

## Trima: Trima Accel System Maintenance

**PURPOSE** The purpose of this procedure is to describe the maintenance necessary to provide maximum system performance and to prolong equipment life of the Trima Accel Automated Blood Collection Machine.

- POLICY**
- Quality control, calibration and maintenance of the CaridianBCT Trima™ Automated Blood Collection System must be followed according to manufacturer's guidelines and in accordance with FDA, aaBB, and regulation.
  - Technical maintenance for the CaridianBCT Trima™ Blood Collection System is performed at six-month intervals (+/- 30 days) by CaridianBCT Service technicians.
    - If a machine fails the alarm test or requires the services of a technician, call 1-800-525-2623 or 1-800-262-3228.
    - For procedural assistance, call 1-877-339-4228 OR 1-303-231-4357.

- EQUIPMENT AND REAGENTS**
- Trima Accel Blood Collection Machine
  - Clean cloth/gauze
  - Mild detergent such as hand soap
  - Cotton swabs
  - Mild detergent or 0.25% sodium hypochlorite solution

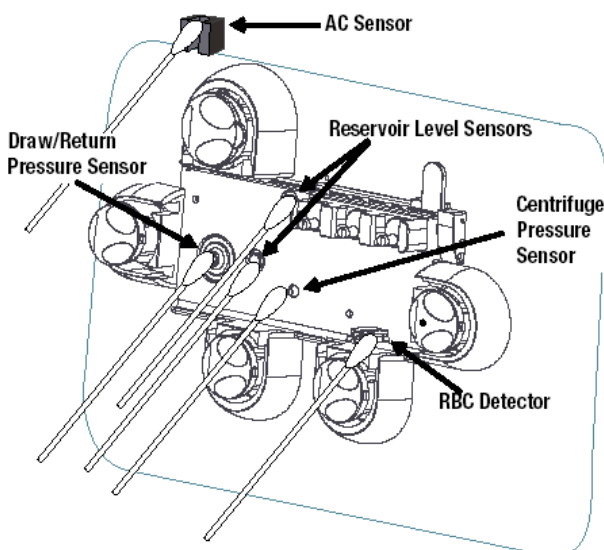
**PROCEDURE:**

	Step	Action
<b>Guidelines for Routine Cleaning</b>	1.	After every procedure, clean any spills on the surface of the Trima or the display panel with a clean cloth or gauze and a mild detergent that is safe for plastics such as soap and water. <b>NOTE:</b> Turn off the Trima Accel Collection System before cleaning to prevent possible electrical hazard or potential damage to the equipment.
	2.	Remove all traces of AC, dirt and spills. In case of a blood spill, follow the guidelines in the section "Cleaning after Blood Spills" in this procedure.
	3.	Allow the surfaces to air dry.

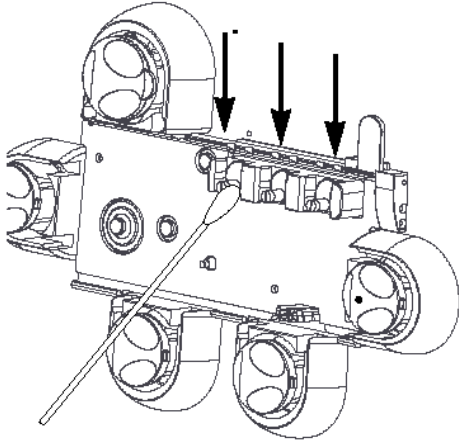
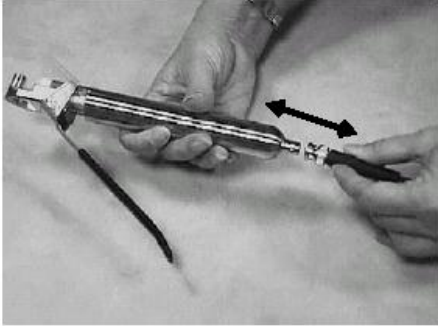
## Trima: Trima Accel System Maintenance, Continued

