



INSTITUTE OF THE
MOTOR INDUSTRY

IMI ACCREDITATION

AIR CONDITIONING





What is IMI Accreditation?

IMI Accreditation is a practical, non-academic way to demonstrate individual capability, providing independent proof of current competence, knowledge and skills.

Focused on the Light Vehicle area of the automotive sector, IMI Accreditation encompasses everyone within this area, from individuals working directly on vehicles to those advising customers or managing a dealership. Three different types of accreditation reflect the diverse range of roles within the motor industry: Technical, Customer Facing and Management

Accreditation typically takes just one day to achieve (depending on the specific route), with individuals assessed against industry-agreed standards. Each accreditation route is designed using best practice techniques, and offers multiple career development options for a specific job role.

Accreditation is available for the following routes:

- Technical
 - Air Conditioning
 - Autoglazing
 - Cosmetic Repair
 - Digital Audio Broadcasting
 - Electric Vehicle
 - Fast Fit
 - Light Vehicle Maintenance & Repair
 - Light Vehicle Inspection
 - Mechanical Electrical Trim
 - Motorcycle
 - Paint
 - Panel
 - Roadside
 - Vehicle Damage Assessor
- Customer Facing
 - Customer Service
 - Parts
 - Sales
- Management
 - Management

Once an individual has passed all the required practical and knowledge-based modules in a specific route, they will receive a certificate of achievement which is valid for three years.



IMI Accreditation benefits

IMI Accreditation was created to help the motor industry keep on top of constant, rapid changes in technology, legislation and working methods, by encouraging and measuring the current competence, knowledge and ability of those working within it. By providing proof of current competence, IMI Accreditation benefits both individuals and their employers.

Those gaining accreditation receive:

- An IMI Accredited certificate
- Inclusion on IMI Professional Register
- Industry-wide recognition of their skills and abilities
- Confidence
- Advice and guidance for development
- An opportunity for career progression

While the employer of an accredited individual benefits from:

- Confidence in the individual's ability
- Eligibility for British Standard/DVSA requirements (depending on routes)
- Increased customer visibility on the IMI Professional Register
- Higher work output and fewer mistakes
- Public confidence in abilities

Industry Recognition through the IMI Professional Register

The IMI Professional Register is an industry-wide database of professionals in the motor industry. The Register is promoted to consumers as a place to find trustworthy professionals who have proven their skills and competence within specialist areas of the industry. IMI Accredited individuals are automatically included on the IMI Professional Register.

Routes to Accreditation

There are two routes to gaining IMI Accredited status: Full Assessment, and Conversion*. Full Assessment involves the completion of all practical and knowledge-based assessments at each level. Conversion enables an individual to use existing qualifications to gain exemption from specific modules.

IMI Accreditation continually evolves to meet the changing needs of the industry, with each accreditation valid for three years, after which time an individual is required to undertake a new assessment either at the same level, next career level or a different route in order to prove their current competence.

IMI Accreditations are delivered through the IMI approved centre network, and you can find your nearest centre or explore assessment routes at www.imiawards.org.uk.

Further Information

For further information on any of the accreditation routes, please visit www.theimi.org.uk/ata. Alternatively call 01992 511521 to contact IMI directly.



Who is the Air Conditioning route for?

The Air Conditioning route is intended for technicians whose job role involves the maintenance and repair or accident repair (MET role or similar) of light vehicles and will have contact with the vehicle Air Conditioning system during their work activities.

There are three levels within Air Conditioning:

- **Refrigerant Handler**
 - The technician must be able to work unsupervised – ideally, they should be in full time employment with at least three months experience to ensure they are familiar with the skills, knowledge and techniques required to recover and recharge vehicle Air Conditioning systems without knowingly releasing refrigerant to the atmosphere. They should also be familiar with the knowledge of the legislation applied to the use of refrigerants (F-Gas) used in the automotive industry.
- **Service Technician**
 - The technician must be able to work unsupervised – ideally, they should be in full time employment with at least twelve months experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler level (see above), plus have the skills, knowledge and techniques required to service, maintain and replace components to a vehicles Air Conditioning system.
- **Diagnostic Technician**
 - The technician should be working in the light vehicle sector of the industry and ideally have at least two years experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler and Service Technician levels (see above), plus have the skills, knowledge and techniques required to diagnose Air Conditioning system faults through pressure readings and system electrical faults. The technician will also be required to diagnose faults with Heating, Ventilation Air Conditioning (HVAC) or climate control faults including returning the vehicle systems to manufacturer specification.

