

# Pathology & Laboratory Medicine Client Centrifuge Procedure

## LABORATORY CUSTOMER SERVICE

Problems or Questions Phone: 847-5121

**Toll Free Phone:** 

800-991-2799



Compact II



Fisher Scientific



Horizon Mini e



Emergency open

## **OPERATING INSTRUCTIONS**

The centrifuge must be placed on a rigid level surface, in a temperature controlled, non-patient area. There must be adequate ventilation and at least twelve inches of space around the centrifuge. There must be sufficient space above the centrifuge to leave the cover open. Suction cups secure the centrifuge to the bench top.

Observe universal precautions when handling specimens, always use gloves and goggles. Inspect tubes before centrifugation; cracked or scratched tubes should not be spun.

To balance the load, place tubes of equal weight (volume) opposite each other. Unbalanced tubes will result in excess noise when spinning and may lead to broken tubes. When you centrifuge an odd number of tubes, place a balance tube of equal weight (volume) opposite the odd tube. <u>Do not remove tops from tubes before spinning.</u>

Do not walk away from the centrifuge until full operating speed is attained.
\*DO NOT OPEN THE CENTRIFUGE COVER UNTIL THE ROTOR STOPS COMPLETELY!\*

To minimize temperature build up, the centrifuge should be left idle for <u>10 minutes</u> with the cover open between sequential runs. When temperatures build up in successive runs the results for certain tests can be altered or can cause hemolysis.

Additional inserts are available for various tube sizes. Please contact laboratory Customer Service if you have any questions about your centrifuge.

## **COMPACT II OR FISHER SCIENTIFIC**

- 1. The six stainless steel shields MUST be inserted into the rotor for proper centrifuge operation.
- 2. The six stainless steel shields must have one black or orange <u>disk</u> cushion and one large black cushion inserted into the bottom. Failure to use BOTH cushions can lead to the tops of the tubes popping off in the centrifuge. For smaller tubes insert a blue adapter into shields opposite each other. There should be a couple of centimeters between the bottom of the test tube cap and the top of the metal shield.
- Close the top cover and latch. The centrifuge will not start unless the interlock switch near the cover is depressed.
- 4. Turn the timer knob past 15 and back to the 15 mark. Do not spin blood for longer than 15 minutes. When the timer's clock gets to zero (knob reaches OFF position), a bell will ring and electrical power to the motor will shut off causing the rotor head to coast to a stop.

## **HORIZON MINI E**

- 1. Make sure there are 4-red tube holders and 2-green tube holders inserted into the rotor.
- 2. The green holders are for spinning tubes that are less than 5 mL (75 mm long).
- 3. The **red holders** are for spinning tubes that are 6-10 mL (100 mm long). *Do not spin 75 mm tubes in the red holders*.
  - \*IMPORTANT: The top of the tube must not rest on the lip of the bucket or bucket insert. In addition, the tube must not stick up beyond middle of the rotor when spinning.\*
  - Close the top cover and turn the latch clockwise, the LATCH light will illuminate.
- 4. Press START. The RUN and the LATCH light should be illuminated. The run is set for 10 minutes and the centrifuge will automatically turn off when finished. When the centrifuge is stopped turn the latch counter clock wise to open.
- 5. In case the power goes out and you need to get into the centrifuge, peel back the open/close label and insert a pen in the hole as you turn the latch.

## **CLEANING, GENERAL**

- Always unplug the power cord before cleaning the centrifuge. Wear protective gloves and clothing.
- 2. At least weekly, wipe the centrifuge interior rotor chamber and exterior housing with a mild detergent or Clorox wipes and water.

  Do not pour cleaning solutions directly into the centrifuge.
- 3. Run empty centrifuge for 5 minutes before spinning patient samples.
- 4. Annually or as needed, centrifuge maintenance must be done by a qualified technician. This would include checking the centrifuge brushes, timer, speed and electrical leaks. This is done by UVM Medical Center Technical Services Department.
- 5. Please contact Laboratory Customer Service at (802)847 5121 to order your annual maintenance. This is required according to the renewal date on the inspection sticker located on the centrifuge.

#### ANNUAL MAINTENANCE OR CENTRIFUGE REPAIR

The centrifuge needs routine maintenance annually. There is a sticker on the side of your centrifuge that tells you the date maintenance is due. If your centrifuge is due for maintenance or there is a problem with operation call Laboratory Customer Service for a replacement. If you have an orange "Defective Equipment" sticker fill it out and stick it to the centrifuge for transport. If not add a label to your centrifuge that says Your name, phone number, location, and the problem with your centrifuge (for instance "routine maintenance/ too loud/ latch broken, etc.) for transport. The courier will pick up your centrifuge for delivery to the lab,

## **CLEANING, DISINFECTING**

- 1. To disinfect, wipe the centrifuge interior rotor chamber and exterior housing with Clorox wipes or with a solution of 1:10 sodium hypochlorite (bleach) and water solution (1-part bleach and 9-parts water).
- 2. It is also recommended to soak the shields and adapters in a 1:10 bleach solution for 10 minutes. After soaking rinse thoroughly in water and dry completely before use.
- 3. If a tube breaks in the centrifuge, carefully remove broken glass/plastic with a hemostat or other device, using gloves. Disinfect the centrifuge as above.
- 4. Run empty centrifuge for 5 minutes before spinning patient samples.

#### \* IMPORTANT \*

\*DO NOT SEND A CONTAMINATED CENTRIFUGE TO THE LAB. BE SURE TO CLEAN YOUR CENTIFUGE BEFORE SENDING IT TO UVMMC FOR SERVICE\*

\*NEVER SEND A CENTRIFUGE WITH BROKEN TUBES INSIDE TO THE LABORATORY\*

## **SAFETY MEASURES**

- 1. Do not use the centrifuge if any part shows signs of corrosion, mechanical damage, or wear.
- 2. Do not use the centrifuge if the interior is hot or if unusual vibrations or noises occur. For centrifuge problems, call Laboratory Customer Service (802)847-5121.
- 3. Centrifuges are instruments with strong potential for harming users due to the high speed at which they operate. It is very important to act safely when using and maintaining these instruments.
- 4. Do not lean or place items on the centrifuge at any time.
- 5. Do not leave the centrifuge until full operating speed is attained, and the centrifuge is operating correctly.

## References:

Becton Dickinson and Company. *Clay Adams® Brand Compact II Centrifuge Model Nos. 420225 and 420227 Operator's Manual.* 1993. Print.

The Drucker Company. Horizon mini E Operators Manual Model 642E laboratory Centrifuge. P/N 7711006 Rev.1.6. Print.