

Aestiva and Aespire Essentials

By attending the Aestiva and Aespire Essentials course, students will gain a better understanding of the theory, pneumatic design and operation of these anesthesia systems. Structured hands-on labs are designed to reinforce skills learned to find and troubleshoot leaks, perform user scheduled maintenance, and complete the preoperative checkout procedures based on FDA recommendations. This workshop covers the Aestiva with 7900 ventilator and Aespire with 7100 ventilator. It is intended for end users responsible for operating and/or supporting this equipment. This includes but is not limited to Anesthesia Technicians, Biomedical Technicians, CRNA's and Physicians.

Note: This course does not qualify individuals to perform in-depth repairs or service planned maintenance. Technical Reference Manuals are not included with this course.

Delivery Method

Classes are held at the Madison Training Center and various cities throughout the United States. Class size is managed to ensure an optimal student-instructor ratio and accessibility to equipment for hands-on exercises.

Class Duration: 3 days

Price: 1050

Tuition price includes:

- Continental Breakfast
- Lunch
- Afternoon snacks
- Course materials

Course Outline Content

Module 1: Fundamentals of Gas Supply

- Stages of anesthesia
- Gas color codes and characteristics
- Handling and storage of cylinders
- Cylinder pin index
- Cylinder pressures
- Sources of supply gases

Module 2: The Anesthesia System

- Internal components of the anesthesia machine
- Main features and controls of the anesthesia machine
- Gas flow through the anesthesia machine
- First-level troubleshooting

Module 3: Vaporizers

- Purpose of a vaporizer
- Types of inhalant agents
- Vaporizer filling

- Vaporizer leak checking
- First-level troubleshooting
- Application of theory through hands-on experience

Module 4: The Breathing System

- Purpose of the breathing system
- Component description and examination
- Gas flow through the breathing system
- Disassembly and assembly for cleaning and sterilization
- Leak testing and daily care
- Internal connections
- Application of theory through hands-on experience

Module 5: Waste Gas Scavenging System

- Purpose of scavenging
- Components
- Gas flow through the waste gas scavenger
- Waste gas scavenger disassembly and assembly for cleaning and sterilization
- Application of theory through hands-on experience

Module 6: Ventilator(s)

- Purpose of ventilators
- General terms and concepts related to ventilation
- Theory of operation of the ventilator and bellows assembly
- Bellows disassembly and assembly for cleaning and sterilization
- Ventilator controls
- Ventilation modes
- Patient parameter monitoring for oxygen concentration, volume, and patient airway pressure
- Alarms
- Application of theory through hands-on experience

Module 7: Monitoring

- Basic components of monitoring systems
- Common modules and clinical issues related to them
- Configuration and operation of monitors
- Troubleshooting

Module 8: Troubleshooting Session

- First-level troubleshooting
- Detection and correction of leaks
- Recognition of misconnections
- Correct setup of an anesthesia system
- Application of theory through hands-on experience

Aestiva and Aespire Essentials Class Syllabus

Concepts to be taught:

We will reinforce skills learned to find and troubleshoot leaks, perform user scheduled maintenance, and complete the preoperative checkout procedures based on FDA recommendations. This workshop covers the Aestiva with 7900 ventilator and Aespire with 7100 ventilator.

Class Length: 8:00 AM to 4:00 PM, Tuesday through Thursday.

Breaks: One 15 minute break in the morning and one 15 minute break in the afternoon.

Lunch: Approximately 30-45 minutes at the GE Cafeteria.

Transportation: Students (customers) will be picked up at the hotel at 7:30 AM and returned to the hotel after class.

Only GE Service Reps are authorized to drive the company vans.

Students are expected to:

Be prompt so class can proceed as scheduled.

Use tools and equipment properly.

Behave professionally.

Rotate partners during hands-on session.

Participate in all aspects of the class.

Take notes.

Use the Study Guide to review and emphasize daily class information.

Follow all safety procedures.

Wear name tags.

