



MARKET FORGE

FCT-CE SERIES ELECTRIC TILTING KETTLE W/HAND CRANK PARTS AND SERVICE MANUAL

EFFECTIVE SEPTEMBER 12, 2014

Superseding All Previous Parts Lists.

The Company reserves the right to make substitution in the event that items specified are not available.

ERRORS: Descriptive and/or typographic errors are subject to correction.

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MAINTENANCE

MODELS

- ❑ FCT-4CE - 4 gallon (16 liters), tilting electric countertop kettle
- ❑ FCT-6CE - 6 gallon (23 liters), tilting electric countertop kettle
- ❑ FCT-10E - 10 gallon (38 liters), tilting electric countertop kettle
- ❑ FCT-12CE - 12 gallon (46 liters), tilting electric countertop kettle

VENTING

Check vacuum/pressure gauge when kettle is cold. Gauge should be in the vacuum zone between 25-30 In. Hg. If not, air is present which must be vented (removed) for proper heating. Use the following procedures to vent air.

1. Place power switch in ON position; kettle empty.
2. Set temperature control thermostat to '10'. Heat kettle until heat indicator light goes off.
3. Using a 7/16" wrench, open bleed vent one full turn for 10 seconds and close.
4. Cool kettle. Check for proper vacuum of 25-30 In. Hg. If reading is not low enough, repeat entire procedure, steps 1-3.

FILLING-JACKET RESERVOIR

The reservoir water level must be maintained at or above the minimum needed to submerge the heating elements. If the low water light turns on during use, the water level is not adequate and the low water protection control has automatically shut off the heating elements.

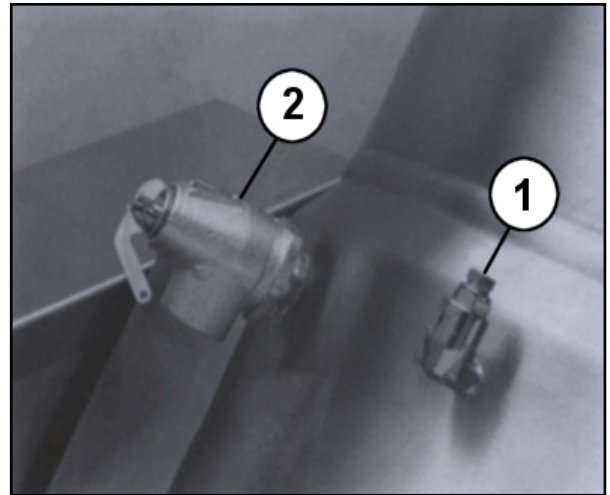


CAUTION

Before adding water to the reservoir, water supply should be analyzed to ensure that hardness is no greater than 2.0- grains per gallon and pH level is within the range of 7.0-8.5. Water which fails to meet these standards should be treated, or ionized distilled water with sodium used. EQUIPMENT FAILURE CAUSED BY INADEQUATE WATER QUALITY IS NOT COVERED UNDER WARRANTY.

