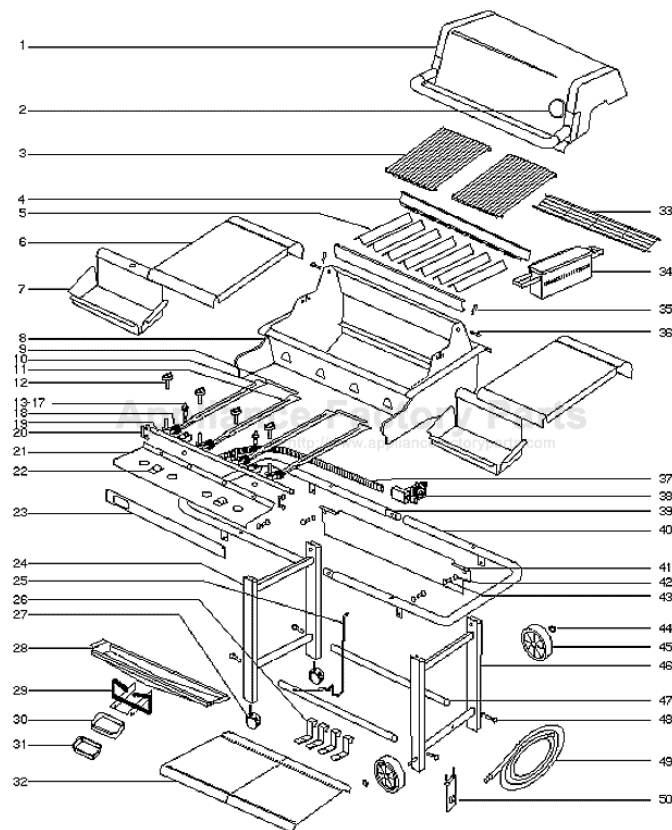


This Owner's Manual is provided and hosted by [Appliance Factory Parts](http://Appliance Factory Parts).



# Weber SUMMIT 450 NG Owner's Manual

[Shop genuine replacement parts for Weber SUMMIT  
450 NG](#)



[Find Your Weber Grill Parts - Select From 2037 Models](#)

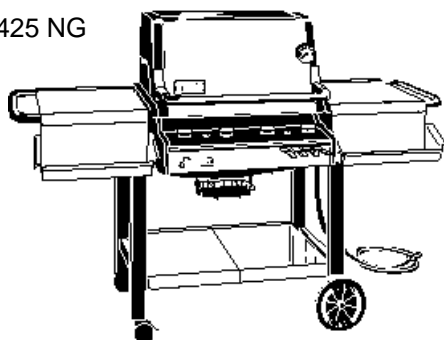
----- Manual continues below -----



# SUMMIT™ 425 & 625 SUMMIT™ 450 & 650

## Natural Gas Barbecues Step-By-Step Guide

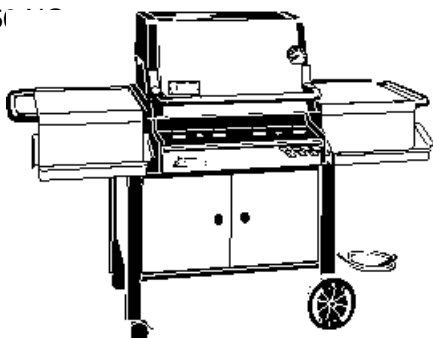
Summit 425 NG



Summit 625 NG



Summit 450 NG



Summit 650 NG



**WARNING:** Follow all leak check procedures carefully in this manual prior to barbecue operation. Do this even if barbecue was dealer assembled.

**NOTICE TO INSTALLER:** These instructions must be left with the owner and the owner should keep them for future use.

**FOR YOUR SAFETY:** Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

**WARNING:** Do not try to light this appliance without reading "Lighting" instructions section of this manual.

**THIS GAS APPLIANCE IS DESIGNED FOR OUTDOOR USE ONLY.**

### FOR YOUR SAFETY

If you smell gas:

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

# INSTALL GAS SUPPLY (CART INSTALLATIONS ONLY)

## General Specifications for Piping

**Note - Contact your local municipality for building codes regulating outdoor gas barbecue installations. In absence of Local Codes, you must conform to the latest edition of ANSI Z223.1. WE RECOMMEND THAT THIS INSTALLATION BE DONE BY A PROFESSIONAL.**

Some of the following are general requirements taken from ANSI Z223.1, for gas supply installations. Refer to ANSI Z223.1 latest edition for complete specifications.

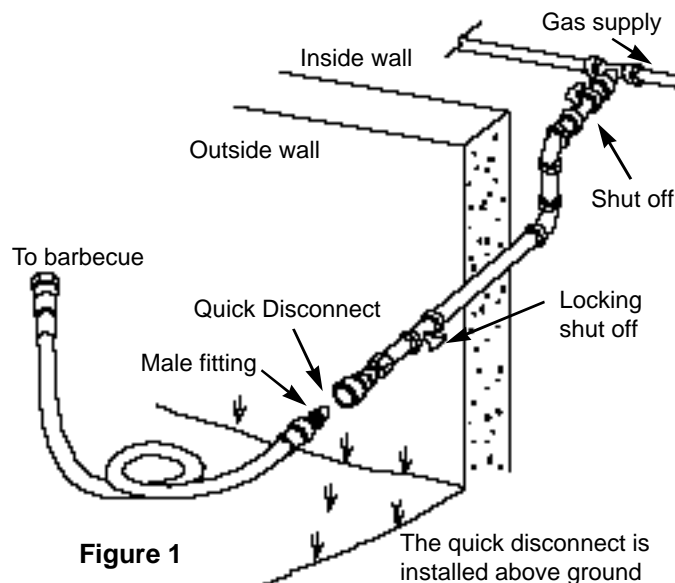
- This barbecue is designed to operate at 4.5 inches of water column pressure (.2526 psi). Use only the regulator with the cooking module.
- A manual shut-off valve must be installed outdoors, immediately ahead of the quick disconnect.

**CAUTION: If young children are in the area, a locking valve should be considered.**

- An additional manual shut-off valve indoors should be installed in the branch fuel line in an accessible location near the supply line.
- The quick disconnect connects to a 3/8 inch NPT thread from the gas source. The quick disconnect fitting is a hand-operated device that automatically shuts OFF the flow of gas from the source when the barbecue is disconnected.
- The quick disconnect fitting can be installed horizontally, or pointing downward. Installing the fitting with the open end pointing upward can result in collecting water and debris.
- The dust covers (supplied plastic plugs) help keep the open ends of the quick disconnect fitting clean while disconnected.
- Pipe compound should be used which is resistant to the action of natural gas when connections are made.
- The outdoor connector must be firmly attached to rigid, permanent construction.

**WARNING: Do not route the 12 foot hose under a deck. The hose must be visible.**

Typical natural gas supply installation. Figure 1.



