




**Instruction Manual**  
**VETSPIN DUO®**  
**VETERINARY CENTRIFUGE**

FOR IN VITRO DIAGNOSTIC USE







Product Number

01500-00 – Hawksley VetSpin Duo (for 240VAC, 50/60Hz)

VetSpin Duo is a registered trademark of Hawksley & Sons Ltd, whose address is 25  
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# Introduction

This manual is for the Hawksley VetSpin Duo® centrifuge. It is vital that **all** instructions in this manual are understood and followed, otherwise no claim of warranty will be considered by the manufacturer. Customers should be aware that these operating instructions are a part of this medical device and need to be kept readily available.

Please read the manual in full and in detail, as incorrect use of the VetSpin Duo® and its associated products may lead to product damage and inaccurate diagnostics.








## Intended Use





The VetSpin Duo is an electronic medical device, designed for in vitro diagnostic use. It is to be used in laboratories to separate particles via suspension, according to comparative density. This can include a range of biological substances including:

- Microbial cells
- Organelles
- Proteins
- DNA & RNA
- Packed Red Blood

# Symbol Key

Signal Words & Colours	Degree of Hazard
<b>Warning</b>	Indicates a hazardous situation that, if not addressed, can result in serious injury or death.
<b>Caution</b>	Indicates a hazardous situation that, if not addressed, could result in minor injury
<b>Notice</b>	Important Information that is non-hazard related

Symbol on Device & in Manual: <b>Attention, General Hazard Area</b>			Symbol on Device: <b>Electrical Hazard</b>
Symbol in Manual: <b>Beware of biohazard</b>			Symbol in Manual: <b>Risk of Crushing</b>
Symbol on Device and in Manual: <b>Collection of electric and electronic devices</b>			Symbol in Manual: <b>Hazard caused by flammable materials</b>
	Symbol in Manual: <b>Refers to important circumstances</b>		

Symbol on Shipping Carton: <b>This way up</b>		Symbol on Shipping Carton: <b>Fragile, handle with care</b>	
Symbol on Shipping Carton: <b>The shipping packaging must be kept away from any rain</b>		Symbol on Shipping Carton: <b>Made from Recycled Materials and Recyclable</b>	

# Product Overview

## Product Contents

- 1 x VetSpin Duo® Combination Centrifuge
- 1 x Combination Rotor
- 1 x Power Cable
- 1 x User Manual
- 1 x Rotor Removal Tool
- 2 x 3amp Fuse
- 1 x Rotor Lid
- 1 x Warranty Card
- 1 x Starter Pack (Capillary Tubes, Cristaseal & Microtubes)





# Technical Specifications

<b>Manufacturer</b>	<b>Hawksley &amp; Sons</b>
<b>Model</b>	<b>VetSpin Duo® Centrifuge</b>
<b>Mains Voltage</b>	<b>220-230V</b>
<b>Mains Frequency</b>	<b>50/60Hz</b>
<b>Motor Type</b>	<b>AC Brushless Motor</b>
<b>Max RPM</b>	<b>10,000 rpm</b>
<b>Maximum RCF</b>	<b>9,380 RCF</b>
<b>Max Time</b>	<b>99 minutes</b>
<b>Speed Accuracy</b>	<b>± 50 rpm</b>
<b>Maximum Capacity: Capillary Tubes</b>	<b>10 x 75 mm (capillary tubes) 10x 1.5/2.0ml tubes</b>
<b>Noise Levels</b>	<b>Below 65dB</b>
<b>Ambient Temperature for normal conditions</b>	<b>2 – 40°C</b>
<b>Permissible Relative Moisture</b>	<b>&lt;80%</b>
<b>Air Pressure</b>	<b>8</b>
<b>Altitude</b>	<b>Up to 2000m above sea level</b>
<b>Size: Length Width Height</b>	<b>305mm 270mm 208mm</b>
<b>Weight</b>	<b>7.5kg</b>
<b>Power Consumption</b>	<b>0.2 KW/h</b>
<b>Supply Voltage</b>	<b>240V (±10%), 50/60Hz</b>
<b>Fuses</b>	<b>3amp 230V fuse</b>

