

ALFA MODEL V500DP
Manufactured by ELVIOMEX Ltd.
for ULTIMO STAINLESS PRODUCTS INC.
www.ultimostainless.com

Operating and installation instructions

Except as noted, this manual can be used for V500

CONTENTS

- 1. Installation instructions**
 - 1.1 Introduction
 - 1.2 Advantages
 - 1.3 Installation
 - 1.3.1 Installation suggestions
 - 1.4 Water supply connection
 - 1.4.1 Drainage connection
 - 1.5 Electrical connection

- 2. Operating instructions**
 - 2.1 Technical data
 - 2.2 Instructions for the dishwasher's regular operation
 - 2.3 Preparation of dishes for washing
 - 2.4 Filling of basket
 - 2.5 Manual filling of detergent
 - 2.6 Rinse-aid dozer
 - 2.7 Starting the washing program - Filling the boiler
 - 2.8 Safety arrangements
 - 2.8.1 Daily operation
 - 2.9 Maintenance / Care / Repair
 - 2.9.1 Unloading dishwasher (dispenser)
 - 2.9.2 Regular maintenance and cleaning works
 - 2.10 Customer service
 - 2.11 Spare parts, Accessories and Components
 - 2.12 Wiring Diagram
 - 2.13 Troubleshooting

- 3. Warranty**
 - 3.1 Warranty

1. Installation instructions

1.1 Introduction

This appliance complies with the needs of gastronomy and professional cuisine and is intended for use by professionals familiar with its safe operation

Before using this appliance, please read the operating instructions carefully and keep this manual for reference to proper operation and to minimize extra repair expenses.

1.2 Advantages

- It is made of Stainless Steel 18/8 304
- Suitable for continuous operation.
- Easy and simple cleaning
- Easy door operation
- Perfect dish and glass washing
- Less environment pollution
- Easy to service when necessary
- Very efficient electrical consumption
- Economical water consumption

1.3 Installation

Check the appliance for any damages during transportation.

The unit should be installed by licensed and approved personnel according to all local codes.

This dishwasher is delivered with water inlet and outlet hoses.

Be sure all electrical supply specifications correspond to information label on machine.

After installation, the dishwasher should be cleaned thoroughly before putting into operation.

The manufacturer/ distributor is not responsible for any possible damages or risks due to improper connection of this appliance.

1.3.1 Installation suggestions

- Place the dishwasher at the desired location.
- The appliance should be tilted very slightly to the left and to the rear for best drainage results.. Adjustable feet are provided for this adjustment.

1.4 Water supply connection

ATTENTION : Connection with the water supply should be made according to all applicable codes.

This dishwasher intended for use with a hot water supply but will also operate (at reduced hourly capacity) with a cold water supply.

Note to plumbing installer: If local codes require an external vacuum breaker, one must be locally supplied and installed in the supply line even though the unit has a built in vacuum breaker..

- The water supply hose/pipe should be ½” or ¾” and terminate in a ¾ NPT fitting. (not garden hose fitting)
- The water supply hose/pipe should be flushed before final connection.
- Minimum flow pressure is 30 PSI (2 bars) and maximum is 75 PSI (5 bars).
- Connect hose supplied with machine to the inlet at the rear of the machine and the pipe fitting on the water supply line.

1.4.1 Drainage connection

Outflow is accomplished by a power drain pump in the E400DP. The outlet hose should be connected to an open drain connection, to a vented drain pipe, or directed to a sink drain pipe (recommended height for best operation should not exceed 3 feet (1M) in height and 6 feet (2M) in distance).

1.5 Electrical connection

The dishwasher operates under specific voltage as noted on the attached Technical Specifications label.

Note: A licensed electrician should be used for the connection according to local codes.

Unit will operate properly with either a 208 or 230 volt line, single phase 16 amps, 2 wire plus ground. **No neutral (No 115 volt service) is required.** Ground line must be connected at the junction block.

Open front panel below door by removing the two nuts holding the panel. Carefully open control box by removing the two Phillips (cross) screws.

Pull the grey plastic conduit frontwards about 1 foot, (30 CM).

Prepare the connecting cable suitable for 20 amps capacity by properly fitting a ½” connector on the end of the cable with about 30” (75 CM) of shielding removed.

It may be easier to make the connections by tilting the machine on to it’s left side, using the packing to prevent scratches.

