



Heavy Duty Line Cleaning Machine

# EBC300 PLUS

## **RULES FOR SAFE OPERATION**

Safety precautions are essential when any electrical or mechanical equipment is involved. These precautions are necessary when using, storing, and servicing electromechanical equipment. Using this equipment with the respect and caution demanded will considerably lessen the possibilities of personal injury. If safety precautions are overlooked or ignored, personal injury or property damage may occur.

This unit was designed for specific applications. It should not be modified and / or used for any application other than those for which it was designed. If there are any questions regarding its application or technical assistance call 1-866-327-4159.

Read this manual carefully - know your equipment. Consider the application, limitations and the potential hazards specific to your unit.

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- Only use a three wire extension cord, with grounded prong. Use a portable plug GFCI device, a 3-prong power cord with a GFCI device or a GFCI equipped outlet to protect from ground fault shock.
- 3. Do not touch pug or outlet with wet hands.
- 4. Avoid accidental starts. Turn switch "off' before connecting or disconnecting cord at electrical outlets.
- 5. Water spray must never be directed toward any electrical wiring or directly toward the machine itself or fatal electric shock may occur.
- 6. Never carry unit by the cord or hoses. Do not pull on cord to disconnect from outlet.
- 7. To prevent damage, the cord should not be crushed, placed next to sharp objects or near heat.
- 8. Check power cords before using. Damaged cords can reduce performance or cause a fatal electric shock.
- 9. Never allow children to operate this equipment.
- 10. Wear safety glasses and / or goggles while operating.
- 11. Disconnect power plug form the oudet when not in use and prior to the detaching of the cleaning hose.
- 12. Prior to starting in cold weather, be sure ice has not formed in any part of the equipment.
- 13. To allow free air circulation, the unit should not be covered during operation.

## PUMP PRIMING INSTRUCTIONS

- 1. The red handle of the Flow Valve (located on the front of the machine) must be in the closed position, with the handle perpindicular to the hose.
- 2. the inline filter must be clean and free of foreign material.
- 3. The strainer at the end of the suction hose must be in place, clean and free of any foregin material.
- 4. With the discharge hose connected and the suction hose in fresh water turn on pump. Do not connect the discharge hose to teh system until the pump has been primed and is pumping properly.
- 5. Make certain you have hooked up the beer lines in order and you are pumping into an unrestricted system with no blockages.
  - CAUTION: Make certain the end strainer is in place, clean, and the tube is not clogged or kinked. Failure to do so could allow dirt, grit, sand, etc. to be sucked into the unit. This could block valves and cause the unit to malfunction. If filters are not in place, the warranty is void. Water temperature above 140°F should be avoided
- 6. For manual operation flip the switch to "ON MANUAL".
- 7. For use with Timer flip the switch to the "ON AUTO" then wait for the timer indicator to display "OFF".
  - Press SET button then the UP or DOWN arrows to select the desired time the unit will run.
  - Press SET button. This will make the unit run for the selected time. Once the time is up, an alarm will go off and the machine will shut off.

(The timer is preset to work from 1-15 minutes. If a different time limit is required please read the section TIMER PROGRAMING

8. Watch the pressure gauge on the front of the machine. Use the red handle flow valve to adjust the amount of solution passing through the lines. This also controls the pressure in the system.

DO NOT ALLOW THE LINE PRESSURE TO EXCEED 50 PSI.

# **CAUTION**

Line pressure above 50 PSI can damage the lines and cause failure of couplers in the system.

## PROTECTING YOUR MACHINE AGAINST DAMAGE

- 1. DON'T run your unit without inlet water hose in place. This will damage the pump and VOIDS THE WARRANTY.
- 2. DON'T let particulate matter get into the pump. Foreign material can ruin the pump immediately. THIS VOIDS THE WARRANTY. To keep particles out, never operate your unit without the filter properly installed on the suction tube, and clean. See maintenance procedure below for further details.
- 3. Always store your machine in a location where the temperatures will not fall below 32° F. The pump in this machine is susceptible to damage if frozen.

