

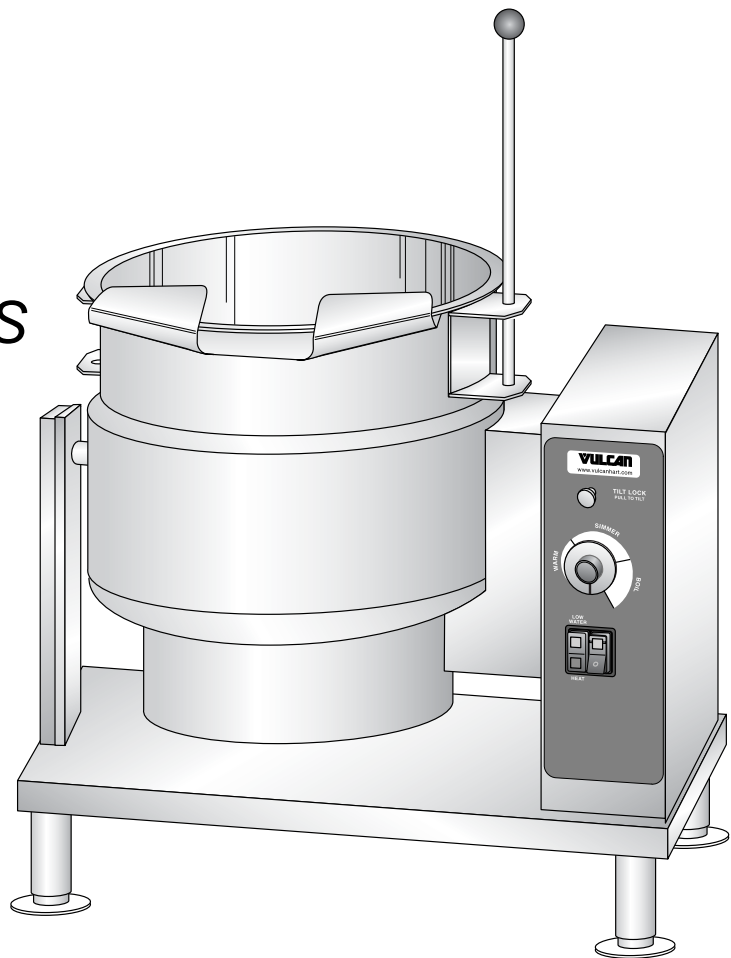


# INSTALLATION & OPERATION MANUAL

## ELECTRIC TILTING COUNTER KETTLES

### MODELS

<i>K6ETT</i>	<i>ML-136067</i>
<i>K12ETT</i>	<i>ML-136068</i>
<i>K20ETT</i>	<i>ML-136069</i>



For additional information on Vulcan-Hart or to locate an authorized parts and service provider in your area, visit our website at [www.vulcanhart.com](http://www.vulcanhart.com)

## IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL ELECTRICAL EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

**⚠ WARNING** Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the **INSTALLATION, OPERATING AND MAINTENANCE** Instructions thoroughly before installing or servicing this equipment.

IN THE EVENT OF A POWER FAILURE,  
DO NOT ATTEMPT TO OPERATE THIS DEVICE.

# TABLE OF CONTENTS

GENERAL .....	4
Unpacking .....	5
Installation Codes and Standards .....	5
INSTALLATION .....	5
Location .....	5
Minimum Clearance .....	5
Installing Electric Kettle on Counter .....	6
Installing Floor Mounted K20ETT .....	6
Electrical Connection .....	6
Electrical Specifications .....	6
OPERATION .....	7
Venting .....	7
Filling the Reservoir Jacket .....	7
Electric Kettle Operation .....	7
MAINTENANCE .....	9
Troubleshooting .....	10
SERVICE AND PARTS INFORMATION .....	11

