INSTALLATION, OPERATION, AND SERVICE MANUAL



HT-E



REVISION HISTORY

Revision Letter	Revision Date	Made by	Applicable ECNs	Details
А	9-12-19	JH	N/A	Initial release of the manual.



HT-E

Undercounter dishmachine; high-temperature, hot-water sanitizing, with a booster tank, drain pump, and detergent and rinse-aid dispensers.

The manufacturer provides technical support for the dishmachine detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual open when you call so that our staff can refer you, if necessary, to the proper page. Technical support is not available on holidays.

Contact technical support toll-free at 1-888-800-5672.

Technical support is available for service personnel only.

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208-230 V 60 Hz 1 Phase	28

SYMBOLS



- Risk of Injury to Personnel



- Risk of Damage to Equipment



Risk of Electrical Shock



- Caustic Chemicals



Reference Data Plate



- Lockout Electrical Power





- Instructions Hyperlink

ABBREVIATIONS & ACRONYMS

ANSI - American National Standards Institute

CFM - Cubic Feet per Minute

dBA - Decibels Adjusted

GHT - Garden Hose Thread

GPH - Gallons per Hour

GPM - Gallons per Minute

GPG - Grains per Gallon

HP - Horse Power

Hz - Hertz

ID - Inside Diameter

kW - Kilowatts

MCA - Minimum Circuit Ampacity

MOP - Maximum Overcurrent Protection

NFPA - National Fire Protection Association

NPT - National Pipe Thread

OD - Outside Diameter

PRV - Pressure Regulating Valve

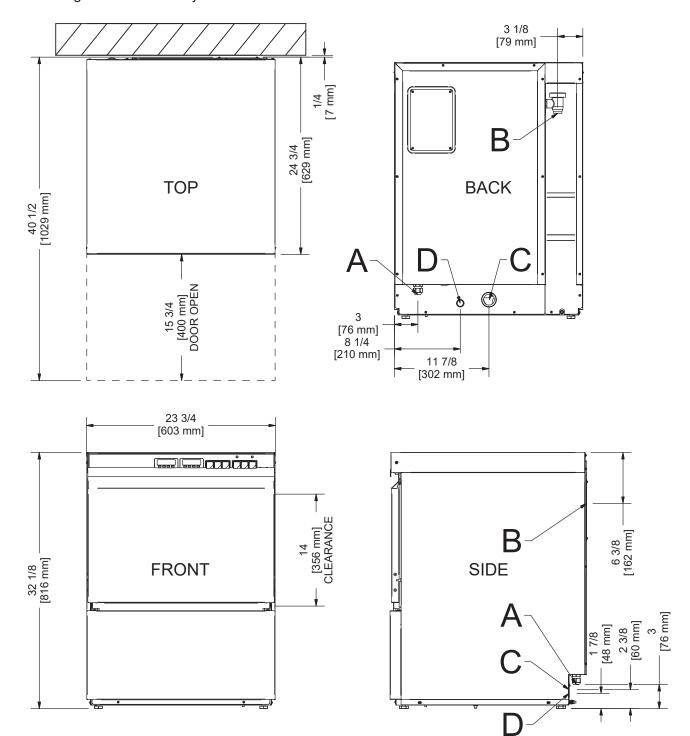
PSI - Pounds per Square Inch

V - Volts

LEGEND

- A Electrical Connection
- B Water Inlet (connection actually at end of pre-installed hose)
- C Drain Connection
- D Chemical Connection

All dimensions from the floor can be increased 2" using the machine's adjustable feet.



SPECIFICATIONS

OPERATING PARAMETERS

Operating Capacity (without Load Time):	
Racks per Hour	32
Dishes per Hour	800
Glasses per Hour	1152
Operating Capacity (with Load Time):	
Racks per Hour	25
Dishes per Hour	625
Glasses per Hour	900
Cycle Times (Normal):	
Wash Time	92
Rinse Time	9
Dwell Time	10
Total Cycle Time	111
Cycle Times (Heavy):	
Wash Time	281
Rinse Time	9
Dwell Time	10
Total Cycle Time	300
Tank Capacity (Gallons/Liters):	
Wash Tank	4.76/18
Booster Tank	2.38/9
Electrical Loads (as applicable):	
Wash Motor HP	3/4
Wash Heater kW (208 V)	3.2
Wash Heater kW (230 V)	3.9
Booster Heater kW (208 V)	4.5
Booster Heater kW (230 V)	5.5



NOTICE Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and is subject to change without notice.

