

# AUTOMATIC HOT WATER BOILER



# **OPERATION MANUAL**

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# MODEL No. ME-10E ME-15E

**ME-30E** 

## ELECTRICAL SPECIFICATIONS

MODEL No.	VOLTS	WATTS	AMPS	PHASE	FIELD WIRING SIZE
ME-10E	120	1,800	15.0	1	14AWG
	240	7,000	29.2	1	10AWG
ME-15E	208	5,300	25.5	1	10AWG
ME-30E	240	10,500	25.0	3	10AWG
	208	7,900	22.0	3	10AWG

NOTE: FIELD WIRING MUST BE SUITABLE FOR 75 DEGREES CELCIUS.

USE COPPER WIRE ONLY FOR POWER SUPPLY CONNECTION. COPPER WIRE: 14 AWG MINIMUM COPPER ONLY.

#### WARRANTY

Every <u>Cecilware</u> product has been carefully inspected before shipment. The finest of materials and the highest standards of workmanship have been but into the equipment. Within 1 year of purchase, should any Cecilware product show defect in factory workmanship or material, we agree to Repair, at our option or replace without cost to user such parts which prove upon factory inspection to have been so defective. All equipment must be shipped transportation charges prepaid for acceptance. This warranty covers replacement parts only, labor charges are covered for 90 days after installation. This warranty does not apply under the following conditions: • neglect or abuse of equipment • excessive lime condition • Improper installation • Improper installation • any outside modification to equipment Every Cecilware urn body is covered for three years. This warranty covers the stainless steel body and stainless steel liners only. Portable equipment such as Electric Fryers, Food Warmers, Electric Stoves, Dispensers, Plug-In Urns, Coffee Brewers and Warmers must be returned to the factory or brought to an authorized service station for repair.

**UNPACKING INSTRUCTION:** Carefully unpack the water boiler and inspect immediately for shipping damages. Your automatic water boiler was shipped in a carton designed to give maximum protection in normal handling. It was thoroughly inspected before leaving the factory and the carrier accepted and signed for it. File any claims for shipping damage or irregularities directly with the carrier.



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**ASSEMBLY:** The four legs, faucet, float ball, and vent cap drain are packed separately with the water boiler. Install legs by tilting the water boiler on its side and screwing the legs into the leg supports until hand tight Carefully right the unit and install it in its permanent location, being sure to leave at lest 6" on the right side of the water boiler for access to the controls. Level the unit by adjusting the bottom pad of the legs. Screw the ball float (36) onto the end of the water inlet valve rod (35). Place the vent cap (30) into the recess in the top of the unit. Mount the faucet assembly onto the shank (13).

#### **DIMENSIONS (INCH)** WATER CAP. IN SHIPP. MODEL NO. GALLONS WT.(LB) в С Α D ME-10E 10.0 14 16 22.5 25.5 45 ME-15E 15.0 14 16 27.5 30.5 50 ME-30E 30.0 29 14 22.5 25.5 95 Compression Water Inlet **e** Connection 12 È M Water inlet D Overflow 12 С В Ó 63 O Vent Opening ӡ Supply Box Thermometer IO AND IS GALLON WATER BOILERS - ELECTRIC

#### **GENERAL SPECIFICATIONS**

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#### **INSTALLATION INSTRUCTION FOR WATER BOILERS**

Water boilers are shipped with the thermostats in the OFF position. Do not turn the thermostat on before filling the water boiler with water.

**NOTE:** When positioning the unit, leave a minimum of 6" clearance on the right side of the water boiler for ease of service.

#### WATER HOOK-UP PROCEDURE:

Use ¼" outside diameter copper tubing to connect the unit to the water supply line. The water line must have a shut-off valve (supplied by a plumber). At the unit, connect the tubing to the compression water inlet valve at the upper right hand side of the unit.