# INSTALLATION, OPERATION AND MAINTENANCE OF K6ETT, K12ETT, K20ETT ELECTRIC STEAM TILTING KETTLES

**SAVE THESE INSTRUCTIONS  
FOR FUTURE USE**

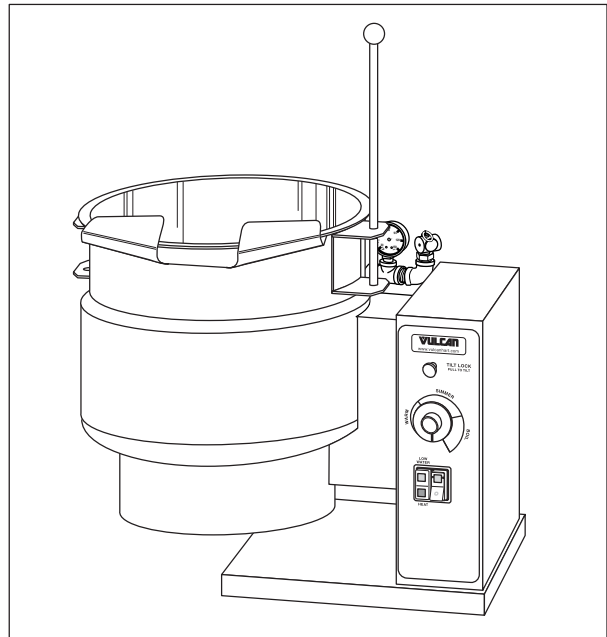
**GENERAL**

Vulcan countertop tilting kettles are produced with quality workmanship and material. Proper installation, usage and maintenance will result in many years of satisfactory performance. It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

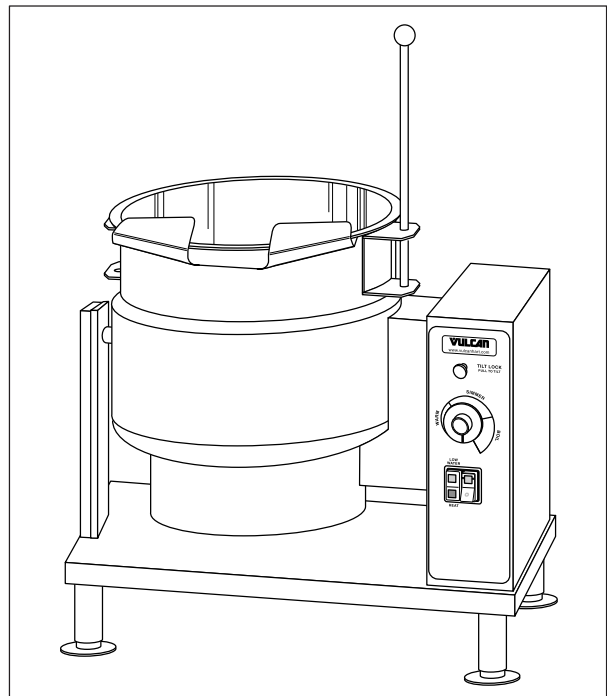
Electric kettles must be connected to an electrical supply according to current local codes. The electric steam kettles are available in 6-, 12- and 20-gallon capacity models.

**TABLE 1. MODEL CHART**

Model Number	Gallons	Quarts	Liters
K6ETT	6	24	23
K12ETT	12	48	45
K20ETT	20	80	76



**Fig. 1 K12ETT Electric Steam Kettle**



**Fig. 2 K20ETT Electric Steam Kettle**

# INSTALLATION

Before installing, verify that the electrical supply required for the equipment covered by this manual agrees with the specifications on the machine data plate, located on the back of the unit. The data plate for the kettle is located on the control box. If the electrical supply does not agree with the equipment requirements, do not proceed with the installation. Contact your dealer or Vulcan-Hart Company immediately.

## UNPACKING

This kettle was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment.

Immediately after unpacking, check for possible shipping damage. If kettle damage is found, save the packaging material and contract the carrier within 15 days of delivery.