Sound Level:

Workplace-related Emission Value (dBA)	66
Water Temperatures (°F):	
Minimum Wash Temperature	150
Minimum Rinse Temperature	180
Minimum Incoming Water Temperature	110
Water Consumption:	
Gallons per Rack	0.69
Gallons per Hour	22.1
Other Water Requirements:	
Water Flow Pressure (PSI)	20 ± 5
Flow Rate Minimum (GPM)	4.6
Water Line Connection Size	3/4" GHT
Water Line Size (NPT)	1/2"
Drain Line Size (NPT)	1"

SPECIFICATIONS

ELECTRICAL REQUIREMENTS





All electrical ratings provided in this manual are for reference only. Always refer to the machine data plate to get exact electrical information for this machine. All electrical work performed on machines should be done in accordance with applicable local, state, territorial, and national codes. Work should only be performed by qualified electricians and authorized service agents.

Note that all electrical wiring used in the HT-E must be rated, at a minimum, for 212 $^{\circ}$ F (100 $^{\circ}$ C), and that only copper conductors must be used.

Where applicable, heating element amperage draws have been adjusted for the assumed input voltage. The manufacturer assumes incoming voltages will be either 208 or 230 Volts. Some heating elements used in the machines are rated for other voltages, such as 240 Volts and 480 Volts. Always verify the amperage draw of the machine in operation when sizing circuit protection.

Available Electrical Characteristics:

- 208 V, 60 Hz, Single-phase
- 230 V, 60 Hz, Single-phase

Electrical Characteristics HT-E

VOLTS	208	230
PHASE	1	1
FREQ	60	60
WASH MOTOR AMPS	3.8 A	3.8 A
DRAIN MOTOR AMPS	0.3 A	0.3 A
RINSE MOTOR AMPS	1.8 A	1.8 A
WASH HEATER AMPS	15.2 A	16.8 A
BOOSTER HEATER AMPS	21.7 A	24.0 A
TOTAL LOAD	25.8 A*	27.8 A*
MCA	31.8 A	34.7 A
МОР	35.0 A	35.0 A

^{*} Heaters and motors do not operate at the same time. Electrical loads based on highest amp draw.

INSPECTION

Do not throw away packaging if damage is evident!

Before installing machine, check packaging and machine for damage. Damaged packaging might be an indication of damage to the machine. If there is any type of damage to both packaging and machine, do not throw away the packaging. The machine has been inspected at the factory before shipping and is expected to arrive in new, undamaged condition. However, rough handling by carriers or others might result in damage to the machine while in transit. If this occurs, do not return machine to the manufacturer. Instead, contact the carrier and ask them to send a representative to the site to inspect the damage and request that an inspection report be completed.

Contact the carrier within 48 hours of receiving the machine as well as the dealer that sold you the machine.

UNPACKING The machine should be unpacked and removed from the pallet before installing. Open the front door and remove all materials from inside. Once unpacked, verify there are no missing parts. If a part is missing, contact the manufacturer immediately.

The plumber must flush the incoming water line!

PLUMBING All plumbing connections must adhere to local, state, territorial, and national codes. The installing plumber is responsible for ensuring the incoming water lines are flushed of debris before connecting to the machine. Note that chips and materials from cutting processes can become lodged in the solenoid valves and prevent them from opening or closing. Any valves found to be fouled or defective because of foreign matter left in the water line, and any subsequent damage, are not the responsibility of the manufacturer.

A water hardness test must be performed.

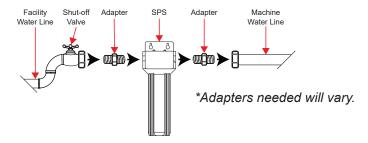
A water hardness test must be performed. If water hardness is higher than 3 GPG, install a water softener or install the optional Scale Prevention System (SPS). See the next section and the Plumbing Options page for more information on the SPS.

WATER SUPPLY **CONNECTIONS: WATER HARDNESS HIGHER THAN 3 GPG**

If water hardness is higher than 3 GPG and a water softener is not being used, install the SPS into the water line between the facility water line and machine water line. Observe proper inlet/outlet water directions. A water shut-off valve should be installed before installing the SPS to allow access for service. The water supply must be capable of the minimum "flow" pressure at the recommended temperature indicated on the data plate.



Example



WATER SUPPLY **CONNECTIONS:** WATER HARDNESS **LOWER THAN 3 GPG**

If water hardness tests at 3 GPG or lower, connect the machine water line (installed at the factory, 3/4" Male GHT connected to a true 1/2" ID line) to the facility water line. A water shut-off valve should be installed in the water line between the facility supply and the machine to allow access for service. The water supply line must be capable of the minimum "flow" pressure at the recommended temperature indicated on the data plate.

PRESSURE REGULATOR

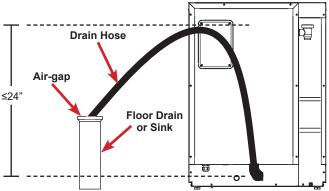
Take care not to confuse static pressure with flow pressure!

The manufacturer has an optional Pressure Regulating Valve (PRV) to accommodate areas where water pressure fluctuates or is higher than the recommended pressure. Take care not to confuse static pressure with flow pressure. Static pressure is line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the valve is open during the cycle. See the Plumbing Options page.