## Gas line piping

- If the length of line required does not exceed 50 feet, use a 5/8" O.D. tube. One size larger should be used for lengths greater than 50 feet.
- Gas piping may be copper tubing, type K or L; polyethylene plastic tube, with a minimum wall thickness of .062 inch; or standard weight (schedule 40) steel or wrought iron pipe.
- Copper tubing must be tin-lined if the gas contains more than 0.3 grams of hydrogen sulfide per 100 cubic feet of gas.
- Plastic tubing is suitable only for outdoor, underground use.
- Gas piping in contact with earth, or any other material which may corrode the piping, must be protected against corrosion in an approved manner.
- Underground piping must have a minimum of 18" cover.

## Test connections

All connections and joints must be thoroughly tested for leaks in accordance with local codes and all listed procedures in the latest edition of ANSI Z223.1.

### **DANGER**

**Do not use an open flame to check for gas leaks. Be sure there are no sparks or open flames in the area while you check for gas leaks. This will result in a fire or explosion which can cause serious bodily injury or death, and damage to property.**

## TOOLS NEEDED

7/16 and 3/4 inch open end or an adjustable wrench



## SUPPLIES NEEDED

Your LP tank is shipped empty for safety. After setting the LP fuel scale you will need to fill it. (See Step "Fill LP tank.")

You will need a soap and water solution to check for gas leaks. (See Step "Check for gas leaks.")

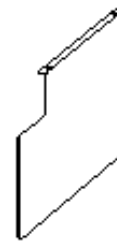
*Note - The hardware size of nuts, bolts and screws is given. For example "1/4-20 x 2 inch bolt" means a bolt 1/4 inch in diameter with 20 threads to the inch, 2 inches long. On a small screw for example, "6-32 x 1/2 inch screw" means a number 6 screw, with 32 threads to the inch, 1/2 inch long.*

While we give much attention to our products, unfortunately an occasional error may occur. If a part is missing, do not go back to the store. Call the Weber Customer Service Center toll free **1-888-33-SUMMIT** (1-888-337-8664) to receive immediate assistance. Have your owner's manual and serial number of the barbecue available for reference.

**Note: If you are interested in installing a Summit 4 burner or 6 burner into a built-in unit, call 1-888-33-SUMMIT for warnings, dimensions, and installation instructions for the Summit 475 or 675.**

## REMOVE PACKAGED CONTENTS

Right panel  
(Summit 450 and 650 only)



1/4-20 x 1/2 inch bolt (2)



Nylon washer (4)



Plastic plug (2)  
(Summit 450 or 650 only)



1/4-20 keps nut (2)

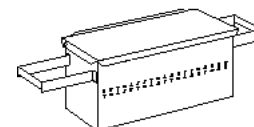


Flavorizer bar  
(7) (Summit 425 or 450)  
(11) (Summit 625 or 650)



Optional Steam-N-Chips smoker

*Note: If you use the Steam-N-Chips Smoker, you will be removing one of the Flavorizer bars. You have a full set of Flavorizer bars to use when not using the Steam-N-Chips smoker.*



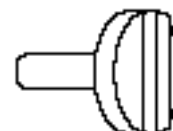
Cooking grate  
(2) (Summit 425 or 450)  
(3) (Summit 625 or 650)



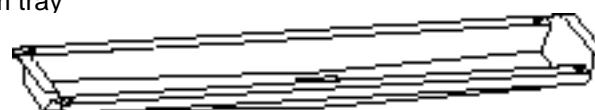
Warm-up basket





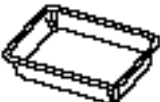

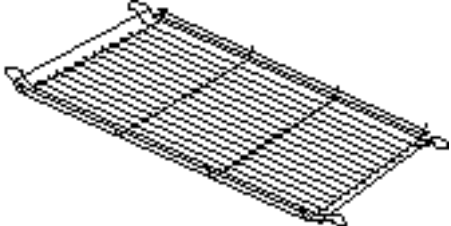
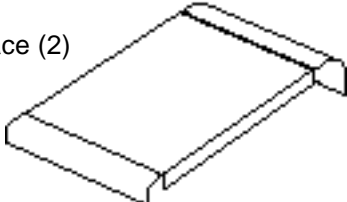
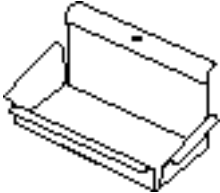
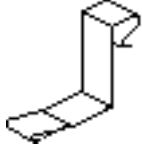
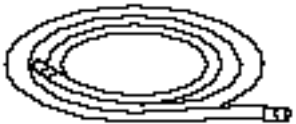
Burner control knob  
(4) (Summit 425 or 450)  
(6) (Summit 625 or 650)



Bottom tray



# REMOVE PACKAGED CONTENTS (CONTINUED)

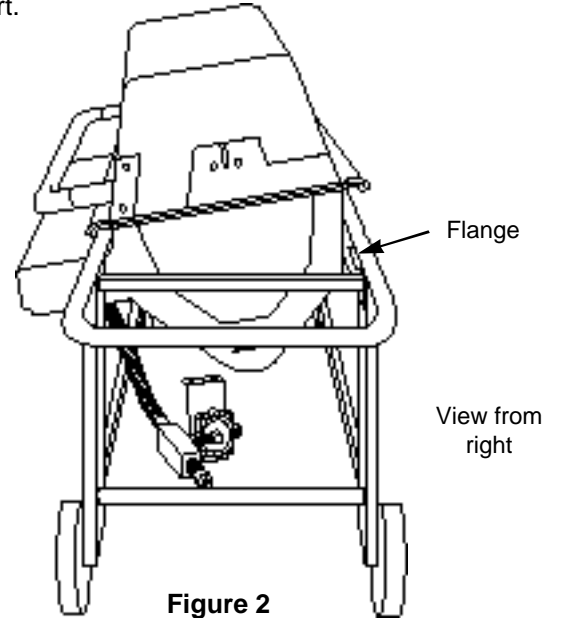
- Catch pan holder 
- Catch pan 
- Drip pan 
- Stainless steel bottom shelves  
(For Summit 425 and 625) 
- Wire bottom rack  
(For Summit 450 and 650) 
- Stainless steel work surface (2) 
- Condiment holder (2) 
- Tool holder (4) 
- Hose 

# ADD COOKING MODULE

**Caution: Use two people to lift and install the cooking module.**

Lift the cooking module out of the packaging. The gas line, regulator, and bracket will hang below the module.

