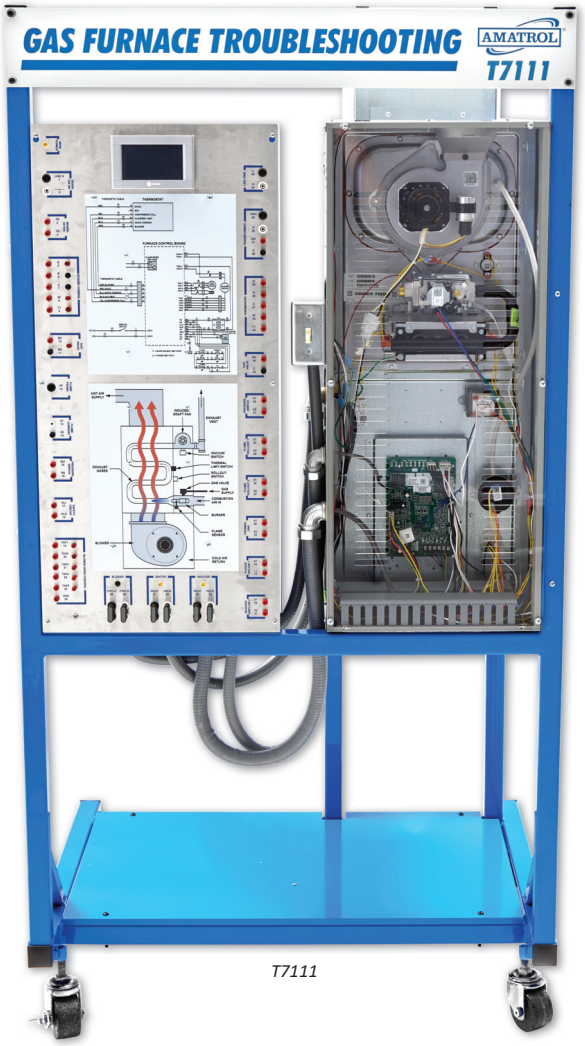
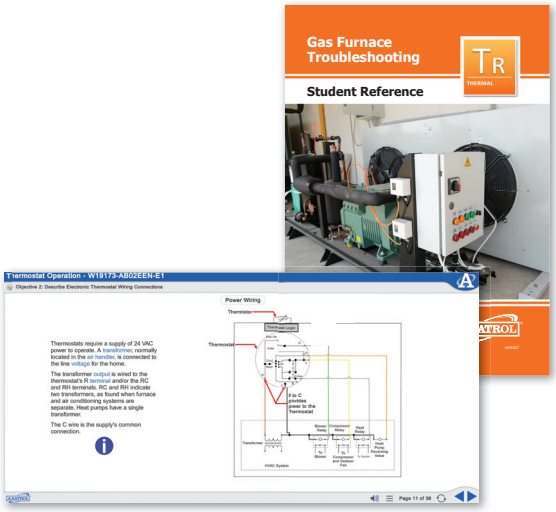
Gas Furnace Troubleshooting Learning System

T7111

THERMAL



T7111



Interactive Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Introduction to Gas Furnace Systems
- Gas Furnace Ratings
- Air Flow Components
- Burner Components
- Gas Valves and Igniters
- Thermostats
- Controllers
- Heat Output Measurements
- Fan and Blower Testing
- Sensor Testing
- Electrical Control Testing
- Troubleshooting Residential Gas Furnace Systems

Amatrol's Gas Furnace Troubleshooting Learning System (T7111) teaches future HVACR technicians how to troubleshoot gas furnace controls in a safe and effective manner. The T7111 uses a simulated flame presence, so no natural gas connection or venting is required.

Learners using the T7111 will gain hands-on experience with real HVACR industrial components, such as a Trane gas furnace, thermostat, service switch, and air filter. To facilitate learning, the furnace's metal access door is replaced with a clear acrylic cover, so that the furnace's interior and control board are visible.

