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Master Forge 3618ST Owner's Manual

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ITEM #0404349

5-BURNER LIQUID PROPANE GAS GRILL

MODEL #3618ST

Español p. 51

! WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read this instruction manual thoroughly before installing or servicing this equipment.

! 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 tank not connected for use should not be stored in the vicinity of this or any other appliance.

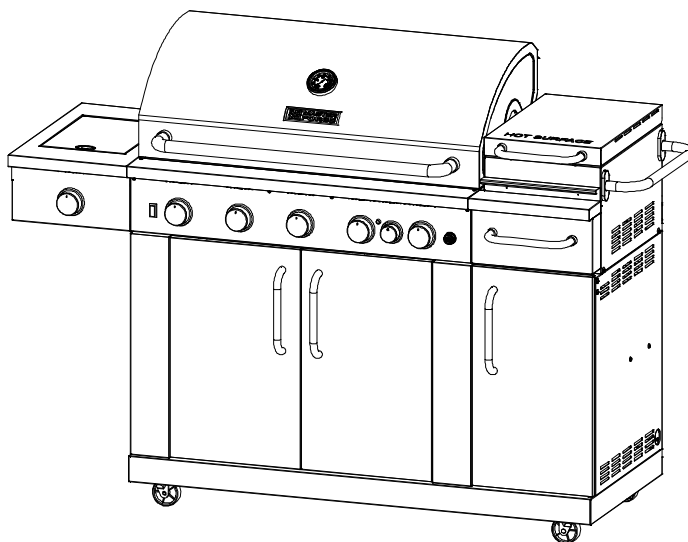
! DANGER

If you smell gas:

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

! WARNING

For Outdoor Use Only



ATTACH YOUR RECEIPT HERE

Serial Number _____ Purchase Date _____



Questions, problems, missing parts? Before returning to your retailer, call our customer service department at **1-800-963-0211**, 8:00 a.m. to 6:00 p.m., EST, Monday-Thursday, 8:00 a.m. to 5:00 p.m., EST, Friday.

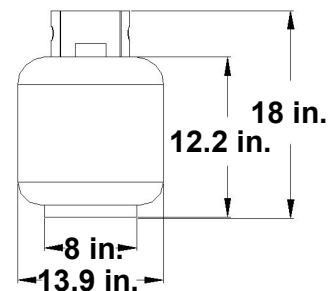
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SAFETY INFORMATION

Please read and understand this entire manual before attempting to assemble, operate or install the product. If you have any questions regarding the product, please call customer service at 1-800-963-0211 Monday thru Thursday from 8:00 am to 6:00 pm EST., Friday from 8:00 am to 5:00 pm EST.

1. The installation of this appliance must conform with local codes or, in the absence of local codes, with either *the National Fuel Gas Code, ANSI Z223.1/NFPA 54*, or Natural Gas and Propane Installation Code, CSA/CGA-B149.1.
2. This grill is intended for use outdoors and should not be used in a building, garage or any other enclosed or covered area.
3. This outdoor grill is not intended for installation in or on recreation vehicles and/or boats.
4. A minimum clearance of 48 in. from combustible constructions to the sides of the grill and 48 in. from the back of the grill to combustible constructions must be maintained. This outdoor cooking gas appliance must not be placed under overhead combustible construction.
5. The use of an electrical source requires that when installed, the grill must be electrically grounded in accordance with local codes or, in the absence of local codes, with ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1. Keep electrical supply cords and the fuel supply hose away from heated surfaces.
6. Inspect the hoses before each use for excessive abrasion or wear, or cuts that may affect safe operation of the grill. If there is evidence of excessive abrasion or wear, or the hose is cut, it must be replaced prior to the grill being put into operation. The replacement hose assembly must be those specified by the manufacturer.
7. Keep your grill in an area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
8. DO NOT obstruct the flow of combustion and ventilation air to this appliance.
9. Keep the ventilation openings of the tank enclosure free and clear from debris.
10. Check all gas connections for leaks with a soapy water solution and brush. Never use an open flame to check for leaks.
11. Never use charcoal in the grill.
12. Never use the grill in windy areas.
13. Never use the grill without the drip tray installed and hung under the burner box. Without the drip tray, hot grease and debris could leak downward and produce a fire hazard.
14. Only a 20 lb. LP-gas cylinder is allowed. The cylinder must be constructed and marked in accordance with the Specifications for LP Gas Cylinders of the U.S. department of transportation (D.O.T.) or the National Standard of Canada, CAN/CSA-B339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission. A 20 lb. LP-Gas cylinder dimensions are:



SAFETY INFORMATION

15. Use only the gas pressure regulator supplied with this appliance. This regulator is set for an outlet pressure of 11.0 wc.
16. The cylinder used must include a collar to protect the cylinder valve.
17. Do not store a spare LP-gas cylinder under or near this appliance.
18. Never fill the cylinder beyond 80 percent full.
19. If the information in “17” and “18” is not followed exactly, a fire causing death or serious injury may occur.
20. The natural gas grill and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 0.5 PSI (3.5 KPa).
21. The outdoor cooking gas 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 system at test pressures equal to or less than 1/2 PSI (3.5 KPa).
22. **CALIFORNIA PROPOSITION 65 WARNING:** The burning of gas cooking fuel generates some byproducts which are on the list of substances known by the state of California to cause cancer, reproductive harm, or other birth defects. To reduce exposure to these substances, always operate this unit according to the use and care manual, ensuring you provide good ventilation when cooking with gas.

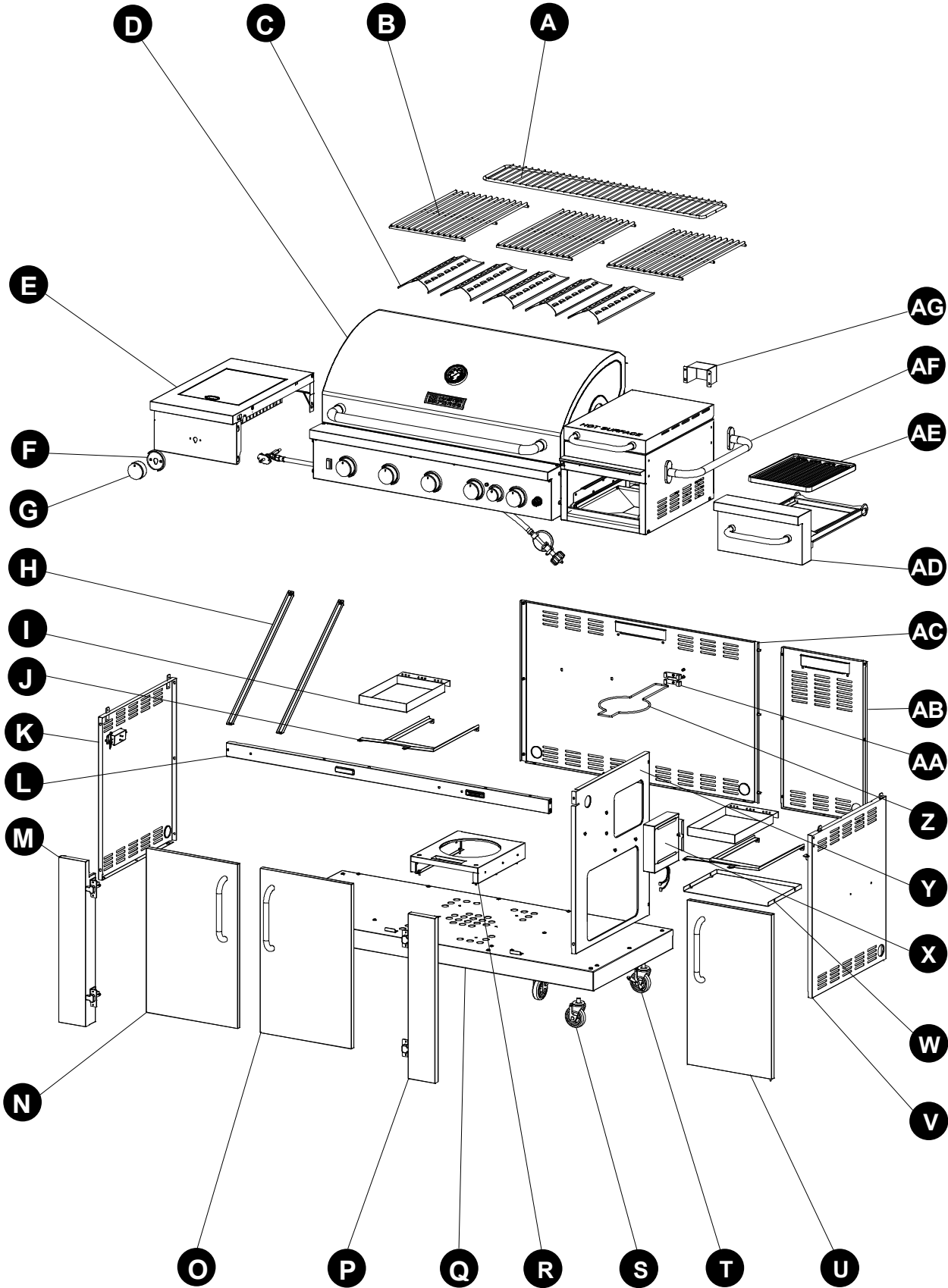
IMPORTANT: We urge you to read this manual carefully and follow the recommendations enclosed. This will ensure you receive the most enjoyable and trouble-free operation of your new gas grill. We also advise you retain this manual for future reference.

WARNING: Your grill has been designed to operate using only the gas specified by the manufacturer on the rating plate. Do not attempt to operate your grill on other gases. Failure to follow this warning could lead to a fire hazard and bodily harm and will void your warranty.

WARNING: Make certain your LP (propane) tank is filled by a reputable propane dealer. An incorrectly filled or an overfilled LP tank can be dangerous. The overfilled condition combined with the warming of the LP tank (a hot summer day, tank left in the sun, etc.) can cause LP gas to be released by the pressure relief valve on the tank since the temperature increase causes the propane to expand. LP gas released from the tank is flammable and can be explosive. Refer to your owner’s manual for more information concerning filling your LP tank.

This unit contains one patent 11/495,104 and one or more patents pending: 61/163,753; 61/215,319; 11/268,051; 12/772,751

PACKAGE CONTENTS



PACKAGE CONTENTS

Part	Description	Quantity
A	Warming Rack	1
B	Grid	3
C	Flame Step	5
D	Burner Box and Hood Assembly	1
E	Side Cooker Shelf Assembly	1
F	Bezel	1
G	Knob	1
H	Tank Stopper	2
I	Drip Tray	2
J	Drip Tray Runner	2
K	Left Side Panel	1
L	Beam	1
M	Left Skirt	1
N	Left Door	1
O	Right Door I	1
P	Right Skirt	1
Q	Base Panel	1

Part	Description	Quantity
R	Tank Tray	1
S	Caster	3
T	Locking Caster	2
U	Right Door II	1
V	Right Side Panel II	1
W	Shelf	1
X	Control Box	1
Y	Right Side Panel I	1
Z	Safety Tank Ring	1
AA	Tank Ring Bracket	1
AB	Right Rear Panel	1
AC	Rear Panel	1
AD	Tray	1
AE	Grate	1
AF	Handle	1
AG	Nozzle Cover	1

HARDWARE CONTENTS

AA



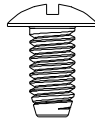
5/32-32 x 3/16 in.
Screw
Qty. 2

BB



5/32-32 x 3/8 in.
Screw
Qty. 8

CC



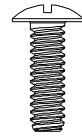
1/4-20 x 1/2 in.
Screw
Qty. 39

DD



1/4-20 x 1-1/4 in.
Screw
Qty. 2

EE



3/16-24 x 5/8 in.
Screw
Qty. 21

FF



M4 x 8
Screw
Qty. 2

GG



Wrench
Qty. 1

PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents list. If any part is missing or damaged, do not attempt to assemble the product.

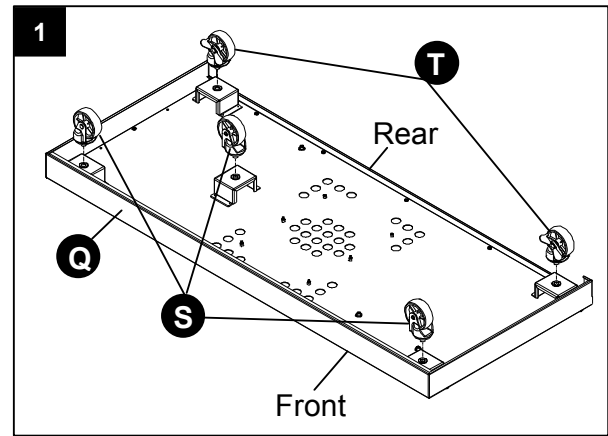
Estimated Assembly Time: 75 minutes by two people

Tools Required for Assembly: Wrench (included), Phillips Screwdriver (sold separately)

ASSEMBLY INSTRUCTIONS

Step 1: Install Casters

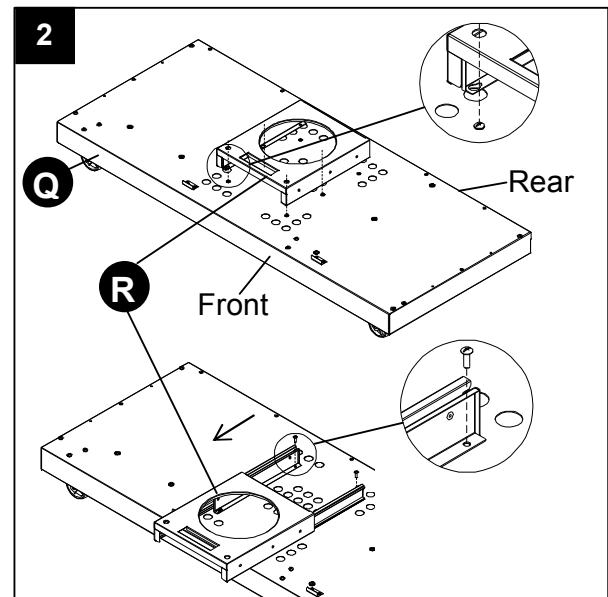
Insert the casters (S and T) into the holes of the base panel (Q), and then tighten with wrench (GG). When this process is completed, turn the bottom panel over. The two locking casters (T) should be at the back of the grill.



Step 2: Attach the Slide-out Tank Tray

Loosen the four screws attached in the base panel (Q) 3 - 4 turns.

Align the holes in the tank tray (R) with the four loosened screws first and then slide the tank tray (R) in the direction shown in Fig. 2 until it stops. Then insert the two 3/16-24 x 5/8 in. screws (EE) into the hole shown in Fig. 2. Tighten all six screws completely.



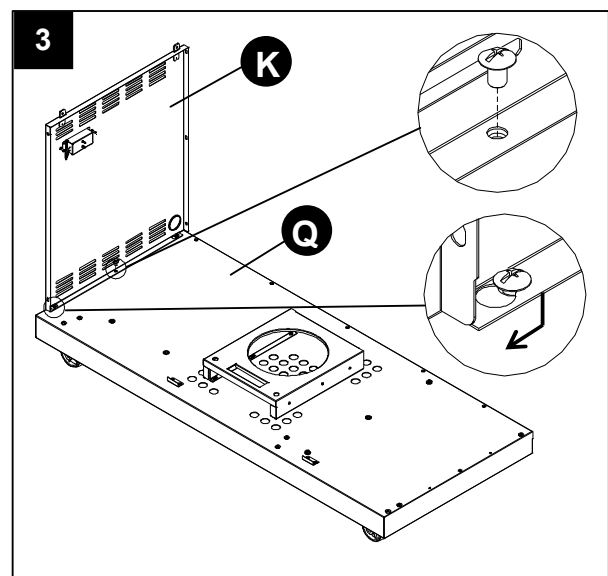
Hardware Used

EE 3/16-24 x 5/8 in. Screw x 2

Step 3: Attach Left Side Panel

Loosen the two screws attached in the base panel (Q) 3 - 4 turns.

Align the holes in the left side panel (K) with the two loosened screws first and then slide the left side panel (K) in the direction shown in Fig. 3 until it stops. Then insert the 1/4-20 x 1/2 in. screw (CC) into the hole shown in Fig. 3. Tighten all three screws completely.



Hardware Used

CC 1/4-20 x 1/2 in. Screw x 1

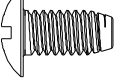
ASSEMBLY INSTRUCTIONS

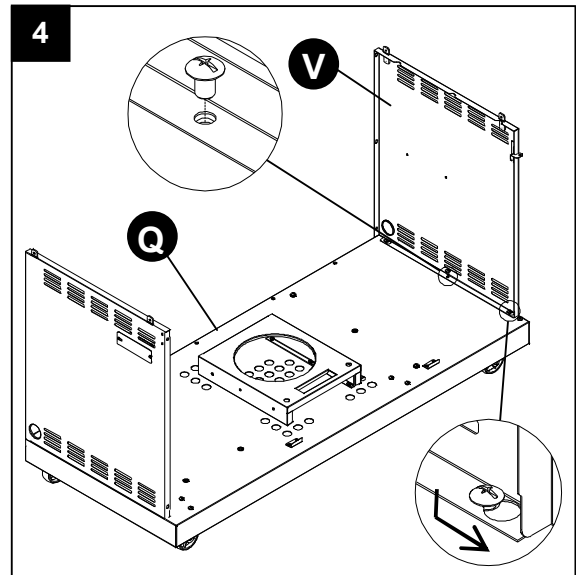
Step 4: Attach Right Side Panel II

Loosen two screws attached in the base panel (Q) 3 - 4 turns.

