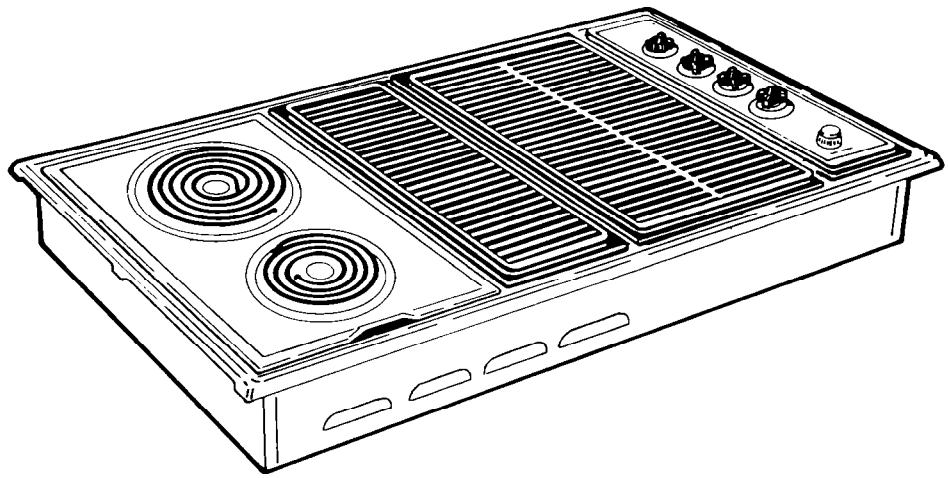
KitchenAid®

Installation Instructions

36″ Electric Modular Downdraft Cooktop



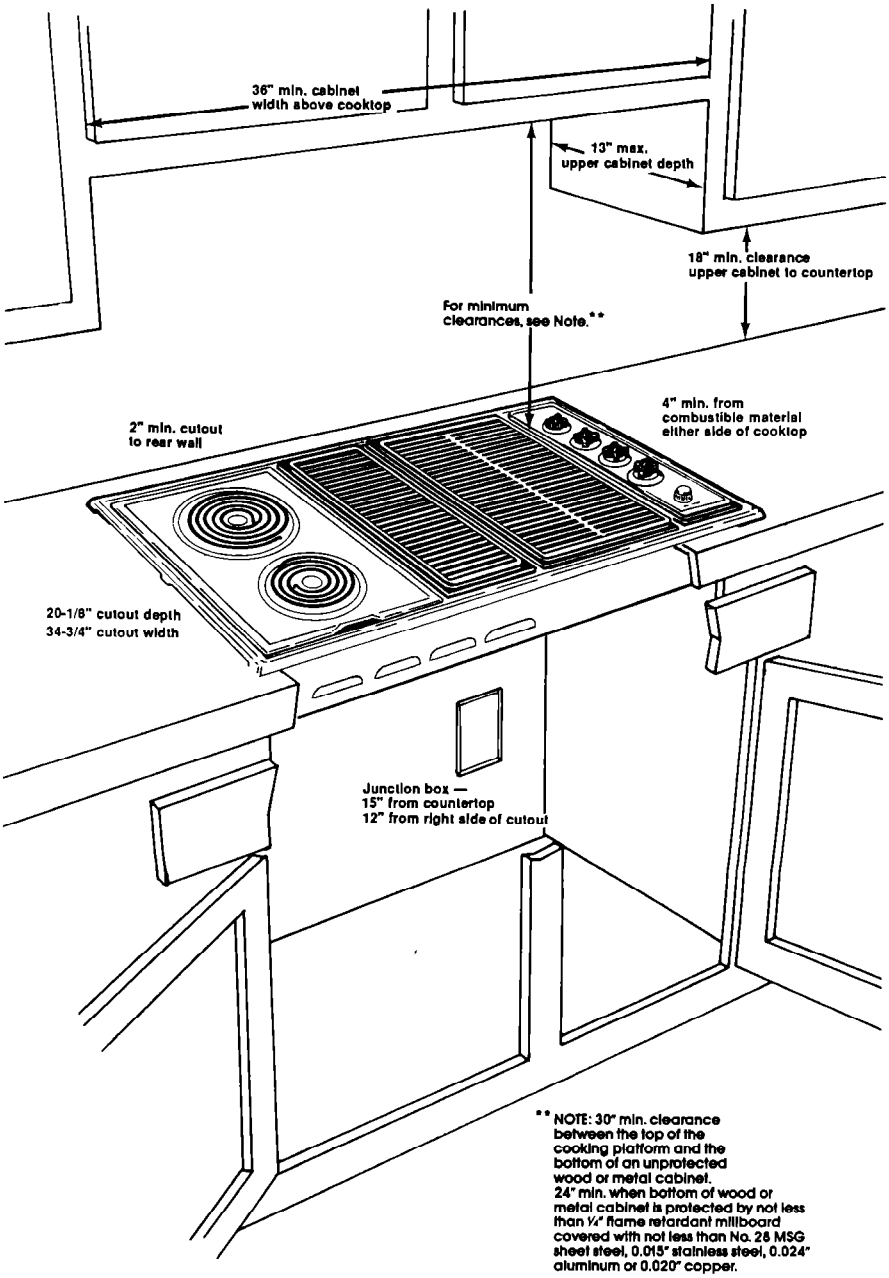
IMPORTANT:

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.



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.

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 to latest), and local codes and ordinances.**

⚠WARNING

Potential 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. Failure to do so may result in serious injury.

⚠WARNING

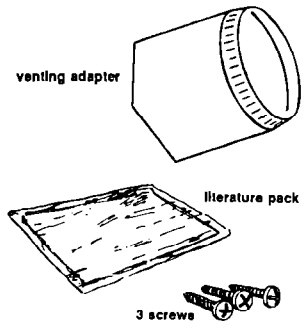
Electrical Shock Hazard

Take special care when drilling holes into the wall. Electrical wires may be concealed behind the wall covering resulting in possible electrical shock.

Tools and materials needed for installation:

PANEL A

Parts supplied for installation:



Hold-down screws are attached

Mobile home installation

The installation of this downdraft cooktop must conform to Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD, Part 280), or when such standard is not applicable, the Standard for Manufactured Home Installations 1982 (Manufactured Home Sites, Communities, and Setups), ANSI A 225.1-1984, or with local codes.

Copies of the standards listed may be obtained from:

National Fire Protection Association
Battery March Park
Quincy, Massachusetts 02269

Electrical requirements

Electrical 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 line can result in a risk of electrical shock.**
- **Do Not use an extension cord with this appliance. Such use may result in a fire, electrical shock or other personal injury.**
- **Do Not have a fuse in the neutral or grounding circuit. To do so may result in an electrical shock or other personal injury.**

IMPORTANT: Save installation instructions for local electrical inspector's use.

A. It is the personal responsibility and obligation of the customer to contact a qualified electrician to assure that the electrical installation is adequate and is in conformance with the National Electrical Code, ANSI/NFPA 70-1987* and local codes and ordinances.

B. A three-wire or four-wire, single-phase, 120/240-volt, 60-Hz, AC only, electrical supply (or three-wire or four-wire, 120/208-volt if specified on nameplate) is required fused on both sides of the line. (Time-delay fuse or circuit breaker is recommended.) The fuse size must not exceed the circuit rating of the appliance specified on the nameplate. It is recommended that a separate circuit, serving only this appliance, be provided. A wiring diagram is located below the control mounting plate. The nameplate is located under the module on the rear wall of the burner box.

C. DOWNDRAFT COOKTOP MUST BE CONNECTED WITH COPPER WIRE ONLY. Aluminum wire **must not** be used to avoid potentially unsatisfactory connections.

D. Wire sizes and connections must conform with the fuse size and rating of the appliance in accordance with National Electrical Code, ANSI/NFPA 70-1987* and local codes and ordinances.

E. The appliance should be connected to the fused disconnect (or circuit breaker) box through flexible armored or non-metallic sheathed cable. The flexible armored cable extending from the appliance should be connected directly to the junction box. Allow some slack in the cable so the downdraft cooktop can be moved if servicing is ever necessary.

F. A U.L.-listed conduit connector must be provided to attach the power supply cord to the junction box.

G. A wiring diagram is located below the control mounting plate.

Electrical connection and recommended grounding method

This appliance is manufactured with a white neutral power supply wire and a frame-connected green (or bare) grounding wire twisted together.

⚠WARNING

Electrical Shock Hazard

Make sure power supply is turned off before starting electrical connection.

Failure to do so could result in an electrical shock or other personal injury.

A. If local codes permit connection of the frame-grounding conductor to the neutral (white) wire:

1. Connect the flexible armored cable that extends from the cooktop to the junction box using a U.L.-listed conduit connector. Tighten screws on conduit connector.
2. Connect the neutral (white) wire in the junction box with the green (or bare) wire and white wire from the appliance cable with a wire connector.
3. Connect the two red wires together and the two black wires together with wire connectors. See Figure 1.

