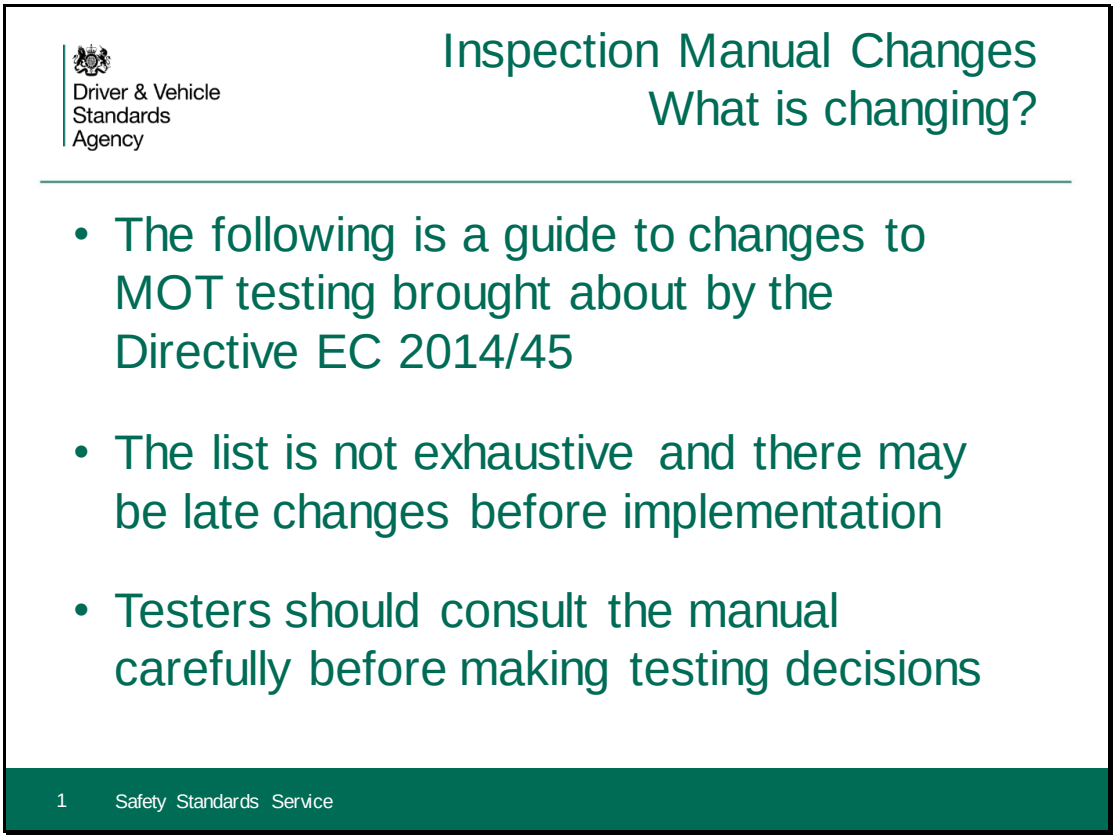
Slide 1

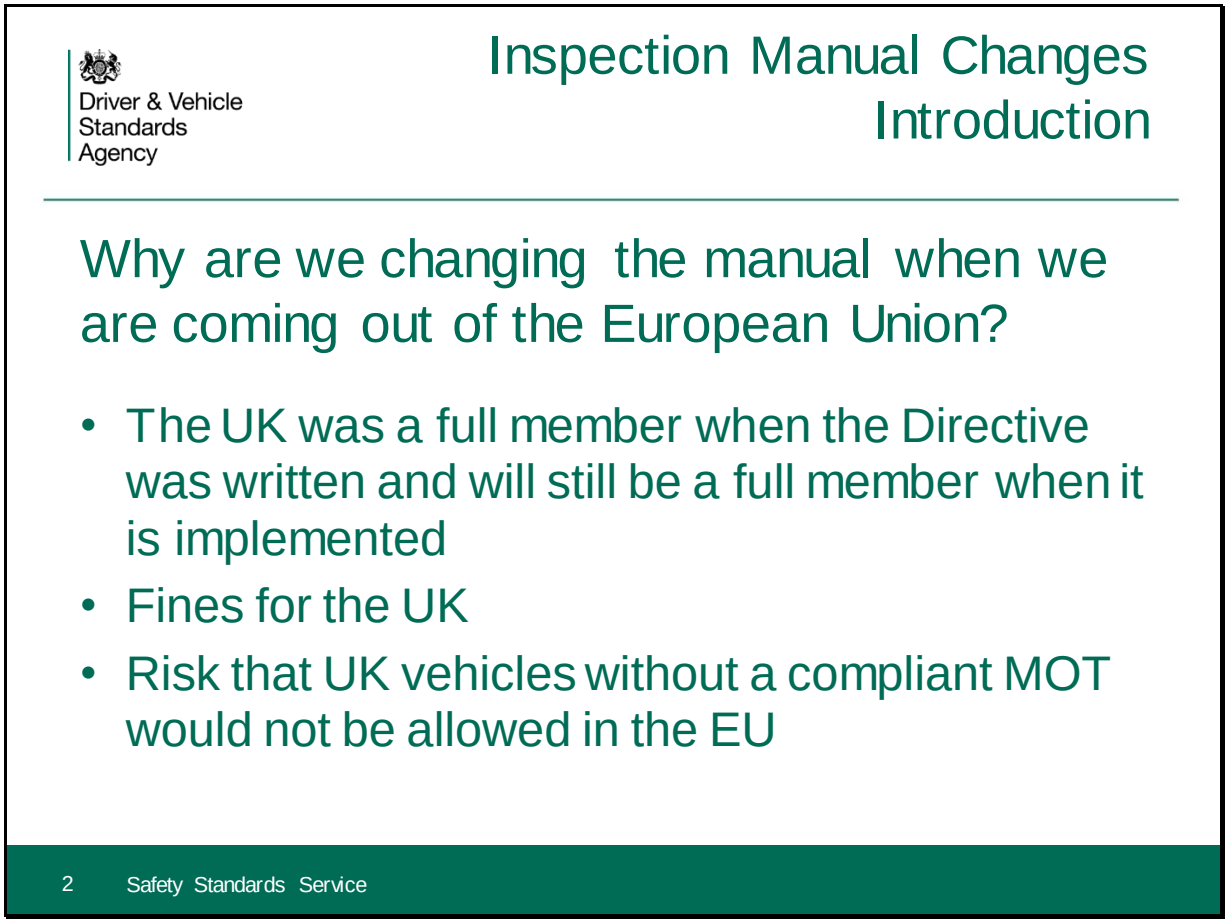


Note: This is not intended to be an exhaustive list of every change in the section, testers are reminded to consult the manual when any defect is encountered to determine whether or not it is a testable item and if so, what standard must be applied.

The following focuses on the changes and is intended to enable testers to familiarise themselves with the new requirements.

This can be used in conjunction with the PowerPoint or as stand-alone study.

Slide 2



EU Directive 2014/45 comes into force on 20th May 2018. The United Kingdom was a full member when the Directive was finalised in 2014 and will still be a full member in 2018 when it is implemented and as such we have to comply with the requirements.

Failure to comply would mean ongoing substantial fines for the UK government. There is also a risk that vehicles without a compliant EU MOT would not be allowed into the EU. This would have a huge impact on the motoring public.

There is a possibility that minor changes to the manual could take place right up to the 20th May. This is largely dependent on the Department for Transport.

