

CAR AC (AIR CONDITIONER) REPAIR TRAINING BROCHURE



Practical training



Post training assistance

CONTACT US

www.pertecnica.com 7842430123

CAR AC (AIR CONDITIONER) REPAIR TRAINING

The Car AC Mechanic Training is crafted to equip participants with the skills needed to diagnose, repair, and maintain automotive air conditioning systems. This comprehensive course covers everything from basic AC system components to advanced diagnostics, refrigerant handling, and repairs. Perfect for those looking to specialize in climate control systems, this training provides both theoretical knowledge and hands-on experience, making you proficient in keeping cars cool and comfortable.

What you'll learn?

- Basics of automotive air conditioning systems and components.
- Refrigerant types, handling, and safety procedures.
- Diagnosing AC system issues using advanced tools.
- Servicing and repairing compressors, condensers, and evaporators.
- Leak detection and refrigerant recovery techniques.
- Electrical components related to air conditioning systems.
- Troubleshooting climate control and HVAC units.
- Testing and calibrating AC systems for optimal performance.

Course summary:

This course is designed to provide specialized training in automotive air conditioning systems. Participants will gain in-depth knowledge of AC components, learn diagnostic and repair techniques, and understand refrigerant safety and management. The training will also focus on troubleshooting modern climate control systems and developing the skills needed to keep vehicle AC systems functioning efficiently.

Key Takeaways:

- Mastery of AC diagnostics, repair, and maintenance.
- Proficiency in refrigerant handling and safety.
- Hands-on experience with AC system components and tools.

Course syllabus:

Module 1: Introduction to Automotive AC Systems

- Overview of automotive air conditioning components.
- · Understanding refrigerants and their types.
- Principles of cooling and refrigeration in vehicles.

Module 2: Refrigerant Handling and Safety

- Refrigerant types, their properties, and uses.
- Safe handling of refrigerants and environmental protocols.
- Proper recovery, recycling, and recharging techniques.

Module 3: Compressors, Condensers, and Evaporators

- Function and types of compressors.
- Repair and replacement of condensers and evaporators.
- System flow and refrigerant cycling.

Module 4: Electrical Components of AC Systems

- Diagnosing AC electrical circuits.
- Repairing wiring and fuses related to the AC system.
- Understanding control units and climate control interfaces.

Module 5: Leak Detection and System Repairs

- Techniques for detecting refrigerant leaks.
- Using electronic and UV leak detection tools.
- Repairing leaks in hoses, fittings, and system components.

Module 6: Pressure Testing and Diagnostics

- Using pressure gauges and vacuum pumps.
- Diagnosing AC performance issues based on pressure readings.
- Systematic troubleshooting of airflow and cooling problems.

Module 7: Servicing and Maintenance of AC Systems

- Regular maintenance schedules for vehicle AC systems.
- Cleaning and replacing air filters and vents.
- Preventive care for compressors and cooling units.

Module 8: Advanced AC System Diagnostics

- Fault-finding in complex AC systems.
- Troubleshooting hybrid and electric vehicle HVAC units.
- Using diagnostic tools for climate control systems.

Module 9: Modern Climate Control and HVAC Systems

- Understanding automatic climate control systems.
- Diagnosing electronic control unit (ECU) related issues.
- Calibration and resetting of climate control settings.

Module 10: Best Practices and Industry Standards

- Understanding industry standards for AC systems.
- Compliance with environmental regulations.
- Best practices in customer service and system diagnostics.

Module 11: Evaluation & Certification

- Comprehensive assessment of theoretical and practical knowledge.
- Written exams covering electric bike repair and maintenance.
- Practical exams involving diagnostic and repair tasks.
- Certification awarded upon successful course completion.
- Career guidance and industry opportunities.

Practical training:

- Using refrigerant recovery, recycling, and recharging systems.
- Servicing and replacing AC compressors, condensers, and filters.
- Leak detection using UV dyes and electronic tools.
- Diagnosing and repairing AC electrical wiring and controls.
- Hands-on practice with pressure gauges and vacuum pumps.
- Evacuating and recharging refrigerants in real-world scenarios.
- Servicing vehicle climate control units for optimal cooling.
- Electrical system testing and calibration of HVAC systems.

Career scope:

Upon completing the Car AC (Air conditioner) repair training course, graduates can explore career opportunities in various sectors, including:

- Automotive AC Technician at dealerships or service centers.
- AC Specialist for vehicle maintenance workshops.
- Mobile air conditioning repair services.
- AC System Installer for car manufacturers.
- HVAC repair technician for automotive companies.
- Self-employed Car AC Mechanic.
- AC maintenance technician for fleet management companies.
- Specialist in hybrid and electric vehicle climate control systems.
- Supervisor for automotive air conditioning services.
- Car AC System Diagnostic Expert.