Align the holes in the right side panel II (V) with the two loosened screws first and then slide the right side panel II (V) in the direction shown in Fig. 4 until it stops. Then insert the 1/4-20 x 1/2 in. screw (CC) into the hole shown in Fig. 4. Tighten all three screws completely.

Hardware Used

CC 1/4-20 x 1/2 in. Screw  x 1

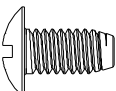


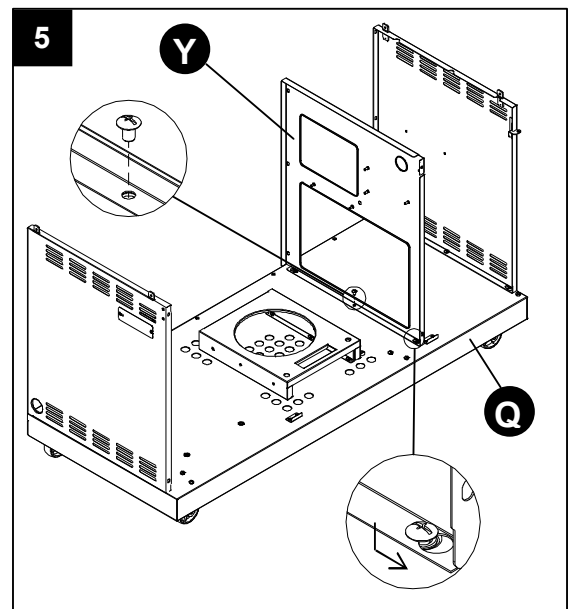
Step 5: Attach Right Side Panel I

Loosen two screws attached in the base panel (Q) 3 - 4 turns.

Align the holes in the right side panel I (Y) with the two loosened screws first and then slide the right side panel I (Y) in the direction shown in Fig. 5 until it stops. Then insert the 1/4-20 x 1/2 in. screw (CC) into the hole shown in Fig. 5. Tighten all three screws completely.

Hardware Used

CC 1/4-20 x 1/2 in. Screw  x 1

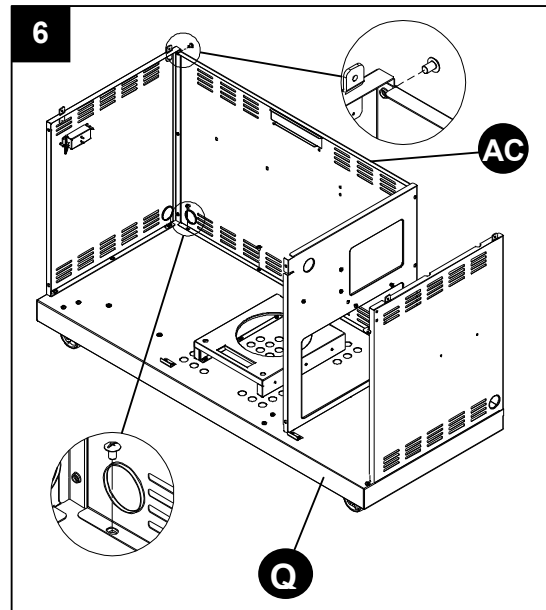
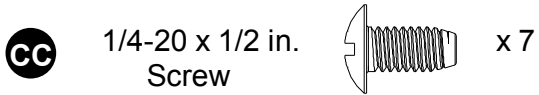


ASSEMBLY INSTRUCTIONS

Step 6: Attach Rear Panel

Attach the rear panel (AC) with seven 1/4-20 x 1/2 in. screws (CC).

Hardware Used

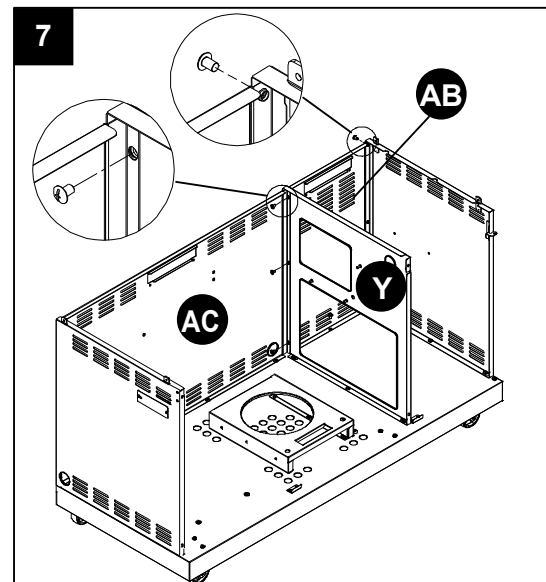
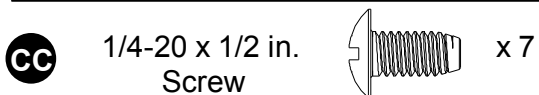


Step 7: Attach Right Rear Panel

Attach the right rear panel (AB) with seven 1/4-20 x 1/2 in. screws (CC).

NOTE: There are three screws to go through the rear panel (AC) and right side panel I (Y) to the nuts in the rear panel (AB).

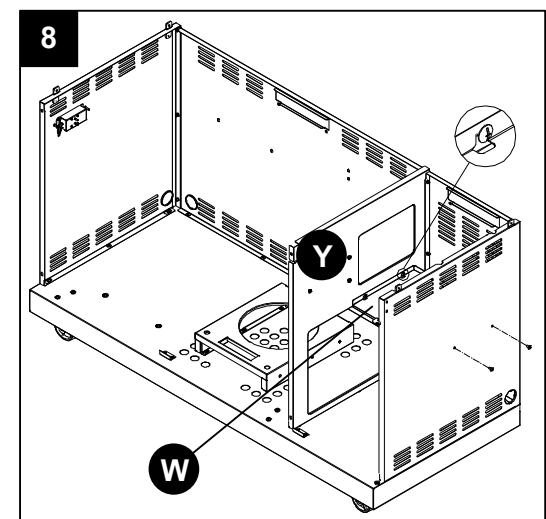
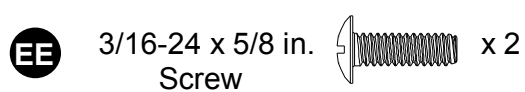
Hardware Used



Step 8: Install the Shelf

Loosen the two screws attached to the right side panel I (Y) 3 - 4 turns. Snap the shelf (W) with the loosened screws and use the two 3/16-24x5/8 in. screws (EE) to fasten the shelf (W). Then tighten all the screws.

Hardware Used



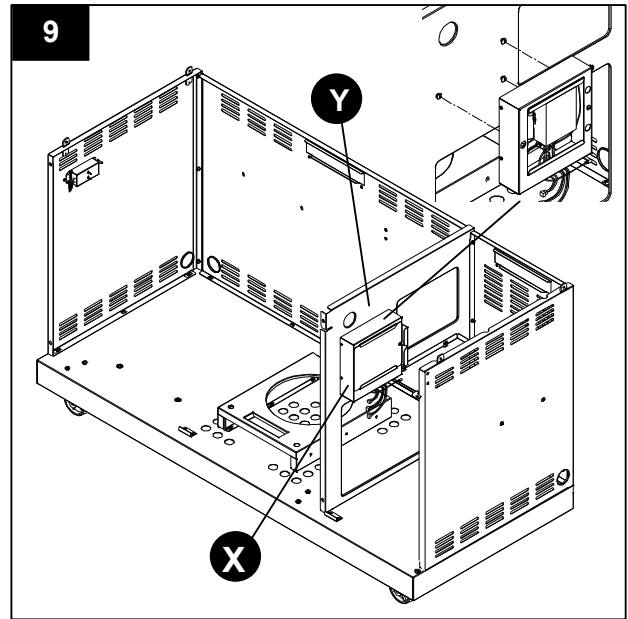
ASSEMBLY INSTRUCTIONS

Step 9: Attach Control Box

Loosen the three screws attached in the right side panel I (Y) 3 - 4 turns.

Align the holes in the control box (X) with the three loosened screws and snap the box to the right side panel I (Y). Then tighten the three screws.

Leave the box uncovered after wiring connection is finished.



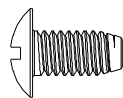
Step 10: Attach Safety Tank Ring

Align the holes in the tank ring bracket (AA) with rear panel (AC), insert the 1/4-20 x 1/2 in. screws (CC) into the holes from outside, and then tighten completely.

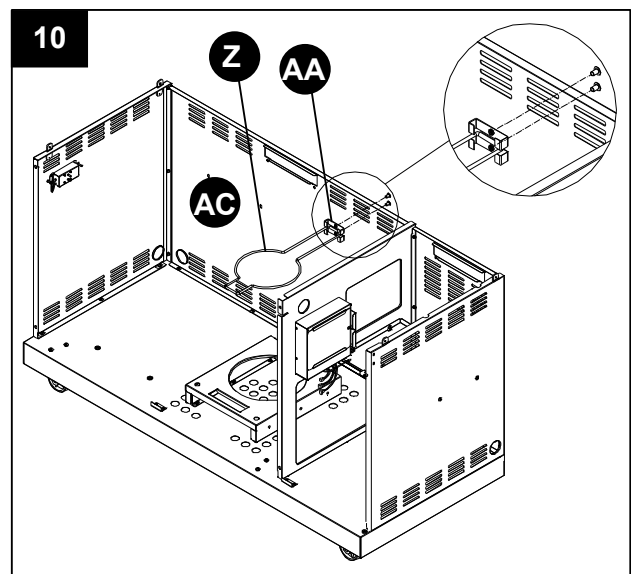
Hardware Used



1/4-20 x 1/2 in.
Screw



x 2



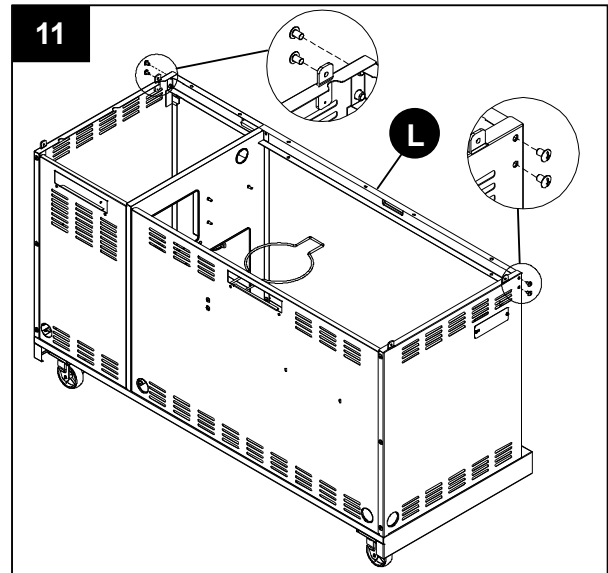
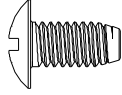
ASSEMBLY INSTRUCTIONS

Step 11: Assemble Beam

Attach the beam (L) with four 1/4-20 x 1/2 in. screws (CC).

Hardware Used

CC 1/4-20 x 1/2 in. Screw x 4



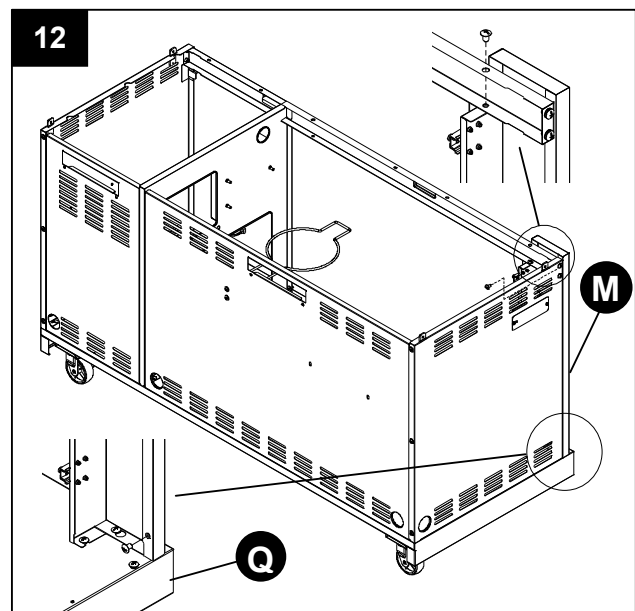
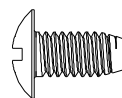
Step 12: Assemble Left Skirt

Loosen the two screws attached in the base panel (Q) 3 - 4 turns.

Align the holes in the left skirt (M) with the two loosened screws first and then slide the skirt (M) until it stops. Then insert the three 1/4-20 x 1/2 in. screws (CC) into the holes shown in Fig. 12. Tighten all five screws completely.

Hardware Used

CC 1/4-20 x 1/2 in. Screw x 3



ASSEMBLY INSTRUCTIONS

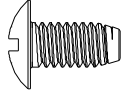
Step 13: Attach Right Skirt

Repeat the procedure from Step 12 to attach the right skirt (P).

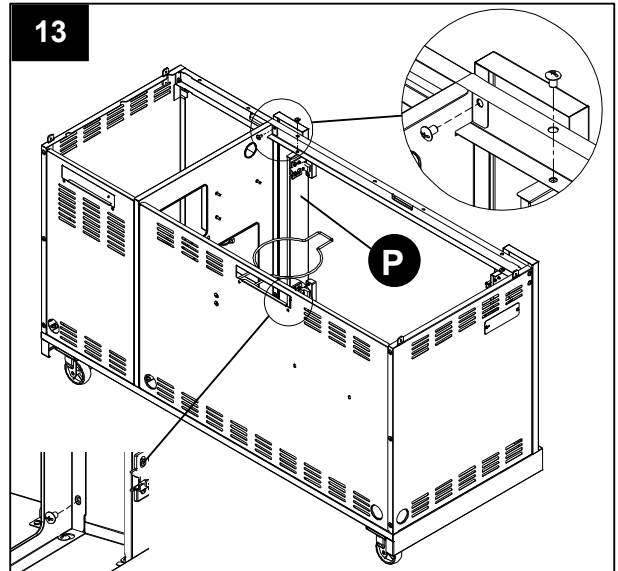
Hardware Used



1/4-20 x 1/2 in.
Screw



x 3



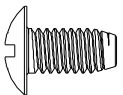
Step 14: Assemble Tank Stoppers

Assemble the two tank stoppers (H) as shown with four 1/4-20 x 1/2 in. screws (CC).

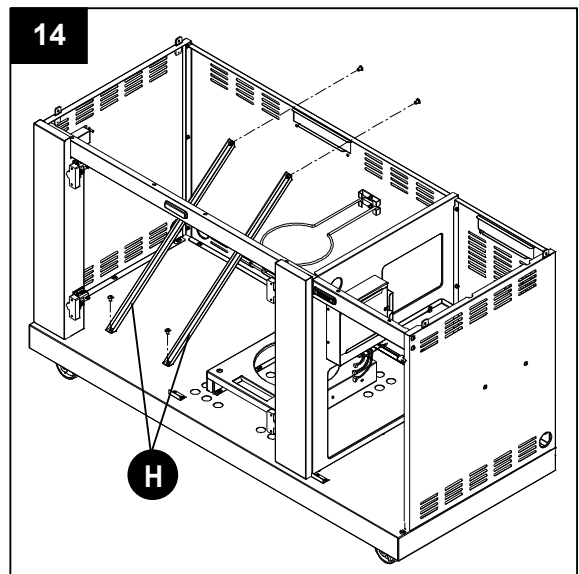
Hardware Used



1/4-20 x 1/2 in.
Screw



x 4




ASSEMBLY INSTRUCTIONS

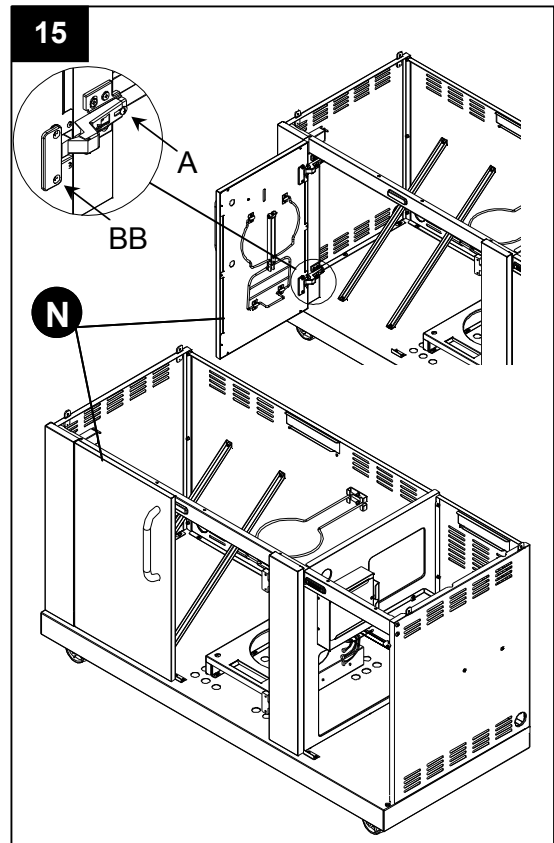
Step 15: Assemble Left Door

Attach the left door (N) with four 5/32-32 x 3/8 in. screws (BB).

Hardware Used

BB 5/32-32 x 3/8 in. Screw  x 4


Note: The screw at arrow A is used to adjust the gap between door and frame. Make any necessary adjustments.

