

MoT Testing a guide



Focusing on the needs of Vehicle Test Stations in the UK, The MoT Club was formed in 2001 as a specialist trade body. It offers a wide range of services dedicated to help both testers and management involved in the MoT scheme.

These services include :

- | | |
|--|--|
| ATL training | 24hr response to dealing with appeals and enforcement action |
| Tester training (refresher courses) | Technical helpline |
| Training for those wishing to become testers | Specialist publications |
| Training on how manage and operate a VTS | IR help and advice |
| Site inspections | Software solutions |
| QC checks on testers | Hand-held testing devices |
| Legal help and advice | VSI data / MoT diary |

The information provided in this guide is intended to assist the tester in carrying out MoT testing in class IV and VII. It is not intended that this guide be used as an alternative to the tester's manual. If the tester is any doubt over a testable item or regulation pertinent to the scheme the tester's manual should always be referred to.

Only approved tools should be used and kept available at all times.

This guide has been prepared to assist a nominated tester (NT), but the use of it does not guarantee the NT immunity of disciplinary action in the event of the test not being carried out in conjunction with DVSA's test procedure.

Ensure vehicle presented is the type you are approved to test, i.e. Class IV, Class VII, petrol/diesel and there are no reasons why the test should be refused.

The MoT Club strongly recommend that ADVISORY NOTES are produced where appropriate.

Published by The MTT Group



COMMON MoT OMISSIONS (GENERAL)

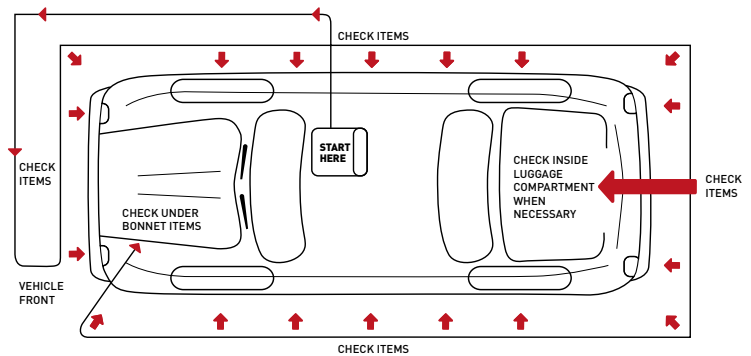
- Checking front lights for interaction
- Correctly aligning headlamp beam tester
- Checking pedalbox/footwell area
- Checking steering column lock operation
- Use of an assistant to access front suspension (vehicle jacked-up)
- Carrying out a vigorous rocking check of front wheels (on turn plates)
- Measuring engine oil temperature (diesel testing)
- Checking fuel system with both engine running and switched off

COMMON ATL/OPTL OMISSIONS

- Use of brake pedal applicator
- Use of wheel play detectors to access under-bonnet components
- Accessing steering lock to lock from both inside and outside vehicle
- Use of wheel chocks
- Checking fuel system with both engine running and switched off
- Amending vehicle weight from VSI to kerbside (weighing facility used)

