



Operators Manual

Installation, Operation & Service

Electric Floor Model Kettles

For units built after August 1999

MODELS:

KEL-25, KEL-30, KEL-40, KEL-40-SH, KEL-60, KEL-80, KEL-100
KEL-25-T, KEL-40-T, KEL-60-T, KEL-80-T, KEL-100-T
KEL-40-SH, KEL-40-TSH, KEL-60-SH, KEL-60-TSH



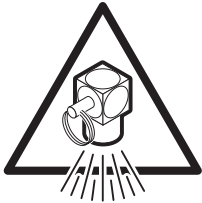
Enodis

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For your safety

DANGER



Keep clear of pressure relief discharge.

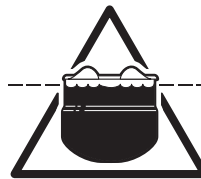


Keep hands away from moving parts and pinch points.

IMPORTANT



Inspect unit daily for proper operation.



Do not fill kettle above recommended level marked on outside of kettle.

CAUTION



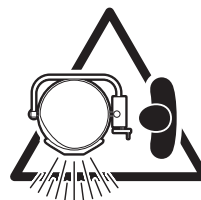
Surfaces may be extremely hot! Use protective equipment.



Wear protective equipment when discharging hot product.

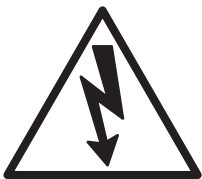


Do not lean on or place objects on kettle lip.



Stand clear of product discharge path when discharging hot product.

SERVICING

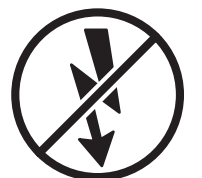


Shut off power at main fuse disconnect prior to servicing.



Ensure kettle is at room temperature and pressure gauge is showing zero or less prior to removing any fittings.

GAS APPLIANCES



Do not attempt to operate this appliance during a power failure.



Keep appliance and area free and clear of combustibles.

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INSTALLATION

GENERAL

Installation of the kettle must be accomplished by qualified electrical installation personnel working to all applicable local and national codes. Improper installation of product could cause injury or damage.

This equipment is built to comply with applicable standards for manufacturers. Included among those approval agencies are: UL, NSF, ASME/Ntl. Bd., CSA, CGA, ETL, and others. Many local codes exist, and it is the responsibility of the owner/installer to comply with these codes.

Note: Maximum voltage for LVD (low volt directive for Europe) to be 440 volts for CE marked appliances.

INSPECTION

Before unpacking visually inspect the unit for evidence of damage during shipping.

If damage is noticed, do not unpack the unit, follow Shipping Damage Instructions shown below.

SHIPPING DAMAGE INSTRUCTIONS

If shipping damage to the unit is discovered or suspected, observe the following guidelines in preparing a shipping damage claim.

1. Write down a description of the damage or the reason for suspecting damage as soon as it is discovered. This will help in filling out the claim forms later.
2. As soon as damage is discovered or suspected, notify the carrier that delivered the shipment.
3. Arrange for the carrier's representative to examine the damage.
4. Fill out all carrier claims forms and have the examining carrier sign and date each form.

INSTALLATION

The first installation step is to refer to the Specification Sheets or Specification Drawings for detailed clearance and drain requirements in order to determine the location of the kettle. Next, carefully cut open the shipping carton for easy removal of the kettle.

CLEARANCE REQUIREMENTS & RECOMMENDED FLOOR DRAIN LOCATIONS

Clearance Requirements			
Back	Left Side	Right Side *	
0	0	12'	

* Minimum recommended clearance for service

Tilting Models

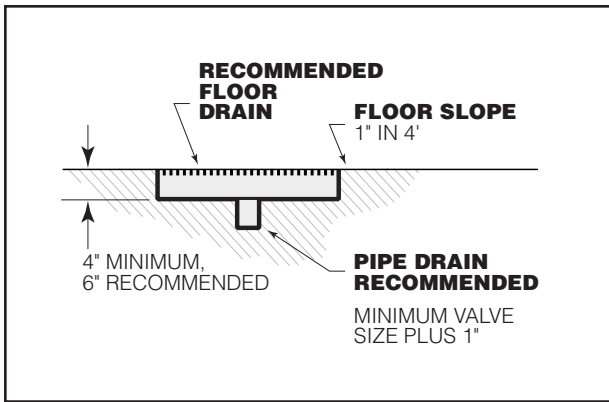
Stationary Models

Recommended Floor Drain Locations **

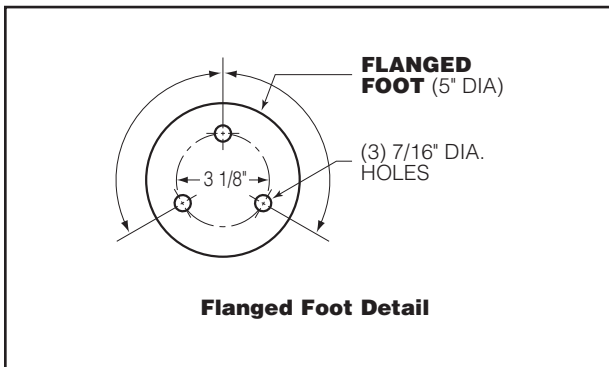
Model #	A	B	C	D
KEL-25	22 3/8"	34"	5 1/4"	11 1/4"
KEL-30	25 3/8"	37"	6 3/4"	12 3/4"
KEL-40	28 5/8"	40"	7 3/4"	13 3/4"
KEL-40-SH	32 1/2"	44"	9 1/2"	15 1/2"
KEL-60	32 1/2"	44"	9 1/2"	15 1/2"
KEL-80	35 7/8"	47"	11 1/4"	17 1/4"
KEL-100	38 3/8"	50"	12 1/2"	18 1/2"
KEL-25-T	22 1/4"	51 3/4"	4"	24"
KEL-40-T	26	56	5 1/2"	28 1/2"
KEL-60-T	29 3/4"	62 1/2"	5 1/2"	31"
KEL-80-T	30 1/2"	65 3/8"	5 1/2"	35 1/2"
KEL-100-T	34 1/8"	69 1/4"	4"	40 1/2"

