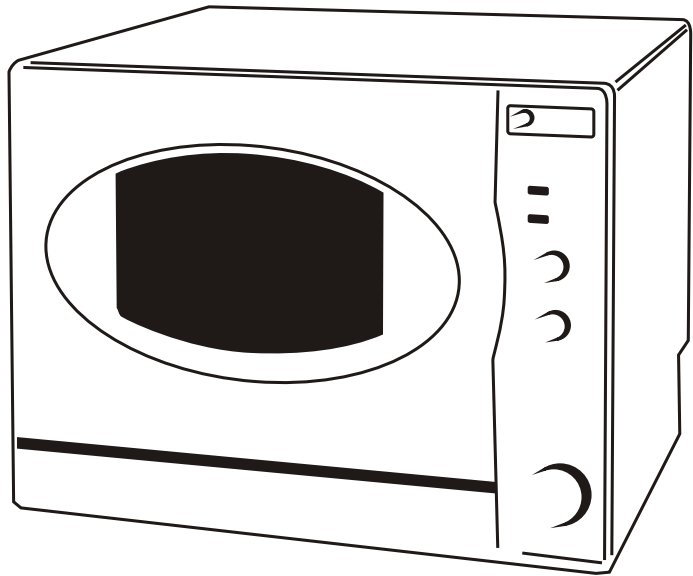


**EQUATOR**<sup>®</sup>

ADVANCED Appliances ≡

# Dishwashers

## *Owner's Manual*



MODEL: CD400

# Table of Contents

	Page
Top 14 Reasons to Buy Equator Compact Dishwasher_____	1
Warranty_____	2
Unit Parts Identification_____	3
Important Safety Instructions_____	4
Installation_____	4
Water Pressure_____	5
Connection & Disconnection Instructions_____	5
Features_____	6
Operating Tips_____	8
Program Summary/Selection_____	8
Common Problems and Solutions_____	9

# Introduction

**Congratulations** on your new Equator Dishwasher. In addition to its award winning design, this is a highly sophisticated engineered product that will give you many years of satisfaction. Please spend a few moments to read the Owners Manual. This will show you ways to best utilize your valuable purchase.

Here are 14 of the best reasons for buying your Dishwasher -

## **1. Compact Size**

The Dishwasher has a compact size of 18.8"x22.4"x19.6". It can fit on a tabletop or any place that is convenient.

## **2. Water and Sewage Savings.**

Your dishwasher uses only about 2.9 gallons of water in a Normal load (compared with 11-14 gallons in. regular dishwashers). Less water results in a reduced sewage bill.

## **3. Energy Savings.**

Since the Dishwasher uses a small amount of water to clean the dishes since there is less water to be heated. This results in substantial energy savings.

## **4. Detergent Savings.**

Since there is a reduced amount of water being used combined with the fact that the water is heated up to 160°, the amount of detergent needed for a standard load is no more than a tablespoon.

## **5. Rack Capacity**

The Dishwasher can accommodate either 4 place settings (large and small mixed) in its racks. This is very convenient for use by small families, individuals, seniors, and offices.

## **6. Water Temperature Selection**

A temperature selection switch allows the Dishwasher to be heated to either 130° or 160° for standard or heavy wash of dishes.

## **7. Convenience**

Your dishwasher can be installed as a freestanding unit with the faucet-adaptor attachment included.

## **8. Built-in Installation**

The convenient size of the dishwashers allows it to be built-into a cabinet.

## **9. Rinse-Aid**

Your Dishwasher is equipped with an automatic rinse-aid dispenser.

## **10. Easy Clean Filter**

The easy-to-clean filter allows any collected remnants of food to be removed from the Dishwasher.

## **11. Wash Options**

This unit is a full-featured Dishwasher. It has three wash options rinse, normal wash, and fast wash.

## **12. Fast Wash**

In these models, with the press of a button, the Dishwasher can do a fast wash a convenient feature for light washing of dishes. A fast wash can be done within 25 minutes.

## **13. Spray Arms**

Your one-spray arm dishwasher is ideal for regular dish cleaning and especially convenient for glasses.