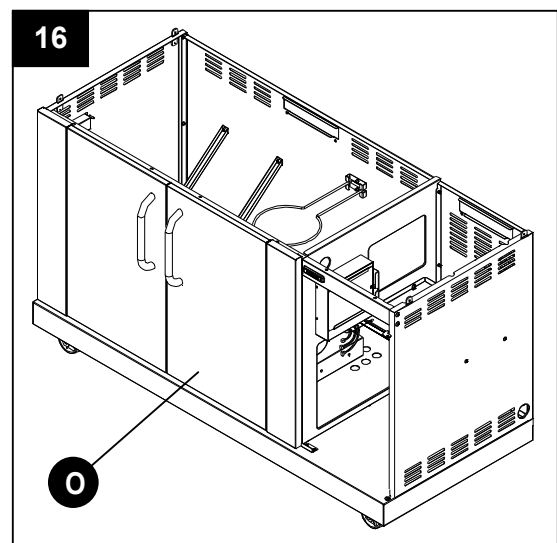


Step 16: Assemble Right Door I

Repeat the procedure from Step 15 to install right door I (O).

Hardware Used

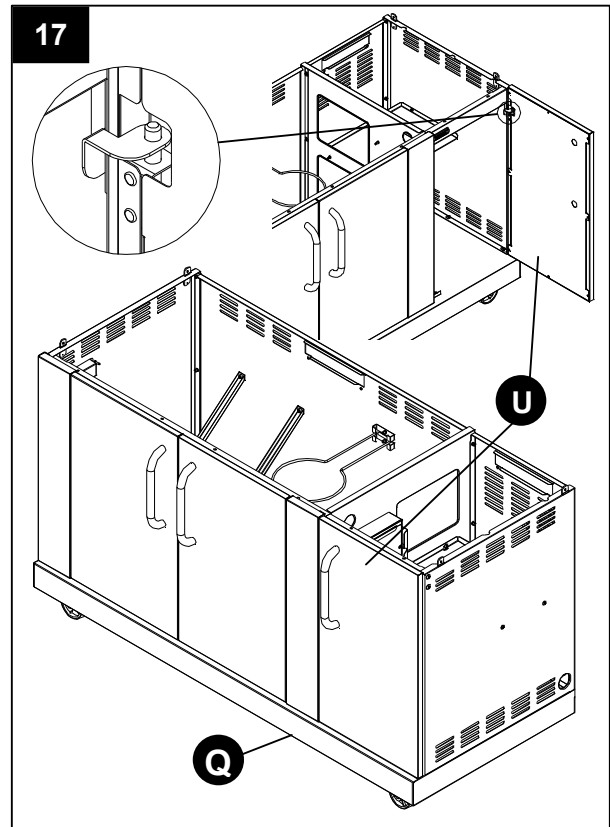
BB 5/32-32 x 3/8 in. Screw  x 4



ASSEMBLY INSTRUCTIONS

Step 17: Assemble Right Door II


Insert the shaft of the right door II (U) into the upper hole, press the spring from the square hole located on the bottom of the door until the shaft is aligned with the hole on the base panel (Q) and then release. The door is installed.

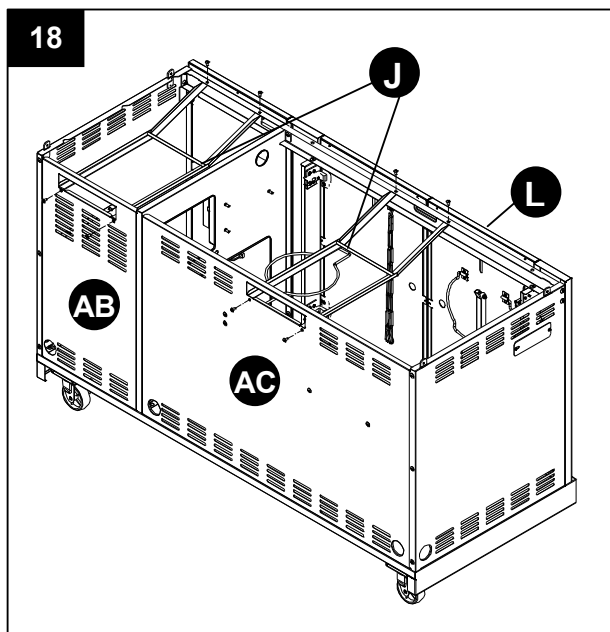


Step 18: Attach Drip Tray Runner

Align drip tray runners (J) with the holes in the beam (L), rear panel (AC) and right rear panel (AB). Insert 3/16-24 x 5/8 in. screws (EE) into the holes and tighten completely.

Hardware Used

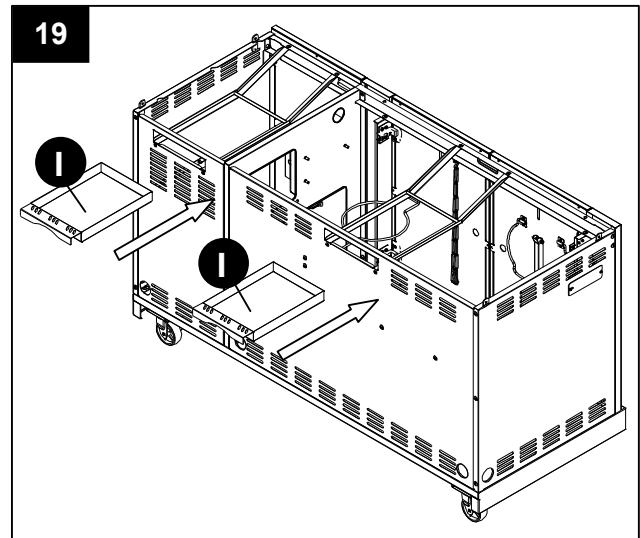
EE 3/16-24 x 5/8 in. Screw  x 8



ASSEMBLY INSTRUCTIONS

Step 19: Attach Drip Tray

Slide in the two drip trays (I) from the back of the cabinet.



Step 20: Mount the Burner Box onto the cabinet

Two people are needed to perform this step.

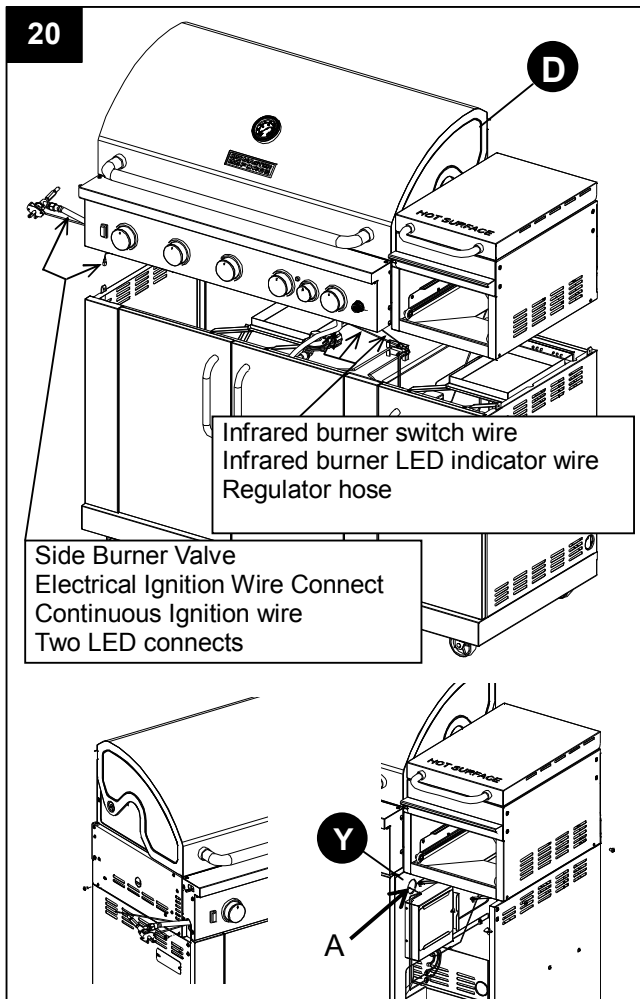
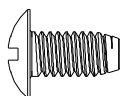
WARNING: Do not lift burner box from sides. We recommend lifting the control box, front opening of the infrared burner and the rear panel of the burner box to avoid pinching fingers under the burner box.

- Lock the two rear casters.
- Take all the packed parts inside the firebox and tray out first. Take the side burner valve, side burner electrical ignition wire connect, side burner continuous ignition wire and LED connects out from under the left control panel, take the pressure regulator and the infrared burner control wires out from under the control box. Place the burner box (D) onto the cabinet by aligning the four tabs on top of the cabinet with the holes under the burner box. Make sure the gas pressure regulator and the infrared burner wires are inside the cabinet.
- Insert the 1/4-20 x 1/2 in. screws (CC) into the four holes and tighten them.
- Guide the infrared burner wires to the cabinet under the infrared burner through the hole in the right (arrow A) side panel (Y).

Hardware Used



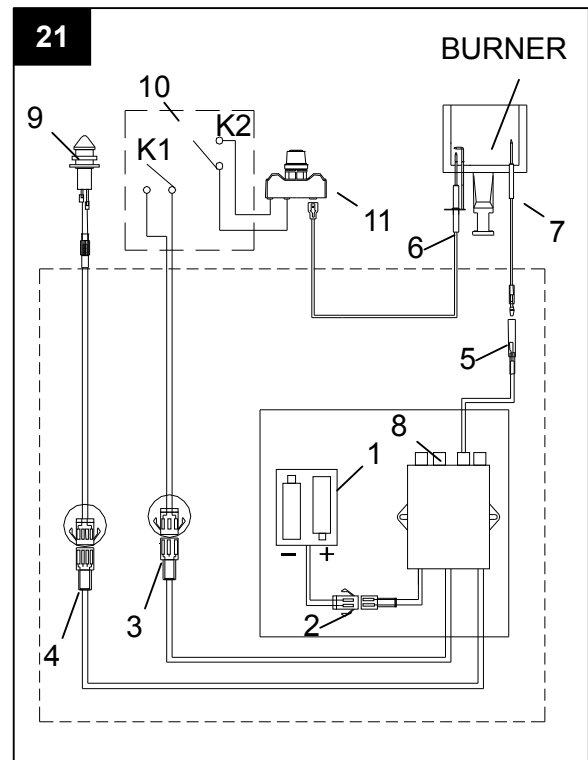
1/4-20 x 1/2 in.
Screw x 4



ASSEMBLY INSTRUCTIONS

Step 21: Infrared Burner Wiring Diagram

- 1: 3V Battery Box
- 2: 1-2 Connect
- 3: 1-3 Connect
- 4: 1-4 Connect
- 5: Couple (female-male)
- 6: Infrared Burner Ignition Wire
- 7: Flame Sensor Wire
- 8: Control Unit
- 9: LED Indicator
- 10: Infrared Burner Valve with Two Switches
 - K1: Switch-Flame Sensor and Indicator
 - K2: Switch-Electrical Continuous Ignition
- 11: Electrical Ignite DHLG-7A



Step 22: Infrared Burner Wiring

Pull the flame sensor wire off of the grease collection panel and let it to fall to the cabinet.

The infrared burner wires should already be guided to the cabinet under the infrared burner following step 20.

The flame sensor wire, the infrared burner switch wire and the infrared burner LED indicator wire should be connected to the control box (X) through the hole under the box and coupled with the proper fittings inside the control box as illustrated.

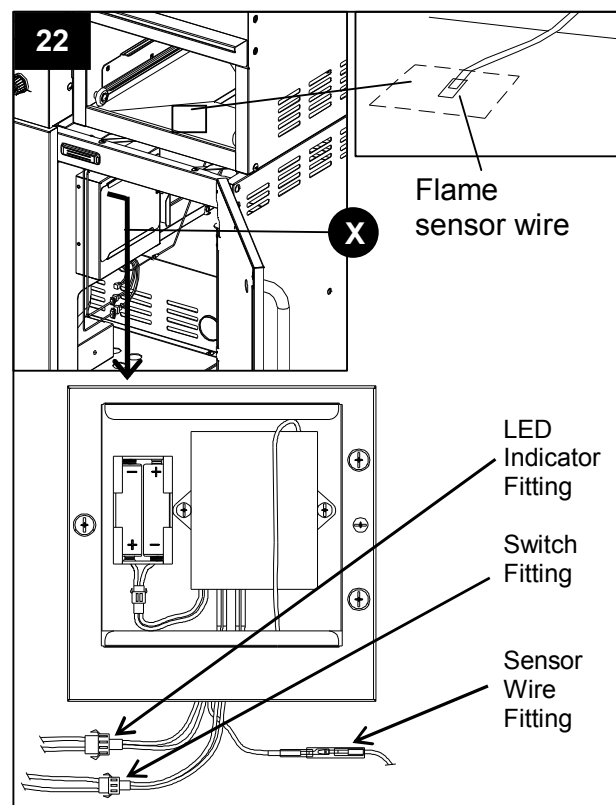
Insert two AA batteries in the battery box in the correct polarity and cover the control box with cover and fasten it to place.

Checking the Connection:

Make sure gas tank IS CLOSED.

Push the infrared burner control knob in and turn the knob to the left to "HIGH" position. Keep pressing the knob and sparks should be observed. The green LED indicator on the left of the infrared burner knob should be on for 8 seconds and a beeper should be heard later. That's the warning the burner is not lit.

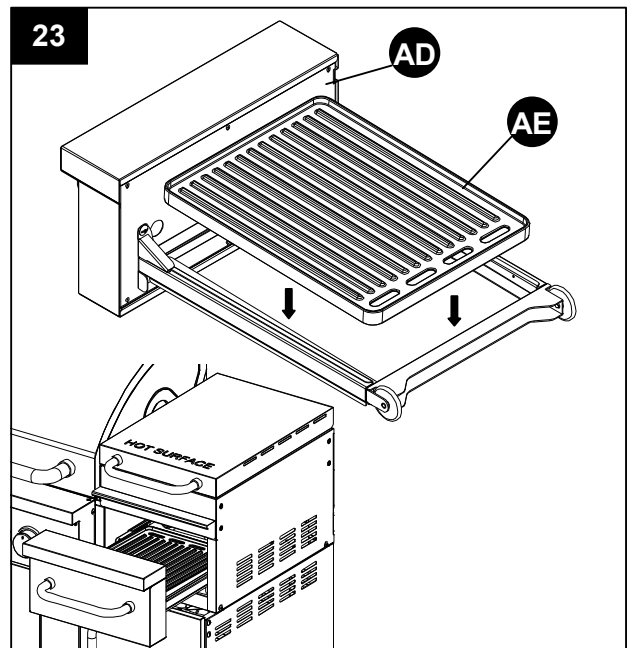
Refer to the troubleshooting section.



ASSEMBLY INSTRUCTIONS

Step 23: Attach the Grate Tray




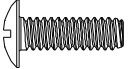
Put the grate (AE) onto the tray (AD). Close the drawer.

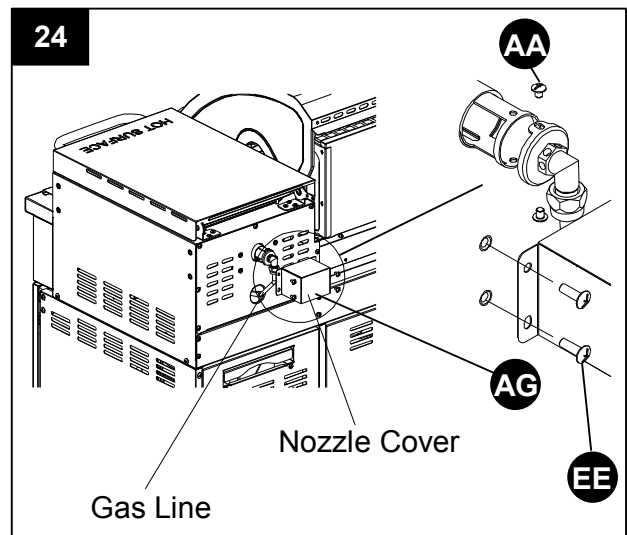


Step 24: Connect the Infrared Burner Gas Line

Use the two 5/32-32 x 3/16 in. screws (AA) to lock the infrared burner gas line to the end of the infrared burner. Then install the nozzle cover (AG) into place with four 3/16-24 x 5/8 in. screws (EE).

Hardware Used


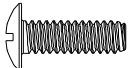
- | | | | |
|---|--------------------------|---|-----|
|  | 5/32-32 x 3/16 in. Screw |  | x 2 |
|  | 3/16-24 x 5/8 in. Screw |  | x 4 |

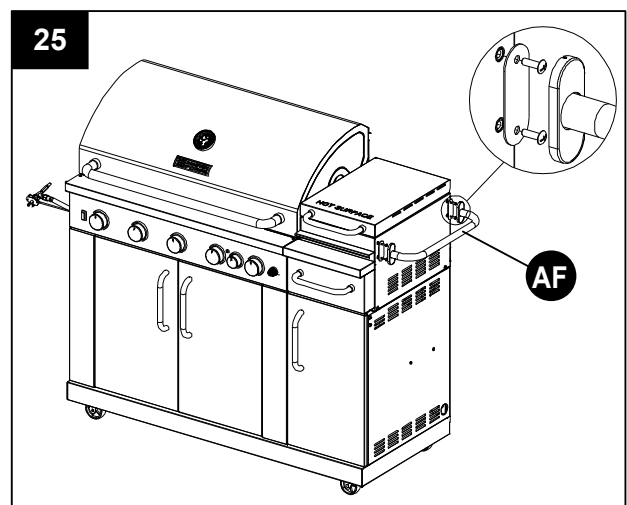


Step 25: Install Handle

Use four 3/16-24 x 5/8 in. screws (EE) to install the handle and snap on the two end covers.