**NOTE:** Connecting the water boiler to a warm water supply will speed up heating and recovery times.

#### **ELECTRICAL HOOK-UP PROCEDURES:**

**NOTE:** Always check the rating plate of the unit for proper voltage and current requirements.

- 1. *120V water boilers* are provided with a 120V/15A grounded plug. Units must have a separate 120V/15A outlet.
- 2. 208/240V water boilers are provided with a terminal block inside the control box. Field wiring must be performed by a qualified serviceman.

#### 1 and 3 phase hook-up:

Remove the fasteners on the cover and slide off cover. Install a suitable conduit and connect copper wires to terminal L1 and L2 (and L3 for 3 phase unit only) and a #14 AWG ground wire to the ground lug.

#### PRIMING AND FILLING A UNIT:

Connect unit to power line (plug cord into line for 120V unit or turn on switch for the 208/ 240V units). Turn on the water supply. The unit fills at the rate of 1 gallon/minute. When the water level becomes visible in the sight gage turn the thermostat clockwise to maximum position. The unit will now automatically fill to capacity and heat the water.

#### **CLEANING INSTRUCTIONS:**

**DAILY:** Wipe the outside of the unit with a damp cloth, using soap solution or a non-abrasive compound when required.

#### SANITIZING THE UNIT:

With power to the unit disconnected, fill unit to capacity. Add 1 ounce of CLOROX BLEACH (5.25%) for every gallon of water in the unit (400 PPM). Let the solution stand in the unit for 15 minutes, then drain all water from the unit slowly. If the unit is not to be used again immediately after sanitizing — do not rinse with water. If the unit is to be used immediately after sanitizing — rinse with water before refilling the unit for further use.

### SERVICE PROCEDURES FOR QUALIFIED SERVICE PERSONNEL ONLY

#### TO REPLACE HEATING ELEMENT

- 1. Shut off electrical power to unit.
- 2. Shut off water supply to unit.
- 3. Drain water from unit by tilting the unit toward at the end of the drain cycle.
- 4. Remove control box cover and disconnect electric wire from electrical connection to the heating element(s).
- 5. Remove (4) screws and pull out heating element(s) with gasket.
- 6. Install new heating element(s) with gasket.
- 7. Connect electrical wires to elements).
- 8. Repeat priming instructions.

#### TO REPLACE THERMOSTAT

- 1. Shut off electrical power to unit.
- 2. Remove control box cover and thermostat knob.
- 3. Disconnect electrical wires from thermostat.
- 4. Loosen small capillary nut, then the packing nut from boiler.
- 5. Remove (2) screws holding thermostat to side box.
- 6. Remove thermostat and pull out thermostat bulb from boiler. Note position of compression ring on capillary tube.
- 7. Install new thermostat. Position capillary end of thermostat bulb two (2) inches from inside wall.
- 8. Tighten large packing nut, then small capillary nut DO NOT over tighten since this could damage the controls.
- 9. Remount thermostat to control box side.
- 10. Re-connect electrical wires to thermostat.
- 11. Replace thermostat knob.
- 12. Repeat priming instruction.
- 13. Recalibrate control if required. Water temperature should be 195 to 205 degree F maximum.

#### TO REPLACE HI-LIMIT CONTROL

- 1. Shut off electrical power to unit.
- 2. Remove control box cover and disconnect (4) electrical wires form control.
- 3. Loosen and remove (2) retaining nuts.
- 4. Install new control in reverse order.

#### **REPLACING WATER INLET CONTROL VALVE**

- 1. Shut off water supply to unit.
- 2. Disconnect water line from control valve.
- 3. Unscrew floatball.
- 4. Remove hex nut and washer while holding the valve/float arm assembly with the other hand.
- 5. Install replacement valve in reverse order.

#### **REPLACING FLOATBALL**

- 1. Shut off water supply to unit.
- 2. Unscrew float ball. Check for water leaks by shaking the ball.
- 3. Replace defective float ball.