4.	<p><b>CAUTION:</b></p> <ul style="list-style-type: none"> <li>• Cleaning the Trima Collection System display with abrasive brushes, scrub material or alcohol may cause damage</li> <li>• Do not lubricate pumps, rotors, or raceways for any reason.</li> </ul>
----	--

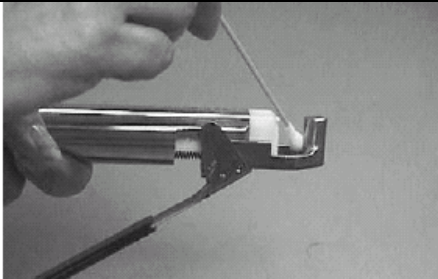
Weekly  
 Maintenance

Step	Action
1.	<p><b>Clean the Sensors:</b></p> <ul style="list-style-type: none"> <li>• Using a gauze cloth or cotton swab dampened with water, thoroughly clean the lenses or surfaces of the sensors as shown in the illustration below.</li> <li>• Do not spray or douse the RBC detector with liquid. Wetting the RBC detector excessively with any liquid can cause damage. (If the front panel must be sprayed, protect the RBC detector to avoid soaking).</li> <li>• Dry the RBC detector immediately after cleaning.</li> </ul>  <p>The diagram shows a cutaway view of the Trima Accel system's internal components. Several sensors are labeled with arrows: 'AC Sensor' at the top, 'Draw/Return Pressure Sensor' on the left, 'Reservoir Level Sensors' in the center, 'Centrifuge Pressure Sensor' on the right, and 'RBC Detector' at the bottom right. Cotton swabs are shown being used to clean the surfaces of the Draw/Return Pressure Sensor, Reservoir Level Sensors, and RBC Detector.</p>

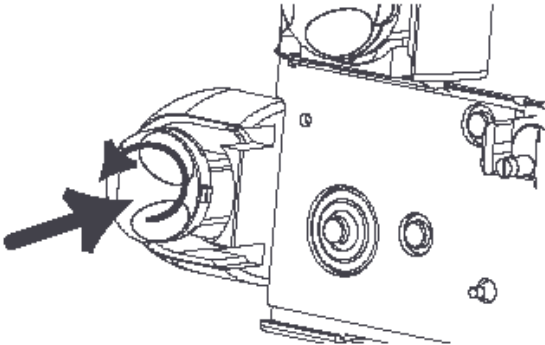
## Trima: Trima Accel System Maintenance, Continued

Step	Action
2.	<p data-bbox="574 354 808 384">Clean the valves</p> <ul data-bbox="574 394 1357 459" style="list-style-type: none"><li data-bbox="574 394 1357 459">• Use a mild detergent and a cotton swab to clean the surfaces of the valves.</li></ul>  <p>The diagram shows a side view of the Trima Accel system's valve assembly. Three black arrows point downwards to the top surfaces of the three main valve heads. A long, thin cotton swab is shown positioned to clean the bottom surface of the central valve head.</p>
3.	<p data-bbox="574 963 971 993">Clean the Seal Safe System</p> <ul data-bbox="574 1003 1433 1071" style="list-style-type: none"><li data-bbox="574 1003 1433 1071">• Disconnect the sealer head from the Trima system by removing the RF interconnect cable from the sealer head.</li></ul>  <p>The photograph shows a pair of hands holding a cylindrical sealer head. One hand is positioned at the top, while the other is at the bottom, pulling a cable away from the device. Two black arrows point to the right, indicating the direction of the cable's removal.</p> <ul data-bbox="574 1451 1433 1627" style="list-style-type: none"><li data-bbox="574 1451 1433 1480">• Hold the sealer head with the jaws facing up.</li><li data-bbox="574 1524 1433 1627">• Clean the open jaw cavity with alcohol applied to one end of a cotton swab. <u>Do not</u> clean the heads with bleach solution. Dry immediately with clean cotton swab.</li></ul>

