

# Beaumont

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Document Contact **Kelly Sartor**  
 Area **Laboratory-Blood Bank**  
 Applicability **Dearborn**

## Centrifuge RPM and Timer Checks - Dearborn Blood Bank

Document Type: Procedure

### I. PURPOSE AND OBJECTIVE:

This document will provide procedure and guidance to verify properly functioning centrifuges within the Blood Bank.

### II. DEFINITIONS/ACRONYMS:

- A. RPM: rotations per minute
- B. Monthly: within the first two weeks of each calendar month.
- C. Yearly: within a 12 month + 1-month time span
- D. Semi-annually: Every 6 months +/- 2 weeks

### III. POLICIES:

- A. Laboratory centrifuge function checks are to be performed at least annually with the exception of Blood Bank serologic centrifuges. Refer to laboratory policy, [Laboratory Centrifuge Function Checks](#).
- B. Timers on Blood Bank serologic centrifuges and the speed of the centrifuges are checked initially, at least every six months or after any adjustment or repair.
- C. The table below defines who is responsible for the timer and centrifuge checks.

Type of Centrifuge	RPM Check	Timer Check
Table Top Serofuges	Beaumont Health Biomedical Department	Semi-annually in Blood Bank

	Semi-Annually	
Helmer Cell Washers	Beaumont Health Biomedical Department Semi-Annually	Semi-annually in Blood Bank
MTS Workstations	Beaumont Health Biomedical Department Annually	Beaumont Health Biomedical Department Annually
Beckman SpinChrons	Beaumont Health Biomedical Department Annually	Beaumont Health Biomedical Department Annually

## IV. EQUIPMENT:

- A. Calibrated Digital Timer

## V. SUPPLIES:

- A. 12 x 75 tubes

## VI. PROCEDURE:

### Timer Check (Table Top serofuges only)

- A. Prepare empty 12 x 75mm tubes according to manufacturing process.
- B. Set the calibrated timer to the time indicated on the appropriate form.
- C. Simultaneously, press the start the centrifugation run and the calibrated timer.
- D. When the centrifuge shuts off, stop the reference timer. Record the centrifuge time on the appropriate form.
- E. Compare the centrifuge timer setting to the time of the centrifugation recorded for the calibrated timer.
- F. Return the completed form to the Supervisor/ Lead Tech for review.

## VII. EXPECTED VALUES:

- A. The equipment RPMs must be within the stated acceptable range for that equipment, see applicable operator manual and applicable blood bank procedures.
- B. The equipment running times must be within the stated acceptable range for that equipment, see applicable operator manuals and applicable blood bank procedures.
- C. If the timer checks are out of the acceptable range, complete the following steps:
  1. Place the equipment out of service. Tag the equipment with the [Equipment Out of Service Form](#).
  2. Contact Beaumont Health Biomedical department at 1-248-551-6300 and request a service repair.

3. Document the unsatisfactory result on an Internal Variance and notify the Supervisor/ Lead Medical Technologist.

## VIII. REFERENCES:

1. AABB Technical Manual, current edition.
2. College of American Pathologist, Transfusion Medicine Checklist, current edition.
3. Clay Adams Serofuge 2000 Series Centrifuge Operators Manual August 1995.

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## Attachments

[Centrifuge Timer Check Form](#)

## Approval Signatures

Step Description	Approver	Date
	Jeremy Powers: Chief, Pathology	6/7/2022
Policy and Forms Steering Committee (if needed)	Kelly Sartor: Supv, Laboratory	6/6/2022
Policy and Forms Steering Committee (if needed)	Gail Juleff: Project Mgr Policy	6/6/2022
	Kimberly Geck: Dir, Lab Operations B	6/4/2022
	Kelly Sartor: Supv, Laboratory	6/3/2022
	Kelly Sartor: Supv, Laboratory	6/3/2022

**CENTRIFUGE TIMER CHECK FORM**

Centrifuge ID (Asset Tag #): \_\_\_\_\_ Timer ID: \_\_\_\_\_ Date: \_\_\_\_\_

Serofuge Timer set at:	Calibrated Timer reading	Acceptable Range	Pass/Fail	Tech Initials
15		14 - 16		
20		19 - 21		
30		28 - 32		
60		57 - 63		

Supervisor Review / Date: \_\_\_\_\_

Centrifuge ID (Asset Tag #): \_\_\_\_\_ Timer ID: \_\_\_\_\_ Date: \_\_\_\_\_

Serofuge Timer set at:	Calibrated Timer reading	Acceptable Range	Pass/Fail	Tech Initials
15		14 - 16		
20		19 - 21		
30		28 - 32		
60		57 - 63		

Supervisor Review / Date: \_\_\_\_\_