## TROUBLE SHOOTING PROCEDURES FOR QUALIFIED SERVICE PERSONNEL ONLY

PROBLEM	POSSIBLE CAUSES	SOLUTIONS OR REMEDIES		
Water fails to heat	Line Fuse or Circuit Breaker	Check for circuit overload before resetting breaker or replacing fuse.		
	Hi-Limit Switch	If Hi-Limit switch opens when water temp. reaches 200 degree F, replace switch.		
	No voltage reading at element a. Defective	Check voltage across terminals 1 and 3 of		
	thermostat	Hi-Limit switch. If no reading replace thermostat.		
	b. Defective Hi- Limit switch	Check voltage across terminals 2 and 4. If no reading — depress red button. Still no reading — replace Hi-Limit switch.		
	Thermostat	Pilot light should be on when thermostat is in the full on position (#5 position). If not — replace thermostat and recalibrate (see calibration). Power supply should meet or exceed power requirements of water boiler. Check data label on control box for power requirements.		
Water does not	Stuck valve	Replace valve		
	Worn valve seat	Replace valve		
	Float ball filled with water due to leak	Replace float ball		
Water does not fill	Stuck filling valve	Check float ball. It should move easily up and down. If not — replace valve.		
	Hung up float	If float ball linkage does not move freely, replace valve		
	Water line clogged	Shut off water supply. Disconnect inlet line. Clean or replace.		

# ME 10E / 15E WATER BOILER







### PARTS LIST ME 10/15E

No.	Description	ME-10E	ME-15E
1	Gauge Shield Mounting Bracket	U160A	U160A
2	Vent Cap Assembly	K108A	K108A
3	Gauge Shield Washer KH	X012A	X012A
4	Water Gauge Glass	X030A	X043A
5	Water Gauge Shield	D020A	D031A
6	Handle	X007A	X007A
7	Plastic Bonnet	X010A	X010A
8	Faucet Spring, S.S.	X019A	X019A
9	Stem	X058A	X058A
10	Cup Seat	X014A	X014A
11	Silicon Gasket	M256A	M256A
12	Faucet Assembly	0017A	D017A
13	Shank	D021A	D021A
14	Dial Thermometer	L007A	L007A
15	Chrome Plated Nut, %" NPT	K110A	K110A
16	Body	R479A	R480A
17	Legs,set of 4	M005S	M005S
18	Overflow Drain	E071A	E071A
19	Thermostat Knob	M008A	M008A

No.	Description	ME-10E	ME-15E
20	Thermostat Bezel	M016A	M016A
21	Control Box	R484A	R484A
22A	High-Limit Control 120V	L224A	L224A
22B	High-Limit Control 240V	M0602	M0602
23	Flange	U013A	U103A
24	Heater Gasket	M0680	M0680
25A	Heater 120V	G199A	G199A
25B	Heater 240V	G197A	G197A
26	Control Box Cover	R485A	R485A
27	Thermostat	L029A	L029A
28	Terminal Block	BOOOA	BOOOA
29	Overflow Tube	H084Q	H059Q
30	Vent Cap Drain	U019A	U019A
34	Stem Valve	M0251	M0251
35	Adapter, % - 20	M0589	M0589
36	S.S. Float, 3"	M0892	M0892
37	Knob	M027A	M027A
38	Cover	Q102H	Q102H

# ME 10E / 15E WATER BOILER



### **CONVERSION INSTRUCTIONS FOR ME-10E and ME-15E WATER BOILERS**

#### Conversion from 208 volts or 240 volts to 120 volts

To convert to 120 volt 15 amp outlet application simply connect a 120 volt 15 amp line cord equipped with 2 prong grounding cap to terminal as follows.

- 1. Connect white lead to terminal block marked (L1).
- 2. Connect black lead to terminal block marked (L2).
- 3. Connect green lead to copper ground terminal marked GND.
- 4. Secure cord to terminal box with a strain relief clamp.
- 5. Change Marketings on Rating Label to reflect the voltage change.