

KLE-115U Single Rack Undercounter Configuration Instruction Manual

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FEATURES

- Heavy stainless steel construction
- 14 1/2" vertical door opening
- Stainless steel spray base & pump screen
- Instant start switch
- Built-in door safety switch
- 9" high gravity drain
- Self sealing gasketless door
- Built-in chemical feed package
- Front mount start, fill, drain, & prime switches
- Fixed overhead spray arm
- Built-in scrap tray
- Slide out control package
- Slip-on pump connections
- Built-in delime switch
- Available with drain pump for applications where drain is located above dishmachine water level

SPECIFICATIONS

PLUMBING:

- 3/4" Water Inlet Size
- 1 1/2" Drain Size (3/4" NPT with drain pump)
- Gallons per hour: 57
- Pump capacity: 49 GPM

CAPACITY:

- 30 Racks per hour
- 19 3/4" x 19 3/4" Standard Rack
- 14 1/2" Vertical Clearance

SHIPPING DIMENSIONS:

- 25" x 24" x 35"
- Weight: 195 lbs. (215 lbs. with drain pump)

TECHNICAL:

- 3450 RPM Pump Motor
- 30 RPM Chemical Injection Motors (3)
- 140 Degree Wash Temperature
- 90 Second Wash/Rinse Cycle
 - 47 Sec. Wash —
 - 15 Sec. Flush —
 - 28 Sec. Rinse —

POWER REQUIREMENTS:

- 115 VAC, 60 Hz, 20 Amp Supply (connections located on removable bracket inside of control box)
- Load current: 13 Amps Continuous

INTRODUCTION

The KLE-115u Low Energy Undercounter Dishmachine is designed to provide years of excellent warewash results under many types of conditions. Each machine is configured as a manual start dishmachine, meaning that the machine starts when the "START" switch is depressed. The KLE-115u dishmachine includes a three product chemical dispenser located in the control housing of the machine which dispenses liquid detergent, rinse product, and a chemical sanitizer suitable for low temperature (recommended 140°F) applications. Options and additional features are also available; contact your nearest Knight representative for more details.

INSTALLATION



WARNING: APPLIANCE MUST BE INSTALLED
PER NATIONAL ELECTRICAL CODE SECTION 422!



- (1) Inspect the machine upon initial receipt. Pull the door down and examine the accessory package located inside machine. Note that it includes spray arms and other equipment required for installation.
- (2) Examine the spot where the machine is to be normally operated. Ensure that all electrical and plumbing connections, as well as counter height, have been considered for installation.
- (3) Level dishmachine using adjustable "bullet feet" at bottom of machine legs. Install spray arm included in accessory box.
- (4) Connect hot water supply connection to rear of machine at the line strainer. Ensure that water pressure is sufficient for fill. Make proper drain connections using drain accessories found in accessory kit. Ensure all plumbing connections are in accordance with applicable plumbing codes.
- (5) Make proper electrical connections (refer to data plate for voltage and current ratings) to the removable barrier assembly provided at the back of the control box. Run all electrical wire through suitable conduit and ensure all connections are made in accordance with local wiring codes. It is recommended that the circuit breaker carrying the machine load have NO OTHER ELECTRICAL DEVICES connected.

NOTE: THE KLE-115U DOES NOT INCLUDE A POWER SWITCH; THEREFORE, ENSURE THAT OPERATIONAL PERSONNEL CAN READILY LOCATE THE CIRCUIT BREAKER BY LINE-OF-SIGHT AND CAN SAFELY DEACTIVATE THE CIRCUIT BREAKER IF NEEDED.

Securely reconnect the barrier assembly.

OPERATION

- (1) Ensure that the "RUN/STOP" switch on the control box is in the STOP position. Apply power by energizing the circuit breaker controlling the dishmachine. Move the "RUN/STOP" switch to the RUN position.
- (2) Prime each of the chemical pumps by using the prime switches located on the control box. Prime each pump until the pump discharge tubes are full.
- (3) Close door to dishmachine and fill the dishmachine using the "FILL" switch on the control box. Fill the dishmachine for approximately 15 seconds. Open the door and ensure the pan is approximately 3/4 full of water. Use the "FILL" switch again if necessary.

