

# HBG 2.0 INSTALLATION

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**HomeBiogas International Distributors Course May 2019**

# INTERACTIVE MANUAL

- **Manual with photos**
- **English, Hebrew , Spanish and Portuguese:**

Web -

<https://app.makeree.com/home-biogas>

Android App -

<https://play.google.com/store/apps/details?id=com.makeree.homebiogas>

Apple App -

<https://itunes.apple.com/bt/app/homebiogas/id1415525575?mt=8>

**INSTRUCTIONS**

**T61B2 HOUSEHOLD BIOGAS SYSTEM**

**BIO-TOILET**

# LET'S OPEN THE MANUAL

# HOMEBIOGAS®

TG1B2 HOUSEHOLD BIOGAS SYSTEM

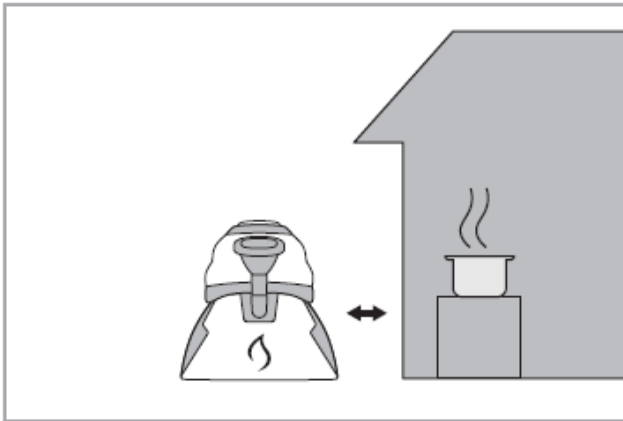
## OWNER'S MANUAL

VERSION 181118

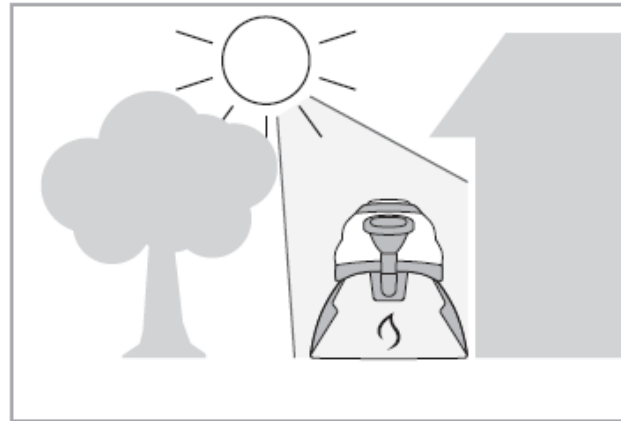


## CHOOSING A LOCATION

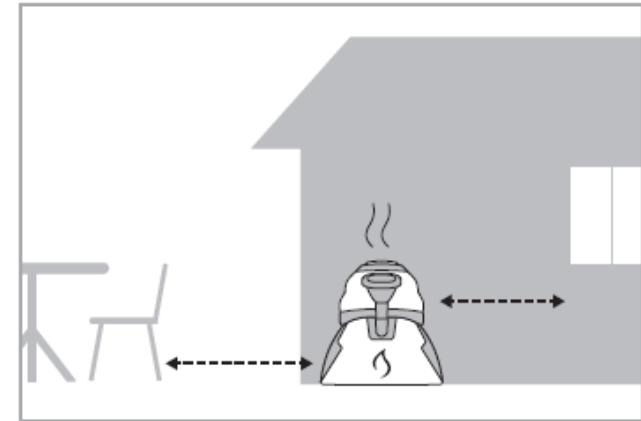
- Before installing verify with the customer the chosen location is correct



system should be installed close to kitchen/cooking area

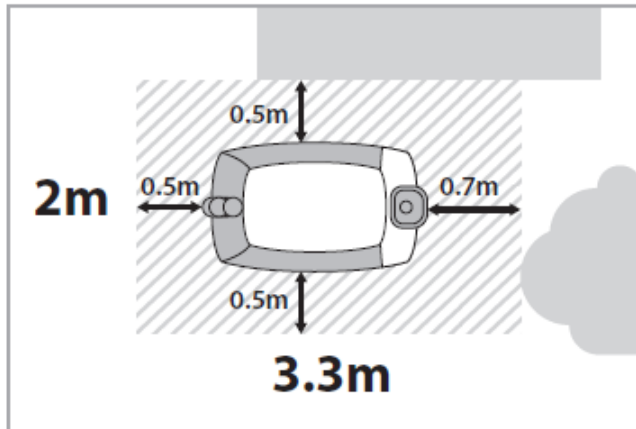


system should be installed in a sunny area outdoors for optimum gas production

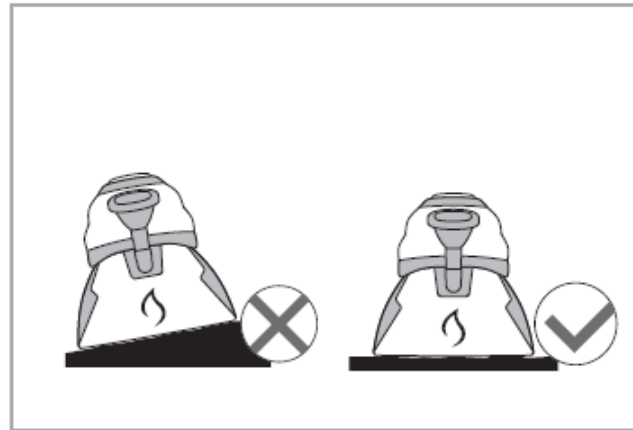


system may have mild organic scent - place away from windows/doors/outdoors seating