## **14. Easy-to-Clean Exterior**

The enameled metal cabinet and the high quality poly-molded door that make up the exterior of the Dishwasher make it easy to clean with just a damp kitchen towel.

# WARRANTY INFORMATION

Your Equator appliance is protected by this warranty under normal, personal, family or household use (1 Year), and limited commercial use (90 days) in the USA and Canada.

## WARRANTY

Equator Corporation undertakes to the consumer-owner to repair or, at Equator Corporation's option, to replace any part of this product which proves to be defective in workmanship or material under normal personal, family or household use, in the USA and Canada, for a period of one year from the date of original purchase.

For commercial use, the product is warranted for a period of 90 days.

During this period, Equator Corporation will provide all labor and parts necessary to correct such defect, free of charge, if the appliance has been installed and operated in accordance with Equator Corporation's written instructions with the appliance. Ready access to the appliance, for service, is the responsibility of the consumer-owner.

## EXCLUSIONS

In no event shall Equator Corporation be liable for incidental or consequential damages or for damages resulting from external causes such as abuse, misuse, incorrect voltage or acts God.

This warranty does not cover service calls which do not involve defective workmanship or materials covered by this warranty. Accordingly, diagnosis and repair costs for a service call which does not involve defective workmanship or materials will be the responsibility of the consumer-owner.

Specifically, the following work is not covered under warranty and does not constitute warranty work:

- . Installation -e.g. improper hook-up or leveling
- . Maintenance - e.g. cleaning of air and/or water filter
- . Damage - e.g. Replacing broken door handle

Most work is covered. The defining factor is, has the machine malfunctioned (Equator is responsible) or has the customer omitted or done something to cause machine to malfunction (customer is responsible).

Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## WARRANTY SERVICE

This warranty is given by:

Equator Corporation,  
Equator Plaza,  
2801 W. Sam Houston Pkwy. N.,  
Houston, TX 77043-1611.

Service under this warranty must be obtained by the following steps, in order:

Call an Equator Corporation Authorized Service Agent (obtain number of nearest agent from your dealer or by calling Equator Service at 1-800-776-3538). Under normal circumstances, Service will be provided during regular business hours (9:00 a.m. to 5:00 p.m. weekdays).

## GENERAL

Since it is responsibility of the consumer-owner to establish the warranty period by verifying the original purchase date, Equator Corporation recommends that a receipt, delivery slip or some other appropriate payment record be kept for that purpose.

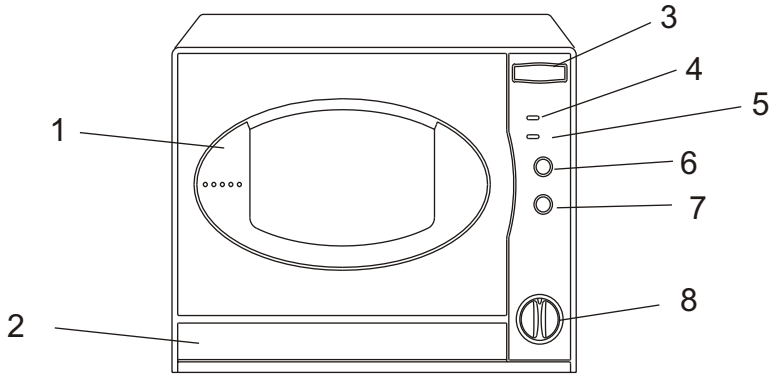
Remember to send in your Warranty Registration Card so that a proof of your purchase exists with Equator.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

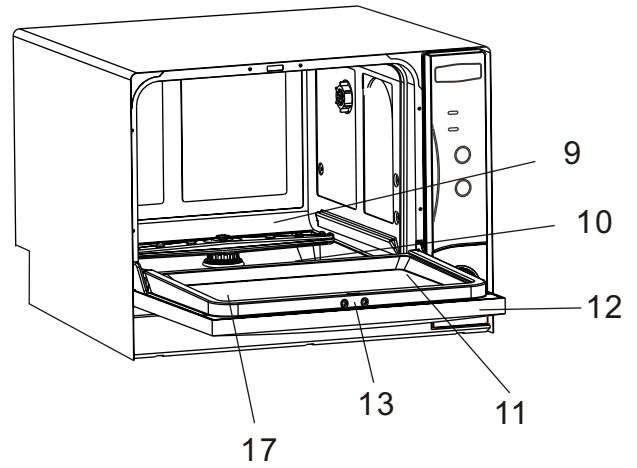
Corporate Office

EQUATOR CORPORATION  
Equator Plaza  
2801 W. Sam Houston Pkwy. N.  
Houston, TX 77043-1611  
Tel: 713-464-3422 - Fax: 713-464-2151  
Tel: 800-776-3538

