

**MINICENTRÍFUGAS NAHITA SERIE 2507 Y FUGEVET+
NAHITA MINICENTRIFUGES SERIES 2507 AND FUGEVET+
MINICENTRIFUGEUSES NAHITASÉRIE 2507 ET FUGEVET+**

Referencia | Code | Référence
GDC001 - GDC002 - GDC003 - GDC004 - GDC005 - GDC008 - GDC009



Este manual es parte inseparable del aparato por lo que debe estar disponible a todos los usuarios del equipo. Le recomendamos leer atentamente el presente manual y seguir rigurosamente los procedimientos de uso para obtener las máximas prestaciones y una mayor duración del mismo.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

Ce manuel est une partie indissociable de l'appareil et doit être mis à la disposition de tous les utilisateurs de l'équipement. Nous vous recommandons de lire attentivement ce manuel et de suivre scrupuleusement les procédures d'utilisation afin d'obtenir des performances maximales et une plus longue durée de vie de l'appareil.

LANGUAGE INDEX

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MODEL MINI CENTRIFUGES SERIES 2507 AND FUGEVET+

Thank you for choosing this equipment. We sincerely wish that you enjoy your Nahita mini centrifuge. We highly recommend looking after this equipment according to what is stated in this manual.

Nahita develops its products according to the CE marking regulations as well as emphasizing the ergonomics and security for its user. The correct using of the equipment and its good quality will permit you to enjoy this equipment for years.

The improper use of the equipment can cause accidents and electric discharges, circuit breakers, fires, damages, etc. Please read the point of Maintenance, where we expose the security notes.

TO GET THE BEST RESULTS AND A HIGHER DURATION OF THE EQUIPMENT IT IS ADVISABLE TO READ THOROUGHLY THIS MANUAL BEFORE OPERATING WITH THE EQUIPMENT.

Please bear in mind the following:

- This manual is inseparable from the Nahita mini centrifuge, so it should be available for all the users of this equipment.
- You should carefully handle the centrifuge avoiding sudden movements, knocks, free fall of heavy / sharp objects on it. Avoid spilling liquids inside the equipment.
- To prevent fire or electric discharges avoid dry or dusty environments as well as spilling liquids on the equipment. In case it may happen unplug the equipment immediately.
- Never try to repair the centrifuge by yourself, since you will lose the warranty and may provoke damages to the general operating system or the electrical installation, as well as injuries to the people that usually handle the centrifuge (burns, hurts...) or damages in nearby equipments.
- If you have any doubt about setting up, installation or functioning do not hesitate in contacting your wholesaler.
- Overhaul is not covered by the equipment warranty.
- Operations made by non-qualified staff will automatically produce a loss of the centrifuge warranty.
- Accessories (including their loss), are not covered by the product's warranty. The warranty neither covers piece's deterioration due to the course of time.
- Please make sure you keep the invoice, either for having the right to claim or asking for warranty coverage. In case you have to send the equipment to Nahita Technical Assistance Department you should enclose the original invoice or a copy as guarantee.
- Manufacturer reserves the right to modify or improve the manual or equipment.

ATTENTION!! IF EQUIPMENTS ARE NOT PROPERLY CLEAN AND DISINFECTED THEY WOULD NOT BE ALLOWED TO REPAIR BY OUR TECHNICAL SERVICE.

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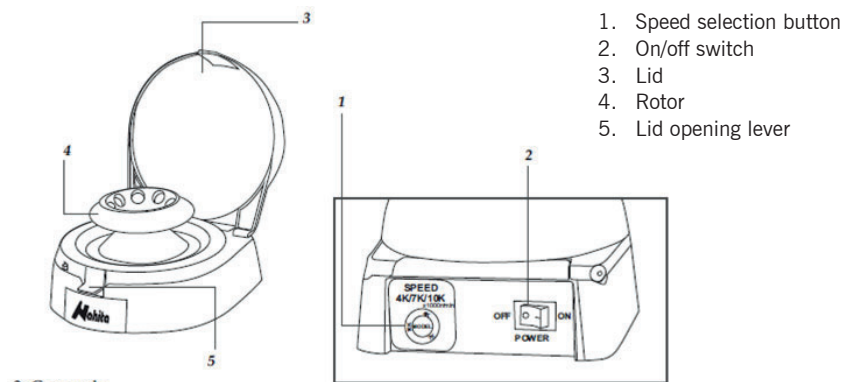
1. USES OF THE INSTRUMENT

Nahita mini centrifuges are table top centrifuges with a compact and silent design, very easy-to-use and with a great stability. The lid design makes their use smooth and silent even at high speeds and also safety: the rotor stops automatically when the lid is opened.