** Above dimensions apply to standard 2" Tangent Draw-Off Valve only. For other valves consult factory.

RECOMMENDED FLOOR DRAIN DETAIL



ASSEMBLY



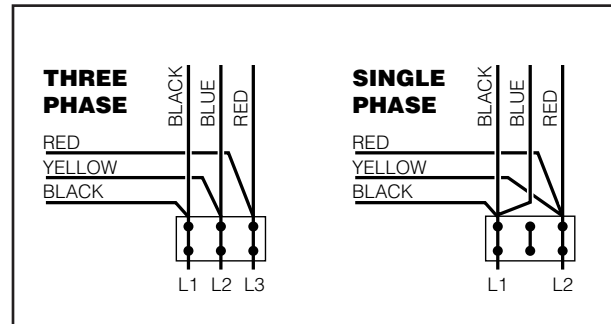
Position the kettle in its permanent location, and level the kettle by turning the adjustable flanged feet. Once positioned and leveled, permanently secure the kettle's flanged feet to the floor using 5/16" lag bolts and floor anchors (supplied by the installer). There are three bolts required to secure each of the flanged feet.

WIRE CONNECTION

Install in accordance with local codes and/or the National Electric Code ANSI/NFPA No. 70-1990 (USA) or the Canadian Electric Code CSA Standard C22.1 (Canada). A separate fused disconnect switch must be supplied and installed. The kettle must be electrically grounded by the installer.

The electrical supply must match the power requirements specified on the kettle's rating plate. The copper wiring must be adequate to carry the required current at the rated voltage. Refer to specification sheet for all electrical specifications.

Note: Maximum voltage for LVD (low voltage directive for Europe) to be 440 volts for CE marked appliances.



The kettle is wired for 3-phase operation at the factory. For single phase operation, rewire the terminal block to that shown in the above diagram.

Note: Ensure main power is turned off before connecting wires.

Stationary Models

Remove the screws securing the dome-shaped service cover underneath the kettle and remove the cover. A wiring diagram is affixed to the inside of cover. Fasten permanent copper wiring to the three-connection terminal block, Be sure to connect ground wire to the separate ground terminal connector (ground lug). Slide the cover's slot over the wiring and secure the cover to kettle with the screws.

Tilting Models

First remove the handwheel by loosening the allen screw. Then remove the two screws at the front and rear of the console cover and remove the cover. A wiring diagram is affixed to the underside of the console cover. Feed permanent copper wiring through the cut-out in the bottom of the console, and fasten to the three-connection terminal block. Be sure to connect the ground terminal connector (ground lug). Replace the console cover and handwheel.

WATER

The sealed jacket of the electric kettle is precharged with the correct amount of a water-based formula, and therefore, no water connection is required to the kettle jacket. The kettle can be equipped with optional hot and cold water taps, the taps require 1/2" copper tubing as supply lines.

INSTALLATION CHECKS

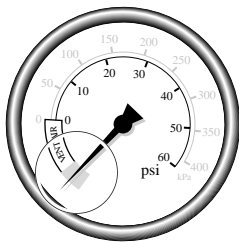
Although the kettle has been thoroughly tested before leaving the factory, the installer is responsible for ensuring the proper operation of kettle once installed.

Visual Checks

1. Check Tilting (tilting kettles):
 - A/ Gearbox tilts kettle smoothly and freely.
2. Insure there are:
 - A/ Three lag bolts securely holding each foot
 - B/ The bottom cover (stationary kettles) is in place and held with a nut.
 - C/ The console cover (tilting kettles) is in place and held with a screw.

Performance Checks

1. Supply power to the kettle by placing the fused disconnect switch to the "ON" position.



2. Before turning the kettle on, read the Vacuum/Pressure Gauge (4). The gauge's needle should be in the green zone. If the needle is in the "VENT AIR" zone, follow Kettle Venting Procedure on page 19 of this manual.
3. Turn the kettle's ON/OFF Switch/Solid State Temperature Control (1) to "1" (Min.). The Heat Indicator Light (Green) (2) should remain lit, indicating the element is on, until the set temperature is reached (130°F/54°C). Then the green light will cycle on and off, indicating the element is cycling on and off to maintain temperature.
4. Tilt the kettle forward (tilting models only). The Low Water Indicator Light (Red) (3) should be lit when the kettle is in a tilted position. This light indicates that the element has automatically been shut off by the kettle's safety circuit. This is a normal condition when the kettle is in a tilted position.
5. Raise the kettle to the upright position. The Low Water Indicator Light (Red) (3) should go out