RECOMMENDED INSPECTION ROUTINE

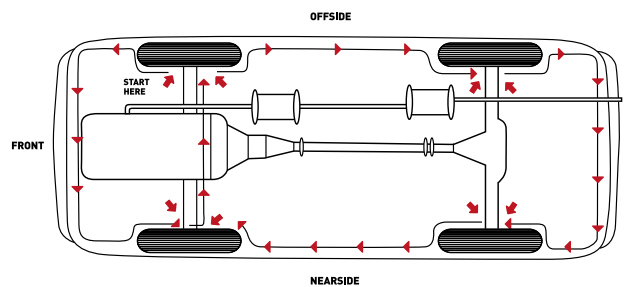
TOPSIDE



REMEMBER
Jack up front and rear wheels to check relevant items

RECOMMENDED INSPECTION ROUTINE

UNDERSIDE



SECTION 01	INSIDE VEHICLE	N/S OF VEHICLE	SECTION 05
CHECK	<ul style="list-style-type: none"> operation of steering lock warning lights seat belts - F/R steering controls wipers washers - bonnet down w/screen seat security & adjustment brake controls & condition of pedal box mirrors door security horn lighting controls indicator repeater & tell tale hazard warning controls - ignition on & off 	<ul style="list-style-type: none"> tyre type/size tyre condition road wheels door security wiper blades shock absorbers (visual) exterior mirror bodywork condition fuel cap side repeaters 	CHECK
SECTION 02	FRONT OF VEHICLE	UNDER BONNET	SECTION 06
CHECK	<ul style="list-style-type: none"> front position lights - interaction headlamp/headlamp aim front indicators hazard lights - ignition on & off number plate bonnet security 	<ul style="list-style-type: none"> body condition/structure steering brake systems VIN details fuel system - engine on & off diesels : oil level <ul style="list-style-type: none"> fuel pump cambelt (if visible) battery security electrical wiring engine mountings 	CHECK
SECTION 03	O/S OF VEHICLE	UNDERSIDE O/S FRONT	SECTION 07
CHECK	<ul style="list-style-type: none"> tyre type/size tyre condition road wheels door security wiper blades shock absorbers (visual) exterior mirror bodywork condition fuel cap side repeaters 	<ul style="list-style-type: none"> tyres wheels stub axle suspension & dust covers wheel bearings steering PAS (if fitted) transmission shafts shock absorbers flexible brake hoses brake pipes service brake condition vehicle structure steering gaiters 	CHECK
SECTION 04	REAR OF VEHICLE	UNDERSIDE FRONT/ENGINE	SECTION 08
CHECK	<ul style="list-style-type: none"> rear lamps indicators reflectors rear fog lamps brake lights inside boot - corrosion number plate number plate lamp hazard lamps - ignition on & off tow bar socket tow ball condition 	<ul style="list-style-type: none"> brake pipes flexible brake hoses vehicle structure fuel lines - engine on & off exhaust system/manifold suspension mountings steering components 	CHECK

SECTION 09

UNDERSIDE N/S FRONT

CHECK

- tyres
- wheels
- stub axle
- suspension, including dustcovers
- wheel bearings
- steering
- PAS (if fitted)
- transmission shafts
- shock absorbers
- flexible brake hoses
- brake pipes
- service brake condition
- vehicle structure
- steering gaiters

SECTION 10

UNDERSIDE MIDDLE (INNER & OUTER)

CHECK

- vehicle structure
- exhaust system
- fuel lines - engine on & off
- brake pipes
- parking brake components
- seat belt mountings

SECTION 11

UNDERSIDE O/S REAR

CHECK

- parking brake condition
- service brake condition
- brake pipes
- flexible brake hoses
- tyre type/condition/size
- wheels
- shock absorbers
- suspension
- wheel bearing
- transmission shaft

SECTION 12

UNDERSIDE REAR

CHECK

- fuel tank
- fuel lines
- brake pipes
- flexible brake hoses
- vehicle structure
- exhaust system
- tow bar security

UNDERSIDE N/S REAR

- parking brake condition
- service brake condition
- brake pipes
- flexible brake hoses
- tyre type/condition/size
- wheels
- shock absorbers
- suspension
- wheel bearing

You should now have completed the underside inspection of the vehicle.

Before you lower the vehicle and continue with the test, take a moment to check that you have not inadvertently missed any testable item.

It is advised to use a vehicle check sheet as printed from the device to ensure all items are marked as being checked at this stage.