AMATROL®

Technical Data

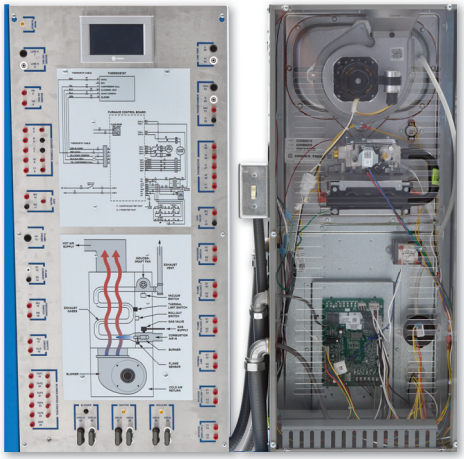
Complete technical specifications available upon request.

Mobile Workstation
Natural Gas Furnace Indoor Blower/Air Handler
Thermostat
Service Switch
Air Filter
Diagnostics Panel
FaultPro Computer-Based Fault Insertion System
Multimedia Curriculum (M19207)
NOTE: Curriculum available in 2027.
Instructor's Guide (C19207)
Installation Guide (D19207)
Student Reference Guide (H19207)
Additional Requirements:
Digital Multimeter
Computer: For PC requirements, see amatrol.com/support
Utilities Required:
Electrical: 120V/60Hz/1ph

Study Real Gas Furnace Components and Practice on Real-World Equipment

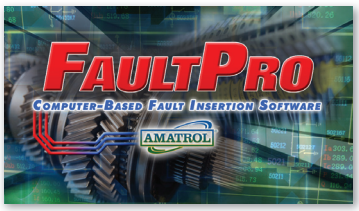
Most American homes use either an electric furnace, electric heat pump, or gas furnace for heat in winter. Although electric heat pumps are becoming more popular, about half of all households rely on natural gas to keep warm. Gas furnaces remain popular because, despite higher upfront costs, they tend to be more energy efficient, which results in overall lower fuel costs. That's why it's critical for today's HVACR technicians to know how to troubleshoot and repair gas furnace systems.

Amatrol's Gas Furnace Troubleshooting Learning System (T7111) teaches future HVACR technicians how to troubleshoot gas furnace controls in a safe and effective manner. Learners using the T7111 will gain hands-on experience with real HVACR industrial components, such as a Trane gas furnace, thermostat, service switch, and air filter.



Hands-On Skills with Real Gas Furnace Components

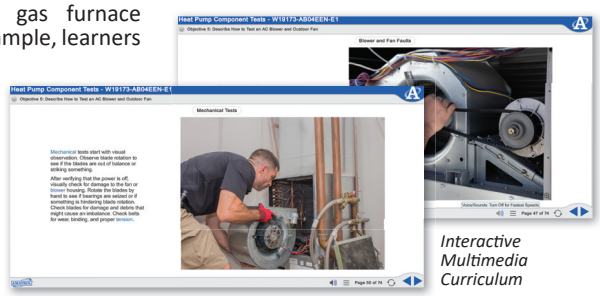
Teach Advanced Troubleshooting Skills



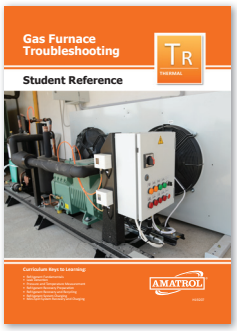
The Gas Furnace Troubleshooting Learning System features robust troubleshooting training via Amatrol's exclusive FaultPro computer-based fault insertion. The instructor can insert faults into the system to create a more realistic troubleshooting environment for students. FaultPro allows students to solve real-world problems they'll encounter on the job safely.

Engaging, Highly Interactive Multimedia (Available in 2027)

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 T7111 curriculum teaches learners about gas furnace systems and their components. For example, learners will study air flow and burner components; gas valves and igniters; thermostats and controllers; and how to test and troubleshoot fans, blowers, sensors, and electrical controls. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



Interactive Multimedia Curriculum



Student Reference Guide

A sample copy of the Gas Furnace Troubleshooting 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 the perfect student resource. 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.

AMATROL®
Certified ISO 9001:2015

2400 Centennial Blvd. Jeffersonville, IN 47130 USA 800.264.8285 812.288.8285 www.amatrol.com

Printed in the USA Copyright © 2026 Form No. 5104-B