Insert the exposed wire in the appropriate ½” hole in the back panel, place the connector mounting nut over the wire, and feed the wire through the grey plastic conduit leading to the inside of the control box. Mount the connector fitting properly.

Push the grey plastic conduit backward so that it rests against the connector, effectively covering the unshielded wire. Raise the machine back into its normal position.

Connect the wires to the appropriate terminal block connections. Please be sure all connections are tight.

Coil the extra wire neatly in the rear of the control box.

Close the control box, and remount front panel. Tighten exterior nuts gently only.

After installation, the dishwasher should be cleaned thoroughly before putting into operation.

2. Operating instructions

2.1 Technical data

Power requirements: 208/230 volts, 60 cycles 16 Amps

Water supply: 120F / 50C recommended, Can be used on almost any temperature water supply. Supply pressure must be between 30 PSI (2 Bars) and 75 PSI (5 Bars)

Drain: V500 Drain should be vented type with connection not higher than outlet pipe of washing machine, or floor drain. V500DP drain connection (recommended height for best operation should not exceed 4 feet (1.2M)) in height and 6 feet (2M) in distance) should be to a drain according to local plumbing codes.

Dimensions: 23"W x 24"D x 32"H (570 mm W x 600 mm D x 830 mm H)

2.2 Instructions for regular operation

The appliance is intended to clean dishes, cups, glasses, cutlery, etc. Be sure the items placed to be washed are suitable for dishwashing. Cutlery should be cleaned of heavy food residues, or soaked if not washed right after use. This machine is not intended for use with items which were used with acids, mineral oil, grease, gasoline or colors.

2.3 Preparation of dishes for washing.

For best results avoid allowing food residues to dry. Remove bulk food residues, olive pips, lemon peels, tooth picks, etc., before placing the dishes in the basket.

If washing is delayed we recommend that you soak dishes and/or glasses which have food residues.

2.4 Filling of basket

Place glasses and cups, with the opening facing down and not piled one on top of the other, in the appropriate baskets. Glasses should not touch each other (damage to glass or stains due to contact may occur).

Plates should be stacked vertically in appropriate baskets and not touching each other.

Place tableware in the supplied plastic basket, with handles downwards or placed freely in a level plastic basket.

In every case, avoid overloading the basket.

2.5 Automatic filling of detergent

Use non-foaming liquid detergent suitable for commercial dishwashers exclusively.

Insert correct detergent plastic line (clear or whitish) in container of detergent.

Initially prime detergent system by filling wash tank, draining, and refilling twice if the system is not already full of detergent. After priming line, empty wash tank completely, refill normally and operate several cycles. Verify amount of detergent solution in wash water and adjust pump using small white adjusting screw located on pump between inlet and outlet plastic hoses. (Note: this is a pulse variable pump and not a variable speed unit for superior pump operation and trouble free operation).

Use of detergent and rinse-aid from the same manufacturer/supplier is recommend for compatibility

2.5.1 Manual filling of detergent

Use only non-foaming detergent suitable for commercial dishwashers.

In the event of non use or malfunction of the automatic detergent injection system, put the detergent suppliers recommended amount directly into the wash compartment tank after the machine has reached its operating temperature,

The correct dosage depends on the water hardness and the amount of residue on the dishes.

Follow the detergent manufacturer's recommendations.

Less detergent deters good washing results and more detergent usually does not provide better results, but rather more unnecessary consumption and environment pollution.

Do not use granular detergent. Poor results usually occur.

Do not use caustic products. This will void the guarantee

2.6 Rinse-aid "dozer"

Insert rinse-aid tube (blue) into container of liquid rinse-aid. This model has an automatic rinse-aid injector for use with a container of liquid rinse aid. It is a round black unit with a chrome adjusting screw in the centre, and is located below and behind the peristaltic detergent pump with the adjusting screw generally accessible without moving other parts.

Before you perform these adjustments, turn off the power supply.

The dozer is adjusted from the manufacturer's premises at its maximum value for easy initial priming and must be adjusted accordingly (depending on water hardness, how dirty the dishes are, and the detergent used).

To reduce (-) the amount of rinse aid, turn the center screw clockwise. To increase (+), turn counterclockwise.

Note: this is a 15 revolution adjusting screw to provide fine adjustments as required.