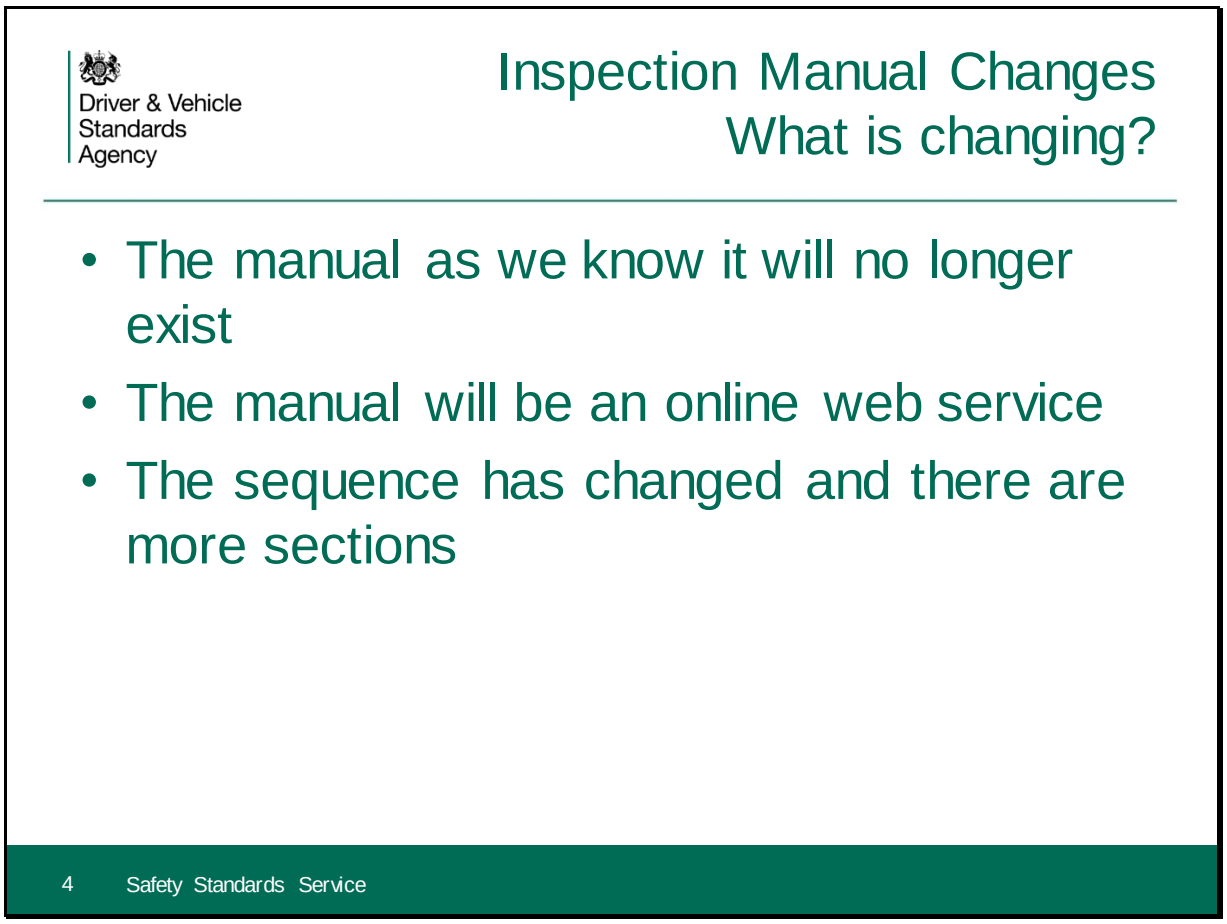
Driver & Vehicle Standards Agency

Inspection Manual Changes Introduction

- The physical test changes very little

3 Safety Standards Service

The physical test will change very little. - The routine remains the same with a few additions e.g. emergency exit and step checks will be included on Class 4 minibuses. Where a Tester identifies a defect, the manual will need to be consulted carefully to ensure that the correct testing decision is made.

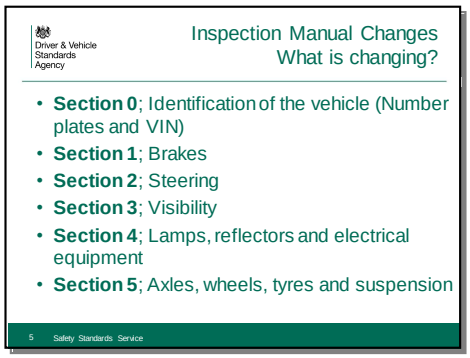


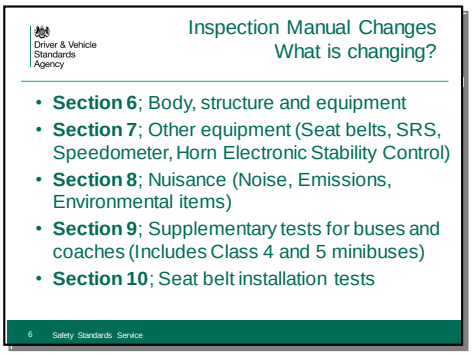
There is a draft manual to view at:-
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/671818/mot-inspection-manual-for-classes-3-4-5-and-7-from-20-may-2018-draft.pdf

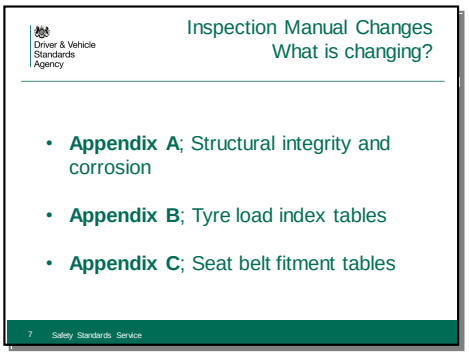
However, when implementation takes place, the manual in document form will be removed. The manual will be viewed as 'html' (Hypertext Markup Language) from MTS and will be a web service a bit like an online shopping experience. The advantage with this format is that it is much easier to find your way around the document and it can be updated in real time. This means that you will always be using the correct version.

The search function is much improved and will continue to evolve over time as we determine, the most common search items.

The html version may be available to view before 20th May. If it is, it will be found here:
https://www.gov.uk/government/publications/mot-inspection-manual-for-class-3-4-5-and-7-vehicles







Slide 5 Slide 6 Slide 7

These are the new sections and the new sequence. They are in this order to align with the Directive.

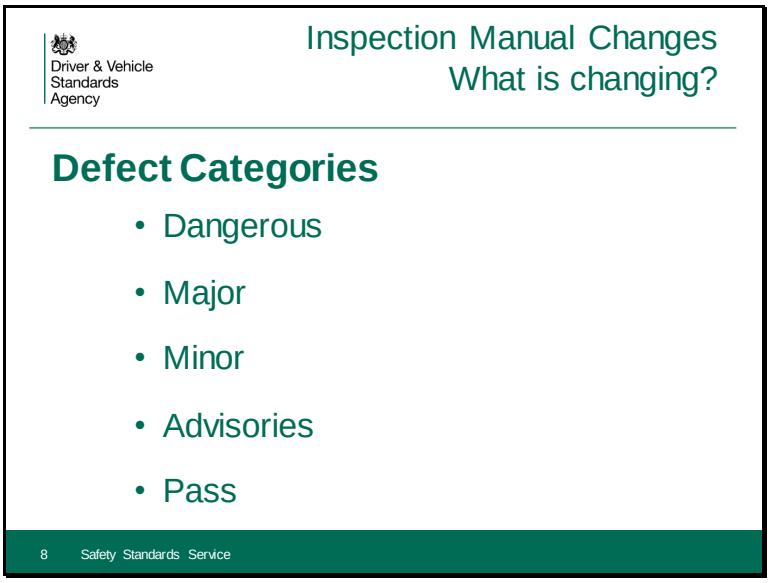
Section 0: Identification of the vehicle (number plates and VIN)
Section 1: Brakes
Section 2: Visibility
Section 3: Visibility
Section 4: Lamps, reflectors and electrical equipment
Section 5: Axles, wheels, tyres and suspension
Section 6: Body, structure and equipment
Section 7: Other equipment, (Seat belts, SRS, speedometer, horn, electronic stability control)
Section 8: Nuisance (noise, emissions and environmental items)
Section 9: Supplementary tests for buses (including class 4 and 5 minibuses)
Section 10 Seat belt installation tests – not normally used

Appendix A: Structural integrity and corrosion

Appendix B: Tyre load index tables

Appendix C: Seat belt fitment tables

Slide 8

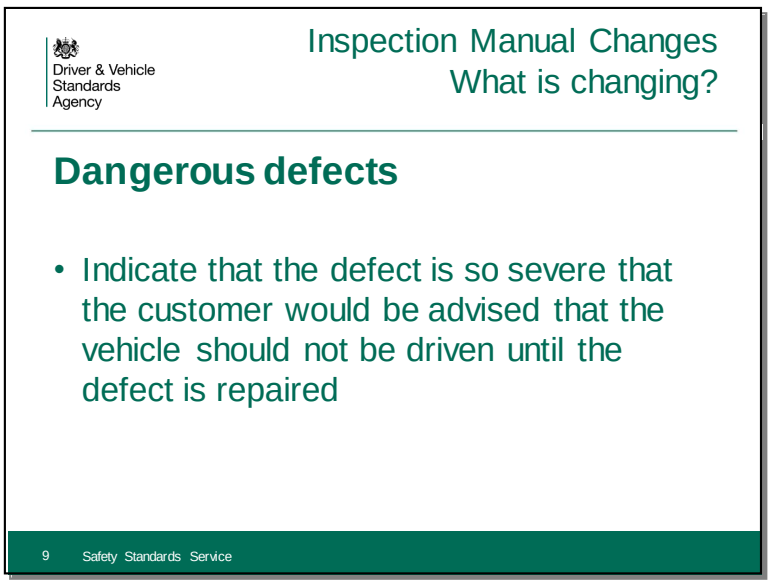


This is the biggest change that Testers will need to get used to. There are now 4 separate defect categories;

- Dangerous,
- Major,
- Minor
- Pass. (Advisories remain)

The Inspection Manual will help you to come to the correct decision, dependent on the nature of the defect.

