



Ziehm Vision Technical Training Course Overview

Course: This course is designed for service engineers with some x-ray experience. The course covers safety, functional checks, calibration procedures, image performance, trouble shooting techniques, and routine maintenance as prescribed by the original manufacturer. The course will be conducted on a staged and fully functional system.

Qualifications for Admission: Participants should have prior x-ray service experience, preferably with R&F systems. They should have a minimum of a two- year degree in electronics or equivalent experience. General Microsoft Windows computer skills are also necessary.

Course Overview:

Class work:

- System Identification and Model Differences
- Functional Description
- Overview of hardware, software, schematics and drawings
- Inter-system communication
- Escalation – contact information
- Required Service Tools
- Available documentation
- Software required
- Safety

Lab work: (performance tasks)

- Equipment familiarization
- Identify major components
- Operate system – test functions and features
- Remove covers
- Identify normal vs abnormal boot sequence
- Maneuver through software menus
- Access service menu
- Access “black screen”
- Install diagnostic software on laptop
- Connect laptop to system



- Access event log
- Locate parts – identify parts
- Evaluate battery condition
- Access BIOS
- Create service floppy disk
- Backup data, and restoration
- Delete patients
- Clone hard drive
- Load Software
- Perform calibrations and alignments
- Perform maintenance procedures
- Diagnose and correct common faults and failures
- Perform repairs
- Diagnose and troubleshoot
 - power issues
 - interlocks
 - boot issues
 - internal system communication issues
 - motorized motion issues
 - x-ray generation problems
 - image quality issues
 - dose problems
 - external communication issues

Summary: Upon Completion of this 5 day course participants will have demonstrated that they can effectively perform the tasks associated with conducting calibrations, routine maintenance, and responding to typical service events, including diagnosing to the subsystem level.

Note:

- *Course outline may change to meet student's needs.*
- *Personal radiation monitoring device and laptop required.*