Suggestion for initializing personnel: After priming system by operating machine through several cycles, rotate adjusting screw gently to full closed position (clockwise) and adjust (counter-clockwise) about 7 full revolutions. Empty wash tank and refill with fresh water. Operate for two or three cycles and verify concentration level. Adjust dozer again if required to achieve final desired results.

2.7 Operation

- Check that the pump inlet filter has been placed in the correct position if it was removed for cleaning.
- Check that the overflow stand pipe is inserted correctly in its outlet.
- Close door.
- Turn power switch to 'PROGRAM' (switches should now illuminate)
- The dishwasher will fill automatically.
- The booster indicator should come on to indicate that the inlet water to the rinse and fill system is being heated to the required rinse temperature (usually 185F/ 84C).
- When the booster water has reached the correct temperature, the corresponding light switches off and the wash tank light comes on if the wash water temperature is not sufficiently hot (usually 140F/60C).
- At initial daily start, allow about 10 to 20 minutes for machine to stabilize water temperatures to their proper temperatures. Note: After warm-up, one initial wash cycle should be performed to thoroughly mix soap and water and be sure unit is fully warmed up and ready to wash properly.
- After initial warm-up, when all heater lights are off, the dishwasher is ready to wash.

Note: If door is opened during heating, or operation, the safety control will turn off the timer and heater controls.

Washing or rinsing will restart from beginning of wash cycle.

- Open the door, insert the basket with the items (dishes, glasses, etc.) noting that heavy food residue has been removed. (If the automatic soap injection system is not used, pour the proper amount of liquid detergent manually into the wash tank). Close the door.
- To start the washing program, select the program desired and press the START button. The automatic program commences, with the green program indicator light in the program selector switch changing from flashing to steady. Note: This unit is equipped with a “positive rinse temperature control and will not advance from wash to rinse unless the rinse water is at the preset temperature (usually about 185F (85C)).
- When the program is finished, the green program light returns to flashing.
- Promptly open the door and remove the basket with the clean items. Use caution with hot items
- Allow to dry.

If, after washing, there are stains from dirt or water spots, the cause may be one of the following :

- Wrong ratio of detergent to water.
- Rinsing water with very high mineral content.
- Improper quantity of rinse-aid.
- Wrong arrangement of items in the basket.
- Low water pressure during rinsing.
- Low water temperature during washing.
- Clogged or miss-positioned filters.
- Clogged jets

2.8 Safety.

If the door is opened in error, a door safety switch interrupts the appliance’s full operation. In case of overload or overheating, the pump motor winding has integrated thermal protection which interrupts power supply to the motor. The booster and wash tank are each equipped with a manually resettable thermal safety fuse which interrupts the power supply in case of overheating.

No technical modifications are allowed in this appliance. The manufacturer is not responsible for any resulting damages due to modifications or tampering. This also applies if the appliance is used for any other purpose, except those indicated.

Dishwasher Water is not potable.

Use, maintenance, and repair of dishwasher should be performed only by competent and informed professionals familiar with this machine.

2.8.2 Daily maintenance operation.

V500 MODEL

- Turn the power switch off.
- Empty the wash tank by removing the overflow standpipe
- .Rinse the washing compartment to remove any dirt residues
- .Remove and clean the large pump filter
- Reassemble the parts in reverse order.

V500DP MODEL

- Turn the power switch to “DRAINAGE”.
- Removing the overflow standpipe
- Close the door
- Hold the “START” button for 3 seconds until selector switch light changes from flashing to steady.
- .Allow unit to complete its automatic empty cycle (about 120 seconds).
- .Rinse the washing compartment to remove any dirt residues
- .Remove and clean the large pump filter. Occasionally remove drain filter by turning counterclockwise, being careful not to allow waste to fall down drain pipe, clean, and replace by mounting back on pins and turning clockwise.
- Reassemble the parts in reverse order.

Never operate the dishwasher without the wash pump filter properly in place.

2.9 Maintenance / Care / Repair

Proper operation and safe use may be ensured only through the correct use of the appliance, as well as the compliance with the operation instructions, the corresponding specifications and the care and cleaning indications.

Notice : Before maintenance, other than daily interior cleaning, power and water supply to the machine must be turned off. The appliance should never be sprayed with water or high pressure cleaning solution, because any water or solution in the electrical elements will affect operation of the appliance as well as provide a potential for serious electrical shock.

