



# PowerSpin™ LX Centrifuge with Variable Speed and Timer

Item # 112-6907 with 6 place rotor

Item # 112-6909 with 6 place rotor

## OPERATION MANUAL

Revision Date 2014/03



*Distributed by (in US only):*

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EC REP

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— CAUTION —

**Read this manual before operating Power-Spin™ LX centrifuge**

**Introduction**

Henry Schein, Inc. has been a long standing provider of quality laboratory equipment for the medical, veterinary, and educational market. With a range of bench top centrifuges designed to meet today's stringent lab needs, as well as a full range of microscopes, Henry Schein is constantly searching for newer and better technology. The Power Spin™ LX Centrifuge offers the protection needed in the fast growing medical and health care industries.

**Description/Intended Use**

The HENRY SCHEIN PowerSpin™ LX centrifuge with variable speed control and timer are specially designed to run for years of demanding laboratory work in clinical labs, physician's offices as well as in any chemical, industrial or biological labs where separation for blood or other materials are desirable.

**Features**

- Six/eight place rotor for use with standard 5-10 ml tubes.
- Note: Can spin up to three 15 ml tubes.
- Can spin 2 ml and 4-5 ml tubes with available adapters.
- Linear speed control allows use from 500 rpm- 4,000 rpm.
- Dependable mechanical 30-minute timer with bell signal at end of run.
- High impact plastic housing for years of dependable use.
- Safety switch in lid shuts off motor when lid is unlatched. Latch release located on the right front side of unit.
- Power indicator light tells when unit is powered on.
- 1 year warranty, parts and labor.

**Construction**

The enclosures of the HENRY SCHEIN PowerSpin™ LX Centrifuges are made of high impact plastic, which is acid and reagent resistant. The internal chamber is made of stainless steel. A safety switch is built into the lid and disconnects the power to the motor whenever the lid is unlatched. The motor is mounted on rubber mounts to provide quieter running and less vibration. The rotor chamber can be easily cleaned and disinfected.

**Performance**

Maximum speed depends on the number and size of the test tubes being spun. PowerSpin™ LX is variable speed unit, with 6 or 8 place rotor. The maximum speed is 4,000 rpm.

**Accessories**

Adapters are available to accommodate various tube sizes. Contact Henry Schein for details.

## **Unpacking and Installation**

The centrifuge is first packed in a styrofoam and then put in a carton box for shipping. Please examine the shipment upon receipt and retain all packing until the unit has been tested. The warranty excludes any damage caused by shipping.

Inspect for any possible shipping damage. If you note any damage, please contact HENRY SCHEIN. Save the original packaging. If it becomes necessary to return the instrument to us, we ask that it be returned in the original packaging.

Unpack the shipping carton carefully and verify that the shipment is complete. It should include the following items:

PowerSpin™ centrifuge (LX)	1 unit
Power cord	1 pc.
Operation manual (LX version)	1 pc.

No on-site installation is required. Follow simple procedures below to set the centrifuge up:

- Take the centrifuge from the styrofoam and place it on a sturdy flat surface.
- Press the lid latch release button located on the right side and open the centrifuge cover. A special packing styrofoam disc is packed inside the lid of the centrifuge to prevent the rotor or shields from moving during shipping. **REMOVE THIS PACKING DISC PRIOR TO OPERATION OF THE CENTRIFUGE**
- The centrifuge rotor is pre-installed. No rotor installation and calibration is required.
- The power inlet is located in the back of the centrifuge. Plug in one end of the power cord to the inlet and the other end to a power outlet.
- Turn the speed control counterclockwise to “0” rpm.

**CAUTION: Make sure the voltage of the power source matches the voltage input of centrifuge.**

## **Operation**

1. Set the timer control to “off”.
2. Plug the centrifuge into a power source outlet. Make sure the voltage is correct.
3. Turn the power rocker switch in rear of unit to “on” position.
4. Open the lid by pressing the lid-opening button.
5. Place the specimen tubes into the tube shields of the rotor.

**CAUTION: Make sure that the specimen tubes are balanced; see safety section below.**

6. Close the lid firmly.
7. Set the speed control knob at or close to “0” rpm.
8. Set the timer clockwise to the desired time.
9. Rotate the speed control knob slowly to the appropriate speed.  
For example, Blood at 3,400 or Urine at 2,000- 2200 rpm.

10. After the centrifuge rotor has come to a complete stop (following the end of the run bell), open the lid.

### **Safety**

Your PowerSpin™ LX centrifuge is a carefully designed and built instrument. When operated properly, it presents no safety hazards. However, please take note of these safety precautions.

**Lid NEVER OPEN THE LID UNTIL THE ROTOR HAS COME TO A COMPLETE STOP!**

**Load Balance Always make sure that the load is balanced before operating the instrument.**

It is very important that test tubes with equal loads are placed opposite each other in the rotor. Also, when spinning a single specimen tube, another specimen tube of the same size filled with water must be installed directly across from the specimen tube to maintain balance. If the centrifuge is not properly balanced, damage could occur. If excessive noise or vibration is noticed during a run, stop the centrifuge and recheck the balance.

### **Maintenance**

This centrifuge is designed to be relatively maintenance free. The motor is a brushless type and has permanently sealed bearings so oiling is not necessary. A surface cleaner such as Formula 409 can be used to clean the outside of the instrument. The rotor chamber and cover can be disinfected with a mild solution of bleach or other disinfecting liquid and allowed to dry. Do not drench or immerse the unit in any liquid! Be sure to disconnect the power before attempting to clean.

