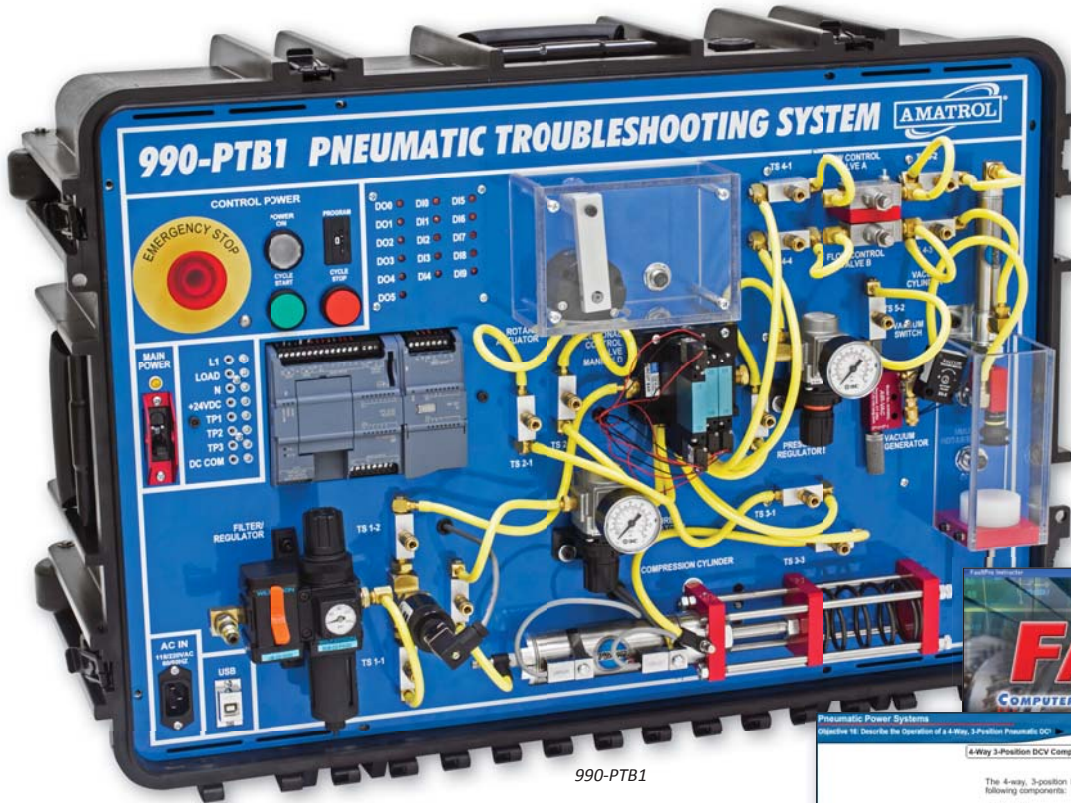


# Portable Pneumatics Troubleshooting Learning System

990-PTB1

Fp

FLUID  
POWER



990-PTB1



Multimedia Curriculum, FaultPro, and Student Reference Guide

## Learning Topics:

- Pneumatic Troubleshooting Concepts
- In-Circuit Pneumatic Component Testing
- Air Preparation Troubleshooting
- Regulator Troubleshooting
- Troubleshooting Pneumatic Actuators
- Quick Exhaust Valves
- Troubleshooting Vacuum Systems
- Vacuum Switch Operation
- Troubleshooting Pneumatic Systems
- Troubleshooting Machine Sequence Faults

Amatrol's Portable Pneumatics Troubleshooting Learning System (990-PTB1) provides a skill-rich, portable troubleshooting system for basic pneumatic and electro-pneumatic circuits. This system's value is twofold: first it provides vital training experience for learners and professionals that will perform industrial maintenance, installation, and troubleshooting on pneumatic systems used in real-world automation machinery, packaging equipment, pharmaceutical applications, chemical handling tasks, and more. Secondly, this system features industry-standard valves, switches, and gauges all within a portable learning system that can be placed on a conference room table, shop floor desk, or practically anywhere when training space is limited.

The 990-PTB1 features directional control valves, flow control valves, limit switches, a programmable logic controller, and FaultPro software, Amatrol's electronic fault insertion software. These industrial components will be used to study troubleshooting topics for air preparation, pneumatic actuators, vacuum systems, pneumatic systems, and more all within an innovative, portable solution that doesn't sacrifice the comprehensive knowledge and skill building for which Amatrol is known.



## Technical Data

Complete technical specifications available upon request.