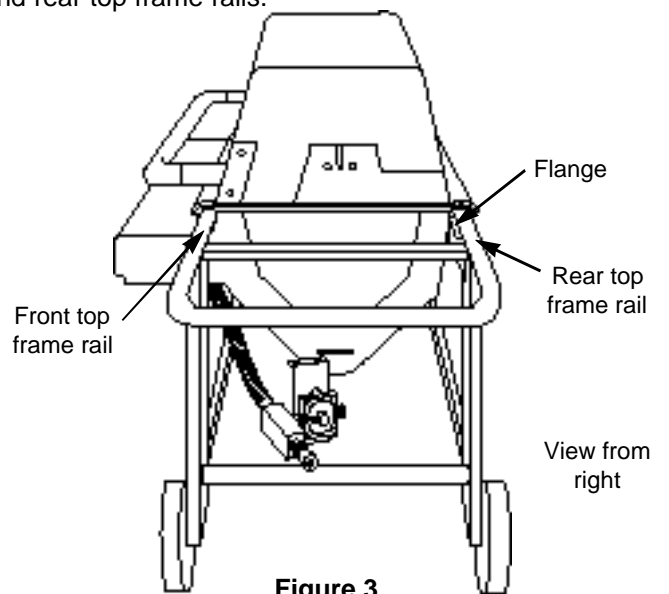
Lower the module on an angle into the cart so the control panel is under the front top frame rail. Figure 2. Guide the gas line regulator and bracket while lowering the module into the cart.



**Figure 2**

Lower the back of the cooking module down so it is between the two flanges in the back panel. Figure 3. Use caution not to scratch the paint of the cooking module when setting the module between the flanges.

The cooking module should be level, setting on the front and rear top frame rails.



**Figure 3**

# MOUNT REGULATOR BRACKET

You will need: two 1/4-20 x 1/2 inch bolts, two nylon washers, two 1/4-20 keps nuts, and a 7/16 inch or open end wrench.

Position the top of the regulator bracket over the top crosspiece. Slip a washer over the bolt and insert through top of bracket and crosspiece. Add keps nut. Repeat with second bolt. Tighten. Figure 4.

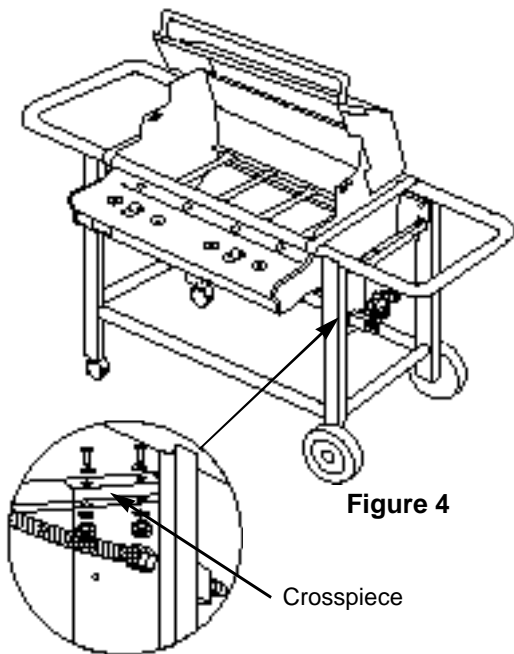


Figure 4

Crosspiece

View from below front

# ADD RIGHT PANEL FOR THE SUMMIT 450 & 650

You will need: right panel and two plastic plugs.

Set the right panel in place. The top flange of the panel fits over the top crosspiece. The bottom curved flange fits under the bottom crosspiece. Figure 5.

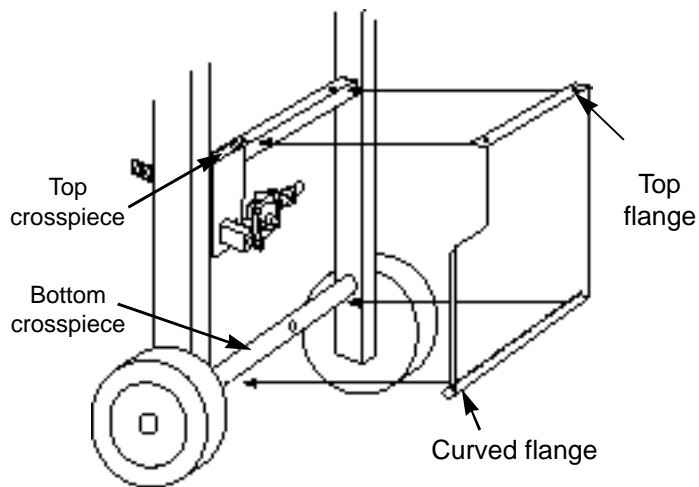


Figure 5

Once the panel is in place, push in the two plastic plugs through the panel into the top crosspiece. Figure 6.

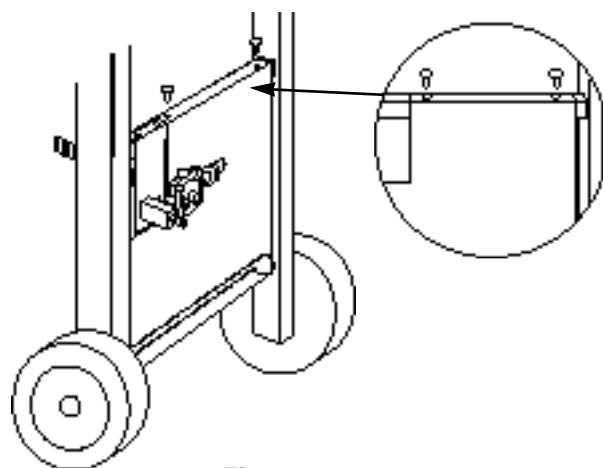


Figure 6

# CONNECT FLEXIBLE HOSE TO REGULATOR

You will need: the 12 foot natural gas supply hose and a 3/4 inch or adjustable wrench.

Thread fitting end of hose onto regulator. Figure 7. Tighten with wrench.

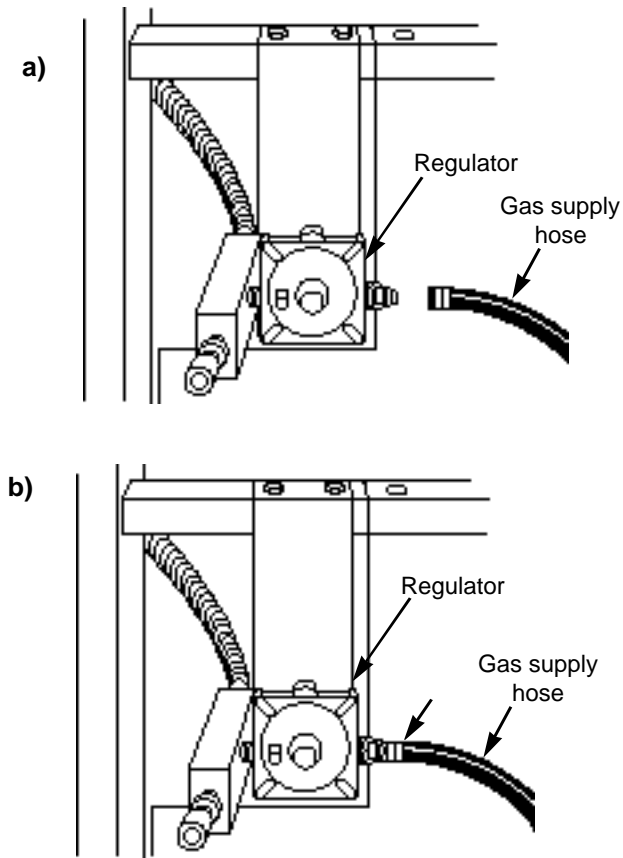


Figure 7

# INSTALL FLAVORIZER BARS

You will need: seven (Summit 425 or 450) or eleven (Summit 625 or 650) flavorizer bars

Set the Flavorizer bars front to back over the burners in the slots of the Flavorizer Bar/cooking grill support. Figure 8 (a).