SHOCK ABSORBER A shock absorber (not supplied) should be installed on the incoming water line. This prevents water hammer or hydraulic shock—induced by the solenoid valve as it operates—from causing damage to the equipment. See the Plumbing Options page.

DRAIN LINE

CONNECTING THE The machine has a pumped (pressure) drain capable of pumping waste water to a height of 24" above the machine's drain pump and is supplied with a drain hose. There must be an air-gap between/around the machine drain hose and the floor drain or sink. The floor drain or sink must be at least 1.5 times larger than the machine drain hose. If a grease trap is required by code, it should have a flow capacity of 12 GPM.



PLUMBING CHECK After installing the incoming water line and the drain line, slowly turn on the water supply to the machine. Check for any leaks and repair as required. All leaks must be repaired before operating the machine.

ELECTRICAL POWER CONNECTIONS

Electrical and grounding conductors must comply with the applicable portions of the National Electric Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

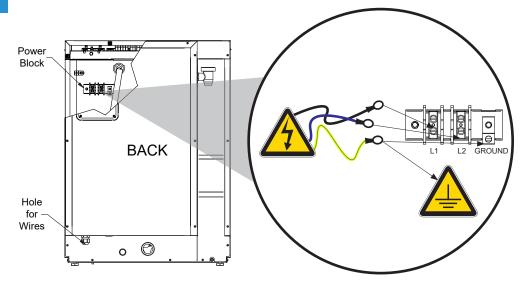




Refer to the data plate for machine operating requirements, machine voltage, total amperage, and serial number.

Disconnect electrical power at the breaker or disconnect switch and tag-out in accordance with procedures and codes.

Remove the back panel. Route power wires through indicated hole and connect to power block and grounding lug. Install the service wires (L1 and L2) to the appropriate terminals as they are marked below. Install the grounding wire into the lug provided. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.







VOLTAGE CHECK Apply power to machine. Check incoming power at the terminal block and ensure it corresponds with the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run machine if voltage is too high or too low. Shut-off the service breaker and advise all proper personnel of the location of the breaker and any problems.

AREA

SURROUNDING This is a commercial machine and reaches temperatures that can exceed those generated by a residential machine. Surrounding countertops, cabinets, and flooring/subflooring material must be designed and/or selected with these higher temperatures in mind.

NOTICE Any damage to surrounding area that is caused by heat and/or moisture to materials that are not recommended for higher temperatures will not be covered under warranty or by the manufacturer.

THERMOSTATS



The thermostats on this machine have been set at the factory. They should only be adjusted by an authorized service agent.

If adjustments are necessary, click here for instructions.

EQUIPMENT

CHEMICAL FEEDER The HT-E dishmachine is supplied with detergent and rinse-aid chemical feeder pumps. The pumps have regulating screws to adjust the amount of chemicals being dispensed. Locate the open ends of the chemical tubes and place each one in the appropriate container. The tubes are labeled "Detergent" and "Rinse-Aid."

PRIMING CHEMICAL FEEDER PUMPS



CAUTION! Water must be in the sump and wash tank before chemicals are dispensed!





WARNING! Some of the chemicals used in dishwashing might cause chemical burns if they come in contact with skin. Wear protective gear when handling these chemicals. If any contact with skin occurs, immediately follow the treatment instructions provided with the chemicals.

The bottom of chemical containers cannot be located any higher than 8" from the floor. Chemical feeder pumps need priming when the machine is first installed or if the chemical lines have been removed and air was allowed to enter.

- Verify proper chemical tube stiffener inlet is in proper container.
- Use prime buttons located on control panel to prime each pump. The buttons are clearly marked DETERGENT and RINSE-AID.
- To prime pumps: 3.
 - Detergent hold DETERGENT button down until detergent is seen entering wash tank.



Rinse-aid - hold RINSE AID button down for two minutes.



LEVELING A level machine is important to prevent any damage to the machine during operation and to ensure the best possible results. The machine comes equipped with adjustable bullet feet which can be turned using a pair of pliers. Since this is an undercounter machine, it should be leveled as close as possible to the machine's location before it is pushed under the counter.

PREPARATION Before operating machine, verify the following:

1. Standpipe is seated in place and clean.



2. Strainers (shown removed for clarity) are in place and clean.

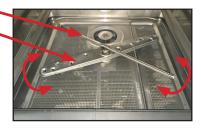








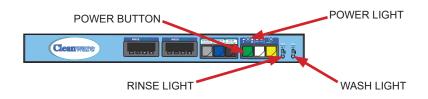
Wash and rinse arms are securely in place and rotate freely.



4. Chemical levels in chemical containers are correct.

FILLING THE 1. Close door. WASH TANK 2. Push POWER button.

- 3. Power light will illuminate and tank and booster will begin filling.
- 4. Rinse and wash lights will illuminate. Once tank and booster have filled and reached minimum temperature, rinse and wash lights will go out.



