



# MODEL UC50e

INSTALLATION & OPERATION

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# 1. Specifications

<b>1.1. Model UC50e</b>	<b>METRIC EQUIVALENT</b>	
<b>WATER CONSUMPTION</b>		
PER RACK	.8 GAL.	(3 L)
PER HOUR	24/16 GAL.	(90/60 L)
<b>OPERATING CYCLE</b>		
WASH TIME-SEC	100/160	100/160
RINSE TIME-SEC	15/15	15/15
DWELL	5/5	5/5
TOTAL CYCLE	2/3MIN.	2/3MIN.
<b>OPERATING CAPACITY</b>		
RACKS PER HOUR	30/20	30/20
WASH TANK CAPACITY	6.87 GAL.	(26 L)
<b>WATER REQUIREMENTS</b>		
	140°F	(60°C)
WATER INLET	3/4"	-
DRAIN CONNECTION	1"	-
RINSE PRESSURE SET	24 PSI	1.7 kg/cm <sup>2</sup>
<b>CYCLE TEMPERATURES</b>		
WASH-°F	155°F – 160°F	(68°C/71°C)
RINSE-°F	180°F – 195°F	(82°C/90°C)
<b>FRAME DIMENSIONS</b>		
DEPTH	24"	(61 cm)
WIDTH	23-7/16"	(59.5 cm)
HEIGHT	33- 5/16"	(84.5 cm)
MAX LOADING HIGHT	13"	(33 cm)
<b>ELECTRICAL RATING</b>		
	<b>220-240 VOLTS</b>	
	1 PH—60 Hz	
	30 AMPS	

## 2. Getting Started

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### 2.1. Receiving and Installation

The dishwasher is shipped from the factory in a corrugated box on a wooden pallet. The installation guidelines give a systematic procedure for setting up the machine.

Start by removing the packaging material. After removing the packing, ensure that the appliance has not been damaged in transport. If it has, inform the retailer. Set the machine in place, and level from side-to-side and front-to-back.

#### 2.1.1. Electrical<sup>1</sup>

Single-phase 230 volt, 60 Hz dedicated circuit should be used to supply electrical energy to the UC50e dishwasher (see specification sheet page 2). This system requires two power wires. An additional third wire must be provided for ground. CMA and local codes require the UC50e to be hardwired (not cord connected) using a proper gauge copper wire. The power connection must be located such that there is sufficient length of the flexible conduit remaining to permit the machine to be moved for cleaning.



#### **DO NOT USE POWER CORD OR GFI OUTLET**

This unit **MUST BE** hard-wired to a dedicated appropriately size circuit breaker.

#### 2.1.2. Plumbing<sup>2</sup>

Each machine is provided with a rubber hose with a  $\frac{3}{4}$ " threaded attachment for water filling. A 140°F water line should be plumbed to this point. The water line used must be of sufficient length and flexibility to permit the machine to be moved for cleaning.

The supply water to the UC50e must be a minimum of 140°F at 30 PSI (Pounds per Square Inch). If it is less than 30 PSI dynamic pressure a pressure pump must be installed to guarantee optimal machine operation. If, however, the water supply pressure is greater than 60 PSI, a pressure reducer must be installed.

Connect the drain hose, supplied with the appliance, to the drain union in such a way that water flows freely (insuring a minimum slope). A drain pump is provided to empty the water at a level below the machine drain. The drain hose should be connected to a trap to prevent odor back -up from the screen.

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<sup>1,2</sup>All electrical and plumbing connections must be made by a qualified person who will comply with all available Federal, State, and Local Health, Electrical, Plumbing and Safety codes

### **2.1.3. Rinse aid dispenser.**

The machine is equipped with rinse aid dispenser, which automatically draws the product. To carry out priming, start the machine and do a few complete wash cycles or press adjustment screw repeatedly. Operating the fine-adjustment screw on the dispenser can regulate the amount dispensed. Reduce the amount by turning the screw clockwise, increase by turning it counterclockwise.

### **2.1.4. Detergent Dispenser.**

The machine is equipped with detergent dispenser, which automatically draws the product. Detergent has been pre-wired prior to the shipment. Refer to wiring diagram on the page 8 for detergent dispenser connection.

Chemical output line is connected to the injector on the back of the machine. Insert chemical input line with the filter in detergent container. Prime detergent dispenser and proceed to dispense. Detergent dispenser capacity can be adjusted using a screwdriver.

### **2.1.5. Temperature Adjustments.**

Booster heater temperature adjustment always has priority over that of the wash tank, and both cannot be switched on at the same time. During wash pump operation the wash tank heating element doesn't work.

If necessary, the water temperature of the wash and rinse cycles can be adjusted by means of the fine adjustment screws on the respective thermostats located on electric component panel.

