Residential Mini-Split Heat Pump Learning System

T7130



Learning Topics:

- Mechanical Refrigeration
- Mini-Split Heat Pump System Operation
- Remote Controller Settings & Adjustments
- Heating & Cooling Modes
- LED Indicators & Communication **Between Units**
- Power Supply Testing
- Component Tests
- System Troubleshooting

Amatrol's Residential Mini-Split Heat Pump Learning System (T7130) teaches the critical hands-on skills HVACR technicians need to succeed when working with residential ductless ("mini-split") HVAC systems. Learners will work with real equipment, such as: a heat pump condenser, evaporator unit, thermostat, panel-mounted gauges, and condensate pump.

In addition to developing hands-on skills with real equipment, learners will use Amatrol's interactive multimedia eLearning curriculum to cover a wide variety of fundamental residential mini-split system topics, including: remote controller adjustments, heating and cooling modes, LED indicators, communication between units, and system troubleshooting.



Technical Data

Complete technical specifications available upon request.

Mobile Workstation Heat Pump Condenser Evaporator Condensate Pump FaultPro Computer-Based Fault Insertion System Multimedia Curriculum (M19174) Instructor's Guide (C19174) Installation Guide (D19174) Student Reference Guide (H19174) Additional Requirements: R410a refrigerant Customer-supplied floor drain Computer (Visit www.amatrol.com/support/ computer-requirements for details.) Utilities Required:

Electric (220V/60Hz/1ph) and (120V/60Hz/1ph)

Study Residential Mini-Split Components and Practice on Real-World Equipment

When it comes to learning important residential mini-split heat pump system skills, there's simply no substitute for hands-on experience with real equipment that technicians will encounter on the job. That's why Amatrol's Residential Mini-Split Heat Pump Learning System features real industrial HVACR equipment, including a heat pump condenser, evaporator unit, and condensate pump. The T7130 was also designed to include transparent housings and pipes with LED illumination that allows learners to see inside the system.



Real industrial components give learners hands-on experience

Real-World Troubleshooting with FaultPro



The T7130 features FaultPro, Amatrol's exclusive electronic fault insertion system. FaultPro allows users to insert 28 mechanical and electrical faults into the system for realistic troubleshooting of situations they will encounter on the job. For example, the T7130 includes faults related to failures involving the fan motor, fuses, input power/wiring, compressor, and sensors. FaultPro's computer-based faults automatically track progress, enabling learners to gain troubleshooting skills in a self-paced environment that ensures that faults are inserted safely, protecting both learners and equipment.

Interactive Multimedia eLearning Curriculum

Amatrol's curriculum features a highly-interactive, multimedia format that includes stunning 3D graphics

and videos, voiceovers of all text, and interactive quizzes and exercises designed to appeal to learners with different learning styles. The T7130 curriculum teaches learners the fundamentals of residential mini-split heat pump systems.

For example, learners using these systems can expect to learn critical hands-on skills, including:

- Adjusting remote controller settings
- Using mini-split system LED indicators to troubleshoot a system
- Verifying communication between indoor and outdoor units
- Testing a four-way valve reversing valve coil
- Troubleshooting system cut-out

Student Reference Guides

A sample copy of the Residential Mini-Split Heat Pump Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes

the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. 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.

Related HVACR Training Systems

Want to explore more HVACR topics? Be sure to check out Amatrol's other HVACR training systems, including the Residential Heat Pump Troubleshooting Learning System (T7100) and the Refrigerant Recovery and Charging Learning Systems for R134a/R410a (T7031/T7032). Each of these systems features Amatrol's interactive multimedia eLearning curriculum and real, industrial HVACR equipment to teach critical hands-on skills.