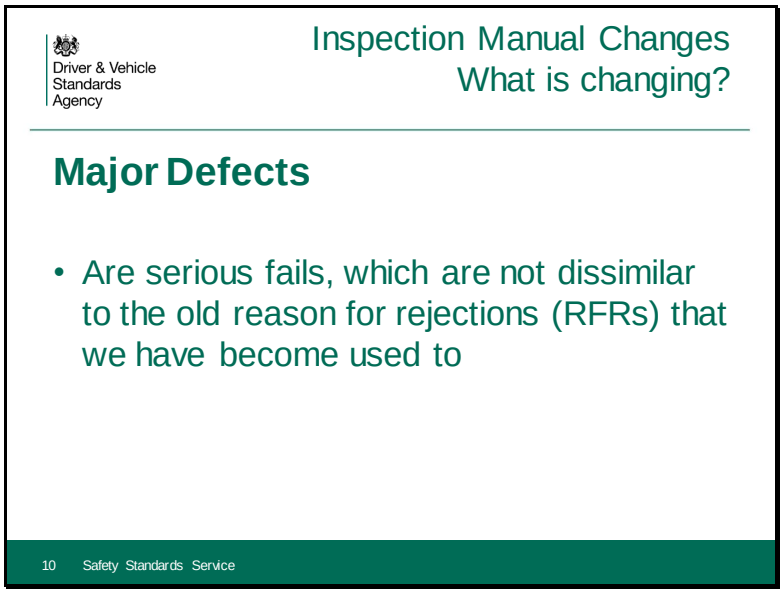
Slide 9



The Inspection Manual will help you with the decision:-

Dangerous, Major or Minor

Slide 10



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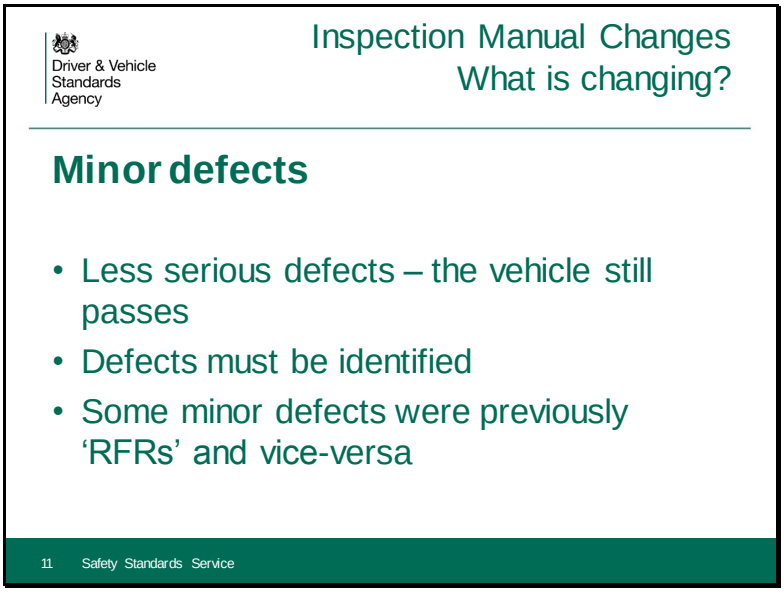
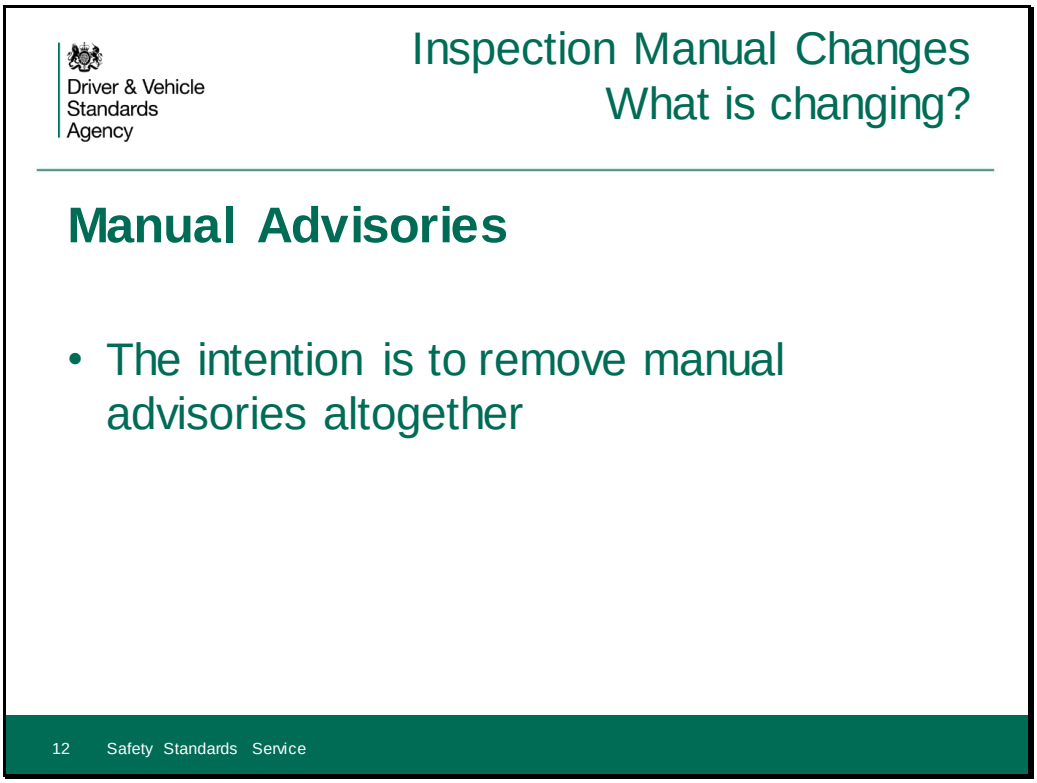


Minor defects; as the name suggests, these are defects of a lower severity than major defects. However, whilst minor fails should be corrected, a vehicle with only minor defects does not fail the test.

It is still important to note that although categorised as minor defects, they must be identified, failure to identify and record them could lead to disciplinary action. Drivers may still be subject to road traffic offences when using a vehicle with minor defects.

Some of these minor defects were previously 'RFRs' and vice-versa, so be careful to read the manual detail when determining the category.

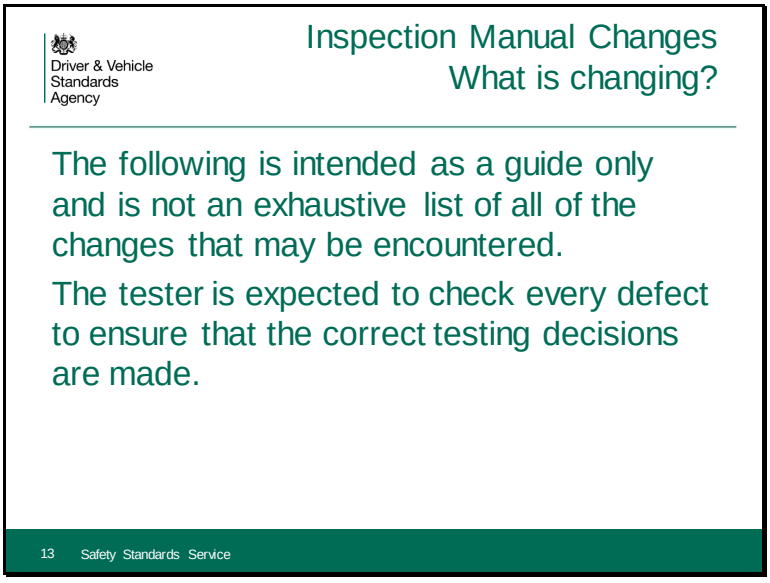
Slide 12



Manual Advisories:

It is also the intention to improve the quality and number of advisory items available on MTS so that eventually, there will be no requirement for manual advisories to be inputted.