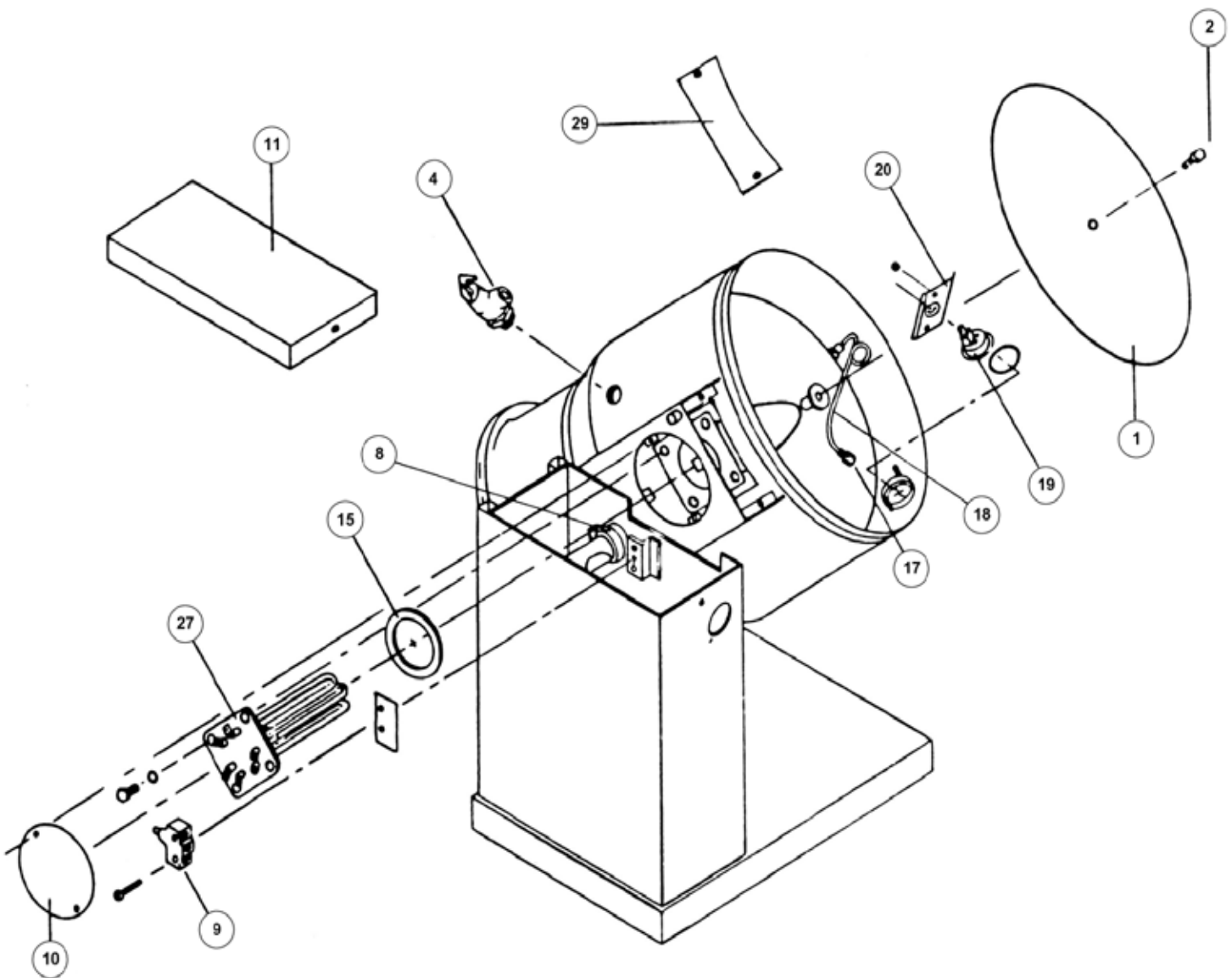
Use the following procedure to fill reservoir. Check vacuum/pressure gauge to ensure that there is no pressure in kettle when adding water.

1. Turn thermostat and power switch to OFF position.
2. Remove 7/16" vent fitting from bleed vent on back of kettle. Insert a funnel into vent opening and add prescribed volume of water. For 6 gallon models, add 50 ounces (1.5 liters). For 10 and 12 gallon models, add 100 ounces (3 liters).
3. Replace and tighten vent fitting.
4. With kettle in upright position, the low water light should be off at this time. If so, follow venting procedure to vent air from reservoir. Venting. If low water light is not off, repeat Filling Jacket Reservoir.