PREPARATION

WARE Proper ware preparation will help ensure good results and fewer re-washes. If not done properly, ware might not come out clean and the efficiency of the machine will be reduced. Putting unscraped dishes into the machine affects its performance, so scraps should always be removed from ware before being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes. Place cups and glasses upside-down in racks so they don't hold water during the cycle. The machine sanitizes as well as cleans. To do this, ware must be properly prepared before being placed in the machine.

OF WARE

WASHING A RACK Open the door completely, slide a rack into the machine, and close the door. Choose the wash cycle with the CYCLE button. Press the START button and the cycle light will illuminate. When the cycle is complete, the cycle light will turn off. Open the door and remove the rack.



OPERATIONAL INSPECTION

Based on use, the strainers might become clogged with soil and debris as the workday progresses. Operators should regularly inspect the strainers to ensure they have not become clogged. If clogged, the washing capability of the machine will be reduced. Instruct operators to clean out the strainers at regular intervals or as required by workload.

ALARMS



Time-out Tank Filling: If the level in the wash tank has not been reached within five minutes and ten seconds, the filling solenoid valve is disconnected and the cycle light starts blinking with a frequency of 0.5 seconds. To restart filling and to disconnect the alarm, push the START button or turn the machine off and on by pressing the POWER button twice.

Determine the reason for machine not filling and fix (see Troubleshooting section) before switching the machine on.

Booster Heating (with Thermo Stop): If the minimum booster temperature has not been reached within eight minutes, the machine will pause and a rinsing phase will follow. The cycle light starts blinking with a frequency of 0.3 seconds and keeps blinking after the cycle ends. To disconnect the alarm, turn the machine off and on by pressing the POWER button twice.

Determine the reason for temperature not being reached and fix (see Troubleshooting section) before switching the machine on.

Open Door: If door is opened at any time during the wash cycle, the cycle stops, all machine functions are cut off (except heating elements), and the cycle light starts blinking with a frequency of 0.5 seconds. If door is closed, the cycle restarts from the stopping point and the cycle light stays on.

If alarm activates with the door closed, ensure the door switch is in correct position and works properly.

- **DRAINING** 1. With machine on, open door.
 - Remove standpipe.



WARNING! Water will be hot!



3. Hold START button for about five seconds.



- 4. When cycle starts, close door.
- 5. Total tank draining takes about three minutes.
- 6. After draining is complete, turn machine off by pushing POWER button. Leave machine off for at least ten seconds (this resets machine to normal function).



SHUTDOWN & 1. Follow Draining section.

- **CLEANING** 2. Once machine is drained, turn power off and remove all debris from strainers.



3. Remove rinse and wash arms.





4. Verify rinse arms are not clogged. If so, remove end-caps with a 12 mm wrench, clean nozzles with a brush, and flush with fresh water. Inspect end-cap o-rings and replace if damaged. Replace end-caps and tighten.







SHUTDOWN & 5. CLEANING

5. Verify wash arms are not clogged. If so, clean nozzles with a brush and flush with fresh water.



6. Remove strainers.









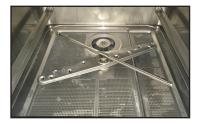
7. Rinse strainers with water and wipe-out with a rag. Use a toothpick to dislodge any stubborn debris.



- 8. Spray or wipe-out interior of machine. Ensure all debris is removed from tub bottom.
- 9. Replace strainers and ensure they are correctly seated.



10. Replace rinse arms, wash arms, and standpipe.



11. After cleaning is complete, stainless steel polish can be used to clean and protect the outside of the machine.

DELIMING

To perform a deliming operation, follow the steps below. The tank capacities of the machine can be found in the Specifications section of this manual.

- 1. Follow Filling the Wash Tank section.
- Once rinse and wash lights have gone out, press DELIME button to turn off chemical feeder pumps.



- 3. Add deliming solution to wash tank per chemical supplier's instructions.
- 4. Close door.
- 5. Use CYCLE button to select the heavy cycle.



6. Push START button.



7. Cycle light will illuminate. When cycle is complete, cycle light will go out.



- 8. Wait until cycle is complete and inspect inside of the machine. If the machine is not delimed, run again.
- 9. If the machine is delimed, follow Draining section.
- 10. After draining is complete, turn machine off by pushing POWER button. Leave machine off for at least ten seconds (this resets machine to normal function).
- 11. Press DELIME button to turn chemical feeder pumps back on.



12. Press POWER button.



13. Run two cycles with no ware to remove residual deliming solution.

NOTICE

If this machine is equipped with the SPS scale prevention and corrosion control device and lime is becoming a frequent problem, the cartridge needs to be replaced. To order a replacement cartridge, call the manufacturer.



caution! This equipment is not recommended for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials/components and will void the manufacturer's warranty.