Slide 13



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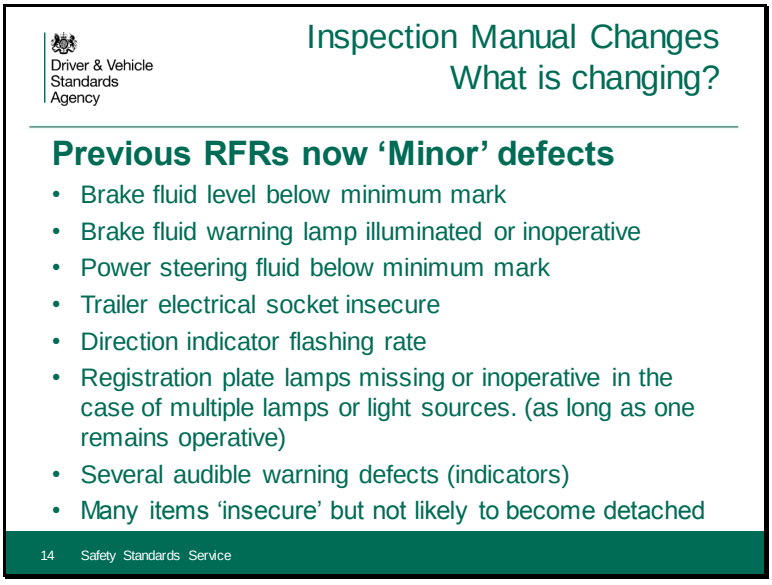
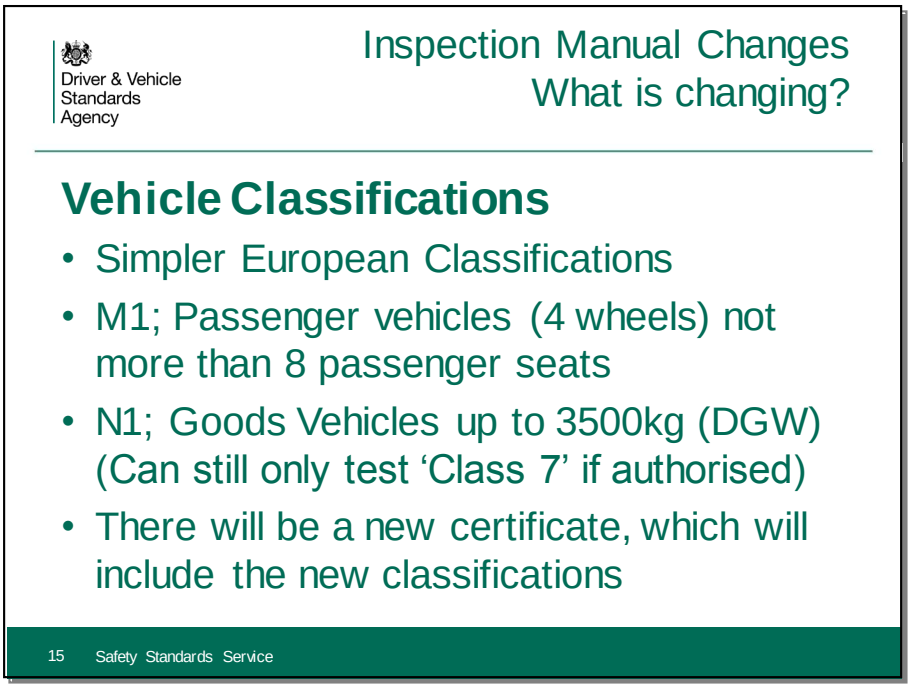


These listed here were previously Reasons for Rejections (rfrs) but are now 'minor defects' and will not fail the test.

- Brake fluid level below minimum mark
- Brake fluid warning lamp illuminated or inoperative
- Power steering fluid below minimum mark
- Trailer electrical socket insecure
- Direction indicator flashing rate
- Registration plate lamps missing or inoperative in the case of multiple lamps or light sources. (as long as one remains operative)
- Several audible warning defects (indicators)
- Many items 'insecure' but not likely to become detached



Vehicle categories will now align to the European Type Approval categories but the old classifications will still be used at least for the time being.

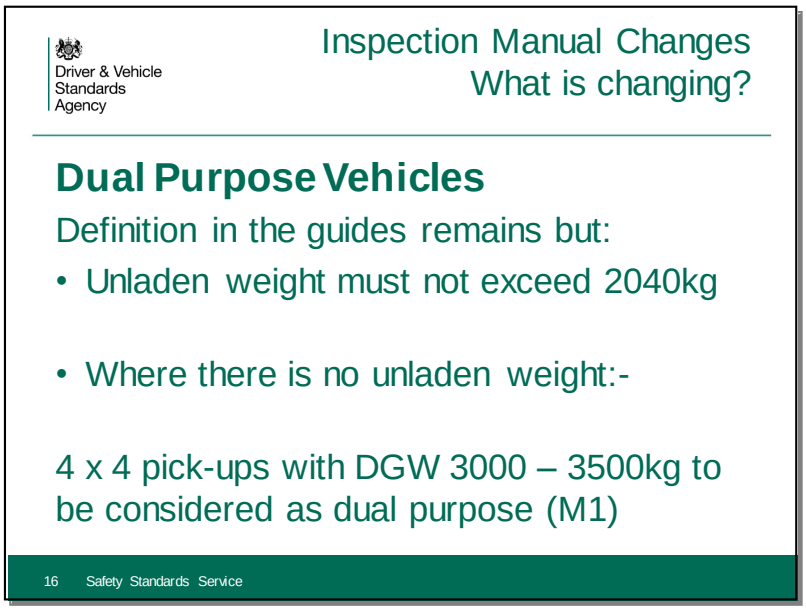
However, the European categories will appear on the MOT Certificate.

For cars and light goods vehicles, the classes are very simple – all cars with 4 or more wheels and not more than 8 passenger seats will be "M1" and all goods vehicles in scope of the test will be "N1" – that is up to 3500kg Design Gross Weight (DGW).

Testers will still only be able to test goods vehicles over 3000kg and up to 3500kg DGW if both they and their site are authorised to test Class 7.

Motorcycles, 3 Wheelers, Minibuses, Motor Homes and Ambulances are a little more complicated. Full details are in the Inspection Manual.

Slide 16

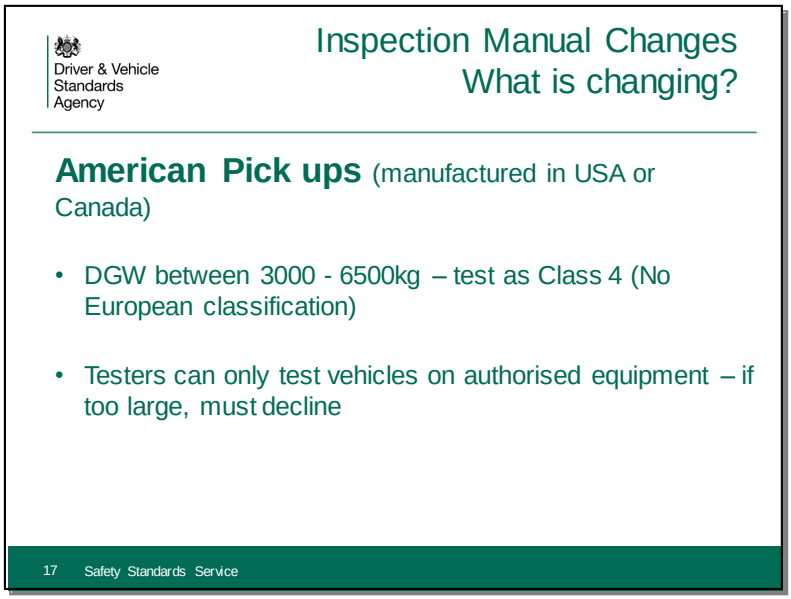


Dual Purpose Vehicles

The definition in the guide remains and there is a requirement that the unladen weight does not exceed 2040kg.

However, 4 x 4 pickup vehicles with a DGW over 3000kg up to and including 3500kg are to be considered dual purpose vehicles for test purposes where no unladen weight data is available and are therefore tested as Class 4 passenger vehicles (M1).

Slide 17

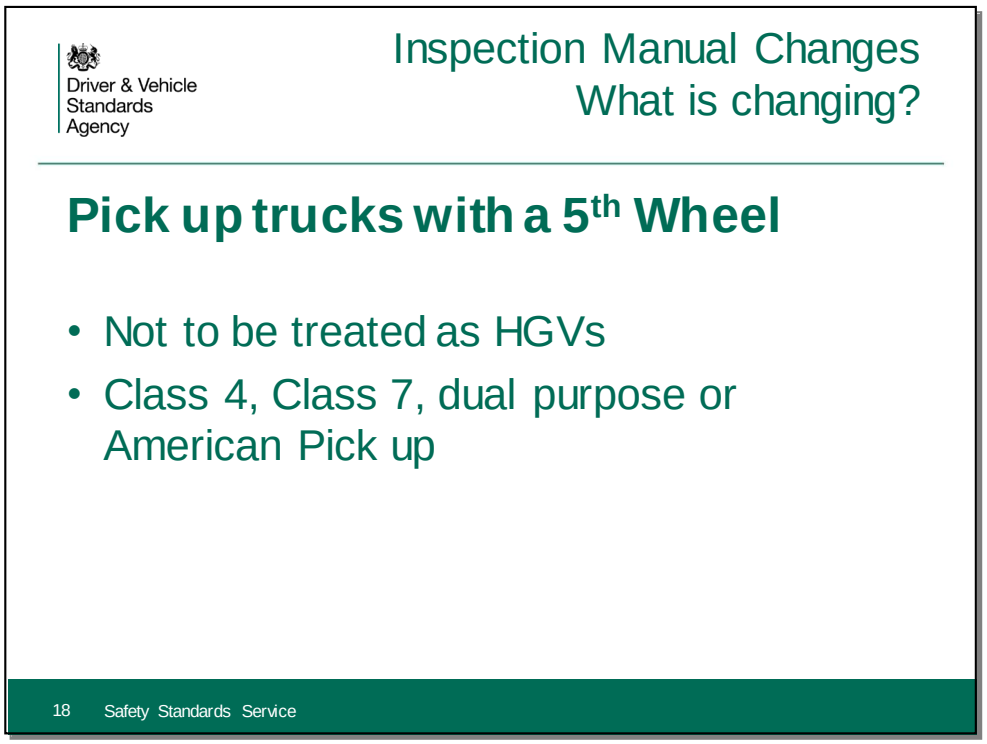


American pick up manufactured in the USA or Canada;

The Inspection Manual should be consulted for the definition but if the DGW is between 3000kg and 6500kg DGW, they should be tested as Class 4 Passenger Vehicles. Note, these vehicles do not have a European Classification.