## General Considerations

- Before the initial operation of your centrifuge, you should read and pay attention to the operating instructions. Only personnel that have read and understood the operating instructions are allowed to operate the device.
- The Hawksley VetSpin Duo® is an exceptionally safe machine and has been designed and tested to be compliant with all European and National safety standards. ***However, when users operate the centrifuge for procedures it is not intended for, Hawksley & Sons Ltd cannot assume liability for any damage or injury.***
- Along with the operating instructions and the legal regulations on accident prevention, you should also follow the recognised professional regulations for working in a safe and professional manner. These operating instructions should be read in conjunction with any other instruction concerning accident prevention and environmental protection based on the national regulations of the country where the device is to be used.
- This centrifuge is a state-of-the-art medical device which is extremely safe to operate. However, it can lead to danger for users and other people if used by untrained staff, or in inappropriate ways that it was not designed for.
- The centrifuge must not be moved or knocked during operation.

### Caution

**In case of a fault or employing the emergency release, never touch the rotor before it is completely still.**

- To avoid damage as a result of condensation, when changing from cold to warm locations, or vice versa, the following protocols should be followed:
  - a. Cold to Hot: when moving to a hotter climate, the centrifuge must rest at room temperature for at least 3 hours before being connected to a power supply.
  - b. Hot to Cold: When moved to a colder room, the centrifuge needs to run hot for 30 minutes.
- Only the rotor approved by the manufacturer for this device and the approved accessories may be used (see page 8 – product contents). Before fitting centrifuge vessels that are not approved on page 23 & 24 – Centrifuged Vessels, the user **must** contact the manufacturer about whether they can be used.

**Notice**


The centrifuge must be loaded in line with page 22 - *Loading the Rotor.*

- When centrifuging with maximum revolutions per minute, the density of the materials, or the material mixtures may not exceed  $1.2\text{kg/dm}^3$
- The centrifuge may only be operated when the balance is within the bounds of acceptability. This is stipulated in page 22 Loading the rotor and additionally ensured by an imbalance switch, which cuts power to the motor when the rotor is imbalanced.
- The centrifuge should not be operated in areas, or spin samples, with highly inflammatory or explosive materials and processes. This includes materials that produce a lot of energy when reacting together.
- Repairs can only be carried out by personnel authorised to do so by the manufacturer.

- If users must centrifuge hazardous materials or compounds contaminated with toxic, radioactive, or pathogenic micro-organisms, they must take appropriate measures. For hazardous substances centrifuge containers with special screw caps must strictly be used. In addition to the screw cap centrifuge containers, for materials in hazard category 3 & 4, a biosafety system must be used (see the WHO “Laboratory Biosafety Manual”) **No Biosafety systems are available for this centrifuge.**
- The centrifuge must not be operated with highly corrosive substances which could impair the mechanical integrity of any rotors, hangers or other accessories.
- Only original spare parts and original accessories licensed by Hawksley & Sons Ltd can be used with this centrifuge.
- The following safety regulations apply:
  - a. EN/IEC 61010-1, EN/IEC 61010-2-020, EN/IEC 61010-2-101, including any national deviations.
- The safe operation and reliability of this centrifuge can only be guaranteed if:
  - a. The centrifuge is operated in accordance with these operating instructions
  - b. The electrical installation on the site where the centrifuge is installed conforms to the demands of EN/IEC stipulations
- Meeting the country-specific requirements concerning occupational safety regarding the use of laboratory centrifuges at the workplaces provided for this purpose by the user is the responsibility of the user.

## Transport & Installation

### Transportation

- This centrifuge must be transported and stored between the tested temperatures of -20°C to +60°C.
- The relative humidity of the transportation vehicle must be between 10% to 80%, and non-condensing.
- The device and accessories may only be transported in closed and dry conditions. 

