HBG 2.0
ACTIVATION AND OPERATION

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FEEDING ONLY ANIMAL MANURE

- If the system will be only fed by animal manure, there is NO need to activate the system

- Afterwards, it is possible to introduce up to 40 liters of bio-slurry every day (20 liters animal manure + 20 liters water, mixed at 1:1 ratio)

ACTIVATION WITH ANIMAL MANURE

- Manure from herbivores: cows, sheep, goats, horses or pigs
- Mix 100 liters of manure with 100 liters of water to create a slurry
- Has to be fresh, maximum 2 days, preferably wet
- As clean as possible from pieces of grass or hay
- Introduce the manure into the system
- Do not feed the system with kitchen waste till you have flammable gas
- Wait around 3 weeks to let the gas tank fill or until the gas tank is full
- Check gas is flammable

FAST ACTIVATION

- Manure from herbivores: cows, sheep, goats, horses or pigs
- Mix 100 liters of manure with water to create a slurry
- Has to be fresh, maximum 2 days, preferably wet
- As clean as possible from pieces of grass or hay
- Put the manure in one or more containers
- Close the container and make one small hole at the top
- Put the container exposed to sun radiation
- Once the system is assembled, introduce the slurry inside the system

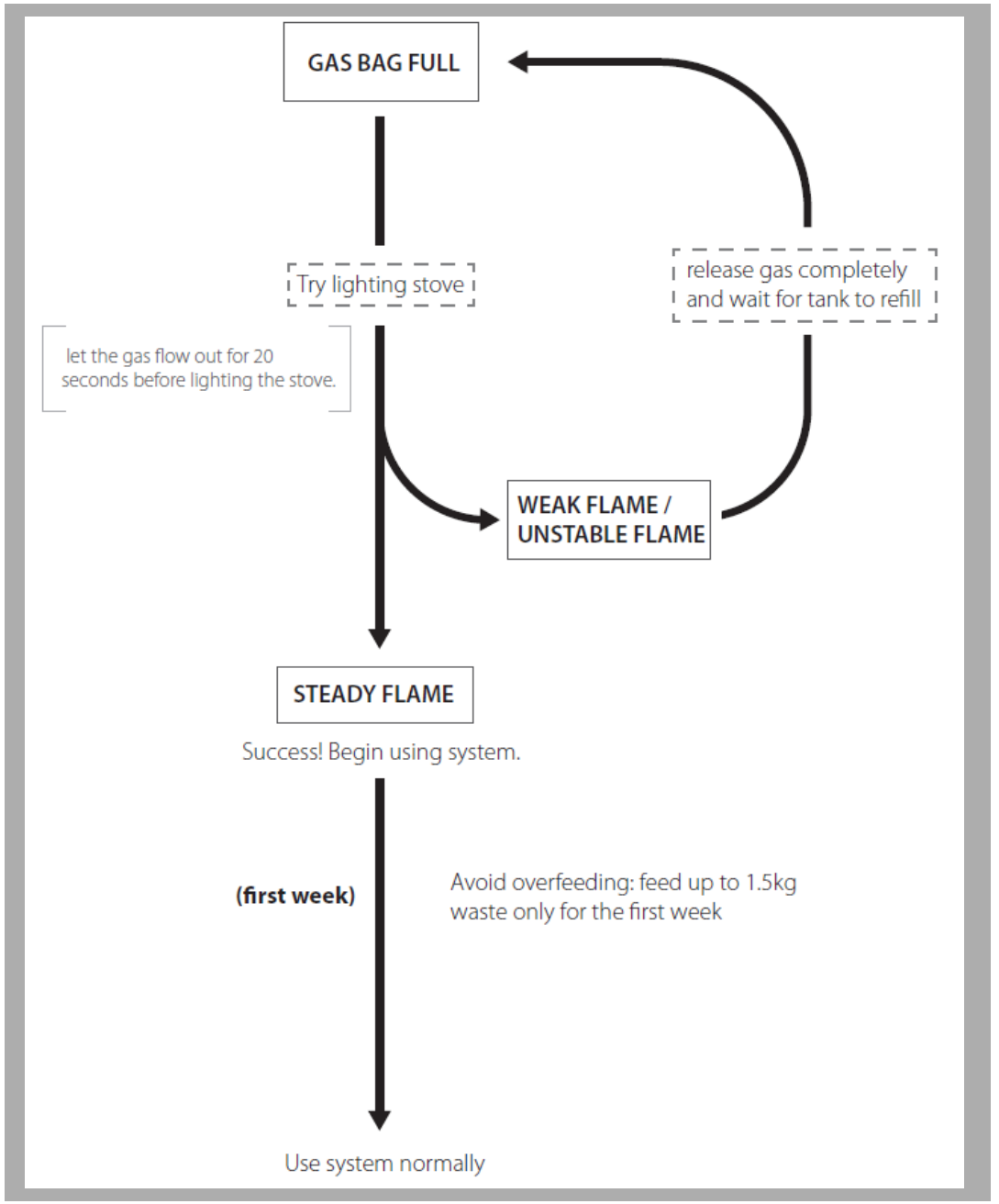
DRY ACTIVATION

- 1st day: Pour 13 kg of sodium bicarbonate into the system through the sink
- 2nd day: Pour 3 kilos of bacteria

- During 2 weeks feed the system 1.5 kg of organic kitchen waste per day.