FRONT VIEW



INSIDE VIEW



REAR VIEW

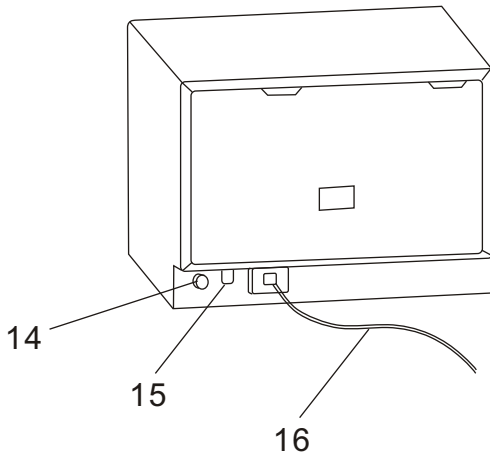


Illustration shows optional solid door assembly

- 1. WINDOW
- 2. FRONT PANEL
- 3. DOOR RELEASE BUTTON
- 4. PILOT LIGHT (POWER)
- 5. PILOT LIGHT (HIGH HEAT)
- 6. POWER ON/OFF BUTTON
- 7. HIGH-HEAT / NORMAL HEAT
- 8. PROGRAM / TIMER SELECTOR
- 9. SPRAY ARM

- 10. FILTER
- 11. DETERGENT LOCATION
- 12. DOOR ASSEMBLY
- 13. DOOR LATCH MECHANISM
- 14. WATER INLET CONNECTION
- 15. DRAIN HOSE CONNECTION
- 16. POWER CORD
- 17. RINSE AID DISPENSER

## IMPORTANT SAFETY INSTRUCTIONS

### WARNING

When using your dishwasher, follow basic safety precautions

- Read all instructions before using the dishwasher
- Use the dishwasher only for its intended function
- Use only detergents or wetting agents recommended for use in a dishwasher and keep them out of the reach of children.

## SAVE THESE INSTRUCTIONS

### WARNING

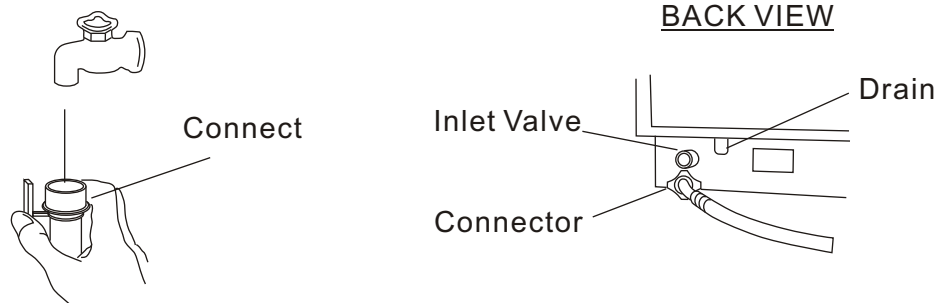
Instructions pertaining to a risk of fire, electric shock, or injury to persons.

### Electrical Instructions:

An electrical supply of 110-120 volts AC only, 60Hz is required. Make sure that a suitable electrical supply socket is located close to where the dishwasher is to be placed. For your personal safety, the appliance must be grounded. The appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazards it must be plugged into a matching 3-prong grounding type electrical outlet.

