

KitchenAid® Installation Instructions

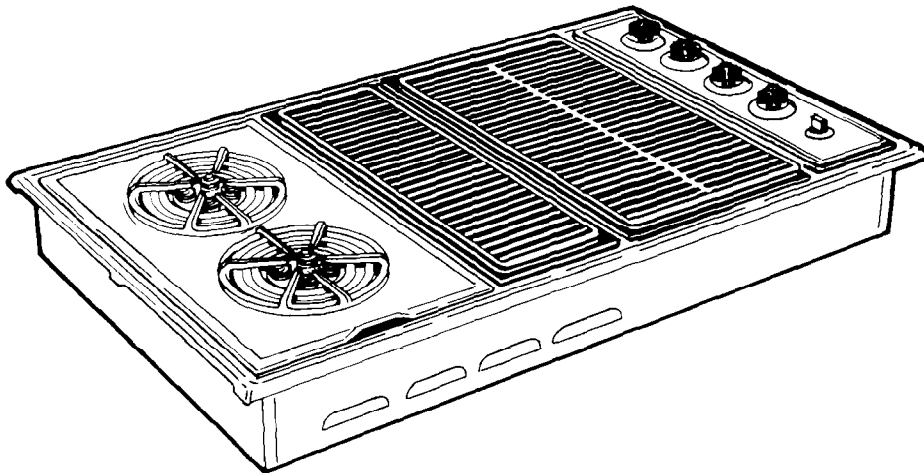
36" Gas Modular Downdraft Cooktop

IMPORTANT:

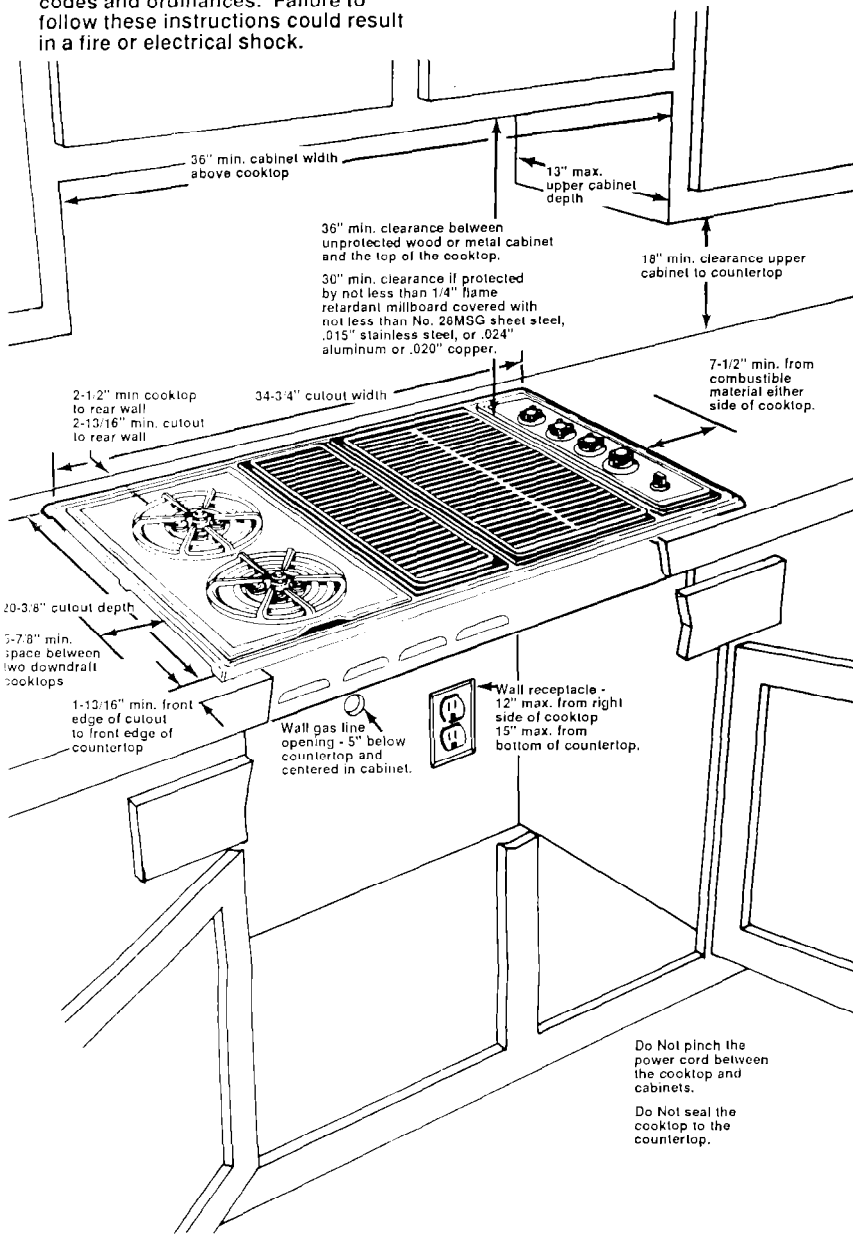
Installer: Leave Installation Instructions with the Homeowner.

