

# Servicing the Lorad Multicare Platinum™ Table



RADIOLOGICAL SERVICE TRAINING INSTITUTE

## Introduction

This course is designed to give the service professional the required information and the hands-on skills needed to make necessary alignments, diagnose service issues and make required repairs. Given the importance of this mammographic modality and the delicate nature of the procedure, the highest calibration standards must be maintained.

## Prerequisites

To attend this course, the service professional must possess fundamental knowledge and understanding of the principles of X-ray (Phase I), mammography and basic electronics.

## Objectives

- Describe the performance specifications of the Multicare table
- Describe the performance specifications of the needle guidance section
- Describe the performance specifications of the stereoguide system
- Describe the performance specifications of the digital imaging system
- Demonstrate an understanding of the various subsystems of the biopsy system
- Perform the necessary performance monitoring and quality assurance tests and performance
- Perform the necessary calibrations and adjustments to maintain the

highest degree of accuracy for the biopsy system

- Evaluate circuit and system functions to facilitate troubleshooting

## Course Outline

### Day 1

- System introduction
- Specifications
  - Table
  - Stereo guide
  - Needle guidance
  - Digital imaging system
- Knobology
- Physical layout
- Using system documentation
- System installation
- Turn-on and power distribution
- Lab Activities
  - System operation
  - Cover removal
  - Component identification
  - System installation
  - Power supply verifications

### Day 2

- X-ray production system
  - Data port
  - kV control
  - mA control
  - Rotor control
- Lab Activities
  - Verify and calibrate kV
  - Verify and calibrate mA
  - Rotor control verification
  - X-ray tube replacement procedure

### Day 3

- Table controls
  - Table motion

- C-arm motion
- Compression motion and force
- Drive belt adjustments
- Lamp control
- Stage controls
  - X/Y/Z axis control interface
  - X/Y motor drive
- Needle alignment
- Lab Activities
  - Table travel limits calibration
  - Stage adjustment
    - Left/right/up/down/height
    - Z-azimuth
    - Breast platform
    - Needle gum holders
  - X-ray field adjustments
  - Final needle guidance alignment and checks
    - Pivot point
    - Compression trays

### Day 4

- DSM system
  - CCD module
  - X486/NT/ Pentium computers
- Digital imaging theory
- Lab Activities
  - Creating white/black calibration maps
  - Align CCD module to X-ray tube
  - Calculating coordinates
  - Final alignment checks
  - System troubleshooting

### Day 5

- I. Course review
- II. Course evaluation
- III. Final exam

**Note:** Due to copyright issues, students are required to purchase and bring to class a copy of the following manuals:

**Ops : 9-500-0290 rev. 003**

**Service: 9-500-0291 rev. 003**

**Schematics: 9-500-0292 rev. 002**