IMPORTANT WARRANTY INFORMATION PLEASE READ
FILL OUT AND RETURN ENCLOSED WARRANTY CARD

THIS WARRANTY COVERS:
Roots And Harvest® 1566- Black Garlic Multi-Purpose Fermenter
THE WARRANTY IS EXTENDED TO THE ORIGINAL PURCHASER ONLY

WARRANTY DURATION: This product is warranted to the original purchaser for a period of one (1) year from the original purchase date. **EACH UNIT COMES WITH A WARRANTY CARD, WHICH MUST BE FILLED OUT COMPLETELY AND RETURNED IMMEDIATELY, WITH A COPY OF THE PURCHASING RECEIPT. FAILURE TO RETURN YOUR WARRANTY CARD WILL LIMIT WARRANTY TO 90 DAYS WITH PROOF OF PURCHASE.**

WARRANTY COVERAGE: This product is warranted against defective materials or workmanship. The warranty is void if the product has been damaged by accident, misuse, neglect, modification or improper service or repairs by unauthorized personnel. It is also void if damaged in shipment or by other causes not arising out of defects in the materials or workmanship. This warranty does not extend to any units which have been in violation of written instructions furnished. This warranty covers only the product and its specific parts, not food or other products processed in it.

WARRANTY DISCLAIMERS: This warranty is in lieu of all warranties expressed or implied, and no representative or person is authorized to assume any other liability in connection with the sale of our products. There shall be no claims for defects or failure of performance under any theory of sort, contract or commercial law including, but not limited to negligence, gross negligence, strict liability or breach of contract. The manufacturer declines all responsibility for damage to persons, things or animals arising from the failure to comply with the norms contained in this manual. The manufacturer reserves the right to make modifications at anytime to the models while maintaining the main characteristics described herein. The manufacturer also declines all responsibility for any errors in compiling this manual.

WARRANTY PERFORMANCE: During the warranty period, a product with a defect will either be repaired or replaced after the product has been inspected by a Roots and Harvest Service Technician. ROOTS AND HARVEST RESERVES THE RIGHT TO REFUSE WARRANTY PERFORMANCE OR PRODUCT EVALUATION UNLESS THE ORIGINAL SALES RECEIPT OR THE WARRANTY CARD IS ON FILE. The repaired product will be in warranty for the balance of the warranty period. No charge will be made for such repair or replacement.

IMPORTANT NOTICE: If any parts are missing or defective, please contact our Customer Service Department for assistance at 877-509-3457 (M-F 8:30am to 4:30pm EST). **DO NOT RETURN TO THE STORE WHERE THE PRODUCT WAS PURCHASED.** Roots and Harvest is not responsible for, or will not cover under warranty, missing or damaged parts on discounted/clearance, resale or final sale items where the seller may not be able to guarantee full functionality or completeness of the unit.

ROOTS AND HARVEST MERCHANDISE RETURN POLICY WARRANTY SERVICE: To obtain service under terms of this warranty, please contact us at 877-509-3457 to obtain authorization prior to returning the merchandise. No merchandise will be accepted without prior authorization. Prior to returning the product for warranty repair the product must be thoroughly cleaned and free from any food particles or other debris. Failure of the purchaser to comply with this standard may result in the unit being returned without repair. In some cases, a $50 cleaning surcharge may apply. Please return the product prepaid in the original packaging if possible, enclose a copy of your receipt, (keep a copy of your proof-of-purchase for your records) and include a written explanation of the issue. Ship to Roots and Harvest, 4440 Muhlhauser Road, Suite 300, West Chester, OH 45011. Roots and Harvest is not responsible for damage incurred in shipping, make certain to pack product properly. Return shipping charges are the responsibility of the purchaser. Packages returned to Roots and Harvest should be insured for the value of the product to cover any damages that may occur during shipping.