Close dishmachine door and depress the "START" button to start dishmachine. Allow machine to complete at least one complete cycle of operation; the wash cycle will take approximately 90 seconds. Inspect the following equipment during the wash cycle to ensure proper operation:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Detergent Supply Pump | <input checked="" type="checkbox"/> Wash Motor |
| <input checked="" type="checkbox"/> Drain Solenoid and Drain Ball | <input checked="" type="checkbox"/> Drain Pump Assembly (if so equipped) |
| <input checked="" type="checkbox"/> Electrical Fill Valve during Rinse Cycle | <input checked="" type="checkbox"/> Rinse Supply Pump |
| <input checked="" type="checkbox"/> Chemical Sanitizer Pump | <input checked="" type="checkbox"/> Spray Arms |

Approximately 5 seconds after the end of the cycle, open door to dishmachine and check for leaks and proper fill level. Spray arms should still be in motion indicating proper water pressure. If the water level is low, depress the "FILL" switch on the control box to fill dishmachine to cover 3/4 of the pan, or to the hole in the drainball stem, if machine is equipped with a drain ball.

If necessary, the door can be opened in the middle of a wash cycle. The machine will stop when the door is opened. Closing the door and pushing the "START" switch resumes operation.

The "DRAIN" switch can be used to drain the dishmachine. The "DRAIN" switch will work if the dishmachine door is open or closed.

PERIODIC MAINTENANCE

NOTE: BEFORE PERFORMING PERIODIC MAINTENANCE, ENSURE WATER SUPPLY VALVE AND CIRCUIT BREAKER ARE OFF.

- (1) Remove and clean line strainer assembly. The line strainer assembly is located on the incoming water line (before the vacuum breaker).
- (2) Clean scrap accumulator and inspect drain ball "O" ring if machine has one. Inspect drain opening and clean if necessary.
- (3) Clean spray arms. Spray arms can be cleaned by removing end cap, dislodging any debris, and flushing length of spray arm with water. Remove debris in spray jets with a toothpick or other pointed object.

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE(S)</u>	<u>REMEDY</u>
Low/No Spray Arm Pressure	Impeller Clog	Clear Pump Intake Tube Clear Impeller
	Clogged Spray Tips	Clear Spray Tips Clear Spray Arm
	Low Water Level	Adjust Fill Cam Clear Line Strainer
Machine Doesn't Shut Off	Bad ON Microswitch	Replace Microswitch
	Bad Door Switch	Replace Door Switch
	Bad Cube Relay	Replace Relay

TROUBLESHOOTING (continued)

<u>PROBLEM</u>	<u>POSSIBLE CAUSE(S)</u>	<u>REMEDY</u>
Machine Won't Start	Bad Door Start Switch	Replace Switch
	Bad RUN/STOP switch	Replace Switch
	Circuit Breaker Tripped	Reset Circuit Breaker
Pump Motor Inoperative	Bad Mercury Relay	Replace Mercury Relay
	Bad Pump Motor	Replace Motor
Machine Won't Fill	RUN/STOP switch in STOP	Move to RUN position
	Bad Fill Solenoid	Replace Solenoid
	Bad Fill Microswitch	Replace Microswitch
	Bad Fill Switch	Replace Switch
Machine Won't Drain	Bad Drain Ball Lift Assy.	Repair/Replace Lift Assy.
	Clogged Drain Pump Impeller	Disassemble/Clean Plumbing
	Bad Drain Solenoid	Replace Solenoid
	Bad Drain Microswitch	Replace Microswitch
	Bad Drain Pump Motor	Replace Motor
Chemical Injection Bad or Poor (Detergent, Rinse, Sanitizer)	Not Enough Chemical	Adjust Cam
	Poor Chemical Flow	Replace Pump Tube
	Bad Pump Motor	Replace Motor
	No Chemical Flow	Replace Product Container
Machine Leaks Water	Debris on Drain Ball	Clean Drain Ball
	Loose Hose Clamps	Tighten Clamps
	Stand Tube Fiber Washer	Replace
Leaky/Noisy Vacuum Breaker	Water Pressure Too Low	Clear Line Strainer
	Water Pressure Too High	Adjust Fill Pressure
Spray Arms Hitting Tray Rails	Machine Not Level	Balance Machine Feet
	Tray Rails Damaged	Adjust/Replace Tray Rails
	Worn Spray Arm Bearings	Replace Bearings