## Installation Instructions

1. Remove all packing materials carefully
2. The water inlet hose from the machine terminates in a 3/4" female connector. The water supply should therefore terminate in a similar male connector and should have a stopcock close by in the pipe. It is recommended to connect the machine to hot water supply. Connect the straight connector of the inlet hose securely to the water supply . Connect the other end (bent connector) to the water inlet valve at the back of the dishwasher cabinet. Do not over-tighten to avoid damage to threads.
3. Prepare the drain hose so that it has a hooked end. Use the plastic U-bend fitting provided for this purpose. The end of the hose should be dropped into a drainage standpipe, the maximum height of which should be no more than 6" above the base of the dishwasher. To allow for an air gap around the end of the drain hoses, the diameter of the standpipe should be at least 1.2" (3cm). Connect the other end of the drain hose (L shaped) to the drain port connection at the back of the dishwasher cabinet. Tighten the drain hose to the drain port using the metal clip included in the package.
4. If you wish, you may connect the water inlet hose on to the kitchen sink tap. You must obtain correct fittings/adaptors to match the inlet hose connectors to ensure secure connection. However, permanent plumbing is recommended.



5. If leaks are located, immediately turn the water supply off and check the connections fully. Tighten connections if necessary.
6. If for any reason you are unable to stop the leak yourself please seek advice from a qualified plumber.
7. The minimum height clearance required to install your dishwasher on a counter top surface with overhead cupboards is 17.8" (45cm).
8. Make sure there is an electrical power supply within easy reach of the machine. The power cord is 6 feet (182.8cm) long.
9. The dishwasher must be installed on a "solid" level surface.  
To level the dishwasher, adjust the 4 level screws under the dishwasher.

## Water Pressure

For best operating results, incoming water pressure should be between 0.5 and 10 bar. Incoming water supply for the dishwasher is controlled by a 'pressure switch' application, so if household water pressure is low, dishwasher fill time will be longer.

## FOR BEST RESULTS:

Your dishwasher cleans by spraying a mixture of hot clean water and detergent (under pressure) against the soiled surface of dishes. The water is pumped through a rotating spray arm, drained through a filter removing food and soiled particles and pumped back through the spray arm.

Soiled water is pumped out and replaced with clean water at the end of each cycle. (the number of times depends on the cycle being used) For best cleaning results, the water temperature must be at least 130°F (55°C). To prevent dishwasher damage, the temperature of the incoming water supply should not exceed 160°F (71°C).

NOTE: Hard Water conditions will adversely affect the washability performance of your dishwasher. Hard Water conditions will also contribute to "Lime" (white film substance) deposits and/or scaling? On the stainless steel surface of the dishwasher tub and "Heater Element" located in the sump underneath the removable filter screen. To assist in minimizing these conditions, it is recommended to periodically operate/rinse the inside of the dishwasher (while empty) using 1 cup of white vinegar (at least once a week).

## Disconnecting your Dishwasher

- Disconnect the power supply cord.
- Close the hot water supply at the stopcock.
- Disconnect the inlet hose assembly from the water supply. When the dishwasher is not in use, place/store the hose on the hanger hose bracket located on the rear wall of the dishwasher cabinet.
- Appliances that are to be discarded must be made unusable. Pull off the plug, remove cable and make the door lock and latch unusable

### ! IMPORTANT !

Once you open the water supply line, (even if it is closed immediately thereafter) the water inlet hose will be pressurized.

### ! CAUTION !

DO NOT LET CHILDREN DISCONNECT THE DISHWASHER. Close supervision of children is always important around appliances.

## Loading your Dishwasher

The dishwasher is designed to receive a standard "4 piece" plate setting consisting of the following:

- 4 Dinner Plates
- 4 Bread & Butter Plates
- 4 Fruit Bowls
- 4 Cups & Saucers
- 4 Dinner Forks
- 4 Dinner Knives
- 4 Salad Forks
- 4 Teaspoons
- 2 Serving Spoons
- 1 Serving Spoons
- 1 Serving Fork

NOTE: For ease of loading/unloading large size dinner plates from the dish rack it may be necessary to (temporarily) remove the silverware basket. When loading/unloading is complete, return the silverware basket to its original position.

## Preparing your Dishes for Washing

- Scrape off all solid food particles from the dishes.
- Remove excessive quantities of oil or grease.
- Empty any liquids from glasses and cups.
- All dishes should be thoroughly rinsed before being placed inside the dishwasher.
- NOTE: Dishes with dried-on foods are more difficult to wash and may not come clean in a normal wash cycle.
- Arrange all items with recessed or curved sections on a slant to drain water away.
- Cups, pots, glasses, etc should be placed upside down.