### Installation

#### Delivery

- Check the Centrifuge, accessories, and packaging for any shipping damage. If there is any visible damage, notify Hawksley & Sons Ltd and the shipping company immediately.
- Check the order for completeness – If not contact Hawksley & Sons Ltd.


<b>Notice</b>	Save shipping container & packaging to simplify return should repair/service be required.
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#### Set up

- Check that all 4 rubber feet are attached and correctly secured.

When deciding the placement of the VetSpin Duo®, the following rules must be adhered to:

- The centrifuge must be placed and operated indoors.

- Position the centrifuge in a stable position and on a flat surface. During set-up, the user must ensure that there is a 300mm clearance zone around the entire centrifuge.
- During operation, no persons, dangerous substances or objects may be within the safety margin of 300mm around the centrifuge. 

### Caution



Failure to place the centrifuge on a flat surface could cause the centrifuge to slip across the surface and fall off during operation. Do not attempt to level the unit by placement of objects under the feet; this is not safe.

### Notice

Once placed, the horizontal alignment of the centrifuge must be inspected. The VetSpin Duo® should ideally be checked with a spirit measure (tool). The bench where the centrifuge is set-up **must** be suitable.

## Installation Considerations

- The bench which the centrifuge is placed on must be stable and free from movement and vibration
- The bench must be horizontal, flat (level) and durable to the device weight
- The ventilation openings must not be blocked
- Check that the mains voltage aligns with the type plate insignia
- The centrifuge should not be exposed to artificial heat or strong sunlight
- Do not expose the rotors or accessories to direct sunlight
- Do not lean on the centrifuge

### Caution


Ultraviolet rays can damage the plastics and coatings of the centrifuge & accessories.

### Caution



Harmful chemicals (e.g., strong ph.) must be avoided. Contact can lead to corrosion of the protective casing, damaging the structural integrity of the centrifuge and accessories. Corrosion of the rotors can lead to rotors being more likely to develop cracks and general damage compromising their structural integrity.

### Mains connection

- Verify that the voltage and frequency correspond to the rating plate located at the rear of the centrifuge 
- Make sure that the power cable supplied conforms to your country's safety standards
- If the above is met; connect the cable to the rear socket (IEC C13 plug) and plug the other end to a grounded electrical socket
- Switch on the mains switch & then switch on the on/off button at the rear of the unit



## Initial Operation

- During centrifugation; hazardous substances and all people must be outside the clearance zone
- Connect the centrifuge with the power cord to a standard mains socket that is turned off
- Turn the mains socket on
- Check that the digital display is working
- Press **+**, **-**, **PROGRAM** buttons to verify that they work correctly
- Press **STOP/LID** button to verify that the lid correctly unlocks
- Set up parameters, as per pages 17-20, operating the centrifuge and press the **START** button to begin a centrifugation run.

### Notice



If the lid is closed, the message “Open the lid” is displayed. In this case, open the lid to display the centrifugation data.

## Moving the Centrifuge

Prior to shipping, complete the following checklist:

- The centrifuge and accessories must be clean and decontaminated.
- Use the original packaging. If the original packaging is not available, damage to the unit will be the responsibility of the customer.
- The certificate of decontamination must be sent  
(Environmental & Health/Safety rules)



- The centrifuge should ideally be carried by two people using correct heavy lifting procedures. (See image below). The centrifuge weighs **7.5kg**.
- The rotor must be secured with packaging foam or cardboard during transportation, to avoid bending the motor shaft.

#### Caution



Due to the weight, carrying the centrifuge wrongly can result in injury or damage of the unit.



## Storage

Before placing the centrifuge into storage proceed with the following:

- Clean and decontaminate/disinfect all parts. For assistance, call Hawksley's centrifuge department
- Store the components in a dust and sunlight free environment
- The centrifuge should be stored upright on its feet

## Operating the Centrifuge

### Overview

Hawksley's VetSpin Duo® is designed for a busy veterinary practice. The VetSpin Duo® has a succinct interface with 3 pre-set programs for rapid spinning, whilst giving practitioners options to adjust speeds and time.