SECTION 13

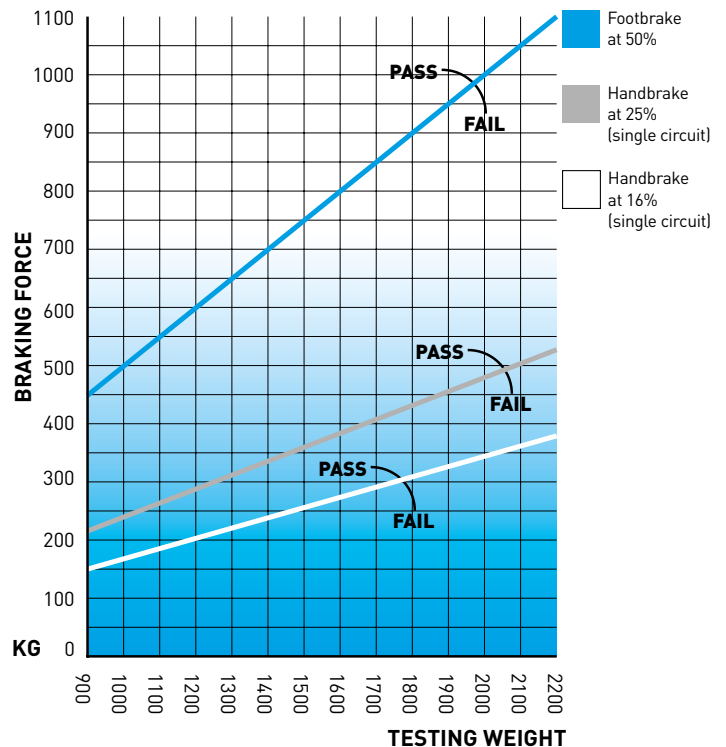
BRAKE PERFORMANCE

- service brake performance
- parking brake performance
- check the rate of increase & decrease between brakes

SECTION 14

CHECK

BRAKE EFFICIENCY



CHECK

- age of vehicle
- condition of engine
- engine oil level
- engine oil temperature - where applicable
- cam belt condition - where applicable
- engine is warm

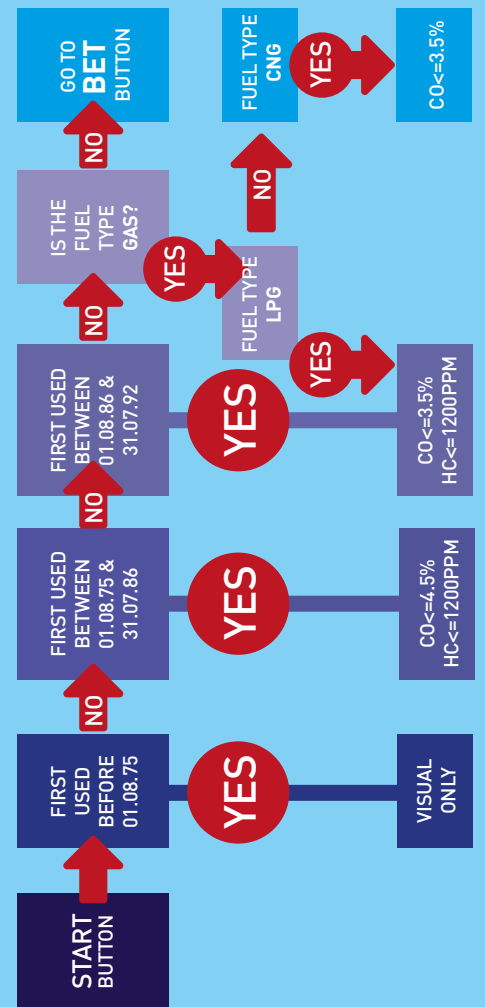
The following types of vehicles should be treated as pre 01/08/75, (Visual Smoke Test Only).

- 1 Wankel Rotary Engines (Post 01/08/87)
- 2 Kit Cars & Amateur Built Vehicles*

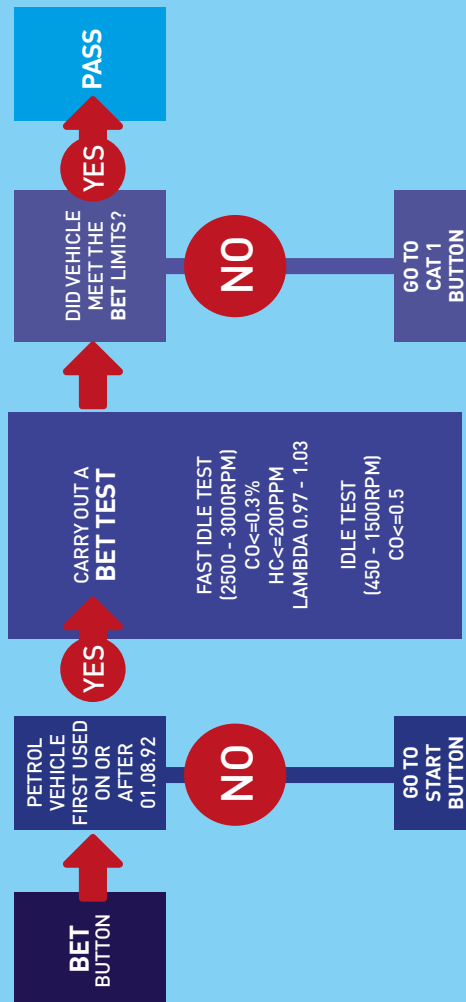
* Except those which from 01/05/98 are required to obtain 'Single Vehicle Approval'