DETERGENT CONTROL

Detergent usage and water hardness are two factors that contribute greatly to how efficiently this machine will operate. Using detergent in the proper amount can become a source of substantial savings. A qualified water treatment specialist can determine what is needed for maximum efficiency from the detergent.

- Hard water greatly affects the performance of the machine, causing the amount of detergent required for washing to increase. If the machine is installed in an area with hard water, the manufacturer recommends the installation of water treatment equipment.
- 2. Deposited solids from hard water can cause spotting that will not be removed with a drying agent. Treated water will reduce this occurence.
- Treated water may not be suitable for use in other areas of operation and it could be necessary to install a water treatment unit for the water going to the machine only. Discuss this option with a qualified water treatment specialist.
- Operators should be properly trained on how much detergent to use per cycle.
 Meet with a water treatment specialist and chemical supplier to discuss a complete training program for operators.
- 5. This machine requires that chemicals be provided for proper operation and sanitization. Contact a chemical supplier with any questions.
- 6. Water temperature is an important factor in ensuring the machine functions properly, and the machine's data plate details what the minimum temperatures must be for the incoming water supply, the wash tank, and the rinse tank. If minimum requirements are not met, there is a possibility that dishes will not be clean or sanitized.
- Instruct operators to observe the required temperatures and to report when they fall below the minimum allowed. A loss of temperature can indicate a larger problem.



MAINTENANCE

PREVENTATIVE MAINTENANCE

PREVENTATIVE **MAINTENANCE**



The manufacturer highly recommends that any maintenance and repairs not specifically discussed in this manual be performed only by qualified service personnel.

WARNING! Unqualified personnel performing maintenance on the machine may void the warranty, lead to larger problems, or cause harm to the operator.

Following the operating and cleaning instructions in this manual will result in the most efficient results from the machine. As a reminder, here are some steps to ensure the machine is being used the way it was designed to work:





CAUTION! Do NOT beat strainers to remove debris!

- 1. Ensure water temperatures match those listed on machine data plate. A loss of temperature can indicate a larger problem.
- 2. Ensure all strainers are clean and securely in place before operating the machine. When cleaning out strainers, do NOT beat them on waste cans. Rinse strainers with water and wipe-out with a rag. Use a toothpick to dislodge any stubborn debris.
- Ensure rinse and wash arms are secure in the machine before operating.
- Ensure standpipe is in position before operating.
- Remove as much soil from dishes as possible by hand before loading into racks.
- Do not overfill racks.
- Ensure glasses are placed upside-down in the rack.
- Ensure all chemicals being injected into the machine are at correct concentrations.
- Clean the machine at end of every day/shift per Shutdown and Cleaning section of this manual.
- 10. Follow all safety procedures, whether listed in this manual or put forth by local, state, or national codes/regulations.

CLEANOUT 1. Follow Draining section.

DRAIN PUMP This machine is equipped with a drain pump, which requires cleaning periodically.

- 2. Place container under cleanout to catch water in drain pump.
- 3. Remove cleanout from front of machine, remove debris, rinse with water, and replace.





TROUBLESHOOTING

TROUBLESHOOTING





WARNING! Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the machine have power to it and live electrical components be exposed. USE EXTREME CAUTION WHEN TESTING THE MACHINE.

OBSERVATION	POSSIBLE CAUSE	REMEDY
A. Power light not illuminating.	 Power disconnect "OFF." Power disconnect or fuses burned out. Power light damaged. Power button damaged. 	 Flip power disconnect to "ON." Contact qualified service agency. Contact qualified service agency. Contact qualified service agency.
B. Machine not filling.	 Water inlet interceptor shutter down. Standpipe not seated. Inlet solenoid valve filter clogged. Inlet solenoid valve coil disconnected. Inlet pipe filter clogged. Faulty PCB. 	 Open the shutter. Fit the overflow properly into the drain. Clean the solenoid valve filter. Contact qualified service agency. Clean the inlet hose filter. Replace.
C. Machine keeps filling after water level is reached.	 Solenoid valve membranes damaged. Solenoid valve membranes dirty. 	Contact qualified service agency. Contact qualified service agency.
D. Wash ineffective.	 Detergent ineffectual/unsuitable. Detergent incorrectly dosed. Suction filter dirty. Too much foam in the tank. Wash arms do not rotate freely. 	 Change detergent. Increase detergent dose. Clean the filter. Decrease detergent dose. Clean wash arms and bushings.
E. Rinse inadequate.	 Water pressure below requirement. Nozzles clogged with lime deposits. Solenoid valve filter clogged. Rinse solenoid valve coil disconnected. Inlet hose filter dirty. Lime deposits in the booster. Rinse arms do not rotate freely. 	 Adjust water pressure to meet requirement. Perform deliming operation. Clean the filter. Contact qualified service agency. Clean the filter. Contact qualified service agency. Clean rinse arms and bushings.