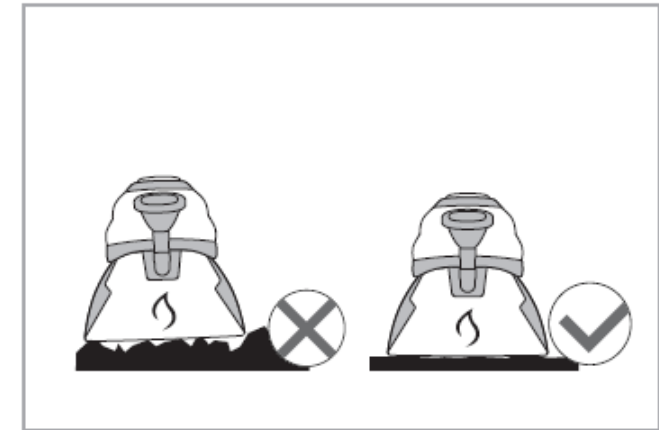
## CHOOSING A LOCATION



prepare at least 2m x 3.3m space for the system (0.5m side, 0.7m front clearance for maintenance & daily usage)

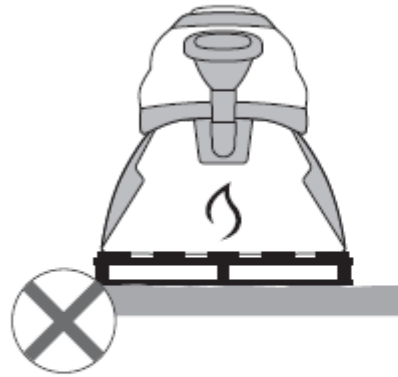


make sure the chosen location has a level surface - usage on sloping or non-level ground will damage system

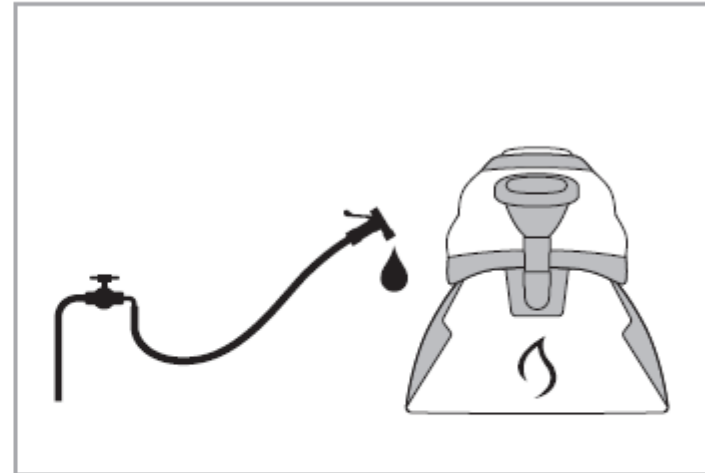


prepare a firm, flat surface clear of obstructions - do not place on soft or unstable ground e.g. flat dry ground, tile, concrete