The recommended temperatures are 160°F (71 °C) for the wash cycle (tank) and 180°F (82,2°C) for the rinse cycle.

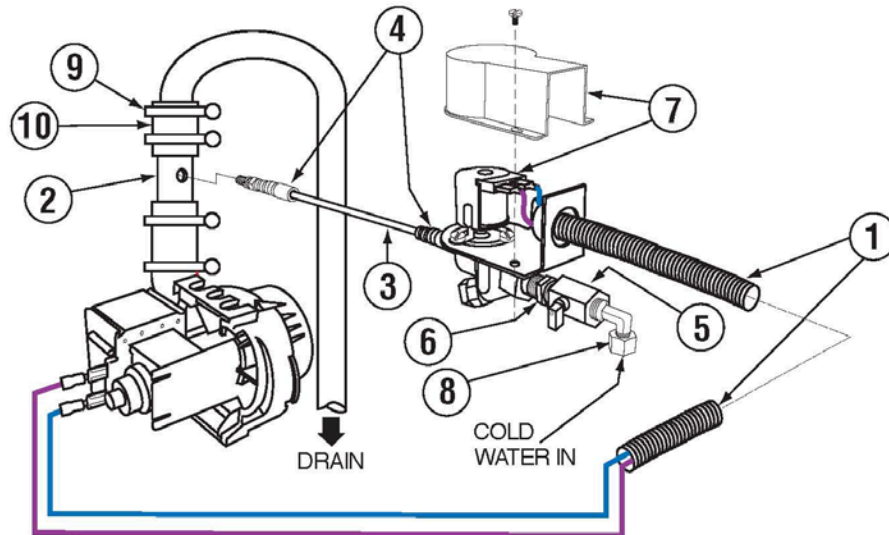
### **2.1.6. Drain Pump.**

The machine is equipped with a drain pump. Pay particular attention the position of the drain hose, which should not be higher than 31 inches. To empty the wash tank turn off the machine by pressing the main switch, pull out the overflow tube inside the water tank and leave the door open. Then keep manual drain button pressed until water tank is completely empty. During the Wash/Rinse cycle, excess water will automatically be drained.

## 2.1.7. Water Tempering Kit (Optional)

## UC50e/UC60e Water Tempering Valve Kit

P/N 13470.65



## INSTALLATION INSTRUCTIONS TO DRAIN TEMPERING KIT

**NOTE:** Turn the dishwasher's wall breaker to "OFF" position before this installation.




1. Undo the drain hose clamp connecting drain hose leading to floor drain.
2. Install the water junction tee, as shown on drain line, and tighten clamp.
3. Connect the drain hose to upper port of water injection tee and tighten hose clamp.
4. Insert the provided white chemical tube into compression nut of water injection tee and tighten compression nut.
5. Connect the provided cold-water solenoid's power leads to the drain solenoid.
6. Connect the water injection assembly's ball valve to a cold water supply.
7. Run the dishwasher through a few cycles and make sure the cold water is injected and check for any possible leaks.

ITEM NO.	P/N	NO REQ'D	DESCRIPTION
1.	15400.17	2.5	3/8" SLIT RIBBED TUBING
2.	15603.50	1	GOOSE NECK PIPE ADAPTER TEE
3.	00425.54	2	CHEMICAL TUBING WHITE
4.	03415.50	2	FLEX-TIGHT FITTING
5.	41014.49	1	3/8" BALL VALVE
6.	40015.00	2	3/8"X1/4" HEX BUSHING
7.	41015.05	1	SOLENOID VALVE 1/4" W/COVER 220V
8.	40112.00	1	1/4" COMP X 1/4" MIP ELL
9.	03101.00	2	HOSE CLAMP #16 1"
10.	03108.60	.25	TRANSFER HOSE 1" REINFORCED

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### 3. Operation

#### 3.1. Control Panel and Relative Symbols.

	ON/OFF PUSH BUTTON
START	CYCLE START PUSHBUTTON
	TIME SELECTOR PUSHBUTTON
	DRAIN PUMP PUSH BUTTON

#### 3.2. Startup Procedures

- Insert the overflow tube in the special seat inside the wash tank.
- Check that the suction filter inside the wash tank is correctly fitted in its seat.  
The filter must be cleaned after every 20 wash cycles and whenever necessary.

**DO NOT use the appliance without the filter**

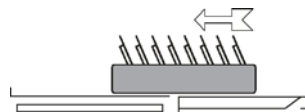
- Close the dishwasher door.
- Insert the rinse aid dispenser line in the liquid container and check for the quantity of the additive.
- Turn on main water valve.
- Turn on the appliance by pressing On-Off push button on the control panel.

