

# varía®

GRIND DIFFERENT



## VS3

USER MANUAL



### **BEFORE USING YOUR VARIA VS3 GRINDER**

Please ensure you read and understand our Safety Measures and Operating Instructions.

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## Important note

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VS3 has been made to handle both espresso and filter grind sizes, however VS3 may find onmi/light roasts challenging at espresso settings (depending on the roast degree and type of bean), please ensure to take the utmost care while grinding light roasted coffees and ensure that you feed the beans in slowly or adjust your dose to suit a slightly coarser grind size.

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**After each grind,  
bellows must be used to  
remove fines and chaff  
and avoid blockages.**

## 1. Safety Measures and Precautions for use

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Please take time to familiarise yourself with the Varia VS3 safety measures and operational guidelines detailed within this manual before operating the grinder.

**PLEASE NOTE** the Varia VS3 Grinder incorporates high-speed rotating burrs which are very sharp and have potential to cause personal injury if any of the following safety measures / precautions or operating instructions are ignored.

1. PLEASE CHECK that your operating power supply and plug outlet type is compatible with the Varia VS3 purchased.
2. ENSURE your Varia VS3 body, power adaptor and power cord is placed in a dry situation, free from any potential water/liquid situations or any heat sources.
3. BE AWARE that the grinding burrs are very sharp, take extra care when cleaning, servicing or removing this part. See section 5. 'Cleaning and maintenance' for detailed instructions. If removed never leave a burr set unattended on a bench, always store securely out of reach of children and within a securely sealed protective container.
4. Ensure the finger guard is firmly in place within the bean hopper prior to operating.
5. DO NOT put your fingers into the hopper when the motor is running or when the power supply is plugged in.
6. ONLY operate with the hopper in place. Exposed burrs can cause injury to fingers, even if burrs are stationary.
7. NEVER allow long hair or loose clothing near the burr housing.
8. DO NOT attempt to clean burrs while the grinder is switched on or operational.
9. If cleaning with a vacuum cleaner, please remove the 4 x springs below outer burr.
10. Coffee Beans may contain foreign objects - eg. stones, pebbles. Always check your supply for any foreign objects before grinding.
11. DO NOT attempt to grind pre-ground coffee.
12. Varia VS3 is designed for home use, not for continuous commercial use.
13. DO NOT grind for more than 90 seconds in a single grinding cycle, ensure a minimum of 90 seconds rest between two grinding cycles.
14. DO NOT operate for more than 6 minutes within a 30 minute period.
15. We recommend the motor is switched OFF before loading beans.

16. DO NOT wash any Varia VS3 parts in the DISHWASHER.
  17. DO NOT operate this product in wet/damp conditions or place Varia VS3 near or onto wet surfaces or into water. Do not operate with wet hands.
  18. DO NOT wash this product or any components with water or immerse this product or any components in water. Wipe down with damp cloth and surface dry thoroughly.
  19. Should you need to use the RDT process to mitigate static during grinding, DO NOT spray moisture near or at the internal workings of the grinder, ONLY spray moisture (RDT) onto beans contained in the dosing cup prior to loading the hopper.
  20. The Varia VS3 must only be used with the supplied power adapter. DO NOT attempt to use Varia VS3 with another power adapter other than that supplied at time of purchase. DO NOT alter/modify the adapter or plug in any way. DO NOT use if power cords or plug is damaged in any way.
  21. SWITCH OFF power supply whenever you are cleaning or servicing Varia VS3, after use or if leaving grinder unattended for a long period of time, to avoid accidents.
  22. The use of third party attachments is not recommended, in doing so this may result in personal injury, a fire, electric shock or damage to Varia VS3.
  23. If there is any damage to the power supply cord or any other parts, please stop using this product immediately.
- If the power supply cord is damaged, it must be replaced by the manufacturer, its service agent or a qualified service person. DO NOT disassemble, damage or replace any part or component of this product at will or use it forcibly.
24. This appliance is not intended for use by persons (including children) with reduced sensory, physical or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
  25. DO NOT allow power cord to hang over bench-top – small children could suffer injury if grinder is accidentally pulled over onto them.
  26. DO NOT insert any utensils into the Varia VS3.
  27. DO NOT use Varia VS3 for anything other than its intended purpose. This appliance is only intended for use in the home and in the workplace. Never use Varia VS3 for grinding grains, spices, nuts or other food items.
  28. The one-year warranty will be voided if the product is used for something other than its intended purpose, and it could result in injury.