## CHOOSING A LOCATION



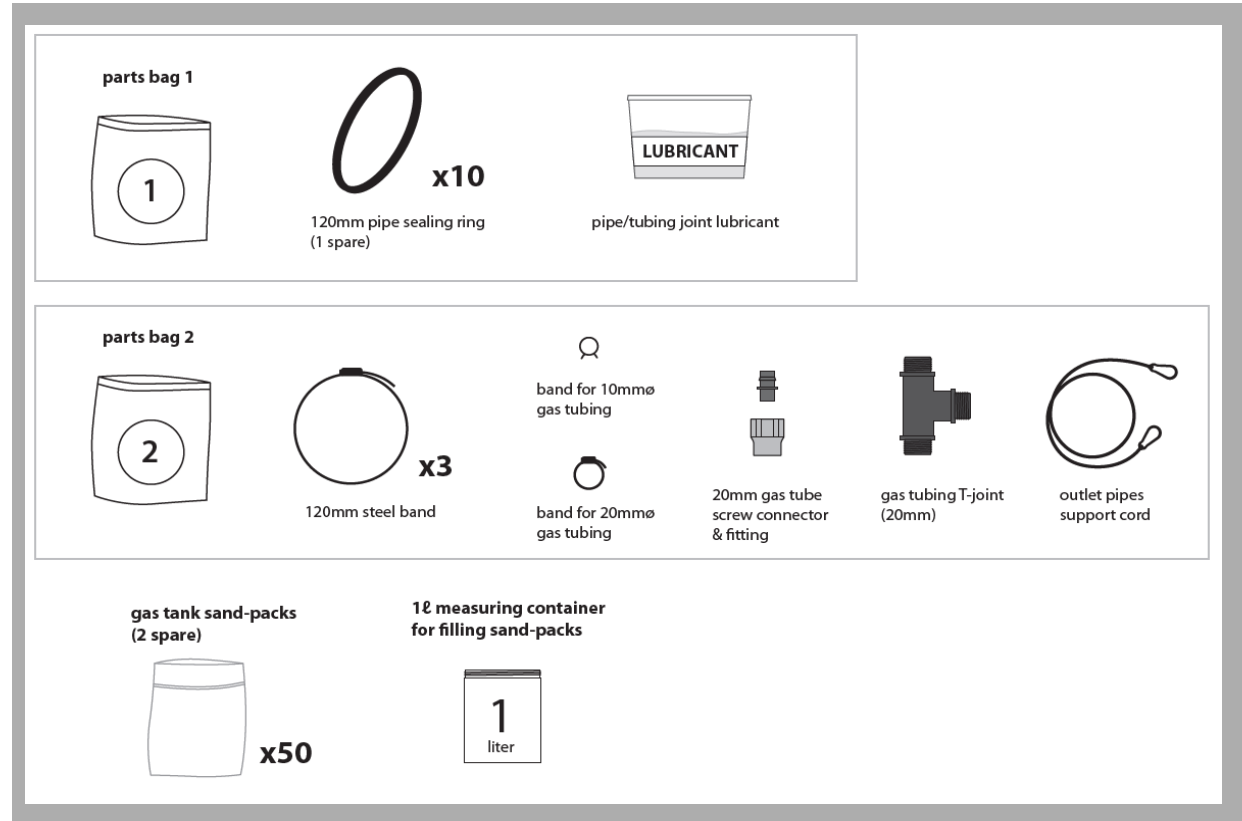
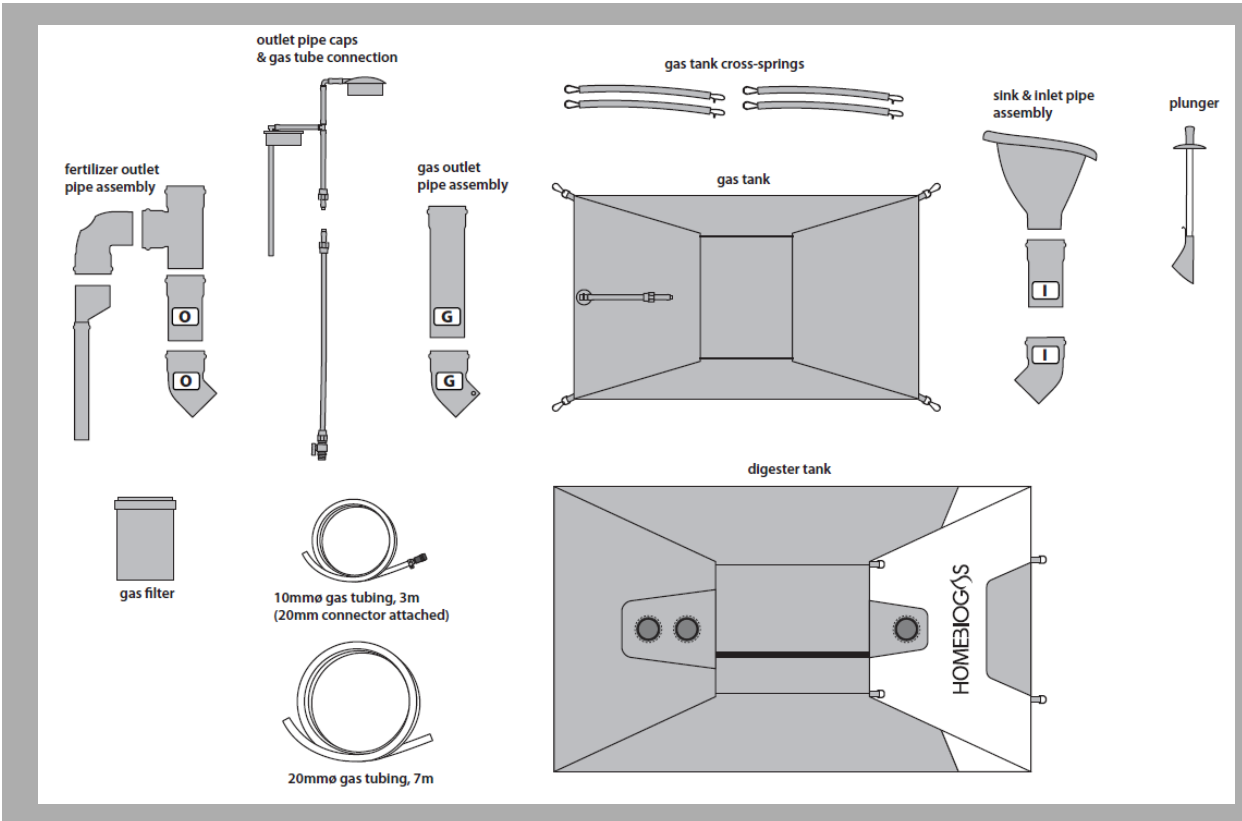
do not place system on shipping  
pallets or other weak raised  
surfaces



place system within reach of a  
water supply.