Air Conditioning Route Structure

Those wishing to achieve IMI accreditation will be required to use the following method:

- **Full Assessment**

For those wishing to retain their accreditation there are two options, these are:

- **Full Assessment**
- or
- **AOM Update**



Note: In order to re-accredit using 'AOM Updates' (Assessed Outcome Modules) the candidate's Accreditation must remain valid throughout the assessments and until all of the prescribed AOMs have been passed. Should the accreditation period expire beforehand, the candidate will be required to re-take a 'full assessment'.

Air Conditioning – Refrigerant Handler	Full Assessment
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This level requires the technician to complete the following modules:

Refrigerant Handling	AOM 126
Refrigerant Cylinder Handling	AOM 127

This will normally be a half day assessment.

Air Conditioning – Service Technician	Full Assessment
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This level requires the technician to complete the following modules:

Refrigerant Cylinder Handling	AOM 127
AC System Service	AOM 128

This will normally be a half day assessment.

Air Conditioning – Diagnostic Technician	Full Assessment
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This level requires the technician to complete the following modules:

Refrigerant Cylinder Handling	AOM 127
AC System Service	AOM 128
AC System Fault - 1	AOM 129
AC System Fault - 2	AOM 130
AC System Fault - 3	AOM 131

This will normally be a one day assessment.



Air Conditioning – Refrigerant Handler	AOM Update <small>Reaccreditation only</small>
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This level requires the technician to complete the following module:

*Vehicle Air Conditioning - technology and legislation	AOM 132
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***Note:** *this module is a knowledge only assessment.*

Air Conditioning – Service Technician	AOM Update <small>Reaccreditation only</small>
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This level requires the technician to complete the following modules:

AC System Service	AOM 128
*Vehicle Air Conditioning - technology and legislation	AOM 132

This may either be achieved through a half day assessment or may be spread over the duration of the individual's existing IMI accreditation.

***Note:** *this module is a knowledge only assessment.*

Air Conditioning – Diagnostic Technician	AOM Update <small>Reaccreditation only</small>
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This level requires the technician to complete **two** out of the following three practical modules:

AC System Fault - 1	AOM 129
AC System Fault - 2	AOM 130
AC System Fault - 3	AOM 131
+	
*Vehicle Air Conditioning - technology and legislation	AOM 132

This may either be achieved through a half day assessment or may be spread over the duration of the individual's existing IMI accreditation.

***Note:** *this module is a knowledge only assessment.*



Air Conditioning – Use of competency based qualifications to attain Accreditation

Individuals who hold one of the industry recognised Air Conditioning qualifications listed below, could be eligible to take the Refrigerant Handler route using the AOM Update (reaccreditation route) – via the NVQ Conversion route.

Note: In order to qualify using this method, the individual’s existing qualification must be no more than three years old upon successful completion of the module.

MET Senior Technician [meets EC 307/2008]	➔	*Vehicle Air Conditioning - technology and legislation	AOM 132
OR			
IMI Awards Ltd QCF Level 3 Refrigerant Handling [500/6771/0]	➔	*Vehicle Air Conditioning - technology and legislation	AOM 132
OR			
City & Guilds Mobile Air Conditioning [7543]	➔	*Vehicle Air Conditioning - technology and legislation	AOM 132

***Note:** this module is a knowledge only assessment.



Accreditation Module Title	Refrigerant Handling				
Module Code	ATA - AOM - 126				
Practical Assessment Time	1 hour				
On-line Knowledge Test	K - 126				
IMI AOM Level	2				
Module Overview	<p>This module is to ensure that the candidate is able to connect vehicle Air Conditioning (AC) equipment to recover the refrigerant from a vehicles AC system, to evacuate the system and recharge the AC system with the correct quantity of refrigerant and oil (quantity and grade) without knowingly releasing refrigerant to the atmosphere.</p> <p>The candidate should be familiar with the process used to carry out these tasks using the appropriate AC equipment.</p> <p>The candidate will need to comply with the latest health and safety requirements and use the appropriate Personal Protection Equipment throughout the task.</p> <p>The candidate must also ensure that there are no leaks from the refrigerant cylinder, the vehicle service equipment and the vehicle at all times during the task.</p>				
Candidate Profile	<p>The technician must be able to work unsupervised – ideally, they should be in full time employment with at least three months experience to ensure they are familiar with the skills, knowledge and techniques required to recover and recharge vehicle air conditioning systems without knowingly releasing refrigerant to the atmosphere. They should also be familiar with the knowledge of the legislation applied to the use of refrigerants (F-Gas) used in the automotive industry.</p>				
Links with Accreditation Routes and Modules	<p>This module features in:</p> <table border="1"> <thead> <tr> <th>IMI Accreditation Route</th> <th>IMI Accreditation Level</th> </tr> </thead> <tbody> <tr> <td>Air Conditioning</td> <td>Refrigerant Handler</td> </tr> </tbody> </table>	IMI Accreditation Route	IMI Accreditation Level	Air Conditioning	Refrigerant Handler
IMI Accreditation Route	IMI Accreditation Level				
Air Conditioning	Refrigerant Handler				



Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Identify the vehicle AC refrigerant type using the appropriate method(s)
1.2	Carryout visual checks of the vehicle AC system to inspect for any defect prior to connecting AC equipment
1.3	Purge AC equipment free from refrigerant pre and post recovery
1.4	Use the correct methods to recover refrigerant
1.5	Carryout AC evacuation procedures
1.6	Select the correct refrigerant type and refrigerant quantity for a specific vehicle
1.7	Select the correct type / volume of AC system oil for a specific vehicle
1.8	Charge a vehicles AC system without loss of refrigerant to the atmosphere
1.9	Disconnect AC equipment from vehicle without loss of refrigerant and damage to the vehicle and its system(s)
1.10	Check for AC refrigerant leaks post recharging including from the AC service port connectors
1.11	Correctly store equipment after completion of task
1.12	Accurately complete all of the necessary documentation to support the recovery / recharging of an AC system
1.13	Use an appropriate level of vehicle care
1.14	Comply with all H&S requirements / safe working practice throughout assessment
1.15	Select and use the appropriate PPE relative to the assessment
1.16	Complete recovery and recharging of a vehicles AC system within given time constraints



Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Montreal Agreement and Kyoto Protocol
2.2	Global Warming Potential (GWP) of refrigerants used in the automotive industry
2.3	Relevant provisions of Regulation (EC) No 842/2006 and EU Directive 2006/40/EC
2.4	Applicable current EC regulations to the market (i.e. UK Statute 2194)
2.5	Health and Safety in relation to Air Conditioning
2.6	First Aid in relation to Air Conditioning
2.7	AC refrigerant in the various states - temperature/pressure/conditions
2.8	Identification of various AC systems and components
2.9	Working practices used in Air Conditioning both pre, during and post
2.10	Contamination of refrigerant
2.11	EC waste regulations
2.12	Transportation of refrigerants
2.13	Refrigerant documentation and activity records
2.14	Refrigerants used with automotive vehicles (e.g.R12, R134a, R1234yf)
2.15	Air Conditioning technology in relation to hybrid / electric vehicles
2.16	Filling / refilling of a cylinder with AC refrigerant



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Accreditation Module Title	Refrigerant Cylinder Handling						
Module Code	ATA - AOM - 127						
Practical Assessment Time	30 minutes						
On-line Knowledge Test	N/A						
IMI AOM Level	2						
Module Overview	<p>This module is to ensure that the candidate is able to handle a refrigerant cylinder using the appropriate methods to comply with the latest legislation.</p> <p>The candidate will need to transfer a quantity of refrigerant between a refrigerant cylinder and vehicle service equipment, ensuring that there is no loss of refrigerant to the atmosphere.</p> <p>The candidate must ensure that there are no leaks from the refrigerant cylinder and the vehicle service equipment at all times during the task.</p>						
Candidate Profile	<p>The technician must be able to work unsupervised – ideally, they should be in full time employment with at least three months experience to ensure they are familiar with the skills, knowledge and techniques required to recover and recharge vehicle air conditioning systems without knowingly releasing refrigerant to the atmosphere. They should also be familiar with the knowledge of the legislation applied to the use of refrigerants (F-Gas) used in the automotive industry.</p>						
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IMI Accreditation Route	IMI Accreditation Level						
Air Conditioning	Refrigerant Handler						
	Service Technician						
	Diagnostic Technician						



Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Carryout visual checks of all AC equipment before connecting equipment to a virgin AC cylinder and identify any faults
1.2	Connect the AC equipment to virgin cylinder using the appropriate methods without the release of refrigerant to the atmosphere
1.3	Select the correct quantity of refrigerant to be transferred between cylinder and AC equipment
1.4	Use the correct method to transfer refrigerant from a cylinder to AC equipment without loss of refrigerant to the atmosphere
1.5	Accurately check for refrigerant leaks from AC equipment / cylinder, before, during and after transfer of refrigerant
1.6	Disconnect AC equipment from virgin cylinder without loss of refrigerant to the atmosphere
1.7	Correctly store equipment after completion of task
1.8	Use an appropriate level of vehicle care
1.9	Comply with all H&S requirements / safe working practice throughout assessment
1.10	Select and use the appropriate PPE relative to the assessment
1.11	Complete the transfer of refrigerant from a cylinder to AC equipment within given time constraints