## Interface Map

**Speed Display:** Displays the speed in revolutions per minute (RPM) from 0 to 9999RPM

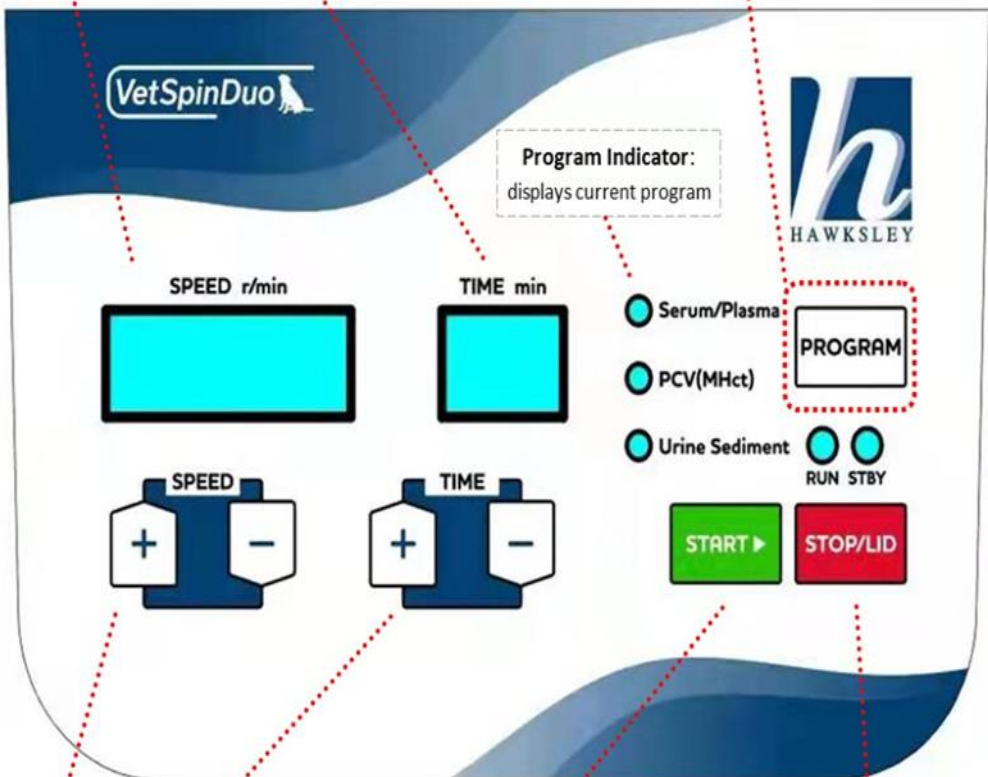
**Time Display:** Displays time remaining in minutes

**Program:** switches between three pre-set programs;

Serum/Plasma—10,000RPM for 2 minutes

PCV(MHct) - 10,000RPM for 5 minutes

Urine Sediment—1,500RPM for 2 minutes



**Program Indicator:** displays current program

SPEED r/min

TIME min

● Serum/Plasma

● PCV(MHct)

● Urine Sediment

PROGRAM

RUN STBY

START ▶

STOP/LID

**Adjust Time:** Time can be adjusted in minutes with the + & - symbols.

**Adjust Speed:** Speeds can be adjusted in increments of 10rpm with the + & - symbols

**Start:** Starts the spin on the parameters set by the programme button and Time/Speed adjustments.

NB: run will only start if lid is closed

**STOP:** Immediately stops the centrifuge from running.

NB: centrifuge will decelerate to ORPM before lid can open

## Quick Start Guide

For those who require simple speed and time adjustment:

- Ensure that the lid is closed, and a **LID OPEN** message is not displaying on the digital display
- Press the **PROGRAM** button to select the pre-set program
- If the pre-set program meets requirements, press the **START** button to begin the cycle
- To adjust the parameters of the pre-set program before a cycle, press the **+** button to increase and the **-** button to decrease both speed and time

### Notice



If the cycle needs to be stopped, users can press the **STOP/LID** button at any time to end the cycle.