FREEZE DAMAGE IS NOT COVERED BY WARRANTY! (See section on frozen pumps)

## MAINTENANCE PROCEDURE

- 1. Flush unit with clean water after every use.
- 2. The suction hose is equipped with an IN-LINE STRAINER to protect the pump from foreign material. The filter element of this strainer MUST be kept clean.

Caution: Failure to keep the element clean restricts the flow of fluid to the pump. This causes the pump to "chatter", or become noisy. It also will cause damage to the pump vanes and <u>VOID THE WARRANTY</u>.

- 3. How to Clean Filter Element:
  - a. Disconnect power and water from the machine
  - b. Disconnect the RED Siphon Hose Assembly from machine
  - c. Remove the clear nylon bowl from the filter assembly, by turning it clockwise to unthread.
  - d. Carefully remove the mesh screen filter from the bowl. Clean the bowl in clear water. Also clean all deposits from the mesh screen. -Take Care NOT to bend or damage the screen.
  - e. Reposition the screen into the clear bowl and reassemble to fitler cap. -You are now ready to resume cleaning!

Note: DO NOT OPERATE your EBC300 Plus Line Cleaning Pump without the filter screen clean and properly installed. This will <u>VOID THE WARRANTY!</u>

New filter elements may be purchased through customer service.

## **FROZEN PUMPS**

You are cautioned not to allow the pump to freeze. There is only a very small amount of water in the pump - it freezes quickly!!!

In cold weather, it is suggested the pump be transported inside your vehicle - not in the trunk or bed of a truck.

If the pump does freeze, it must be replaced. You may purchase replacement pumps through the Customer Service department.

# TIMER PROGRAMING

#### **PARAMETERS**

	Description	Units	Range
Ut	Time unit	option	Min/Sec
Top	Maximum time interval	time unit	1 to 999
Bc	Alam	option	On/Off
Man	Manual control	option	On/Off

### **Parameter Descriptions**

Ut = Time unit - Minutes (min) or Seconds (sec).

Top = Maximum Time Interval - For local starts via the set key. Remote starts count down from this value.

Bc = Alarm - Buzzer sounds when the countdown expires or is stopped by the user via the SET key.

Man = Manual Control - When the timer countdown is not desired, the timer can be operated to open and close the relay for indefinite periods of time. Switch the relay output off and on by means of the SET key.

## **Programming Parameters**

- Press set for 8 seconds. The first parameter label is shown on the display (Ut).
- · Move to the desired parameter with the UP and DOWN keys.
- Press SET to view the value on the display.
- The value can be modified with the UP and DOWN arrows.
- · Press SET to store the value and exit to next parameter.
- Press SET and DOWN at the same time to quit programming or wait one minute and the display will automatically exit programming mode.

#### NOTICE

If the timer is activated via digital input during a previously running countdown, the timer will reset to the Top parameter and initiate a new countdown.

### **Local Operation**

The user can set and activate the timer using the front keys.

- During Standby mode, press SET and "0" will be shown on the display.
- · Modify the time interval with the UP and DOWN keys.
- Press SET to enter it and start the timer (close the relay output).
- To deactivate the timer (open the relay output), hold SET down for 1 second.

## NOTICE

The time interval cannot exceed the pre-programmed "Top" parameter.

#### **BUZZER**

When the timer interval has expired, an internal buzzer will beep two times. This double beep will only occur once.

### LED INDICATIONS

Upper LED Flashes during timer countdown.

Lower LED This indicates the system is in Manual Control Mode.

#### **DISPLAY MESSAGES**

In normal operation, the countdown time will be shown on the display.

- Run = Briefly displays when the timer is initiated.
- End = Briefly displays on the screen when the timer is stopped or at the end of time cycle.
- Off = Standby Mode.
- · On or Off = Displayed during manual control.
- Er = Memory Error

#### **MAINTENANCE**

Upon final installation of the Series LCT316 Low Cost Digital Timer, no routine maintenance is required. A periodic check of system calibration is recommended. The Series LCT316 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.