs and into the door brace..
- Using a # 2 Phillips screwdriver, not provided, tighten both screws. DO NOT over-tighten the screws.



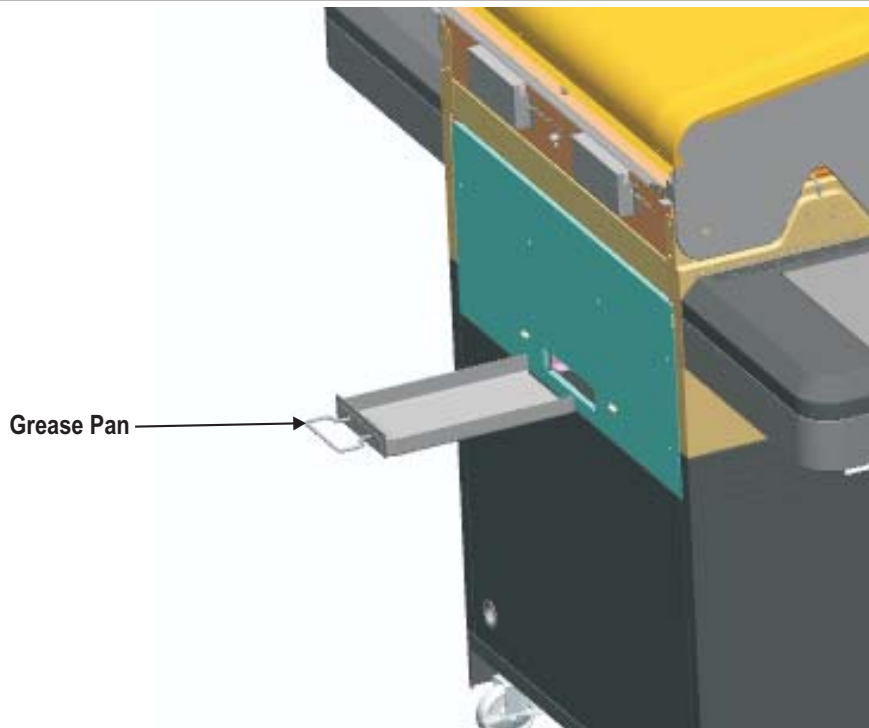
**NOTE:** Cabinet doors are shown removed to enhance clarity  
DO NOT remove cabinet doors

# Main Burner Conversion (Cont.)

13

## Reinstall Grease Pan

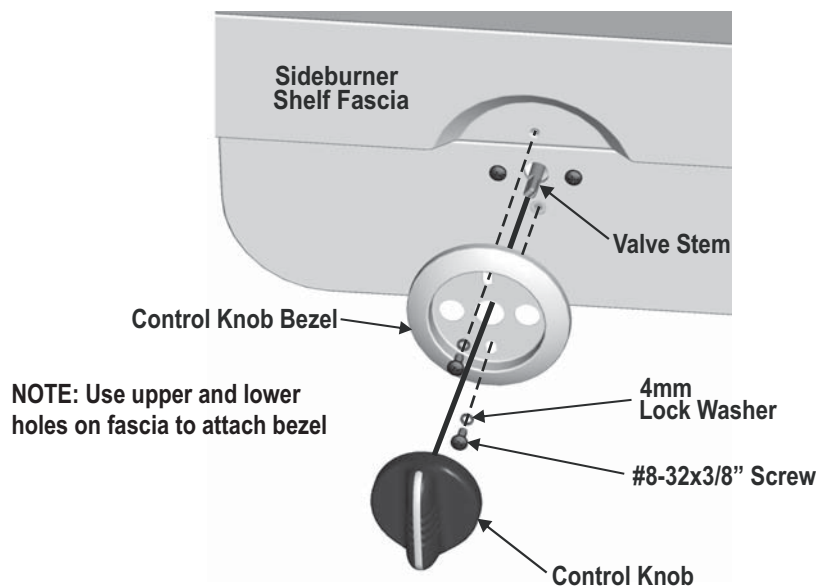
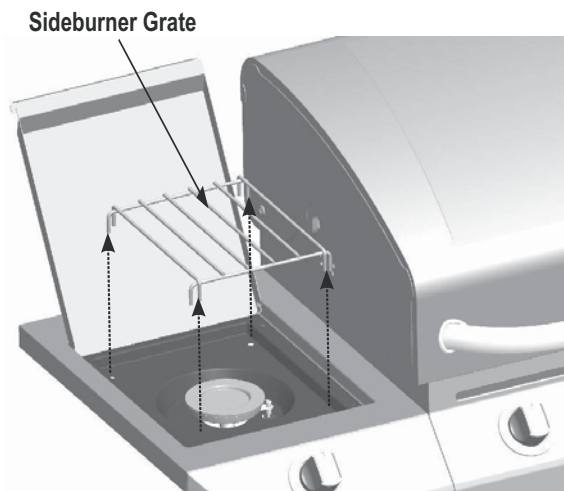
- Reinstall Grease Pan into the rear of the grill.