Accreditation Module Title	AC System Service
Module Code	ATA - AOM - 128
Practical Assessment Time	1.5 hours
On-line Knowledge Test	K - 128
IMI AOM Level	2

Module Overview	
<p>This module is to ensure that the candidate is able to check the Air Conditioning refrigerant pre recovering the refrigerant.</p> <p>The candidate will need to connect vehicle Air Conditioning (AC) equipment to recover the refrigerant from a vehicles AC system, in order to evacuate the system. The candidate will be required to replace an AC component ensuring that the seal/gaskets are replaced during the process.</p> <p>The candidate will then be required to recharge the AC system with the correct quantity of refrigerant and oil (quantity and grade) without knowingly releasing refrigerant to the atmosphere. The candidate should be familiar with the process used to carry out these tasks using the appropriate AC equipment.</p> <p>The candidate must be able to check the AC system for leaks using industry techniques and check the efficiency of the system after the recharging of the AC system.</p> <p>The candidate will need to comply with the latest health and safety requirements and use the appropriate Personal Protection Equipment throughout the task.</p> <p>The candidate must also ensure that there are no leaks from the refrigerant cylinder, the vehicle service equipment and the vehicle at all times during the task.</p>	

Candidate Profile	
<p>The technician must be able to work unsupervised – ideally, they should be in full time employment with at least twelve months experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler level, plus have the skills, knowledge and techniques required to service, maintain and replace components to a vehicles Air Conditioning system.</p>	

Links with Accreditation Routes and Modules	
This module features in:	
IMI Accreditation Route	IMI Accreditation Level
Air Conditioning	Service Technician
	Diagnostic Technician

Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Correctly carryout pre maintenance AC system checks
1.2	Accurately carryout system performance pre checks including system pressures and temperatures
1.3	Correctly identify the vehicle refrigerant type using minimum of a refrigerant identifier
1.4	Carryout visual checks of the vehicle AC system to inspect for any defect prior to connecting AC equipment
1.5	Purge AC equipment free from refrigerant pre and post recovery
1.6	Use the correct methods to recover refrigerant
1.7	Correctly carryout AC evacuation procedures
1.8	Accurately carryout AC system vacuum checks / procedures
1.9	Check the serviceable condition of a pollen filter and replace as required
1.10	Correctly replace AC components including replacing seals and lubricating oil(s) as required
1.11	Select the correct refrigerant type and refrigerant quantity for a specific vehicle
1.12	Select the correct type / volume of AC system oil for a specific vehicle
1.13	Charge an AC system correctly
1.14	Accurately check for leaks from AC system using a minimum of 2 different methods
1.15	Accurately identify AC system leaks and document accordingly
1.16	Disconnect AC equipment from vehicle without loss of refrigerant and damage to the vehicle and its system(s)
1.17	Accurately carryout AC system performance checks post charging including identifying AC system pressures and temperatures
1.18	Check for AC refrigerant leaks post recharging including from the AC service port connectors
1.19	Correctly store equipment after completion of task
1.20	Complete documentation with accuracy to allow communication to others
1.21	Use an appropriate level of vehicle care
1.22	Comply with all H&S requirements / safe working practice throughout assessment
1.23	Select and use the appropriate PPE relative to the assessment
1.24	Complete an AC system service accurately within given time constraints



Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Air Conditioning system components and their function including compressor, evaporator, condenser, expansion valve fixed / TXV, receiver dryer, accumulator
2.2	Fixed & variable displacement compressors within an automotive AC system
2.3	AC systems used to cool automotive high voltage batteries
2.4	Filtration used in conjunction with AC systems
2.5	Lubricating (PAG) oils and their function within an AC system
2.6	Principles of vacuuming the AC system
2.7	Effects of moisture within an AC system
2.8	Humidity and the affect(s) within an AC system
2.9	Refrigerant physical properties inc. Latent heat and kinetic energy
2.10	Leak detection methods and their effects commonly used within an automotive AC system - including electronic equipment, Oxygen Free Nitrogen, refrigerant dye, vacuum & trace gas
2.11	Flushing of an AC system and its components
2.12	Effects and the processes required to recharge if the incorrect refrigerant is found in an AC system
2.13	H&S required whilst working with automotive high voltage systems