## Trima: Trima Accel System Maintenance, Continued

Step	Action
	 <ul style="list-style-type: none"><li data-bbox="574 674 1463 852">• Clean all areas internal and adjacent to the jaw cavity in the same manner. Squeeze the lever to expose any contaminated areas along the side of the sealer. Immediately dry each area with a dry cotton swab after cleaning.</li><li data-bbox="574 894 1398 999">• If you are unable to clean the unit satisfactorily, refer to chapter 9 of the Trima Accel Operator's Manual to disassemble, clean and reassemble the seal safe.</li></ul>
4.	Date and initial the maintenance performed on the "Trima Apheresis Equipment Maintenance and Inspection" log in the weekly maintenance section.

## Trima: Trima Accel System Maintenance, Continued

Step	Action
Monthly Maintenance	<p>1. Clean the Pump Housing and Pump Rotors:</p> <ul style="list-style-type: none"> <li>• Grasp the top of the rotor, push it in and twist it to the left to remove it from the housing.</li> </ul>  <ul style="list-style-type: none"> <li>• Clean the housing and the bottom of the rotor with soap and water and a clean cloth or gauze. Allow the surface to air dry.</li> <li>• Align the rotor with the rotor housing. Ensure that the metal bar inside the rotor lines up with its corresponding slot in the housing.</li> <li>• Push the rotor in and twist it to the right. It will click into place. If not installed correctly, a pump error alarm message will occur.</li> </ul>
	<p>2. Clean the Fluid Leak Detector</p> <ul style="list-style-type: none"> <li>• Using a clean cloth and mild soap and water wipe the surface along the ridges of the fluid leak detector using a gentle side to side motion. Be careful not to damage the ridges of the leak detector.</li> <li>• To disinfect, wipe the detector again with a 0.25% sodium hypochlorite bleach solution.</li> <li>• Finish by cleaning the detector with water, preferably distilled, to remove any residue. Then dry the detector with a clean cloth or gauze pad.</li> </ul>
	<p>3. Date and initial the procedures performed on the "Trima System Weekly and Monthly Maintenance and Cleaning Log" see attachment A.</p>

## Trima: Trima Accel System Maintenance, Continued

	<b>Step</b>	<b>Action</b>
<p><b>Cleaning After Blood Spills</b></p>	1.	<p>To disinfect any portion of the Trima Collection System that comes in contact with a blood spill, use a 0.25% sodium hypochlorite solution.</p> <ul style="list-style-type: none"> <li>• Commercial household bleach (5.25% to 6%) when diluted 1 part bleach with 18 parts water will give approximately 0.25% sodium hypochlorite solution.</li> <li>• CAUTION: Using a stronger bleach solution than recommended may cause damage or discoloration.</li> </ul>
	2.	<p>After you detect a blood spill, check the following areas and disinfect them as necessary. Allow the surfaces to air dry.</p> <ul style="list-style-type: none"> <li>• Surfaces</li> <li>• Sensors</li> <li>• Valves</li> <li>• Pump housing and rotors</li> <li>• Centrifuge chamber</li> <li>• Filler</li> </ul>
	3.	<p><b>Cleaning the centrifuge chamber after a blood Spill</b></p> <ul style="list-style-type: none"> <li>• Clean the Trima Accel system ONLY with mild detergent and water or with 0.25% sodium hypochlorite solution.</li> <li>• Cleaning blood spills from inside the centrifuge chamber is the operator's responsibility unless the blood is in an area that cannot be cleaned without disassembling the machine. In this case, call CaridianBCT for assistance from a service representative or technician.</li> <li>• Use a clean cloth, gauze or cotton swab to clean the blood spill.</li> <li>• Allow the surfaces to air dry.</li> </ul>
	4.	<p><b>Cleaning the Fluid Leak Detector</b></p> <ul style="list-style-type: none"> <li>• Using a clean cloth, gauze, or cotton swab, wipe the surface along the ridges of the fluid leak detector using a gentle, side-to-side motion. Be careful not to damage the ridges of the lead detector.</li> <li>• To disinfect, wipe the detector with a 0.25% sodium hypochlorite solution.</li> <li>• Finish by cleaning the detector with water, preferably distilled, to remove any residue. Then dry the detector with a clean cloth or gauze pad.</li> <li>• Leave the centrifuge door open to facilitate drying.</li> </ul>