TROUBLESHOOTING

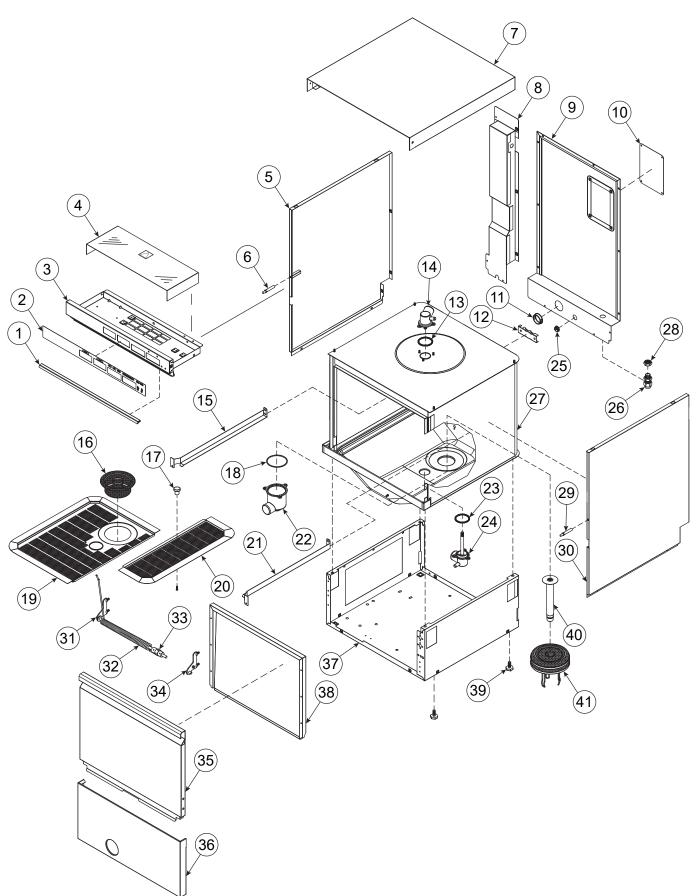
TROUBLESHOOTING





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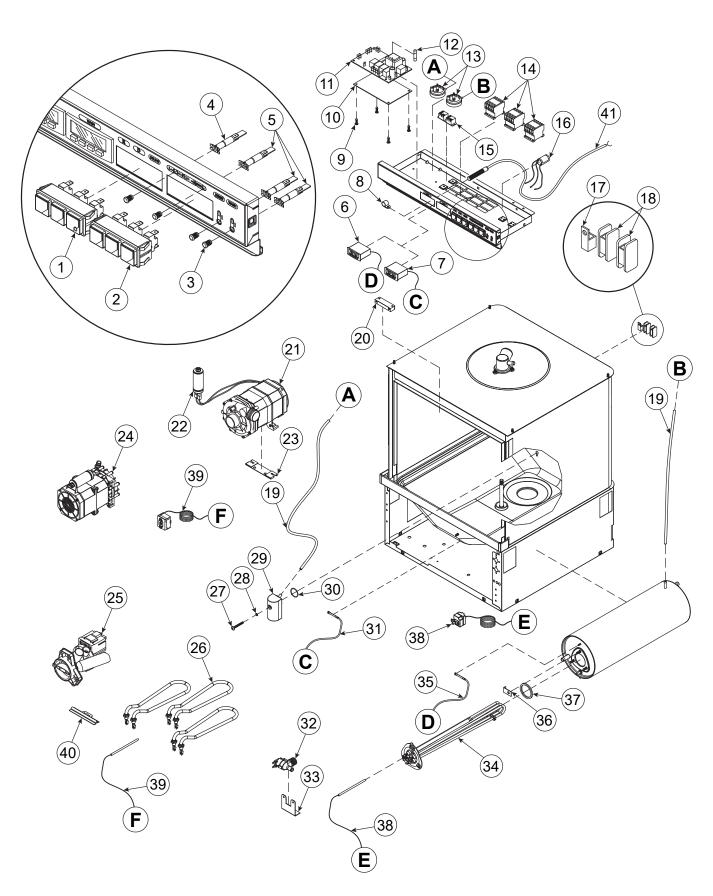
OBSERVATION	POSSIBLE CAUSE	REMEDY
F. Rinse temperature inadequate.	 Water pressure above requirement. Heating element damaged. Heating element encrusted with lime deposits. Safety thermostat activated. 	 Adjust water pressure to meet requirement. Contact qualified service agency. Perform deliming operation. Press reset button.
G. Wash temperature inadequate.	 Safety thermostat activated. Heating element damaged. Heating element encrusted with lime deposits. 	 Press reset button. Contact qualified service agency. Perform deliming operation.
H. Rinse light not illuminating.	Rinse light damaged.	Contact qualified service agency.
I. Rinse light remains illuminated.	1. See Observation E.	See Observation E.
J. Wash light not illuminating.	1. Wash light damaged.	Contact qualified service agency.
K. Rinse light remains illuminated.	See Observation F.	See Observation F.
L. Machine continues to operate with door open.	Microdoor damaged. Microdoor out of line with magnetic field.	Contact qualified service agency. Contact qualified service agency.
M. Machine not draining.	1. Drain pump clogged.	See Drain Pump Cleanout section.