### Notice



Once the rotor is stationary, the **STOP/LID** button can be pressed again to release the lid, as per EN IEC 61010-2 regulations.

The lid will only open when the rotor is stationary.

### Notice



Before commencing a run make sure the rotor is installed correctly and balanced – see page 21 & 22 Rotor Installation & Balancing

### Notice



The normal environmental conditions the centrifuge functions at are  $-2^{\circ}$  to  $+40^{\circ}$ C. We do not recommend operating the centrifuge outside this range.

### Caution

Do not reach in between the lid and housing



with your fingers.

## Control Panel Keys



Selects the program directly. When pressed, the program button will alternate between the 3 pre-set cycles of the VetSpin Duo. The current program will be displayed by an LED as per the image. Program parameters are as follows:



Serum/Plasma – 10,000RPM for 2 minutes



PCV(MHct) – 10,000RPM for 5 minutes



Urine Sediment – 1,500RPM for 2 minutes



Input the speed directly. Pressing the + key increases speed and pressing the - key decreases the speed in increments of 10RPM. This temporarily adjusts the speed of the pre-set programs.



Input the Runtime Directly. + increases runtime and – decreases runtime in increments of 1 minute. This temporarily alters the time of the pre-set programs.



Starts the centrifugation run. Pressing this button starts the run according to the parameters currently set.



Stops the centrifugation run. Pressing this button stops the current spin and applies a break to the rotor.

Pressing the **STOP/LID** button when the centrifuge is at a complete stop unlocks the lid.



LED light that displays whether the centrifuge is currently running: RUN

LED light that displays whether centrifuge is ready to run: STBY

## Rotor Installation and Balancing

### *Rotor Installation*

Make sure that the motor shaft is clean and has a thin coat of grease applied. If the motor shaft is dry, apply a thin coat of WD40 or neutral oil-based lubricant. Any dirt particles between the motor shaft and rotor prevent the rotor from sitting on its bearings correctly: potentially causing an imbalance or risk. Likewise, an ungreased rotor can cause unnecessary friction and wear on both the motor shaft and the rotor itself.

#### Notice



Ensure that the rotor is placed vertically onto the motor shaft and that it slots into the two brass pins. This ensures that the rotor does not come off its bearings during centrifugation.

Before every run we recommend these checks:

1. Check the Rotor Screw is fastened securely
2. Check Rotor Gaskets. Replace if they appear worn or damaged and post-pone procedure until replaced (Rotor Gaskets can be purchased directly from Hawksley & Sons Ltd)
3. Weigh the samples and make sure samples of the same weight are placed in such an orientation that they are opposite one another
4. Screw on the Rotor Lid before any procedure

### *Rotor Removal*

1. Remove the Rotor Screw by turning anticlockwise with the Rotor Removal Tool
2. Once the rotor screw is removed, lift the rotor vertically, being careful to keep the rotor face horizontal as it is lifted up, to avoid bending the motor shaft

#### Notice

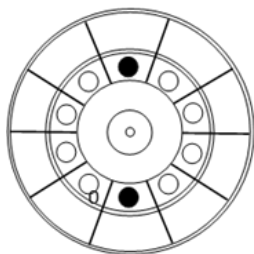
Whilst the rotor is removed, keep the Rotor Screw and Rotor together, as the Rotor Screw can easily be misplaced.

## Loading the Rotor

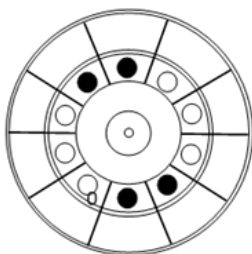
General guidelines to make sure you load a rotor correctly:

- The minimum tubes required is two (loaded opposite each other to balance). One can process a single sample by using a second tube with the same weight as a counterbalance, placed exactly opposite.
- Rotor must be equipped with the same type of test tubes on all places or with pairs of equal type which are placed on opposite places according to motor axis
- Each tube in the rotor requires another tube 180° degrees opposite to it.