# Sideburner Conversion

14

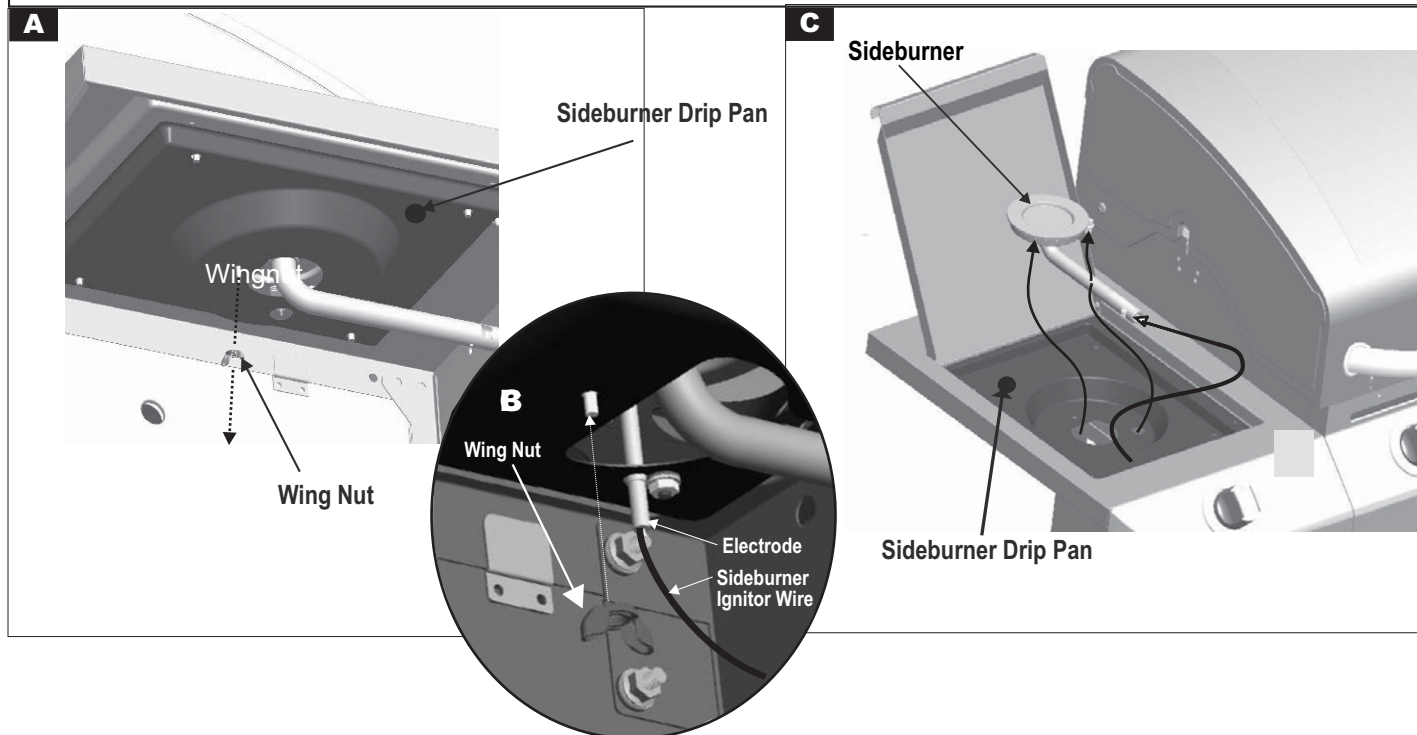
- Open the sideburner cover. Remove the cooking grate.
- Pull the sideburner control knob off the valve stem. Remove the existing bezel by removing the two screws and two lock washers securing bezel to shelf fascia. Save the bezel for converting back to LP gas. Save screws and lock washers for reuse.
- Removing these screws will cause the gas valve to disengage from the back of the shelf fascia. This is normal.