When loading items to be washed:

- Locate sharp items so that they are not likely to damage the door seal.
- Load sharp knives with the handles up to reduce the risk of cut-type injuries
- Do not load plastic items unless they are marked "dishwasher safe" or the equivalent. For plastic items not marked, check the manufacturer's recommendations.
- Do not load glasses over the dish rack pins. Glasses loaded over dish rack pins are not properly supported and are likely to get damaged.
- Items with wooden or bone handles and items joined together with glue are unsuitable as they cannot resist hot water.
- Do not touch the heating element during or immediately after use.
- Do not operate your dishwasher unless all enclosure panels are properly in place.
- Do not tamper with controls.
- Do not abuse, sit on, or stand on the open door or dish-rack of the dishwasher. The machine may topple over.
- Protect cables and hoses from high temperatures.
- To reduce the risk of injury, do not allow children to operate or play with the dishwasher.

## Using the Right Detergent

Use only detergent specifically made for use in dishwashers, as other types will cause over-sudding. If your detergent is old and/or lumpy, throw it away. Old detergent loses its washing power. Lumpy detergent won't dissolve.

## How much Detergent Should You Use

That depends if your water is "hard" or "soft."

**HARD WATER REQUIRES MORE DETERGENT TO GET DISHES CLEAN.**

**SOFT WATER REQUIRES LESS DETERGENT TO GET DISHES CLEAN.**

- The recessed detergent area located on the inside door panel will hold approximately 7 grams of detergent.



## Using a Rinsing Agent

You can help prevent unsightly spots on dishes and glassware and reduce drying time by using a rinse agent. A rinse agent is specially formulated to rinse away food and detergent residues that can be left behind on your dishes. Used regularly, a rinse agent will automatically provide you with cleaner dishes every time you wash.

To fill the rinse agent dispenser, unscrew the dispenser cap located on the inner door. Add the rinse agent slowly into the container until it just reaches the bottom of the filling cap inside the dispenser opening. Replace the cap. The dispenser will automatically release the rinse agent into the final rinse water (approximately 90cc of rinse agent).

## Rinse Feature

The "Rinse" is a convenience feature that allows dishes to be rinsed, if you don't have a full load ready to be washed. (Preventing foods from becoming dried/caked on the dish surface) It is not necessary to add detergent to the dishwasher during the Rinse cycle. However, due to the short duration of the pre-rinse, (6 minutes only) make sure the incoming water supply is hot. Open the hot water faucet and run till hot, before connecting the dishwasher.

### ! IMPORTANT !

Your dishwasher is not a "waste disposal unit", clean off large particles of food sediments before placing dishes in the dishwasher.

## Using the "High-Heat" Feature

The "High-Heat" feature gives you the option of washing/drying dishes at very high water temperatures. When activated, the "High -Heat" feature energizes the heating element which will raise and maintain the internal water temperature of the dishwasher at 151 °F(66 °C)

### ! CAUTION !

Water temperatures this high can cause severe burns/scalding. Always exercise extreme care when opening and/or entering the dishwasher during the High -Heat cycle.

To activate this feature, push the "High" button on the control panel.

- Pushed button in = the "High -Heat" feature is activated.

## Using the "Normal - Heat" Feature

The "Normal - Heat" feature gives you the option of washing dishes at "normal" incoming water tank temperature. (usually the incoming water temperature will be between 130° ~ 140°F / 54.4° ~ 60°C)

When activated, the "Normal -Heat" feature by-passes the heating element.

To activate the "Normal -Heat" feature push the "High/Normal" button on the control panel.

- Push button out the "Normal -Heat" feature is activated.

### ! IMPORTANT !

When the "Normal - Heat" feature is activated, drying time for the dishes will be increased. The dishes dry by a "convection" method only. To speed-up the drying time, we suggest you leave the dishwasher door partially open after the program is complete. This will allow humidity from within to escape. Push the door open button and the door pops open to a pre-set convection dry position.