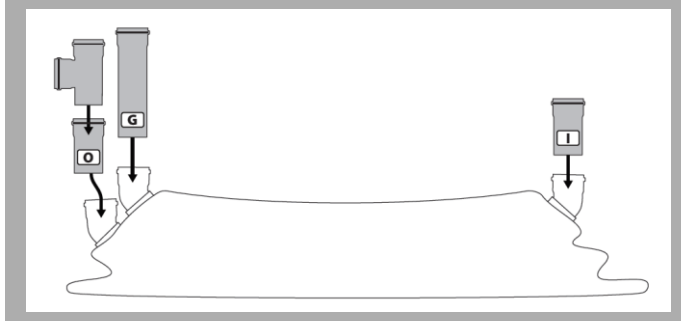
### PARTS IN THE BOX

- Make sure you have all the components

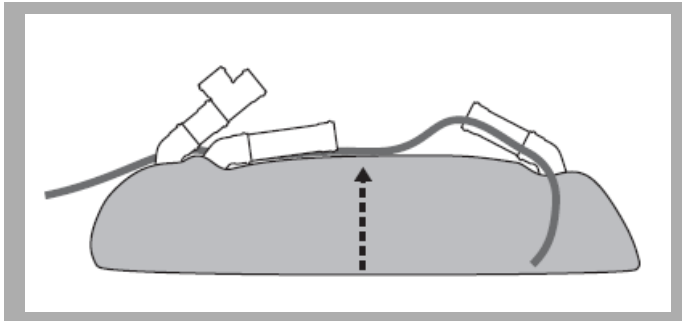


## ASSEMBLY SUMMARY

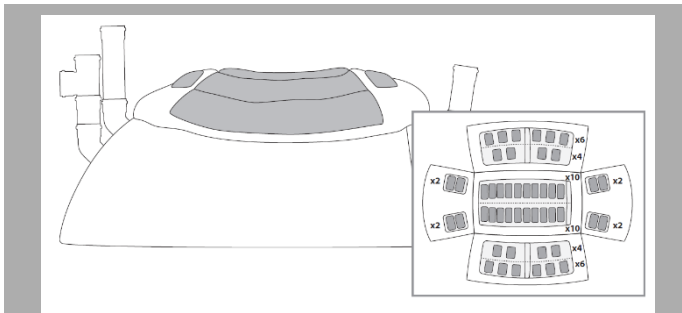
- Connect pipes



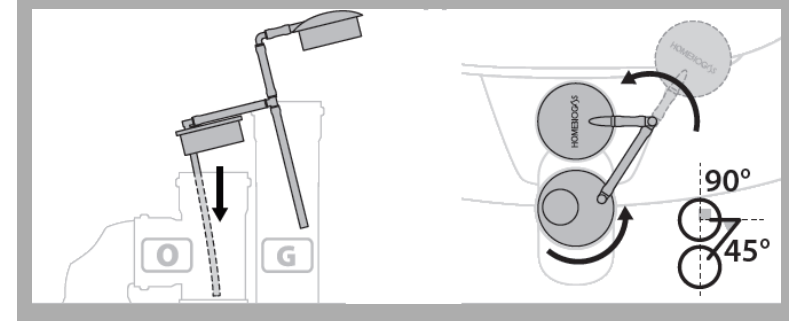
- Fill with water



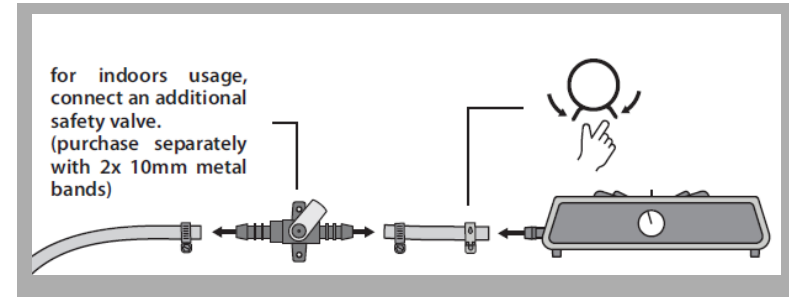
- Add gas bag including sand



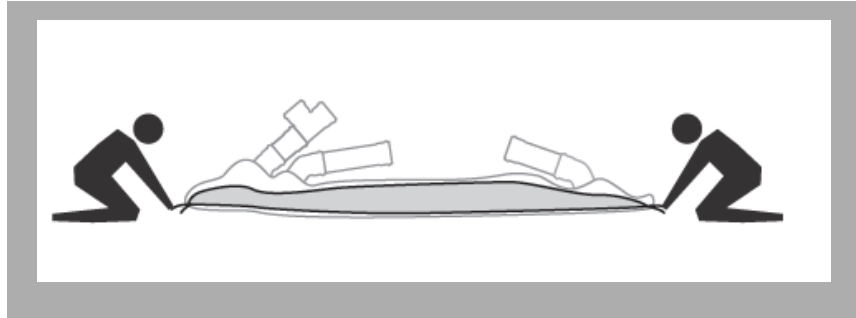
- Connect O-G kit



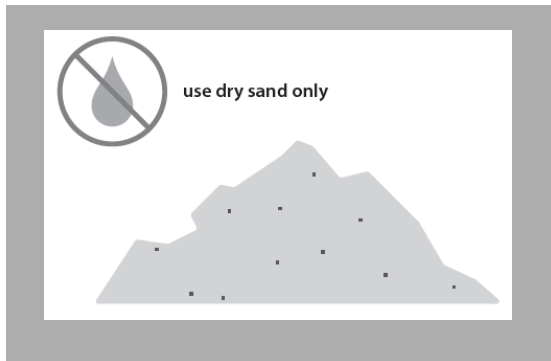
- Connect stove



## INSTALLATION TIPS



- Do not step on the digester
- Do not exert force on the digester



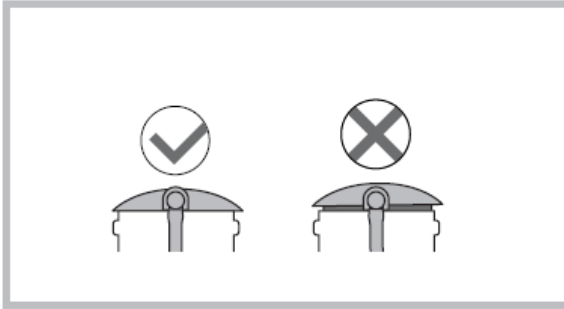
- Be sure you have 50 kg of sand available



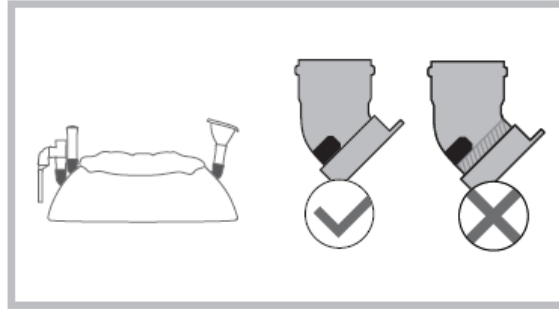
- Be sure you have 1200 liters of water available