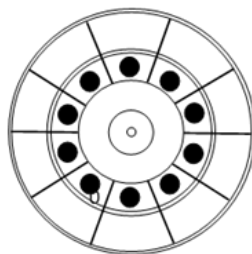
Below are examples of balanced rotors:



Balanced

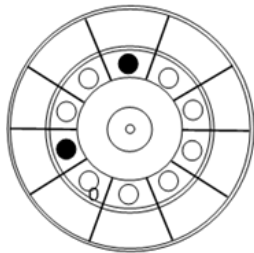


Balanced

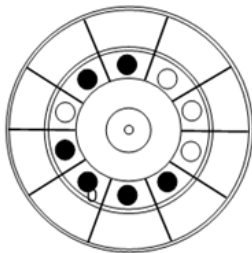


Balanced

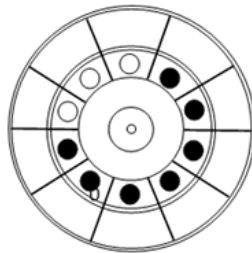
Below are examples of unbalanced rotors:



Unbalanced




Unbalanced



Unbalanced

## Caution

 It is dangerous to use an unbalanced rotor. Failure to properly install the rotor could result in damage to the centrifuge and void the warranty.

## Centrifuged Vessels

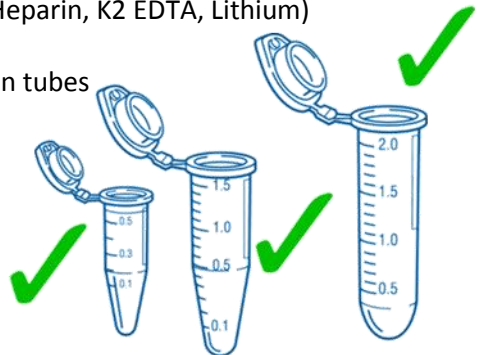
All centrifuge containers have to be filled outside of the centrifuge, to stop spills.

Containers should be filled no more than the specifications of the manufacturer. They must also be filled to a level so far that no fluid can be expelled from them whilst the centrifuge is running.

**NB:** Do not place tubes that are too large or too small into the centrifuge.

The Hawksley VetSpin Duo<sup>®</sup> takes:

- 75mm capillary tubes (Plain, Heparin, K2 EDTA, Lithium)
- Screw Cap 2ml blood collection tubes
- 1.5ml Microtubes
- 2.0ml Microtubes
- Screwcap 0.5ml Microtubes



Examples of incompatible tubes:

3ml, 5ml, 7ml, 10ml, 15ml & 15ml centrifuge tubes/vacutainers

PCR Strips

40mm capillary tubes

Blood or specimen bags

Open or damaged consumables



## Calculations

### Calculating Maximum Rotor Speed

The maximum speed is calculated for samples with a maximum density of 1.2 gram/ cm<sup>3</sup>. If the samples have a higher density the following equation must be used to calculate the new maximum speed.

$$\text{Reduced Maximum Speed} = \text{Maximum Speed} \times \sqrt{\frac{1.2}{\text{sample density}}}$$

Reduced Maximum Speed = The new reduced speed

Default speed = Max rotor speed for samples with 1.2g/cm<sup>3</sup> density

Sample density = Density of the samples



## Notes on RCF & RPM

The Hawksley VetSpin Duo® digital display shows the speed in Revolutions per Minute (RPM) of its rotor. If a user is ever required to calculate from RPM to RCF, or vice versa, there is a calculation that allows the user to do so accurately:

$$RCF = \left(\frac{RPM}{1000}\right)^2 \times radius \times 1.118$$

$$RPM = 1000 \times \sqrt{\frac{RCF}{1.118 \times R}}$$

R = Radius

RPM = Revolutions per Minute

RCF = Relative Centrifugal Force

## Cleaning & Maintenance


### Cleaning


The centrifuge and accessories should be cleaned on a regular basis, after each usage is recommended.

