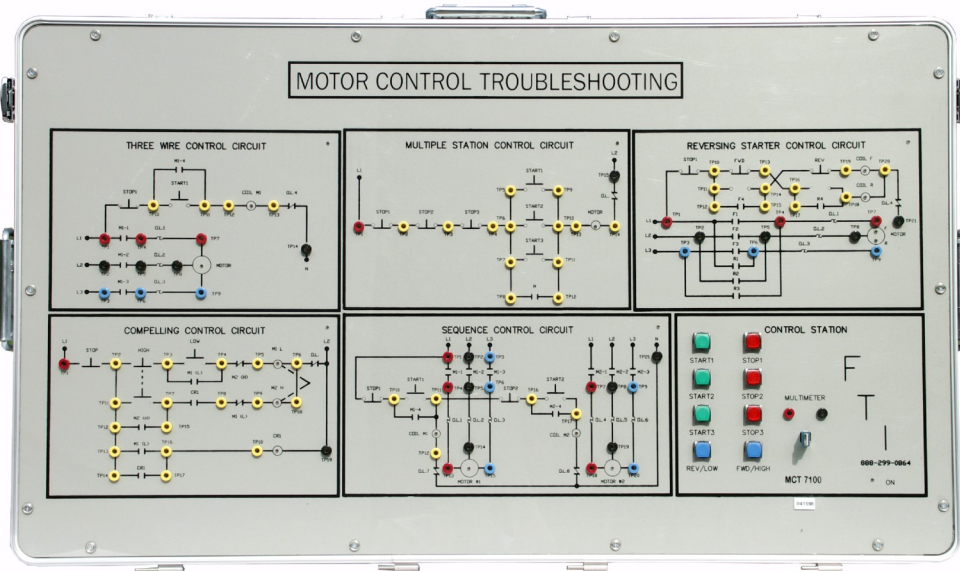# FUTURE TEK, INC.

Model 7100 Specifications

Model 7100 Training Package includes:

- Model 7100 Motor Controls Troubleshooting Trainer
- Lab Manuals: Motor Controls Troubleshooting Training System Manual
- Software: Windows Based Custom Training Software
- CD: USB Driver Info
- Info Sheet: Troubleshooting Trainer Software Installation Info

Trainer Dimensions

39" x 23" x 16"

38 lbs

General Description

Future Tek Model 7100 Motor Controls Troubleshooting Training System is used in industry to test new employees' skills in the electrical field and to update existing technicians' skills. Model 7100 makes troubleshooting labs quick and easy for the instructor, and meets secondary, post-secondary, and industrial curriculum requirements. Instructors and students love the challenge that this training system offers. The system produces a Detail Report for each individual student, this documentation is required for curriculum and accreditation.

This training system may be used as a tool for introduction to Motor Controls. An instructor may demonstrate all the resistances, voltages, components , and values in the entire control circuit. Understanding the resistance of each component, studying the operation of each component in series and parallel, and grasping how the voltage is moved from one component to the other must be accomplished before any troubleshooting can be taught. Once the student has learned circuit operation and theory, then the trainer may be used to select specific troubleshooting problems, from basic to advanced. This trainer will also provide shorts (0 ohms across components) which cannot be demonstrated in other training scenarios.

To use the system, an instructor selects the desired faults from the Instructor's Guide, and using the menu driver software, builds a fault table for the student's troubleshooting session (Random fault insertion is also available). The instructor then enters the fault table number and the time limit for the session and turns the computer and trainer over to the student. The student then Determines the Cause of the Fault by Testing the Circuit Operation and Taking Measurements of Voltage and/or Resistance utilizing the leads provided and the Built-In VOM simulator. Using the data acquired, the student then selects to replace a component or wire (connection) to repair the problem. All of the student's actions are recorded and may be printed in a session summary specific for each student.

There is also a Tutorial (Teaching) mode to help the student develop troubleshooting skills.

A total of 152 Real-World Troubleshooting Problems and Solutions are available covering Five Control Circuits (Three Wire Control, Multiple Station Control, Reversing Starter Control, Compelling Sequence Control, and Sequence Control).

Model 7100 Components List	
Qty	Description
92	Banana Jacks (Testing Locations) of Various Colors
1	Set of 2 Test Leads (1 Black, 1 Red)
1	USB Connection (Operates on USB Power, no Power Plug required)
11	Pushbuttons of Various Colors