The operation is signaled by the switch indicator lighting up or by the indicator with the symbol.

The machine will automatically fill the water tank to the proper level tank, and then the heating phase begins. Indicator comes on when the water temperature is reached.

- Insert the rack filled with dishes to wash.

The plates must be correctly placed in the rack.



- Select the wash cycle required by pressing Time Selector push button. Push in for 2 min cycle, push out for 3 min cycle.
- To begin the wash cycle press Cycle Start push button. The button light will come on, indicating that the cycle has started.

At the end of the washing cycle, a hot rinse cycle will take place.

The indicator light of the Cycle Start button will turn off when the cycle has finished.

- The appliance is now ready for a new wash.
- At the end of the day, clean the machine (see "Preventive Maintenance").

### **3.3. Preventive Maintenance.**

#### **3.3.1. Regular Maintenance.**

In order to ensure perfect performance, the appliance must be completely cleaned at least once a day in the following way:

- Turn off On-Off push button.
- Turn off main water valve.
- Remove the overflow tube from the wash tank to empty the water.  
Remove the overflow tube, turn off On-Off push button, and press Drain Pump push button until all the water has been completely emptied.
- Remove the filters and clean it with a brush under running water.
- Remove the spray arms loosening the fixing screws, and thoroughly clean the nozzles and cleaning and rinsing arms under running water.
- Reassemble all parts and refit the spray arms in their seats, fixing them with the relative screws.

Clean the tank thoroughly.

**Do not use bleach or chlorine based detergents.**

- At the end of the day, it is advisable to leave the dishwasher door open.  
**It is advisable to replace the tank water by refilling the tank at least every 20 wash cycles, or twice a day. Do not use metal brushes or corrosive products, which can damage the machine.**

#### **3.3.2. Special Maintenance.**

Once or twice a year have a qualified technician inspect the machine:

- clean the solenoid valve filter
- remove scale from the heating elements
- check the tightness of the seals
- check condition and/or wear of the components
- check operation of the dispensers.



### 3.4. Troubleshooting.

PROBLEM	LIKELY CAUSE	SOLUTION
The machine does not start	On-Off push button is turned off	Turn on On-Off push button
The machine does not draw water	main water valve is closed	Open main water valve
	The spray arm nozzles or the solenoid filter is clogged and/or caked with lime deposits	Clean the rinsing arm nozzles, the pipes and the filter. If the machine has a water purifier check the salt content or regenerate more often
	Faulty pressure switch	Replace the pressure switch
Unsatisfactory washing results	The washing nozzles are clogged or the washing arms do not rotate	Unscrew and clean the nozzles and the rotation shaft, refit them correctly in their seats
	Detergent concentration too low	Use non-foaming detergent or use less of same detergent
	Fats or starches are not removed	Detergent concentration too low
	The filter is too dirty	Remove the filter, clean it with a brush under running water and refit in its seat
	Check the tank temperature (it must be about 150°F - 65,5°C)	Adjust the thermostat or check correct heating element operation
	Length of washing cycle inadequate for type of grime build-up	Choose a longer cycle if possible, otherwise repeat wash cycle
	Wash water too dirty	Empty water from the tank, clean filters; refill the tank and correctly refit the filters
Glasses or dishes are not completely dried	Insufficient rinse aid	Increase the amount of rinse aid by turning the screw on the dispenser
	The rack is unsuitable for the glasses and dishes	Use a suitable rack enabling the dishes to be tilted so water can run off
	The dishes have been too long in the tank	As soon as the wash cycle is finished, pull the rack out immediately, allowing the air to dry the glasses and dishes more quickly
	Rinse water temperature is less than 180°F (82°C)	Check the temperature of the booster thermostat
	Surface of dishes and glasses too rough or porous for material wear	Replace type of dishes and glasses used
Streaks and spots on glasses and dishes	Too much rinse aid	Decrease the amount of rinse aid by turning the fine-adjustment screw on the dispenser
	The water is too hard	Check the water hardness Water should not be harder than 5-10 °f
	Salt present in dishwasher tank	Thoroughly clean and rinse the appliance, and avoid spilling salt when filling the container
The machine suddenly stops during the cycle	The machine is connected to an overloaded circuit	Connect the machine separately (call the Technical Assistance service)
	A safety device has been activated	Check safety devices (call the Technical Assistance service)
During wash cycle the machine stops and draws water	Water from the previous day has not been replaced	Empty the tank and refill it
	The tank water temperature is too high	Have the Technical Assistance service check the thermostat and the pressure switch
	Faulty pressure switch	the thermostat and the pressure switch
	The overflow tube is incorrectly positioned	Remove the overflow tube and correctly reposition it

### 4. Electrical Diagram

WIRE DIAGRAM FOR MODEL: UC-50e.

