

BIODIGESTER HBAW SEWAGE TREATMENT PLANTOPERATING INSTRUCTIONS

1. Use premises as normal except it is better to avoid sending non-biodegradable items down the drain and remember the Biodigester uses a natural process. Do not use cleaning products excessively, especially bleach.

2. Service every 12-18 Months

An annual service is advisable although the Biodigester may run for much longer than this without attention. Servicing may be carried out by a suitable practical person.

2.1 Air Blower

(a) A servicing video is available on Youtube. Search for the appropriate Charles Austen air blower. HBAW2, 3, 4 – ET30 air blower, HBAW5 & 6 – ET60 air blower, HBAW7 & 8 – ET80 air blower and HBAW 9, 10 & 11 – ET100 air blower.

Whilst carrying out a service check on an HBAW2, 3 or 5 check that the timer is set and operating correctly.

(b) Unclip the plastic cover on top of the air blower. Clean or replace the air filter. These normally last a number of years. Clean air blower filter and re-assemble.

(c) Unscrew air blower main lid, four screws at base. Inside at each end there are black covers held by four screws each. Undo these covers and check that the rubber diaphragms exposed are intact and have no splits. Any accumulation of dust indicates that the magnetic shuttle in the centre needs to be adjusted or replaced.

The rubber diaphragms should be replaced every 3 years.

Re-assemble, lubricating the screws for the main cover. Check tightness of jubilee clip fixing air line to blower.

(d) Inspect air line for kinks and accumulation of water due to condensation. Condensation is prevented by having a continuous fall on the air line.

2.2 Aeration Chamber

(a) Check tightness of external jubilee clip.

(b) Check for vigorous aeration when the air blower is running. If necessary unscrew 1" plastic coupling(s) within the Biodigester, withdraw pipework and diffuser, clean, replace and check operation. The coupling(s) should be firmly hand tight.

(c) The dividing wall between the aeration and final settlement chamber has a number of 20mm holes through which the mixture transfers when more effluent comes in. These holes are normally kept clear due to the aeration process but check and brush clean as appropriate.

(d) Check for any odour, note the colour of the working mixture and thickness.

2.3 Final Settlement Chamber

(a) There is a rectangular baffle on the downstream side of the transfer holes. Check that this baffle has no thick accumulation of solids.

(b) The outlet 'T' pipe holds back a layer of humus solids. Check the thickness of this layer. Check the clarity of the final effluent by inspection, it should be clear and free of obvious solid particles.

2.4 Emptying

(a) Emptying may be required annually. The need is based upon observations made. A thin working mixture, thin crust in the final settlement chamber and clear effluent indicate there is no immediate need for emptying.

(b) When emptying both chambers leave a little sludge in the aeration chamber.

(c) The transfer holes and downstream baffle become easier to check and clean at the time of emptying.

3. EVERY THREE YEARS

Replace air blower internal rubber diaphragms.