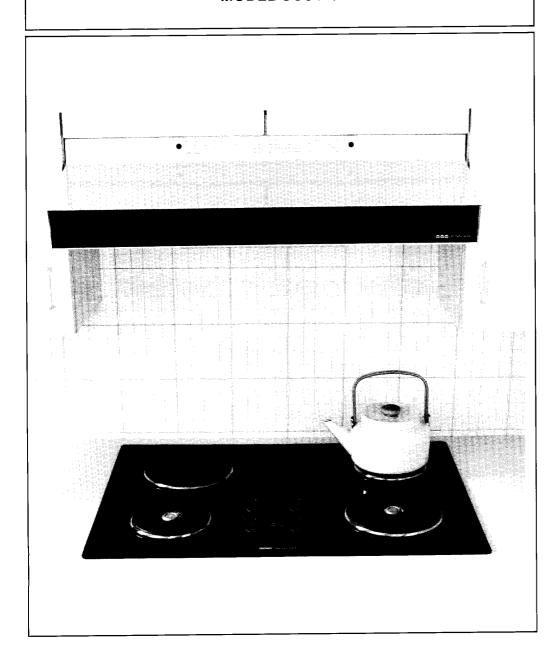


# Use and Care Manual **Solid Element Cooktop**

**MODEL CCS446** 





# Read before operating your cooktop

All appliances — regardless of the manufacturer — have the potential through improper or careless use to create safety problems. Therefore the following safety precautions should be observed:

- 1. Be sure your appliance is properly installed and grounded by a qualified technician.
- 2. Never use your appliance for warming or heating the room.
- 3. Children should not be left alone or unattended in area where appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- 4. Wear proper apparel. Loose-fitting or hanging garments should never be worn while using the appliance.
- 5. Do not repair or replace any part of the appliance unless specifically recommended in this manual. All other servicing should be referred to an authorized Jenn-Air Service Contractor.
- **6.** Flammable materials should not be stored near surface units.
- 7. Do not use water on grease fires. Smother fire or flame or use dry chemical or foam-type extinguisher.
- 8. Use only dry potholders. Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch hot heating elements. Do not use a towel or other bulky cloth.
- 9. Use proper pan size. Many appliances are equipped with one or more surface units of different size. Select cookware having flat bottoms large enough to cover the surface unit heating element. The use of undersized cookware will expose a portion of the heating element to direct contact and may result in ignition of clothing. Proper relationship of cookware to heating element will also improve efficiency and performance.

- 10. Never leave surface units unattended at high heat settings. Boil over may cause smoking and greasy spillovers that may ignite.
- 11. Glazed cookware only certain types of glass, glass-ceramic, ceramic, earthenware, or other glazed cookpots are suitable for cooktop surface without breaking due to the sudden change in temperature. Use only such cookware as you know have been approved for this purpose.
- 12. Cookware handles should be turned inward and not extend over adjacent surface heating elements to avoid burns, ignition of flammable materials and spillage due to unintentional contact with the cookware.
- 13. CAUTION Do not store items of interest to children in cabinets above a cooktop — children climbing on the cooktop to reach items could be seriously injured.
- 14. Do not touch surface units or areas near units. Surface units may be hot even though they are dark in color. Areas near surface units may become hot enough to cause burns. During and after use, do not touch or let clothing or other flammable materials contact these areas until they have had sufficient time to cool.
- **15.** Do not use cooktop if glass is broken. Contact an authorized Jenn-Air Service Contractor.
- 16. Clean glass with caution. If wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burns. Some cleansers can produce noxious fumes if applied to a hot surface.
- Do not operate with damaged cooking element after any product malfunction until proper repair has been made.
- **18.** Keep all switches "OFF" when unit is not in use.
- **19.** Clean only parts listed in this manual and use procedures recommended.



# About the Solid Element

The solid elements are made from a cast iron plate into which electrical heating coils have been embedded. The coils are arranged to provide a uniform heat distribution. Heat from the solid element is conducted to the cookware rather than radiated, as is the case with the electrical coils.

Since the solid elements are made from cast iron, they share many qualities of cast iron cookware — gradual heat-up, even cooking and heat retention. These qualities provide the cook with certain advantages. Although the elements are slower to heat than standard electrical coil elements, once heated they provide even heat distribution. When heavy gauge, flat bottom utensils are used, even heat distribution prevents hot spots or scorching. Less water is needed to cook foods. Energy can be saved by turning the element off before cooking is completed and using the retained heat to finish cooking.