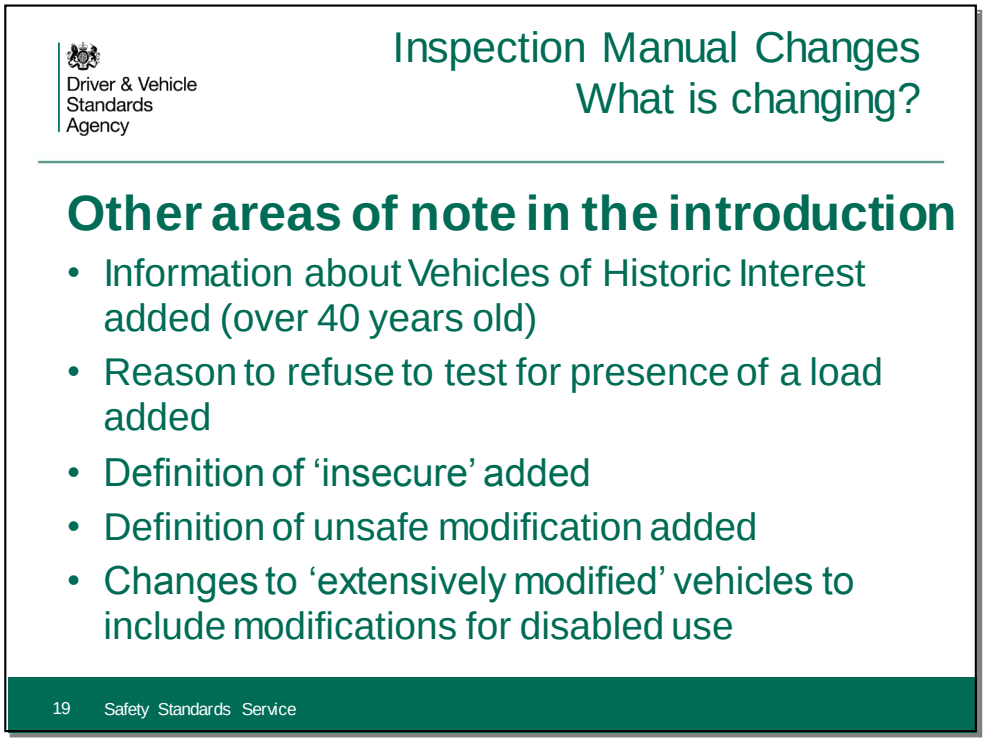
Testers are reminded that they can only test vehicles that can be safely tested on the authorised equipment. If they are too large, then the tester must decline to test them.

Slide 18



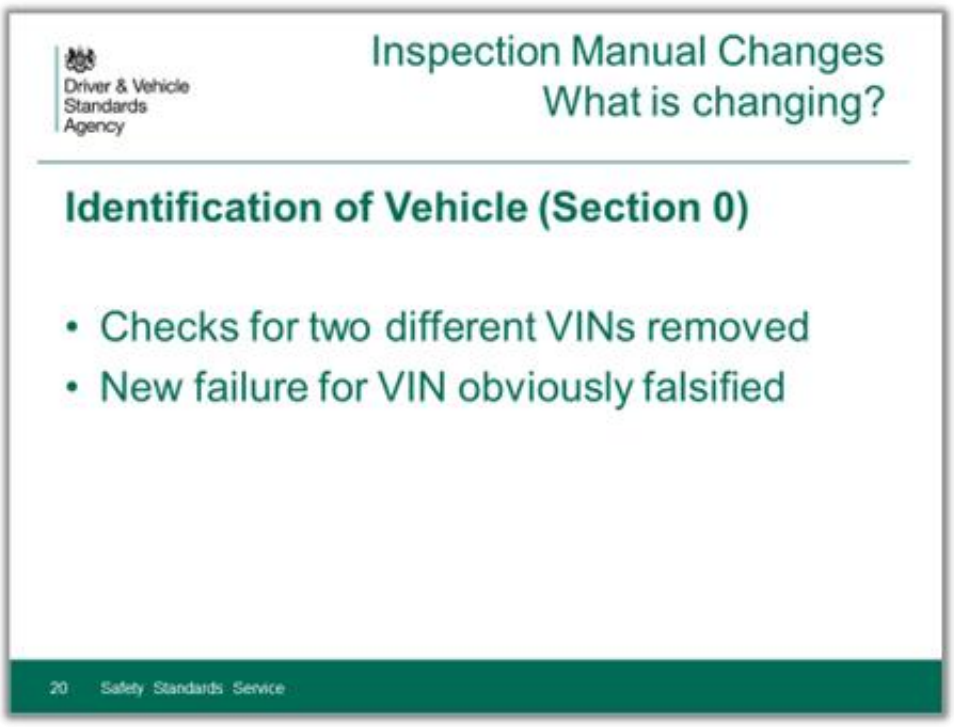
Pick-up trucks fitted with a 5th wheel are not to be treated as Heavy Goods Vehicles and should be tested as either a Class 4, Class 7, Goods Vehicle, Dual Purpose Vehicle or American Pick-up truck as appropriate.

Slide 19



- Information about Vehicles of Historic Interest added (over 40 years old)
- Reason to refuse to test for presence of a load added
- Definition of 'insecure' added
- Definition of unsafe modification added
- Changes to 'extensively modified' vehicles to include modifications for disabled use

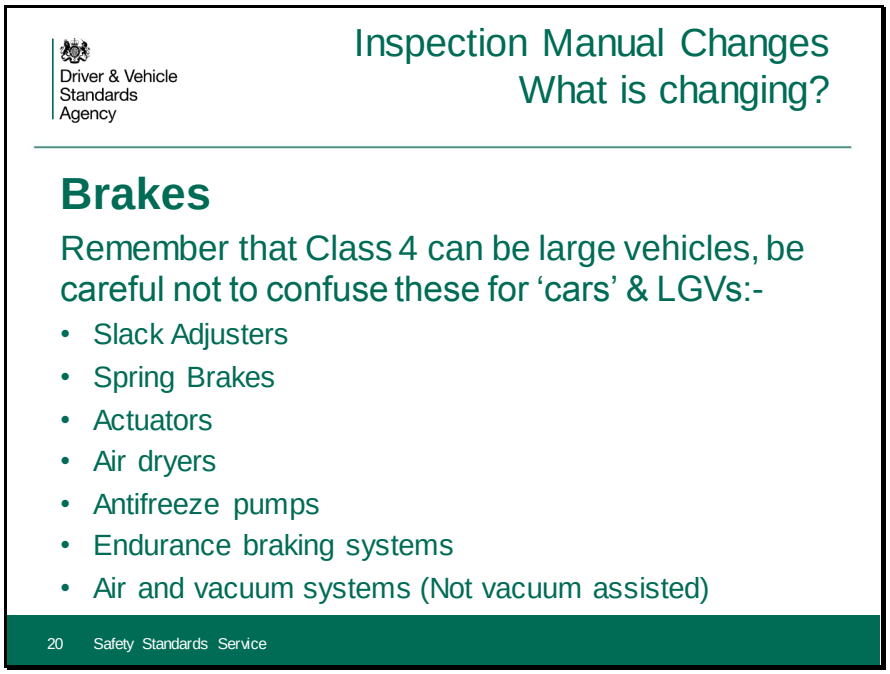
Slide 20



There are only two defects for VIN:-

- “VIN missing or cannot be found”
- “VIN incomplete, illegible or obviously falsified”

Slide 21



These terms all refer to large vehicles fitted with 'Air Brakes', although they could be Class 4 (Motorhomes etc), Testers should ensure that they don't confuse these terms when testing light vehicles.

In particular 'Vacuum Systems' refer to very old braking systems that operated on an inverse air principle and should not be confused with the more usual 'vacuum servo-assisted brakes'.