No safety systems should be disabled.

2.9.2 Regular maintenance and cleaning.

Depending on local water hardness, the nozzles on the upper wash piping and rinse arms should be cleaned. Caution must be exercised to not damage the nozzles. If rinse nozzles are removed, they must be replaced with the slot in line with the rinse arm. **ATTENTION MUST BE GIVEN TO THE CORRECT INSTALLATION OF FILTERS, WASH ARMS, AND TEFLON BUSHINGS! REPLACE BUSHINGS IF WORN.** Clean the appliance with warm water and conventional cleaning aids. Stainless steel parts should never be cleaned them with "steel wool" wire brush, etc, since even the lightest contacts on the surfaces with steel may contaminate the stainless steel and cause rust formation. Use brushes made of polymer plastic or natural bristles or thin brass wire. Always keep brush movements in line with grain in the Stainless Steel so that you will not affect the appearance. Finally, rinse with clean water and dry thoroughly.

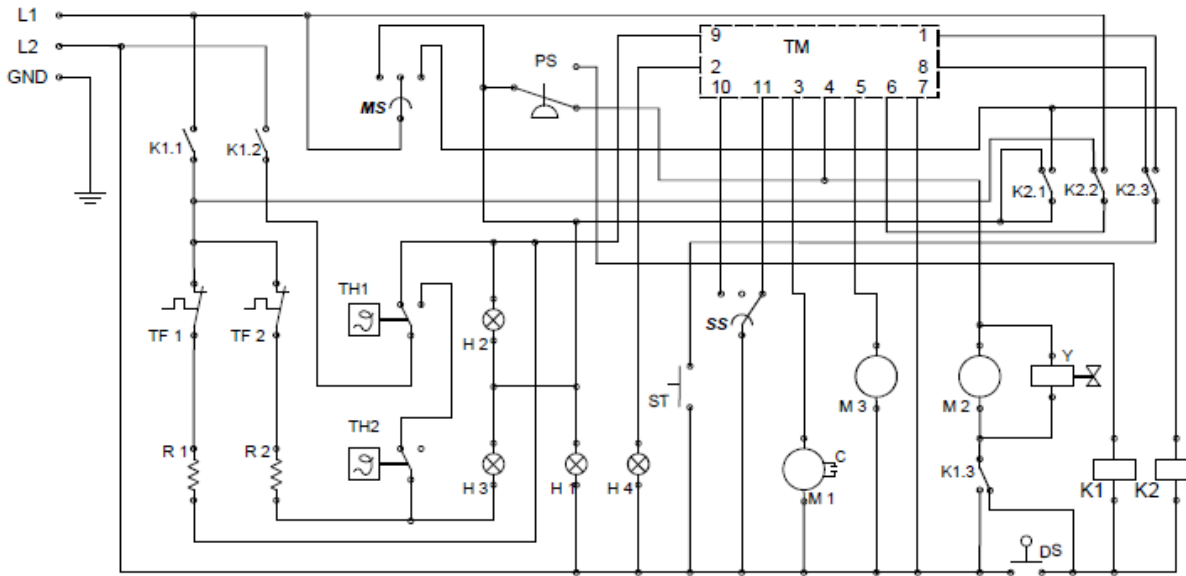
We remind you that corrosion (rust formation) on stainless steel surfaces is not created by itself, but rather due to the use of improper cleaning products (e.g. whitening or particularly caustic cleaning products based on chlorine).

Occasionally calcium sediments form on the internal walls of the wash compartment, tubing, and booster chamber (due to mineral particles in the water), which may affect the correct operation of the appliance and which requires removal.

2.11 Spare parts, Accessories and Components

Spare parts and components are usually available at the authorized local service agency, or directly from ULTIMO STAINLESS PRODUCTS INC, In case of warranty claims or complaints, you must supply the model and serial number of the appliance found on the specification label of the appliance.