### CHECK-LIST

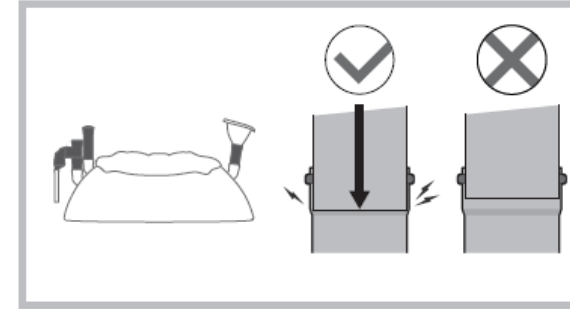
1. gas outlet cap (G) is inserted fully



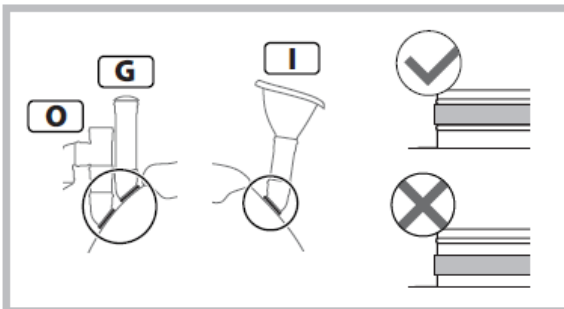
2. 45 elbows O, G, I pushed in all the way (up to sticker)



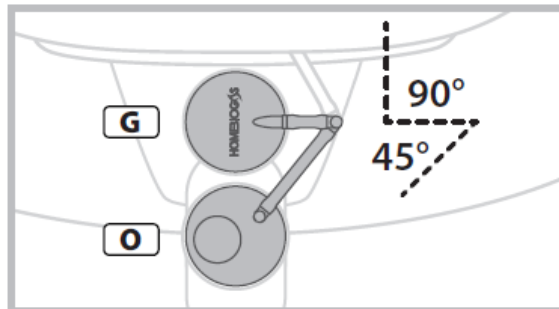
3. pipes in O, G & I assemblies inserted fully



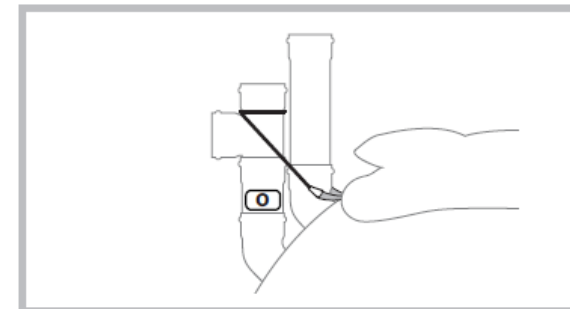
4. steel bands on O, I & G pipe connectors tightly fastened



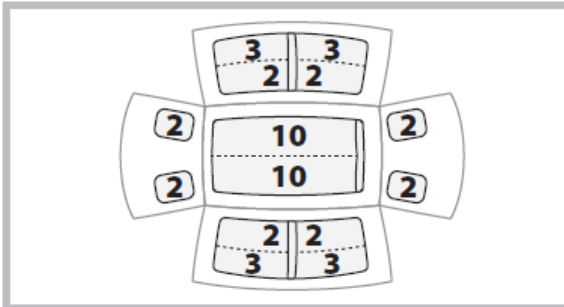
5. caps on O and G pipes angled correctly



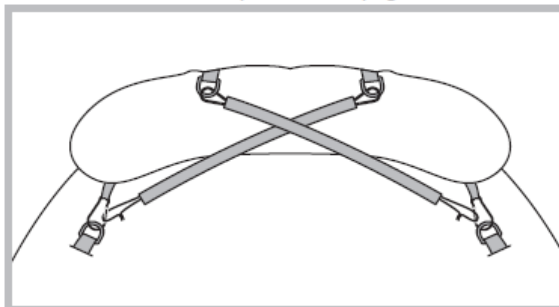
6. fertilizer outlet support cord in correct location



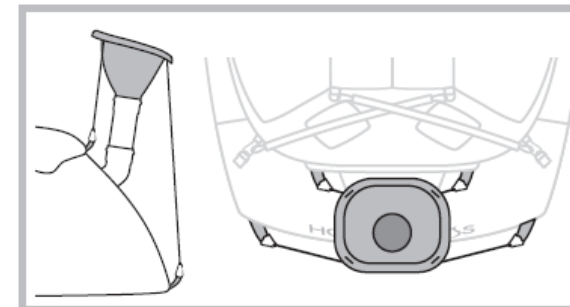
7. 48 sandbags inserted in correct locations (page 22)



8. all gas tank cross-springs securely connected to the correct attachment points (refer page 23)

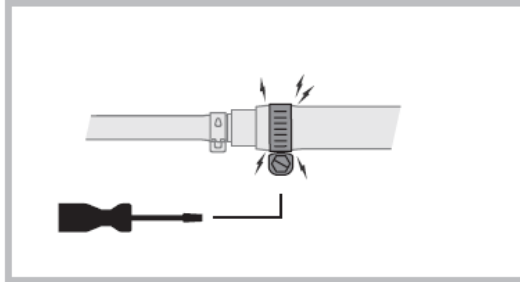


9. sink anchoring cords correctly attached

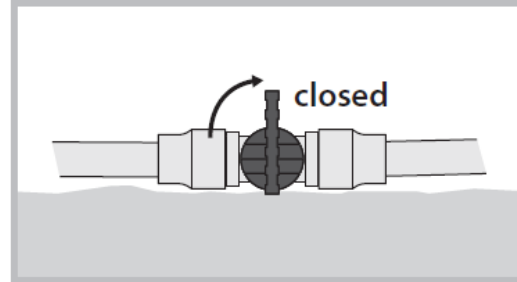


# CHECK-LIST

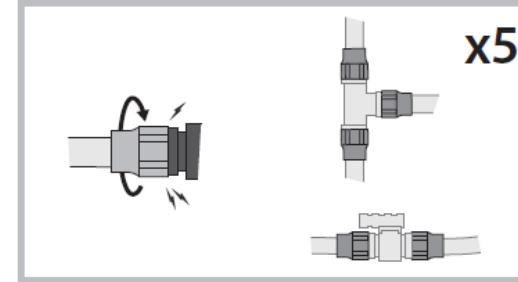
10. steel bands on 20mm gas tube securely tightened