29. Please take care in disposing of all packaging materials responsibly. Plastic bags are a potential hazard as they can suffocate young children, if not disposed safely.
30. Varia VS3 MUST BE plugged into a grounded (earthed) power outlet.
31. DO NOT remove ground earth prong from plug.
32. DO NOT let the power cord touch hot surfaces.
33. DO NOT remove bottom cover from main body or disassemble the grinder in any way, other than to replace burr set. This procedure is detailed in section 5.3 of this manual. Failure to follow this detailed procedure may result in personal injury and or damage to the burr housing or burrs.
34. DO NOT operate in the presence of explosive and/or flammable fumes, heat sources or naked flames.

**Failure to follow these instruction / guidelines can result in electrical shock, fire or cause serious injury and or death.**

**The manufacturer will not be held responsible for any damage resulting from failure to comply with the stated safety measures above.**

### **DO NOT REMOVE BOTTOM COVER FROM MAIN BODY.**

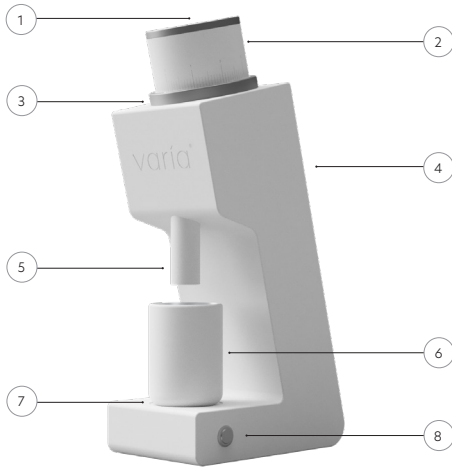
ONLY authorised service agents are permitted to repair Varia VS3. Unauthorised repairs will void the manufacturers warranty. In the event that repairs are necessary please contact your point of sale representative or email [hello@variabrewing.com](mailto:hello@variabrewing.com)

## **2. What's in the box:**

- 1 x VS3 Grinder (Stainless Steel Supernova Burr Installed)
- 1 x User manual
- 1 x DC power adapter (Includes selected AC power cord and plug)
- 1 x Magnetic dosing cup
- 1 x Silicone bellows for hopper
- 1 x 5mL RDT spray bottle
- 1 x Cleaning brush
- 1 x Replacement set of 4 x burr chamber springs
- 1 x Allen key (for removing burr housing screws)

### 3. Product Overview

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- |                           |                            |
|---------------------------|----------------------------|
| ① Hopper Lid (Magnetic)   | ⑤ Grounds Chute            |
| ② Hopper                  | ⑥ Dosing Cup (Magnetic)    |
| ③ Hopper Alignment Collar | ⑦ Magnetic Design Cup Dock |
| ④ Main Body               | ⑧ Power Switch             |

### 4. Operating Instructions

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#### **First use and seasoning:**

**WARNING: DO NOT turn on the grinder when the hopper is at its tightest setting as you will cause damage to the burrs.**

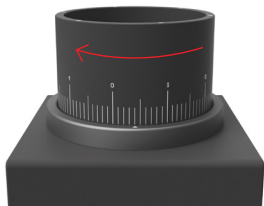
1. Remove all packaging before using.
2. Place the Varia VS3 onto a flat and stable surface.
3. Plug the adapter power cord into a power outlet and receptacle plug into the back of the grinder.
4. Check the power is on by pressing the power button once to turn on the motor, press again to turn off.
5. Remove the lid from the hopper and begin the calibration procedure.  
- see 4.1 *Grid Settings & Calibration*.

## 4.1 Grind Settings & Calibration

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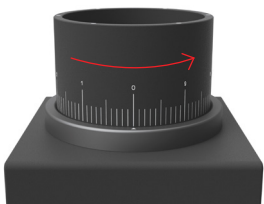
Your Varia VS3 has been factory calibrated and the hopper should be at the "0" setting.

1. To calibrate your Varia VS3, rotate the hopper in a clock-wise direction **until you reach the tightest setting past "0"**. (When factory new, this maximum tightness may vary from a seasoned thread after use).



**DO NOT** turn the grinder on while the hopper is set to the tightest setting as this could cause damage to the burrs as a result of the edges contacting.

2. Next, rotate the hopper in an anti-clockwise direction **until you reach "0"**. This is now your calibration "zero point" **and you are now ready to grind!**



## 4.2 Burr Seasoning

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Please be aware, your grind setting alignment may change after burr seasoning.