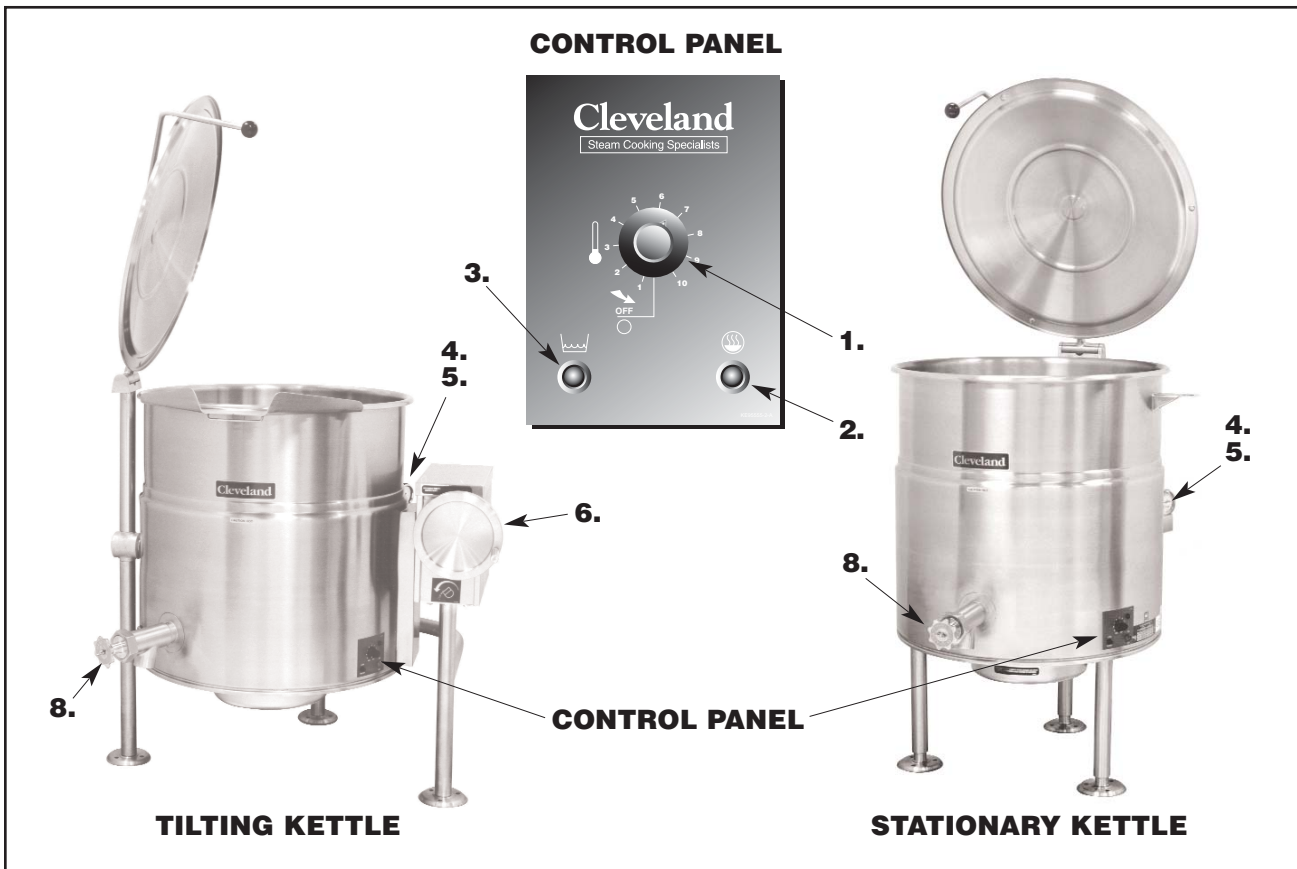
when the kettle is upright. If the red light remains lit in the upright position, it indicates a low water condition, and water must be added to the reservoir before the kettle can be operated. Refer to the Reservoir Fill Procedures on page 19 of this manual.

6. Turn the ON/OFF Switch/Solid State Temperature Control (1) to "10" (Max.) and allow the kettle to preheat. The green light should remain on until the set temperature (260°F/127°C) is reached. Then the green light will cycle ON and OFF, indicating the element is cycling ON and OFF to maintain temperature. Fill the kettle with cold water to the steam jacket's welded seam. Refer to the Temperature Range Chart on page 5 for the time required to bring the water to a boil.
7. When all testing is complete, empty the kettle and turn the ON/OFF Switch/Solid State Temperature Control (1) to the "OFF" position.

CLEANING

After installation the kettle must be thoroughly cleaned and sanitized prior to cooking. See complete cleaning instructions on page 6 of this manual.

OPERATING INSTRUCTIONS



General Parts Drawing

ITEM #	DESCRIPTION	FUNCTION
1.	On-Off Switch/Solid State Temperature Control	Turns kettle ON/OFF and allows the operator to adjust the kettle temperature in increments from 1 (Min.) to 10 (Max.). (see Temperature Range Chart in the Operating Instructions section on page 5 of this manual).
2.	Heat Indicator Light (Green)	When lit, indicates that the kettle element is on. Cycles ON-OFF with element.
3.	Low Water Indicator Light (Red)	When lit, indicates that the kettle is low on water and will not operate in this condition (see Reservoir Fill Procedures on page 19 of this manual).
4.	Vacuum/Pressure Gauge	Indicate steam pressure in PSI inside steam jacket as well as vacuum in inches of mercury.
5.	Pressure Relief Valve (not shown)	This valve is used to vent the kettle and in the unlikely event there is an excess steam build-up in the jacket, this valve opens automatically to relieve this pressure.
6.	Tilt Wheel	Used for tilting the kettle up or down. Some units have an optional Power Tilt Control Switch located in the same position.
7.	Power Tilt Control Switch (not shown)	Used for tilting the kettle up or down.
8.	Tangent Draw-Off Valve	Used for draining product or wash water from kettle. It is supplied as standard equipment on stationary kettles and is optional on tilting kettles.

OPERATING THE KETTLE

DO NOT LEAN ON OR PLACE OBJECTS ON KETTLE LIP. SERIOUS INJURY COULD RESULT IF KETTLE TIPPED OVER, SPILLING HOT CONTENTS.