### **Routine Rotor Inspection and Maintenance**

All centrifuge rotors should be removed and inspected for damage, defects or other problems:

- Before initial use.
- Each time the rotor is removed for cleaning.
- At least every 6 months.

Plastic rotors and tube shields should be replaced every 12 months (once each year).

**What to do if your inspection finds rotor or tube shield damage, defects or other problems?** If you detect any problems or damage, or defects in your centrifuge rotor or tube shields discontinue use of the centrifuge and rotor immediately! **Do not under any circumstances continue to use a rotor that you think has damage** as it could create a safety problem.

Contact support at HENRY SCHEIN immediately at 800-588-9776 or 732-274-1155. Please be prepared with the serial # (found on the rear of the machine near the electrical plug) and any information you may have about where and when it was purchased.

## **Calibration**

According to Code of Federal Regulations Title 21, centrifuges require verification or calibration as follows:

- 1) Before initial use; 2) after repair or adjustments; and 3) 6 month after use. The centrifuge timer, however, should be checked for accuracy at least every 3 month.
- 2) The speed should fall within  $\pm 100$  rpm of the speed display.



Speed is checked using  
UNICO digital tachometer.  
Order part# C800-75

- 3) The timer is a mechanical one and designed to be accurate to 5 min  $\pm$  30 sec.

## **Electrical Shock Hazard**

Do not attempt to operate this instrument near water or liquid spill. Unplug the unit before cleaning or repairing. Periodically check the condition of the power cord for cuts or damage. Do not operate with a damaged cord.

## **Biohazard**

If a tube breaks, a biological hazard may exist. Unplug the instrument. Clean using approved laboratory procedures. Always wear the proper protective clothing and gloves. Use a suitable disinfectant and dispose of the sample properly. Refer to the guidelines set forth by OSHA, CLIA, etc.

## **Service**

If you feel that your centrifuge needs factory service, please call support at HENRY SCHEIN at 800-588-9776 or 732-274-1155 to determine the nature of the problem.

**REPAIRS OR MODIFICATIONS MADE TO THE CENTRIFUGE BY AN UNAUTHORIZED PARTY WILL VOID THE WARRANTY.**

## **Problem Solving**

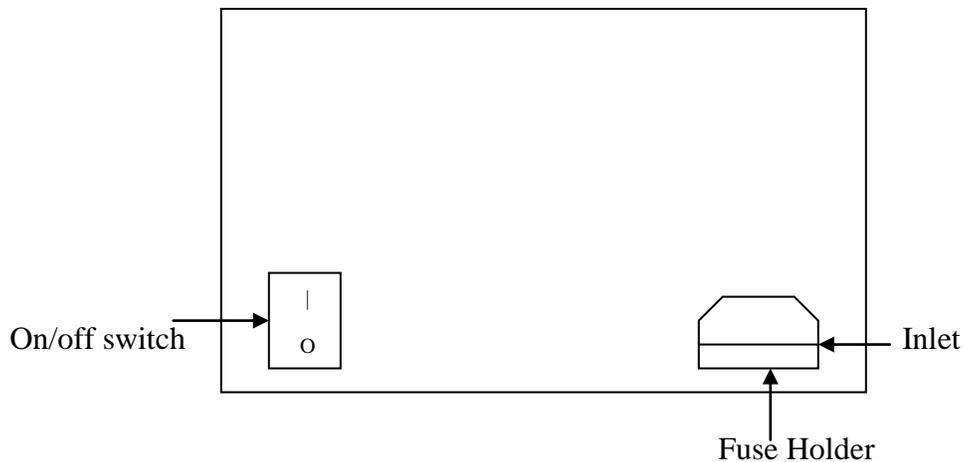
1. Centrifuge does not start.
  - a) Check to determine if centrifuge is plugged in.
  - b) Check that timer has been set.
  - c) Check that lid is closed and latched.

- d) Check that Power rocker switch in rear of unit is in the “on” position.
  - e) Check that the Power indicator light (on front panel) is lit. A failure of the power light to illuminate could indicate a need for a new fuse when the unit is properly plugged in turned on and the lid closed.
2. Excessive noise when running. If the noise is irregular or different in tone, be sure that there is no paper or debris in the rotor or rotor chamber. Make sure that the load is balanced.
  3. Indicator light fails to light.
    - a) Unit is not turned on
    - b) Lamp needs to be replaced
    - c) Fuse is blown
  4. Fuse Replacement:

**CAUTION: DISCONNECT THE POWER CORD BEFORE REPLACING FUSE.**

Follow the procedures below to replace the fuse:

- a) Unplug the power cord. Turn the on/off switch to “off”
- b) Remove the power cord from the power inlet on the back of the centrifuge.
- c) Locate the fuse holder. The fuse holder is a part of the power inlet.



- d) Use a Philip type screwdriver to take the snap-in type holder cover off. Remove the blown fuse and replace it with the same type and rating fuse which is: 250V 3A.
  - e) Put the snap-in fuse holder back.
5. Intermittent motor operation; or no operation.  
Call support at HENRY SCHEIN: 800-588-9776 or 732-274-1155.

**Specifications**

Speed\_\_\_\_\_500 – 4,000 rpm

Speed accuracy\_\_\_\_\_± 100 rpm @ 3000 RPM

Width\_\_\_\_\_10.2 inches

Depth\_\_\_\_\_11.8 inches

Height\_\_\_\_\_8 inches

Weight\_\_\_\_\_18 lbs