HELP IN DETERMINING EMISSIONS REQUIREMENTS CAN BE FOUND IN THE NEXT SECTION OF THIS GUIDE

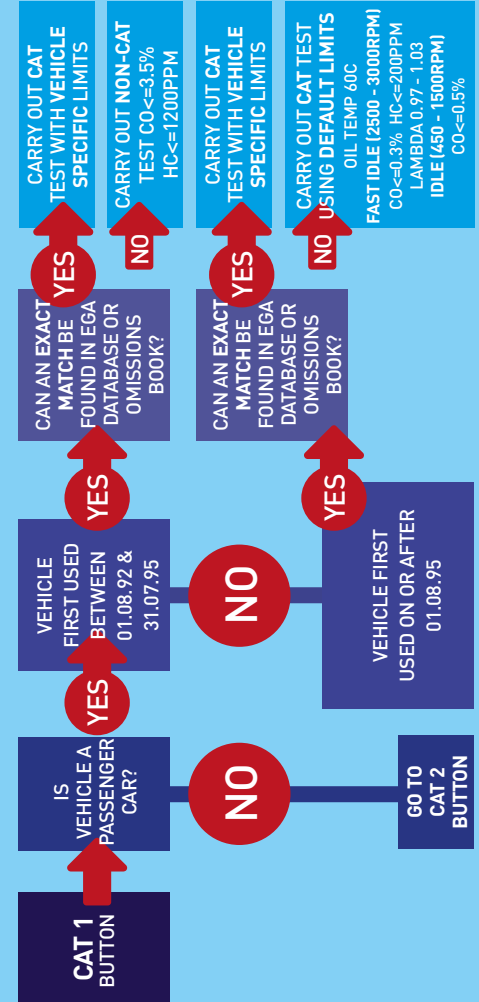
NON-CATALYST TESTS

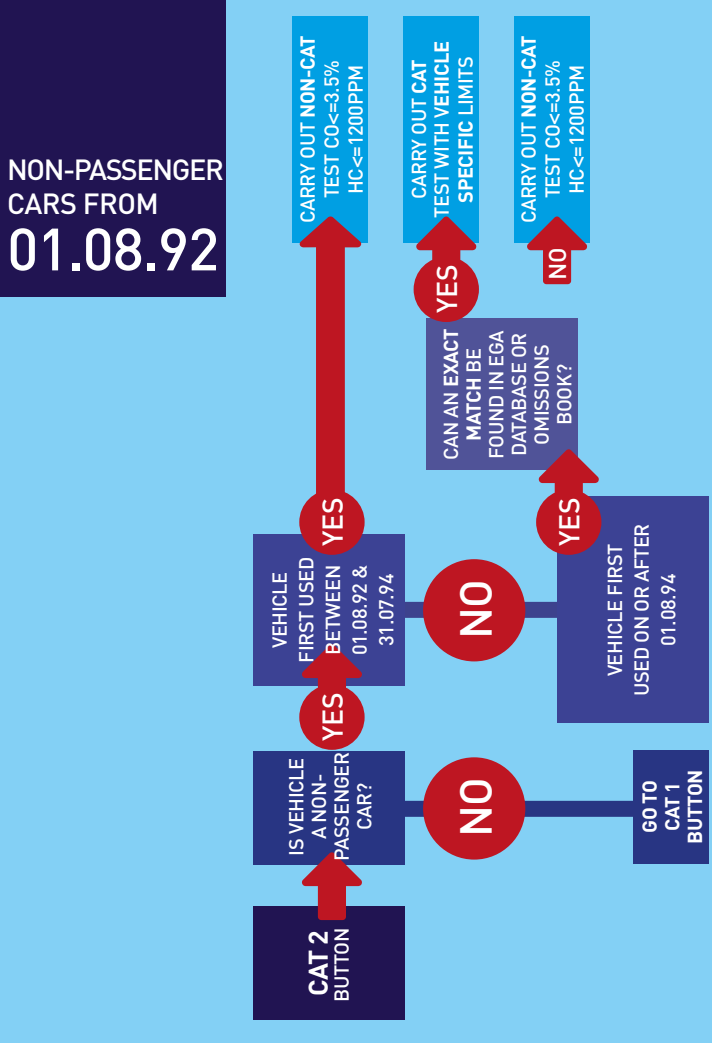


SPARK IGNITION BET TEST



PASSENGER CARS FROM 01.08.92





SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
LIGHTING (if fitted)	1.0		
Side lamps & rear lamps	1.1	Required by all vehicles	Side lamps must be white unless incorporated into a yellow headlamp. Rear lamps must be red. Only the obligatory lamps should be tested.
Registration plate lamp(s)	1.1	Required by all vehicles	If more than one fitted they must all work
Rear fog lamps	1.1	01.04.1980	Inspection confined to the ONE lamp fitted to the centre or offside.
Headlamps (requirements for a matched pair showing both main & dip beam)	1.2	01.01.1931	4 wheeled vehicles
		01.01.1972	3 wheeled vehicles ALL headlamps fitted must extinguish main beams when 'dip' is selected.

SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
LIGHTING (continued)	1.0		
Direction indicators (continued)	1.5	01.04.1986	Side repeater lamps must be fitted or may be part of a 'wrap-around' front indicator lens
Hazard warning lamps	1.5	01.04.1986	Prior to this date - not a requirement, but must work if fitted. Post this date - must be fitted and tested. Hazard 'tell-tale' may be a separate light or part of the indicator 'tell-tale' light