Hardware Used

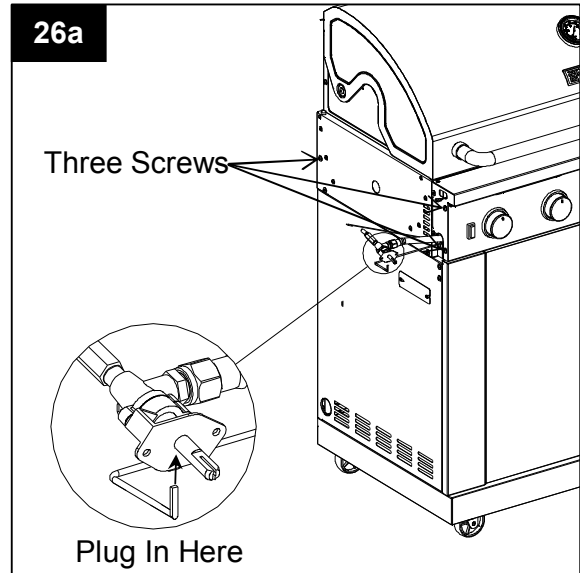
- | | | | |
|---|-------------------------|---|-----|
|  | 3/16-24 x 5/8 in. Screw |  | x 4 |
|---|-------------------------|---|-----|



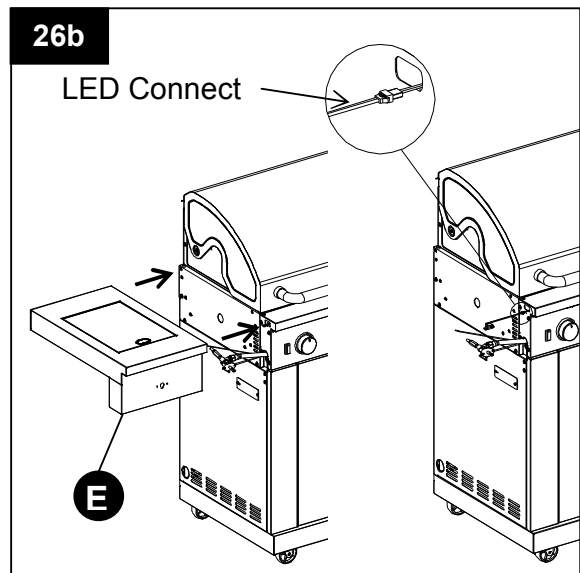
ASSEMBLY INSTRUCTIONS

Step 26: Assembly the Side Cooker Shelf

a. Loosen the three pre-installed screws by 3 - 4 turns and plug the continuous ignition wire to the socket of the side burner valve. Failure to plug the wire to the valve will result in no ignition.



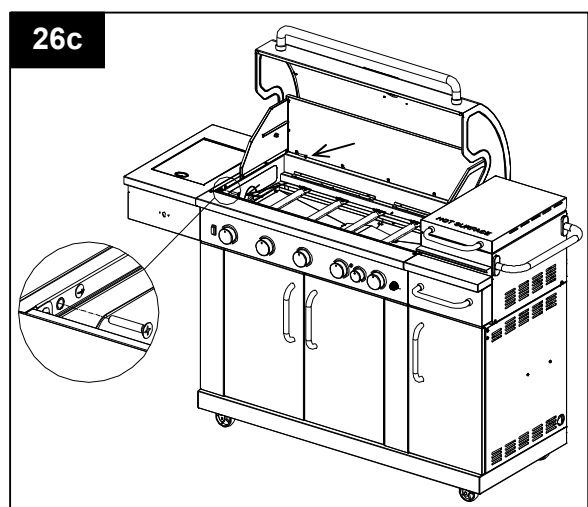
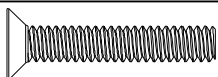
b. Carefully guide the LED connect to the relevant square hole on the side cooker shelf and then hang the side cook shelf (E) to the three loosened screws and push down until the side cook shelf (E) is flush with the burner box. Couple the two LED connects together.



c. Open the lid and use two 1/4-20 x 1-1/4 in. screws (DD) to fasten the side cooker shelf (E) from inside the burner box. Then tighten the three loosened screws.

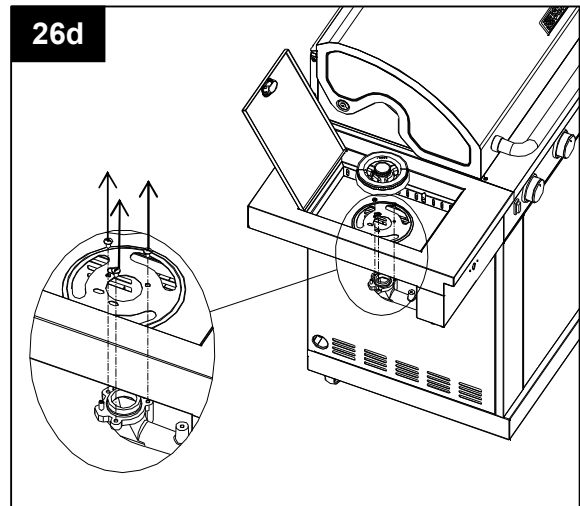
Hardware Used

DD 1/4-20 x 1-1/4 in. Screw x 2

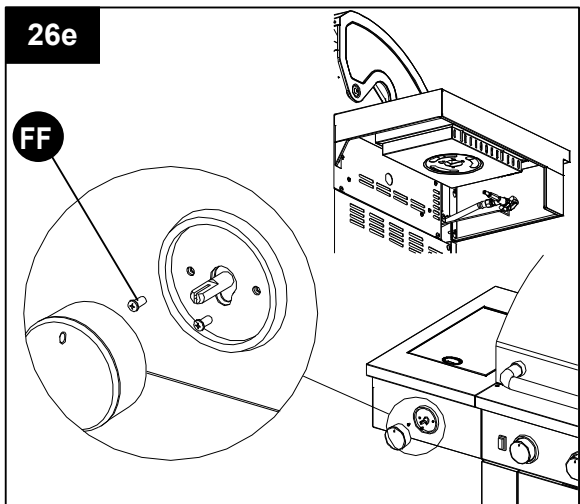


ASSEMBLY INSTRUCTIONS

d. Take the burner rings off first. Hold the side burner body and disassemble it by loosening the three screws as shown.



e. Install the side burner valve to the shelf by using two M4 x 8 screws (FF). The bezel should be locked together with the valve. Then push a knob onto the stem of the valve.

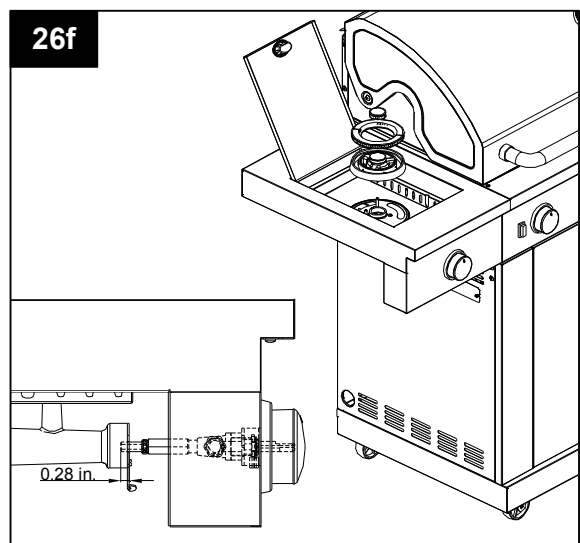


Hardware Used

FF M4 X 8 Screw  x 2

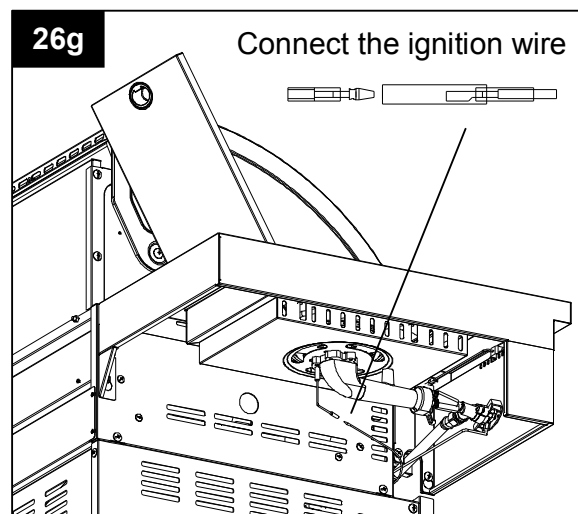
f. Install the previous disassembled side burner body back to the side burner shelf with the three screws and put the brass burner ring onto the burner by aligning the cutouts on the ring with the stud and ignition pin. The side burner nozzle should be inside of the burner 0.28 in. as illustrated.

Note: For LP gas, the air shutter should be fully open. For NG gas, adjust the air shutter 1/4 of the way open.

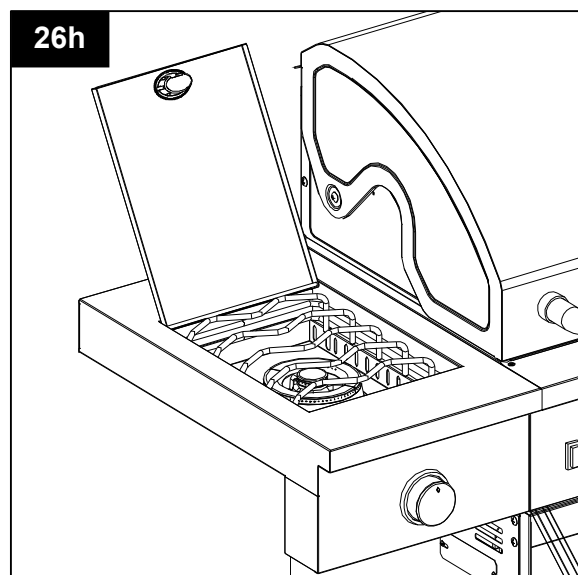


ASSEMBLY INSTRUCTIONS

g. Connect the side burner ignition wire as illustrated.

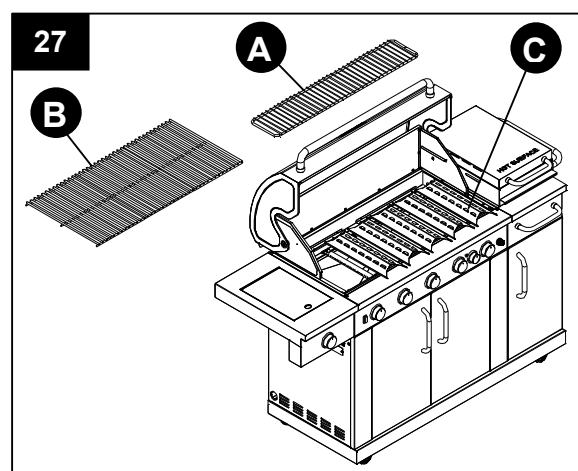


h. Put the side burner grate onto the cutout by aligning the legs with the slots.



Step 27: Install the Flame Steps, Cooking Grids and Warming Rack

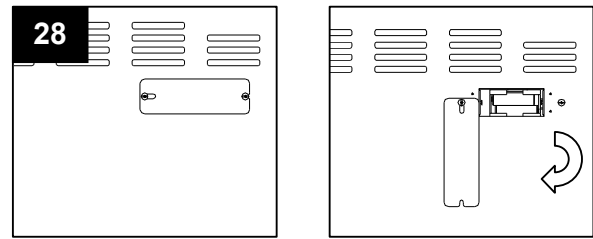
Put the flame steps (C), cooking grids (B) and warming rack (A) into place.



ASSEMBLY INSTRUCTIONS

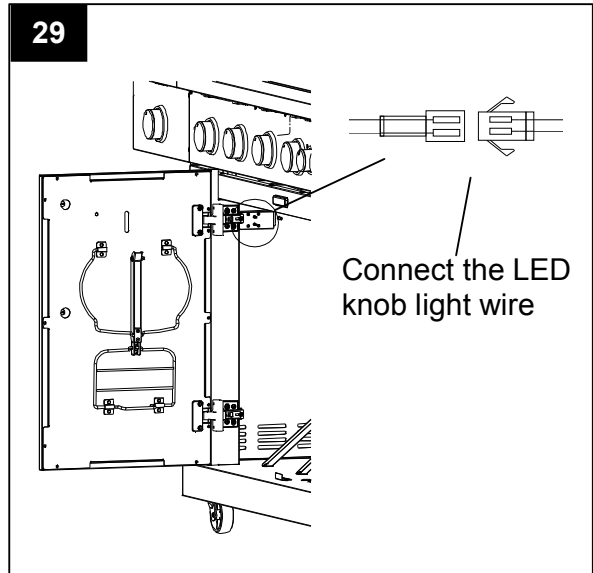
Step 28: Install the LED batteries

Loosen the two screws and slide the cover to left to open the LED battery cover. Load two AA batteries (not included) to the battery box. Pay attention to the polarity of the battery. Then close the cover and lock it.



Step 29: Connect the LED knob lights to the power supply

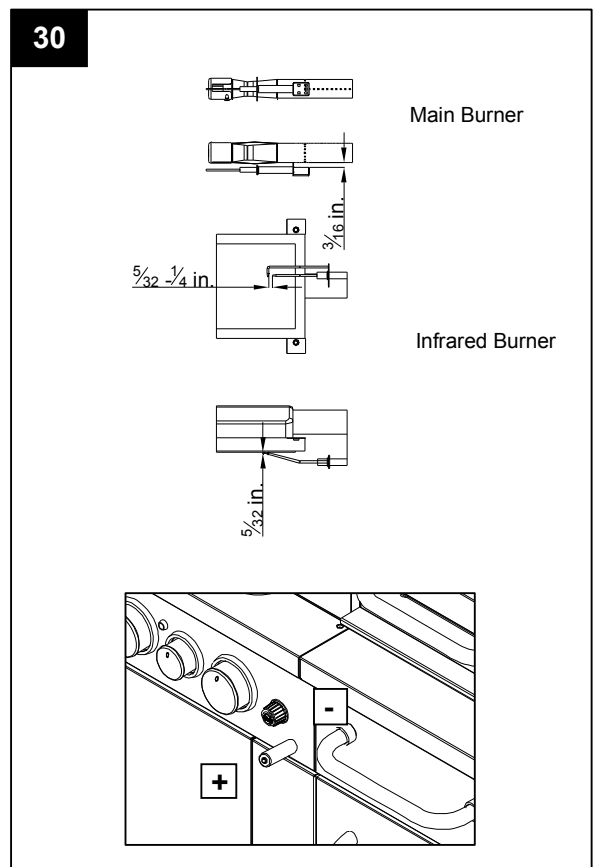
Open the left door. Find the LED connect from the battery box and the connect from the control box and couple them.



Step 30: Check the distance between the ignition pin and the burner (except the side burner ignition) and connect the ignition system

If the distance between the ignition pin and the burner does not show the same as illustrated, loosen the ignition pin screw, adjust the distance, and then tighten the screw.

Then put one AA battery (not included) into the electronic ignite with correct polarity direction. Press the knob to check if sparks are produced. If not, please refer to the troubleshooting section to solve the problem.



INSTALLATION INSTRUCTIONS

For Portable LP-Gas Connection

The slide out tank tray has an opening that allows a 20 lb. gas tank bottom flange to drop into place (tank sold separately). This will help to lock the tank in place. Before sliding your tank tray to the back, lift up the safety tank ring. Lower the safety tank ring to lock the tank when the tank tray is slid to the back. Use only a 20 lb. gas tank (see LP Gas Safety Requirements for additional information). As shown in Fig. 32, it is unsafe to operate the grill if the gas tank is not vertical.

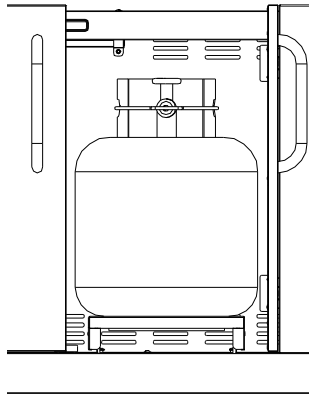


Fig. 31

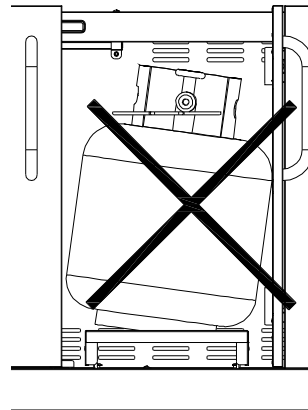


Fig. 32

WARNING: The Type I connective coupling (see Fig. 33) supplied with your grill must not be replaced with a different type of grill/tank connection system. Removal will result in loss of warranty, gas leakage, fire and severe bodily harm.

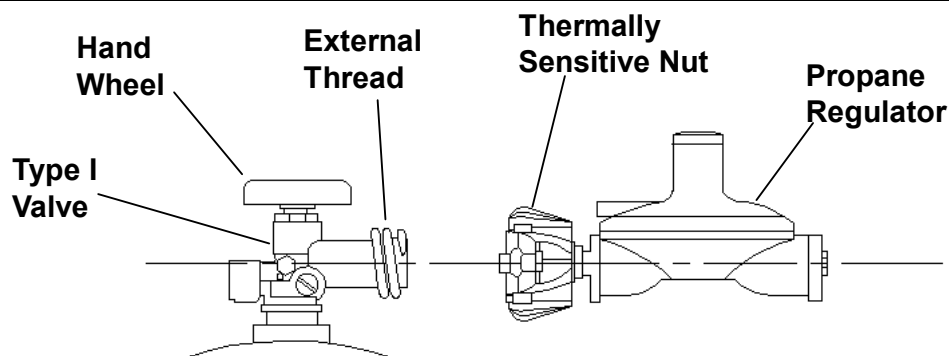


Fig. 33

The propane tank valve connection supplied with this grill incorporates four important safe guards: Hand Assembly, Hand Disassembly, Excess Flow Control and Temperature-Activated Shut-Off.

a. Hand Assembly:

1. Make certain the tank valve and all the appliance valves are in the "OFF" position.
2. When connecting the regulator/burner valve assembly to the tank valve, turn the large plastic nut clockwise until it stops.
3. Gas will not flow unless the plastic nut is completely connected.
4. **HAND TIGHTEN ONLY.**

INSTALLATION INSTRUCTIONS

b. Hand Disassembly:

1. Make certain the tank valve and all the appliance valves are in the “OFF” position.
2. Turn the large plastic nut counterclockwise until it is disassembled.
3. HAND LOOSEN ONLY.

c. Excess Flow Control and Low Heat

The propane regulator assembly incorporates an excess flow device designed to supply the grill with sufficient gas flow under normal conditions yet control excess gas flow.