TUB & FRAME

ITEM	PART NUMBER
1	512054900
2	512072300
3	511145400
4	513258400
5	511144300
6	512083500
7	513226400
8	511145900
9	513380900
10	513373100
11	500063700
12	513370900
13	512069100
14	511081400
15	513266200
16	512104600
17	513293800
18	512074100
19	513371000
20	513371100
21	513266100

ITEM	PART NUMBER
22	513284700
23	512069100
24	511141900
25	500062200
26	500032800
27	511146000
28	500036800
29	512083500
30	511144400
31	511084800
32	512006200
33	513230700
34	511084900
35	511143400
36	513375000
37	513375400
38	513375600
39	500008700
40	511114700
41	511102200



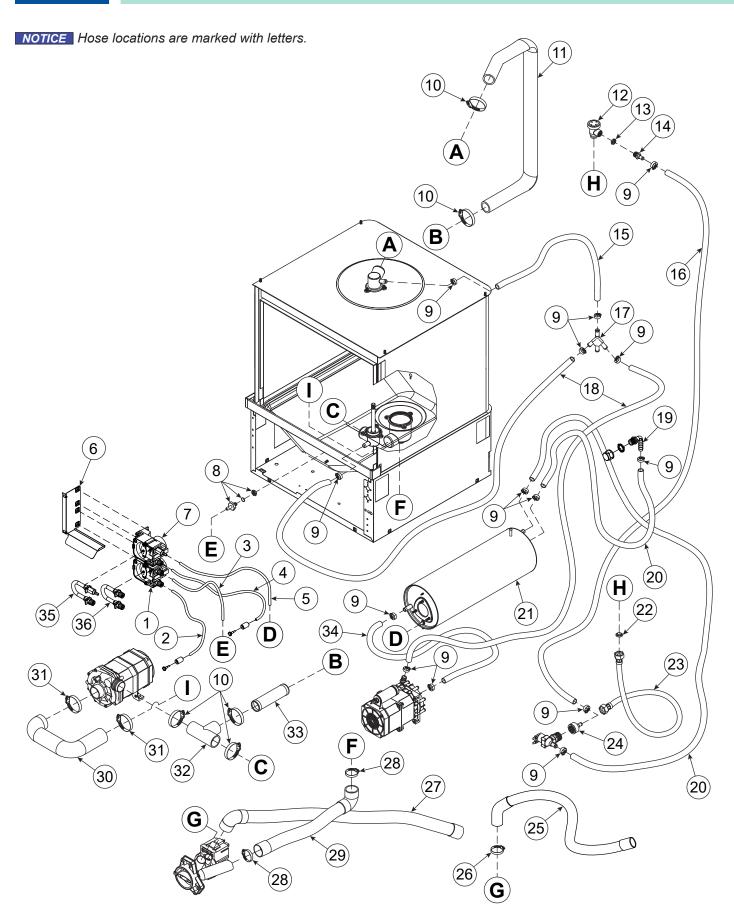
ELECTRICAL

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PARTS

ITEM	PART NUMBER
1	500114200
2	500005300
3	500110300
4	500064600
5	500064500
6	512108500
7	512108400
8	500116200
9	502019800
10	513141100
11	500113000
12	500087200
13	500000400
14	500035100
15	500019100
16	500011400
17	500112800
18	500112700
19	512023200
20	500046100
21	512107000

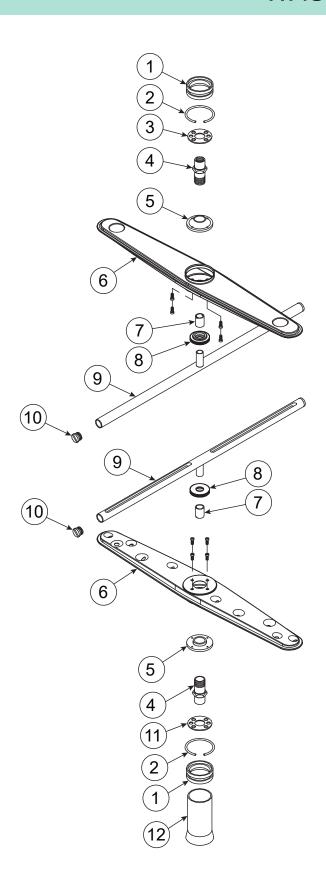
ITEM	PART NUMBER
22	512008100
23	513373900
24	512106500
25	510011100
26	512109300
27	502019400
28	500086400
29	513233200
30	512106900
31	500111500
32	500114700
33	513009700
34	512004410
35	500111500
36	513271600
37	512006800
38	500064000
39	500117400
40	543255900
41	500115900



