

# LBC MANUFACTURING



Simple Solutions for Effluent Disinfection

**LBC-500**

## LIQUID BLEACH CHLORINATOR

### Owner's Manual

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*THIS PRODUCT WAS  
EVALUATED AS A  
CHLORINE DIS-  
PENSER AND MEETS  
THE APPLICABLE RE-  
QUIREMENTS OF  
STANDAR 46*

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**US PATENT # 7651607**

LBC Manufacturing  
P.O. Box 1117  
Columbus, TX 78934  
(979)826-0139 Office  
(281)715-4100 Efax

**Liquidchlorinator.com**

## ***RECOMMENDED INSTALLATION INSTRUCTIONS***

LBC Manufacturing recommends installation by TCEQ licensed and trained installers

1. Locate the Aerobic System Holding/Pump Tank
2. Place the liquid chlorinator housing on a level undisturbed base. This may be accomplished many ways, just ensure the choice location does not allow the chlorinator base to move from its installed position. Additionally, the Housing Lid (ref. #1) must be above final installation grade.
3. Obtain 20 linear feet of 4" PVC pipe and a 4' End Cap.
4. Using PVC cleaner and glue, attach 20 feet of 4 inch pipe to the chlorinator housing (ref. #3)
5. Next, glue the 4 inch End Cap to the remaining end of the 20 ft. length of pipe  
NOTE: The 20' length of pipe can be assembled with assorted bend fittings, providing the entire length of pipe is level horizontally.
6. Next, locate the Poly Vinyl Tubing (ref # 5) and route into the Holding/Pump Tank. The vinyl tubing is flexible and subject to damage from sharp or heavy objects. It is preferred to install the tubing in a sleeve to help protect from damage.
7. Locate the Sprinkler Pump plumbing located inside the pump tank. (Purple Pipe) Install the venture (ref #7) onto the sprinkler pump plumbing. Note: Tank Plumbing techniques vary, just ensure the venture (ref #7) has a water tight seal. Proper operation of the venture requires 20 psi from the sprinkle pump.
8. Locate the Poly Vinyl Tubing (ref # 5) previously routed into the holding/pump tank. Connect the end of the tubing to the Venturi Suction Port (ref # 6)
9. Next, Remove the Chlorinator Housing lid (ref # 1) and fill the housing (ref #2) with twelve (12) gallons of 6% Sodium Hypochlorite (household Bleach).
10. Finally, Engage the Sprinkler Pump and ensure the Liquid Bleach Chlorinator is visibly moving Bleach through the vinyl tubing. Note: If Bleach solution is not visibly moving through the Poly Vinyl Tubing, refer to the Troubleshooting section of this manual.

## CHLORINE DISPENSER PERFORMANCE

The LBC500 is a proven disinfection device that meets the applicable requirements of NSF standard 46 for chlorine dispensers. The LBC500 is listed as a certified chlorine dispenser for secondary effluent Certification that requires the device to be used with 6% sodium hypochlorite (household bleach) tank contact of at least 200 gallons reserve and a minimum of 15 minutes of contact time. (200 gallons is the normal residual of water left in the pump tank after the sprinkler cycle) USEPA guidelines state “on average satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5ppm after 15 minutes contact.

LBC Manufacturing designed and built the Liquid Chlorinator to provide years of trouble-free service. It is constructed from durable PVC material which can withstand the corrosive nature of 6% Sodium Hypochlorite (Household Bleach). It has been tested to strict standards and has proven to function more consistently, at a lower operating cost, than any other disinfection method.

The basic function of the Liquid Bleach Chlorinator is to introduce a measured dose of disinfectant to the effluent water in holding/pump tank to disinfect effluent before being pumped out to the field. Venturi creates a vacuum as the water passes through it. The vacuum is then used to draw the disinfectant from the Chlorinator housing, through the vinyl tubing into the holding/pump tank. The Venturi discharges the disinfectant into the holding/pump tank as it thoroughly mixes the water and disinfectant together to provide a negative atmosphere for bacterial existence. The patented metering component of the Chlorinator housing allows a larger dose of disinfectant to be drawn when the sprinkler pump engages, and then a slow smaller portion as the pump continues to run. When installed and operating properly, the larger dose of disinfectant will enter the holding/pump tank within 15 seconds of initial pump start-up. During the pump run cycle, a small metered drip will continue to feed in until the sprinkler pump shuts off. After the sprinkler has finished pumping, the metering chamber in the Chlorinator housing will re-fill itself for the next pumping cycle.