  - Kitchen waste should be from a variety of food groups – carbohydrates, sugars, fats, etc. Avoid feeding the system citrus peels during activation.

FLAMMABILITY CHECK

- **Dry activation→ Continue feeding 1.5 kg of food waste per day**
- **Animal Manure → Do NOT feed the system yet!**



FEEDING THE SYSTEM

Kitchen Waste

up to 6 liters per day

(After the system has stabilized and has operated at least half a year, in warm conditions (>25°C avg), you can feed up to 12 liters per day)

Food scraps like rice, cheese, vegetable & fruit peels/pulp, meat, bones, eggshells, cooking oil, and any other "wet" food waste.

FEEDING THE SYSTEM

Animal Manure

up to 40 liters per day
(volume of slurry - waste mixed with water)

Animal waste, as clean as possible from stones, straw and earth. Dog or cat waste (free from sand) can be fed.

Animal waste should be mixed well with an equal amount of water.

CONTROL INPUTS

large quantities of citrus fruit peel

(contain anti-bacterial oils which could affect the system's performance)

large quantities of cooking oil

(can lower pH level in the system and slow down digestion)

max 50ml/1.7oz a day

chicken/poultry droppings

(have a high ammonia content which will raise pH level in the system)

max 50% of waste input

DO NOT FEED

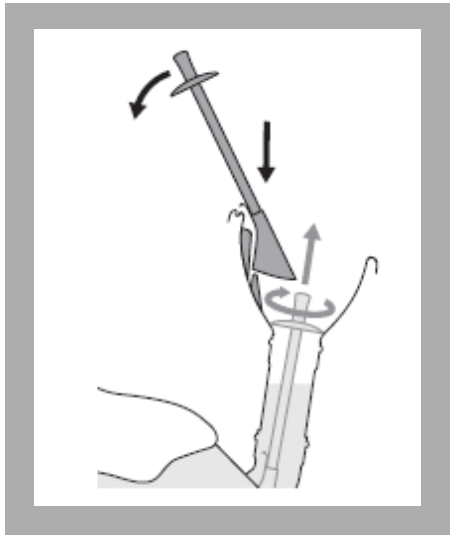
Non-organic objects/household waste:
metal
plastic
glass
paper
any non-organic liquids

Garden Waste:
straw
grass
dry leaves
twigs
tree branches
wood shavings
earth
Sand

Fertilizer from the system
If chlorine tablet is added, fertilizer may contain chlorine which could harm bacteria