Homeowner: Keep Installation Instructions for future reference.

Save Installation Instructions for local electrical inspector's use.



Important: Observe all governing codes and ordinances. Failure to follow these instructions could result in a fire or electrical shock.



Before you start...

Proper installation is the installer's responsibility. A qualified technician should install this downdraft cooktop. Make sure you have everything necessary for correct installation. It is the responsibility of the installer to comply with the installation clearances specified.

Check location where downdraft cooktop will be installed. The location should be away from strong draft areas, such as windows or doors and strong heating vents or fans.

Electrical ground is required. See Electrical requirements.

If cabinet has a drawer, the drawer will need to be removed and the drawer fronts installed permanently to front of cabinet.

Countertop opening dimensions that are shown must be used. Given dimensions provide 0" clearance.

ALL OPENINGS IN THE WALL OR FLOOR WHERE THE DOWNDRAFT COOKTOP IS TO BE INSTALLED MUST BE SEALED.

Proper gas supply connection must be available. See Gas supply requirements.

This appliance is Not approved for use in mobile homes.

Cabinet construction: This appliance is designed for installation in a base cabinet with a depth of 24". The maximum depth for overhead cabinets is 13". Then minimum vertical clearance between the cooking surface and overhead cabinets is 30". Overhead cabinets installed at either side of the appliance must be a minimum of 18" above the countertop. The minimum distance between the front edge of the countertop and the front edge of cooktop is 1-1/2".

⚠ WARNING

FOR YOUR SAFETY

Do Not store or use gasoline, or other flammable vapors and liquids in the vicinity of this or any other appliance. The fumes can create a fire hazard.

FOR YOUR SAFETY

If you smell gas:
 1. Open windows.
 2. Don't touch electrical switches.
 3. Extinguish any open flame.
 4. Immediately call your gas supplier.

Do not obstruct the flow of combustion and ventilation air. Obstruction of air could result in fire or explosion.

⚠ WARNING

BURN HAZARD

Do Not install cabinets above the downdraft cooktop. If cabinets are located above the cooktop, avoid using the cabinets while the cooktop is in use. To do so may result in serious injury.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

- Take special care when drilling holes into the wall. Electrical wires may be concealed behind the wall covering resulting in possible electrical shock.
- Disconnect the electrical supply before servicing the appliance. Failure to do so could result in electrical shock.

NOTE:

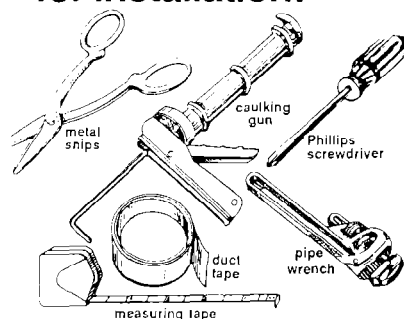
Clearances specified are for combustible walls and materials that have a density of 20 or more pounds per cubic foot. No evaluation of clearances has been made for installations adjacent to materials that are less than 20 pounds per cu. ft. or to plastic tiles and sheeting.