1. Before turning kettle on, read the Vacuum/Pressure Gauge (4). The gauges needle should be in the green zone. If the needle is in the "VENT AIR" zone, refer to the Kettle Venting Instructions (page 19). Any air that may be present will increase cooking times. Once heated, the kettle's normal maximum operating pressure is approximately 10-12 psi, while cooking a water base product.
2. Ensure that the electrical service to the kettle is turned on at the fused disconnect switch.

Temperature Control Setting	Approximate Product Temperature	
	°F	°C
1. (Min.)	130	54
2.	145	63
3.	160	71
4.	170	77
5.	185	85
6.	195	91
7.	210	99
8.	230	110
9.	245	118
10. (Max.)	260	127

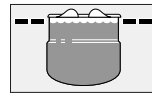
NOTE: Certain combinations of ingredients will result in temperature variations

Temperature Range Chart

3. Preheat the kettle by turning the ON/OFF Switch/Solid State Temperature Control (1) to the desired temperature setting (see above "Temperature Range Chart"). The Heat Indicator Light (Green) (2) will remain lit, indicating the burner is lit, until the temperature setting is reached. When the green light goes off, the heaters are off, and preheating is complete.

NOTE: When cooking egg and milk products, the kettle should not be preheated, as products of this nature adhere to hot cooking surfaces. These types of food should be placed in the kettle before heating is begun.

4. Place food product into the kettle. The Heat Indicator Light (Green) (2) will cycle on and off indicating the elements are cycling on and off to maintain the set temperature.



NOTE: Do not fill kettle above recommended level marked on outside of kettle.

NOTE: The Low Water Indicator Light (Red) (3) should not be lit during kettle operation. This light indicates that the elements have been automatically shut off by the kettle's safety circuit. It is normal for the red light to come on when the kettle is in a tilted position. However, the kettle cannot be operated when the red light remains lit while the kettle is in the upright position. This indicates a low water condition, and water must be added to the reservoir. Refer to Reservoir Fill Procedures on page 19 of this manual for details.

5. When cooking is completed place ON/OFF Switch/Solid State Temperature Control (1) to the "OFF" position.
6. Pour the contents of the kettle into an appropriate container by tilting the kettle forward. Care should be taken to pour slowly enough to avoid splashing off the product.

NOTE: As with cleaning food soil from any cookware, an important part of kettle cleaning is to prevent food from drying on. For this reason, cleaning should be completed immediately after cooked foods are removed. Refer to the Cleaning Instructions (page 6) for detailed kettle washing procedures.

APPROXIMATE BOILING TIMES

Gals.	Ltrs.	Times in Minutes					
		Standard Wattage			High Wattage*		
		208V	240V	480V	208V	240V	480V
25	95	60	45	60	40	30	30
40	150	60	50	75	40	30	30
60	225	100	75	75	50	40	40
80	300	130	100	100	65	50	50
100	375	160	120	120	80	60	60

*High Wattage is only available with 3 phase units.

The accompanying chart shows approximate times required for electric kettles of various capacities to boil water. The ON/OFF Switch/Solid State Temperature Control (1) must be set at "10" (Max.) throughout the heatup period. Water will boil about 1/3 faster if the kettle is filled only to the outer steam jacket's welded seam, resulting in a kettle filled to 2/3 capacity.






CLEANING INSTRUCTIONS



CARE AND CLEANING

Cooking equipment must be cleaned regularly to maintain its fast, efficient cooking performance and to ensure its continued safe, reliable operation. The best time to clean is shortly after each use (allow unit to cool to a safe temperature).

WARNINGS

- ⇒  Do not use detergents or cleansers that are chloride based or contain quaternary salt.
Chloride Cleaners
- ⇒  Do not use a metal bristle brush or scraper.
Wire Brush &
- ⇒  Steel wool should never be used for cleaning the stainless steel.
Steel Pads
- ⇒  Unit should never be cleaned with a high pressure spray hose.
High Pressure Spray Hose
- ⇒  Do not leave water sitting in unit when not in use.
Stagnant Water

CLEANING INSTRUCTIONS

1. Turn unit off.
2. Remove drain screen (if applicable). Thoroughly wash and rinse the screen either in a sink or a dishwasher.
3. Prepare a warm water and mild detergent solution in the unit.
4. Remove food soil using a nylon brush.
5. Loosen food which is stuck by allowing it to soak at a low temperature setting.
6. Drain unit.
7. Rinse interior thoroughly.
8. If the unit is equipped with a **Tangent Draw-Off Valve**, clean as follows:
 - a) Disassemble the draw-off valve first by turning the valve knob counter-clockwise, then turning the large hex nut counter-clockwise until the valve stem is free of the valve body.
 - b) In a sink, wash and rinse the inside of the valve body using a nylon brush.
 - c) Use a nylon brush to clean tangent draw-off tube.
 - d) Rinse with fresh water.
 - e) Reassemble the draw-off valve by reversing the procedure for disassembly. The valve's hex nut should be hand tight only.
9. If the unit is equipped with a **Butterfly Valve**, clean as follows:
 - a) Place valve in open position.
 - b) Wash using a warm water and mild detergent solution.
 - c) Remove food deposits using a nylon brush.
 - d) Rinse with fresh water.
 - e) Leave valve open when unit is not in use.
10. Using mild soapy water and a damp sponge, wash the exterior, rinse, and dry.

NOTES

- ⇒ For more difficult cleaning applications one of the following can be used: alcohol, baking soda, vinegar, or a solution of ammonia in water.
- ⇒ Leave the cover off when the kettle is not in use.
- ⇒ For more detailed instructions refer to the Nafem Stainless Steel Equipment Care and Cleaning manual (supplied with unit).