Headlamp aim	1.6	Required by ALL vehicles	(Approx pre-1950) vehicles that do not conform to any of the three types of conventional beam patterns should be judged on the amount of 'dazzle' it emits. Test to one of the three beam patterns shown on the next three pages.
Audible horn	1.7	Pre-1905	Can have a gong bell or a siren as audible warning

SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
LIGHTING (continued)	1.0		
Stoplamps	1.3	01.0.1936 01.09.1965 01.01.1975	One stoplamp required Must be separate from indicator Two stoplamps required
Highlevel stoplamps	1.3	If fitted	If combined unit, it is acceptable for only one light source to illuminate
Rear reflectors	1.4	Required by ALL vehicles	Only the obligatory reflectors should be tested
Direction indicators	1.5	01.01.1936 01.09.1965	Not required prior to this date Prior to this date - can be incorporated into stoplamp or combined with rear/side lamps Post this date - all indicators must emit amber light

DIAGRAM 2 : BRITISH AMERICAN TYPE (CHECKED ON DIPPED BEAM)

Check the position of the upper and right hand edges of the 'hot spot'

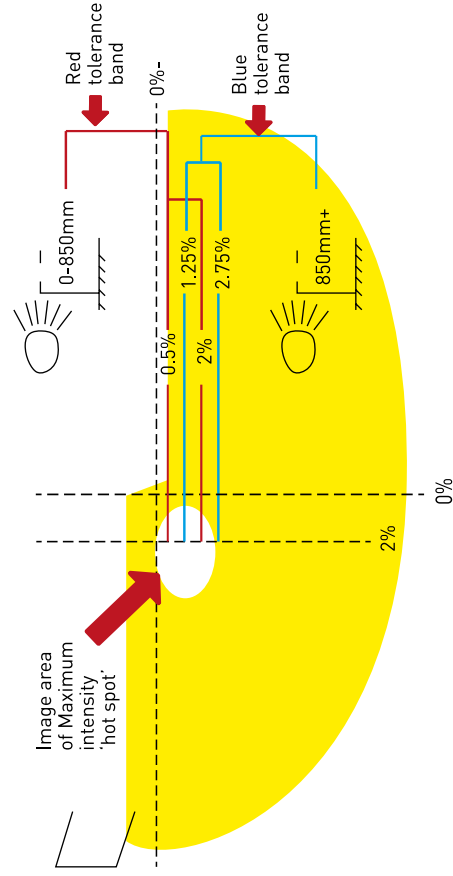


DIAGRAM 3 : EUROPEAN 'E' BEAM HEADLAMP (CHECKED ON DIPPED BEAM)

Check the position of the upper and right hand edges of the 'hot spot'

