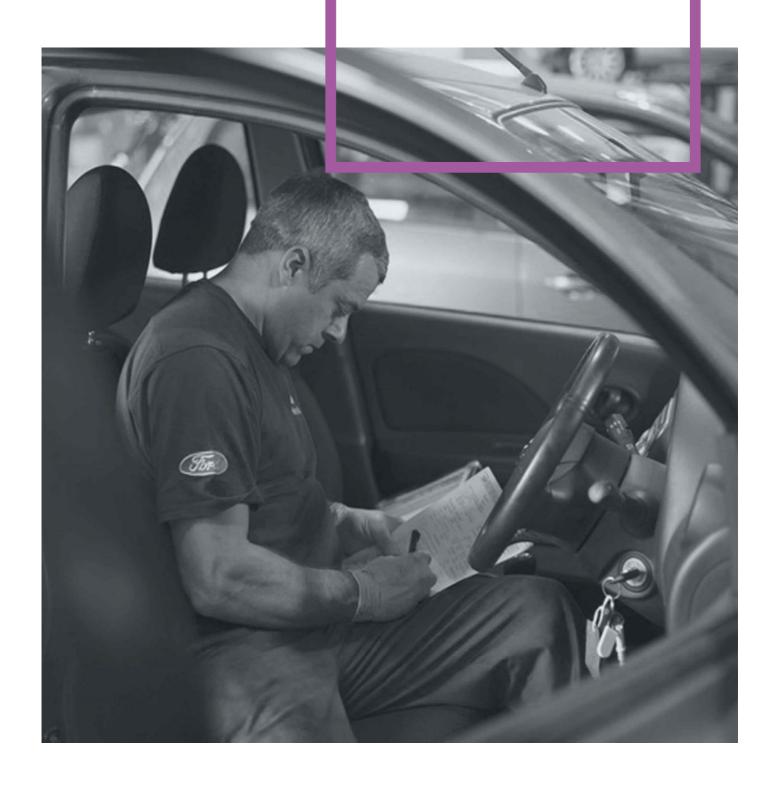


IMI ACCREDITATION

# LIGHT VEHICLE INSPECTION





#### 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.

IMI Accreditation encompasses everyone 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
  - o Electric Vehicle
  - o Fast Fit
  - Light Vehicle Maintenance & Repair
  - Light Vehicle Inspection
  - Mechanical Electrical Trim
  - Motorcycle
  - o Paint
  - o Panel
  - o Roadside
  - Vehicle Damage Assessor
- Customer Facing
  - o Customer Service
  - o Parts
  - Sales
  - o Finance and Insurance
- 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
- 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 center network, and you can find your nearest center or explore assessment routes at <a href="https://www.theimi.org.uk/awarding">www.theimi.org.uk/awarding</a>



#### **Further Information**

For further information on any of the accreditation routes, please visit <a href="http://awarding.theimi.org.uk/Qualifications/IMI-accreditation.">http://awarding.theimi.org.uk/Qualifications/IMI-accreditation.</a>. Alternatively call 01992 511521 to contact IMI directly.

#### Who is the LV Inspection route for?

The IMI Light Vehicle Inspection route is intended for technicians whose job role involves the inspection, maintenance and repair of light vehicles.

There is one route within Light Vehicle Inspection:

#### Inspection Technician

The technician must be able to work unsupervised and they should be in full time employment with at least three years' experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

#### LV Inspection Route Structure

Those wishing to achieve 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 expire beforehand, the candidate will be required to retake a 'full assessment'.



### LV Inspection Route Structure

This route requires the technician to complete the following modules:

| Emission System - Inspection       | AOM |
|------------------------------------|-----|
| Linission System - inspection      | 071 |
| Electrical Systems - Inspection    | AOM |
| Liectrical Systems - mspection     | 072 |
| Braking Systems - Inspection       | AOM |
| Braking Systems - inspection       | 073 |
| Steering & Suspension System -     | AOM |
| Inspection                         | 074 |
| Vehicle Structure - Inspection*    | AOM |
| verilicie Structure - Irispection" | 075 |
| Vehicle Appraisal - Inspection     | AOM |
| verlicie Appraisar - Irispection   | 076 |

This will normally be a one-day assessment.