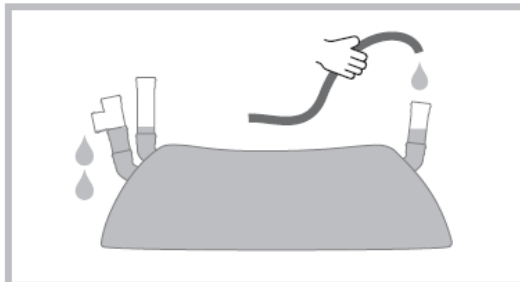
11. Gas valve closed (until activation complete) & gas valve on ground level



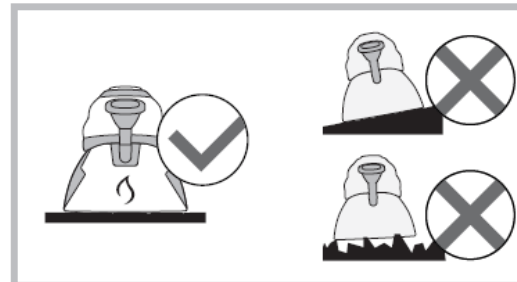
12. All 5 gas connectors screwed tight



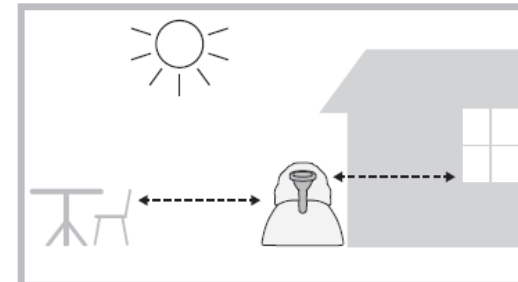
13. digester filled until water flows from fertilizer outlet



14. Digester is placed on strong, flat, level surface (refer page 7-8)



15. Digester is placed in sunny location near kitchen, away from windows/sitting areas (refer page 7-8)



You should also re-tighten the bands around the digester's 3 pipe connectors twice:

1. during the time of day when temperature is lowest
2. once again after 3 days.

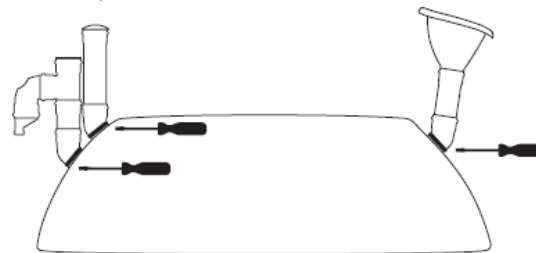
This will prevent leakage caused by material expansion and temperature difference.



**lowest day-night temperature**



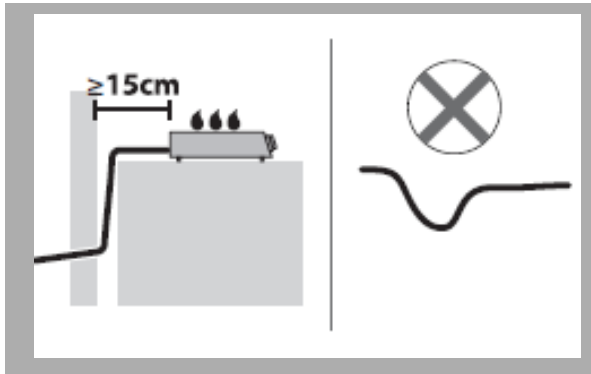
**after 3 days**



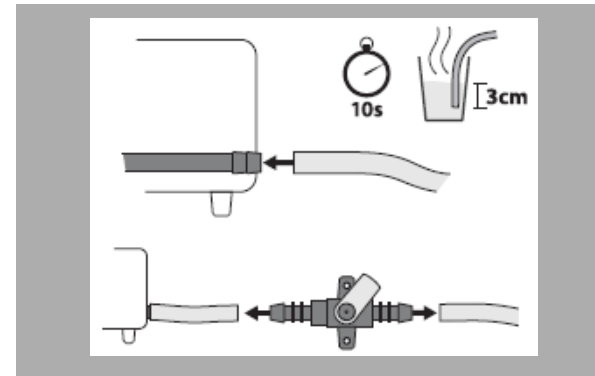
**Please proceed to the next section to activate your system before use. DO NOT begin to feed the system before it has been activated.**

# CONNECTING THE STOVE

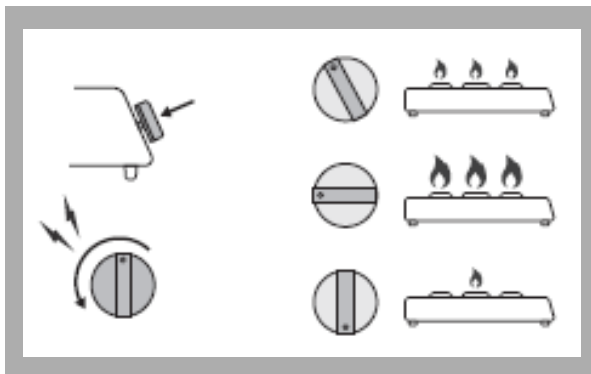
- ① Choose Stove Location & Set Up Gas Pipe