Rapid changes in pressure can trigger the excess flow device providing a low flame and low temperature. If the tank valve is turned open to allow gas flow while a burner valve is open, the surge of pressure will cause the device to activate. The device will remain closed until the pressure is equalized. This should occur within 5 seconds.

To ensure this does not cause difficulty in lighting the grill, follow these instructions:

1. Make sure all burner valves are “OFF”.
2. Open the tank valve and wait 5 seconds.

d. Temperature-Activated Shut-Off

The large plastic nut on the regulator assembly is designed in coordination with a check valve in the tank valve to shut off the flow of gas when exposed to temperatures between 240-300°F. In the event of a fire or hose break, one of the safeguards will function to control or stop the flow of gas from the propane tank. Never attempt to use damaged equipment.

IMPORTANT: Before the use of a fresh tank of gas, please check leakage around the connections, and make sure there is no leakage or vapor accumulation in the cabinet. Make sure all openings around side walls are not blocked.

IMPORTANT: Place dust cap on cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve outlet that is provided with the cylinder valve. Other types of caps or plugs may result in leakage of propane.

Gas Requirements

This grill is set and tested at the factory for use with LP gas only. However, it is natural gas convertible and can be used at the same rating. The rating plate is located on the inside panel of right door I.

LP Gas

If your grill is for LP gas, the regulator supplied is set for an 11-in. water column (WC) and is for use with LP gas only. The factory-supplied regulator and hose must be used with a 20-lb. LP gas tank.

Convert to Natural Gas

This grill is natural gas convertible. Please follow the section “CONVERTING TO NATURAL GAS” (see page 46) to convert your grill.

INSTALLATION INSTRUCTIONS

After your grill is converted to natural gas, the working pressure for natural gas is 7 in. water column (WC). Gas pressure is affected by gas line size and the length of gas line run from house. Follow the recommendations in the chart below.

From House to Grill	
Distance	Tubing Size
Up to 25 ft.	3/8 in. DIA
26-50 ft.	1/2 in. DIA
51-100 ft.	2/3 in. of run 3/4 in. 1/3 in. of run 1/2 in.
More than 101 ft.	3/4 in. DIA

LP GAS System

Contact your gas supplier for a special regulator for bulk gas that fuels other appliances.

Gas Consumption

Total gas consumption of this grill with the burner(s) on "HIGH": Table 1 below.

Table 1

Burner Type	BTU/HR
Main Burners	12,000 x 5
Side Burner	15,000 x 1
Infrared Burner	12,500 x 1

Locating the Grill

This gas appliance is designed and certified for outdoor use only. Do not operate the grill inside a building, garage, recreation vehicle, screened porch or any enclosed area. Keep the grill away from windy areas, but keep the grill in a well-ventilated area. Do not obstruct the flow of combustion and ventilation air around the grill.

WARNING: Do not place the grill under overhead, unprotected combustible surfaces.

Clearance to Combustible Construction

A minimum clearance of 48 in. from the sides of the grill, and a minimum clearance of 48 in. from the back of the grill to adjacent vertical combustible constructions must be maintained. However, the manufacturer strongly suggests a 6-ft. clearance from the grill to combustible constructions.

Clearance to Noncombustible Construction

A minimum clearance of 48 in. from the back of the grill above the cooking surface to noncombustible constructions is required to allow the grill hood to open completely. A minimum of 48 in. clearance to the sides of the grill above the cooking surface to noncombustible constructions is recommended. The grill can be installed directly next to noncombustible construction below the cooking surface.

INSTALLATION INSTRUCTIONS

Checking orifices' alignment with burners

Orifices may shift during assembly and movement; therefore, check the orifices' alignment with the burners according to the following illustrations before lighting.

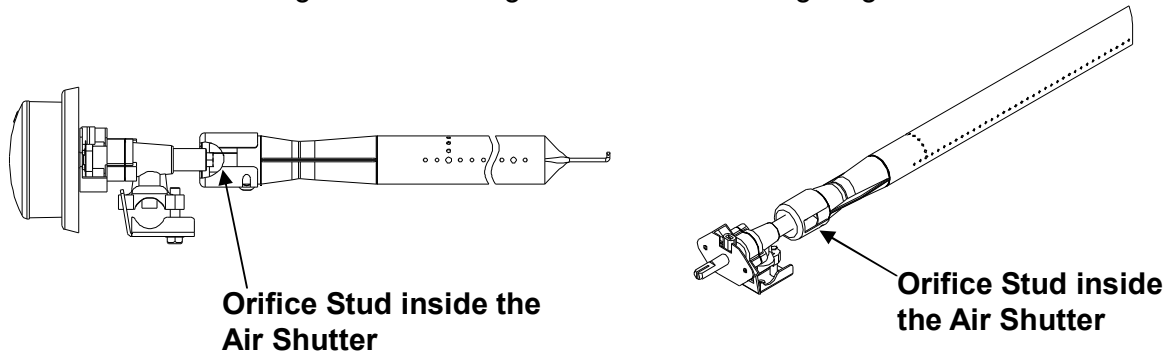


Fig. 34 Main Burner and Orifice Relationship

Infrared Burner Ignition Wire and Flame Sensor Replacement

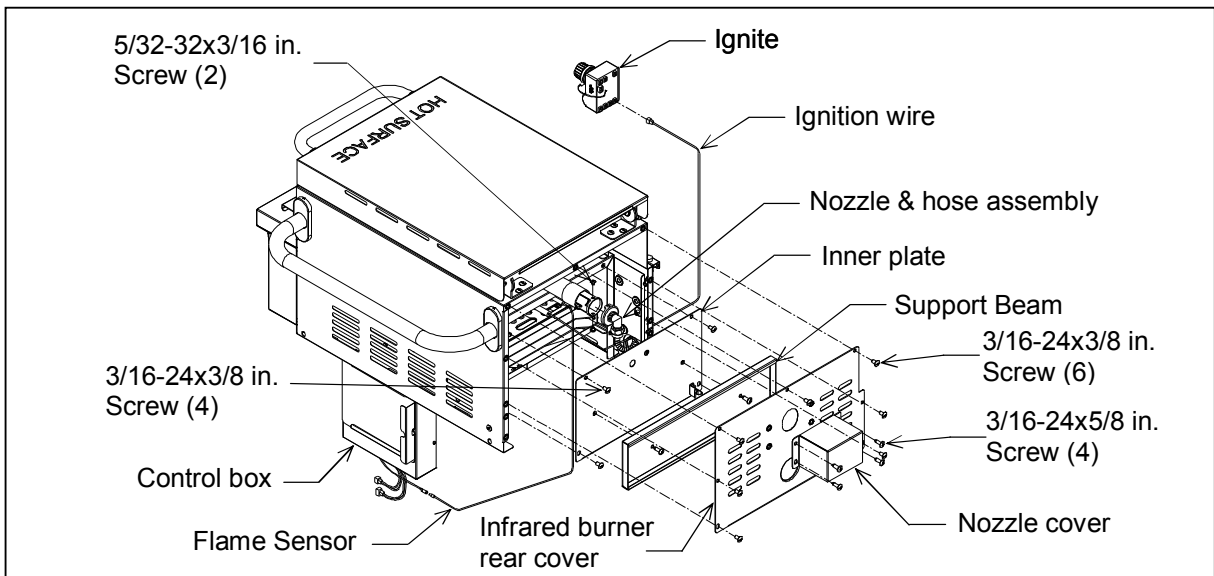


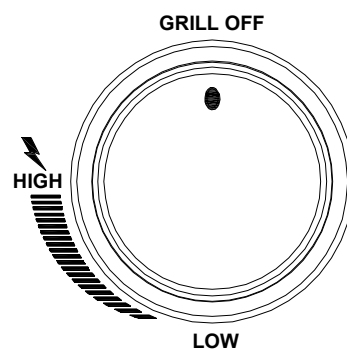
Fig. 35 Infrared Burner Ignition and Flame Sensor replacement

To replace the ignition wire or flame sensor, Fig. 35 shows the parts which have to be disassembled. Then the ignition wire and flame sensor will be exposed for replacement. It also shows the ignition wire goes through the hole on the right side panel I to the electrical ignite and the flame sensor wire goes to control box. The support beam can be thrown away after the replacement. It is mainly for the shipping, no effect on grilling.

Grill Lighting Instructions

To Light the Main Burners and the Side Burner

1. Read instructions before lighting your grill.
2. Open the grill hood during lighting.
3. Check the ignition pin position and distance between the pin and the burner. Refer to Fig. 30 on page 22.
4. Make sure the drip tray is installed.
5. Open the LPG tank or natural gas valve.
6. Push the control knob in and turn the knob to the left to "HIGH" position. Keep pressing the knob until the burner is lit.
7. If the burner does not ignite within 5 seconds, immediately turn the control knob back to the "OFF" position. Wait 5 minutes. Repeat step 6 up to 2 or 3 times.
8. If the burner still does not ignite, TURN OFF THE GAS. WAIT 5 MINUTES for excess gas to dissipate. Repeat steps 5 and 6 (if necessary).
9. If the burner still can't be lit, refer to the Troubleshooting section.



Replacing the Battery

1. Unscrew the electrical ignition button and remove the old battery.
2. Replace with a new AA battery.

Note: The negative (-) side of the battery goes in first. Please refer to the mark on the side of the cap.

WARNING:

Make sure the hood is completely open each time you attempt to light the grill. Failure to open the hood could lead to delayed ignition resulting in bodily harm.

CAUTION: It is important to inspect the full length of the gas line hose. If it is evident there is excessive abrasion or wear, or the hose is cut, the hose must be replaced prior to the appliance being used.

If required, check your parts list for the proper replacement hose assembly. It will be necessary to open the bottom door to fully inspect the hose.

Air Shutter Adjustment

1. Main burner

The main burner air shutters are adjusted at the factory for LP gas only. The settings are:

- (1) 1/4 in. open for LP gas.
- (2) 1/6 in. or smaller open for NG gas.

If you desire to fine tune your shutter adjustment (or if your flame is more yellow rather than blue), please follow this procedure.

WARNING: Do not touch burner after adjustments. The burner is hot.

- a. Loosen the air shutter. The shutter is located on the end of the gas burners underneath the control box. See Fig. 36.

OPERATING INSTRUCTIONS

- b. Loosen the air shutter screw.
- c. Light the burner to be adjusted.
- d. With a protected gloved hand, fine tune the air shutter until a stable, mostly blue flame is observed. Acceptable flames are shown in Fig. 37.
- e. Tighten the air shutter locking screw enough to hold the shutter in place.
- f. Repeat procedure on other burners.

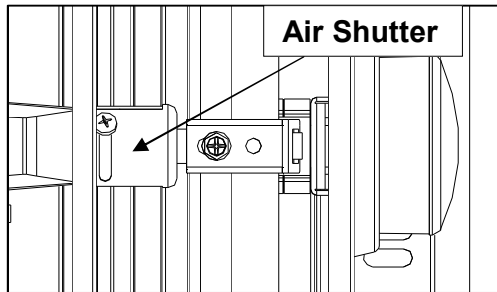


Fig. 36 Air Shutter

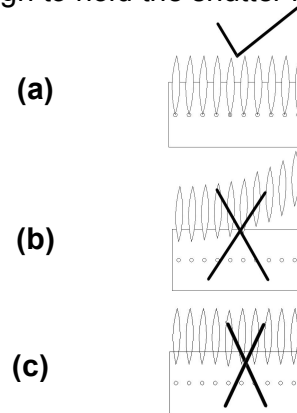


Fig. 37 Acceptable Flame only (a)

Match Lighting Instructions

IMPORTANT: The hood must be open when match lighting any burner.

1. Turn on gas supply.
 - a. If portable, at the LP cylinder valve.
 - b. If permanent gas supply, at the manual gas shutoff valve.
2. Open the right door I to access the match clip with chain.
3. Attach either the match or paper to the clip shown in Fig. 38, light the match and insert it close to the ports of the burner, push and turn the depressed knob to the left to "HIGH" position.

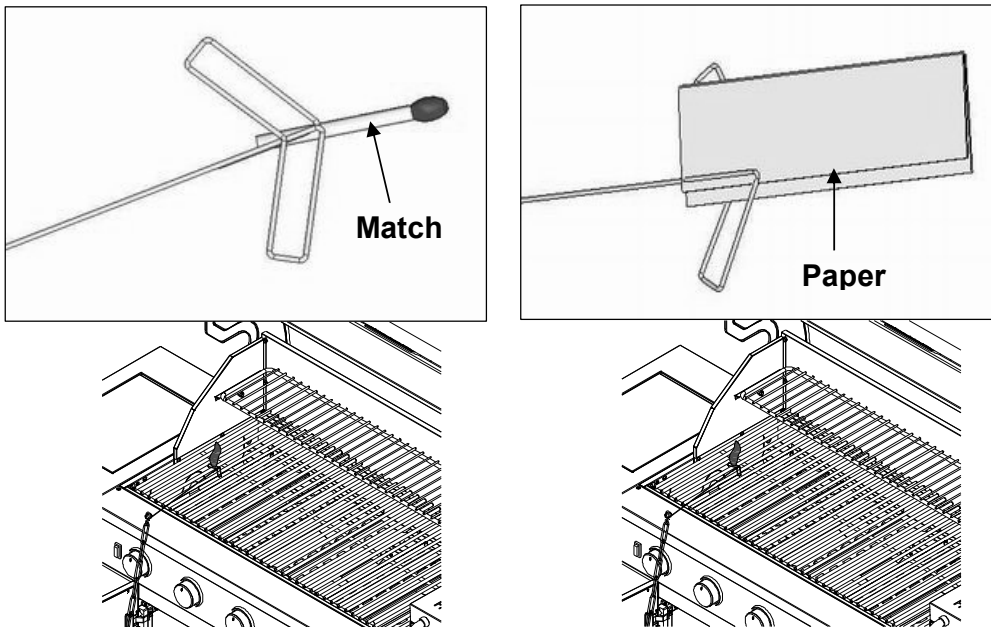


Fig. 38 Match/Paper Lighting Illustration

4. The center burner (if needed) can be lit from center grid by inserting the match clip into the front side of flame tamer. Light this burner before igniting both outside burners.

OPERATING INSTRUCTIONS

5. Depress burner valve for that burner and turn to high.
6. Observe that the burner has ignited. Remove the match and extinguish.
7. Repeat Steps 2 - 5 for the next burner.

Breaking in Your Grill

When firing your grill for the first time, it is advisable to run all the main burners and burner on "HIGH" for 15 minutes with the hood down/sear top tray closed and then turn the main burners off. This tempers the grill.

Preheating Grill

It is extremely important that your grill be up to temperature before you begin using it. After lighting, close the hood and preheat the grill on "HIGH" for 10 minutes. This preheating will ensure that the cooking grid and grate are hot enough for proper grilling. Please follow the "Infrared Burner Grilling Instructions" section on page 30 for details on infrared burner operation.

CAUTION: Do not cover the grids during the preheating period.

WARNING: Never leave a grill unattended to guard against possible grease fires getting out of control. Grease fires can be severe and cause grill damage, property damage and bodily harm.

Open or closed hood for grilling

Cooking with the lid open or closed is a matter of personal preference. Cooking with the lid closed is recommended if you enjoy cooking at maximum "searing" temperatures. This method will also produce more "flare up", speed the cooking procedure and will give you a more robust, smoky, outdoor flavor. If you prefer cooking slower with less flare up, we suggest the lid-open method.

We recommend always cooking with the lid CLOSED if you are in a windy area or colder climate. Your grill has been designed and constructed to give you maximum flexibility and cooking performance. Be creative. Try different cooking methods on your grill to determine which suits your needs best. There is no right or wrong way to cook, just different cooking styles. Get creative and enjoy!

Checking Gas Leaks

Before operating your grill, after refueling, check carefully to be certain that all connections are tight and there are no gas leaks.

1. Make 2 - 3 ounces of leak solution by mixing liquid dishwashing soap with water.
2. Make certain all control knobs are in the "OFF" position.
3. Brush small amounts of the leak solution on all the fittings and turn the gas on.
4. If bubbles appear, there is a leak. Proceed to step 5.
5. Turn the gas off and tighten all connections.
6. Go back to step 1 to retest the fittings.
7. If bubbles continue to appear, turn the gas off. Contact customer service.

WARNING: Never use a match or open flame for leak detection. Use of an open flame could result in a fire, explosion and bodily harm.

IMPORTANT: When connecting or replacing any gas pipe or fittings, all joints must be sealed with approved leak-proof sealing compound or plumber's tape.