23

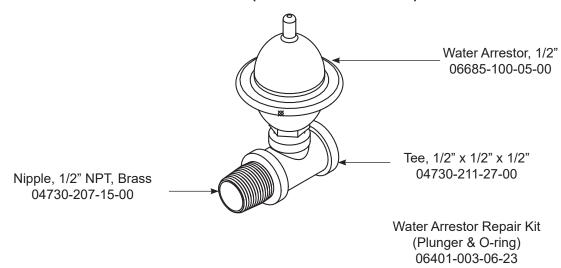
ITEM	PART NUMBER
1	CWM512072000
2	Tube - 512009100 Stabilizer - 513119600 Filter - 500108800
3	512023200
4	Tube - 512069300 Stabilizer - 513119600 Filter - 500108800
5	512073700
6	513386700
7	512072100
8	513374100
9	502000800
10	502001600
11	512106300
12	500112000
13	513000400
14	513374400
15	513385100
16	513385300
17	513224800
18	513385200

ITEM	PART NUMBER
19	510011500
20	512077300
21	511145300
22	512009300
23	512105100
24	512105200
25	512059900
26	502001100
27	512105000
28	502023400
29	512060000
30	512055100
31	502002000
32	512068600
33	513374300
34	513385000
35	512072500
36	512072200

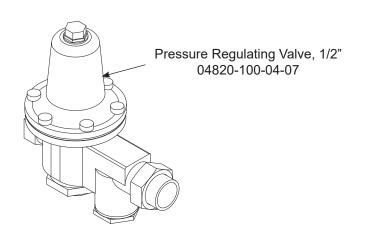


ITEM	PART NUMBER
1	513185600
2	512053100
3	513186900
4	513186000
5	513185900
6	Complete Assembly - 600062900 Arm Only - 511060800
7	513186100
8	513186200
9	Complete Assembly - 600063800 Arm Only - 511069900
10	513202900
11	513186300
12	513244800

SHOCK ABSORBER (WATER ARRESTOR) OPTION



PRV OPTION



CLEANWARE HT-E SCHEMATIC 208/230 VOLTS, 60 Hz, 1-PHASE **LEGEND** CONTACTOR, BOOSTER CB PUMP, WASH BOARD, PCB CONTACTOR, POWER SUPPLY PUMP, RINSE LAMP, POWER PILOT CL SL CV CONTACTOR, TANK PS PUMP, DRAIN SR SWITCH, RINSE AID, MANUAL DB DISTRIBUTOR, RINSE AID, ELECTRIC PV SWITCH, TANK PRESSURE ST START DISTRIBUTOR, DETERGENT, ELECTRIC SV LAMP, TANK PILOT DD ΕV VALVE, TANK SOLENOID RB ELEMENT, BOOSTER HEATING SW SWITCH, DETERGENT, MANUAL IG SWITCH, MAIN RV ELEMENT, TANK HEATING TTV THERMOSTAT, TANK THERMOMETER Μ BOARD, TERMINAL SB LAMP, BOOSTER PILOT **TVS** THERMOSTAT, TANK HI-LIMIT MP MICROSWITCH, DOOR SC LAMP START PILOT TTB THERMOSTAT, BOOSTER THERMOMETER RELAY, DOOR MICROSWITCH SCV SWITCH, CYCLE SELECTION MPR **TBS** THERMOSTAT, BOOSTER HI-LIMIT SWITCH, BOOSTER PRESSURE SD SWITCH, DISTRIBUTORS PB Main Contactor °30 °30 L1 30 30 N Tank Booster Contactor Contactor NB 33 33 **** L2 RBIG P12 P11 -CST Start Switch P11 56/25 P25 Pressure P11 -88 Cycle MP elector P1 SCV P25 P10 T1 Т2 $|/|_{\mathsf{MPR}}$ P10 PB 56/25 Booster Pressure P26 P20 P21 P22 P23 P24 P25 P1 P11 P10 Booster ↑ Hi-Limit Scheda (88701109) SE TBS Р7 R P14 P13 P16 P14 P15 P17 P12 4 5 Booster T-stat TTB <u>Р</u>7 Manual Chemical 3 5 P7 Dispense MPR r TVS Tank Hi-Limit₁₃ |-(SR 160 170 4 , 215 o<u>17</u>0 P14 160 Pilot Tank P11 TTV Lamp T-stat (X)SL Auto/ 3 14 Manual 17 16 P12 Main Contactor Chemical Contactor P14 Selection P15 Booster SB P16 P17 P15 XEV (PS CL PL) (\times) sc (PR) CB (DB) ⊗s∨ P12 P12 Lamp P12 P12 P12 P12 P12 P12 16 P12 Drain (DD) P12 Tank Pump Valve Pump _am Contacto Det. Disp P12 09905-004-72-26-A