The solid elements are easy to clean because they are slightly elevated and sealed into the cooktop surface (without drip bowls). Therefore, spills flow onto the cool surface area rather than burning onto the element. Simple maintenance keeps the elements looking like new.

Since this manual explains how you can obtain the best use of your cooktop, it is essential that you follow the instructions carefully. This will enable you to more fully enjoy and properly maintain your appliance.

Should you have any questions about your Jenn-Air, please write to us.

Consumer Relations Department Jenn-Air Company 3035 Shadeland Avenue Indianapolis, Indiana 46226-0901



# **Control Settings**

# **Types of Solid Elements**

The cooktop is equipped with two different types of solid elements.



**Protect Temp elements** — Two elements are equipped with a thermal protector or limiter. The long life of the element is assured by preventing the cooking surface from becoming overheated in situations in which heat is not properly conducted away from the element's surface by cooking food. The thermal protector reduces wattage to the element to prevent overheating. Examples of when overheating could occur include turning the element on without a pan in place or using an unsuitable cooking utensil, such as one with a badly warped bottom, or letting a pan boil dry.



**Auto Temp elements** — Two elements are thermostatically controlled. A thermostat in the center of the element senses the temperature of the bottom of the pan and can be set for a range of temperatures. At each setting, the heating process begins at full power to reach the desired temperature quickly and then cycles on and off during the cooking process to maintain that temperature.



### **Control Locations**

- 1. Left rear heating element (Protect Temp element)
- 2. Left front heating element (Auto Temp element)
- 3. Right front heating element (Auto Temp element)
- 4. Right rear heating element (Protect Temp element)

### **To Set Controls**

- The controls are a push-turn type. To turn on the Protect Temp elements, push down and turn in either direction. To turn on the Auto Temp elements, push down and turn clockwise to desired setting.
- When control is in any position other than OFF, it is not necessary to push before turning.
- A red indicator light on the cooktop will glow when a surface heating element is turned
  on

# Suggested Control Settings

Many factors will determine the control setting that provides the best results such as size and type of cookware or amount of food to be cooked. Low or varying electrical voltage may also be a factor. While some experimentation is required, the suggested settings are provided as a general guideline until you become familiar with your solid element. The information in these charts is based on heavy gauge aluminum cookware.

## **Protect Temp Elements**

- HI To bring liquids to a boil or blanch.
- 7-10 For frying or browning foods; to maintain rapid boil of large amounts of food.
- 6 To slow sauté; to maintain slow boil of large amounts of food.
- 3-5 To stew, steam, simmer; to finish cooking foods started on a higher setting.
- LO-2 Melting butter or chocolate; maintaining food at serving temperature.

### **Auto Temp Elements**

- HI To boil large quantities of water.
- 9-10 To deep fat fry, blanch.
- 7-8 To pan fry.
- 5-6 To braise, brown or sear meat.
- 3-4 To saute, steam, simmer, scald, scramble eggs, boil small quantity of water.
- LO-2 Melting butter or chocolate; maintaining food at serving temperature.
- **Note:** Only one setting is necessary for cooking on these elements because it maintains the temperature on which it is set and does not allow food temperatures to go above that setting.

### **Additional Tips:**

- When preparing foods which can be easily scorched or over-cooked, start cooking at a lower temperature setting and gradually increase temperature as needed.
- A higher setting than normal may be necessary when using covered utensil or a
  utensil made with material that is slow to conduct heat, such as cast iron.
- A lower setting can be used when cooking small quantities of foods or when using a utensil that conducts heat quickly.



# **Cooking Utensils**

To achieve optimum cooking performance, use *heavy gauge, flat, smooth bottom* utensils that conform to the diameter of the solid element (no more than one inch overhang). Proper utensils will minimize cooking times, use less electricity, cook food more evenly and require less water or oil.

Utensils with thin, uneven bottoms do not adequately conduct heat from the solid element to the food in the utensil which result in hot spots, burned or underdone food. Using bad utensils also requires more water, time, and energy to cook food.

# **Selecting Proper Cooking Utensils**

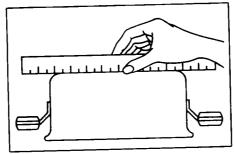
- Select heavy gauge utensils. Usually heavy gauge utensils will not change shape when heated.
- Use utensils with flat, smooth bottoms. The two ways to determine if utensils have a flat, smooth bottom are the ruler test and the cooking test.