NOTE:

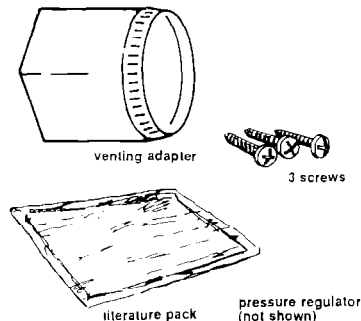
It is the customer's responsibility:

- To contact a qualified electrical installer.
- To assure that electrical installation is adequate and in conformance with National Electrical Code, ANSI/NFPA 70-1987** (or latest code) and local codes and ordinances.

Tools and materials needed for installation:



Parts supplied for installation:



Gas supply requirements

OBSERVE ALL GOVERNING CODES AND ORDINANCES.

⚠ WARNING

Fire Hazard

- Downdraft cooktop must be connected to a regulated gas supply.
- L.P. gas supply must Not exceed a pressure of 14" water column. This must be checked by a qualified person before installing the downdraft cooktop.
- All pipe connections must be wrench-tightened.
- Purchase a new flexible gas line. Do Not reuse an old flexible gas line from your previous downdraft cooktop.

Failure to follow above could cause high pressure gas release, resulting in a fire or explosion.

A.

The installation of this downdraft cooktop must conform with the American National Standard, National Fuel Gas Code ANSI Z223.1-1984* (or the latest code) and local codes and ordinances.

Copies of the standards listed may be obtained from:

- American Gas Association
1515 Wilson Boulevard
Arlington, Virginia 22209
- National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts 02269

B.

Input ratings shown on the serial/rating plate are for elevations up to 2,000 feet. For elevations above 2,000 feet, ratings should be reduced at a rate of 4% for each 1,000 feet above sea level.

C.

This downdraft cooktop is equipped for use with NATURAL gas. It is design-certified by A.G.A. for NATURAL and L.P. gases with appropriate conversion. The serial/rating plate located under the cooktop has information on the type of gas that can be used. If this information does not agree with the type of gas available, check with the local gas supplier. See Panel E for L.P. gas conversion instructions.

D.

Provide a gas supply line of 3/4" rigid pipe to the cooktop location. A smaller pipe on long runs may result in insufficient gas supply. Pipe-joint compounds resistant to the action of Natural and L.P. gas must be used. With L.P. gas, piping or tubing size can be 1/2" minimum. L.P. gas suppliers usually determine the size and materials used on the system.



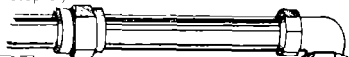
E.

If local codes permit, A.G.A.-approved, flexible metal tubing is recommended for connecting this downdraft cooktop to the gas supply line. Do Not kink or damage the flexible tubing when moving the downdraft cooktop. A 1/2" male pipe thread is needed for connection to inlet (female pipe threads) of pressure regulator.



F.

The supply line shall be equipped with a shutoff valve to shut off gas supply to the cooktop. This valve should be located in the same room as the downdraft cooktop and should be in a location that allows ease of turning on or shutting off the gas to the cooktop. Do Not block access to the shutoff valve. (See Step 6.)



G.

If rigid pipe is used as a gas supply line, a combination of pipe fittings must be used to obtain an in-line connection to the downdraft cooktop. All strains must be removed from the supply and fuel lines so range will be level and in line.

H.

This cooktop is equipped with a class 2 gas pressure regulator. The maximum inlet gas supply pressure for this regulator is 14" WCP. The inlet test pressure for checking this regulator must be at least 7" WCP for natural gas. It is shipped from the factory adjusted for natural gas at 6" WCP outlet pressure. The maximum inlet pressure for L.P. gas is 14" WCP. The minimum test pressure is 11" WCP. The regulator supplied must be used with this cooktop.

I.

Line Pressure Testing:

Testing above 1/2 lb. psi (gauge)
The downdraft cooktop 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 1/2 psig (3.5kPa).

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

Electrical requirements

Electric ground is required on this appliance.

⚠ WARNING

Electric Shock Hazard

- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded. Improper connection of the equipment-grounding conductor can result in electrical shock.
- Do Not use an extension cord with this appliance. Such use may result in a fire, electrical shock or other personal injury.

IMPORTANT: Save Installation Instructions for local electrical inspector's use.

A 120-volt, 60-Hz, AC only, 15 or 20-ampere, fused electrical supply is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided.

Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity is necessary. Locate the polarized outlet in the rear wall below the downdraft cooktop. The outlet should be visible through open cabinet doors below the downdraft cooktop. In addition to checking that the outlet provides 120-volt power and is correctly grounded, the outlet must be checked by a qualified electrician to see if it is wired with correct polarity.

A wiring diagram is included in the literature package. The wiring diagram is also located below the control mounting plate.

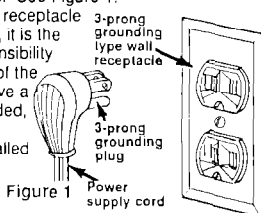
Recommended grounding method

DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG.

Note: The power cord is located on the right side of downdraft cooktop.

For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-prong grounding type wall receptacle, grounded in accordance with the National Electrical Code, ANSI/NFPA 70-latest edition and local codes and ordinances. See Figure 1.

If a mating wall receptacle is not available, it is the personal responsibility and obligation of the customer to have a properly grounded, 3-pronged wall receptacle installed by a qualified electrician.



Temporary grounding method

DO NOT, UNDER ANY CIRCUMSTANCES REMOVE THE POWER SUPPLY CORD GROUNDING PRONG.

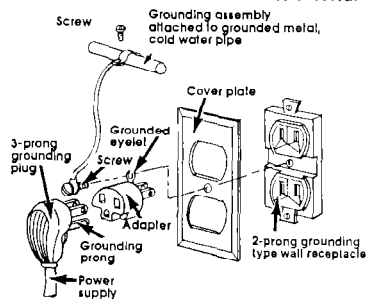


Figure 2

Electrical ground is required on this appliance.

If changing and properly grounding the wall receptacle is impossible and where local codes permit (consult your electrical inspector), a temporary adapter may be plugged into the existing 2-prong wall receptacle to mate with the 3-prong power supply cord. See Figure 2.

If this is done, you must connect a separate copper grounding wire (No. 18 minimum) to a grounded cold water pipe* by means of a clamp and then to the external grounding connector screw. **Do Not ground to a gas supply pipe or hot water pipe.** Do Not connect to electrical supply until appliance is permanently grounded. See Figure 3.

* Grounded cold water pipe must have metal continuity to electrical ground and not be interrupted by plastic, rubber or other electrically insulating connectors such as hoses, fittings, washers or gaskets (including water meter or pump). Any electrical insulating connector should be jumped as shown with a length of No. 4 wire securely clamped to bare metal at both ends.

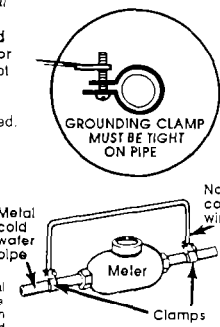


Figure 3

Venting requirements

Ductwork needed for installation is not included.

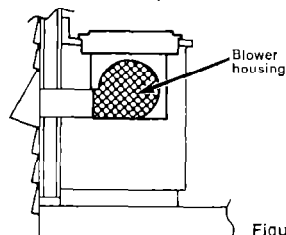
⚠ WARNING

Fire Hazard

- Venting system must terminate to the outside.
- Do Not terminate the ductwork into an attic or other enclosed space.
- Do Not use 4" laundry-type wall caps. To do any of the above may result in a fire.

Determine which venting method to use. The length of the ductwork and number of elbows should be kept to a minimum to provide efficient performance. The size of ductwork should be uniform. Do Not install two elbows together. Use duct tape to seal all joints in the duct system. Ductwork can extend either through the wall or floor. Use caulking to seal exterior wall or floor opening around cap. (Figures 4 - 7 show common venting methods and types of materials needed.) **Use only metal ductwork.** Flexible elbows count twice as much as standard elbows.

Through-the-wall installation (outside wall installation shown)



Install directly to outside using the dimensions shown.