## INSTALLATION CODES AND STANDARDS

In the United States, Vulcan kettles must be installed in accordance with:

- 1 State and local codes
- 2 NFPA Standard NFPA-96, *Vapor Removal from Cooking Equipment*, latest edition, available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269
- 3 National Electrical Code (ANSI/NFPA No.70, latest edition) available from the National Fire Protection Association (NFPA), Batterymarch Park, Quincy, MA 02269

In Canada, Vulcan kettles must be installed in accordance with:

- 1 Local codes
- 2 Canadian Electrical Code (CSA C22.2 No.3, latest edition) available from the Canadian Standards Association, 5060 Spectrum Way, Mississauga, Ontario, Canada L4W 5N6

## LOCATION

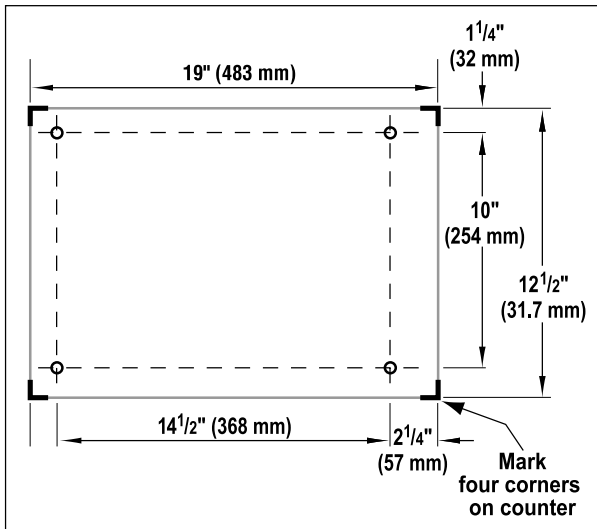
The K6ETT and K12ETT tilting kettles are to be permanently mounted on a counter or a stand. The K20ETT is to be floor mounted.

## MINIMUM CLEARANCE

**TABLE 2. MINIMUM CLEARANCE REQUIREMENTS**

Capacity in Gallons	Clearance in Inches
6	5.25
12	6.5
20	8.0

**INSTALLING ELECTRIC KETTLE ON COUNTER**



**Fig. 3 Mounting Hole Location**

1. Position the kettle on the counter or stand in its final installed location with sufficient rear clearance (see Table 2 for minimum required clearance) from the wall to allow the kettle to tilt completely without obstruction. Mark the four corner locations of the kettle base as shown in Fig. 3.
2. Remove the kettle from the counter and drill four  $\frac{7}{16}$ " diameter holes according to the measurements in Fig. 3.
3. Prepare a clean, dry surface according to package directions on a high grade NSF listed sealant.
4. Apply a continuous bead of sealant along the complete outer edges of the kettle base.
5. Position the kettle in place and secure firmly with supplied hardware.
6. Thoroughly wipe off excess sealant.

**INSTALLATING FLOOR MOUNTED K20ETT**

1. Position the kettle in its final installed location to provide drainage directly below pour path, with sufficient rear clearance (see Table 2) from the wall to allow the kettle to tilt completely without obstruction.
2. Level the kettle by making necessary adjustments using the flanged feet.
3. Mark anchoring hole locations through the flanged feet.
4. With hole location marked, drill holes to accommodate  $\frac{5}{16}$ " studs.
5. Reposition the kettle.
6. Bolt the kettle down and apply a high grade NSF listed sealant around bolt heads and flange making contact with floor surface. Wipe off excess sealant immediately.

**ELECTRICAL CONNECTION**

**⚠ WARNING** Electrical and grounding connections must comply with the applicable portions of the National Electrical code and/or other local electrical codes.

1. Open control box.
2. Connect electric supply to terminal block.
3. See wiring diagram located inside the control box lid.

**ELECTRICAL SPECIFICATIONS**

**TABLE 3. ELECTRICAL SPECIFICATIONS**

Model	PH	208V / 240V	308V / 480V
K6ETT	1	7.5 kW-10kW	N/A
K12ETT, K20ETT	1	12 kW-16kW	N/A
K6ETT	3	7.5 kW-10kW	7.5 kW
K12ETT, K20ETT	3	12 kW-16kW	12 kW