Revised March 31, 2021

ROOTS & HARVEST® by LEM

BLACK GARLIC MULTI-PURPOSE FERMENTER

USE & MAINTENANCE

#1566

1 YEAR
WARRANTY

⚠ CAUTION ⚠

Use extreme caution when opening the lid during or after cooking.
Hot steam will escape and may cause scalding.

Roots and Harvest • West Chester, OH 45011 • 877-509-3457 • RootsandHarvest.com

⚠ GENERAL WARNINGS AND SAFETY INFORMATION ⚠

Save these instructions.

1. It is important to read and understand all of the instructions and safeguards prior to use.
2. The manufacturer declines any responsibility in the case of improper use of this product. Improper use of this product voids the warranty.
3. Tie back loose hair and clothing. Roll up long sleeves. Remove neck ties, rings, watches, bracelets or other jewelry before operating the appliance.
4. Use appliance only on a level, stable surface to prevent tipping. Never move appliance while in use.
5. Use the appliance with supplied accessories only. Warning: the use of accessories or attachments not recommended or sold by the manufacture may cause injury, damage to personal property and may void your warranty.
6. Always ensure the appliance is properly assembled and safely set up before use.
7. Always make sure the outside of the inner cooking pot is dry prior to use. If inner cooking pot is returned to the appliance wet, damage to the appliance my occur or the appliance may malfunction.
8. Caution: This appliance is not recommended for use near or by children or persons with certain disabilities. Set up and store the appliance in a secure dry location out of reach of children.
9. Do not attempt to disable any of the safety features that are in place. They are there for your safety.
10. Do not let cord hang over edge of table or counter-top or near heat or open flame.
11. Do not operate it with a damaged cord or plug or after the appliance malfunctions or has been damaged in any manner. Return the appliance to the nearest authorized service facility for examination, repair or adjustment.
12. Do not touch hot surfaces. Use handles or knobs.
13. During the fermentation stage you may see steam coming from the vents in the lid. This is normal. Do not cover, touch or obstruct the steam vents.
14. Failure to follow warnings and a safety information could result in death serious bodily injury and or property loss.
15. Indoor use only. To protect against the risk of electrical shock, never immerse the device, cord or plug in water and do not expose the deice to rain or moisture. Warning: In the event the device should fall into water, remove the plug from the wall socket before attempting to remove the unit for the water. If submergence occurs, have the appliance examined by an authorized technician before use.
16. Keep the area around the appliance clear of material that can burn.
17. Keep your work area clean and well lit. Cluttered work benches and dark work areas may cause accidents or injury.
18. The appliance is designed exclusively for domestic use and not for commercial purpose.
19. The appliance must be connected to 110/120vt AC electric supply only. Ensure the power cord is well connected to the the power inlet of the appliance.
20. This appliance has a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug will fit in a polarized outlet one way. If the plug doesn't fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. DO NOT modify the plug in any way.
21. Thoroughly hand-wash all appliance parts and wipe down the exterior with warm soapy water prior to use. Dry thoroughly. Not dishwasher safe. Discoloration may occur.
22. Turn appliance OFF, then unplug from the outlet when not in use, before assembling or disassembling parts and before cleaning. To unplug, grasp the plug and pull from the outlet. Never pull from the power cord.
23. Unplug from outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts and before cleaning and storing the appliance.
24. Use extreme caution when opening the lid during or after cooking. Hot steam will escape and may cause scalding.
25. Warning: Do not use while under the influence of alcohol or prescription or non-prescription drugs as these may impair user's ability to properly assemble or safely operate the appliance.
26. Warning: The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common-sense must be used.
27. WARNING: To avoid dangers of suffocation, keep all plastic bags away from babies and children.
28. SAVE THESE INSTRUCTIONS.

DEFAULT TIMES AND TEMPERATURES

Temperatures will fluctuate daily and with garlic and solo garlic you will see large swings in temperature. On the 4th day (50°C) is normal. It is also normal to see a temp flux 3°C +/- on all functions. Only the garlic functions that will fluctuate greatly.