Slide 22

Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Brakes (section 1)

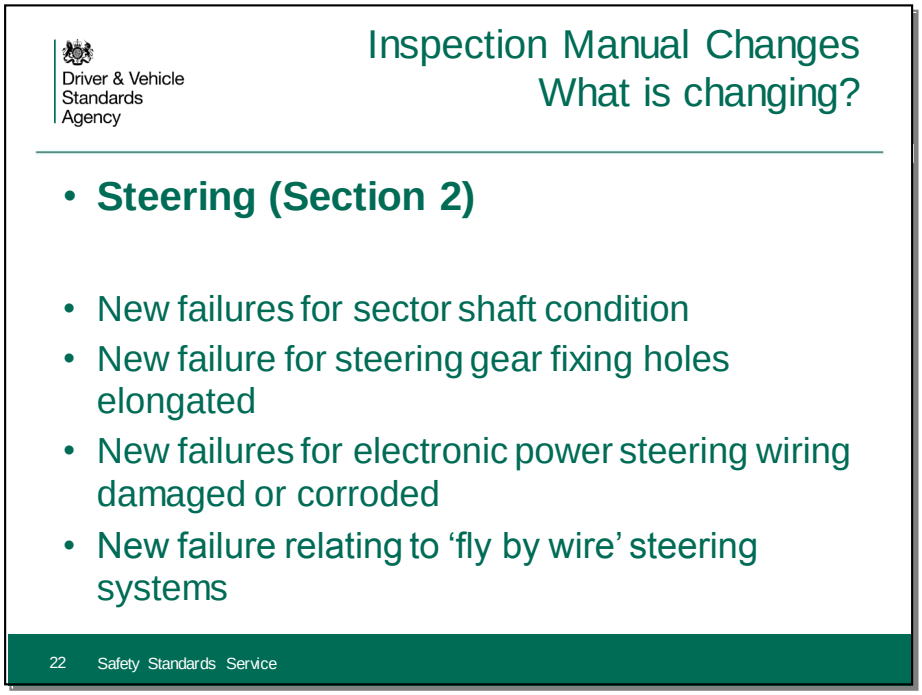
- New failure for brake lining or pad wear indicator
- New failure for brake lining/pad incorrectly mounted
- New failure for a brake disc or drum missing
- ABS system cannot be removed post 2010 vehicle
- New failure for brake fluid contaminated (Visual assessment, without removing the top)
- Checks for reserve pressure of full power hydraulic systems removed

21 Safety Standards Service

Note: **Some vehicles have a warning light** on the dashboard to indicate that the brake pads are becoming excessively worn. This lamp may be a multi-function lamp which also illuminates for other reasons, such as the parking brake being applied. Testers must therefore ensure that the lamp is not illuminated for any other reason before failing for its illumination.

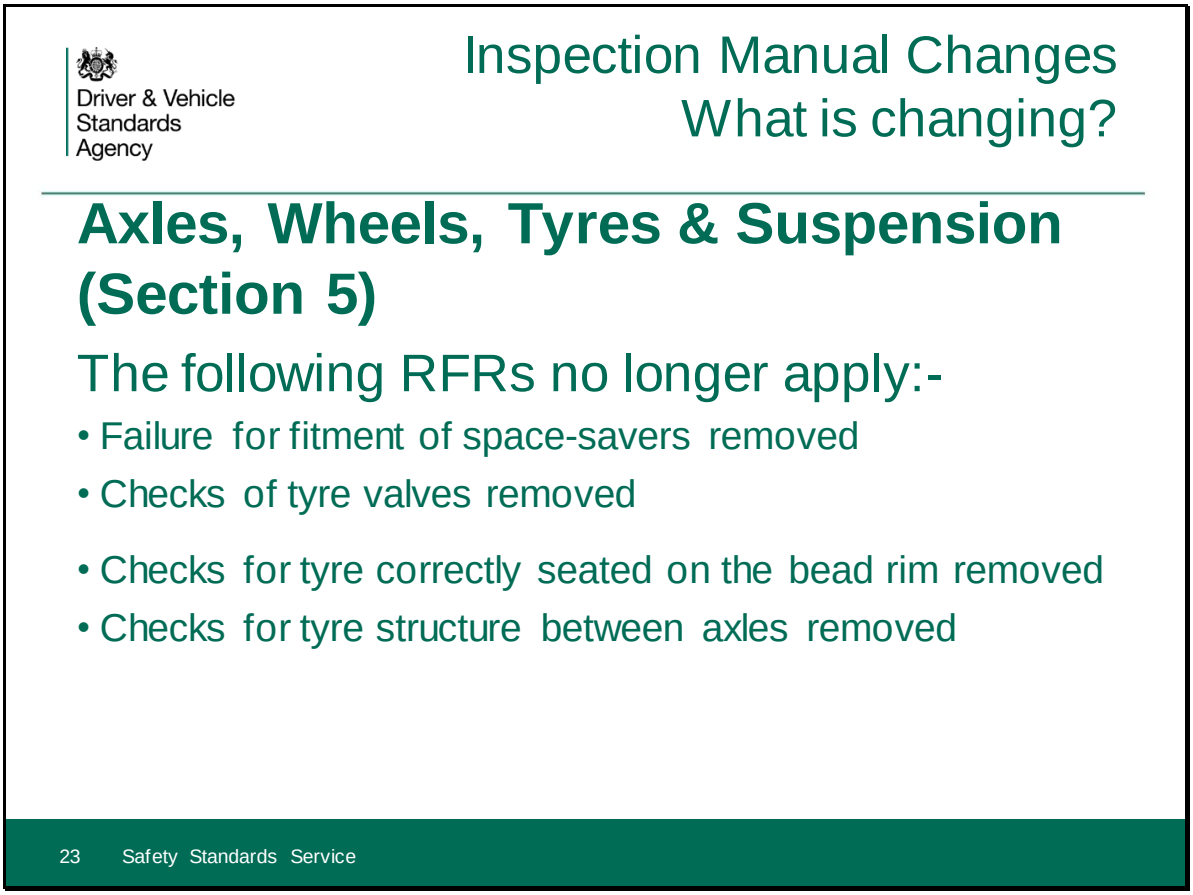
- New failure for brake lining or pad incorrectly mounted
- New failure for a brake disc or drum missing
- For braking performance, the performance values have not changed but remember that cars are M1 (four or more wheels and not more than 8 passenger seats) and light goods vehicles up to 3500kg DGW are N1.
- ABS system cannot be removed on a post 2010 vehicle
- New failure for brake fluid contaminated (Visual assessment, without removing the top)
- Checks for reserve pressure of full power hydraulic systems removed

Note: This is not intended to be an exhaustive list of every change in the section, testers are reminded to consult the manual when any defect is encountered to determine whether or not it is a testable item and if so, what standard must be applied.



This section does not have many changes but there are a few of note.

New failures for sector shaft condition
New failure for steering gear fixing holes elongated
New failures for electronic power steering wiring damaged or corroded
New failure relating to 'fly by wire' steering systems

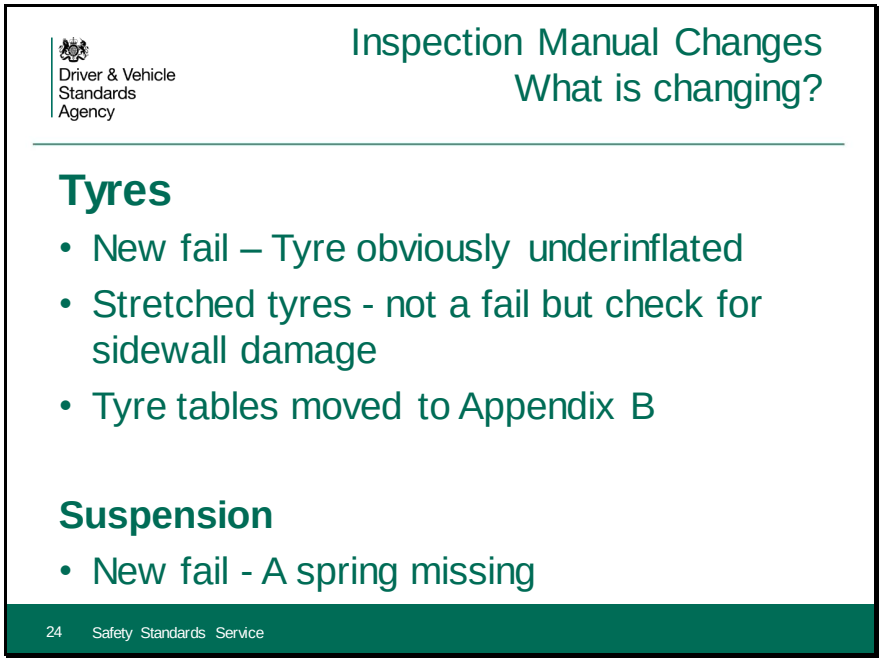


Checks for tyre structure between front and rear axles removed

– After years and years of impressing on testers that radials should go to the rear and cross plies to the front where mixed, this requirement has now gone! It is of course still best practice but in reality, it is highly unlikely that you will ever come across the situation.