SERVICE PARTS

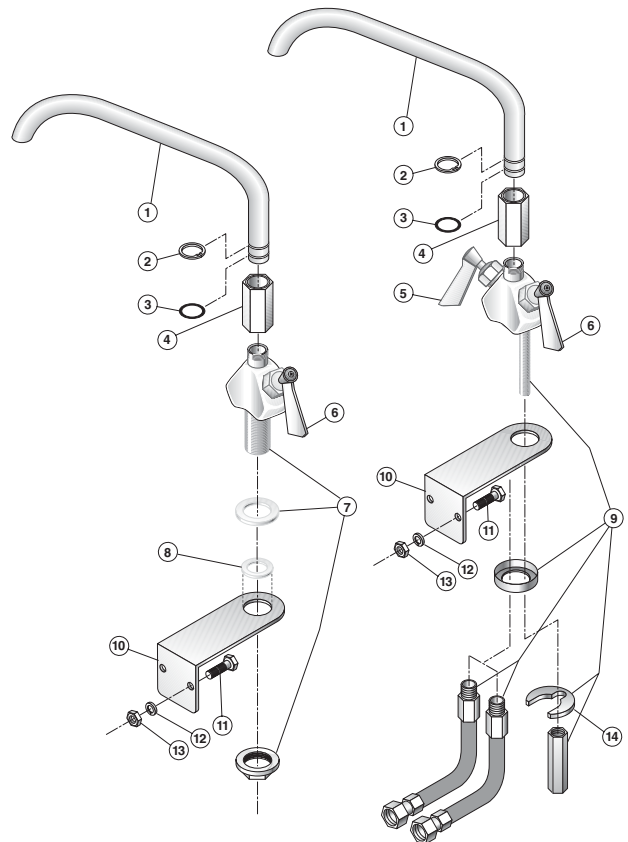
WARRANTY

Our Company supports a worldwide network of Maintenance and Repair Centers. Contact your nearest Maintenance and Repair Centre for replacement parts, service, or information regarding the proper maintenance and repair of your cooking equipment

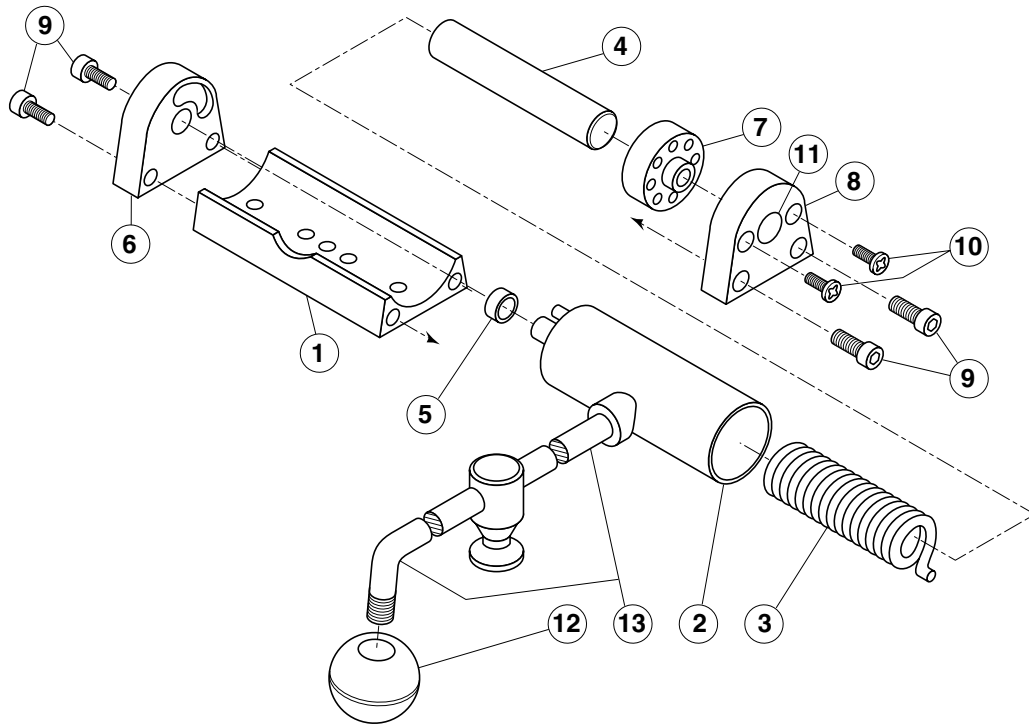
In order to preserve the various agency safety certification (UL, NSF, ASME/Ntl. Bd., etc.), only factory-supplied replacement parts should be used. The use of other than factory supplied replacement parts will void warranty.

FAUCET ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	KE50825-5	3/4" Spout1 (KEL-25/30/40/60/80/100 & 40-SH)	
	KE50825-3	3/4" Spout (KEL-25-T)1	
	KE50825-2	3/4" Spout (KEL-40/60/80/100-T)1	
2.	FA95022	Retaining Ring1	
3.	FA05002-19	"O" Ring1	
4.	KE51736	Long Faucet Nut1	
5.	SE50020	Hot Water Stem Assembly1 (Double Pantry only)	
6.	SE50021	Cold Water Stem Assembly1	
7.	KE51401	Single Pantry Body1 (c/w Item No. 6)	
8.	KE50335	Adapter Washer1 (Single Pantry only)	
9.	KE51403	Double Pantry Body1 (c/w Item No. 5&6)	
10.	KE54159	Faucet Mounting Bracket1	
11.	FA11258	Hex Cap Screw2	
12.	FA30505	Washer2	
13.	FA21008	Hex Nut2	
14.	SE50447	Washer Horseshoe1	



