

# Beaumont

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## Clay Adams Dynac® III Centrifuge - Model No. 420104 - Royal Oak

Document Type: Procedure

### I. PURPOSE AND OBJECTIVE:

- A. The Dynac® III Centrifuge has a continuously adjustable electronic speed control and electronic tachometer, zero speed switch, cover lock and other safety features. To standardize centrifugation of urine specimens for routine Urinalysis, an RCF of 400g – 450g is recommended. To achieve this in our laboratory section, this centrifuge is set for a speed of 1600 revolutions per minute (rpm) and a time of 5 minutes.

### II. PRECAUTIONS:

- A. Never operate the centrifuge with an unbalanced load. For smooth operation and extended centrifuge life, the weight should be as equally distributed around the rotor as possible. Load a balance tube across from each tube to be centrifuged.
- B. Never operate the centrifuge if the lid is not securely latched in the closed position.
- C. Never attempt to balance the load by adding weights or metal shot to bottom of a tube or shield.
- D. Always use gloves when cleaning the centrifuge.

### III. SUPPLIES:

See Operator's Manual for Clay Adams Dynac® III Centrifuge for list of replacement parts, rotors, shields and accessories.

### IV. PROCEDURE:

#### A. Quick Start Operation

1. Load urine samples in a balanced fashion.
2. Confirm that the centrifuge is set for 1600 rpm and 5 minutes.
3. Close the lid and press the START/STOP key to initiate the cycle. **Note: If the time and speed values have not been changed, pressing the START/STOP key will use the time and speed values that were used last.**

4. Pressing the TIME/SPEED key while the centrifuge is running will alternately display the current speed, or the time remaining in the cycle.
5. When the cycle is completed, press the OPEN LID key, and wait for the solenoid click.
6. Press the latch on the lid within 5 seconds and open the lid. **Note: the OPEN LID key will not function while the centrifuge is spinning; the rotor must come to a complete stop before the lid can be opened.**
7. Carefully remove the tubes using care not to re-suspend the sample.

#### B. To Reset Time, Speed

1. The centrifuge must be stopped.
2. Observe the display and determine if the display is in the time or speed mode. (The display indicates a colon ':' for the time mode and 'RPM' for the speed mode).
3. Press the TIME/SPEED key to place the centrifuge in the time display mode.
4. Press the CLEAR key to reset the time to zero.
5. Use the numeric keypad to enter in the desired time of 5 minutes
6. Press the TIME/SPEED key again to place the centrifuge in the speed display mode.
7. The current speed is displayed. To use this setting, press the TIME/SPEED key.
8. Otherwise, use the CLEAR key to reset the speed to zero and use the numeric keypad to enter in the speed of 1600 rpm.
9. Note that minimum settable speed = 500 rpm, and the maximum settable speed = 4000 rpm for this centrifuge.

#### C. Stopping the Centrifuge

1. Press the START/STOP key. **Note:** If the centrifuge is stopped midcycle, pressing the START/STOP key again will resume the cycle with the remaining time.
2. If a new cycle is required, press the CLEAR key.

#### D. Setting the Automatic Brake Feature

1. To enable the automatic brake feature, press the BRAKE key. The word "BRAKE" will appear in the display. The brake should decelerate the rotor.
2. Pressing the BRAKE key will alternately turn the automatic brake feature off and on.

#### E. Maintenance

1. Clean any spills when they occur, using a 1:10 dilution of commercial sodium hypochlorite. (Add 1 part household bleach to 9 parts water).
2. Wipe the interior and exterior surfaces of the centrifuge bowl, rotor, and shatter-proof transparent cover with a damp cloth as needed. A mild detergent may be used to remove stains.
3. As needed, disinfect the rotor, shields, and adapters by soaking in a 1:10 solution of household bleach for 10 minutes. Rinse thoroughly with running water to remove all traces of bleach. Dry thoroughly before re-installing.
4. Facilities Management is responsible for semi-annual inspections, replacement of motor brushes, and speed checks using a tachometer

## V. REFERENCES:

- A. Beckton Dickinson and Company, Sparks, MD 21152, Operator's Manual for Clay Adams Dynac® III Centrifuge Model 42014, 1997.
- B. Ringsrud KM, Linne JJ. Urinalysis and Body Fluids-A Mosby Yearbook, Inc., 1995, pp 81-84. Color Text and Atlas.

### Attachments

No Attachments

### Approval Signatures

Step Description	Approver	Date
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### Applicability

Royal Oak