#### Ruler Test:

- 1. Place the edge of a ruler across the bottom of the pan.
- 2 Hold up to the light.
- 3. No light should be visible under the ruler.

#### Cooking Test:

- 1. Put 1 inch of water into the utensil.
- Place utensil on the solid element. Turn control to the HI setting.
- 3. Observe the bubble formation to determine the heat distribution. If the bubbles are uniform across the utensil, the utensil will perform satisfactorily. If the bubbles are not uniform, the bubbles will indicate the hot spots.



- Match the size of the utensil to the size of the element. Ideally, the utensil will be the same size or slightly larger.
- Do not use a small pan on a large element. Not only can this cause the element to require more energy and time, but can also result in spillovers burning onto the element resulting in a cleaning chore.

#### **Improper Cookware**

- Cookware that does not have flat bottoms.
- Thin, uneven, grooved or rough bottom utensils.
- · Unbalanced cookware that does not rest flatly and evenly on solid element.
- Cookware that extends more than 1 inch beyond the surface of the solid element.
- Nonflat specialty items that are oversized, uneven or do not meet proper utensil specifications such as round bottom woks with rings, griddles, rippled bottom canners, lobster pots, large pressure canners, etc.

**Note:** Oversized utensils or woks equipped with round metal rings can discolor the stainless steel rings.

**CAUTION:** If flat bottom pans are not used, the top may *overheat* and the glass cooktop could break.

### **Home Canning**

Acceptable canning pots should not be oversized and must have a flat bottom. When canners do not meet these standards, the use of the HI heat setting becomes excessive and may result in damage to the cooktop. In addition, water may not come to a boil and canners may not reach 10 lb. of pressure.

The acceptable canning procedure uses the HI setting just long enough to bring the water to a boil, then lower the setting to maintain the water temperature.

#### **Characteristics of Utensil Materials**

Heavy gauge utensils with flat, smooth bottoms will generally work similarly. There are some differences in the cooking performance of various utensil materials.

- Aluminum utensils heat quickly and evenly. Best suited for simmering, braising, boiling and frying.
- Stainless steel utensils will evenly distribute heat if constructed of tri-ply or combined with other metals such as aluminum and copper. Use for cooking functions similar to aluminum.
- Cast iron utensils are slow to heat but cook more evenly once temperature is reached. Use for long term low heat cooking or for browning and frying.
- Glass ceramic, earthenware, heat-proof glass or glazed utensils can be used if recommended by the manufacturer for cooktop cooking. Do not use with trivets. Best used on LO to MED temperature settings.
- Porcelain enamel-on-steel or porcelain enamel-on-cast iron should be used according to manufacturer's directions. Do not allow to boil dry.



# **Cooking Procedures**

#### **IMPORTANT**

BEFORE USING THE COOKTOP FOR THE FIRST TIME, HEAT THE ELEMENTS WITHOUT A PAN FOR 3 TO 5 MINUTES ON THE HI SETTING. The elements are shipped with a coating (lacquer) which protects them against corrosion. Heating the elements allows the coating to be hardened and burned into the elements. During the curing process, a non-toxic smoke will be created. Turn on the overhead hood fan if the smoke is objectionable. If the elements are not cured, the coating can stick to a pan when first used on the solid element. (Note: The rings around the elements will turn a gold color during the curing process. This is normal. Remove discoloration as instructed on page 11.)

- Make sure bottom of cookware is dry before placing on element.
- Do not use wire trivets, fire rings, pads or any such item between the cookware and the element.
- Cover cookware with lids to shorten cooking time and save energy. This is especially important when cooking large quantities of food.
- Use as little water to cook food as is necessary. Covered cookware requires less water.
- To take advantage of the retained heat in the solid element, turn the element off 5-10 minutes before food is ready and it will continue to cook.
- Do not lay lids (with moisture in them), spatulas, or other food laden utensils on solid element.



# Cleaning and Care

BEFORE CLEANING, BE CERTAIN ALL ELEMENTS ARE TURNED OFF AND THE TOP OF THE ELEMENTS ARE COOL.

#### **Cast Iron Solid Elements**

The body of the solid element is made of high strength cast iron. The red lacquer dot on some solid elements will eventually disappear after the element has been used or after it is scoured. The cast iron will also lose its dark luster over a period of time. (See instructions below for restoring cast iron.) These changes will not affect the solid element's performance or durability.