HINGE ASSEMBLY



ITEM NO.	PART NO.	DESCRIPTION	QTY.
		Hinge Assembly	
1. - 11	KE50597-1	25 - 40 Gallon, 20 Gallon Full Jacketed	1
	KE50597-2	60 - 80 Gallon, 30 - 40 Gallon Full Jacketed	1
	KE50597-3	100 - 150 Gallon, 60 - 100 Gallon Full Jacketed	1
	KE50597-4	KDM-60, KDM-60-T, Cook Tank	1
	KE50597-5	KDL-200, KDL-250, KDL-150-F, KDL-250-F	1
1.	KE50822	Hinge Base	1
2.	KE51217	Hinge Cylinder	1
3.	KE50121-2	Hinge Spring Light - for KE50597-2	1
	KE50121-1	Hinge Spring Heavy - for KE50597-1, KE50597-3, KE50597-4, KE50597-5, ..	1
4.	KE50823-1	Hinge Pin	1
5.	KE50824	Hinge Bearing	1
6.	KE50819-1	Hinge End Piece	1
7.	KE50820	Hinge Insert	1
8.	KE50819	Hinge End Piece	1
9.	FA11284	Screw, Socket Head	4
10.	FA11507	Cutting Screw,	2
11.	SK50418	Plug Button	1
12.	KE50151-2	Knob	1
13.		Cover Handle (specify model)	1