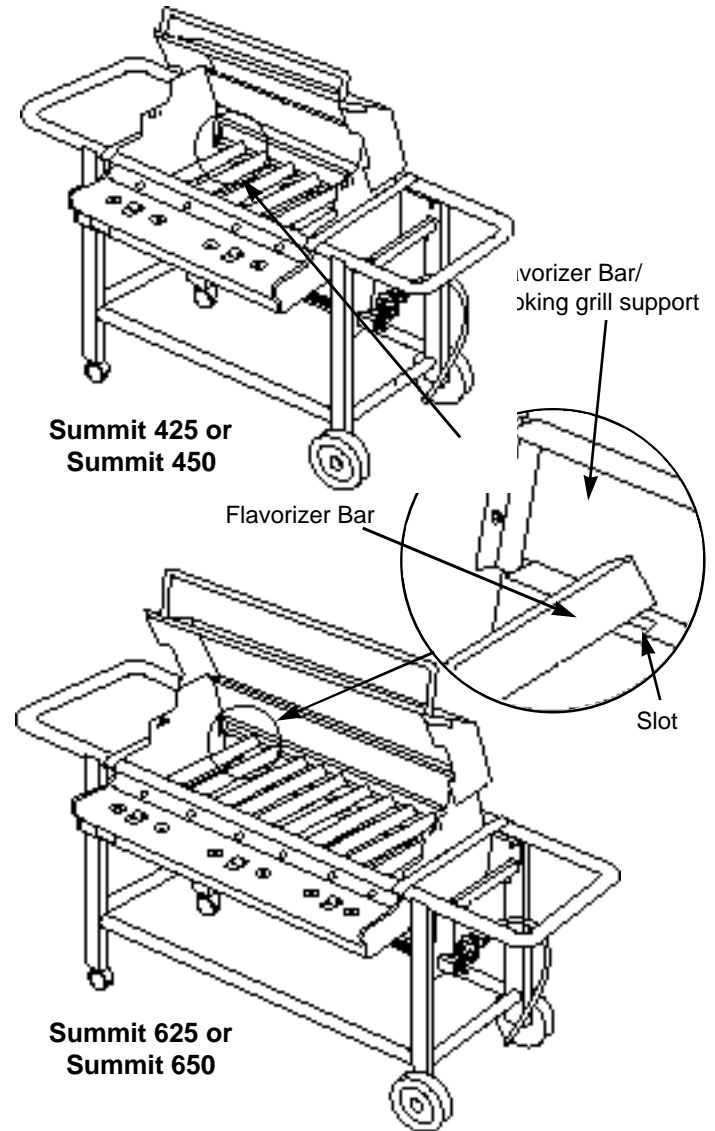


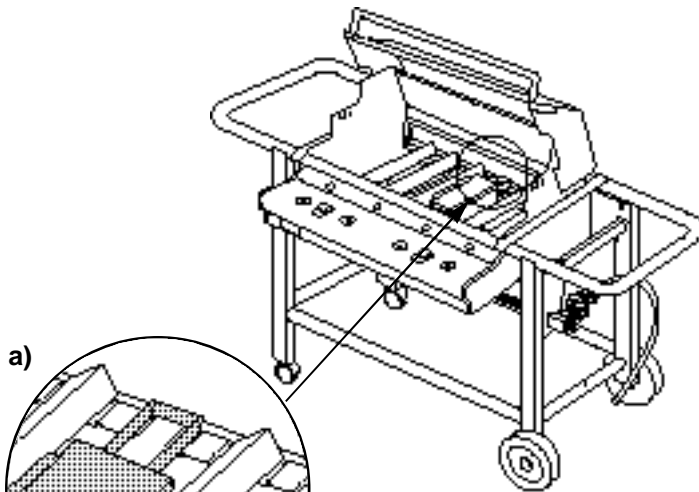
Figure 8

# INSTALL STEAM-N-CHIPS SMOKER

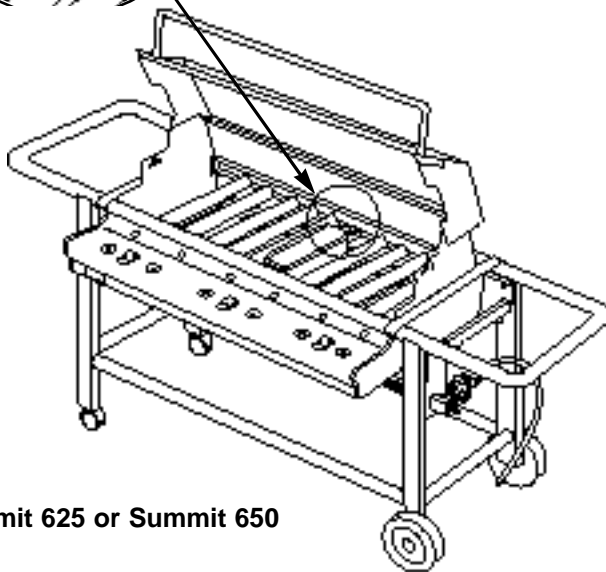
You will need: Steam-N-Chips smoker.

Remove the center Flavorizer bar (the one that is not over a burner). Set the handles of the Steam-N-Chips smoker on the Flavorizer bar holder. Figure 9 (a).

*Note: For directions on how to use the Steam-N-Chips smoker, see the Operating Guide.*



Summit 425 or Summit 450



Summit 625 or Summit 650

Figure 9

# ADD COOKING GRATES

You will need: two (Summit 425 or 450) or three (Summit 625 or 650) cooking grates.

The cross-wire of the cooking grate goes down. Set the cooking grates in place next to each other. Figure 10.

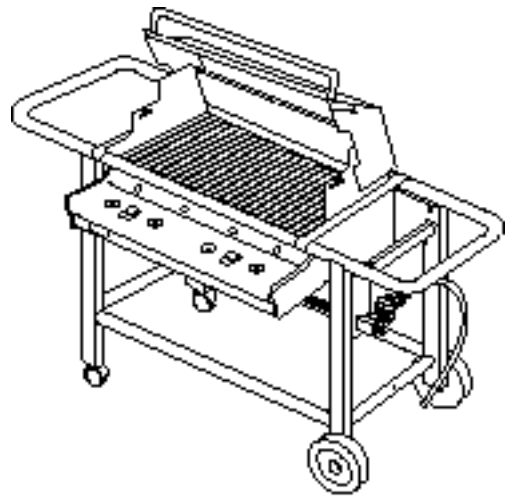


Figure 10

## INSTALL WARM-UP BASKET

You will need: warm-up basket.

