

Little John Digester O&M Manual

PRODUCT DESCRIPTION

This manual contains information on the installation, maintenance and operation of Our patented “Little John Digester”. Our “*Little John Digester*” system was designed for the permanent removal and oxidation of F.O.G. (Fats, Oils, & Grease), matting, odor, and corrosion control in commercial and residential lift stations, grease traps, and wet wells.

1.1 SITE LOCATIONS

A. *Lift Stations*

B. *Grease Traps*

C. *Mining Operation Sites*

D. *Oil Drilling/Fracking Locations*

E. *Animal Waste Lagoons*

F. *Food Processor*

G. *Holding Ponds*

H. *Paper Mills*

1.2 GENERAL INFORMATION

The Patented “Little John Digester” is designed to provide state of the art “Green” technology for the reclamation of contaminated wastewater.

All Our Patented Technology Employs state of the art airlift technology for several reasons:

- Maximization of Oxygen Transfer
- No moving parts
- Reduced maintenance by up to 90%
- Enhanced Worker Safety
- Easy installation
- Energy Efficiency and Cost Effectiveness
- Oxidation of H₂S Gas for corrosion and odor control

1.3 STANDARD OPERATION

Little John Digester:

Designed for use in lift stations, grease traps, and wet wells for solids, odor, and F.O.G. (fats, oils, and grease) removal. All models of the Little John Digesters operate with low pressure, high volume airflow provided by a regenerative blower located outside of the pump station. An air feed line attached to the digester supplies the necessary airflow to the unit.

The Digesters are lowered into the pump station and positioned between the pumps by using the air supply hose and a cable attached to the top of the digester. The digester is weighted to keep it firmly located on the bottom of the station or wet well.

1.4 A.O.P. ADVANCED OXIDATION PROCESSING (*Optional*)

Most units will come equipped with A.O.P. for *advanced odor control* to correct other issues that require specific attention for remediation. A.O.P. is Hybrid Ozone with Hydroxyl Radicals.

A.O.P. is generated within the enclosed case along with the blower. The unit is prewired and requires no special maintenance. The A.O.P. will not operate unless the blower is turned on. To engage the A.O.P., simply turn the switch labeled "A.O.P." to the "on" position and when the switch illuminates red, this is the indication that the A.O.P. is functioning properly.

A.O.P. "L.E.D." INDICATORS

There is a small white block located at the top of each A.O.P.. This small block contains one fiber cable per A.O.P. tube in the canister.

If the A.O.P. bulb is operating correctly; the fiber optic will emit a blue light. If one of the Fiber Optic cables is not illuminated, this indicates a bad bulb and will need to be replaced in order for that tube to correctly work. Each of the A.O.P. bulbs are wired independently, therefore if one bulb is not functional the remaining A.O.P. bulbs will continue to operate. When having a fiber optic light go out, turn the unit off, disconnect the power to the blower case and have a certified electrician replace the bulb. Once the bulb is replaced, continue normal operating procedures.

MAINTENANCE:

The *only* maintenance required on Our equipment is to periodically inspect and clean the air filter located on the blower. Inspect the air filter weekly and clean or replace as necessary. Turn the blower off before removing the old filter. Avoid any material from entering the air intake port. Foreign objects entering the air intake port will destroy the blower. All bearings are sealed and do not require lubrication.

See blower MFG. Booklet Enclosed

TROUBLE SHOOTING:

1) Blower keeps tripping Breaker:

Solution: Call a certified electrician. Check for wiring errors, breaker sizing, and also water depth on unit (too much head pressure will result excessive draw).

2) Blower is Hot to touch (blowers operate at Ambient + 20degrees F.)

Solution: Check air filter, amp draw, voltage, and also check the water depth the unit is operating in.

3) A.O.P. not working

Solution: Remove cover plate and check fuses. Check all electrical connections and call a certified electrician.

MOST COMMON PROBLEMS ENCOUNTERED:

- a. *Dirty air filter*
- b. *Excessive water depth*
- c. *Improper voltage supply*
- d. *Excessive amp draw*
- e. *Improper wiring*
- f. *Objects lodged in air feed hose.*

SPECIAL NOTES:

Once the unit is installed and operating, have the electrician check the following:

- Voltage to the unit
- Amp Draw
- Blower Rotation

Improper voltage will DAMAGE the blower. *This is not covered by the blower manufacturer's warranty.*

SAFETY:

Be careful when lowering the unit into the station. While holding onto the air feed hose, gently lower the unit down using a *hand-over-hand action*. **Always use leather working gloves and the correct safety apparel.**

*****NOTE*****

ALWAYS check blower ROTATION before connecting air supply hose to the blower. Have a certified electrician wire the blower case to the proper electrical supply. Make sure that the air is blowing out of the connection port! After rotation is determined to be correct, attach the air feed hose (*Shown in figure 1a*). **Make sure the unit is securely tied off to the mooring post and in the proper position. The aerator is now ready for operation. Press the Green button in the blower case to engage blower.**

FOR RW SOLUTIONS TECHNICAL SUPPORT PLEASE CALL OR EMAIL:

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