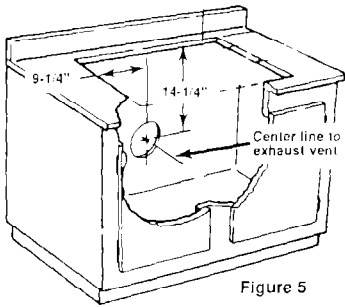


Figure 5

Through-the-floor installation

Island location

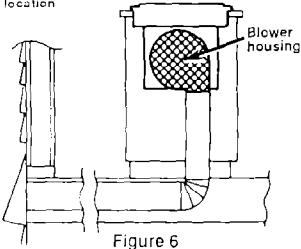


Figure 6

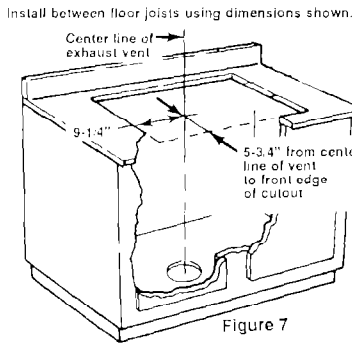
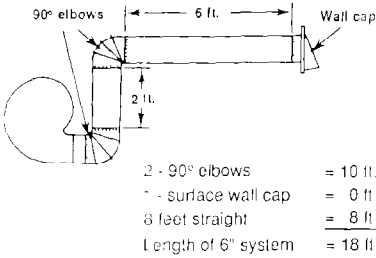


Figure 7

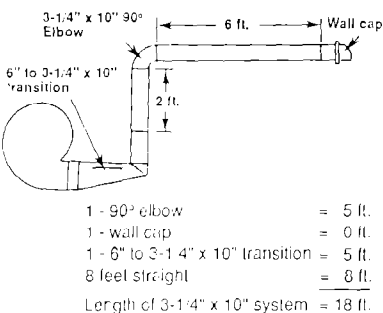
Recommended duct length for island or peninsula installations

Use 6" or 3-1/4" x 10" duct with a maximum of 26 feet for duct system. For best performance, use no more than three 90° elbows. To calculate the length of system you need, add the equivalent feet for each duct piece used in the system. See the following example:

6" duct system



3-1/4" x 10" duct system



Recommended standard fittings

6" Systems: Equivalent length of 6" duct

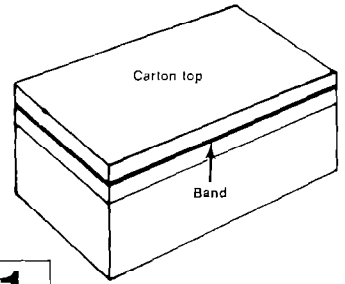
3-1/4" x 10" to 6" = 4.5 ft.	6" to 3-1/4" x 10" 90° elbow = 5 ft.	6" to 3-1/4" x 10" 90° elbow = 9 ft.	
90° elbow = 5 ft.	6" to 3-1/4" x 10" = 1 ft.	45° elbow = 2.5 ft.	6" wall cap = 0 ft.

Note: Never use laundry type wall caps.

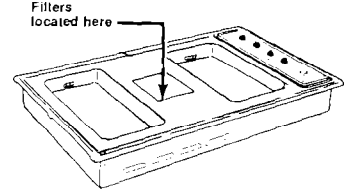
3-1/4" Systems: Equivalent length of 3-1/4" x 10" duct

3-1/4" x 10" to 6" = 4.5 ft.	6" to 3-1/4" x 10" 90° elbow = 6 ft.	6" to 3-1/4" x 10" = 1 ft.
3-1/4" x 10" 90° elbow = 5 ft.	3-1/4" x 10" flat elbow = 12 ft.	3-1/4" x 10" wall cap = 0 ft.

Now start...

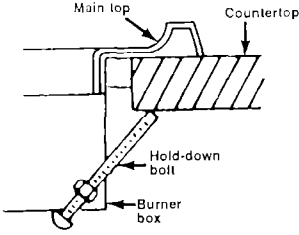


1. Cut band from around the top flange of carton, and remove the top of carton.



2. Remove styrofoam pads and cooktop from carton. Remove styrofoam pads from front and back of cooktop. Remove griddle (griddle is packed in box on top of grill) from cooktop, and set to one side. Lift off grills and grates and place on protective covering. Lift front end of grill burner module and pull toward you. Use both hands to remove grill burner module. Repeat to remove the surface burner module. Place both burner modules on protective covering. Remove grease pan (under the grill burner module) and set aside with other parts. Remove any tape from cooktop, including tape holding filters inside the cooktop.