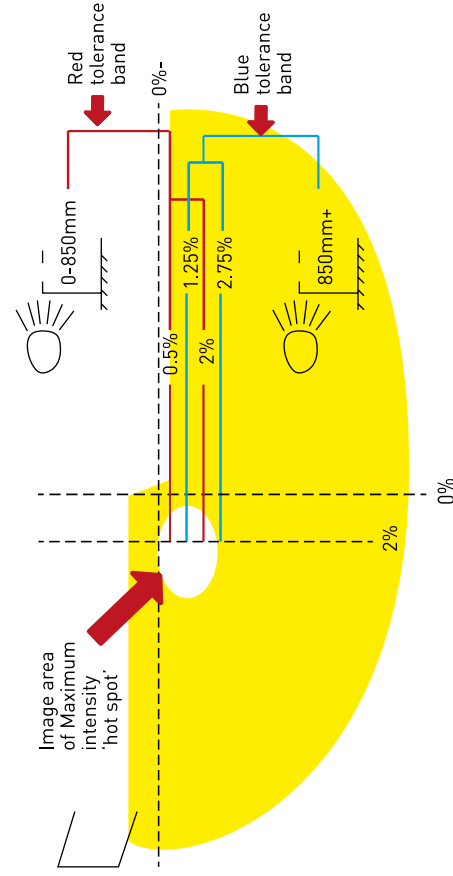


DIAGRAM 1 : BRITISH AMERICAN TYPE (CHECKED ON MAIN BEAM)

Check the position of the entire of the area of maximum intensity ('hot spot')

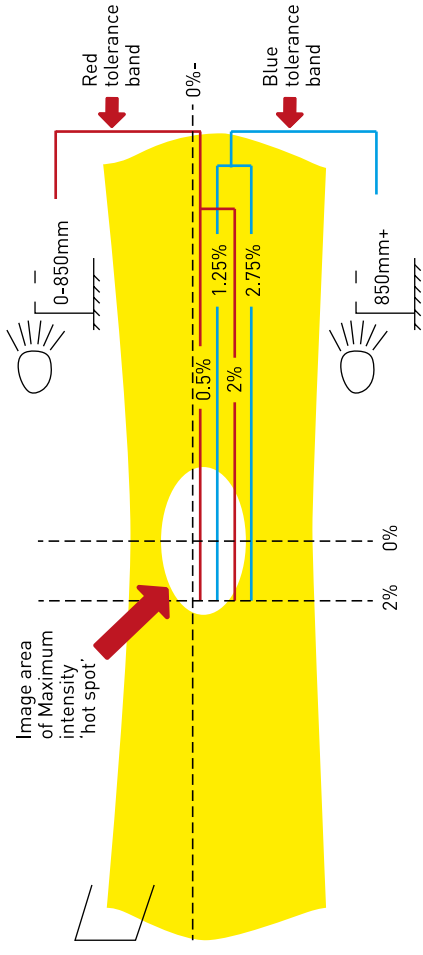


DIAGRAM 3 : EUROPEAN 'E' BEAM HEADLAMP (CHECKED ON DIPPED BEAM)