## Trima: Trima Accel System Maintenance, Continued

Step	Action
5.	<p><b>Removing and cleaning the filler after a blood spill.</b></p> <ul style="list-style-type: none"><li>• After a blood spill, you may need to remove and clean the filler.</li><li>• Open the centrifuge door by grasping the handle and pushing upwards with your fingers to release the lock.</li><li>• Push the filler latch pin toward the center of the centrifuge and raise the filler latch.</li><li>• Push the filler-locking pin toward the center of the centrifuge and raise the filler.</li><li>• NOTE: The filler locking pin is opposite the filler latch pin. The filler latch pin has a notch in it, whereas the filler-locking pin does not.</li><li>• Disinfect the filler using 0.25% sodium hypochlorite solution and a clean cloth or gauze.</li></ul> <p><b>NOTE:</b> Use a small swab to clean the groove of the filler and a dry swab or 70% isopropyl alcohol wipe to remove excess fluid. Allow the filler to air dry.</p>
6	<p><b>Replacing the filler after cleaning</b></p> <ul style="list-style-type: none"><li>• To insert the filler, align the two notches on the bottom of the filler with the two metal pins on the centrifuge and press the filler down firmly until the filler locking pin is securely in place. You should hear a click.</li><li>• Lower the filler latch.</li><li>• Ensure the filler is securely in place by trying to lift it. If the filler is locked in place, you should not be able to raise it.</li><li>• Close the centrifuge door.</li></ul>

### ATTACHMENTS

Attachment A: Trima System Weekly and Monthly Maintenance and Cleaning Log

### REFERENCES

CaridianBCT, Trima Accel Automated Blood Collection System: Operator's Manual For Use with Versions 6.0 07/2010.

## **Trima: Trima Accel System Maintenance**, Continued

### **AUTHORS:**

Cecilia Militante, CLS  
Nora Manuel RN, MN  
Jocelyn Guillermo, RN  
Lynn Douglas  
Virginia Vengelen-Tyler, MBA, MT(ASCP)SBB, CQA(ASQ)

Rose Hooper, MT(ASCP)SBB  
Angela Varela, MT(ASCP)  
Howard Ammerman, MT(ASCP)  
Lourdes Ramos, RN

---

### **DISTRIBUTION:**

All Donor Centers:

Orchard Blood Donor Center	Los Angeles Blood Donor Center
San Diego Blood Donor Center	Woodland Hills Blood Donor Center



**Trima: Trima Accel System Maintenance**, Continued

Reviewed and approved by:  
 Electronically Signed

December 28, 2010

Virginia Vengelen-Tyler, MBA,  
 MT,ASCP(SBB), CQA(ASQ) Regional Blood  
 Bank Compliance Officer

Date

Signature Collected Electronically

December 17, 2010

Adriana A. Bedoya, M.D., FCAP, FASCP  
 Medical Director- San Diego Donor Center

Date

Signature Collected Electronically

December 17, 2010

Gary A. Gochman, MD, Medical Director –  
 Orchard Donor Center

Date

Signature Collected Electronically

December 17, 2010

Jeffery D. Shiffer, MD. Medical Director –  
 Woodland Hills Donor Center

Date

Signature Collected Electronically

November 11, 2010

Joseph C. Thompson, MD. Medical Director  
 –Los Angeles Donor Center

Date

**DOCUMENT HISTORY PAGE**  
**Effective Date:** December 28, 2010

Change Type: new, major, minor, etc.	Changes Made to Document - Describe	Signature responsible person/ Date	Medical Director Reviewed/ Date	Lab Manager Reviewed/ Date	Date Change Implemented
New					