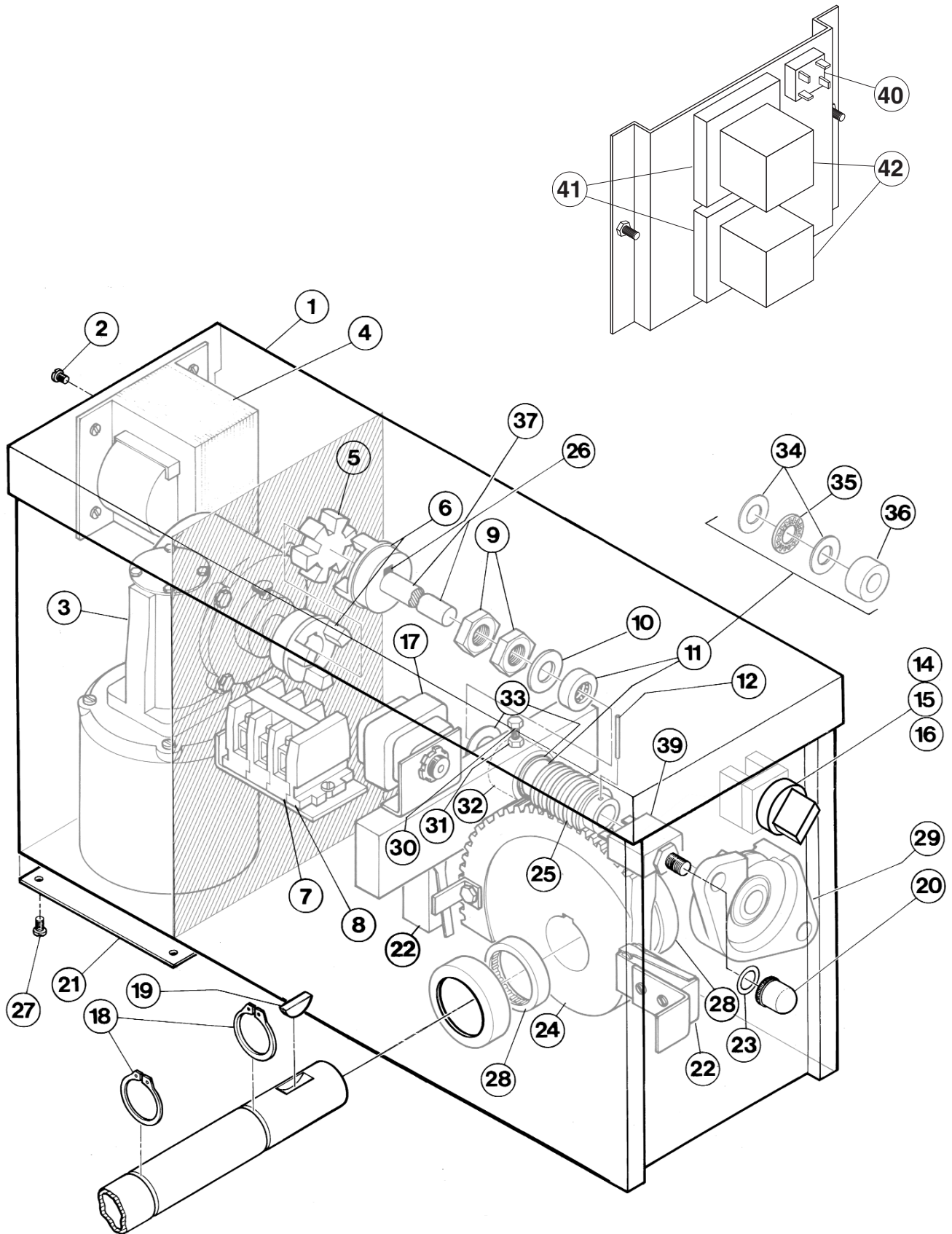
KETTLE BOTTOM & SIDE

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	KE50556-1	Probe, Water Level	1
2.	KE54941-5	Safety Valve, 50 PSI, 1/2" (North America)	1
	KE54941-31	Safety Valve, 50 PSI, 1/2", (Europe)	1
3.	KE51226	Wire Connector Terminal	10
4.	KE51225	Edge Connector	1
5.	KE00458	Solid State Control Box	1
6.	KE50753-7	Relay, 12 VDC	1
7.	KE54761	Bracket, Terminal Block	1
8.	KE50377	Terminal Block Section (Large, White)	3
	SK50055-1	Terminal Block Section (Small)	3
9.	KE50376	Terminal Block End Section (Large, White)	1
	SK50054-1	Terminal Block End Section (Small)	1
	SK50054-2	Terminal Block End Barrier	1
10.	KE53838-11	Transformer, 380-415 to 120-220V	1
	KE53838-12	Transformer, 440-480 to 240V	1
	KE53838-13	Transformer, 600 to 240V	1
11.		Pressure Gauge	
	KE000714-4	For units built prior to February 2005	1
	KE50429-5	For units built after January 2005	1
12.	KE50568-1	L.E.D., Green	1
13.	KE50567-1	L.E.D., Red	1
14.	SE00115	Potentiometer with ON/OFF Switch, c/w Item #15	1
15.	KE51005	Rubber Boot	1
16.	KE50569-1	Knob, Potentiometer	1
17.	KE55069-5	Safety Thermostat (140° C)	1
18.	KE50515	Thermistor	1
19.	KE50750-3	Contactor, 208/240V, 40 Amp. (standard kettles)	2
	KE50750-4	Contactor, 208/240V, 50 Amp. (special high wattage kettles - 6 elements)	2
	KE50750-5	Contactor, 208/240V, 60 Amp. (special high wattage kettles - 6 elements)	2
20.	KE51139-1	Fuse Holder	1
21.	KE52936-1	Fuse, 1/2 amp (used on 380 to 600V units)	1
22.	KE54833-3	Snap-In Bushing, .875"	1
23.	KE54833-4	Snap-In Bushing 1.093"	1
24.	KE50473	Ground	1
25.	KE53838-21	Transformer, 240 to 16V	1
26.	KE00688	Transformer Enclosure (stationary kettles only)	1
27.	KE50392	Bracket, Electrical Entry, 1 3/4" hole (stationary kettles only)	1

CONTROL CONSOLE COMPONENTS - HAND TILT

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	FA11134	Screw, 10-24 x 3/8" SS	.2
2.	KE50325	Gear Box Lid	.1
3.	FA95008	Locknut, 3/4-16	.2
4.	FA30088	Washer, 1 1/2" O.D. x 13/16" I.D. x .125 "W.	.1
5.	SE00036	Thrust Bearing Assembly and Spacer	.2
6.	KE50752	Transformer, 240/16V	.1
7.	KE50315	Worm	.1
8.	FA95005	Tension Pin	.1
9.	KE50375	Tilt Shaft	.1
10.	FA19505	Set Screw, hand wheel	.1
11.	KE00508	Hand Wheel	.1
12.	FA95007	Retaining Ring (25-40 gallon)	.2
	FA95050	Retaining Ring (60 gallon & up)	.2
13.	KE00151	Segment Gear (25-40 gallon)	.1
	KE52833	Segment Gear (60 gallon & up)	.1
14.	FA95048	Woodruff Key (25-40 gallon)	.1
	FA95051	Woodruff Key (60 gallon & up)	.1
15.	KE51711	Roller Bearing, trunnion (25-40 gallon)	.2
	KE517111	Roller Bearing, trunnion (60 gallon & up)	.2
16.	KE50377	Terminal Block Section (large, white)	.3
	SK50055	Terminal Block Section (small, black)	.3
17.	KE50376	Terminal Block End Section (large, white)	.1
	SK50054	Terminal Block End Section (small, black)	.1
18.	T40226	Bearing Assembly	.1
19.	FA10623	Bolt, 5/16-24 x 1 1/2"	.1
20.	FA20029	Hex Nut, 5/16-24	.1
21.	KE51891	Washer, 1 1/2" O.D. x 13/16" I.D. x .037" W.	.2
25.	KE51730	Bearing, tilt shaft	.1