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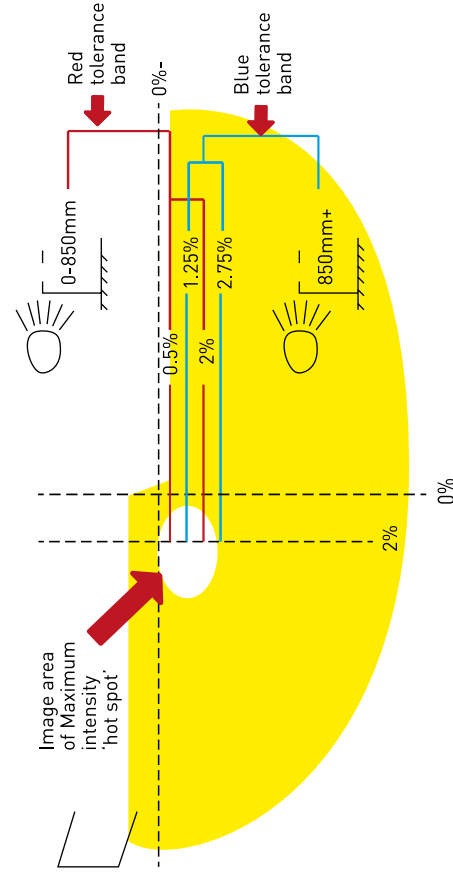
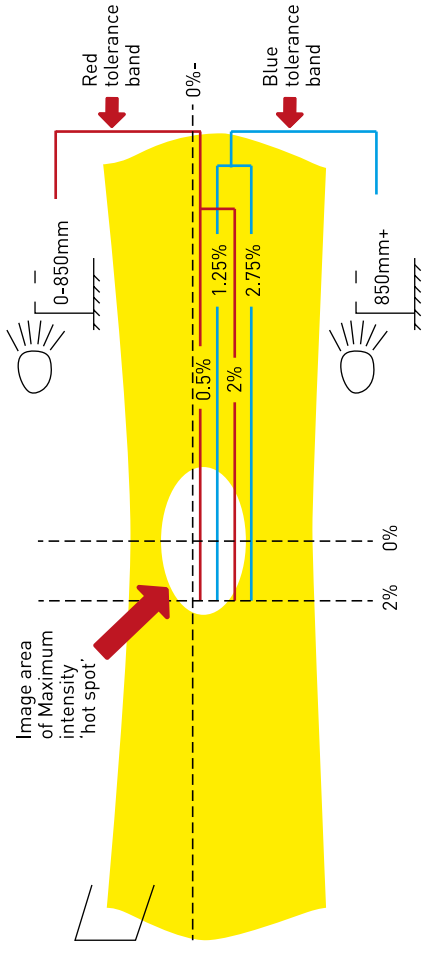


DIAGRAM 1 : BRITISH AMERICAN TYPE (CHECKED ON MAIN BEAM)

Check the position of the entire of the area of maximum intensity ('hot spot')



SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
STEERING & SUSPENSION	2.1-2.7	N/A	Use an assistant at all times Some items will need to be examined from a number of positions
BRAKES	3.1	Vehicles designed after 1904 Constructed after 1905	Prior to this date do not require a parking brake
Hydraulic parking brake	3.1	01.01.1968	Not acceptable as sole means of operation after this date
Air/Vacuum Visual warning	3.3	01.10.1937	Except vehicles 3050kg or less unladen with reservoir integral with servo unit
Optional Audible warning	3.3	Permitted from 01.04.1983	If visual & audible devices are fitted only one need work
General		01.01.1915	Prior this date only one efficient system required. Post this date two efficient systems are required

BRAKE EFFICIENCY																									
CLASS OF VEHICLE	EFFICIENCIES REQUIRED																								
		<table border="1"> <thead> <tr> <th colspan="2">SERVICE BRAKE</th> <th colspan="2">PARKING BRAKE</th> </tr> <tr> <th></th> <th>SINGLE LINE</th> <th>SPLIT SYSTEM</th> <th></th> </tr> </thead> <tbody> <tr> <td>Vehicles with four or more wheels having a service brake operating on at least four wheels and a parking brake operating on at least two wheels.</td> <td>50%</td> <td>25%</td> <td>16%</td> </tr> <tr> <td>Vehicles with three wheels and a service brake operating on ALL wheels and a parking brake operating on at least one wheel which were first used : i) Before 01.01.1968 ii) On or after 01.01.1968</td> <td>40% 50%</td> <td>25% 25%</td> <td>16% 16%</td> </tr> <tr> <td>Vehicles first used before 01.01.1968 which do NOT have one means of control operating on at least four wheels (three for three wheeled vehicles) and which have one brake system with two means of control or two brake systems with separate means of control.</td> <td>30% From FIRST means of control</td> <td>25% From SECOND means of control</td> <td></td> </tr> <tr> <td>Vehicles first used before 01.01.1915</td> <td colspan="3">ONE efficient braking system required</td> </tr> </tbody> </table>	SERVICE BRAKE		PARKING BRAKE			SINGLE LINE	SPLIT SYSTEM		Vehicles with four or more wheels having a service brake operating on at least four wheels and a parking brake operating on at least two wheels.	50%	25%	16%	Vehicles with three wheels and a service brake operating on ALL wheels and a parking brake operating on at least one wheel which were first used : i) Before 01.01.1968 ii) On or after 01.01.1968	40% 50%	25% 25%	16% 16%	Vehicles first used before 01.01.1968 which do NOT have one means of control operating on at least four wheels (three for three wheeled vehicles) and which have one brake system with two means of control or two brake systems with separate means of control.	30% From FIRST means of control	25% From SECOND means of control		Vehicles first used before 01.01.1915	ONE efficient braking system required	
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SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
TYRE & ROADWHEELS	4.0	First used prior 03.01.1933 or MORE than 8 passenger seats	1.0mm
Minimum tread depth	4.1	03.01.1933 on and up to 8 passenger seats	1.6mm
SEATBELTS	5.1	See manual	All seat belts fitted must be tested
BODY & STRUCTURE	6.1-6.2	See manual	
Reg plate & VIN details	6.3	01.08.1980	Post this date all vehicles except kit cars & amateur-built vehicles require a visible VIN number