# Sideburner Conversion (Con't.)

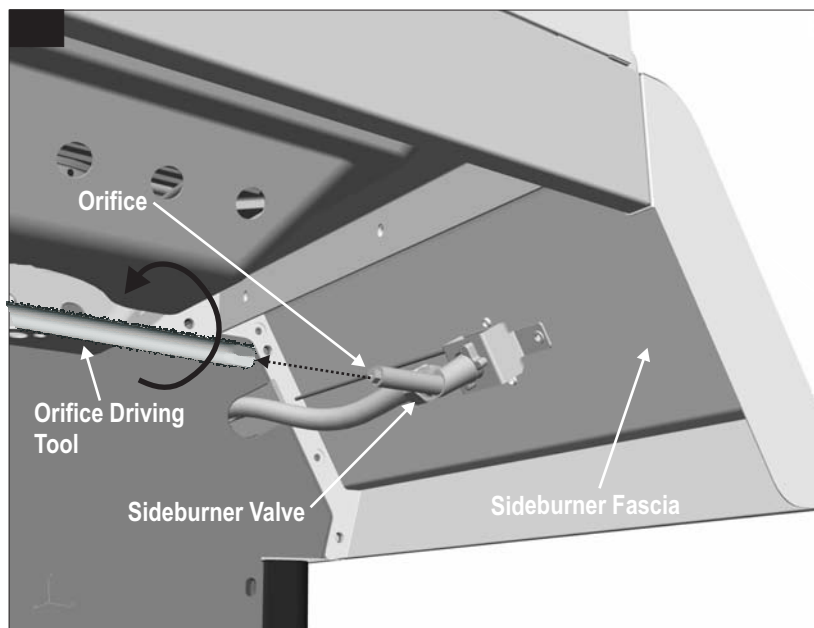
15

- Remove the wingnut from the burner as **Shown in illustration A.**
- Remove the Ignitor wire from the electrode as **Shown in illustration B.**
- Remove the burner from the sideburner pan as **Shown in illustration C.**



16

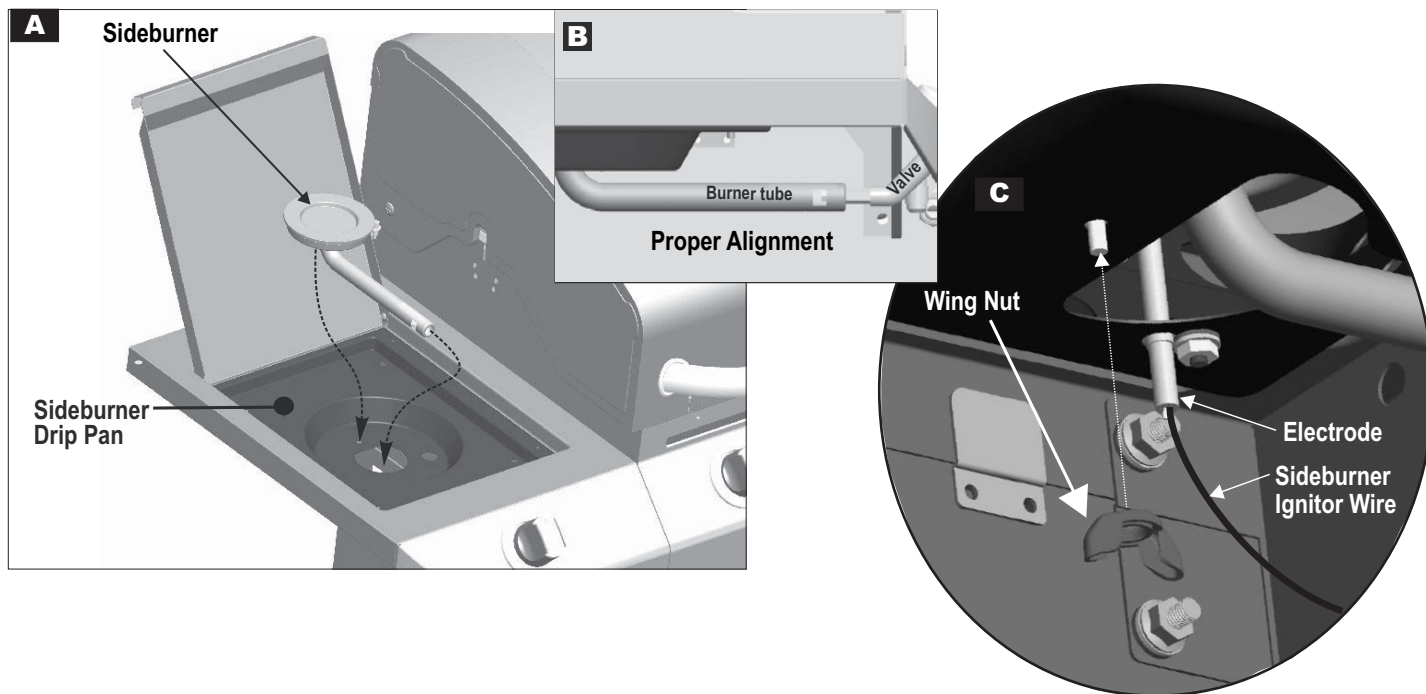
- Locate the Sideburner Valve underneath the sideburner shelf. The Sideburner Valve will be attached to the Sideburner Fascia.
- Using the supplied **Orifice Driving Tool**, remove the orifice from the sideburner valve as shown below.
- This style Sideburner is designed to work with Natural Gas once Orifice is removed. **Do not replace any Orifices when using Natural Gas.**