ITEM	DESCRIPTION
1	Bleed Vent
2	Pressure Relief Valve

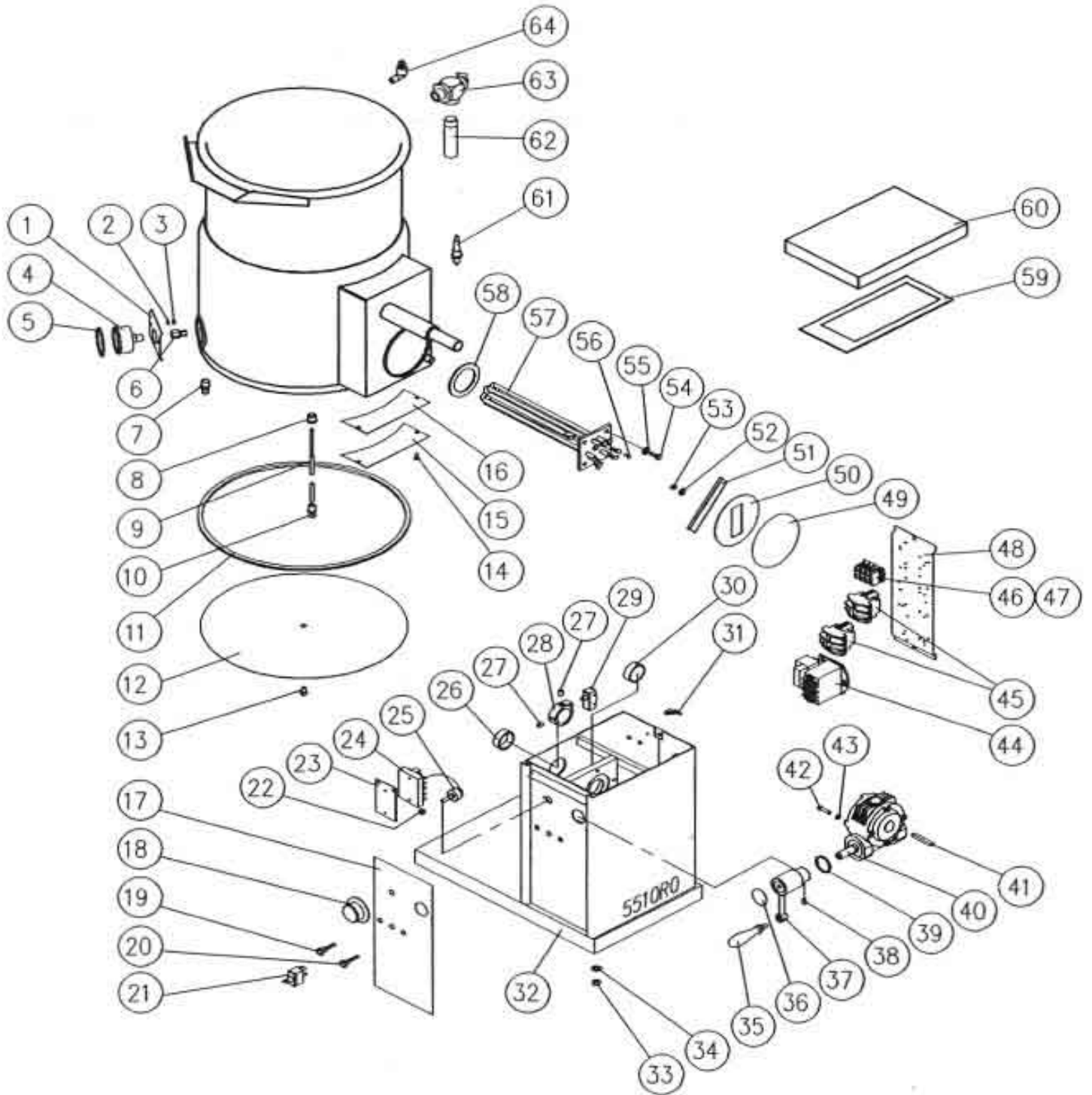
EXTERIOR VIEW



EXTERIOR VIEW

ITEM	PART NO.	DESCRIPTION
1	97-5004	Cover, Kettle Enclosure FCT-6CE
	97-5006	Cover, Kettle, Enclosure FCT-10CE & -12CE
2	97-5005	Bolt, Enclosure Cover
3	97-5010	Air Vent 7/16", Assy.
4	97-5009	Valve, Relief, Safely (50 PSI)
5	97.5007	Handle, Tilt, FCT-6CE, -10CE & -12CE
6	97-5008	Knob, Handle, Tilt
7	97-5011	Switch, Power
8	97-5026	Collar, Retaining
9	08-6362	Switch, Interlock
10	97-5144	Cover, Access, Element
11	97-5003	Cover, Box, Control
12	10-7934	Liquid Level Control
13	20-0043	Contacto
14	10-5069	Section, Terminal Block
	10-5070	End, Terminal Block
15	97-5024	Gasket FCT-6CE, Element
	97-5025	Gasket FCT-10CE & -12CE, Element
16	10-7935	Probe
17	10-3425	Connector 1/4 x 1/4
18	97-5145	Tube, Copper, FCT-6CE
19	97-5146	Tube, Copper, FCT-10CE & -12CE
20	97-5002	Gauge, Pressure
21	97-5147	Plate, Mounting
22	10-6307	Knob Thermostat
23	09-6493	Controller, Temperature (thermostat)
24	97-0572	Potentiometer, Remote
25	09-6474	Sensor, temperature
26	20-0007	Light. Low Water
27	20-0007	Light, Temperature
	-	Elements Heating FCT-6CE
	97-5015	208V, 7.5KW
	97-5016	220V or 380V 7.5KW
	97-5017	240V or 415V 7.5KW
	97-5018	480V 7.5KW
	-	Elements Heating FCT-10CE & -12CE
	97-5019	208V 12KW
	97-5021	240V, or 415V 12KW
	97-5020	220V/380V 12KW
	97-5022	480V 12KW
28	97-5150	Panel, Control
29	97-5149	Cover, Box, Trunnion FCT-10CE & -12CE
	97-5148	Cover, Box, Trunnion FCT -6CE
30	10-5562	Logo, Casting. M.F