Mild cleaning solutions are to be used. Aggressive or abrasive cleaning materials are not allowed. **Neutral pH cleaners (between 5 – 8 pH) are recommended for cleaning rotors.** Wipe the rotor and accessories with soft materials and then put on thin oil film (or other anti-corrosive solution) to protect against corrosion.


- Clean by hand and only with liquids
- The water used for cleaning should be between 15 – 25°C


- Do not use caustic alkalis, peroxides, or chlorine compounds
- Ingredients of appropriate detergents: soap, anionic tensides, non-ionic tensides
- After using detergents, remove the detergent residue by wiping with a damp cloth
- In the event of condensation from water, dry the chamber by wiping out with an absorbing cloth
- Check the centrifuge for damage once a year

<b>Caution</b>	 If damage is found that could compromise the safety of the centrifuge, please get in touch with Hawksley’s engineers, who can advise on safety concerns, as well as repair information.
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<b>Caution</b>	 If a rotor has any signs of wear or corrosion, they can no longer be used.
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Before using any cleaning or decontamination methods except those recommended by the manufacturer, users should check with the manufacturer that the proposed method will not damage the equipment.

<b>Notice</b>	 Hawksley’s rotors aren’t autoclavable
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<b>Notice</b>	 Always keep adaptors & rotors clean and free from moisture to prevent corrosion
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<b>Notice</b>	 If recommended cleaning instructions aren’t followed warranty will be void
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<b>Notice</b>	 If hazardous material is spilt on or inside the equipment, the user has responsibility for carrying out the appropriate decontamination
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## Warning



**It is strictly prohibited to allow radioactive materials to come into contact with the VetSpin Duo®**

## Sterilisation

- Apply alcohol, 70% ethanol or isopropanol, for 10 minutes to kill any bacteria and viruses.
- Do not use formaldehyde for the sterilisation process.
- Phenol is a corrosive substance and should never be used.
- Do not autoclave rotors.

## Service

Refer to the Hawksley warranty for further instruction and make sure to fill out the warranty card before return. Remember that **decontamination of the centrifuge & all of its accessories must be completed before returning for servicing, repair, or disposal.**

## Notice

All returned items must be clean so as to be free from any biological material or chemicals prior to shipment for service.

## Rotor Gasket Replacement

The rotor gasket must be replaced if damaged. To replace the gasket:


1. Pinch the old gasket with your fingers and pull it out
2. Wipe the rotor clean
3. Place the new gasket in the slot. The new gasket should fit in easily with applied finger pressure

## Mechanical Emergency Door Release

The centrifuge lid is locked during power failure and cannot be controlled via the electronic interface. Users can use a mechanical override to recover samples. This method is only for **Emergency use** and should never be used during normal use.

To be carried out by authorized personnel.

### Warning

 Before carrying out mechanical override of the lid lock, make sure the rotor has stopped rotating. Serious injury is likely if the rotor is touched while rotating at high speed.

Follow these steps to access rotor:

1. Check rotor has stopped rotating (use the lid viewport for this)
2. If the rotor has stopped – unplug the power cable
3. Locate the white plastic plug on the front L/H underside of machine (Highlighted by a red arrow on the L/H side of the case)
4. Using a screwdriver (tool) unscrew the plastic plug
5. The plug will be attached to a string, pull the string away from the centrifuge
6. You will hear an audible click as the lid lock releases and the lid open
7. You can now retrieve your samples
8. After sample retrieval place the plastic plug back into its slot
9. Plug the power cable back in and close the lid
10. Wait 10 seconds and then press the 'lid open' button


**If after these steps your centrifuge is no longer working - contact Hawksley's services department or your distributor.**