Install one end of the warm-up basket into the hole on the right end of the lid and the other end into the slot in the left end of the lid. Figure 11 (a).

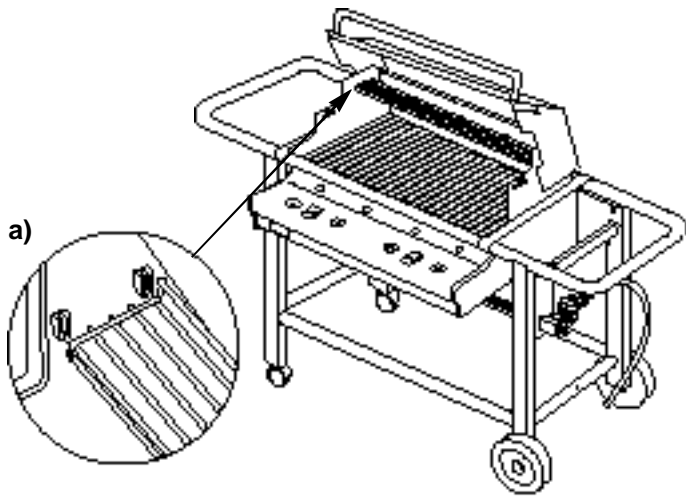


Figure 11

## INSTALL BURNER CONTROL KNOBS

You will need: four (Summit 425 or 450) or six (Summit 625 or 650) burner control knobs.

Push on the burner control knobs. Figure 12.

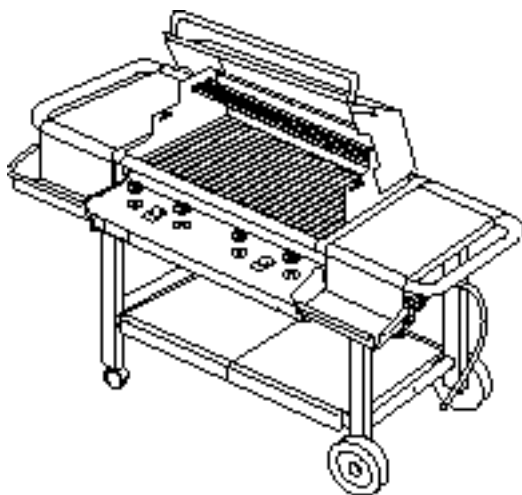


Figure 12

## INSTALL BOTTOM TRAY

You will need: Bottom tray, catch pan holder, catch pan, and one drip pan.

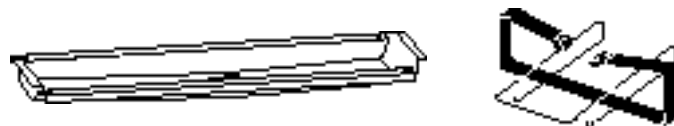


Figure 13

*Note: It may be easier to install the catch pan holder by removing the catch pan from the holder.*

Hook the ends of the catch pan holder into the hole in the bottom tray. Figure 14.

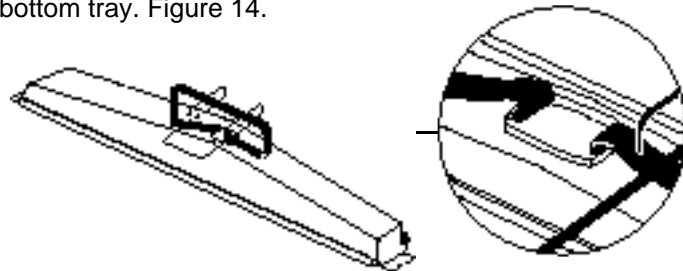


Figure 14

Slide the bottom tray into the mounting slots under the bottom of the cooking box with the finger grip of the catch pan toward you. Figure 15.

**CAUTION: Do not line the bottom tray with aluminum foil. It can cause grease fires by trapping the grease and not allowing grease to flow into the catch pan.**

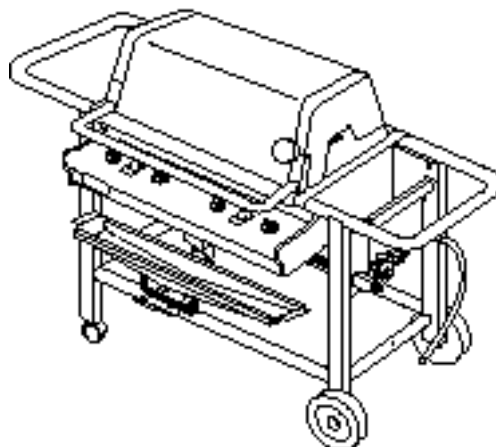
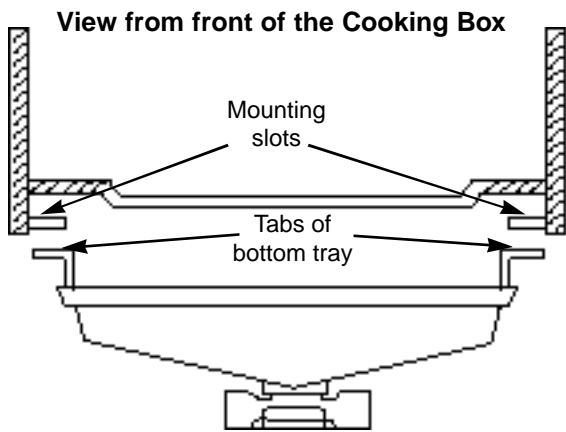


Figure 15



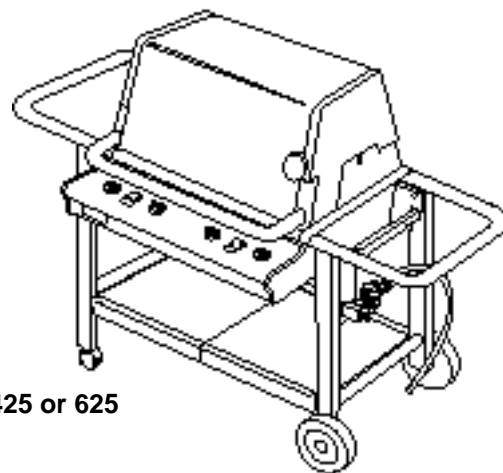
**Figure 16**

Put the foil drip pan into the catch pan.

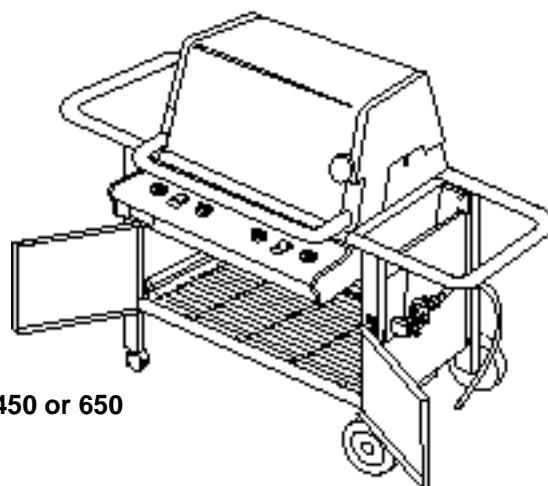
## INSTALL BOTTOM SHELVES

For the Summit 425 or 625, place the stainless steel bottom shelves between the frame supports.