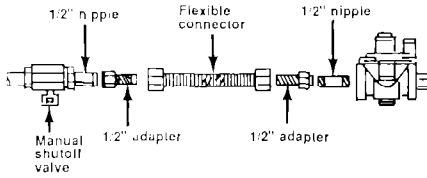
- 3.** Install venting adapter to blower housing using three screws provided. Rotate blower housing downward to clear the cabinet opening.



- 4.** Insert the downdraft cooktop into the countertop cutout. Center the downdraft cooktop in the cutout.

Check that front edge of downdraft cooktop is parallel to front edge of countertop and at least 1-1/2 inches back from front edge of countertop and 2-1/2 inches from rear wall. Tighten hold-down bolts at each side of cooktop.

- 5.** Connect vent adapter to installed venting system. See Venting requirements.



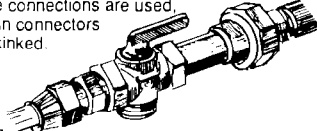
- 6.** Assemble the flexible connector from the gas supply pipe to the pressure regulator in order: manual shutoff valve, 1/2" nipple, 1/2" adapter, flexible connector, 1/2" adapter, and 1/2" nipple. These parts must be supplied by installer.

⚠ WARNING

Fire Hazard

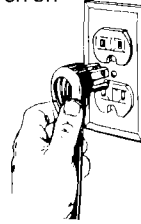
Do Not make connection too tight. The regulator is die cast. If the connection is made too tight, it will crack resulting in a gas leak and possible fire or explosion.

- 7.** Use pipe-joint compound resistant to the action of Natural and L.P. gas to seal all gas connections. Check that the manual shutoff valve between the inlet nipple and the gas line valve is open. If flexible connections are used, be certain connectors are not kinked.



- 8.** Open shutoff valve in the gas supply line. Wait a few minutes for gas to move through the gas line.

- 9.** Use a brush and liquid detergent to test all gas connections for leaks. Bubbles around connections will indicate a leak. If a leak appears, shut off gas valve controls and adjust connections. Then check connections again. **NEVER TEST FOR GAS LEAKS WITH A MATCH OR OTHER FLAME.** Clean all detergent solution from cooktop. **All connections must be wrench-tightened.**



- 10.** Place grease pan in the bottom of the right side of the cooktop. Align grill burner orifices with the venturi at the rear of the cooktop. Push burner pan in and lower into place. Replace grills over burner pan. Repeat with the surface burner. Plug the electrical cord into the grounded outlet.

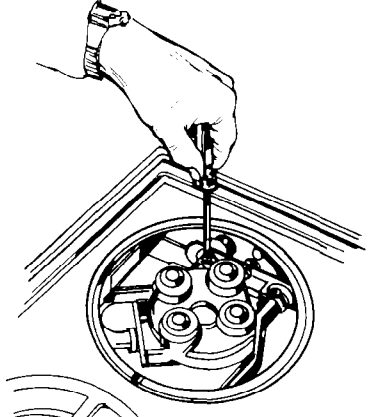
Electronic Ignition System -- initial lighting

Cooktop burners use electronic igniters in place of standing pilots. When the cooktop control knob is turned to the "LIGHT" position, the system creates a spark to light the burner. This sparking continues until the control is turned to the desired setting.