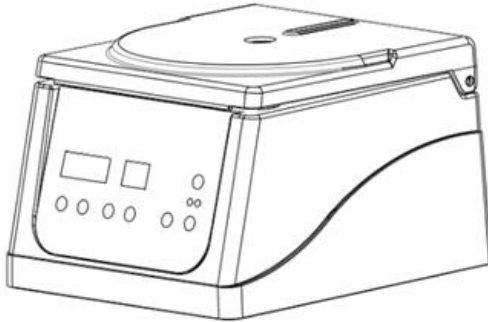
# Troubleshooting

## Error Indicators

Code	Code Meaning	Error Meaning	How to Solve
E1	Imbalance protection	Imbalance detector switch has been closed.	Ensure that you have balanced tubes correctly (as per page 22).
E3 or EC	Lid Error	Lid lock attempted to release lid but something is preventing or blocking the lid from opening.	Make sure nothing is blocking or restricting the lid's movement.
E9	External supply voltage is high	External power supply exceeds AC242V.	Ensure that you are using the correct power supply. If you are using the correct power supply, get in contact with Hawksley's repair team, who will advise on next steps, including any required repairs.
E2 or E7	Speed Error	Either the sensor is not detecting the speed, there is speed interference, or acceleration is too rapid.	Get in contact with Hawksley's repair team, who will advise on next steps, including any required repairs.
E4 or E5	Motor Error	Brakes are not connected or too strong, caused by excessive current in the braking mechanism	
E6	Power Error	The VetSpin is experiencing surges in power input.	
E8	Communication Error	The communication between the display board and the driver board is unsuccessful.	

## Caution

 If errors continue to be displayed despite having taken recommended measures, then the centrifuge sensors are most likely damaged. Call our services department.



## Safety Precautions

- Do not move the centrifuge while rotor is turning

## Notice

This includes if the centrifuge is set up incorrectly (e.g., not horizontal) do not use unless rectified

- If cover is not closed properly centrifuge will not operate reclose cover insuring a proper close
- If the centrifuge is not serviced by a qualified person remove from operation until a full service by qualified personnel
- Do not use if rotor or accessories are damaged or corroded

- Proceed with caution if rotor and accessories are not original or specially recommended, ensuring correct rotor speeds have been calculated for the new rotor
- Do not centrifuge any materials that are flammable or explosive
- Do not centrifuge chemically reactive solutions
- Do not keep centrifuge stored with flammable or explosive substances
- Do not keep centrifuge near unqualified staff or members of the public
- Ensure rotor is properly balanced before operating
- Do not fill tubes while they are in the rotor. Liquid spillage may harm the device
- If liquid is spilled on the rotor or rotor chamber, the centrifuge must be cleaned immediately
- The centrifuge and rotor are not microbiologically leak-proof. Tubes with leak-proof covers must be used
- No radioactive materials can be used with the centrifuge

## VetSpin Duo® Warranty

The VetSpin Duo® is warranted to be free from defects in material and/or workmanship, under normal use for a period expiring of two years from date of installation. This is dependent that the purchaser of the centrifuge has completed and forwarded the Hawksley Warranty document.

This warranty will not be valid if the product is not used for its intended purpose and/or the user has not followed the manual guidelines. This warranty will not cover damage due to accident, negligence, misuse, or defects caused by improper installation, unauthorised repairs, or modifications. Repaired or replaced products provided under this warranty carry only the remainder of the original warranty and repairs shall not interrupt or prolong this warranty. For warranty terms and conditions outside the UK, contact your Authorised Hawksley Distributor.

Hawksley makes no warranty other than the one set forth herein. This warranty is given expressly in lieu of all other warranties, expressed or implied. The purchaser agrees that there is no warranty of merchantability or of fitness for any intended purpose and that there are no other remedies or warranties, expressed or implied, which extend beyond the description on the face of the agreement. No agent or employee of Hawksley is authorised to extend any other warranty or assume for Hawksley any liability as set forth above.

Products received without prior and proper authorisation will not be processed and hence not considered under warranty. All items returned for service should be sent postage prepaid in the original packaging or other suitable carton, padded to avoid damage. Hawksley & Sons Ltd will not be responsible for damage incurred by improper packaging.

All items returned for service should be set postage prepaid in the original packaging or other suitable carton, added to avoid damage.

**This warranty is valid only if the warranty is completed within 30 days from the date of purchase.**



## VetSpin Duo® Disposal

**IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE EUROPEAN DIRECTIVE ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**



At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service. Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin.

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