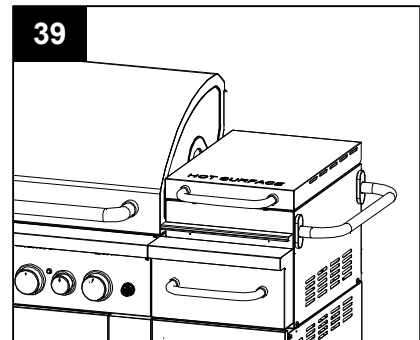
OPERATING INSTRUCTIONS

Infrared Burner Grilling Instructions

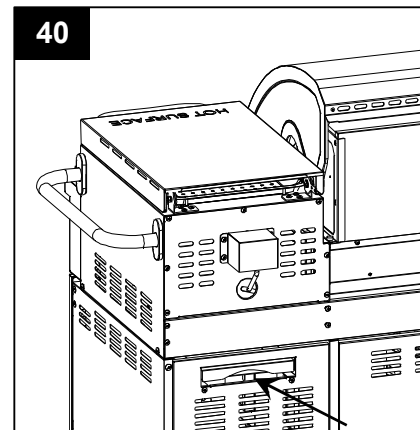
Grilling with a top fired infrared burner at high temperature seals more flavor and allows juices to surround the meat, cooking it in half the time.

WARNING: Your top-fired burner has been designed to operate using only the meats specified below. Do not attempt to cook fish, hamburger or fatty meats. Failure to follow this warning could lead to a fire hazard and bodily harm and will void your warranty.

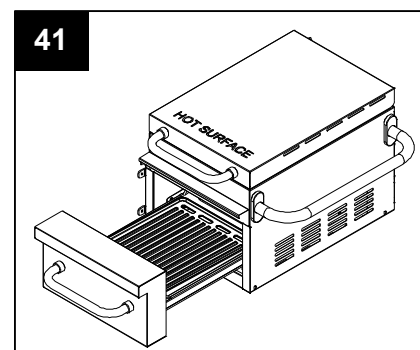
1. Professionally sears steaks and chops.
2. Pizza.
3. Vegetable and soft shell fish steamer.
4. Warmer meat storage.



Always check the grease drip tray making sure it is empty and in position.



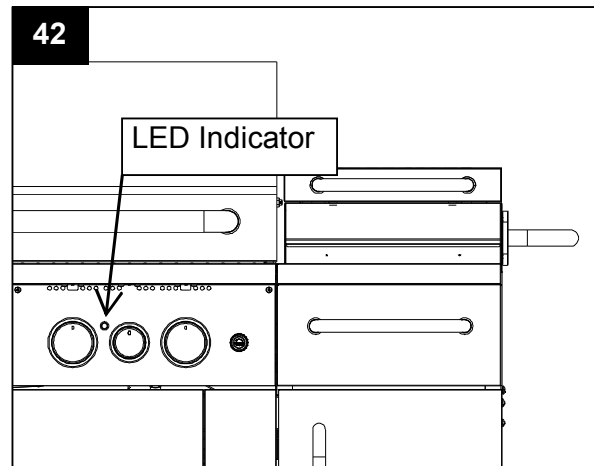
Make certain that the griddle is positioned groove side up with grease hole always placed at the rear.



OPERATING INSTRUCTIONS

Preheat 15 minutes

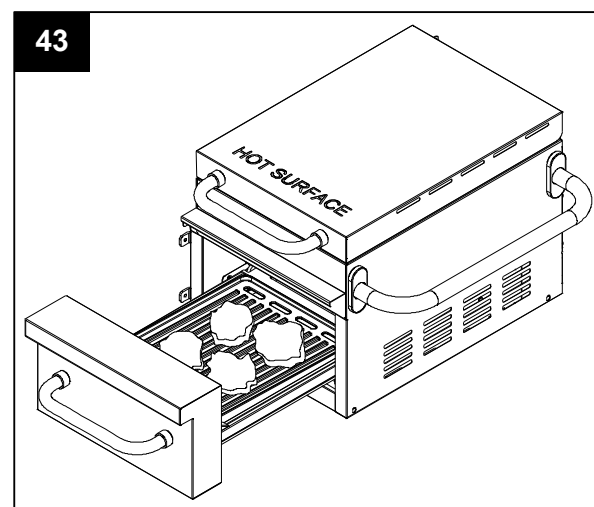
The second knob is for the infrared burner control. Follow the lighting instructions on page 27 to light this feature. If the burner is lit, the green LED will come on. If not, you will hear a beep. Wait 5 seconds and try again. Preheat for 15 minutes.



Suggested grill times each side depending on thickness.

Do not crowd your meats. Only cook 4 - 6 cuts at a time, depending on size.

Food Type	Grilling Time (Minutes)
Steak	3
Chops	4
Pizza	2, one side
Chicken	Use main grill
Fish	Use main grill

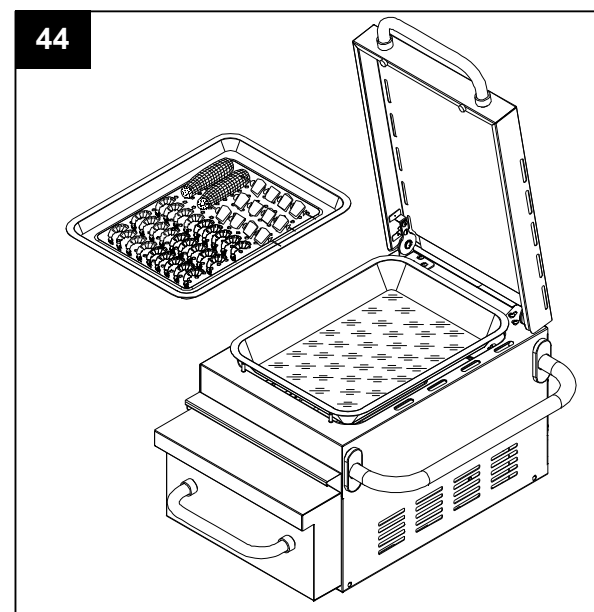


Vegetable and Soft Shell Fish Steamer

Before igniting, place 1-1/2 to 2 cups of water in the pan and cover it with the steamer screen. Soft shell fish includes:

- Shrimp
- Crab legs
- Soft shell clams

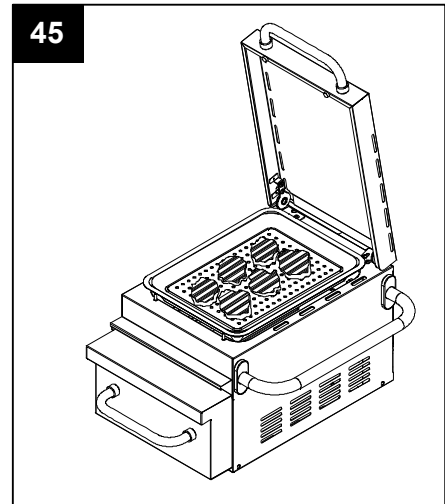
NOTE: Steam with lid closed.



OPERATING INSTRUCTIONS

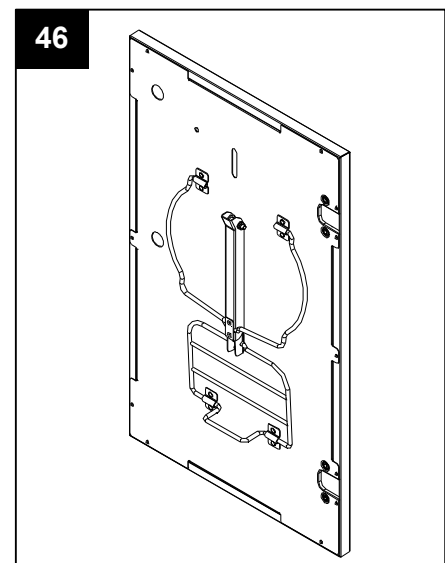
Warmer

This feature with water can hold grilled meats at desired wellness allowing everyone to enjoy their food together.

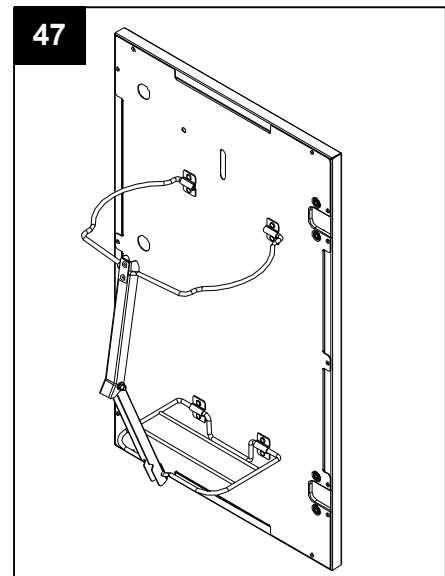


Trash Bag Holder Instruction

Trash bag holder is installed on the left door.
When not in use, fold down.



To unfold, lift the metal rings on top and bring the bottom down.
Place a paper or plastic bag for trash into the frame.



CARE AND MAINTENANCE

WARNING: Please remember this is an outdoor gas grill. Many areas of the grill generate extreme heat. We have taken every precaution to protect you from the contact areas. However, it is impossible to isolate all high-temperature areas. Therefore, use good judgment and a certain degree of caution when grilling on this product. We suggest a covered, protected hand during operation of grill. Do not move your grill when it is in operation or hot to the touch. Wait until your unit is turned off and properly cooled down before moving it. Failure to follow this warning could result in personal injury.

Post Heating

To keep the grates free of charred food remains, run the grill on “HIGH” for 15 minutes after cooking is complete and food has been removed.

CAUTION: Do not cover the grill during the post heating period.

After post heating your grill, turn the control knobs to the “OFF” position.

Propane Tank Shut-Off

After the burner box cools down, the propane tank valve should also be closed. If you do not want to wait for the burner box to cool, use a covered hand to turn off the propane tank valve.

WARNING: Do not attempt to turn off the LP tank valve without first covering your hand with a protective mitt or allowing the grill to cool down. Failure to follow this warning could result in a severe burn.

LP Gas Safety Requirement

For LP gas grills, the LP gas supply tank to be used must be: Constructed and marked in accordance with the Specifications for LP Gas Tanks of the U.S. Department of Transportation (DOT) or the National Standard of Canada, CAN/CSA-B339 Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission, as applicable; and Provided with a listed Overfill Prevention Device (OPD).

The tank should be 12 in. in diameter and 18-1/2 in. tall and be equipped with a Type-I fitting.

The tank supply system must be arranged for vapor withdrawal.

The tank used must include a collar to protect the cylinder valve.

Do not operate the gas grill indoors or in any enclosed area. If the gas grill is not in use, the gas must be turned off at the supply tank. If the grill is to be stored indoors, disconnect the gas supply tank and store the tank in an upright position in a cool, well-ventilated outdoor location away from your grill or any other heat source.

When checking for gas leaks, do not use an open flame. Use a soapy water solution and apply it to the pipe joints and fittings with a brush and check for bubbles. Check flexible hoses for cuts and wear that may affect the safe operation of the grill. Only the factory supplied hose and regulator must be used. Use only replacement regulator and hose assemblies specified by manufacturer.

CARE AND MAINTENANCE

LP tank should be securely locked by the patented safety tank ring at all times. An unlocked tank may fall or tilt which can cause injury or property damage. It is recommended to lock the tank at all times.

Refer to Fig. 31 and Fig. 32. After positioning the tank in the opening, lower the safety tank ring to lock the tank. Use only 20 lb. gas tank (see LP Gas Safety Requirements for Additional Information).

Handling the Liquid Propane Tank Safely

Remember to handle your portable liquid propane tank carefully when you take it to your dealer for a refill. Avoid dropping it or bumping it against sharp objects. Liquid propane tanks are sturdily constructed, but a series of hard jolts could damage the container.

When transporting the tank to your local propane gas dealer, make sure the valve is closed tightly and the protective cover is in place. Position the tank securely in an upright position so it will not roll around your vehicle.

If you plan to make stops for shopping or errands, have your liquid propane tank filled at the last stop before going home. Again, make certain the refilled tank is secure and in an upright position. When you return home, remove the refilled tank from your vehicle. Never leave a portable liquid propane tank inside a vehicle that may become overheated by the sun.

Your local liquid propane gas dealer will gladly offer you additional safety tips.

Storing the Liquid Propane Tank Safely

Do not store portable liquid propane tanks (whether full or empty) inside your home, the living area of an R.V., a garage, basement or workshop. It is unlikely that liquid propane will leak from the tanks. If it should leak, the fuel could be exposed to sparks from automobiles, power tools or other appliances. When storing or transporting your LP tank, it must remain in an upright position. Never lay your LP tank down on its side whether it is full or empty. Never store a spare tank under or near your grill.

CAUTION: Never transport or move your grill or grill tank without first closing the manual valve on your liquid propane gas tank.

The best place to store a liquid propane tank is in a shady or protected spot outdoors, behind your home or garage, or on a screened porch but where it is out of reach of children. Liquid propane will not evaporate. It is in a strong, closed container. It will not lose any of its clean-burning heat content, even if left outside year-round.

WARNING: When not connected to your grill, the LP gas tank must be stored in an upright position in a cool, shady, well-ventilated, outdoor location away from your grill or any other heat source. Failure to follow this warning could lead to tank valve damage, fire hazard and personal injury.

CARE AND MAINTENANCE

Refilling a Propane Tank

It is extremely important that your LP tank be filled properly when you take it to be refilled. Be sure to use a reputable LP dealer and observe how the tank is filled and at what capacity. An overfilled LP tank can be dangerous.

The proper way to fill a tank is by weight. The empty tank should be placed on a scale. The scale weights should be readjusted to a weight that would allow up to 80% of the total weight. The filling operation must end once the tank is filled to 80% of its total capacity. If the tank is not completely empty, the scale readjustment must be changed to consider the propane (LP) already in the tank.

WARNING: An LP (propane) tank is overfilled if it contains more than 80% of its total capacity of propane (LP).

An incorrectly filled or an overfilled LP (propane) tank can be dangerous. If a tank is overfilled and the weather causes the warming of the LP tank, (a hot day, tank left in sun or stored indoors) internal pressure is created due to expansion of the propane which in turn may cause the LP gas to be released through the pressure relief valve on the tank. The pressure relief valve is a safety device required on 20 lb. propane tanks by the Department of Transportation to prevent a catastrophic tank failure due to excessive pressure. LP gas released from the tank is flammable and can be explosive.

IMPORTANT: When connecting or replacing gas pipe or fittings, all joints must be sealed with approved leak-proof sealing compound or plumber's tape. After making connections, check all joints for leaks using a soapy water solution and a brush.

WARNING: Never use an open flame to test for gas leaks. Use of an open flame could result in a fire, explosion and bodily harm.

Stainless Steel

This grill has some stainless steel parts. Stainless steel is non-rusting in certain conditions; therefore, a cover and stainless steel cleaner should be used when the grill is not in use.

Wipe with a stainless steel cleaner on all non-cooking surfaces once a month.

Never clean the stainless steel when it is hot.

After initial grilling, certain areas of the grill (i.e., the vents, hood and burner box) may discolor. This is a normal discoloration caused by the intense heat from the burners.

Specks of grease can gather on the surface of the stainless steel and get baked on. These can usually be removed with warm soapy water or a stainless steel cleaner. As a last resort a mild abrasive pad could be used with a stainless cleaner. Use light pressure on the pad and always scrub in the direction of the grain. There are many outstanding products that will help clean and protect on all non-cooking surfaces.

Do not use steel wool to clean the grill.

CARE AND MAINTENANCE

Do not use abrasive cleaners on the polished surface. Use caution when cleaning. Metal polish or a mild chrome cleaner can be used to bring back luster and highlights. Rust remover can be used to remove rust stains that occur from outside sources. Follow the rust removal instructions carefully.

To touch up minor scratches in the stainless steel, sand the affected surface lightly with 160 dry grit emery sand paper in the direction of the grain.

Burners

Burners are made of stainless steel and can be soaked in water and cleaned with a brass wire brush or a stiff bristle brush. Check every port hole for clogs. Use a wire pin (smaller than the port) to clean clogged ports. Do not enlarge any ports. Make sure the burners are dry before installing them back on the grill. See Fig. 48.

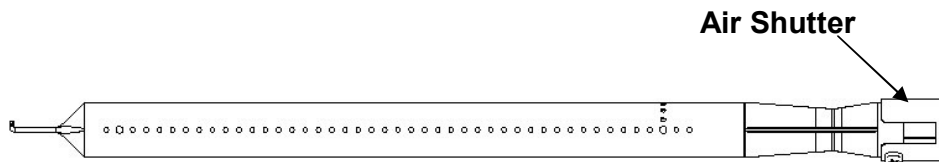


Fig. 48

Spiders and insects can nest inside the burners of this or any other grill and cause the gas to flow from the front of the burner. This could cause a fire to occur behind the valve panel, thereby damaging the grill and making it unsafe to operate. Inspect the burners at least once a year or immediately after any of the following conditions occur:

1. The smell of gas in conjunction with the burner flames appearing yellow.
2. The grill does not reach temperature.
3. The grill heats unevenly.
4. The burners make popping noises.

Drip Tray

The drip tray collects excessive grease runoff and fallen food particles.

Allow the tray and its contents to cool before cleaning. Take the tray out and wipe it clean.

Make sure the tray is installed before using the grill.

It is highly recommended that you check the tray regularly to avoid any possibility of a grease fire, however, most of the drippings will vaporize back into the cooked item giving you an outdoor grilled flavor.

Helpful Care and Maintenance Hints

Before grilling, pre-heat main burner/sear burner for 15 minutes on "HIGH" with hood down, pre-heat infrared burner for 5 minutes with tray closed. To avoid uncontrolled flare-ups or grease fires, grill meats with hood open and cook the suggested meats only in the infrared burner. Close hood if meats are thick or weather is cold, or if you are using indirect cooking.

CARE AND MAINTENANCE

Always protect your hand with a pot mitten or cooking glove when coming into contact with a hot surface.

Hood up when grilling meats, especially chicken. Hood down when indirect or rotisserie cooking.

NEVER leave your grill unattended while cooking.

After use, close hood, turn burners to "HIGH" for 15 min. for self-cleaning, grease burn off.