\*Note: this module is a knowledge only assessment consisting of 10 online questions. This test is mandatory to complete as well as the overall 30 question test covering the remaining modules.

| Inspection Technician | AOM Update Reaccreditation only |
|-----------------------|---------------------------------|
|-----------------------|---------------------------------|

This route requires the technician to complete the following modules:

| Emission System - Inspection    | AOM |
|---------------------------------|-----|
| Linission System - inspection   | 071 |
| Electrical Systems - Inspection | AOM |
| Electrical Systems - mspection  | 072 |
| Vahiala Appraisal Inapaction    | AOM |
| Vehicle Appraisal - Inspection  | 076 |

Each module has a mandatory knowledge assessment consisting of 10 online questions.

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



| Accreditation Module Title | Emission System - Inspection |
|----------------------------|------------------------------|
|                            |                              |
| Module Code                | AOM - 071                    |
|                            |                              |
| Practical Assessment Time  | 1.0 hour                     |
|                            |                              |
| On-line Knowledge Test     | K-071                        |
|                            |                              |
| IMI AOM Level              | 3                            |
|                            |                              |
| Module Overview            |                              |

This module assesses the candidate's knowledge, skills and ability to carry out emission testing on light vehicles.

The candidate will be able to use the appropriate vehicle and / or equipment manufacturer information to identify the processes / techniques required to test, diagnose and rectify vehicle emission faults.

#### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and they should be in full time employment with at least 3 years' experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |

May 2017 V2



| Skills | Requirements   |  |  |
|--------|--|--|--|
| The ca | The candidate must demonstrate the ability to:   |  |  |
| 1.1    | comply with health and safety requirements (including use of appropriate VPE / PPE)    |  |  |
| 1.2    | follow a methodical procedure when carrying out an emissions test (on a petrol engine) |  |  |
| 1.3    | accurately analyse emission testing data from petrol engine vehicles                   |  |  |
| 1.4    | accurately analyse emission testing data from diesel engine vehicles                   |  |  |
| 1.5    | use a scan tool to interrogate emissions related systems                               |  |  |
| 1.6    | find appropriate emissions requirements  |  |  |
| 1.7    | identify ${f 1}$ emission related fault within the eng                                 | ine management, fuel, air intake or exhaust system |  |
| 1.8    | feedback emissions results to a customer / co  | lleague  |  |
| 1.9    | work within given time constraints   |  |  |

| Knowle                                  | edge Requirements   |  |
|---|---|--|
| The candidate must know and understand: |   |  |
| 2.1                                     | health and safety requirements (including use of appropriate VPE / PPE) |  |
| 2.2                                     | diesel fuel system(s) and the associated components                     |  |
| 2.3                                     | petrol fuel system(s) and the associated components                     |  |
| 2.4                                     | vehicle emission systems, including system components                   |  |
| 2.5                                     | engine faults including symptom, effect & cause                         |  |
| 2.6                                     | equipment calibration requirements                                      |  |
| 2.7                                     | basic pre checks required prior to carrying out an emissions test       |  |



### **IMI ACCREDITATION**

LIGHT VEHICLE INSPECTION

| Accreditation Module Title | Electrical Systems - Inspection |
|----------------------------|---------------------------------|
|                            |                                 |
| Module Code                | AOM - 072                       |
|                            |                                 |
| Practical Assessment Time  | 1.0 hour                        |
|                            |                                 |
| On-line Knowledge Test     | K - 072                         |
|                            |                                 |
| IMI AOM Level              | 3                               |
|                            |                                 |
| Module Overview            |                                 |

This module assesses the candidate's knowledge, skills and ability to check vehicle electrical systems and diagnose electrical faults using a logical method.

The candidate will need to access vehicle information such as component location and the appropriate electrical wiring diagrams, together with the use of electrical test equipment such as a multi-meter and fault code / scan tool to diagnose the system fault. Once the electrical fault has been diagnosed, the candidate should have the ability to rectify the fault, reconfigure system components and erase fault codes to allow the candidate to check the system is functioning as per the vehicle manufacturer's original specification.

#### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and should be in full time employment with at least 3 years' experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |

May 2017 V2



| Skills | Requirements  |  |  |
|--------|---|--|--|
| The ca | The candidate must demonstrate the ability to:  |  |  |
| 1.1    | comply with health and safety requirements (in  | cluding use of appropriate VPE / PPE)                |  |
| 1.2    | follow a methodical procedure when inspecting   | electrical systems                                   |  |
| 1.3    | correctly check vehicle occupant safety systems (including SRS) meet vehicle manufacturer settings              |  |  |
| 1.4    | correctly check vehicle instrument warning lamps and identify any immediate actions required to remedy fault(s) |  |  |
| 1.5    | access fault codes from vehicle system(s) and interpret any information to be able to rectify a fault(s)        |  |  |
| 1.6    | correctly read and interpret a wiring diagram   |  |  |
| 1.7    | follow a methodical process to accurately diagr   | nose the vehicle's electrical fault                  |  |
| 1.8    | correctly use electrical measuring equipment (s<br>the vehicle's electrical system                              | such as a multi-meter) to be able to accurately test |  |
| 1.9    | diagnose <b>1</b> electrical wiring fault (open circuit,  | short circuit or high resistance)                    |  |
| 1.10   | feedback electrical system inspection results to  | o a customer / colleague                             |  |
| 1.11   | work within given time constraints  |  |  |

| Knowledge  | e Requirements                                      |   |  |
|------------|---|---|--|
| The candid | The candidate must know and understand:             |   |  |
| 2.1        | health and safety requirements (including use       | of appropriate VPE / PPE)                     |  |
| 2.2        | vehicle electrical system components and operation  |   |  |
| 2.3        | vehicle occupant safety systems (including SF       | RS)   |  |
| 2.4        | vehicle instrument warning lamps                    |   |  |
| 2.5        | how to interpret wiring diagrams                    |   |  |
| 2.6        | the purpose and operation of scan tools / dia       | gnostic equipment                             |  |
| 2.7        | the purpose and operation of electrical measu       | uring equipment                               |  |
| 2.8        | units of electrical measurements (Ohms, Amp<br>law) | s, Volts, Watts) and their relationship (Ohms |  |
| 2.9        | correct practices when working on Electric/Hy       | brid vehicles                                 |  |

May 2017 V2



| Accreditation Module Title | Braking System - Inspection |  |
|----------------------------|-----------------------------|--|
| Module Code                | AOM - 073                   |  |
| Drastical Assessment Time  | 4.0 hours                   |  |
| Practical Assessment Time  | 1.0 hour                    |  |
| On-line Knowledge Test     | K-073                       |  |
| IMI AOM Level              | 3                           |  |
| IIVII AOIVI Level          | 3                           |  |
|                            |                             |  |

#### **Module Overview**

This module is to assess the candidate's knowledge, skills and ability to carry out vehicle brake inspection(s). This will include using various methods such as visual and measuring braking components using the appropriate tools and equipment (micrometer / DTI).

The candidate should be able to use the appropriate workshop equipment (such as brake roller tester equipment), review the information to identify the processes / techniques needed to rectify brake system faults and recommend any actions required.

#### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and should be in full time employment with at least 3 years experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |



| Skills | Requirements  |  |  |
|--------|---|--|--|
| The ca | The candidate must demonstrate the ability to:  |  |  |
| 1.1    | comply with health and safety requirements (including use of appropriate VPE/ PPE)                            |  |  |
| 1.2    | follow a methodical procedure when inspecting braking systems   |  |  |
| 1.3    | accurately analyse data from a brake roller tester  |  |  |
| 1.4    | remove, refit and correctly torque a road wheel   |  |  |
| 1.5    | measure braking system components, compare with technical data (brake disc and brake pads) and record results |  |  |
| 1.6    | accurately determine the serviceability of braking components - brake discs/drums                             |  |  |
| 1.7    | diagnose 1 braking system fault (missing bolts/damaged hose/incorrectly fitted components etc.)               |  |  |
| 1.8    | feedback braking system inspection results to a customer / colleague  |  |  |
| 1.9    | work within given time constraints  |  |  |