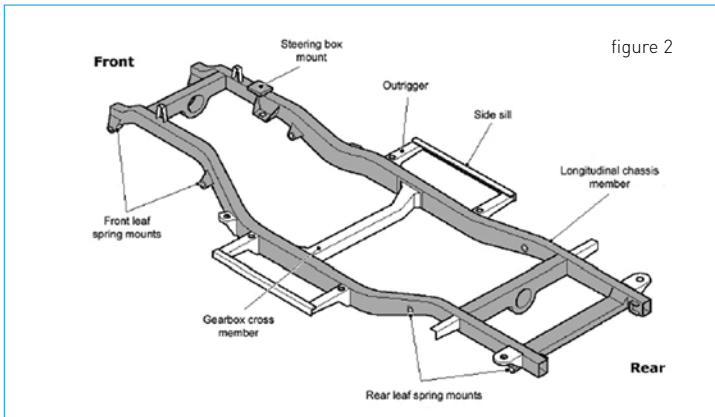
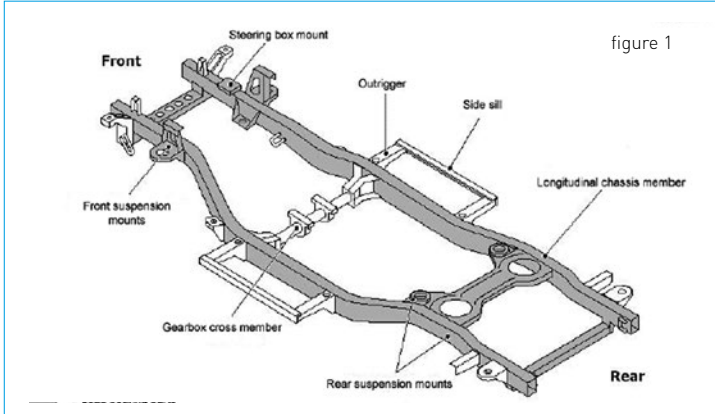
SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
FUEL & EMISSIONS			
Spark ignition vehicles	7.3	Required by ALL vehicles	Follow the 'flow-charts' in the previous section of this guide.
DIESEL FUELLED VEHICLES	7.4	01.08.1979	<p>Prior to this date only a visual inspection is required</p> <p>Post this date use the following limits :</p> <p>Non-turbocharged vehicles 2.50m-1</p> <p>Turbocharged vehicles 3.00m-1</p>

SECTION	INSPECTION MANUAL REF	REQUIRED FROM (DATE OF FIRST USE)	REMARKS - OTHER COMMENTS
DRIVER'S VIEW OF THE ROAD	8.0		
Mirrors	8.1	(Passenger vehicles) 01.08.1978 (Minibuses) 01.08.1983 (Goods vehicles) ALL	<p>Prior to this date only ONE obligatory mirror required. Post this date TWO obligatory mirrors required.</p> <p>Post this date must have offside & nearside exterior mirrors fitted</p> <p>Must have TWO mirrors</p> <p>NOTE before deciding on pass or fail in any item contained in this section, always refer to the inspection manual.</p>

STRUCTURAL INTEGRITY & CORROSION

These diagrams show areas that need to be inspected on a 'ladder chassis' type vehicle

■ = Load-bearing parts



STRUCTURAL INTEGRITY & CORROSION

These diagrams show areas that need to be inspected on a 'monocoque' type vehicle

■ = Load-bearing parts