Grounded neutral

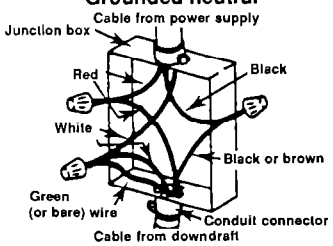


Figure 1

B. If local codes DO NOT permit connection of the frame-grounding conductor to the neutral:

1. Connect the flexible armored cable that extends from the cooktop to the junction box using a U.L.-listed conduit connector. Tighten screws on conduit connector.
2. Separate the white wires from the green (or bare) wire that extends out the end of the appliance cable. See Figure 2.

Ungrounded neutral

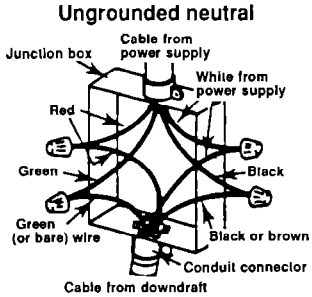


Figure 2

3. Connect the white wire from the power supply cable to the neutral (white) wire in the junction box.
4. Connect the black (or brown) wires together and the red wires together with wire connectors. See Figure 2.
5. Connect the green (or bare) wire to a grounded cold water pipe* (or to the grounded lead in the service panel). **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.

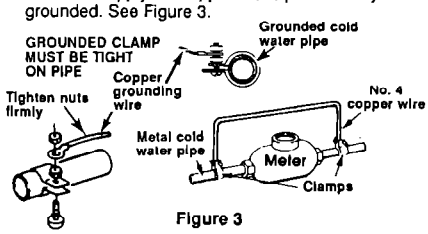


Figure 3

* 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.

C. If connecting to a mobile home, four-wire electrical system:

1. Connect the flexible armored cable that extends from the surface unit to the junction box using a U.L.-listed conduit connector. Tighten screws on conduit connector.
2. Separate the white wires from the green (or bare) wire that extends out the end of the appliance cable. See Figure 2.
3. Connect the white wires together, the red wires together, and the black (or brown) wires together.
4. Connect the green (or bare) wire from the supply cable to the grounding wire in the junction box.

Venting requirements

Ductwork needed for installation is not included.

⚠WARNING

Potential Fire Hazard

Venting system must terminate to the outside. Do Not terminate the ductwork in 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 hazard.

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. **Flexible ductwork is Not recommended.** If it is used, calculate each foot of flexible ductwork as two feet of straight metal ductwork. Flexible elbows count twice as much as standard elbows. Use only metal ductwork.

Through the wall installation

(outside wall installation shown)

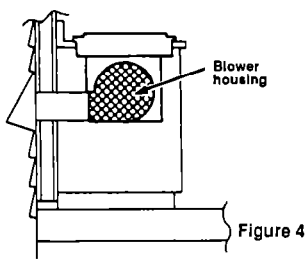


Figure 4

Install directly to outside using the dimensions shown.

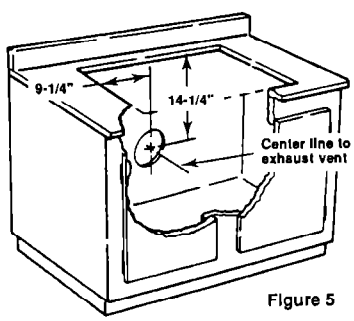


Figure 5

Through the floor installation

Island location

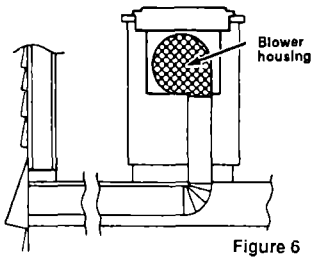


Figure 6

Install between floor joists using dimensions shown.

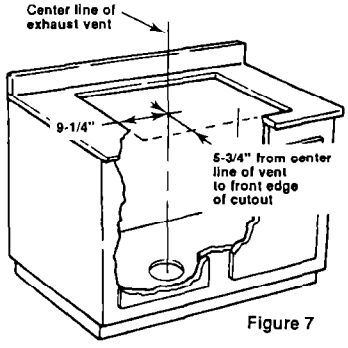
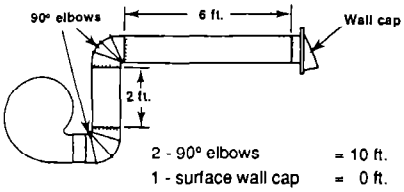


Figure 7

Recommended duct length for island or peninsula installations

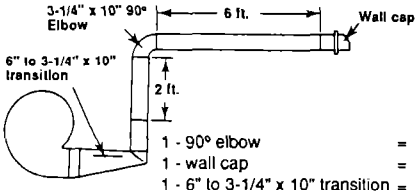
Use 6" or 3-1/4" x 10" duct with a maximum of 26 feet for duct system. For best performance, use no more than three 90° elbows. To calculate the length of system you need, add the equivalent feet for each duct piece used in the system. See the following example:

6" duct system



2 - 90° elbows	= 10 ft.
1 - surface wall cap	= 0 ft.
8 feet straight	= 8 ft.
Length of 6" system	= 18 ft.