For the Summit 450 and 650, place the bottom rack under the cart between the frame supports. Lift up one end of the rack so it clears the crosspiece. Continue to lift until the opposite end clears the opposite crosspiece. Set the rack in place on both crosspieces.



**Summit 425 or 625**



**Summit 450 or 650**

**Figure 17**

# INSTALL CONDIMENT HOLDERS AND WORK SURFACES

You will need: two condiment holders and two stainless steel work surfaces.

Place the condiment holders on the ends of the frame. Set the work surfaces on top of the condiment holders and the barbecue frame. Figure 18.

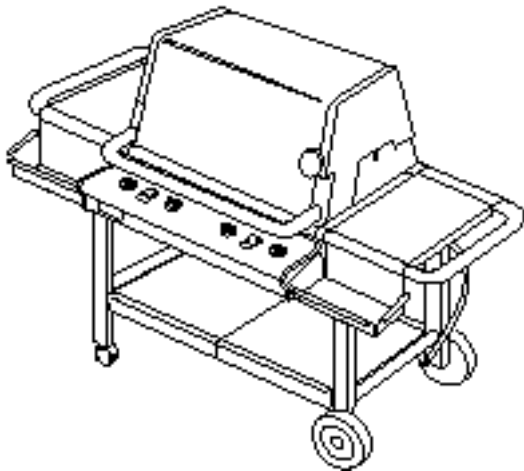


Figure 18

# CHECK FOR GAS LEAKS

## WARNING

The gas connections of your Weber Gas Barbecue have been factory tested. We do however recommend that you leak check all gas connections before operating your Weber Gas Barbecue.

## Remove burner control knobs, control panel and front panel

Remove the burner control knobs. The control panel is separate from the front panel. The control panel needs to be removed before the front panel can be removed.

Figure 19.

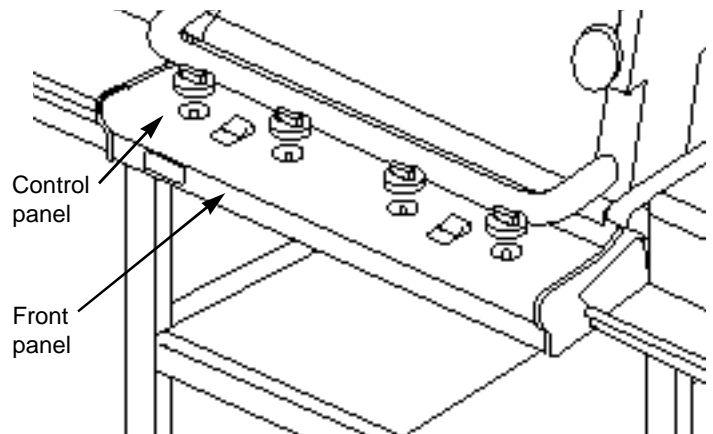


Figure 19

Put your fingers under the front edge of the control panel, lift up, and pull evenly toward you. Figure 20 (a).

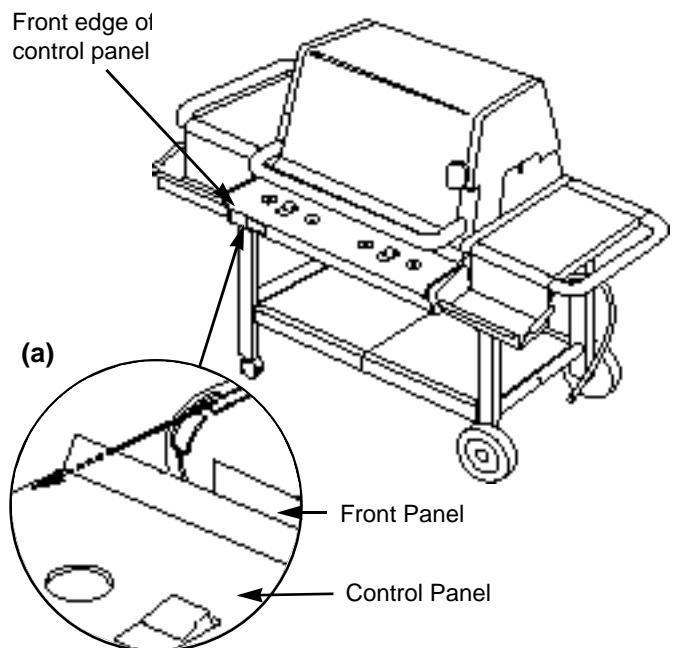


Figure 20

# CHECK FOR GAS LEAKS (CONTINUED)

Pull the front panel up and out of the cooking box assembly. Figure 21.

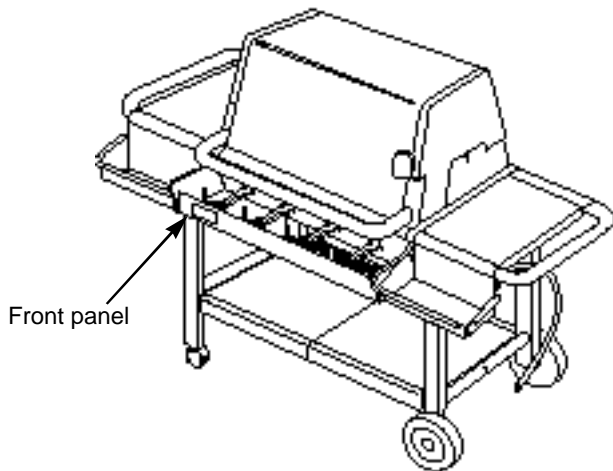


Figure 21

## DANGER

**Do not use an open flame to check for gas leaks. Be sure there are no sparks or open flames in the area while you check for leaks. This will result in a fire or explosion which can cause serious bodily injury or death and damage to property.**

**WARNING:** You should check for gas leaks every time you disconnect and reconnect a gas fitting.

You will need: a soap and water solution and a rag or brush to apply it.