- For normal cleaning, wipe the element with a damp cloth. Heat element on a medium setting for a few minutes until completely dry.
- For light soil, use powdered cleansers such as Bon-Ami, Bar Keepers Friend, or soft scrubbing cleansers. Rinse thoroughly. Heat element on a medium setting until completely dry.
- For heavy soil, use soapy scouring pads such as S.O.S. or Brillo, a scouring pad such as Scotch-Brite, or a brush with scouring powders. To facilitate the cleaning process, first warm the element on a LO setting. Rinse thoroughly after cleaning. Heat element on a MED setting until completely dry.
- For routine maintenance and to restore the cast iron, use Collo Electrol (Jenn-Air Model A911 or Part No. 712190) or salt-free vegetable oil. Apply the Collo Electrol by following package instructions. When the element is cool, use a clean cloth to remove excess polish. A very thin coat of salt-free vegetable oil will also restore the appearance of the cast iron. Apply with paper towel to a lukewarm element, wipe off excess, and heat on MED setting to cure. If too much oil is used, the surface can become tacky. If this happens, use procedures recommended for cleaning heavy soil.
- Remove any food spills and spatters from elements as soon as possible with a damp cloth. Dry thoroughly.
- The sensor in the Auto Temp elements may be cleaned with Bar Keepers Friend, Zud or Collo Luneta (Jenn-Air Model A912, Part No. 712191).

#### Stainless Steel Seal Ring

The ring around the cast iron element prevents food spills from running under the element. Made from stainless steel, the ring will change to a gold color when the element is heated. This removeable discoloration is a normal characteristic of stainless steel and will occur whenever the solid element is heated on a HI setting.

 To remove discoloration, use a non-abrasive stainless steel cleanser such as Bar Keepers Friend, Zud or Collo Luneta (Jenn-Air Model A912, Part No. 712191). Rinse thoroughly, wipe dry.

### **Glass Cooktop**

The tempered glass cooktop will withstand temperature changes while cooking. Although impact resistant, treat this glass cooktop with the same care you would any glass material.

- Clean glass cooktop after surface has cooled.
- For normal daily cleaning, wipe with a damp sponge or cloth. Use glass cleaners such as Windex to remove smudges and stains. Buff with a clean dry cloth or paper towel.
- For more difficult to remove food stains, use non-abrasive soft cleansers such as Shiny Sinks, Soft Scrub, Bon-Ami, or dishwashing liquids such as Ivory or Joy or a paste of water and baking soda. Rinse and dry thoroughly; buff with clean dry cloth or paper towel.
- Do not use any cleaners not recommended for use on glass.

### **Control Knobs**

The knobs can be removed with the controls in the OFF position. Pull each knob straight from the shaft. Wash knobs in warm soapy water; do not use abrasive cleansers or materials. To replace each knob, match flat part of knob opening with the flat part on the shaft, returning in OFF position.

#### **IMPORTANT**

Do not use decorative covers over the solid element. These trap moisture which can corrode the cast iron element. If the element is accidentally turned on, the covers could permanently damage the solid element or the cooktop.

Do not use wet pans or leave pan bottoms wet. Moisture could cause corrosion and will not allow your pans to heat properly.



Check the following list to be sure a service call is really necessary. A quick reference of this manual may prevent an unnecessary service call.

#### If surface indicator lights or elements fail to come on:

- check for a blown circuit fuse or a tripped main circuit breaker.
- check if cooktop is properly connected to electric circuit in house.

#### If cooktop elements do not get hot enough:

- surface controls may be improperly set.
- cookware may not be flat or the correct size or shape.
- · voltage to house may be low.

#### If elements smoke when first turned on:

• this is normal (see page 10 for curing elements).

#### If stainless steel ring turns gold:

• this is normal (see page 11).

#### If the glass cooktop gets hot:

- cookware may be oversized or undersized for the element.
- · cookware bottom may not be flat.

#### If You Need Service

- Call the authorized Jenn-Air Service Contractor listed in the Yellow Pages or the dealer from whom your appliance was purchased.
- Your Jenn-Air Service Contractor can provide better and faster service if you
  can accurately describe problems and give the model and serial number of
  your appliance. Be sure to retain proof of purchase to verify warranty status.
  Refer to WARRANTY for further information on owner's responsibilities for
  warranty service.

NOTE: Complete service and parts literature are available from any authorized Jenn-Air Parts Distributor.

All specifications subject to change by manufacturer without notice.