# Sideburner Conversion (Con't.)

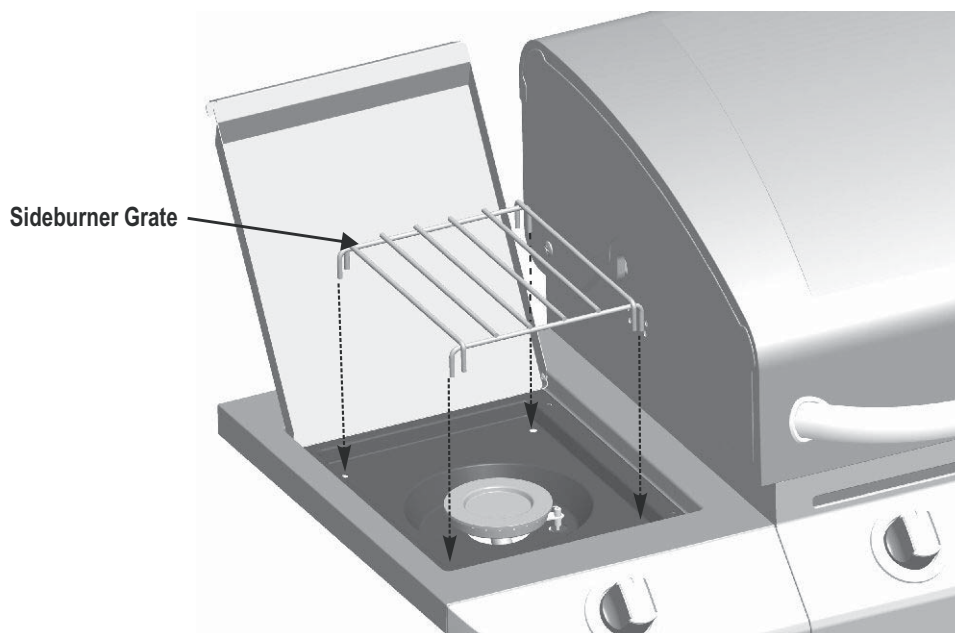
17

- Reinstall the burner as **Shown in illustration A.**
- Make sure the burner tube is properly aligned with the sideburner valve as **Shown in illustration B.**
- Reinstall the wingnut to the burner stud. Attach the ignitor wire to the electrode as **Shown in illustration C.**



18

- Place sideburner cooking grate onto sideburner shelf, aligning grate legs with holes in shelf as shown below.



**EMERGENCIES:** If a gas leak cannot be stopped, or a fire occurs due to gas leakage, call the fire department.

Emergencies	Possible Cause	Prevention/Solution
Gas leaking from cracked/cut/burned hose.	<ul style="list-style-type: none"> <li>Damaged hose.</li> </ul>	<ul style="list-style-type: none"> <li>Turn off gas at source. If anything but burned, replace parts. If burned, discontinue use of product until a plumber has investigated cause and corrections are made.</li> </ul>

### Troubleshooting

Problem	Possible Cause	Prevention/Solution
Burner(s) will not light using ignitor.	<p><b>GAS ISSUES:</b></p> <ul style="list-style-type: none"> <li>No gas flow.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure gas hose is properly connected to grill. If hose is properly connected, make sure gas source is turned on.</li> </ul>
Burner(s) will not match light.	<ul style="list-style-type: none"> <li>See "<b>GAS ISSUES:</b>".</li> <li>Match will not reach.</li> <li>Improper method of match-lighting.</li> </ul>	<ul style="list-style-type: none"> <li>Use long-stem match (fireplace match).</li> <li>See "Match-Lighting" section of Grill Use and Care.</li> </ul>
Flames blow out.	<ul style="list-style-type: none"> <li>Natural gas valve not fully open.</li> <li>Inadequate gas pressure.</li> </ul>	<ul style="list-style-type: none"> <li>Open Natural Gas Valve to full open position.</li> <li>Call gas company.</li> </ul>

# Notes:



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