2.12 Wiring Diagram WITH DRAIN PUMP



ELECTRICAL DIAGRAM

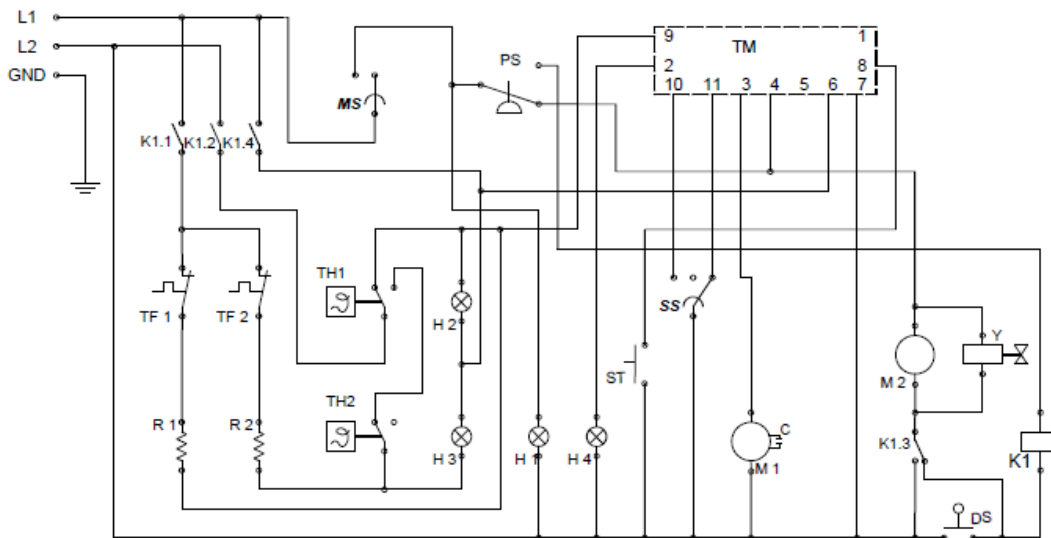
(with drainage pump)

V - 500

220-240 Volt AC 2ph 60 Hz

MS : Main switch	R1 : Booster's heating element
ST : Start switch	R2 : Tank's heating element
SS : Program selector switch	M1 : Wash pump motor
DS : Doors cut off switch	M2 : Detergent pump motor *
PS : Pressure switch	M3 : Drainage pump motor *
TH : Thermostat	K1 : Magnetic contactor
TF : Thermofuse	K2 : Microreley
TM : Electronic timer	Y : Water inlet valve
C : Capacitor	H : Indicator lamp

2.12 Wiring Diagram WITHOUT DRAIN PUMP



ELECTRICAL DIAGRAM

V - 500

208-240 Volt AC 2ph 60 Hz

MS : Main switch	R1 : Booster's heating element
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TF : Thermofuse	Y : Water inlet valve
TM : Electronic timer	H : Indicator lamp
C : Capacitor	

2.13 Troubleshooting

PROBLEM	CAUSE	SOLUTION
The dishwasher does not operate.	No power to the machine	Check the connection.
		Breaker or fuse has not been activated or is faulty
	Control switch S1 not activated.	Turn switch S1 on.
	Switch S1 is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Water supply not turned on.	Turn the supply on.
	Door is not closed.	Close the door.
	Water inlet valve is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
Fill water runs continuously	Overflow drain stand pipe not installed properly	Install overflow drain stand pipe
		Verify that overflow drain stand pipe is installed properly with overflow slots upwards.
The appliance operates, but the green operating pilot light does not illuminate.	The pilot light is faulty.	Change the pilot light.
	Wire lead to lamp disconnected	Reconnect power lead
	Lamp is out of it's socket	Insert lamp
Booster not heating	Switch S1 or main switch or fuse has not been activated.	Check the switch S1 of the appliance and the main switch or fuse.
	The booster thermostat is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	The booster 99°C thermal fuse is faulty.	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Pressure switch is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Booster heating contactor is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
Booster heating operates, but pilot light does not turn on.	The pilot light is faulty.	Change the pilot light
	Wire lead to lamp disconnected	Reconnect power lead
	Lamp is out of it's socket	Reconnect power lead
Wash tank heating does not operate.	The wash tank thermostat is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	The 60°C thermal fuse is burned or defective	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
Pump motor does not operate.	Main switch or fuse is not activated.	Activate main switch or fuse.
	The door is not closed.	Close the door.