3-1/4" x 10" duct system



1 - 90° elbow	= 5 ft.
1 - wall cap	= 0 ft.
1 - 6" to 3-1/4" x 10" transition	= 5 ft.
8 feet straight	= 8 ft.
Length of 3-1/4" x 10" system	= 18 ft.

Recommended standard fittings

6" Systems: Equivalent length of 6" Duct

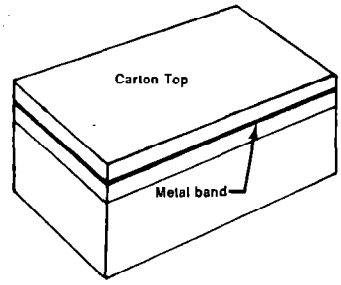
3-1/4" x 10" to 6" = 4.5 ft.	3-1/4" x 10" to 6" 90° elbow = 5 ft.	6" to 3-1/4" x 10" 90° elbow = 8 ft.
90° elbow = 5 ft.	6" to 3-1/4" x 10" = 1 ft.	45° elbow = 2.5 ft.	6" wall cap = 0 ft.

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

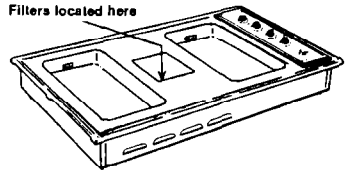
3-1/4" x 10" to 6" = 4.5 ft.	6" to 3-1/4" x 10" 90° elbow = 8 ft.	6" to 3-1/4" x 10" = 1 ft.
3-1/4" x 10" 90° elbow = 5 ft.	3-1/4" x 10" flat elbow = 12 ft.	3-1/4" x 10" wall cap = 0 ft.

Note: Never use laundry type wall caps.

Now start...

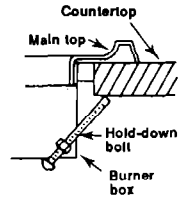


1. Cut metal band from around the top flange of carton, and remove the top of carton.



2. Remove styrofoam pads and cooktop from carton. Remove styrofoam pads from front and back of cooktop. Lift out grill module and griddle (in box) from cooktop, and set to one side. Remove any tape from cooktop, including tape holding filters inside the appliance.

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 inches from any vertical walls. Tighten hold-down bolts at each side of unit.

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

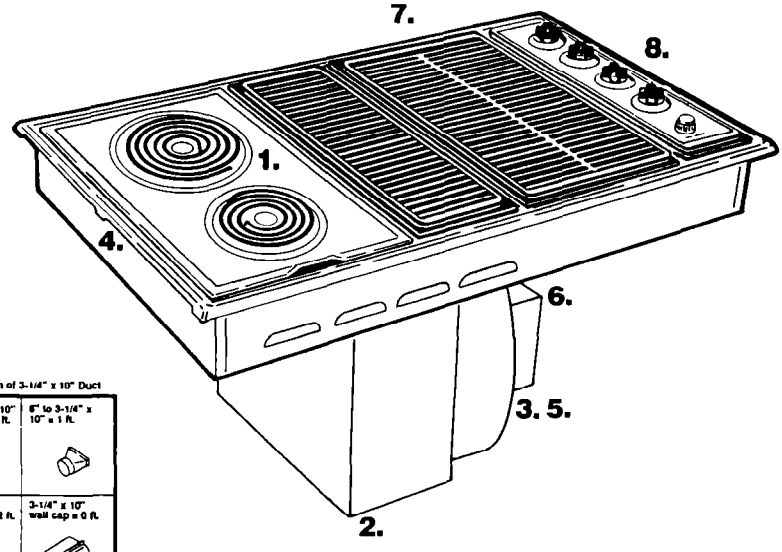
6. Make electrical connections. See Electrical requirements and Electrical connection sections, Panel B.

7. Install grill and surface modules in cooktop following instructions in Use and Care Guide.

8. Turn power supply on. Check that grill, module and vents are operating correctly. If one does not operate, disconnect the power source and check that wire connections have been made correctly.

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.

Numbers correspond to steps.



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 located under the module on the rear wall of the burner box.

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