EXPLODED VIEW



EXPLODED VIEW

ITEM	PART NO.	DESCRIPTION	FCT-4CE & FCT-6CE QTY	FCT-10CE & FCT-12CE QTY
1	97-6499	Pressure Gauge Plate	1	1
2	—	Washer #10	2	2
3	—	Hex Nut 10-32	2	2
4	97-5002	Pressure Gauge	1	1
5	97-5620	“O” Ring	1	1
6	97-5046	Connetor - female	1	1
7	97-5000	Connector - male	1	1
8	97-6500	Reducer Bushing 3/8 x 1/4	1	1
9	97-5618	Temperature Probe	1	1
10	97-6501	Connector - male	1	1
11	97-6502	Bottom Cover Gasket	1	
	97-6503	Bottom Cover Gasket		1
12	97-6504	Bottom Cover	1	
	97-6505	Bottom Cover		1
13	—	Hex Screw 5/16-18 x 1/2	1	1
14	—	Machine Screw 10-32 x 1/2	2	2
15	97-6506	Trunnion Box Cover	1	
	97-6507	Trunnion Box Cover		1
16	97-6508	Trunnion Box Cover	1	
	97-6509	Trunnion Box Cover		1
17	97-6510	Console Decal	1	
	97-6511	Console Decal		1
18	97-5013	Dial	1	1
19	98-6162	Temperature Pilot - Red	1	1
20	97-6512	Temperature Pilot - Amber	1	1
21	97-6513	Power Switch	1	1
22	98-6047	Rotary Shaft Seal	1	1
23	97-6515	Mounting Plate	1	1
24	97-5047	Temperature Control	1	1
25	97-5617	Potentiometer complete with wires & hardware	1	1
26	97-6516	Bearing L.H.	1	1
27	97-6517	Set Screw 3/8-16 x 1/2	2	2
28	97-6518	Actuator	1	1
29	97-5414	Interlock Siwtch	1	1
30	97-6519	Bearing R.H.	1	1
31	97-5052	Ground Lug	1	1
	97-6320	Earth ID Tag	1	1

EXPLODED VIEW

ITEM	PART NO.	DESCRIPTION	FCT-4CE & FCT-6CE QTY	FCT-10CE & FCT-12CE QTY
32	97-6520	Base	1	1
33	—	Hex Nut 3/8-16 NC	6	6
34	—	Washer 3/8"	6	6
35	97-5577	Tilt Handle	1	1
36	97-6521	Direction Label	1	1
37	97-6522	Tilt Arm	1	1
38	—	Set Screw 1/4-28 x 1/4	1	1
39	97-6523	"O" Ring	1	1
40	97-6524	Gear Box	1	1
41	97-6525	Key	1	1
42	97-6526	Socket Hd. Screw M6 x 2.5mm	4	4
43	—	Washer M6	4	4
44	97-6527	Liquid Level Control	1	1
45	97-5609	Contactor 208/240V	2	2
	97-5609	Contactor 380, 415, 480V	1	1
46	10-6963	Terminal Block	3	3
47	98-6186	End Section	1	1
48	97-5657	Component Mounting Plate	1	1
49	97-6528	Element Access Cover	1	1
50	97-6529	Element Access Cover Gasket	1	1
51	97-6530	Element Access Brace	1	1
52	—	Internal Tooth Washer 1/4"	1	1
53	—	Hex Nut 1/4-20	1	1
54	—	Hex Screw 5-16-18 x 3/4	4	4
55	—	Lock Washer 5/16	4	4
56	—	Screw 10-32 x 3/8 Brass NI Plated	6	6
57	97-5015	Element Assy., 208V, 7.5 kW	1	
	97-5017	Element Assy., 240/416V, 7.5 kW	1	
	97-5016	Element Assy., 220/380V, 7.5 kW	1	
	97-5018	Element Assy., 480V, 7.5 kW	1	
	97-5019	Element Assy., 208V, 12 kW		1
	97-5020	Element Assy., 220/380V, 12 kW		1
	97-5021	Element Assy., 240/416V, 12 kW		1
	97-5022	Element Assy., 480V, 12 kW		1