However, tyres must be of the same construction across the axle.

Slide 25



- New failure for tyre obviously under-inflated

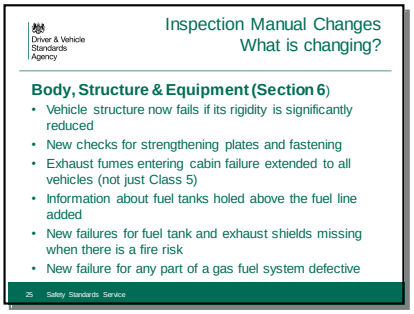
(Note, this is a minor failure under the Tyre pressure monitoring system) minor - defects having no significant effect on the safety of the vehicle or impact on the environment and other minor non-compliances. If only defects of a minor nature are present a test certificate will still be issued

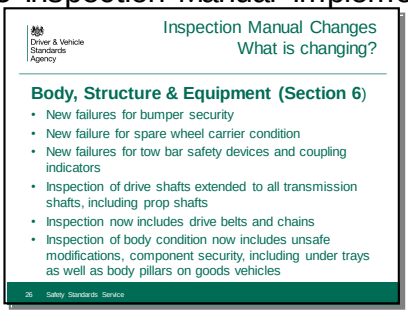
Stretched tyres

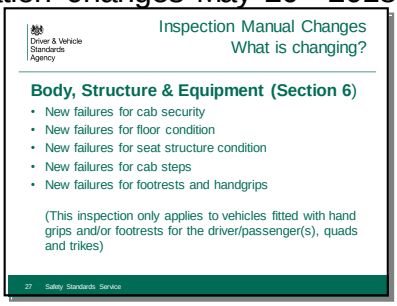
- Stretched tyres do not justify rejection in themselves, however, additional care should be taken when checking the condition of stretched tyres as they are more prone to sidewall damage

- Tyre tables have been moved to Appendix B

- New failure for a spring missing (This covers the situation whereby vehicles are modified to run on the bump stops.)





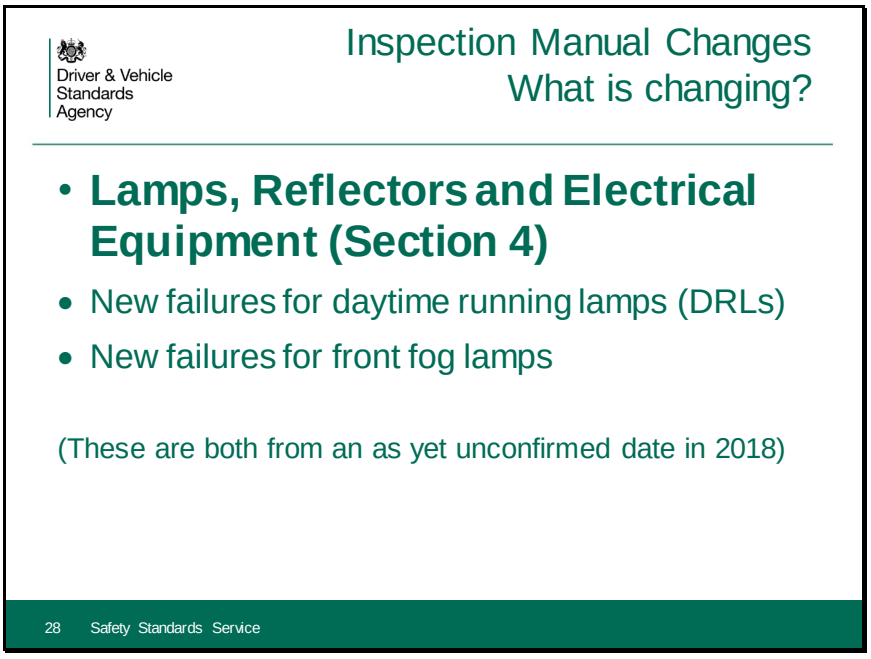


Slide 26 Slide 27 Slide 28

There are quite a lot of changes in this section:

- Vehicle structure now fails if its rigidity is significantly reduced
- New checks for strengthening plates and fastening
- Exhaust fumes entering cabin failure extended to all vehicles
- Information about fuel tanks holed above the fuel line added
- New failures for fuel tank and exhaust shields missing when there is a fire risk
- New failure for any part of a gas fuel system defective
- New failures for bumper security
- New failure for spare wheel carrier condition
- New failures for tow bar safety devices and coupling indicators
- Inspection of drive shafts extended to all transmission shafts, including prop shafts
- Inspection now includes drive belts and chains
- Inspection of body condition now includes unsafe modifications, component security, including under trays as well as body pillars on goods vehicles
- New failures for cab security
- New failures for floor condition
- New failures for seat structure condition
- New failures for cab steps
- New failures for footrests and handgrips This inspection only applies to vehicles fitted with hand grips and/or footrests for the driver/passenger(s), quads and trikes

Slide 29



There are some notable changes in the lighting section:

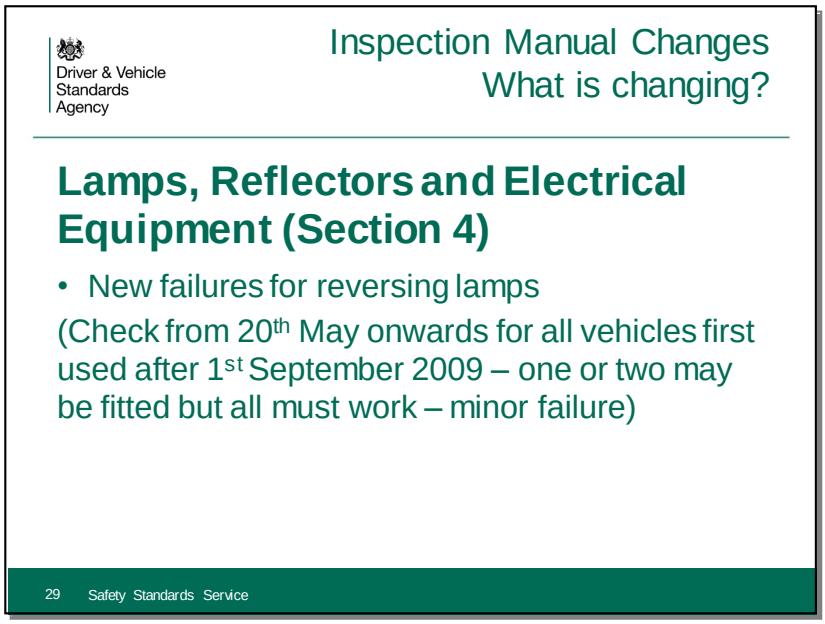
- New failures for daytime running lamps (DRLs)

  This only applies to vehicles first used on or after (Date to be confirmed in 2018), so apart from taxis and other vehicles tested before their 3rd anniversary, this will not apply (for these vehicles) until (Date to be confirmed) in 2021. An inoperative DRL will be a Major failure.

- New failures for front fog lamps

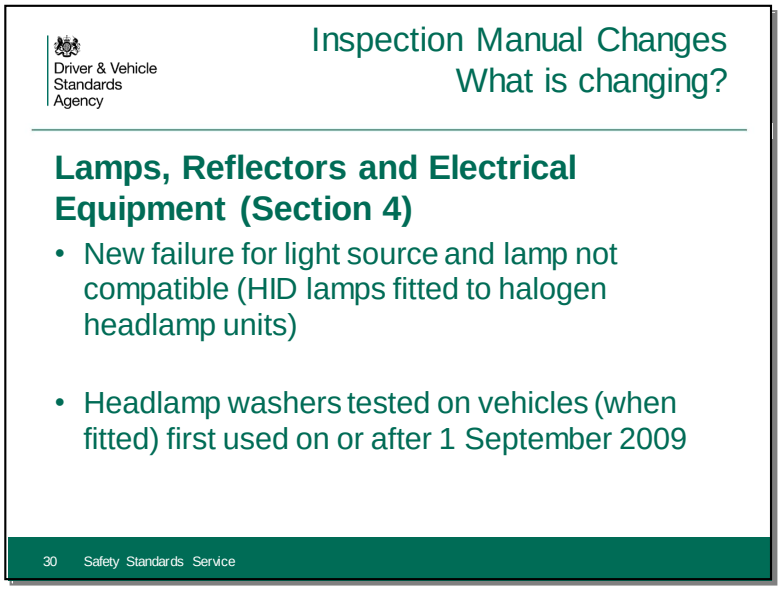
  As with DRLs, these fall into scope on vehicles first used on or after (Date to be confirmed in 2018), so apart from taxis and other vehicles tested before their 3rd anniversary, this will not apply (for these vehicles) until (Date to be confirmed in 2021). An inoperative front fog lamp is a Major failure.