Care and Maintenance Time Table Chart

Grill Item	Frequency Based on Normal Use	Cleaning Method
Painted surface	Twice yearly	Car wax
Stainless surface	Twice yearly	Stainless cleaner
All grates	After each use	Burn off and wipe
Stainless grates	15 days	Wire brush/ Dishwasher safe
Porcelain grates	15 days	Scrub pad soapy water/ Dishwasher safe
Burner heat tents	30 days	Wire brush
Burners	90 days	Wire brush
Burner box interior	120 days	Interior grill cleaning products

Gauging amount of LPG fuel

To gauge the amount of propane fuel in your gas tank the grill must be in operation. Place your hand at the top of the tank and slowly move down the side until the tank feels cool to the touch. This will indicate the approximate amount of propane gas in your tank; if 3/4 empty, refill.

Do not use charcoal briquettes or any flammable material with your grill. Use of such material will void your warranty and may lead to a fire, explosion and/or bodily harm.

TROUBLESHOOTING

Many solutions given here can make your grilling experience safer and more enjoyable. You can also call customer service at **1-800-963-0211**, 8 a.m. - 6 p.m., EST, Monday - Thursday, 8 a.m. - 5 p.m., EST, Friday.

Problem	Possible Cause	Corrective Action
Grill, side burner or sear top burner will not light	<ol style="list-style-type: none"> 1. The ignition wire came off the electrical igniter. 2. The distance between the ignition pin and the burner is greater than 5/32 in. (sear burner and sear top burner). 3. The ignition wire is broken. 4. The battery has died. 5. The battery is in the wrong polarity. 6. The electrode tip does not produce sparks at the burner port. 7. No gas supplied. 8. Air shutter opening is too big. 9. Switch on the infrared burner valve is broken. 10. The igniter is broken. 	<ol style="list-style-type: none"> 1. Reconnect the ignition wire to the electrical igniter. 2. Loosen the ignition pin and adjust the distance, then fasten it again. 3. Call customer service for a replacement ignition wire. 4. Install a new AA battery. 5. Change the battery polarity. 6. Reinstall the electrode. 7. Turn on the regulator valve. 8. Loosen the air shutter and adjust the opening to a smaller size. 9. Replace the manifold. 10. Replace the igniter.
Burner flame is yellow and gas odor can be smelled	<ol style="list-style-type: none"> 1. The air shutter opening is not properly set. 2. Spiders or insects block the air shutter. 	<ol style="list-style-type: none"> 1. Loosen the air shutter and adjust the opening to have blue flames. 1/4 in. opening for LPG. 1/6 in. or less opening for NG. 2. Clean blockages. 3. Check for the source of gas leaks.
Excessive flare-up	<ol style="list-style-type: none"> 1. Grilling fatty meats. 2. Knobs on "HIGH". 3. Spray water on gas flames. 4. Hood closed when grilling. 	<ol style="list-style-type: none"> 1. Hood up when grilling. 2. Grill fatty meats when the grids are cold while the knobs are on the "LOW" setting. Move the meats to the warming rack if flare up continues until flame settles down. Never spray water on gas flames.
Burner blows out	<ol style="list-style-type: none"> 1. LP tank is empty. 2. Burner is not aligned with the control valve. 3. Gas supply is not sufficient. 	<ol style="list-style-type: none"> 1. Refill the LP tank. 2. Install the burner correctly. 3. Check the gas supply hose and make sure there are no leaks and no knots.

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action										
<p>Low heat with the knob in "HIGH" position</p>	<ol style="list-style-type: none"> 1. Low heat is found in natural gas models. 2. Ports are blocked. 3. LP tank has run out. 	<p>1. This model is set for 7 in. natural gas usage. Please check your natural gas supply system to have correct gas pressure. Regulator is not needed for NG model.</p> <p>Check the orifice if you installed NG nozzles. Conversion kit provides the following nozzles:</p> <table border="1" data-bbox="911 645 1394 898"> <thead> <tr> <th data-bbox="911 645 1179 707">Burner</th> <th data-bbox="1179 645 1394 707">Orifice Size</th> </tr> </thead> <tbody> <tr> <td data-bbox="911 707 1179 770">Main Burner</td> <td data-bbox="1179 707 1394 770">ø 1.37 mm</td> </tr> <tr> <td data-bbox="911 770 1179 833">Infrared Burner</td> <td data-bbox="1179 770 1394 833">ø 1.38 mm</td> </tr> <tr> <td data-bbox="911 833 1179 898">Side Burner</td> <td data-bbox="1179 833 1394 898">ø 1.55 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Clear ports of any obstructions. 3. Refill the LP tank. 	Burner	Orifice Size	Main Burner	ø 1.37 mm	Infrared Burner	ø 1.38 mm	Side Burner	ø 1.55 mm		
Burner	Orifice Size											
Main Burner	ø 1.37 mm											
Infrared Burner	ø 1.38 mm											
Side Burner	ø 1.55 mm											
<p>Low heat, LP gas</p>	<p>The propane regulator assembly incorporates an excess flow device designed to supply the grill with sufficient gas flow. Rapid changes in pressure can trigger the excess flow device, providing a low flame and low temperature.</p>	<p>Please follow these instructions:</p> <ol style="list-style-type: none"> 1. Make sure all burners are "OFF". 2. Open the tank valve and wait 5 minutes. 3. Light the burners one at a time following the lighting instructions listed on the door liner and Page 27. 										
<p>Low heat, natural gas</p>	<p>Gas pressure is significantly affected by gas line and length of gas line from house gas line.</p>	<p>Check your gas line and make corrections by following the chart below.</p> <table border="1" data-bbox="911 1570 1394 1845"> <thead> <tr> <th colspan="2" data-bbox="911 1570 1394 1621">From House to Grill</th> </tr> <tr> <th data-bbox="911 1621 1110 1666">Distance</th> <th data-bbox="1110 1621 1394 1666">Tubing Size</th> </tr> </thead> <tbody> <tr> <td data-bbox="911 1666 1110 1711">Up to 25 ft.</td> <td data-bbox="1110 1666 1394 1711">3/8 in. diameter</td> </tr> <tr> <td data-bbox="911 1711 1110 1756">26 ft.-50 ft.</td> <td data-bbox="1110 1711 1394 1756">1/2 in. diameter</td> </tr> <tr> <td data-bbox="911 1756 1110 1845">51 ft.-100 ft.</td> <td data-bbox="1110 1756 1394 1845">2/3 in. of run 3/4 in. 1/3 in. of run 1/2 in.</td> </tr> </tbody> </table>	From House to Grill		Distance	Tubing Size	Up to 25 ft.	3/8 in. diameter	26 ft.-50 ft.	1/2 in. diameter	51 ft.-100 ft.	2/3 in. of run 3/4 in. 1/3 in. of run 1/2 in.
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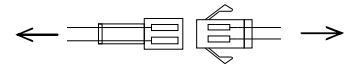
TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Beeping	<ol style="list-style-type: none"> 1. No gas. 2. Connection is loose. (Refer to Fig. 21, #5). 3. Flame sensor wire is broken. 4. Flame sensor pin is too far from ceramic surface. 5. Burner is extinguished. 	<ol style="list-style-type: none"> 1. Check gas. 2. Reconnect the couple tightly. 3. Replace the flame sensor wire. (Refer to Fig. 21, #7). 4. Reinstall the flame sensor pin. The pin should have a maximum 5/16 in. distance to the burner. 5. Turn off the control knob. Wait 5 minutes for excess gas to dissipate. Light the burner again.
LED Indicator off	<ol style="list-style-type: none"> 1. No gas. 2. LED is broken. 3. Connection is loose. (Refer to Fig. 21, #2, #3, #4 and #7). 4. Flame sensor wire is broken. 5. Flame sensor pin is too far from ceramic surface. 6. Burner is extinguished. 7. Switch on the valve is broken. 8. Control box is dead. 	<ol style="list-style-type: none"> 1. Check gas. 2. Replace the LED. 3. Reconnect the couple tightly. 4. Replace the flame sensor wire. 5. Reinstall the flame sensor pin. The pin should have a maximum 5/16 in. distance to the burner. 6. Turn off the control knob. Wait 5 minutes for excess gas to dissipate. Light the burner again. 7. Replace the manifold or the valve. 8. Replace the control box.
Hood lamp will not illuminate	<ol style="list-style-type: none"> 1. No power supply. 2. Defective halogen bulb. 3. Internal wiring issue. 	<ol style="list-style-type: none"> 1. Check power supply and make sure transformer is properly plugged in. 2. Replace the bulb. 3. Check the wiring connections under the fire box. All wire connections must be tight. If any wires are damaged they should be replaced.

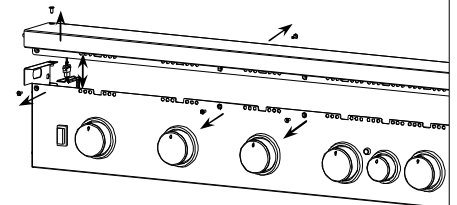
TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
LED control panel lights will not illuminate	<ol style="list-style-type: none"> 1. No power. 2. Defective LEDs. 3. Loose connection. 4. Defective switch. 	<ol style="list-style-type: none"> 1. Install 2 AA batteries in the battery box. 2. Replace the LED lights. See below demonstration 2.1 - 2.7. 3. Check the connection between the battery box and the LED light. (Refer to 2.1 below). 4. Replace the switch. Refer to 2.1 - 2.7 to remove the LED installation panel and replace the switch.

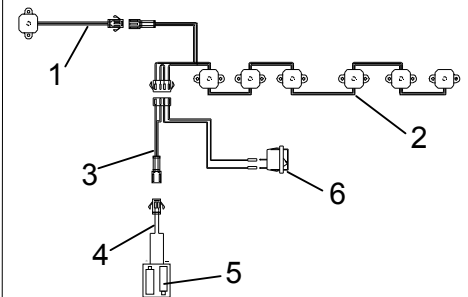
2.1 Open the left door and locate the LED power line and separate the power line from the coupling; please refer to page 22 at "Step 29: Connect the LED knob lights to the power supply."



2.2 Take the six 5/32 – 32 x 3/8 in. and one 5/32 – 32 x 3/4 in. countersunk head screws off.



2.3 Rotate the LED installation panel outside so that the LED is exposed for replacement. The LED knob lights are composed by six parts as listed in the table. All parts are connected with quick connects. Located the defective part and take it off.



LED holders are fastened to the panel with ST3.5X9.5 screws.

2.4 Install the new parts.

2.5 Plug in all the connects following the diagram.

2.6 Install the upper part of control panel with the seven countersunk head screws.

2.7 Connect the LED knob lights to power supply per 2.1 and Step 29, page 22.

No.	Name	P/N
1	Side Burner LED	3618ST-A013
2	Control Panel LED	3618ST-A011
3	LED Connect	3618ST-A012
4	Battery Box	6318B-8400
5	AA battery	
6	Switch	E3520-00 -8015

WARRANTY

Proof of purchase is required to access this warranty program, which is in effect from the date of purchase. Customers will be subject to parts, shipping, and handling fees if unable to provide proof of the purchase or after the warranty has expired.

If you have any questions or problems, you can call our customer service department at **1-800-963-0211**, 8 a.m. - 6 p.m., EST, Monday - Thursday, 8 a.m. - 5 p.m., EST, Friday.

Limited Warranty

5-Year Warranty on stainless steel burners.

1-Year Warranty on all parts affecting the operation of the gas grill due to damage.

Warranty Provisions:

This warranty is non-transferable and does not cover failures due to misuse or improper installation or maintenance.

This warranty is for replacement of defective parts only. We are not responsible for incidental or consequential damages or labor costs.

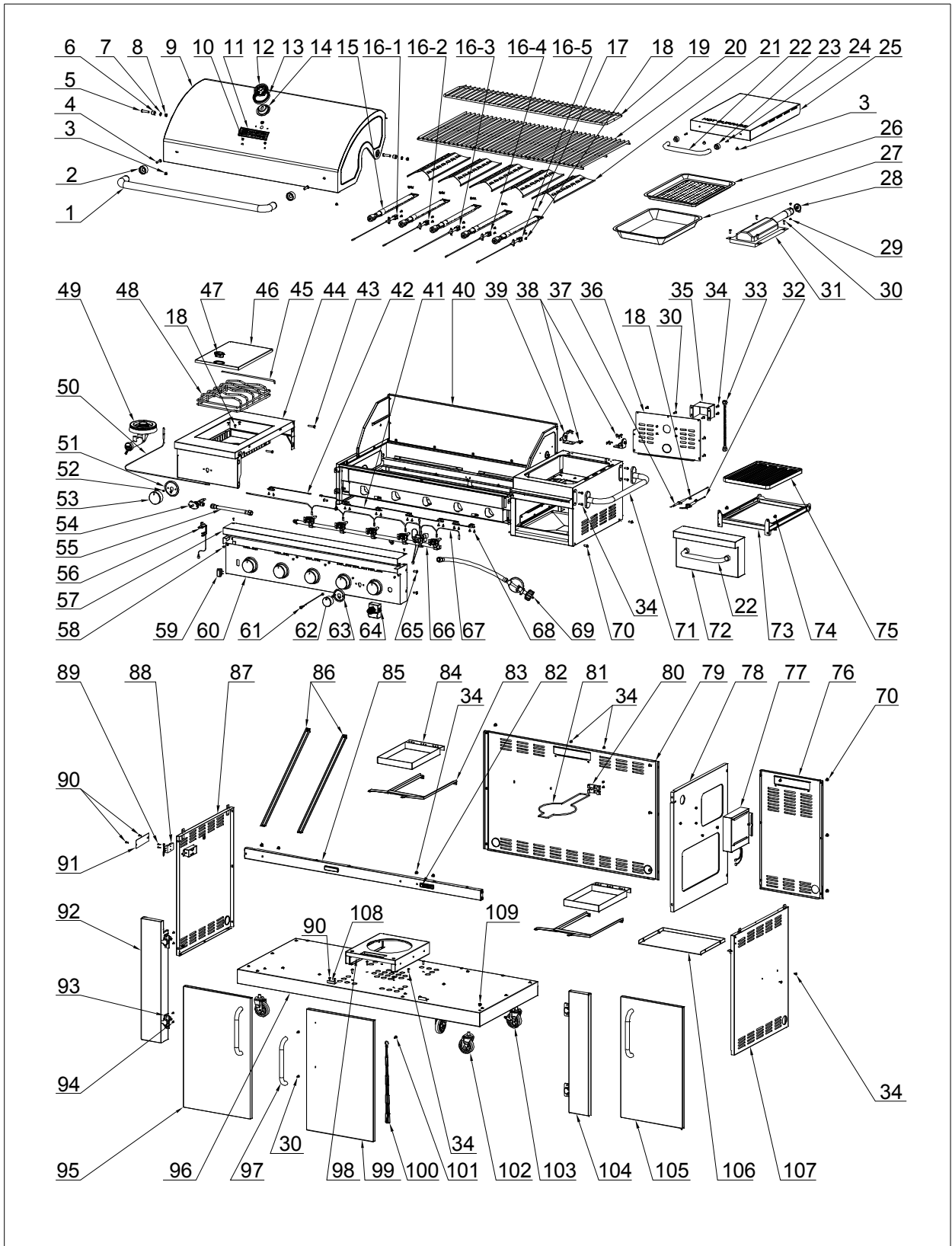
This warranty does not cover corrosion or discoloration after the grill is used, or due to lack of maintenance, hostile environment, accidents, alterations, abuse or neglect.

This warranty does not cover damage caused by heat, abrasive and chemical cleaners, or any damage to other components used in the installation or operation of the gas grill.

Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

EXPLODED VIEW

For replacement parts, call our customer service department at **1-800-963-0211**, 8 a.m. – 6 p.m., EST, Monday - Thursday, 8 a.m. - 5 p.m., EST, Friday.