Minicentrifuges series 2507 are very versatile since they can be used with Eppendorf tubes of 2, 1.5, 0.5 and 0.2 mL, thus being ideal for using in techniques such as PCR, HPLC or microfiltration. Model 2507/25 is only suitable to be used in the car in field determinations or analysis.

Fugevet+ centrifuge is supplied with 3 types of angle rotors: for microtubes, for strips and for microhematocrit and it is mainly aimed at analytical applications in veterinary.

2. DESCRIPTION



3. TECHNICAL SPECIFICATIONS

Series 2507

Code	GDC008	GDC001	GDC002	GDC009	GDC003	GDC004
Model	2507/4	2507/7	2507/11	2507/30	2507/15	2507/25
Capacity	- Rotor for 8 x 1.5/2 mL microtubes - Rotor for 4 strips of 8 x 0.2 mL PCR microtubes - Rotor for 6 x 1.5 mL microtubes, 6 x 0.5 mL microtubes and 2 x 8 x 0.2 mL microtube strips*			- Rotor for 8 x 1.5/2 mL microtubes - Rotor for 4 strips of 8 x 0.2 mL PCR microtubes - Rotor for 6 x 1.5 mL microtubes, 6 x 0.5 mL microtubes and 2 x 8 x 0.2 mL microtube strips* - Rotor for 12 x 20 µl micro haematocrit capillaries		- Rotor for 8 x 1.5/2 mL microtubes - Rotor for 4 strips of 8 x 0.2 mL PCR microtubes - Rotor for 6 x 1.5 mL microtubes, 6 x 0.5 mL microtubes and 2 x 8 x 0.2 mL microtube strips*
Speed (rpm)	4000	7000	10000	12000	4000/ 7000/ 10000	Fondo redondo de PP con tapa
FCR (g)	990	3260	5610	8550	990/ 2910/ 5610	Tubo PCR de f
Noise	<43dB	≤ 52 dB				
Power	CA 100-240 V, 50/60 Hz				DC12V (car)	
Dimensions	170x160x130 mm					
Weight	~0.8 Kg					

*Adapters included

Fugevet+

Code	GDC005
Model	Fugevet+
Capacity	<ul style="list-style-type: none"> - Rotor for 8 x 1.5/2 mL microtubes - Rotor for 4 strips of 8 x 0.2 mL PCR microtubes - Rotor for 6 x 1.5 mL microtubes, 6 x 0.5 mL microtubes and 2 x 8 x 0.2 mL microtube strips - Rotor for 12 x 20 µl micro haematocrit capillaries - Rotor for 4 cryotubes of 5 mL and 2 mL*.
Speed	4000/ 7000/ 12000
FCR	990/ 2910/ 5610
Dimensions	170x160x130 mm
Weight	~0,8 Kg
Power	CA 100-240V, 50/60Hz

*Adapters included

Chart of recommended speed depending on rotor for Fugevet+

Microhematocrit rotor	max. 12000 rpm
Microtube rotor	max. 12000 rpm
Strip rotor	max. 12000 rpm
Cryotube rotor	max. 7000 rpm

4. INSTALLATION / SETTING UP**Preliminary inspection**

- Unwrap the centrifuge; take off the involving plastic and take off the polyspan protection in which it comes fitted.
- Without connecting the equipment to the power supply, Check manually that the rotor spins freely without any obstacle and make sure it does not present any damage due to transport. In case it presents any damage, tell it immediately to your transport agent or dealer so that they can make the claims in the correct time limit.