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Accreditation Module Title	AC System Fault - 1				
Module Code	ATA - AOM - 129				
Practical Assessment Time	1 hour				
On-line Knowledge Test	K - 129				
IMI AOM Level	3				
Module Overview	<p>This module is to determine that the candidate is able to diagnose an AC system fault using refrigerant pressure readings and other recognised diagnosis methods to determine an accurate diagnosis of a system fault.</p> <p>The candidate will need to comply with the latest health and safety requirements and use the appropriate Personal Protection Equipment throughout the task.</p> <p>The candidate must also ensure that there are no leaks from the refrigerant cylinder, the vehicle service equipment and the vehicle at all times during the task.</p>				
Candidate Profile	<p>The technician should be working in the light vehicle sector of the industry and ideally have at least two years experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler and Service Technician levels, plus have the skills, knowledge and techniques required to diagnose Air Conditioning system faults.</p>				
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IMI Accreditation Route	IMI Accreditation Level				
Air Conditioning	Diagnostic Technician				

Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Carryout visual checks of the vehicle AC system to inspect for any defect prior to connecting AC equipment
1.2	Correctly connect AC test equipment to AC system
1.3	Use the correct method to recover refrigerant (if applicable to task)
1.4	Correctly carryout AC evacuation procedures (if applicable to task)
1.5	Select the correct refrigerant type and refrigerant quantity for a specific vehicle
1.6	Select the correct type/volume of AC system oil for a specific vehicle
1.7	Charge an AC system correctly
1.8	Accurately read / interpret both high and low pressure readings during an AC system diagnosis
1.9	Use a logical procedure to diagnose an AC system fault
1.10	Accurately diagnose an AC system fault
1.11	Correctly disconnect AC equipment from a vehicle
1.12	Correctly store equipment after completion of task
1.13	Complete documentation with accuracy to allow communication to others
1.14	Use an appropriate level of vehicle care
1.15	Comply with all H&S requirements / safe working practice throughout assessment
1.16	Select and use the appropriate PPE relative to the assessment
1.17	Complete an AC system fault within given time constraints

Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Refrigerant pressures and associated system faults
2.2	AC system & component testing procedures
2.3	How the ambient air temperature affects the operation of an AC system
2.4	Manual, semi automatic and fully automatic AC service equipment
2.5	AC service centres and the processes used by the system to recover and recharge



Accreditation Module Title	AC System Fault - 2
Module Code	ATA - AOM - 130
Practical Assessment Time	1 hour
On-line Knowledge Test	K - 130
IMI AOM Level	3
Module Overview	<p>This module is to assess the candidate's knowledge, skill and ability to diagnose an AC system electrical fault, typically an open circuit, high resistance or a short circuit.</p> <p>The candidate will need to access vehicle information such as component location and the appropriate electrical wiring diagrams, together with electrical test equipment such as multi-meter (volts, amps, ohms) to determine an accurate diagnosis of an AC electrical system fault.</p>
Candidate Profile	<p>The technician should be working in the light vehicle sector of the industry and ideally have at least two years experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler and Service Technician levels, plus have the skills, knowledge and techniques required to diagnose Air Conditioning system faults.</p>
Links with Accreditation Routes and Modules	
This module features in:	
IMI Accreditation Route	IMI Accreditation Level
Air Conditioning	Diagnostic Technician



Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Carryout visual checks of the vehicle AC system to inspect for any defect prior to connecting AC equipment
1.2	Correctly connect AC test equipment to AC system
1.3	Accurately read / interpret both high and low pressure readings during an AC system diagnosis
1.4	Identify whether an AC system component is inoperative
1.5	Accurately identify the AC system component fault
1.6	Understand and interpret electrical component information and wiring diagrams
1.7	Competently use electrical test equipment
1.8	Competently use system diagnostic test equipment (if applicable)
1.9	Use a logical procedure to diagnose an AC electrical system fault
1.10	Accurately diagnose an AC system electrical fault
1.11	Correctly disconnect AC equipment from a vehicle
1.12	Correctly store equipment after completion of task
1.13	Complete documentation with accuracy to allow communication to others
1.14	Use an appropriate level of vehicle care
1.15	Comply with all H&S requirements / safe working practice throughout assessment
1.16	Select and use the appropriate PPE relative to the assessment
1.17	Complete an AC electrical system fault within given time constraints

Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Electrical testing procedures
2.2	Electrical circuit values (volts / amps / ohm)



Accreditation Module Title	AC System Fault - 3				
Module Code	ATA - AOM - 131				
Practical Assessment Time	1 hour				
On-line Knowledge Test	K - 131				
IMI AOM Level	3				
Module Overview	<p>This module is to determine the candidate's knowledge, skill and ability to diagnose a Heating, Ventilation AC (HVAC) system fault. This may include the AC system being integrated within a climate control system.</p> <p>The candidate will need to use vehicle information such as system / component operation and the appropriate electrical wiring diagrams, together with the necessary test equipment such as diagnosis / scan tools to determine an accurate diagnosis of a HVAC electrical system fault.</p>				
Candidate Profile	<p>The technician should be working in the light vehicle sector of the industry and ideally have at least two years experience to ensure they are familiar with the skills, knowledge and techniques as indicated with the Refrigerant Handler and Service Technician levels, plus have the skills, knowledge and techniques required to diagnose Air Conditioning system faults.</p>				
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IMI Accreditation Route	IMI Accreditation Level				
Air Conditioning	Diagnostic Technician				

Skills Requirements	
The candidate must demonstrate the ability to:	
1.1	Carryout visual checks of the vehicle AC system to inspect for any defect prior to connecting AC equipment
1.2	Correctly connect AC test equipment to AC system
1.3	Accurately read / interpret both high and low pressure readings during an AC system diagnosis
1.4	Identify that an AC system is working correctly
1.5	Identify whether a HVAC system component is inoperative
1.6	Understand and interpret vehicle electrical information and wiring diagrams
1.7	Competently use electrical test equipment
1.8	Competently use system diagnostic test equipment (if applicable)
1.9	Use a logical procedure to diagnose a HVAC system fault
1.10	Accurately diagnose a HVAC system component fault
1.11	Correctly disconnect AC equipment from a vehicle
1.12	Correctly store equipment after completion of task
1.13	Complete documentation with accuracy to allow communication to others
1.14	Use an appropriate level of vehicle care
1.15	Comply with all H&S requirements / safe working practice throughout assessment
1.16	Select and use the appropriate PPE relative to the assessment
1.17	Complete a HVAC component fault within given time constraints

Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Climate control system components and their function
2.2	Heating and ventilation system components and their function
2.3	Sensors and actuators, their operation and function within an AC / climate control system



Accreditation Module Title	Vehicle Air Conditioning - technology and legislation
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Module Code	ATA - AOM - 132
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Practical Assessment Time	N/A
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On-line Knowledge Test	K - 132
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IMI AOM Level	2
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Module Overview	
<p>This is a knowledge only assessment module to ensure that the candidate has the knowledge needed to work competently on a current vehicle.</p> <p>This is a 30 question knowledge test in which the candidates will be tested on health and safety, legislation and the technology associated with automotive AC systems (from AC refrigerants to electric vehicles).</p>	

Candidate Profile	
<p>The technician must be able to work unsupervised – ideally, they should be in full time employment with at least twelve months experience to ensure they are familiar with the skills, knowledge and techniques required to recover and recharge vehicle Air Conditioning systems without knowingly releasing refrigerant to the atmosphere.</p>	

Links with Accreditation Routes and Modules	
This module features in:	
IMI Accreditation Route	IMI Accreditation Level
Air Conditioning	Refrigerant Handler
	Service Technician
	Diagnostic Technician



Knowledge Requirements	
The candidate must indicate a sound knowledge of:	
2.1	Montreal Agreement and Kyoto Protocol
2.2	Global Warming Potential (GWP) of refrigerants used in the automotive industry
2.3	Relevant provisions of Regulation (EC) No 842/2006 and EU Directive 2006/40/EC
2.4	Applicable current EC regulations to the market (i.e. UK Statute 2194)
2.5	Health and Safety in relation to Air Conditioning
2.6	First Aid in relation to Air Conditioning
2.7	AC refrigerant in the various states – temperature / pressure / conditions
2.8	Identification of various AC systems and components
2.9	Working practices used in Air Conditioning both pre, during and post
2.10	Contamination of refrigerant
2.11	EC waste regulations
2.12	Transportation of refrigerants
2.13	Refrigerant documentation and activity records
2.14	Refrigerants used with automotive vehicles (e.g.R12, R134a, R1234yf)
2.15	Air Conditioning technology in relation to hybrid / electric vehicles
2.16	Filling/refilling of a cylinder with AC refrigerant