FUNCTION	TIME/TEMPERATURE	COMMENT
Solo Garlic	9 Days/76˚C	• If the time is set to 6, 7 or 8 days, the default temperature is 77˚C, temperature range is 75-76-77-78-79. • If the time is set to 9 or 10 day, the default temperature is 76˚C Temperature range is 74-75-76-77-78. • If the time is set to 11 or 12 days, the default temperature is 75˚C, temperature range is 73-74-75-76-77.
Garlic	9 Days/75˚C	• If the time is set to 6 or 7 or 8 days, the default temperature is 76˚C, temperature range is 74-75-76-77-78. • If the time is set to 9 or 10 days, the default temperature is 75˚C, temperature range is 73-74-75-76-77. • If the time is set to 11 or 12 days, the default temperature is 74˚C, temperature range is 72-73-74-75-76.
Yogurt/Natto	6 Hours/39˚C	• Time range (4 Hours to 24 Hours): 6—8—10—12—14—16—18—20—22—24—4—6… • Temperature range (33˚C to 45˚C): 39—41—43—45—33—35—37—39—41 • Yogurt recommended 6-12 hours, according to the weather and amount of food, Can be adjusted as appropriate. Natto recommended 12-24 hours, according to the weather and amount of food, Can be adjusted as appropriate.
Enzyme/Sweet Wine	2 Days/26˚C	• Time range (2 Days to 12 Days): 2—3—4—5—6—7—8—9—10—11—12—2—3 • Temperature range (22˚C to 38˚C): 26—28—30—32—34—36—38—22—24
Drying/Heat Preservation	2 Hours/60˚C	• Time range (2 Hours to 72 Hours): 2—4—6—8—10—12—14—16—18—20—22...72—2—4…… • Temperature range (46˚C to 74˚C): 60—62—64—66—68—70—72—74—46—48—50—52—54—56—58—60……
Simmer/Disinfection	2 Hours/86˚C	• Time range (2 Hours to 72 Hours): 2—4—6—8—10—12—14—16—18—20—22…72—2—4… • Temperature range (78˚C to 90˚C): 86—88—90—78—80—82—84—86—88—90—78…
Time		Adjust the time.
Temp		Adjust the temperature.
Function		Choose the function you need.
Cancel		Cancel any function by holding the button 3 seconds.

GET TO KNOW YOUR BLACK GARLIC MULTI-PURPOSE FERMENTER

#	DESCRIPTION	#	DESCRIPTION
1	Handle	10	Function Button
2	Cover open button	11	Drying/insulation Indicator light
3	Digital Display	12	Yogurt, Heating, Natto Indicator Light
4	Function Panel	13	Rice, Fruit Wine Indicator Light
5	Power Socket Inlet	14	Temperature Button
6	Cooking/disinfection indicator light	15	Enter/Cancel Button
7	Garlic indicator light	16	Inner Pot
8	Solo Garlic indicator light	17	Garlic Cage
9	Time Setting Button	18	Power Cord

GET TO KNOW YOUR BLACK GARLIC MULTI-PURPOSE FERMENTER

This is a multifunctional automatic intelligent fermenter that will assist you in making black garlic, yogurt, kimchi, sweet rice, fruit wine, and natto. It is also helpful in disinfecting non plastic household goods.

Electric Fermenter features:

- A surround heater which enables uniform heating to ensure constant temperature with minimal heat loss to reduce energy consumption.
- Unique intelligent functions. It can be selected for fermentation time 6-12 days (1444-288 hours). The fermentation temperature can be set to meet different taste effects and different time requirements.
- Unique drying function. For the garlic with heavy water and extra-large garlic which may be more wet, black garlic can be dried to improve the fermentation effect.
- Cage like structure for garlic fermentation. The cage allows for good air circulation and uniform temperature and is easy to use. The cage can hold and ferment approximately 3 lbs. of garlic at a time.
- The inner pot liner helps to keep the temperature uniform and is easy to use and remove for cleaning.