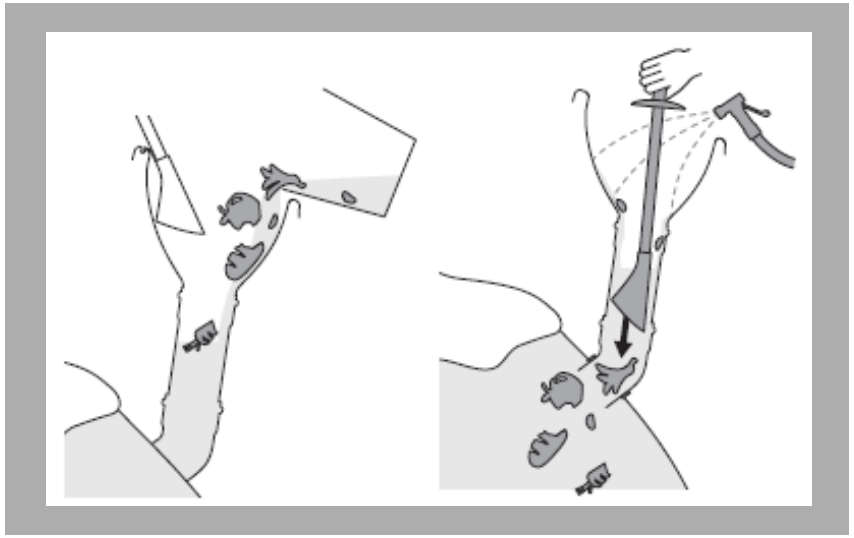
HOW TO FEED THE SYSTEM

1. Turn the plunger 180°, then lift and rest the plunger on the plunger slot on the back of the sink.

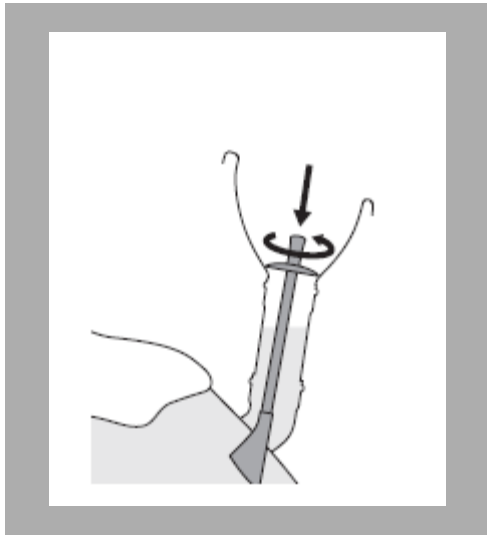


2. Pour the waste into the sink gradually to prevent splashing.

Push the waste down the inlet pipe into the digester tank, then rinse the sink (and the container) with water.



3. Push the plunger all the way down the inlet pipe, then make sure to turn plunger 180° to “lock” it in place and properly seal sink.



(Optional) After feeding the system, you may add a little sodium bicarbonate into the system to minimize smell and improve digestion. Sodium bicarbonate can be stored in a salt shaker for easy handling.

5 COMMANDMENTS OF USING HOMEBIOGAS

1. MAKE HOMEBIOGAS HAPPY- FEED IT PROPERLY

Feed up to 6 liters of kitchen waste or 40 liters of animal manure slurry daily. For additional guidelines, refer to the Owner's Manual.

2. KEEP SYSTEM LIQUID TEMPERATURE ABOVE 20°C/68°F

Add a water heater or stop feeding completely until the temp. rises to an average of 20°C/68°F

3. ENSURE HOMEBIOGAS IS FULL OF WATER

The system is full when water pours out from the fertilizer outlet

5 COMMANDMENTS OF USING HOMEBIOGAS

4. FEED WITH KITCHEN WASTE OR ANIMAL MANURE

Do not feed with: paper, sand, plastic, leaves, branches, straw, dirt, sand, or large quantities of citrus peels or cooking oil; or with more than 50% chicken manure

5. FEED ONLY WHEN THE GAS IS FLAMMABLE

Gas is not flammable when HomeBiogas is fed improperly or fed when temp. is under 20°C/68°F. Refer to the Owner's Manual for more assistance

OPERATING HOMEBIOGAS IN COLDER SEASONS

Below an average temperature of 20°C or 68 °F Fahrenheit

1 ADD AN ADDITIONAL HEAT SOURCE

2 PUT THE SYSTEM IN A GREENHOUSE

3 TEMPORARILY STOP FEEDING

4 IN FREEZING TEMPERATURE, DRAIN 200 L

GAS FILTER REPLACEMENT

- Gas filters filter Sulfide (H2S)- H2S is a corrosive gas with bad smell that can be toxic in high concentrations and make the stove corrosive.
- Order new filter from HomeBiogas
- Carefully dispose old filter

GAS FILTER REPLACEMENT

Remove the old filter:

1. Use or release the gas from the system until the gas tank is empty.
2. Remove the Gas Outlet & Fertilizer Outlet Cap Assembly. Keep a distance from the outlet; avoid breathing close to the opened outlet.
3. Wait for 5 minutes to allow gases to disperse.
4. Remove the rubber sealing ring from the Gas Outlet.
5. Remove the spent filter using the string attached to the filter's cap.

Install the new filter:

1. Remove both cover stickers from the base and cap of the new filter.
2. Insert the new filter into the Gas Outlet pipe. Push the filter down firmly to ensure a good seal.
3. Place the sealing ring back into its slot in the Gas Outlet pipe.
4. Replace the Gas & Fertilizer Outlet Cap Assembly (refer p25). Make sure the caps are pushed in completely.