Static retention will also be higher than normal until charge is absorbed. This will be reduced after grinding your first 2kg of coffee through the Varia VS3 and as the body discharges any residual static.

**Finger Guard:** Varia VS3 is fitted with a finger guard inside the bean hopper to ensure its safe operation. It is up to user discretion to remove this part for operation. Please be aware of the risks involved should you remove this guard, especially to yourself or if young children are in the house who may find Varia VS3 interesting.

The finger guard is designed to keep fingers away from the sharp burrs.

**ENSURE fingers, loose clothing and long hair are kept a safe distance from the hopper opening while operating or on standby.**

### 4.3 Grind Settings Chart

VS3 has been made to handle both espresso and filter grind sizes, however VS3 may find onmi/light roasts challenging at espresso settings (depending on the roast degree and type of bean), please ensure to take the upmost care while grinding light roasted coffees and ensure that you feed the beans in slowly or adjust your dose to suit a slightly coarser grind size.



## 4.4 Static and RDT

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Please be aware, static charge may be present during grinding when new. This will decrease as the grinder is seasoned however some static retention may exist within the cup during and after grinding as a result of the magnet placed in the base of the cup. The amount of static may vary depending on some external factors, such as your location humidity, burrs seasoning status and the type of coffee beans.

In order to reduce static retention while grinding, we recommend to use the RDT "Ross Droplet Technique" as per the instructions below:

1. Measure your dose into the dosing cup as per your brew requirement.
2. Take the 5mL water spray "RDT" bottle and ensure it is filled with filtered water.
3. Spray 2-3 sprays into the dosing cup directly onto the beans.
4. Cover the cup with your hand and shake the beans so as to disperse the water droplets throughout the coffee beans evenly coating the surface in a small amount of water droplets.
5. Pour your dose into the hopper as per normal grinding.
6. Wipe your grinds cup free of any excess water droplets before commencing grinding.
7. Place your dosing cup onto the dock and begin grinding as per normal.
8. In order to ensure a cleanliness of the grinder after using the "RDT", be sure to wipe the hopper and dosing cup dry with a paper towel or dry soft cloth.

## 4.5 Hopper Bellows

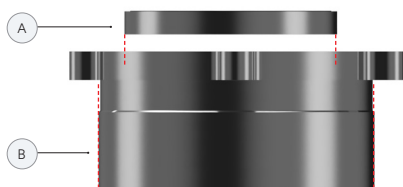
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A silicone cleaning bellows has been supplied with the Varia VS3 and this is used for cleaning any remaining grounds or chaff out of the hopper, burr chamber and ground chute.

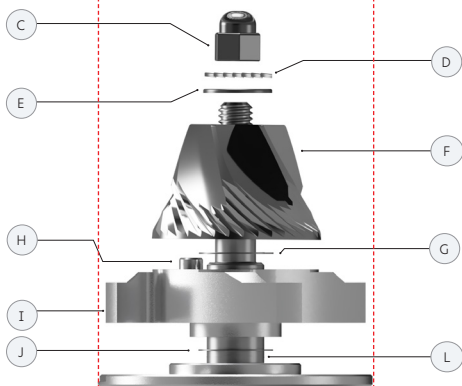
1. Remove the hopper lid and place this into the hopper bellows top side which is marked with the Varia VS3 logo (this will push into the groove made for the lid and become secured).
2. Next, place the hopper bellows bottom side on top of the hopper rim and make sure it fits properly around the diameter and creates a seal the gently push and release the hopper bellows up and down from the top with your hand. (This will create a small vacuum and force air through the grinding system in order to quickly clean any loose grounds/chaff left in the chamber).

**PLEASE NOTE: Varia recommends that the bellows are only used for cleaning the hopper as described above, using as a hopper extension however, is at users discretion.**