We will only accept any equipment return within 15 days after delivery and provided it comes in its original wrapping with all accessories and documents included.

■ Please check that all the accessories are enclosed with the equipment:

- Angle rotor for 8 tubes
- 16 adapters for tubes: 8 x 0,2 ml and 8 x 0,5 ml.
- Strip rotor
- Microhematocrit rotor (Fugevet+ and GDC009)
- Angle rotor for 4 tubes (only Fugevet+)
- Microhematocrit reader (Fugevet+ and GDC009)

Installation

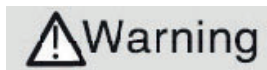
Before using this instrument, it is convenient for you to familiarize with its components and basic essentials, as well as with its control functions.

PLEASE READ THOROUGHLY THE INSTRUCTIONS BEFORE CONNECTING AND OPERATING WITH THIS EQUIPMENT WITH THE AIM OF ACHIEVING THE HIGHEST FEATURES AND THE MAXIMUM DURABILITY OF THE INSTRUMENT.

- Please put the centrifuge on top of a horizontal, plane and stable table making a free space of at least 30 cm per side.
- Do not put the equipment near any warm supply (burners, blowlamps...), nor expose it directly to the sun, etc.
- During operation, people and dangerous material such as flammable or infectious liquids must be out of this area.
- The centrifuge is supplied with a Schuko standard wire 85-240 V, 50-60 Hz. Please insert the wire that feeds the AC electric current in the base of current provided with earth.

Neither the manufacturer nor the distributor will assume any responsibility for the damages produced to the equipment during its installation or damages to people suffered by the improper use of the electric connection. The tension should be 85-240 V, 50/60 Hz.

■ If you are not using the centrifuge for a long period of time please make sure it is disconnected from the net and protected from dust (this way you will avoid accidents and will extend its working-life).



- This centrifuge is not provided with an isolation system in case of leakages or breakages of tubes during centrifugation.
- Never use this centrifuge with explosive or flammable substances.
- Do not fill the tubes more than 70% of their capacity; this may cause the leakage of sample during centrifugation.
- Use tubes with cap. Tubes without cap can cause leakage of liquids during the process of centrifugation.

Setting up

- To open the lid, press the lid opening lever.
- Place the desired rotor on the rotor axe taking into account the shape of the central hole of the rotor. Press the rotor until hearing a “click”.

Warning

- Make sure the rotor is well placed before using the centrifuge. An improper positioning may cause damages to the user.

- Do not place the rotor upside down.

- An inappropriate rotor may cause damages to the centrifuge and the user.

■ Place the tubes in the rotor symmetrically and perfectly balanced. An unbalanced load of the rotor will reduce lifetime of the rotor and the centrifuge. A high unbalance may cause serious damages to the centrifuge and the user.



■ Turn the centrifuge on by pressing on/off switch

■ For models 2507/15, 2507/25 and Fugevet+: Press the button at the back side to select the desired working speed (4000, 7000 o 10000/12000 rpm; see the Chart of recommended speed depending on rotor). The corresponding LED will light up at the front side of the centrifuge.

■ To start centrifugation, make sure the lid is properly closed. At this moment the rotor will start spinning.

■ To stop centrifugation, just press the lid opening lever, wait until the rotor stops completely and then open the lid and remove the tubes.

■ Switch the centrifuge of by pressing the corresponding on/off switch.

■ To change rotor, press the flanges of the upper end of the rotor axe with the fingers and pull up the rotor. Note: in case of hematocrit rotor it is necessary to remove the rotor lid first.

Warning

The improper use of the centrifuge may cause damages to the user or people nearby.

Caution

The improper use of the centrifuge may cause damages to the centrifuge and nearby equipments.

Security

■ The centrifuge must be used by previously qualified staff that knows how the equipment works thanks to the user manual

■ Do not touch the plug or the on/off switch with wet hands.

■ Do not put the equipment near any warm supply (burners, blowlamps...), nor expose it directly to the sun, etc.

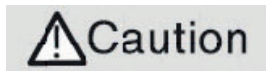
■ To prevent fire or electric discharges avoid dry or dusty environments as well as spilling liquids on the equipment. In case it may happen unplug the equipment immediately.