**Note:** K6ETT and K12ETT have external terminal block. In K20ETT, terminal block is inside control box.

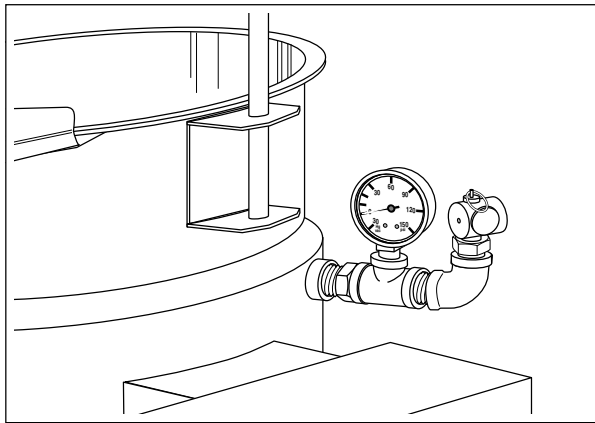
## OPERATION

**⚠ WARNING** The kettle and its parts are hot. Use care when operating, cleaning or servicing the kettle.

### VENTING

While the kettle is cold, check the vacuum/pressure gauge. The gauge should be in the vacuum zone measuring between 25 to 30 in. Hg (84 to 100kPa). If not, there is air in the jacket and it must be removed by venting for proper heating.

1. Place the power switch in the ON position with the kettle empty.
2. Set the temperature control thermostat to boil and heat until the heat indicator light goes off.
3. Pop the pressure relief valve for 10 seconds.
4. Let the kettle cool. Check for a correct vacuum of 25 to 30 in. Hg (84 to 100kPa). If reading is not low enough, repeat the venting procedure steps 1 through 3.



**Fig. 4 Rear of Kettle**

### FILLING THE RESERVOIR JACKET

During use, the reservoir water level must be maintained high enough to submerge the heating elements. If the low water light is illuminated during use, the water level is not adequate and the low water control has automatically shut off the heating elements.

Before adding water to the reservoir, the water supply should be analyzed to ensure that hardness is no greater than 2.0 grains per gallon and the pH level is within the range of 7.0 to 8.5. Water which fails to meet these standards should be treated, or use ionized distilled water with sodium. Equipment failure caused by inadequate water quality is not covered under warranty.

1. Set the thermostat and power switch to OFF position.
2. Release any pressure by popping the pressure relief valve. Then remove the 1/2" plug on the back of the kettle.
3. Insert a funnel into the vent opening and add 3 or 4 ounces of water.
4. Replace and properly tighten 1/2" plug.
5. Turn on the unit.

If the low water light turns on, turn off the unit and repeat steps 3 and 4. If low water light is off, follow the venting procedure (see VENTING) to vent air from reservoir.

### ELECTRIC KETTLE OPERATION

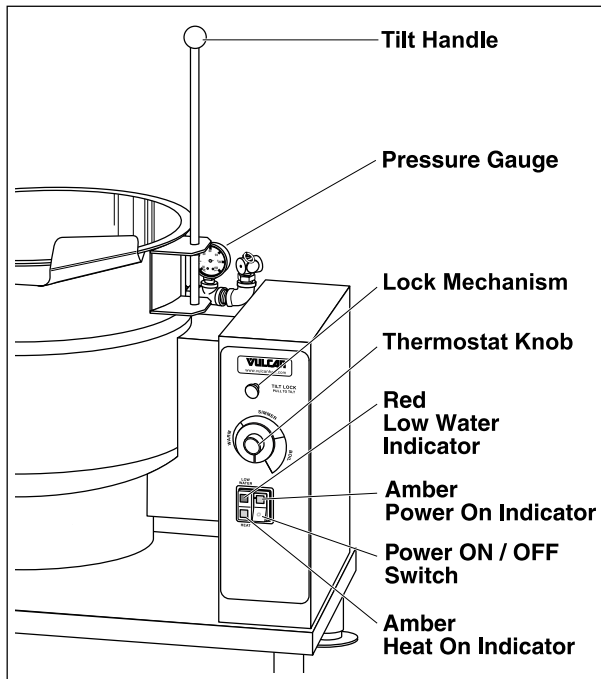
1. Turn the console power ON/OFF switch to the ON position.
2. Preheat the kettle by placing the thermostat knob at Simmer/Boil (desired setting) and wait until the temperature light cycles off.

**NOTE:** Food products with milk or egg base should be placed into a cold kettle before cooking. Avoid sudden contact of these food products to a hot kettle surface because they stick to the surface.

