g-SPIN
Micro-Centrifuge

INSTRUCTION MANUAL

Serial No._____________________

World Precision Instruments, Inc.
USA
International Trade Center, 175 Sarasota Center Blvd., Sarasota FL 34240-9258
Tel: 941-371-1003 • Fax: 941-377-5428 • E-mail: sales@wpiinc.com
UK
Astonbury Farm Business Centre • Aston, Stevenage, Hertfordshire SG2 7EG
Tel: 01438-880025 • Fax: 01438-880026 • E-mail: wpiuk@wpi-europe.com
Germany
Liegnitzer Str. 15, D-10999 Berlin
Tel: 030-6188845 • Fax: 030-6188670 • E-mail: wpi-de@wpi-europe.com
Internet
www.wpiinc.com • www.wpi-medical.com
www.nitricoxide.net • www.pipetter.com
CONTENTS

Introduction .............................................................................................................................................1
Operation ................................................................................................................................................2
  Opening the Lid ............................................................................................................................2
  Replacing the Rotor ....................................................................................................................2
  Loading the Tubes .......................................................................................................................3
  Starting/Stopping the Centrifuge ...........................................................................................3
Safety Precautions .................................................................................................................................4
Accessories ...............................................................................................................................................5
Specification ...........................................................................................................................................6
Warranty ...................................................................................................................................................9

Warranty
WPI (World Precision Instruments, Inc.) warrants to the original purchaser that this equipment, including its components and parts, shall be free from defects in material and workmanship for a period of one year from the date of receipt. WPI’s obligation under this warranty shall be limited to repair or replacement, at WPI’s option, of the equipment or defective components or parts upon receipt thereof f.o.b. WPI, Sarasota, Florida U.S.A. Return of a repaired instrument shall be f.o.b. Sarasota.

The above warranty is contingent upon normal usage and does not cover products which have been modified without WPI’s approval or which have been subjected to unusual physical or electrical stress or on which the original identification marks have been removed or altered. The above warranty will not apply if adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, air conditioning, humidity control, or causes other than normal and ordinary usage.

To the extent that any of its equipment is furnished by a manufacturer other than WPI, the foregoing warranty shall be applicable only to the extent of the warranty furnished by such other manufacturer. This warranty will not apply to appearance terms, such as knobs, handles, dials or the like.

WPI makes no warranty of any kind, express or implied or statutory, including without limitation any warranties of merchantability and/or fitness for a particular purpose. WPI shall not be liable for any damages, whether direct, indirect, special or consequential arising from a failure of this product to operate in the manner desired by the user. WPI shall not be liable for any damage to data or property that may be caused directly or indirectly by use of this product.

Claims and Returns
Inspect all shipments upon receipt. Missing cartons or obvious damage to cartons should be noted on the delivery receipt before signing. Concealed loss or damage should be reported at once to the carrier and an inspection requested. All claims for shortage or damage must be made within ten (10) days after receipt of shipment. Claims for lost shipments must be made within thirty (30) days of receipt of invoice or other notification of shipment. Please save damaged or pilfered cartons until claim is settled. In some instances, photographic documentation may be required. Some items are time-sensitive; WPI assumes no extended warranty or any liability for use beyond the date specified on the container. Do not return any goods to us without obtaining prior approval and instructions from our Returns Department. Goods returned (unauthorized) by collect freight may be refused. Goods accepted for restocking will be exchanged or credited to your WPI account. Goods returned which were ordered by customers in error are subject to a 25% restocking charge. Equipment which was built as a special order cannot be returned.

Repairs
Contact our Customer Service Department for assistance in the repair of apparatus. Do not return goods until instructions have been received. Returned items must be securely packed to prevent further damage in transit. The Customer is responsible for paying shipping expenses, including adequate insurance on all items returned for repairs. Identification of the item(s) by model number, name, as well as complete description of the difficulties experienced should be written on the repair purchase order and on a tag attached to the item.

* Electrodes, batteries and other consumable parts are warranted for 30 days only from the date on which the customer receives these items.
INTRODUCTION

The G-Spin6 centrifuge is a compact instrument generating centrifugal force. It can be used to separate colloidal particles or substances of different densities, to remove moisture, for microfiltration or to simulate gravitational effects. The applications range from biochemistry, cellular and molecular biology to medical science.

The G-Spin6 centrifuge comes with two interchangeable rotors, one for microtubes and one for 0.2mL polymerase chain reaction (PCR) strip tubes. (Fig. 1) The microtube rotor holds six individual 1.5mL plastic microcentrifuge tubes. Rotor adapters are available that hold 0.5mL tubes and 1.0mL tubes. The strip tube rotor is designed to centrifuge two 8x0.2mL strip tubes. The rotation speed is fixed at 6000RPM and has a maximum relative centrifugal force (RCF) 2,000g.