*Note: Since some leak test solutions, including soap and water, may be slightly corrosive, all connections should be rinsed with water after checking for leaks.*

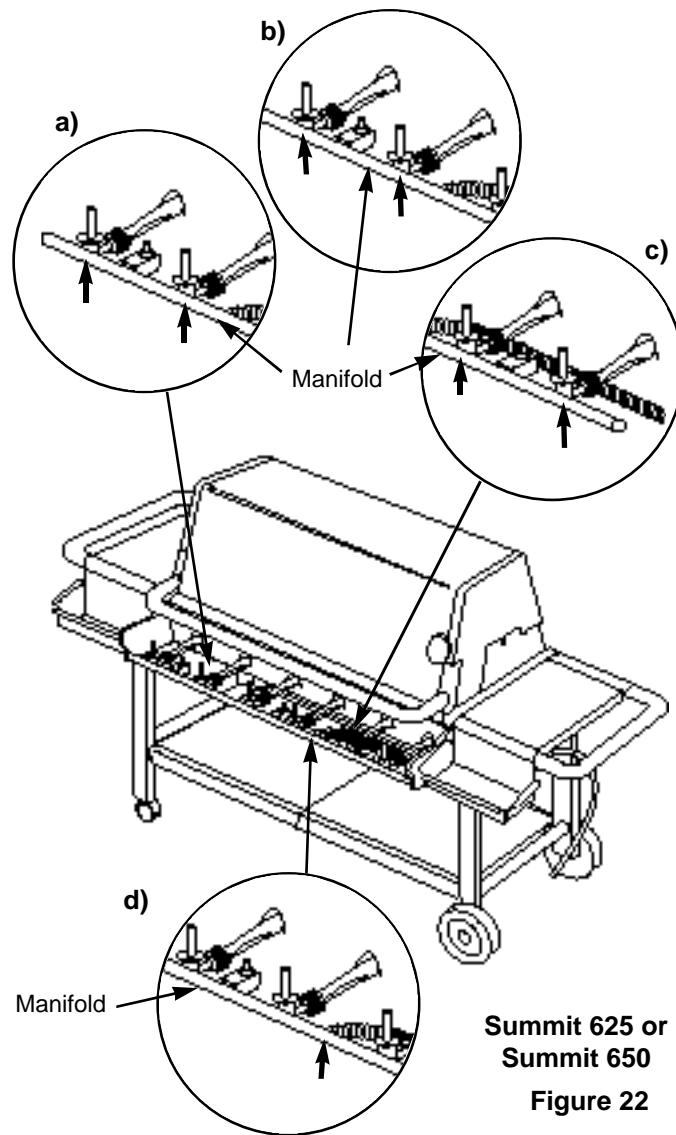
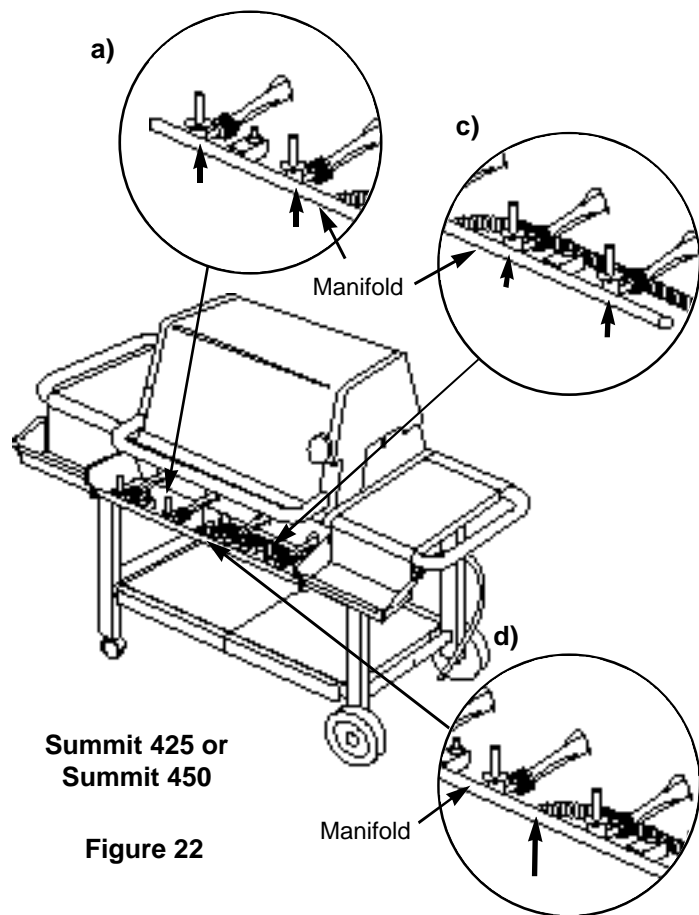
**Warning:** Make sure all burner control knobs are in the OFF position, including the side burner, if the barbecue has a side burner.

Turn on gas supply.

# CHECK FOR GAS LEAKS (CONTINUED)

Check for leaks by wetting the connections with the soap and water solution and watching for bubbles. If bubbles form or if a bubble grows there is a leak.

**WARNING: Do not ignite burners when leak checking.**



Check:

- Left valves to manifold connection. Figure 22 (a).
- Center valves to manifold connection. Figure 22 (b).  
(For Summit 625 or 650 only.)
- Right valves to manifold connection. Figure 22 (c).
- Gas line to manifold connection. Figure 22 (d)

**WARNING: If there is a leak at connection 22 (d), turn OFF the gas and retighten the fitting with a wrench and recheck for leaks with soap and water solution.**

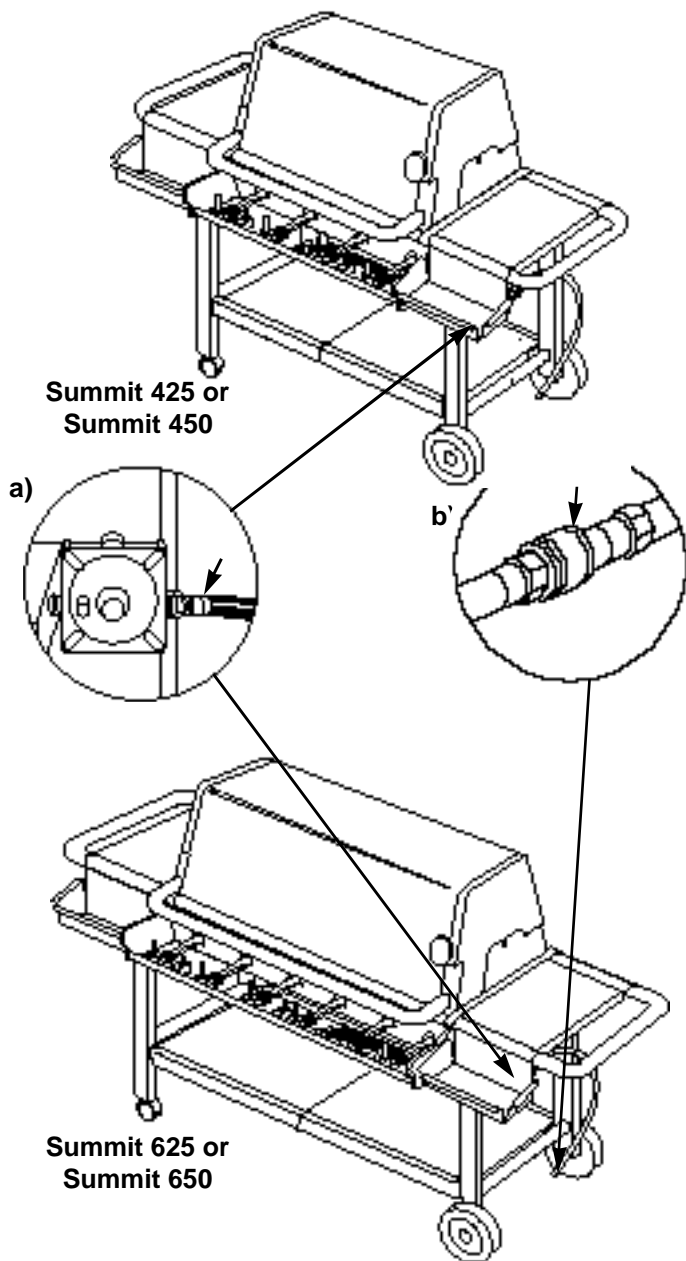
**If a leak persists after retightening the fitting, turn OFF the gas. DO NOT OPERATE THE BARBECUE. Contact your dealer.**

## CHECK FOR GAS LEAKS (CONTINUED)

- a) Hose to regulator connection. Figure 23 (b).
- b) Hose to quick disconnect connection. Figure 23 (a).