3. Pour the food to be cooked into the kettle.

**TABLE 4. CONTROLS AND INDICATORS**

Item	Function
Tilt Handle	Tilts kettle.
Power ON/OFF Switch	Controls power to the kettle.
Power ON Indicator (Amber)	When lit, unit powered.
Low Water Indicator (Red)	When lit, indicates insufficient water in the kettle jacket.
Temperature Light (Amber)	When lit, indicates the heating element is on.
Thermostat Knob	Regulates kettle temperature from simmer to a rolling boil.
Vacuum Pressure Gauge	Indicates the vacuum inside the kettle jacket.
Tilt Lock Mechanism	Prevents kettle from tilting.



**Fig. 5 Kettle Controls**

**THERMOSTAT AND TEMPERATURE**

1. Place the thermostat knob at the required temperature setting, from warm to boil, representing a temperature range from approximately 90°F to 300°F (32°C to 149°C) in the reservoir.
2. When the cooking is finished, set the thermostat knob and the power ON/OFF switch to the OFF positions.
3. Pull the tilt lock mechanism to release tilt lock. Pour the finished product from the kettle using the tilt handle.
4. When cooking is completed, immediately add water to the kettle to prevent residue from drying and sticking to the inside of the kettle.
5. Allow kettle to cool and then follow CLEANING procedure.



# MAINTENANCE

## CLEANING



**⚠ WARNING** Disconnect electrical power to the machine and follow Lockout/Tagout procedures before cleaning.

**NOTE:** Do not hose down under any condition. Failure to comply will void the warranty.

The kettle interior and exterior should be washed after each use when a different food is to be cooked next or when cooking is completed for the day.

1. Add water to the kettle for cleaning and to prevent residue from drying and sticking to the inside of the kettle.
2. Loosen stuck-on food by allowing it to soak at a low temperature setting.

Never use harsh or corrosive cleaning chemicals.

Never scrape the inside of the kettle with abrasive cleansers metal tools or steel scouring pads, which will scratch the surface, spoil the appearance and make it more difficult to thoroughly clean.

3. Add mild detergent and scrub the kettle interior with a nylon brush.
4. Thoroughly rinse the interior and dry with a soft cloth.
5. Rinse the exterior and dry with a soft cloth.

**K6ETT, K12ETT, K20ETT ELECTRIC COUNTERTOP KETTLE TROUBLESHOOTING**

<b>SYMPTOMS</b>	<b>POSSIBLE CAUSES/REMEDY</b>
<p>Kettle not coming on, no power light.</p>	<p>Power switch not turned on/Turn on kettle power switch.</p> <p>Kettle unplugged/Plug kettle in.</p> <p>Breaker tripped or turned off/Reset or turn breaker on.</p> <p>Internal fuse failed/Call authorized servicer.</p> <p>Controls failure/Call authorized servicer.</p>
<p>Kettle not heating, no heat light</p>	<p>Power switch not turned on/Turn on kettle power switch.</p> <p>Thermostat not set/Set thermostat to desired level.</p> <p>Kettle is up to set temperature/If higher temperature desired, increase thermostat setting.</p> <p>Kettle not positioned up right/Tilt kettle up till tilt lock latches.</p> <p>Kettle low on water, low water light is on/Fill jacket and vent per procedure in Installtion &amp; Operation manual.</p> <p>Controls failure/Call authorized servicer.</p>
<p>Kettle not heating, heat light is on</p>	<p>Heating element failure/Call authorized servicer.</p> <p>Controls failure/Call authorized servicer.</p>
<p>Kettle heats up slow or will not come to boil</p>	<p>No vacuum in jacket/Refer to venting instructions in Installtion &amp; Operation manual.</p> <p>Wrong supply voltage for kettle/Check that data plate matches building supply voltage or call authorized servicer.</p> <p>Low voltage to unit/Call authorized servicer.</p>

## **SERVICE AND PARTS INFORMATION**

To obtain service and parts information concerning this model, contact the Vulcan-Hart Service Agency in your area (refer to our website, [www.vulcanhart.com](http://www.vulcanhart.com) for a complete listing of Authorized Service and Parts depots).

When calling for service, the following information must be available: model number, serial number, manufacture date (MD) and voltage.