The centrifuge has rubber feet to keep it stable and minimize the vibration. The centrifuge automatically shuts off when the cover is open. The power switch (or the emergency safety switch) can stop the rotor in seconds.

Fig. 1 — gSpin. Inset shows alternate rotor style for PCR strips.
**OPERATION**

**Opening the Lid**

Press the lid release down to open the lid. (Fig. 2) The rotor will gradually slow to a complete stop in a few seconds. Do not attempt to open the lid or remove samples until the unit has come to a complete stop. After the rotor has stopped, lift the lid back on the hinge.

To close, press the lid down until the lid clips to the lid release.

---

**SPECIFICATION**

- **Rotation Speed**: 6,000 RPM, fixed
- **Maximum RCF**: 2,000g
- **Tube Capacity**: 6 x 0.5-2.0 mL tubes or 2 x 0.2 mL strip tubes
- **Round Rotor**: Fixed angle, 6-places 0.5-2.0 mL tubes
- **Strip Rotor**: Fixed angle, 2 x 0.2 mL strip tubes
- **Dimensions**: 6”W x 5” H x 7” D (189 x 161 x 121 mm)
- **Power**: 110 V 60 Hz or 220 V 50 Hz
- **Fuse**: 0.5 A, 250 V
ACCESSORIES

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-SPIN6</td>
<td>Microcentrifuge, 6000 RPM, 110V 60Hz</td>
</tr>
<tr>
<td>G-SPIN6-220</td>
<td>Microcentrifuge, 6000RPM, 220V 50Hz, CE</td>
</tr>
<tr>
<td>503529</td>
<td>Microcentrifuge tube, 0.5mL, natural, bag/1,000</td>
</tr>
<tr>
<td>503530</td>
<td>Microcentrifuge tube, 1.5mL, natural, bag/1,000</td>
</tr>
<tr>
<td>503331</td>
<td>Microcentrifuge tube, 2.0mL, natural, bag/1,000</td>
</tr>
<tr>
<td>503332</td>
<td>Microcentrifuge tube strips, 0.2mL, domed cap, bag of 250</td>
</tr>
<tr>
<td>503537</td>
<td>Microcentrifuge tube strips, 0.2mL, flat cap, bag of 250</td>
</tr>
<tr>
<td>503541</td>
<td>Microcentrifuge Tube Adapter, 0.5mL, set of 6</td>
</tr>
<tr>
<td>503542</td>
<td>Microcentrifuge Tube Adaptor, 1.0mL, set of 6</td>
</tr>
<tr>
<td>503543</td>
<td>g-Spin Round Rotor, 6x1.5mL, 1 unit</td>
</tr>
<tr>
<td>503544</td>
<td>g-Spin Strip Rotor 8x0.2mL Strip tube, 1 unit</td>
</tr>
</tbody>
</table>

Replacing the Rotor

1. Locate the recessed setscrew on the motor shaft below the rotor head. (Fig. 3)

   Fig. 3 – Rotor and setscrew

2. Use the Allen wrench provided to loosen the setscrew. (Fig. 4) Do not remove the screw.

   Fig. 4 – PCR rotor with Allen wrench in setscrew

3. Lift the rotor off the rotor shaft.

4. Properly position the new rotor on the motor shaft, and gently press the rotor down till it stops.

5. Use the Allen wrench to tighten the setscrew. Do not over-tighten. This will damage the rotor and the rotor shaft.
**Loading the Tubes**

Slide the desired plastic microcentrifuge tubes into the rotor holes, but keep the following cautions in mind:

- Use only centrifuge tubes made from plastic and designed to withstand centrifugal forces of at least 2,000g.
- The tubes must be loaded on the centrifuge symmetrically. Each tube/adapter should be counterbalanced by another tube/adapter.
- Weight of loaded tubes should not vary more than 3.0g.
- Never run the centrifuge with only one strip or tube in the rotor.

**NOTE:** Smaller microcentrifuge tubes slip through the rotor holes, so the black adapter sleeves are provided for use with these tubes. Insert each tube in an adapter and place the tube and adapter into the rotor hole. (Fig. 5)

**Starting/Stopping the Centrifuge**

The power switch is located on the side of the centrifuge. (Fig. 2) Before turning on the motor, verify that the lid is securely latched. If the power switch is engaged (I), opening the lid will automatically stop the centrifuge, and closing the lid will start the centrifuge.

To start the motor, set the toggle switch in the on (I) position.

To stop the motor, set the toggle switch to the off (O) position.

**SAFETY PRECAUTIONS**

Never operate the centrifuge without a rotor properly attached to the shaft.
Never fill the tubes while they are in the rotor. Liquid spillage may damage the unit.
Never centrifuge flammable, explosive or corrosive materials.
Never move the centrifuge while it is running.
Never centrifuge hazardous materials outside of a hood or proper containment facility.