PRIOR TO USE

Remove all items from packaging. Thoroughly wash all removeable parts in hot soapy water and dry thoroughly. Do not put the inner bowl in the dishwasher, it is made of aluminum and will oxidize. Wipe appliance down with a soapy damp cloth. Do not use abrasive cleansers. Inspect the appliance. Check to make sure there is not any debris in the inner tank or on the bottom of the pot. If there is be sure to remove it before use. Wash and thoroughly dry inner pot and cage before replacing in the machine. After inserting the inner pot rotate it left and right to ensure that It is properly seated in place.

Firmly insert the power cord into the power inlet on the back of the appliance. Plug the other end of the plug into the wall outlet. Unit will beep when power is received. The unit beeps and display shows 888 press the function button to get to desired function. Light will switch from each function as you press function button. NOTE: If the display is not showing 888 then the machine is in memory function and you must press and hold the cancel button for 3 seconds to reset the machine.

After each use power off and clean the inner cover and the seal/gasket on the cover. Wipe with a soft cloth, do not use metal brush or other abrasive cleaner or tools. The liner/bowl and the cage should be removed for cleaning. The liner and stainless-steel cage must be wiped dry before it is placed in the appliance. Do no soak the machine in water or rinse with water or other liquid. Always turn off the unit and unplug from power source prior to cleaning or maintenance.

⚠ CAUTION ⚠

Turn appliance OFF, then unplug from the outlet when not in use, before assembling or disassembling parts and before cleaning. To unplug, grasp the plug and pull from the outlet. Never pull from the power cord.

⚠ CAUTION ⚠

Use extreme caution when opening the lid during or after cooking. Hot steam will escape and may cause scalding.

⚠ CAUTION ⚠

Always make sure the outside of the inner cooking pot is dry prior to use. If inner cooking pot is returned to the appliance wet, damage to the appliance my occur or the appliance may malfunction.

HOW TO USE

Automatic timing function and power failure function: The fermenter has long working hours and automatic time function. Long term power failure memory function, if the power is cut off, then the fermenter will suspend work, after power is restored the fermenter will automatically continue to work, no need to worry about accidental power outage. Please do not power off frequently during the fermentation or open the lid frequently or for long periods of time, and don't press the cancel button when fermentation is working.

To begin: Plug the fermenter into the power supply, the display will show 888, the fermenter is on the standby. If the display doesn't show 888, it may be that the fermenter is in memory mode, press and hold the ENTER/CANCEL button for 2-3 seconds to cancel the memory and the display will show 888. Press the **FUNCTION** button (within 15 seconds) to select the desired mode. Pressing **FUNCTION** button will scroll though all available modes: **SOLO GARLIC, GARLIC, YOGURT/NATTO,ENZYME/SWEET WINE, DRYING/HEAT PRESERVATION, SIMMER/DISINFECTION**. When you come to the desired function, if you want to change the time and temperature, pressing the TIME and TEMP button to adjust time and temp for your function choice. To adjust time and temperature these buttons must be pressed within 15 seconds of selecting the function to be used. The fermenter has default time and temperature for each function, you can use it directly if you don't want to change time and temperature. After the function is selected, you can press ENTER/CANCEL to start immediately or let the machine start automatically after 15 seconds, do not hold in the ENTER/CANCEL button (holding in the button will cancel all functions and put the unit into standby). When the fermenter is working the indicator light will flash and the display will cycle to display remaining fermentation time in days (indicated by "d"), then hours, then actual working temperature (in Celsius). Press and hold the **ENTER/CANCEL** button for 2-3 seconds in the working mode to cancel all functions and reset the machine. This will put the fermenter in stand by and will auto shut down after 5 minutes. When the fermentation is complete, the display will show 000 and temperature and alternate between them, and makes 3 sounds every 10 minutes. After 2 hours, the fermentation will shut down automatically.