WIRING DIAGRAM

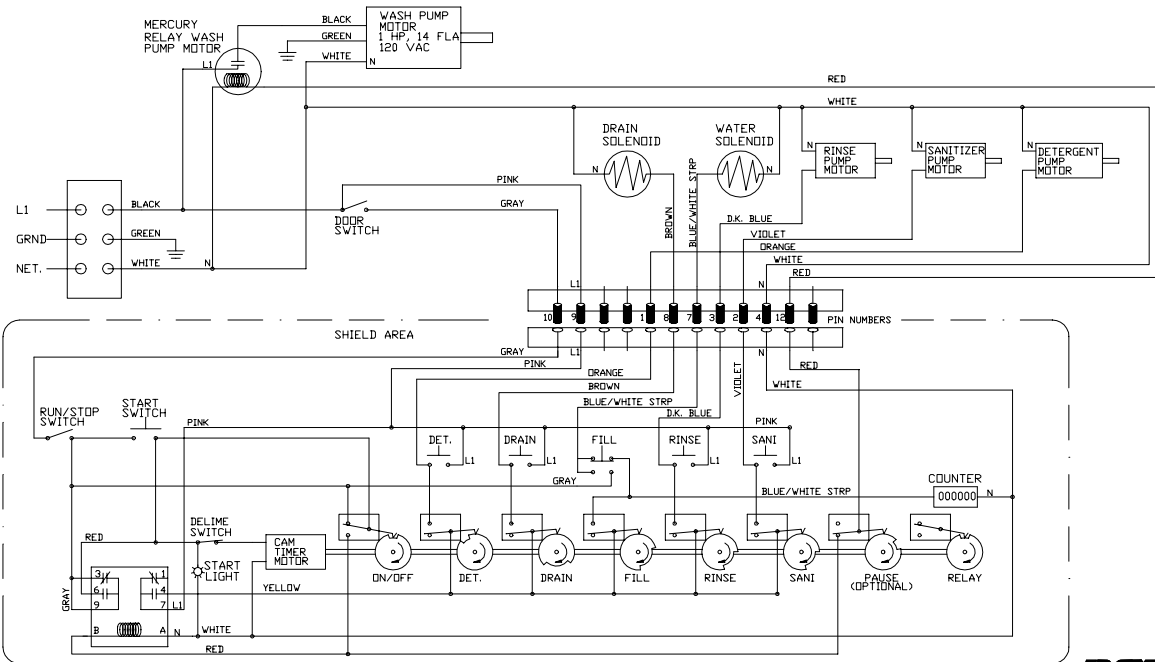
POWER REQUIREMENTS: 120 VAC, 20 AMPS CLEAN CIRCUIT

