



# Pneumatics Training System

## Model CES 7043

Students are introduced to the basic principles and laws of fluids, which govern the operation and application of pneumatic devices. While learning to use compressed air safely, the student connects the various components to create a compressed air circuit; completes experiments and activities; and interprets graphic symbols and schematics.

At this workstation, you will have a hands-on career exploration in pneumatics. You will use some of the same components, including meters, valves and regulators, that professionals in the construction industry use.

This job experience project will expose you to the basic fundamentals of pneumatics. Compressed air, the fluid that powers pneumatic systems, can be released at high pressure and be very dangerous. Therefore, you will be given important tips on how to work with compressed air safely. You will learn how to connect the various components on your pneumatics trainer to create a compressed air circuit. Different circuits will be used to complete various experiments and activities.

### **CURRICULUM**

Curriculum manual is provided in a three-ring binder, with pages contained in page protectors. Easy to follow step by step activities are highlighted using full color photographs. Once introduced to career related information (job description, education and training requirements, job prospects, and income ranges) the student begins a "hands-on" work experience, using professional tools of the trade to complete projects or tasks. An audio tape follows the manual word-for-word. Pre and post tests, worksheets, answer sheets, and instructors guide.

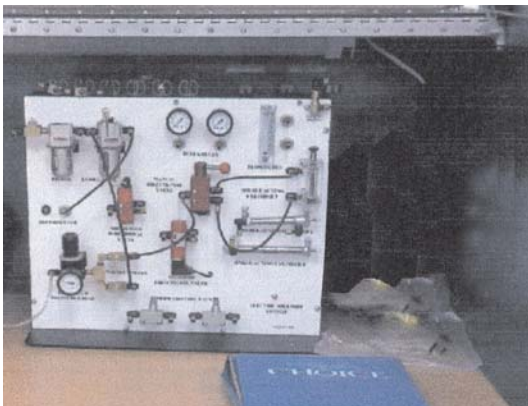
### **HANDS ON ACTIVITIES**

- Connect air lines
- Test filter unit
- Apply lubricant
- Adjust flow control valve
- Adjust pressure regulators and record pressure readings
- Identify and operate flowmeter
- Identify and operate directional control valves
- Identify and operate air piloted directional control valve
- Identify and operate single acting and double acting cylinders

### **PNEUMATIC TRAINER INCLUDES:**

Contamination port; filter; lubricator; test gauges; flowmeter; air indicator; air piloted valve; manual valve; double cylinder #3; double cylinder #2; single cylinder #1; solenoid valve; regulator and gauge; needle valves; flow control valves; electric PB switch; cylinder bracket.

**NOTE:** Requires air supply.



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