Disinfection function: Disinfection can be used for high temperature sterilization for household goods (excluding plastics) Cooking/disinfecting function: Enter the cooking disinfecting function by pressing the function button the indicator light illuminates when function is selected and digital display will default to 6 hours. Press the time button to adjust length to time for this setting. You can also press the temperature button continuously to adjust the temperature. The tools required for the fermentation operation can be sterilized in the liner/bowl of the machine for 1 hour. Plastic tools are not recommended for disinfection, high temperature may melt the plastic.

FOOD MAKING

Prior to each ferment you will need to have your recipe and culture or spores required to ferment your product. Follow your recipe for preparing the item and then use the multi- purpose fermenter to ferment or heat the product.

Prior to any function, sterilize the inner tank and any utensils that will be used for making your fermentation. You can do this by using the disinfection feature or sterilize in boiling in water for about 1 minute and then wipe bowl or cups dry.

TROUBLESHOOTING

PROBLEM	REASON	SOLUTION
No Power. No lights.	Power is not connected	Check that both ends of the power cord are securely plugged into the unit and the power outlet.
Power on, buttons do not work	Process is working or is in power off memory	Press the Cancel button for several seconds to cancel the program and reset the machine.
Display code, alarm	Working complete, prompt	Press the cancel button to cancel the program
Power on, no display or no heating	Machine is broken	Maintenance
Display not working	Machine is broken	Press and hold the cancel button, no change then machine is broken.

⚠ WARNING! ⚠

Fermentation of garlic has a strong smell. You may want to consider placement of your fermenter to keep odor to a minimum in the house.

BLACK GARLIC

Note: Fermentation of garlic has a strong smell. You may want to consider placement of your fermenter to keep odor at a minimum in the house.

This machine has a cage like frame for holding garlic. The structure allows for good air circulation and uniform temperature. It can be removed for cleaning. The cage will hold 3-4 lbs. of garlic. For best results fill the cage and shake it to settle the garlic.

Note: It is suggested you keep notes of pounds of garlic used time and temperature so to remember next time what worked and what could be done better.

1. Choose fresh garlic or solo garlic, no peeling, no need to clean. As Figure 1, you can cut off the end of the garlic.

Figure 1

Figure 2

Figure 3

Figure 4

2. Fill the cage with 3-4 lbs. of garlic and close the door of the cage. Shake to settle and even out the garlic. It is better to fill the cage, the ferment will do better with more garlic.
3. With the inner liner bowl already installed put the cage into the fermenter and close and lock the lid
4. Set the machine to garlic function (adjust time and temp as desired). After the fermentation complete, the machine will automatically turn off and will beep to indicate fermentation is complete.

ⓘ CAUTION ⓘ

Be extra careful when opening the lid of the fermenter contents will be hot and hot air will escape and may cause burns.

The first time you make black garlic set it to 7 days. Open the fermenter 5-6 days in and take one out and taste it. If you think it tastes good, fermentation is complete. It is possible to end the fermentation in advance. If it is not fermented enough, let ferment for the remaining time. If you want to eat some dry, you can dry for another 1-2 days. The longer the time, the higher the temperature the dryer the black garlic will be. Excessive fermentation will be too dry and bitter. But if your fermentation is too short or at too low temperature, the garlic may not be black and will be wet and sour. Generally, it is best to ferment for the full default time at the default temperature, but both time and temperature can be adjusted according to your preference.

If you find after you fermented the garlic is still wet and the center is not black you can ferment again for 1-2 more days or you can dry using the drying function. 6-48 hours can be chosen. When drying the lid does not need to be fastened, it is best to leave a gap so the humidity can escape and the drying effect will be better.

When making black garlic the fermentation will be better if you fill the cage completely with garlic too few garlic will not ferment well. 3-4.5 lbs. (1.5-2 kg) of garlic is best.

After black garlic process is complete it can be eaten but flavor is at its best after it has been stored for 5-10 days. Shelf life of black garlic stored in a container is about 1 months if refrigerated and sealed shelf life is extended to about 3 months.