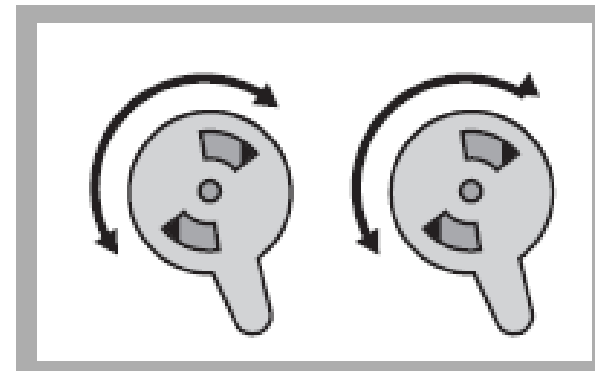
- ② Connect Gas to Stove



- ③ Turn On the Stove & Control Flame

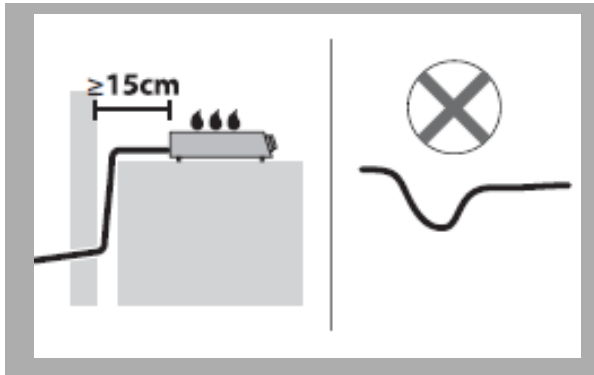


- ④ Adjust Airflow

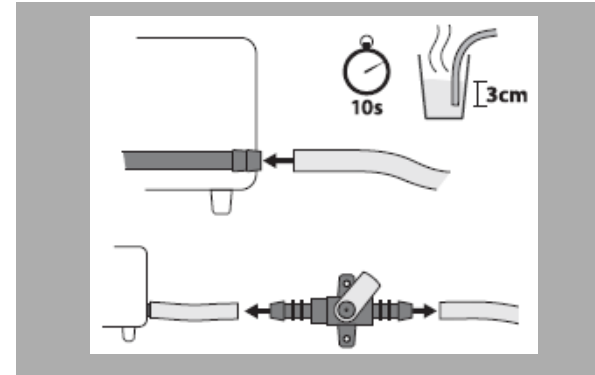


# CONNECTING THE STOVE

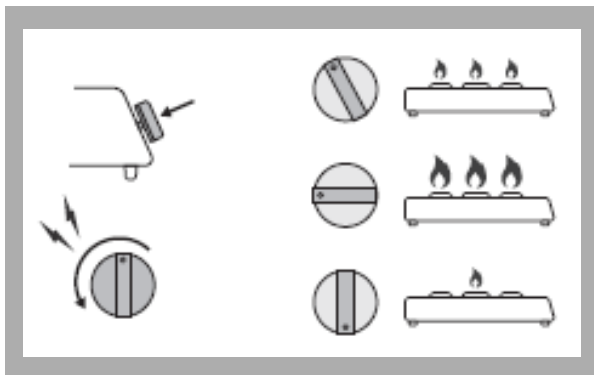
- ① Choose Stove Location & Set Up Gas Pipe



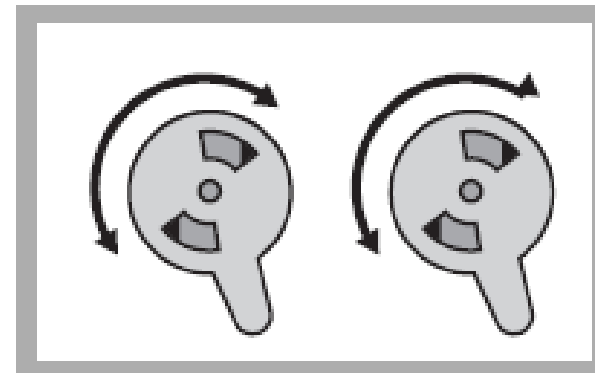
- ② Connect Gas to Stove



- ③ Turn On the Stove & Control Flame



- ④ Adjust Airflow



# Bio-Toilet Installation

1. Position the toilet and Bolt it down



2. Place the 2 plastic bolts and nuts, 2 plastic rectangles into the seat joints



3. Attach a pipe for a water source, such as a greywater recycling system.



4. Insert the inlet pipe into the bucket. The filter should not be put underwater.



# Bio-Toilet Installation

5. Slide the inlet pipe onto the top inlet hole, making sure the hose is snugly fit onto the pipe.



6. Slide the outlet pipe over the discharge elbow. Tightly screw both bands onto the portion where the outlet pipe overlaps with the discharge elbow.