CONTROL CONSOLE COMPONENTS - POWER TILT

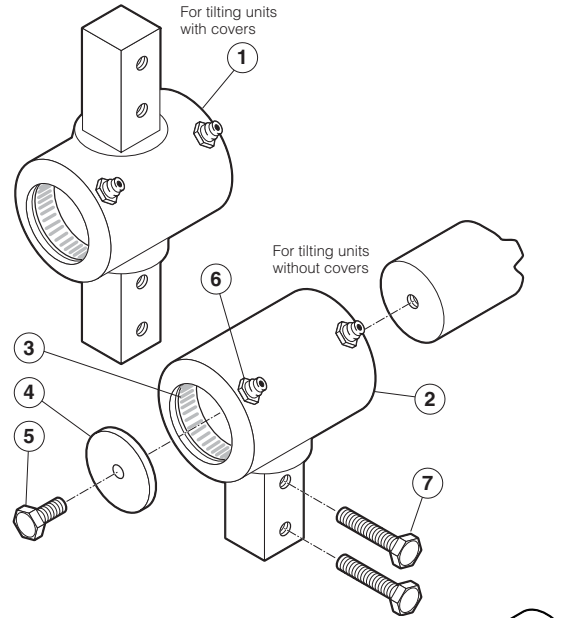


CONTROL CONSOLE COMPONENTS - POWER TILT

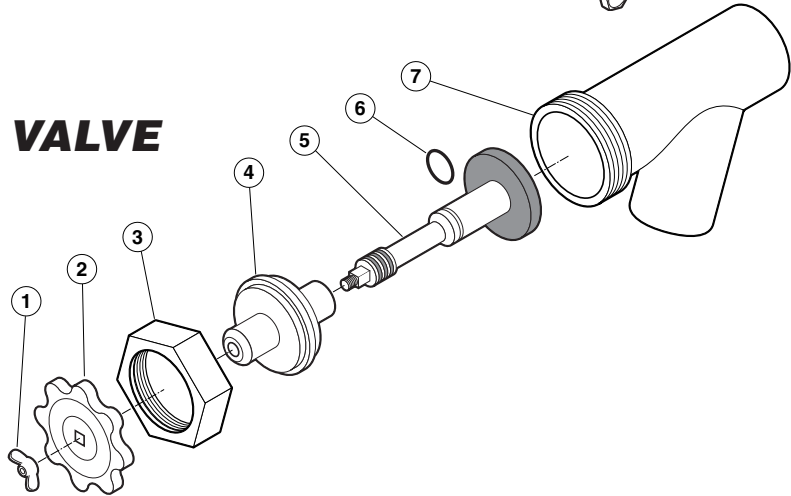
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	KE503252	Gear Box Lid	1
2.	FA11134	Screw, 10-24 x 3/8" S.S.	1
3.	KE50577	Motor	1
4.	KE51224	Transformer, 208/120V (HG3J)	1
	KE52386	Transformer, 220, 240/120V (HG5J)	1
5.	KE50583	Buna-N Insert	1
6.	KE50582	Coupling	2
7.	KE50377	Terminal Block Section (large, white)	3
	SK50055	Terminal Block Section (small, black)	3
8.	KE50376	Terminal Block End Section (large, white)	1
	SK50054	Terminal Block End Section (small, black)	1
9.	FA95008	Locknut, 3/4-16	2
10.	FA30088	Washer, 1 1/2" O.D. x 13/16" I.D. x .125" W.	1
11.	SE00036	Thrust Bearing Assembly and Spacer	2
12.	FA95005	Tension Pin	1
14.	KE50580	Water Resistant Boot	1
15.	FA00012	"O" Ring, Circuit Breaker	1
16.	KE50579	Circuit Breaker	1
17.	KE50752	Transformer, 240/16V	1
18.	FA95007	Retaining Ring (25-40 gallon)	1
	FA95050	Retaining Ring (60 gallon & up)	1
19.	FA95048	Woodruff Key (25-40 gallon)	1
	FA95051	Woodruff Key (60 gallon & up)	1
20.	KE50580	Water Resistant Boot	1
22.	KE51007	Micro Switch	2
23.	FA00012	"O" Ring, circuit breaker	1
24.	KE00151	Segment Gear (25-40 gallon)	1
	KE52833	Segment Gear (60 gallon & up)	1
25.	KE50315	Worm	1
26.	KE50441	Tilt Shaft	1
27.	FA11092	Screw, 8-32 x 1/2", SS	4
28.	KE51711	Roller Bearing, trunnion (25-40 gallon)	2
	KE517111	Roller Bearing, trunnion (60 gallon & up)	2
29.	KE51731	Bearing, tilt shaft	1
30.	FA10623	Bolt, 5/16-24 x 1 1/2"	1
31.	FA20028	Hex Nut, 5/16-24	1
32.	T40226	Bearing assembly	1
33.	KE51891	Washer, 1 1/2" O.D. x 13/16" I.D. x .037" W.	2
37.	FA95037	Key, 3/16" x 3/16" x 3/4"	1
38.	FA95014	Key, 3/16" x 3/16" x 1"	1
39.	KE50579	Circuit breaker, 1 amp	1
40.	KE50581	Bridge Rectifier	1
41.	KE54535	Edge Connector (11 pin)	2
42.	KE50753-10	Relay	2

TRUNNION ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	KE00354	TRUNNION BEARING ASSEMBLY1 (INCLUDES PART # 3 & 6)	1
2.	KE00351	TRUNNION BEARING ASSEMBLY1 (INCLUDES PART # 3 & 6)	1
3.	KE51711	ROLLER BEARING	2
4.	KE51571-1	SPHERICAL WASHER	1
5.	FA95081-3	BOLT, 5/16-18 X 1/2"	1
6.	KE51886	GREASE NIPPLE	2
7.	FA95027	MODIFIED BOLT, 5/16-18 X 1 1/2"	4/2



TANGENT DRAW-OFF VALVE



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1. - 7.	KE50973	2" DRAW-OFF ASSEMBLY	1
	KE50972-B	3" DRAW-OFF ASSEMBLY	1
1.	FA95049	WING NUT, TD-2	1
	FA21050	ACCORN NUT, TD-2	1
	FA21501-1	ACCORN NUT, TD-3	1
2.	KE52755	KNOB, TD-2	1
	SE50018	KNOB, TD-3	1
3.	FI05180-1	HEX NUT, TD-2	1
	FI05180-2	HEX NUT, TD-3	1
4.	KE52753	RETAINER, TD-2	1
	SE50013	RETAINER, TD-3	1
5.	KE52752	PISTON, TD-2	1
	SE50010	PISTON, TD-3	1
6.	FA05002-24	"O" RING, TD-2	1
	FA05002-38	"O" RING, TD-3	1
7.	KE50972-B	VALVE BODY, TD-2	1
	KE50973	VALVE BODY, TD-3	1

SPARE PARTS LIST

<i>ITEM ON.</i>	<i>DESCRIPTION</i>	<i>QTY. DOMESTIC</i>	<i>QTY. OVERSEAS</i>
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Refer to page 9, Kettle Bottom& Side for parts drawing

KE00458	Solid State Control Box	1	1
KE50753-7	Relay, 12 VDC		1
KE50750-5	Contacto, 208/240V, 60 Amp. (special high wattage kettles - 6 elements)	1	2
KE53838-11	Transformer, 380-415 to 120-220V		1
SE00115	Potentiometer with ON/OFF Switch, c/w Rubber Boot	1	1
KE51005	Rubber Boot	1	1
KE50569-1	Knob, Potentiometer	1	1
KE50515	Thermistor		1
KE51005	Rotary Seal		1
KE52936-1	Fuse, 1/2 amp (used on 380 to 600V units)		1
KE53838-19	Transformer, 120 to 16V	1	1
KE53838-21	Transformer, 240 to 16V	1	1

Refer to page 7, Faucet Assembly for drawing

FA05002-19	"O" Ring for Faucet Spout	1	1
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