| Know                                    | ledge Requirements  |  |
|---|---|--|
| The candidate must know and understand: |   |  |
| 2.1                                     | health and safety requirements (including use of appropriate VPE/ PPE)  |  |
| 2.2                                     | how to identity brake components and describe their operation   |  |
| 2.3                                     | the method of Inspecting brake system components  |  |
| 2.4                                     | how to operate and analyse results from brake roller and decelerometer test equipment                                     |  |
| 2.5                                     | brake fluid properties  |  |
| 2.6                                     | the component functions within a vehicle electronically controlled braking system (electric handbrakes / ABS / ESP / TRC) |  |



| Accreditation Module Title | Steering & Suspension System - Inspection |
|----------------------------|---|
|                            |   |
| Module Code                | AOM - 074                                 |
|                            |   |
| Practical Assessment Time  | 1.0 hour                                  |
|                            |   |
| On-line Knowledge Test     | K - 074                                   |
|                            |   |
| IMI AOM Level              | 2   |
|                            |   |

#### **Module Overview**

This module assess the candidate's knowledge, skills and ability to carry out vehicle suspension system inspection(s) using the appropriate method, dependant on the suspension system, using the appropriate tools and equipment.

The candidate will be able to use the appropriate workshop equipment (such as turntable plates), review the information to identify the processes / techniques needed to rectify suspension system faults and recommend any actions required.

### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and should be in full time employment with at least 3 years' experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |



| Skills | Requirements  |  |  |
|--------|---|--|--|
| The ca | The candidate must demonstrate the ability to:  |  |  |
| 1.1    | comply with health and safety requirements (including use of appropriate VPE/ PPE)  |  |  |
| 1.2    | follow a methodical procedure when inspecting steering and suspension systems   |  |  |
| 1.3    | inspect a variety of suspension components e.g. McPherson strut, wishbone, solid axle, springs, dampers, airbags, using appropriate tools and equipment |  |  |
| 1.4    | correctly inspect steering components and check the operation of power steering (if applicable) using appropriate tools and equipment                   |  |  |
| 1.5    | locate and interpret steering and suspension technical data   |  |  |
| 1.6    | identify <b>1</b> suspension fault and report on their findings   |  |  |
| 1.7    | identity <b>1</b> steering fault and report on their findings   |  |  |
| 1.8    | feedback steering and suspension system inspection results to a customer / colleague  |  |  |
| 1.9    | work within given time constraints  |  |  |

| Knowl  | edge Requirements  |  |  |
|--------|--|--|--|
| The ca | The candidate must know and understand:                                |  |  |
| 2.1    | health and safety requirements (including use of appropriate VPE/ PPE) |  |  |
| 2.2    | suspension system component inspection methods and component operation |  |  |
| 2.3    | steering system component inspection methods and component operation   |  |  |
| 2.4    | a range of tyre wear characteristics                                   |  |  |
| 2.5    | how to identify a range of tyre types and markings                     |  |  |
| 2.6    | operational checks related to TPS                                      |  |  |
| 2.7    | wheel alignment principles and Ackerman principle                      |  |  |



| Accreditation Module Title | Vehicle Structure - Inspection |
|----------------------------|--------------------------------|
|                            |                                |
| Module Code                | AOM - 075                      |
|                            |                                |
| Practical Assessment Time  | N/A                            |
|                            |                                |
| On-line Knowledge Test     | 0.25 hour                      |
|                            |                                |
| IMI AOM Level              | 3                              |
|                            | I                              |

#### **Module Overview**

This module is to ensure that the candidate has the knowledge of vehicle construction (including the materials used), vehicle body components (including fixed glazing units) and the methods used to repair.

The candidate will be able to identify areas of corrosion, the method used to check and the remedial action necessary to rectify the fault.

This is a 10 question multiple choice online test.

#### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and they should be in full time employment with at least 3 years experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |



| Knowl  | vledge Requirements  |                     |
|--------|--|---------------------|
| The ca | The candidate must indicate a sound knowledge of:  |                     |
| 2.1    | identification of poor previous repair   |                     |
| 2.2    | vehicle structure and load bearing devices   |                     |
| 2.3    | vehicle structure including A, B, C and D posts  |                     |
| 2.4    | vehicle structure corrosion and how to identify  |                     |
| 2.5    | identify previous vehicle body repairs using cosmetic/SMART and structural                                     |                     |
| 2.6    | sources of information available for acceptable repair methods and their application                           |                     |
| 2.7    | vehicle crumple zones within vehicle body construction   |                     |
| 2.8    | tow bar fitment and operation including checking procedures  |                     |
| 2.9    | bonded automotive glazing units such as windscreens including the security/fixing and repairing of windscreens |                     |
| 2.10   | occupant safety systems Inc. SRS (air bags and seat  | belt pretensioners) |
| 2.11   | driver interior controls to include operation of doors, steering components, bonnet release etc.               |                     |