REPLACEMENT PARTS LIST

Part	Description	Part #	Part	Description	Part #
1	Hood Handle	3618ST-6300	30	Screw	3/16-24 x 3/8 in.
2	Hood Handle Base	3618ST-6400	31	Infrared Burner	6318B-8706-1
3	Rubber Plug	3219B-8083	32	Ignition Pin (Infrared Burner)	3618ST-8709
4	Screw	1/4 -20 x 3/4 in.	33	Infrared Burner Gas Hose	6318B-8307
5	Screw	5/16-18 x 1-3/8 in.	34	Screw	3/16-24 x 5/8 in.
6	Bushing	3618ST-0001	35	Air Shutter Cover	6318B-7001
7	Spring Washer	3618ST-0003	36	Infrared Burner Rear Panel	3618ST-7400
8	Nut	5/16-18	37	Flame Sensor	6318B-8707
9	Hood	3618ST-6100	38	SS Screw	3/16-24 x 3/8 in.
10	Nut	3/16-24	39	Hinge	6318B-7600
11	Badge	2518-3-8001	40	Burner Box	3618ST-2000
12	2.5 in. Temperature Gauge	2518-3-8012	41	Control Panel LED	3618ST-A011
13	Bezel	2518-3-6005	42	Side Burner LED	3618ST-A013
14	Washer, Temperature Gauge	2518-3-6002	43	Screw	1/4-20 x 1-1/4 in.
15	Main Burner	3618ST-2004	44	Side Cooker Shelf	3618ST-5100
16-1	Ignition Pin (Main Burner)	3618ST-A400-9	45	Shaft, Cover	2518SL-5003-N
16-2	Ignition Pin (Main Burner)	3618ST-A400-7	46	Cover, Side Burner	3618ST-5001
16-3	Ignition Pin (Main Burner)	3618ST-A400-5	47	Handle, Cover	3218LT-00-2804
16-4	Ignition Pin (Main Burner)	3618ST-A400-3	48	Grate, Side Burner	3618ST-5002
16-5	Ignition Pin (Main Burner)	3618ST-A400-1	49	Side Burner	3618ST-A500
17	R-Pin	R-Ping	50	Ignition Wire	3618ST-A200-2
18	Screw	3/16 -24 x 3/8 in.	51	Bezel	SH3118B-3004
19	Warming Rack	3618ST-2002	52	Screw	M4 x 8
20	Cooking Grid	3618ST-2001	53	Knob	E3518-00-3003
21	Flavor Step	6318B-38-2003	54	Side Burner Valve	3618ST-CF001-B2
22	Lid Handle	6318B-7120B-10	55	Side Burner Hose	SH3118B-3005
23	Lid Handle Base	6318B-7120B-20	56	Connect Wire, LED	3618ST-A012
24	Screw	5/32-32 x 1 in.	57	Upper Part of Control Panel	3618ST-3301
25	Lid	6318B-7120A	58	SS Screw, Countersink	5/32-32 x 3/8 in.
26	Screen Pan	6318B-8704	59	Switch, LED	E3520-00-8015
27	Pan	6318B-8703	60	Lower Part, Control Panel	3618ST-3102
28	Nozzle Assembly	6318B-8706-2	61	LED Indicator	6318B-8710
29	Screw	5/32-32 x 3/16 in.	62	Bezel, Small	6318B-3002

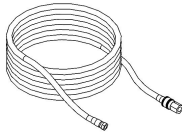


REPLACEMENT PARTS LIST

Part	Description	Part#	Part	Description	Part#
63	Knob, Small	L3218-00-3001	88	3V Battery Box	6318B-8708
64	Electrical Igniter	DHLG-7A	89	Screw, Countersink	M3 x 10
65	Screw	1/4-20 x 3/8 in.	90	Screw	8-32 3/8 in.
66	Manifold	3618ST-3200	91	Battery Cover	3618ST-1503
67	Continuous Ignition Wire	3618ST-A900	92	Left Skirt	3618ST-1901
68	SS Screw	ST3.5x9.5	93	Door Hinge	P3018-00-8009
69	Regulator	3618ST-A003	94	Screw, Countersink	5/32-32 x 3/8 in.
70	Screw	1/4-20 x 1/2 in.	95	Left Door	3618ST-1B00
71	Handle	3618ST-7110	96	Base Panel	3618ST-1110
72	Tray Front	3618ST-7310	97	Door Handle	L3018S-00-1410
73	Tray	6318B-7330	98	Tank Tray	3618ST-1120
74	SS Screw	1/4-20 x 3/8 in.	99	Right Door I	3618ST-1C00
75	Grate	6318B-7303	100	Match Holder	3618ST-1C10
76	Right Rear Panel	3618ST-1003	101	Screw	5/32-32 x 5/8 in.
77	Control Box	3618ST-1720	102	Caster	3618ST-A700
78	Right Side Panel I	3618ST-1711	103	Locking Caster	3618ST-A800
79	Rear Panel	3618ST-1201	104	Right Skirt	3618ST-1A01
80	Tank Ring Bracket	2518SL-1203	105	Right Door II	3618ST-1D00
81	Safety Tank Ring	SH3118-1202	106	Shelf	3618ST-1002
82	Magnet	SH3118B-1808	107	Right Side Panel II	3618ST-1600
83	Drip Tray Runner	3618ST-1E00	108	Door Stopper	L3218-00-1112
84	Drip Tray	3618ST-1001	109	Bearing, Door Hinge	2518SL-1104
85	Beam	3618ST-1400	CK-2	Infrared Burner orifice Φ 1.38	6318B-8705-1
86	Tank Stopper	3618ST-1F00	CK-3	Side burner orifice Φ 1.55	3618ST-S-NG
87	Left Side Panel	3618ST-1500			


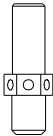

CONVERTING TO NATURAL GAS

The grill does not pack with a complete natural gas conversion kit. Please purchase natural gas conversion kit Item #0050772 for the conversion. Check the package contents with the chart below before using the conversion kit. Follow the instructions on the following pages to convert your grill to natural gas. If you have any questions please call our customer service department at **1-800-963-0211**, 8 a.m. – 6 p.m., EST, Monday - Thursday, 8 a.m. – 5 p.m., EST, Friday. Please discard the conversion kit if you decide to use liquid propane gas.

Package Contents in #0050772

Part	Description	Illustration	Qty.
A	10 ft. Natural Gas Hose		1
B	Nozzle Removal Tool		1
C	Flathead Screwdriver		1

Orifice Size

Model	Main burner Φ1.37	Side burner Φ1.55	Infrared burner Φ1.38
3618ST			
Qty.	5	1	1
Notes	Must purchase Item #0050772		Comes with grill

CONVERTING TO NATURAL GAS

Before the conversion, 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.

1. Main Burner Conversion

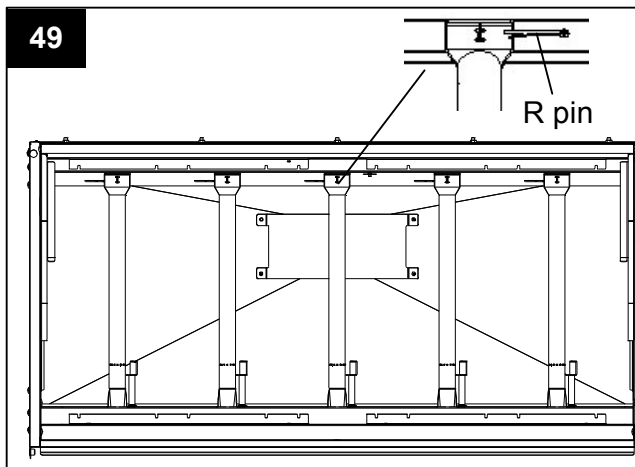
a. Open lid and remove the warming rack, grids and flame steps. Then pull off the R-pins and take the main burners out. Adjust main burners' air shutters by loosening the air shutter screws.

The settings are:

1/4 in. open for LP gas.

1/16 in. - 1/8 in. open for NG gas.

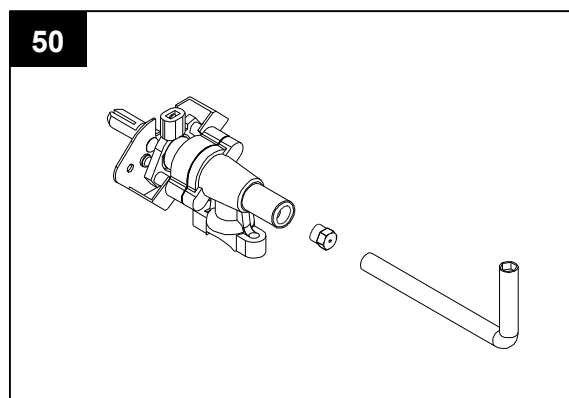
You need to adjust the openings before you put the burners back into the burner box.



b. Change to NG nozzle

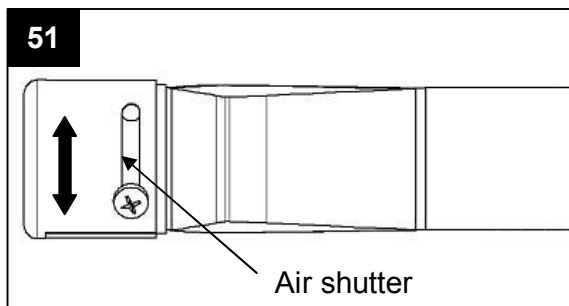
Remove the LP nozzles first with the nozzle removal tool (B), install the NG nozzle sized 1.37.

Note: These nozzles come with #0050772.



c. Adjust the main burner air shutter to have a 1/16 in. - 1/8 in. opening. Install the main burner back to the fire box and secure to the bracket with the R pins.

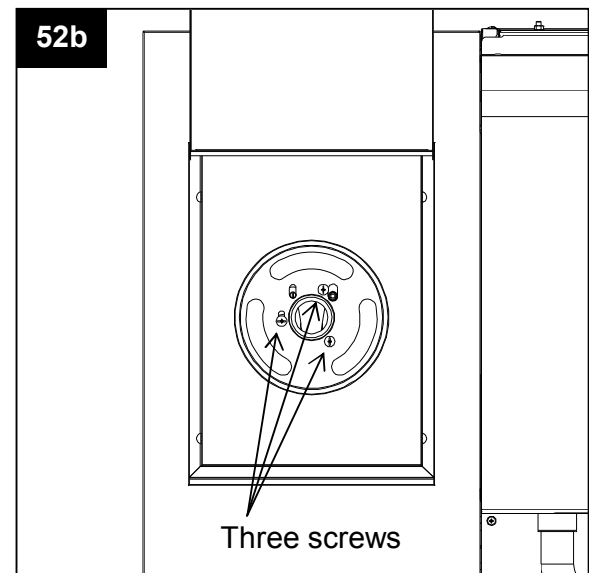
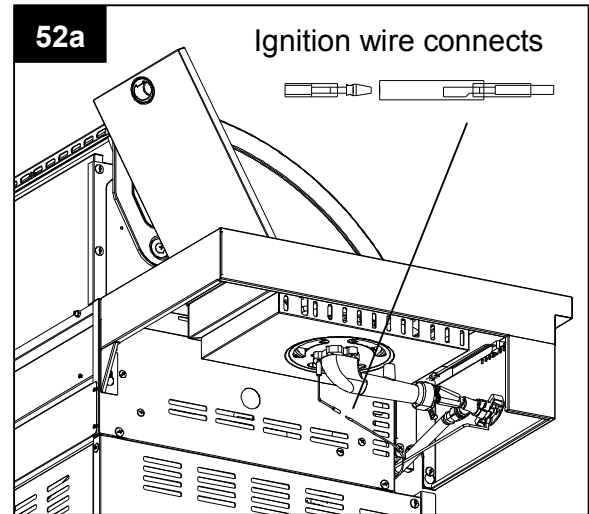
Make sure the nozzles are aligned with the burners and the ignition pins are installed in their original positions. Check the sparks before operating your grill.



CONVERTING TO NATURAL GAS

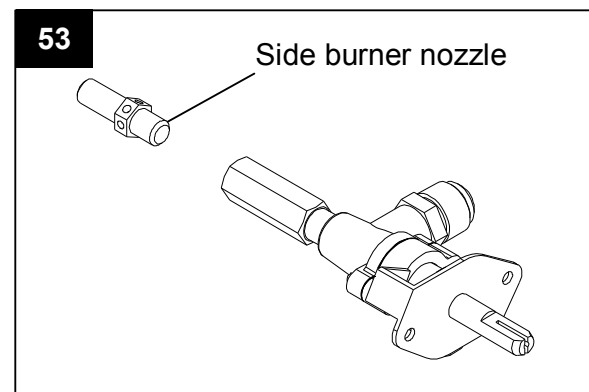
2. Side burner conversion

a. Take the side burner grate and burner heads off. Separate the side burner ignition wire at the connect (Fig. 52a) and then disassemble the side burner body by removing the three screws as shown in Fig. 52b.



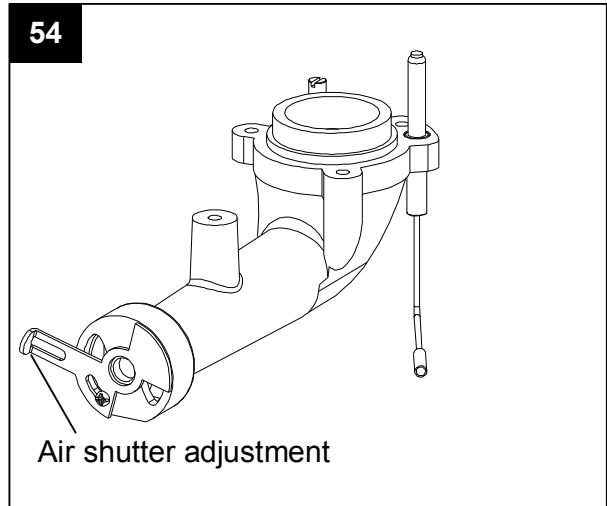
b. Use two wrenches to remove the side burner nozzle from the side burner valve. Then install the NG nozzle to the valve. This nozzle is included with the grill. The size is 1.55.

Note: Failure to use two wrenches to loosen or install the nozzle may damage the valve. The valve stem need to be protected.



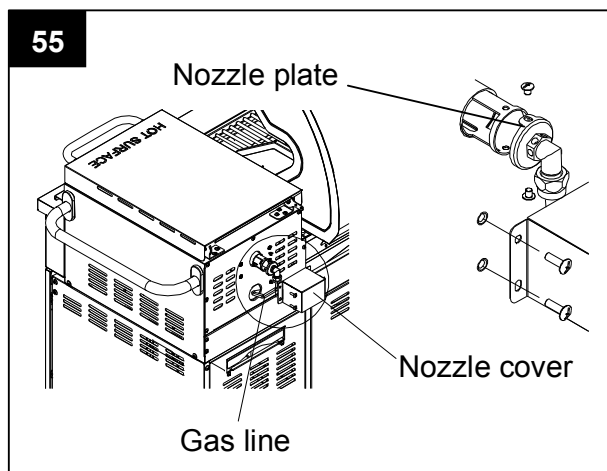
CONVERTING TO NATURAL GAS

c. Adjust the air shutter 1/4 of the way open. Then install the side burner body back with the three loosened screws. Connect the ignition wire and put the burner heads on. Fine tune the air shutter after lighting the side burner to get a better flame.

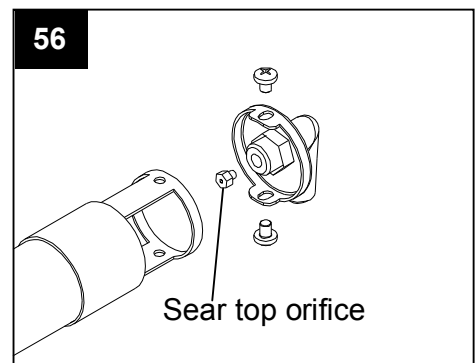


3. Infrared Burner conversion

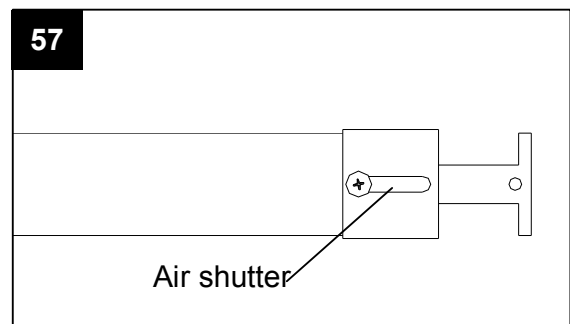
a. Remove the nozzle cover and the nozzle plate. Fig. 55.



b. Remove the LP orifice with the nozzle removal tool (B), then install the NG orifice. This nozzle is included with the grill and sized 1.38.



c. Adjust the infrared burner air shutter to have a 3/4 in. opening. Then install the nozzle plate and air shutter cover back.

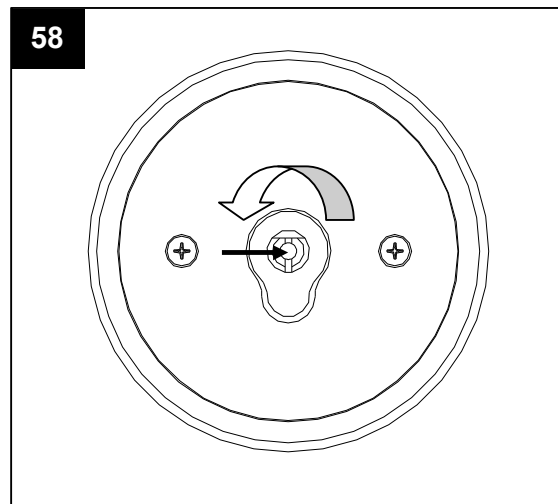


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4. Valve Setting

Take the knobs off (except the infrared burner knob) and insert the slotted screwdriver into the hole the arrow pointed as shown in Fig. 58. Turn the screwdriver counterclockwise by 6 full turns at least so that the insert inside the valve turns the same turns which convert to natural gas version.

Warning: Failure to turn it to the correct position will result in the low heat setting working improperly.

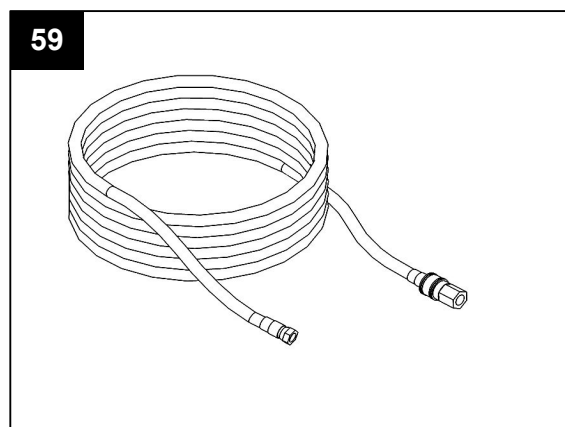


5. Change to 10 ft. NG hose

Take the regulator off from the manifold and replace it with 10 ft. Please make sure the hose is securely fastened.

6. Reassemble remaining parts

After all of the conversions, put flame tamers back in the burner box, followed by the grids, warming racks, side burner and side burner grates.



7. Checking for gas leaks. Use a soapy water solution and apply it to the pipe joints and fittings with a brush and check for bubbles.

8. The conversion is now complete.

CAUTION:

If low flames or burner problems are observed after converting from LPG to NG, the natural gas lines may not be large enough. Refer to the "From House to Grill" chart on page 25 for natural gas supply line specifications. Please contact a plumber to assure proper pressure at 7 in. water column.

Do not return your grill to the store.