## OPERATION AND MAINTENANCE

It is the Owner's Responsibility to operate and maintain the Liquid Chlorinator to the best of their ability. If service is required, refer to the Data/Service Plate located on the fill lid of the LIQUID CHLORINATOR.

The Liquid Chlorinator uses 6% Sodium Hypochlorite (Household Bleach). Do not use any other products and or chemicals other than specified. Always maintain a constant supply of disinfection/bleach in the chlorinator Housing at all times. The rate of disinfection/bleach usage will vary with individual homeowner water usage. If disinfectant usage increases or decreases, call the service provider. If flood waters, ants, chemicals, etc. other than 6% sodium hypochlorite, enter the Chlorinator Housing, call for service

**\*\*\*\*Always use personal protective equipment when filling or servicing the chlorinator\*\*\*\***

**MONTHLY:** Open the chlorinator fill lid and visually inspect the liquid level of Household bleach. Maintain a constant supply of 6% Sodium Hypochlorite in the chlorinator housing and reservoir at all times. Check sprinkler discharge for chlorine/bleach smell or NSF required 15 ppm total chlorine. If service is required, refer to the data/service plate located on the fill lid of the liquid chlorinator.

**PERIODICALLY:** Open the Chlorinator Fill Lid and Visually Inspect the Chlorinator for debris such as dirt, grass clippings, etc. Check Sprinkler discharge for Chlorine/Bleach smell or NSF required 15 ppm Total chlorine. If Service is required, refer to the Data/Service Plan located on the Fill Lid of the Liquid Chlorinator.

**YEARLY:** Visually inspect the Chlorinator Housing for any damage from lawnmowers, etc. Remove dirt/ant build up, grass, etc. from Chlorinator Housing Fill Lid. Check Sprinkler discharge for Chlorine/Bleach smell or NSF required 15 ppm Total chlorine. If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Liquid Chlorinator.

# OFF LOADING AND PACKING INSTRUCTIONS

***“WARNING!!! DO NOT DROP OR CRUSH”***

It is the Owner's Responsibility to operate and maintain the Liquid Chlorinator to the best of their ability.

If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Liquid Chlorinator.

**\*\*\*Always use Personal Protective Equipment when Filling or Servicing the Chlorinator\*\*\***

## TROUBLESHOOTING/REPAIR INSTRUCTIONS

### General Visual Inspection

1. Check to ensure Aerobic System is functioning properly.
2. Collect effluent sample from sprinkler head and perform chlorine test. If no chlorine is detected, refer to section below.

### Chlorinator not functioning properly:

1. Check to ensure tank sprinkler pump is working properly. (if pump is not working, it will not operate the Venturi to draw in disinfectant.)
2. Check to ensure Venturi is functioning properly. (engage the sprinkler pump and place finger over Venturi suction port (ref. #6). If suction/vacuum is not present, replace Venturi.)
3. Check to ensure the vinyl tubing (ref. #5) is not damaged. If damaged, replace with 3/8" od X 1/4" id Poly Vinyl Tubing.
4. Check to ensure Chlorinator Housing Fill Port (ref. #2) is free of dirt/debris. If dirt/debris is detected, drain Chlorinator Housing and reservoir and refill with 6% Sodium Hypochlorite.
5. Check to ensure Flooding event has not occurred. If Flooding event has occurred, drain Chlorinator Housing and reservoir and refill with 6% Sodium Hypochlorite.

## **Sources for Replacement Parts**

Replacement parts or components may be obtained from your local installer, service provider, or from **LBC Manufacturing**, P.O. Box 1117, Columbus, TX 78934

Office # (979) 826-0139 Fax # (281) 715-4100

INSTALL OF RECORD: \_\_\_\_\_

ADDRESS OF INSTALLER: \_\_\_\_\_

PHONE NUMBER OF INSTALLER: \_\_\_\_\_

BRADEN OF AEROBIC UNIT: \_\_\_\_\_