## Operating Instructions

To operate the dishwasher:

1. Make sure the inlet and drain hoses are correctly and securely connected.
2. Push the door release button to open the door.
3. Place the dishes on the dish rack and cutlery inside the cutlery basket.
4. Check to make sure that the rotating spray arm can turn freely all the way round. If necessary remove any obstacles.
5. Fill the detergent in the recessed area on inner door panel. (approx. 7 grams)  
NOTE: If using the "Rinse" cycle only, it is not necessary to add detergent.
6. Close the door firmly
7. Open the hot water supply.
8. Turn the selector switch to the desired wash program. (Rinse, Normal, Short).
9. Press the power button.
  - Button in = power on
  - Button out = power offThe power light will illuminate indicating the machine is receiving power.
10. The dishwasher stops automatically at the end of the program. The power light will remain illuminated, until the power button is switched off.
11. The dishwasher is designed to stop if the door is opened accidentally during operation.
12. After washing, dishes should be allowed to cool down for about 15 minutes so they are not too hot to handle.  
Dishes will cool quicker if the door is opened slightly.
13. After unloading the dishwasher, remove the filter, clean off any bits of food, and put the filter back in its position.

**NOTE:** At the beginning of each cycle, the dishwasher always starts in the "drain" mode. This is because the drain pump always retains a small amount of water (in the sump) from the previous cycle. This is necessary to keep the pump primed.

Therefore, don't be alarmed if you see a small amount of water being pumped-out from the drain hose prior to the start of the regular wash cycle. (THIS IS NORMAL)

### Program Summary/Selection

#### RINSE:

Water Temperature: Incoming Water

Program Duration: 6 Minutes

Water Consumption: 2.8 liters/0.73US/gal.

#### NORMAL/HIGH HEAT:

Water Temperature: 143°F/62C

## COMMON DISHWASHING PROBLEMS AND SOLUTIONS

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Dishwasher will not start	<ul style="list-style-type: none"> <li>* Dishwasher not receiving electrical power.</li> <li>* Door is unlatched.</li> <li>* Dishwasher not level..</li> </ul>	<ul style="list-style-type: none"> <li>* Check electrical connection fuse/circuit breaker.</li> <li>* Close and latch door.</li> <li>* Level unit.</li> </ul>
Dishes not clean	<ul style="list-style-type: none"> <li>* Improper loading</li>   <li>* Spray arm not rotating freely</li>   <li>* Not enough detergent and/or improper detergent being used.</li>   <li>* Improperly prepared dishes.</li>   <li>* Water inlet hose kinked/bent due to improper installation.</li> </ul>	<ul style="list-style-type: none"> <li>* Arrange dishes so spray action reaches all surfaces.</li> <li>* Do not overload dishwasher.</li>   <li>* Check spray arm to make sure nothing (i.e. cutlery) is obstructing spray arm rotation.</li> <li>* Check if filter screen has become dislodged and obstructing spray arm rotation.</li>   <li>* Use more dishwasher detergent</li> <li>* Do not use detergent that is hard or cracked.</li> <li>* Use only a recommended dishwasher detergent.</li>   <li>* Excess food soil and liquids should be removed from dishes before loading.</li>   <li>* Eliminate kink or bend from Inlet hose.</li> </ul>
Chipping or breaking glassware	<ul style="list-style-type: none"> <li>* Improper loading of dishes.</li> </ul>	<ul style="list-style-type: none"> <li>* Do not overload dish rack. Load Glasses on the upper rack only, Not over dish rack pins. Glasses Loaded over dish rack pins are Not properly supported and Subject to damage.</li> </ul>
Water remains in bottom	<ul style="list-style-type: none"> <li>* A small amount of water (in sump area) is normal.</li>   <li>* Excessive amount of water; Cycle not completed.</li> </ul>	<ul style="list-style-type: none"> <li>* This is necessary to keep the Pump primed and is drained automatically at the beginning of each cycle.</li>   <li>* Allow dishwasher to complete Full cycle.</li> </ul>

# **EQUATOR CONTACT NUMBERS**

**SERVICE: (800) 776-3538**

**PARTS & ACCESSORIES: (800) 935-1955 130 & 131**

**TECHNICAL SUPPORT: (888) 935-1955 ext. 110 & 115**

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