	Main relay is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Pump motor is faulty	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Program timer is faulty.	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
Motor operates, but pump does not rotate	An object has jammed the pump impeller	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Hard water deposits or detergent have been petrified following non operation of the appliance.	Loosen deposits by rotating screw on rear side of pump motor
Washed items do not dry (dishes, glasses, etc.)	Rinse aid supply is empty	Replace or refill rinse aid container
	Rinse aid "dozer" valve is defective.	Refer to the detergent supplier, authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Timer is faulty.	Refer to the authorized service agency, local dealer, or Ultimo Stainless Products inc.
	Rinse arms (upper and/or lower) do not rotate.	Clean nozzles
		Replace Teflon bushings if worn. Note: take caution to not install rinse arm without bushings.

If a problem is not listed or corrected by any of the above, please refer to your local authorized service agency, dealer, or ULTIMO STAINLESS PRODUCTS INC.

3. Warranty

3.1 Warranty

WARRANTY POLICY FOR PROFESSIONAL DISHWASHERS

Ultimo Stainless Products inc. warrants the product sold to be free from defects in material and factory workmanship under normal conditions of use and maintenance for a period of one year from the date of installation at the end user, but not to exceed fifteen months from date of shipment unless agreed to by **Ultimo Stainless Products inc.** with a written extension.

In the event of a defect in material or factory workmanship covered by this warranty, Ultimo Stainless Products inc. or its authorized representative will authorize repair when notified, and repair or replace the defective part of the equipment that has become defective, and will cover labor and material cost within the warranty period or fifteen months from shipment date, whichever occurs first. Travel charges may not exceed a total of two hours or one hundred and fifty kilometers (one hundred miles). All defective parts must be retained or returned at the discretion of **Ultimo Stainless Products inc.** and warranty claims will be evaluated upon inspection of defective component. Overtime rates, or other sundry charges, must be approved in advance by **Ultimo Stainless Products inc.** or are generally not under warranty.

This unit must be properly maintained and operated in accordance with **Ultimo Stainless Products inc.** maintenance and operating procedures.

Ultimo Stainless Products inc. retains the right, at its own expense, to have its representatives inspect the unit(s) at the end user's premises and to request all records pertaining to such unit(s) to determine whether a defect is the result of defective material, or improper use of the unit.

This warranty does not cover parts or accessories which carry the warranty of an original supplier, or improper uses, which includes inappropriate detergents. It is also voided by improper installation not in accordance with **Ultimo Stainless Products inc.** instructions.

Modification or alterations of this unit from its condition at the date of original sale will void all warranty.

Labor charges associated with the replacement of minor items such as, but not limited to, wash arms, switches, pilot lights, gauges, etc. or replacement of normal wear items is not included. Adjustments and/or calibrations are not warranted. **Drain or water supply hoses are not guaranteed.**

Failure due to improper water supply is not covered by this warranty.

This warranty is void if failure is a direct result of improper handling, fire, water, acts of God, insurgencies, and also improper repair or misuse by authorized or unauthorized persons, or improper installation.

This warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether expressed or implied by application of law or otherwise, including, but not limited to, any representation as to performance, and any implied warranties of fitness for a particular purpose,

THIS EQUIPMENT IS INTENDED FOR PROFESSIONAL FOOD SERVICE USE ONLY AND NOT FOR ANY OTHER USE WHETHER FOR INDUSTRIAL, PERSONAL, OR HOUSEHOLD, (UNLESS SPECIFICALLY AGREED TO BY ULTIMO STAINLESS PRODUCTS INC.), OR OTHER UNINTENDED USE, AND SUCH USE WILL IMMEDIATELY CAUSE THIS WARRANTY TO BE NULL AND VOID. THE SALE FOR THESE PURPOSES SHALL BE DEEMED TO HAVE BEEN EFFECTED WITHOUT ANY WARRANTY OR LIABILITY OF ANY KIND, INCLUDING, AND WITHOUT LIMITATION OR REFERENCE TO WARRANTY AS TO SUITABILITY FOR ANY OTHER THAN INTENDED PURPOSE.

Warranty registration must be effected within 30 days of purchase. If installation is delayed, warranty period commencement may deviate if requested by the dealer that the circumstance requires extension of this period. However this must be agreed and confirmed by Ultimo Stainless Products inc.

The best engineers are those who listen to their end users needs and come up with solutions to problems to meet those needs.

In this regard we invite you to suggest improvements, changes, or remedies to make the product the best available in it's field. Your suggestions and recommendations are welcome at the email address below.

THE COMPANY RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS WITHOUT PRIOR NOTIFICATION.

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