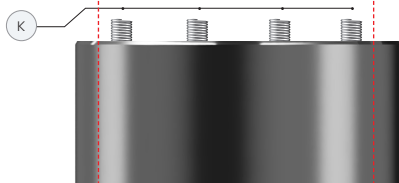
**Outer burr housing**



**Inner burr assembly**



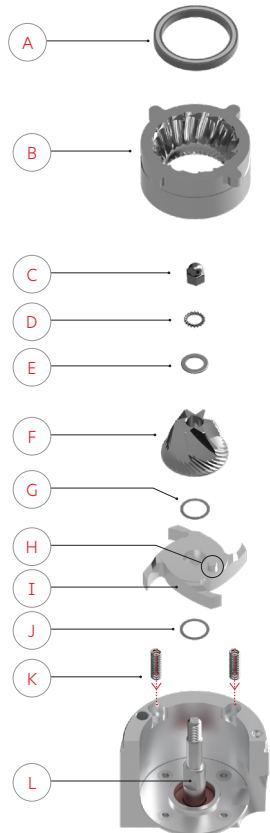
**Burr chamber**



- |                        |                           |
|------------------------|---------------------------|
| (A) Ring bearing       | (G) Thin washer           |
| (B) Outer burr housing | (H) Locking pin           |
| (C) Set nut            | (I) Lower grounds spindle |
| (D) Locking washer     | (J) Thin washer           |
| (E) Flat washer        | (K) Springs               |
| (F) Inner Burr         | (L) Driveshaft            |

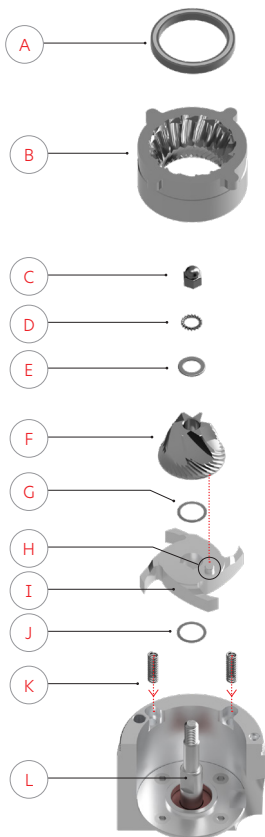
## 5.1 Full Clean / Disassembly

1. Turn on the VS3 while empty and use the silicone bellows to clean our any residual coffee particles.
2. Remove the power supply.
3. Remove the tools from the parts bag supplied.
4. Remove the hopper by rotating anti-clockwise, gently place this to the side and remove the adjustment collar also.
5. Carefully remove the small ring bearing (A).
6. Next gently pull the outer burr (B) up and out.
7. Using the tool provided, loosen the set nut (C) on the inner burr by cranking the tool clockwise.
8. Once the set nut has been released, you will notice 1 x locking washer (D) and 1 x flat washer (E), remove both and place to the side.
9. Remove the inner burr (F), revealing 1 x thin washer (G) on top of the grounds spindle (H), remove this also.
10. Remove the grounds spindle (G), revealing 1 x thin washer (J) underneath, remove this also.
11. Clean the grounds spindle and remove any residue coffee from inside the burr chamber.
12. Lastly, remove the springs x 4 (K) from the burr chamber.



## 5.2 Burr Change / Reassembly

1. Place a thin washer (J) onto the driveshaft followed by the grounds spindle (I) (into the chamber), lining up with the corresponding flat side (L) on the driveshaft. Then place a thin washer (G) on top of the grounds spindle.
2. Replace the 4 x springs (K) back into the chamber.
3. Place the new or cleaned inner burr (F) onto the grounds spindle, rotate until it engages with the locking pin (H) on the grounds spindle.
4. Replace the flat washer (E) on top of the inner burr followed by the locking washer (D).
5. Replace the set nut (C) onto the driveshaft thread and use the tool to tighten in an anti-clockwise direction.
6. Replace the new or cleaned outer burr (B) back into the burr chamber.
7. Replace the ring bearing (A) on top of the outer burr housing - ensure this ring bearing is fitting inside the cavity before the next step.
8. Replace the adjustment collar and hopper and tighten the hopper to the "O" point.
9. Dial in your required grind setting.
10. Lastly, replace your lid and power supply and you are ready to grind.



## 6. Frequently Asked Questions

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### **VS3 grind chamber is blocked?**

Check the grind setting is not in the 0-1 setting range.

Check that the burr chamber does not have any coffee beans or foreign materials present (rocks, sticks, unroasted coffee beans), that may be stuck in the chamber. Remove any residual beans and clean the burr chamber as per the cleaning process in this manual.

**Tip: After each grind cycle, use of bellows is recommended** - This will create a small pressured air blast through the grinding system in order to quickly clean any loose grounds/chaff left in the chamber). Refer 4.5 pg10.

### **The nut/washer is wobbling?**

This is normal behaviour and is not indicative of a malfunction or problem. The nut and washer are not part of the system that determines the concentricity of the burrs and has zero impact on the precision or alignment of the grinder.