7. Connect the vented loop

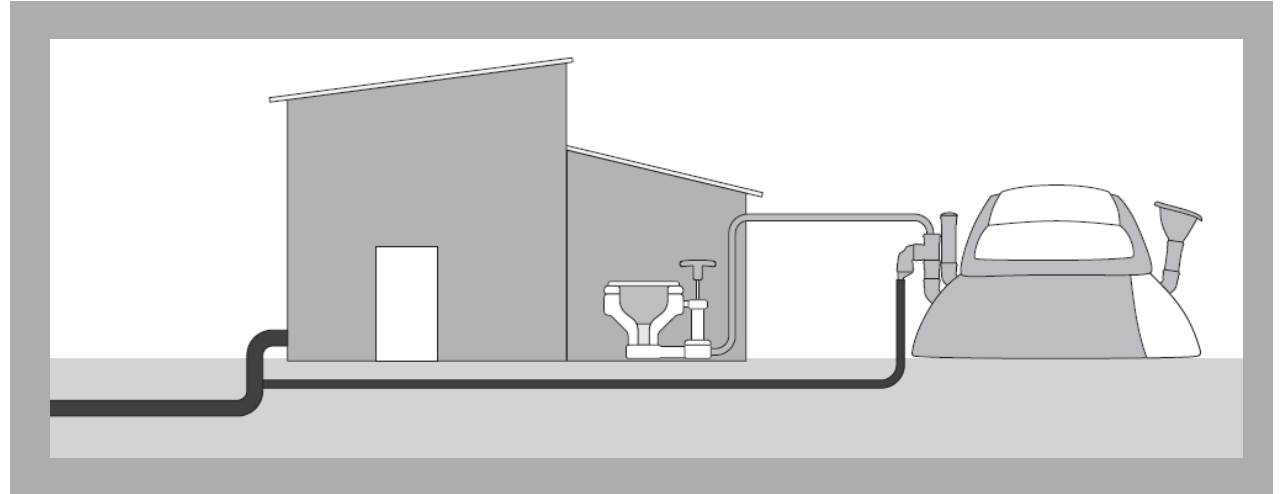


8. Final Solution

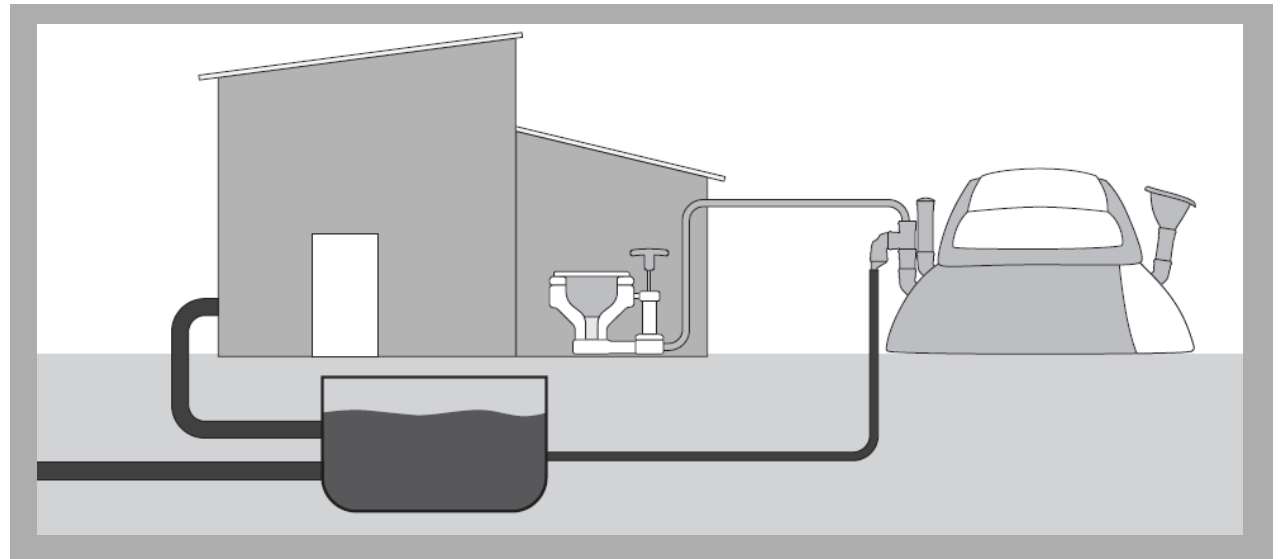


## MANAGING THE EFFLUENT

**Option 1: Divert effluent back into your existing sewage infrastructure**

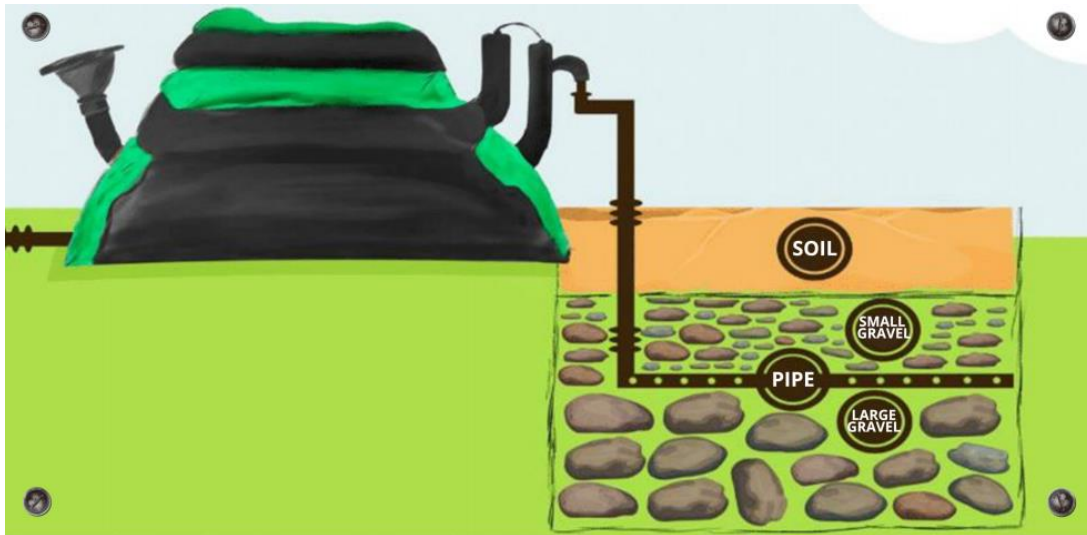


**Option 2: Divert effluent into your existing septic tank**



# MANAGING THE EFFLUENT

Option 3: Construct a drainfield



Option 4: Construct a Mulch Basin