### Portable Case

Suitcase: 28.8-in. L x 20.1-in. W x 14.8-in. D  
Durable ABS Plastic  
S71200 Siemens PLC  
Directional Control Valve Manifold – 4-Valve Stack  
Directional Control Valve, 3 position, 5 way, spring centered  
Directional Control Valve, single solenoid, 2 position, 5 way, spring return (2)  
Directional Control Valve, double solenoid, 2 position, 5 way, detented  
Rotary Actuator, double acting with arm attached to shaft  
Cylinder, double acting (2)  
Pressure Regulator (2)  
Spring Load  
Vacuum Generator  
Vacuum Switch  
Vacuum Gauge  
Pressure Gauge  
Multimeter  
Flow Control Valves (6)  
Limit Switches (4)  
Control Power Pushbutton  
Emergency Stop Pushbutton  
On/Off Switch with Lockout/Tagout  
Multimedia Curriculum (M19141)  
Instructor's Guide (C19141)  
Install Guide (D19141)  
Student Reference Guide (H19141)

### Additional Requirements:

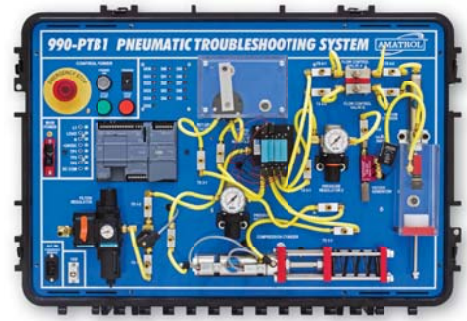
Computer: See requirements: <http://www.amatrol.com/support/computer-requirements>

### Utilities

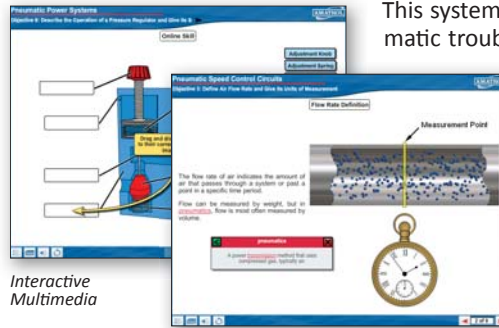
Electricity (120 VAC/60 Hz/1 phase)

## Practice Hands-On Pneumatic Troubleshooting Skills with the 990-PTB1

The 990-PTB1 includes four directional control valves, two double acting cylinders, six flow control valves, a vacuum gauge, pressure gauge, multimeter, and S71200 Siemens PLC all within a portable learning system. Learners will use these components to perform skills such as troubleshooting a variety of components via an in-circuit test. These components include: filters, cylinders, flow control valves, and quick exhaust valves. Learners will also practice troubleshooting low pressure, high pressure, actuators that move out of sequence, and actuator speed.



## Comprehensive Troubleshooting Curriculum in a Stunning Multimedia Format



Interactive Multimedia

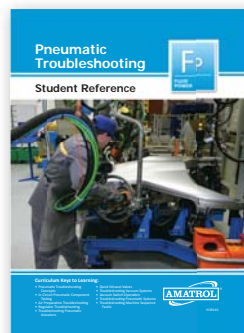
This system includes a comprehensive curriculum of pneumatic troubleshooting topics including symptoms of lubricator failure, the function of a rotary actuator, symptoms of vacuum switch failure, and how to troubleshooting zero pressure. The 990-PTB1's curriculum is presented in a highly interactive multimedia format. This multimedia features stunning 3D graphics and animations, audio voiceovers of the text, and interactive quizzes and activities to fully engage the learner in vital pneumatic troubleshooting concepts.

## Fault-Pro: A World-Class Troubleshooting Teaching Tool

990-PTB1 uses FaultPro, an electronic fault insertion system that is only available from Amatrol, to insert 30+ faults into the system for troubleshooting. During the learning process, FaultPro allows learners to insert faults in the system as they progress through the step-by-step procedures learning industrial troubleshooting methods. Then, FaultPro can be set to randomly select and insert a fault to test a learner's troubleshooting abilities and prepare them to solve real-world technical problems once they're in the field.

## The 990-PTB1: Mobile, Durable, Compact Learning System

Set within a durable ABS plastic case, the 990-PTB1 features wheels and a handle to create a mobile training platform that can be used to deliver training where needed and that's easy to store and transport. The cover is quickly removed to enable the case to sit firmly upright on a table surface for any learner to use.



## Student Reference Guide

A sample copy of the Portable Pneumatic Troubleshooting's Student Reference Guide is also included with the system for your evaluation. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.