### **The hopper on my VS3 is moving while grinding?**

We apply a food grade metal grease to our threads at the factory. With continued use this can wear off and allow the thread more slip. In order to ensure a stable and fixed thread position - please apply a food grade grease to the threads.

## 5. Cleaning and Maintenance:

Power must be TURNED OFF while cleaning this product. The grinder body and base must NOT be immersed or submerged in water or washed with water to clean.

**Cleaning grinder body:** Please use a moist cloth/towel to wipe the body, ensure that the cloth/towel is not wet as no water should enter the body. Ensure that once cleaned the surfaces are dried again.

*We recommend you discuss this procedure with you reseller if you are not familiar or confident in replacing a bur set.*

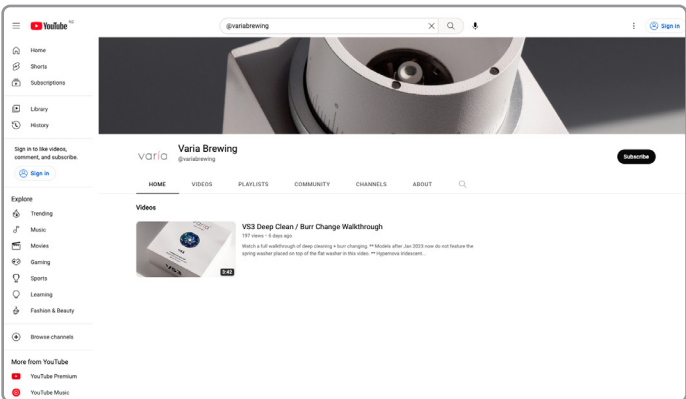
**PLEASE NOTE** that after replacing a burr set, any performance changes to the grind settings will be as a result of an incorrect disassembly and/or reassembly.

In this instance your warranty will not cover any additional costs related to reinstating the Varia VS3 to factory grind settings and/or performance.

### VS3 Deep Clean / Burr Change Walkthrough:

A step-by-step reference video is available on YouTube - this will assist you when completing the following tasks.

<https://www.youtube.com/@variabrewing>



## 6. Technical Specifications

Manufacturer	Varia Brewing Limited
Model name	VS3
Electrical specifications	DC Adapter input: 100-240V~, 2.0A, 50/60Hz. Output: 24 V, 4.0 A, 96.0W
Grind adjustment & Scale	Stepless, '0' thru '10', 0.1 increments
Colour options	Black/White
Optional extra parts	Black and Gold Titanium coated upgrade burr parts
Burr Size/Type	38mm conical 6 core
Base material	High nitrogen 420 Stainless Steel
Burr material hardness	HRC58
Burr life	150kg
Maximum recommended continuous grind time	30 minutes + 1 hour rest time after grinding.
Grind setting	Stepless adjustment / (20 Micron) relative vertical burr shift or 0.02mm per increment
Retention (10g Dose)	With RDT <0.1g / Without RDT: <0.2g
Grind speed	Espresso: 0.5g/second / Filter: 0.8g/second
Hopper capacity	30g
Grinder construction material	ADC12 die cast and machined aluminium
Motor	100W DC motor / 160RPM No load speed
Voltage	100-240V
Torque	28kg.cm
Dimensions	147 x 90 x 310mm
Weight	3.2kg

## 7. Limited Warranty

For 12 months after the original date of consumer purchase, Varia Brewing Limited warrants this product against any defects caused by defective material or workmanship.

Only the original user is covered by this warranty when a Varia VS3 grinder is purchased from an authorized reseller, and when is fitted with the factory standard parts.

To make a warranty claim, you will need the original sales receipt as proof of purchase.

### **This warranty does not cover damage to the product caused by the following:**

- Operating with the incorrect type of current/voltage and or plug type.
- An accident, misuse, neglect or 'act of God'.
- Using a non-approved power adaptor.
- Improper maintenance or unauthorised repairs. (Failure to clean the grinder and cleaning/servicing in according to the manufacturer's instructions).
- Any damage to burrs unless faulty from new.
- Failure to adhere to all of the safety measures / precautions or operating instructions outlined in this document's safety measures and operating instructions.

Varia Brewing Limited will not be responsible for any material damage or personal injury resulting from failure to adhere to the Varia VS3 Grinder Safety Measures and or Operating Instructions detailed in this manual.

**Please direct all warranty claims and enquiries to: [hello@variabrewing.com](mailto:hello@variabrewing.com)**

**[www.variabrewing.com](http://www.variabrewing.com)**