**WARNING: If there is a leak at connections 22 (a), 22 (b), 22 (c) 23 (a), or 23 (b) turn OFF the gas. Do not operate the barbecue. Contact your dealer.**

When leak checks are complete, turn gas supply OFF at the source and rinse connections with water.



## REINSTALL FRONT PANEL

You will need: front panel.

With the Weber logo to the left, slide front panel down into place. Figure 24.

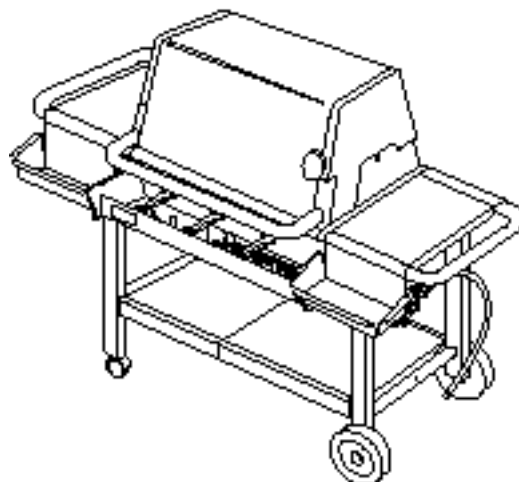


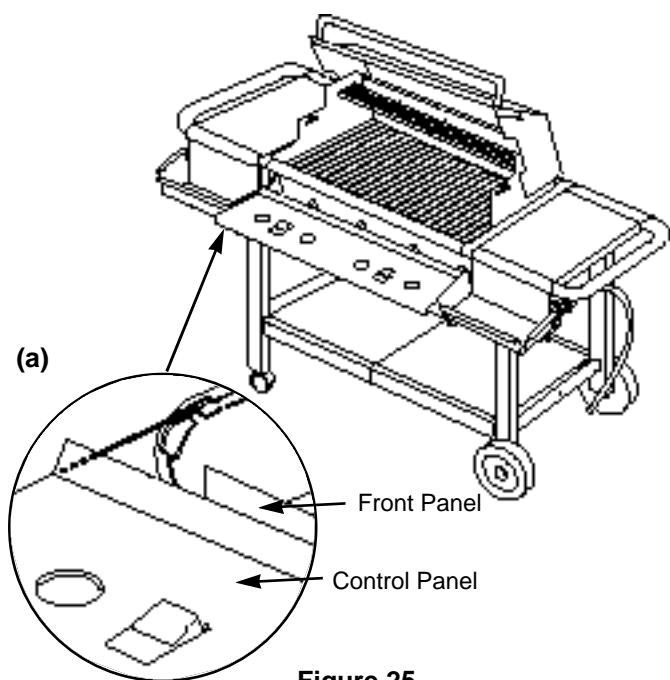
Figure 24

## REINSTALL CONTROL PANEL

You will need: control panel.

Pull igniter buttons up until they stay in the up position. Place the control panel into the grooves on either side of the front of the cooking box. Push the control panel into place, using even pressure while pushing. Figure 25 (a).

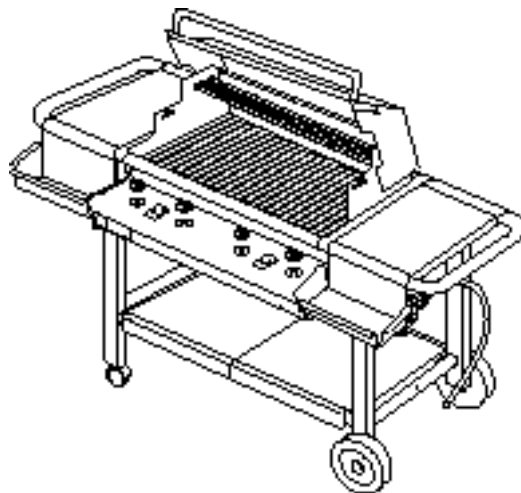
Use your fingers to lift the front edge of the control panel slightly and set it into the recess on both sides of the cooking box. Figure 25.



## REINSTALL BURNER CONTROL KNOBS

You will need: four (Summit 425 or 450) or six (Summit 625 or 650) burner control knobs.

Push on the burner control knobs. Figure 26.

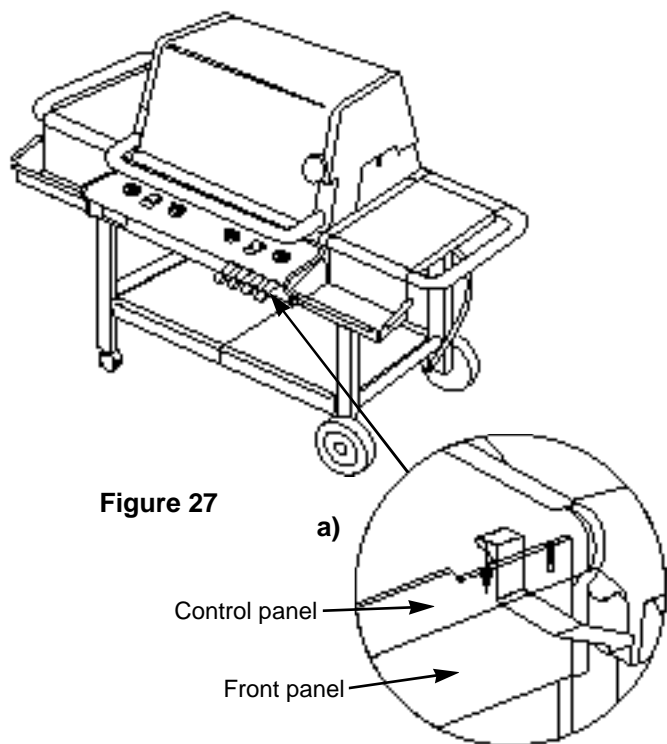


**Figure 26**

# INSTALL TOOL HOLDERS

You will need: four tool holders.

Place the tool holder under the control panel and over the front panel. Figure 27 (a). Set the tool holder on top of the front panel and slide it to the left.



REFER TO OPERATING  
GUIDE BEFORE LIGHTING  
BARBECUE