| Accreditation Module Title | Vehicle Appraisal - Inspection |
|----------------------------|--------------------------------|
|                            |                                |
| Module Code                | AOM - 076                      |
|                            |                                |
| Practical Assessment Time  | 1.0 hour                       |
|                            |                                |
| On-line Knowledge Test     | K - 076                        |
|                            |                                |
| IMI AOM Level              | 2                              |
|                            |                                |
| Module Overview            |                                |

#### Module Overview

This module assesses the candidate's knowledge, skills and ability to carry out a vehicle inspection using a logical method / routine whilst using the appropriate workshop tools and equipment.

The candidate will be able to identify the processes / techniques needed to rectify system faults and recommend any actions required for repair.

#### **Candidate Profile**

This module is intended for technicians working within a maintenance and repair vehicle workshop. The technician must be able to work unsupervised and they should be in full time employment with at least 3 years' experience to ensure they are familiar with the techniques for vehicle servicing, inspection and system(s) diagnosis.

| Links with Accreditation Routes and Modules |                         |
|---|-------------------------|
| This module features in:                    |                         |
| IMI Accreditation Route                     | IMI Accreditation Level |
| Light Vehicle Inspection                    | Technician              |



| Skills Requirements                            |  |  |
|--|--|--|
| The candidate must demonstrate the ability to: |  |  |
| 1.1  | comply with health and safety requirements (including use of appropriate VPE/ PPE)   |  |
| 1.2  | carry out a vehicle inspection using a structured routine / methodology to provide consistent and accurate results   |  |
| 1.3  | carry out an inspection of a vehicle's body structure and determine its roadworthiness   |  |
| 1.4  | inspect all vehicle lighting - front/ rear/ side – including headlamp alignment (this can include halogen, Xenon, LED and Laser technology)  |  |
| 1.5  | accurately complete inspection documentation when carrying out a vehicle inspection to ensure that the vehicle conforms to legal / legislation requirements / manufacturer's specifications  |  |
| 1.6  | use inspection documentation to accurately record vehicle faults and make recommendations when components require attention. These can be safety critical or urgent / minor / outside of manufacturer's specifications or advisory faults  |  |
| 1.7  | carry out an inspection of a vehicle and its component(s) to ensure that they operate / function as intended by the vehicle manufacturer   |  |
| 1.8  | identify components and their location on the vehicle by name and possible faults associated with those components   |  |
| 1.9  | <ul> <li>identify a minimum of 5 faults from the following areas ensuring every area is covered:</li> <li>Under bonnet</li> <li>Vehicle interior</li> <li>Vehicle exterior</li> <li>Under vehicle</li> <li>2 of these faults must be safety critical / require urgent attention</li> </ul> |  |
| 1.10   | access relevant vehicle inspection information from suitable sources   |  |
| 1.11   | feedback vehicle inspection results to a customer / colleague  |  |
| 1.12   | work within given time constraints   |  |

| Knowledge Requirements                  |  |  |
|---|--|--|
| The candidate must know and understand: |  |  |
| 2.1                                     | health and safety requirements (including use of appropriate VPE/ PPE)   |  |
| 2.2                                     | vehicle inspection methods and inspection routines to include components:  • Under bonnet  • Vehicle interior  • Vehicle exterior  • Under vehicle |  |
| 2.3                                     | vehicle faults including 'symptom, effect & cause'   |  |
| 2.4                                     | the interior warning lights including indication of faults / information displays  |  |
| 2.5                                     | function, security and operational checks of modifications, enhancements and accessories   |  |
| 2.6                                     | Tyre Pressure Monitoring (TPS) system operation and inspection requirement   |  |
| 2.7                                     | headlight aim and beam patterns  |  |
| 2.8                                     | how to retrieve and read fault codes (if identified)   |  |