■ Keep the centrifuge away from direct sunlight and dust and do not place it in bad ventilated areas.

■ The required environmental conditions are: temperature 5-35°C and relative humidity 30-85%.

It is absolutely forbidden the presence of flammable products (liquids or gases) in the working area.

■ When you are not using the centrifuge for a long period of time please make sure it is unplugged in order to avoid possible accidents.



DO NOT USE FOR MORE THAN 4-5 MINUTES AT A TIME.
WAIT 4-5 MINUTES BETWEEN CENTRIFUGATION CYCLES.

RISK OF HEATING OF PLASTIC COMPONENTS!

- It is essential to have the equipment switched off and unplugged from the net before cleaning, checking components or replacing any piece.
- Never try to repair the centrifuge by yourself, since you will lose the warranty and may provoke damages to the general operating system or the electrical installation, as well as injuries to the people that usually handle the equipment (burns, hurts...).
- Try not to spill any liquid inside the centrifuge though it is properly insulated. In case you have any doubts do please immediately unplug the centrifuge.
- The centrifuge is supplied with a Schuko standard wire 85-240 V, 50-60 Hz. Please insert the wire that feeds the AC electric current in the base of current provided with earth.
- Made under the European regulations for electrical security and electromagnetic compatibility

5. MAINTENANCE AND CLEANING

To get the best results and a higher duration of this equipment it is essential to follow the processes of use.

- Please follow the processes of use of this manual.
- This manual should be available for all users of this equipment.
- Check visually the rotor to see if it presents any damage. In case rotor is damaged do not use the centrifuge and contact Nahita Technical Assistance Department.
- Check the lid can be opened and closed smoothly and that it is locked when pressed.
- Always use original components and supplies. Other devices can be similar but they can damage the equipment.
- Be careful to avoid deforming, bending or damaging cables or any other component.
- Never try to repair the centrifuge by yourself, since you will lose the warranty and may provoke damages to the general operating system or the electrical installation, as well as injuries to the people that usually handle the centrifuge (burns, hurts...) or damages in nearby equipments.
- Check the plug and the cable to assure they are in perfect conditions.
- In the event of breakdown please contact your distributor to overhaul through Nahita Technical Assistance Department.

Cleaning

- Review and clean the centrifuge during regular periods of time and immediately after any liquid spillage to prevent any danger.
- Never use scourers or substances that can grate for cleaning metallic parts such as stainless steel, aluminium, coatings, etc. as they damage the centrifuge and produce an early ageing of the equipment.
- Use a fluff-free cloth dampened with soaped water that does not contain abrasives.

ATTENTION! IF EQUIPMENTS ARE NOT PROPERLY CLEAN AND DISINFECTED THEY WOULD NOT BE ALLOWED TO REPAIR BY OUR TECHNICAL SERVICE.

6. TROUBLESHOOTING

Problem	Cause	Solution
The centrifuge does not work	The cable is disconnected	Plug the cable
	The motor brushes have lost conductivity	Turn the rotor several time by hand smoothly
	Objects that move around rotor axe	Unplug the centrifuge and remove these objects
	Motor is at the end of its lifetime	Contact Nahita Technical Service
Abnormal noise The centrifuge vibrates	Unbalanced load of the centrifuge	Load tubes perfectly balanced
	Strange objects in the rotor	Unplug the centrifuge and remove these objects
	Motor damaged	Contact Nahita Technical Service
The rotor is not correctly placed	The rotor is placed upside down	Place the rotor in the correct position
	The rotor or rotor axe is damaged or deformed.	Contact Nahita Technical Service



Instructions on environment protection

- At the end of its life cycle, please, do not dispose of this equipment by throwing it in the usual garbage; hand it over a collection point for the recycling of electrical and electronic appliances.
- It does not contain dangerous or toxic products for humans but a non adequate disposal would damage the environment.
- The materials are recyclable as mentioned in its marking.
- By recycling material or by other forms of re-utilization of old appliances, you are making an important contribution to protect our environment.
- Please inquire at the community administration for the authorized disposal location.