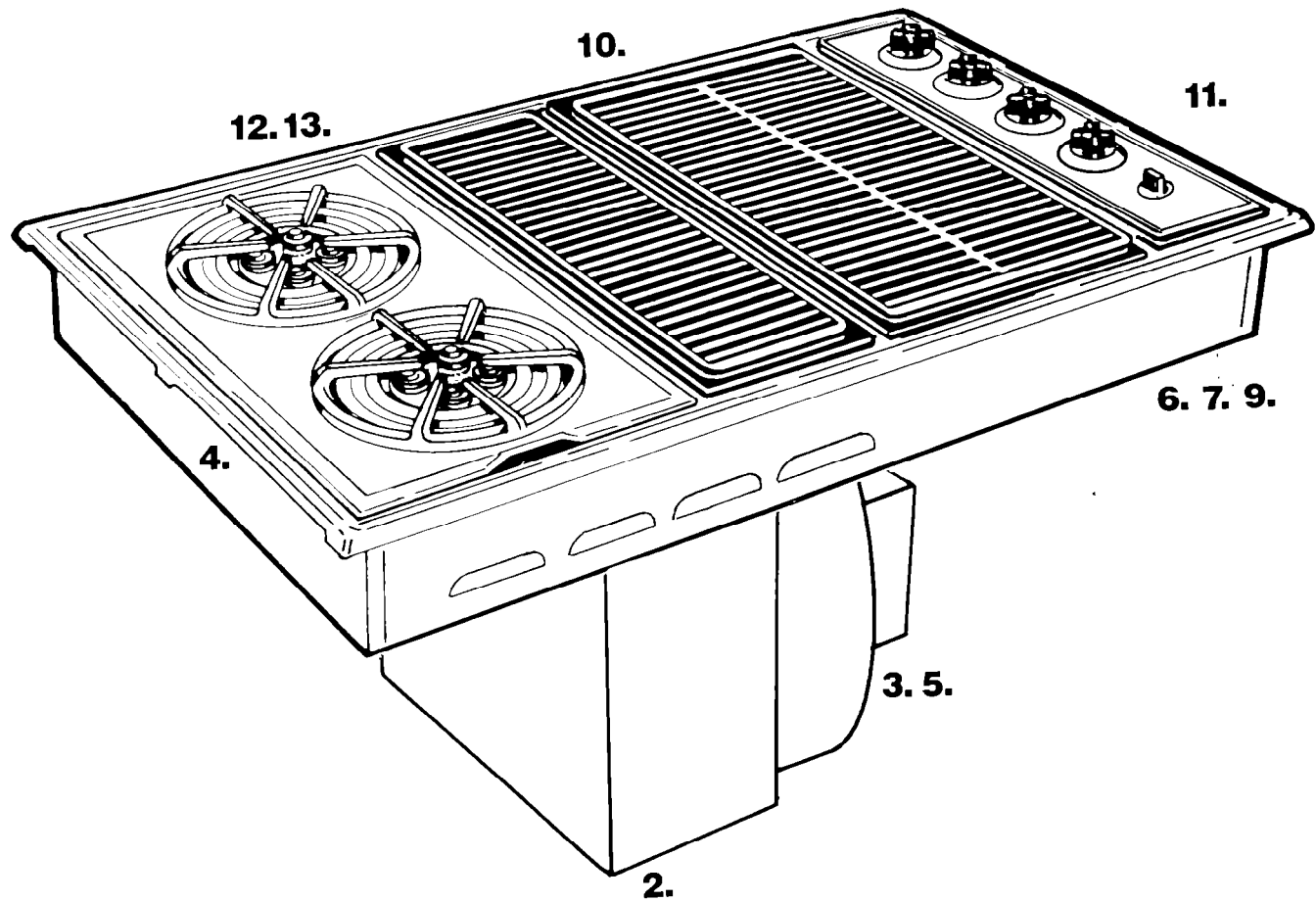
- 11.** Check the operation of the cooktop burners. Push in and turn each control knob to "LIGHT" position. The flame should light within four seconds. Do not leave the knob in the "LIGHT" position after burner lights.

- 12.** After burner lights, turn control knob to "HI" position. Check each cooktop burner for proper flame. The small inner cone should have a very distinct blue flame 1/4" to 1/2" long. The outer cone is not as distinct as the inner cone.



- 13.** If burner flames lift off ports, are yellow or are noisy when turned off, the air/gas mixture may be incorrect. To adjust for proper flame: loosen air-shutter screw and adjust shutter to the widest opening that will not cause the flame to lift or blow off the burner and will provide the proper flame described in step 12. Repeat as necessary with other burners. Tighten air-shutter screw.

To get the most efficient use from your new downdraft cooktop, read your KitchenAid Use and Care Guide. Keep Installation Instructions and Guide close to downdraft cooktop for easy reference.



PANEL D

If downdraft cooktop does not operate...

First, check that circuit breaker is not tripped or fuse blown. A wiring diagram is located below the control mounting plate. Read before servicing.

If you need assistance...

When you call, you need the downdraft cooktop model number and serial number. Both numbers can be found on the serial/rating plate under the left module on the left side wall of the burner box.