MODEL: KLE-115u

KNIGHT
Dishmachine

WARNING: APPLIANCE MUST BE INSTALLED
PER N.E.C. SECTION 4221

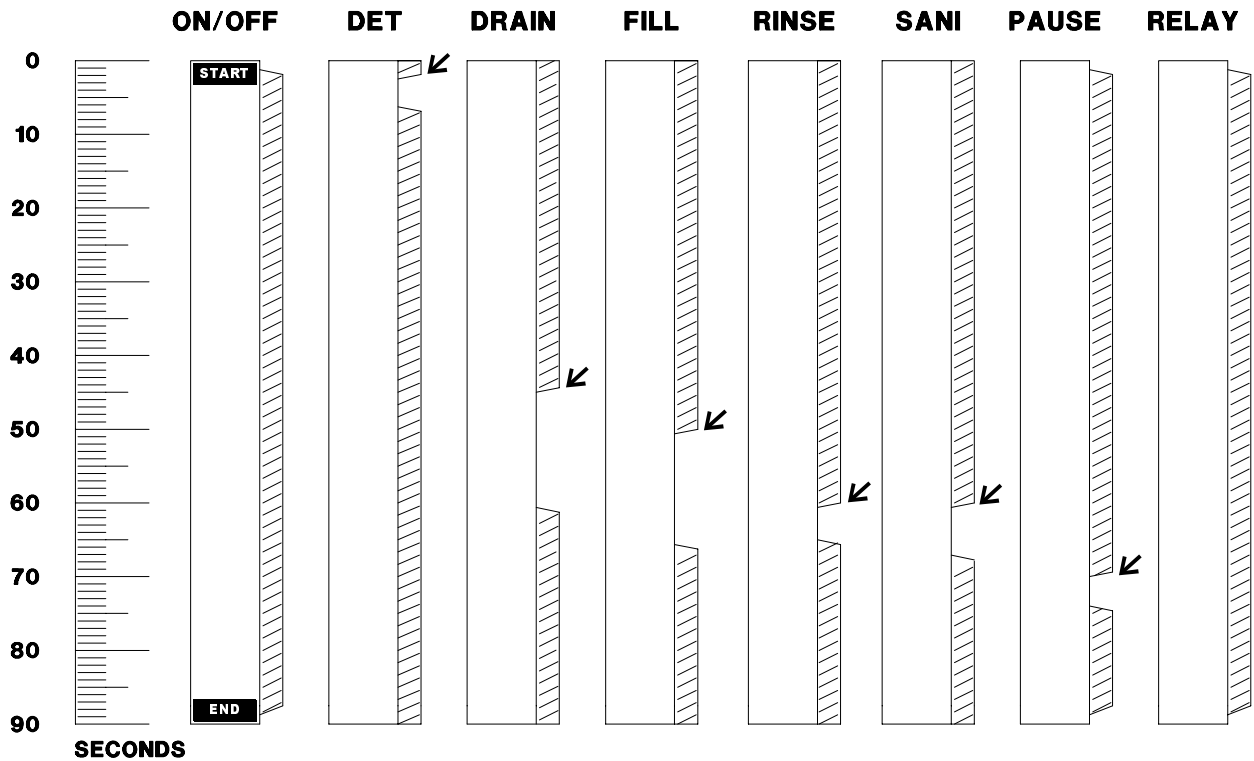
NOTE: If unit is equipped with 7 cam timer, red wire from
pin 12 of connector is not broken by pause cam.



REF: PART No. 9601304 Rev. E

DEX
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CAM TIMER SETTINGS



The cycle of operation begins when the ON/OFF cam lifts and ends when the ON/OFF cam falls. The arrows ↙ indicate the time each noted feature begins to operate.

The above settings are set at the factory and can be adjusted as necessary (except for the ON/OFF and DRAIN cams which are "fixed" and cannot be changed).

DISCLAIMER

Knight Inc. does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight Inc.

WARRANTY

All stainless steel components have a three year limited warranty from date of purchase against manufacturer's defects. Warranty replacement for component parts purchased by Knight are limited to warranty by the manufacturer. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

KNIGHT INC. A Unit of IDEX Corporation

World Headquarters: 20531 Crescent Bay Dr. Lake Forest, CA 92630-8825 USA TEL: (949) 595-4800 FAX: (949) 595-4801	Atlanta Branch: 8111 Technology Dr. NE Covington, GA 30014 USA TEL: (770) 787-9400 FAX: (770) 787-1155	Toronto Branch: 2283 Argentia Road Mississauga, Ontario L5N 5Z2 Canada TEL: (905) 542-2333 FAX: (905) 542-1536	London Branch: #15 Brunel Centre Newton Road, Crawley West Sussex UK RH102UB TEL: (44) 1293-615570 FAX: (44) 1293-615585	Sydney Branch: Unit 28, 317-321 Woodpark Rd., Smithfield NSW Australia 2164 TEL: 61-29-725-2588 FAX: 61-29-725-2025	Amsterdam Branch: Marssteden 68 7547 TD Enschede The Netherlands TEL: 31-53-428-58-00 FAX: 31-53-428-58-09
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