Slide 30



New failures for reversing lamps Unlike DRLs and front fog lamps, reversing lights are testable items on all vehicles from 20th May 2018 (for vehicles first used from 1st September 2009), so you need to be checking them from this date. One or two may be fitted but all must work. However, an inoperative reversing lamp is a Minor failure. It is still important to note that although it is categorised as a minor defect, it must be identified, failure to identify and record it could lead to disciplinary action.

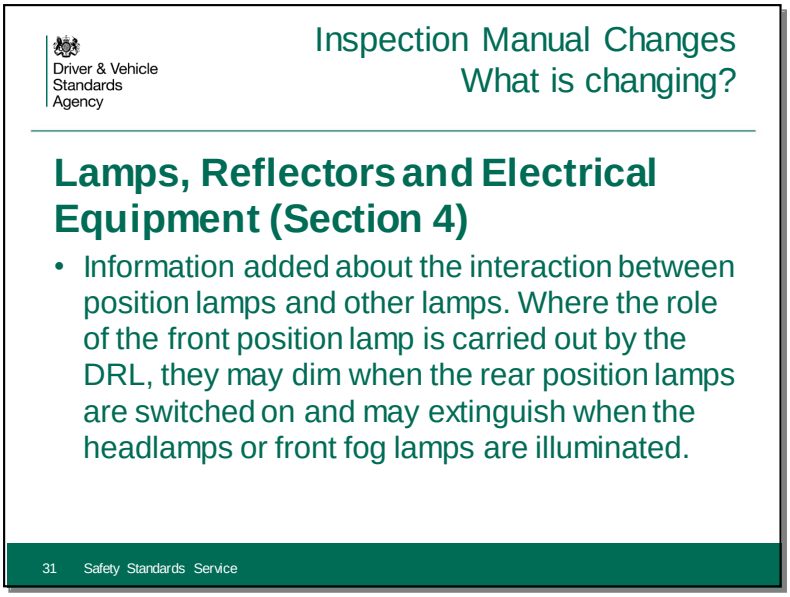
Slide 31



Other areas of note:

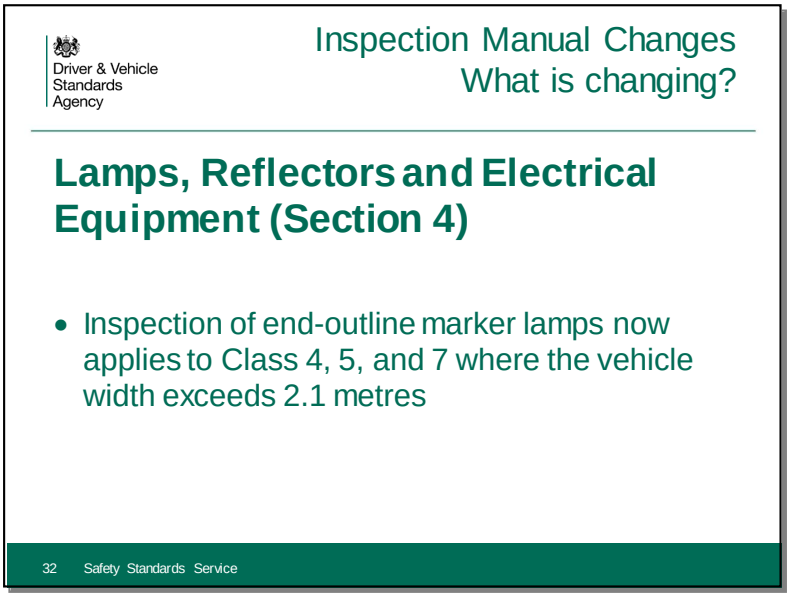
- New failure for light source and lamp not compatible (HID lamps fitted to halogen headlamp units)
- Headlamp washers tested on vehicles (when fitted) first used on or after 1 September 2009

Slide 32



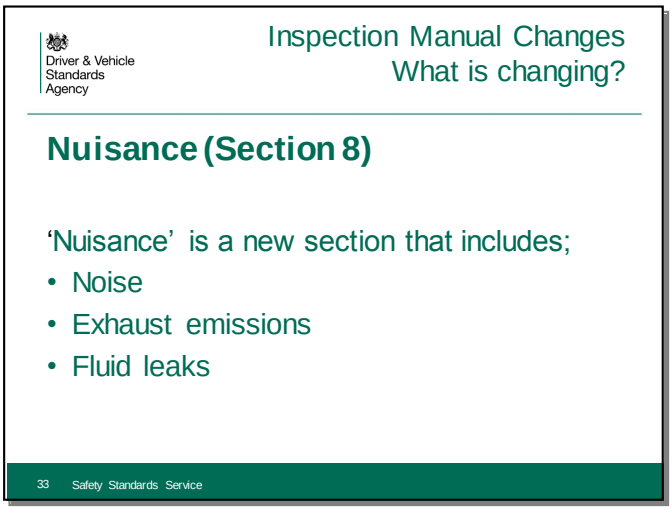
Information added about the interaction between position lamps and other lamps. Where the role of the front position lamp is carried out by the DRL, they may dim when the rear position lamps are switched on and may extinguish when the headlamps or front fog lamps are illuminated.

Slide 33



Inspection of end-outline marker lamps now applies to Class 4, 5, and 7 where the vehicle width exceeds 2.1 metres

Slide 34

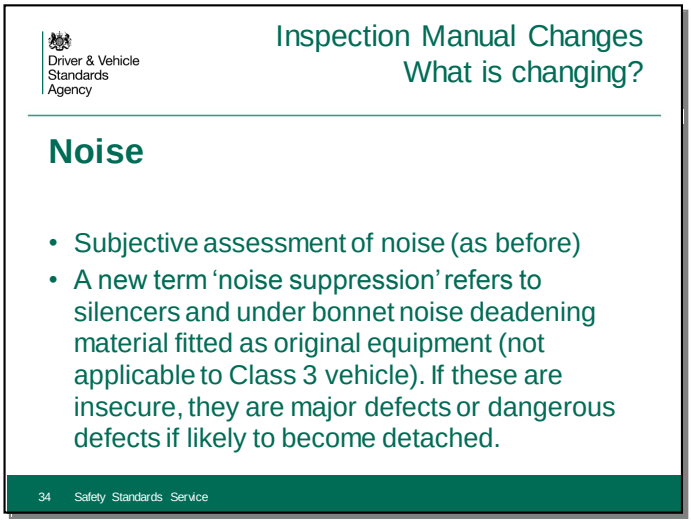


There are few changes in this section

'Nuisance' is a new section that includes;

- Noise
- Exhaust emissions
- Fluid leaks

Slide 35

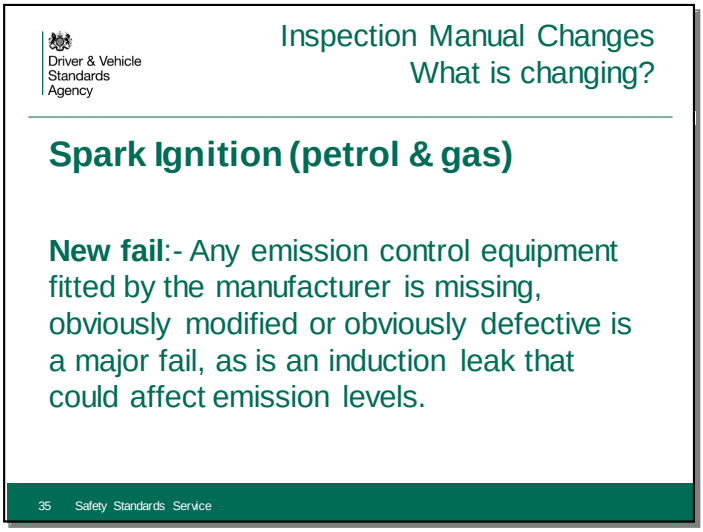


Noise

A subjective assessment of noise level is made as before.

A new term 'noise suppression' refers to silencers and under bonnet noise deadening material fitted as original equipment (not applicable to Class 3 vehicles). If these are insecure, they are major defects or dangerous defects if likely to become detached.

Slide 36



Spark Ignition Emissions (petrol and gas)

Any emission control equipment fitted by the manufacturer is missing, obviously modified or obviously defective is a major fail, as is an induction leak that could affect emission levels.

Slide 37

Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Spark Ignition (petrol & gas)

- Emission levels remain unchanged for spark ignition engines

New Change:-

- A check of the Engine Malfunction Indicator Lamp (MIL) is required.

36 Safety Standards Service

Emission levels remain unchanged for spark ignition engines but there is one new change.

A check of the Engine Malfunction Indicator Lamp (MIL) is required.

"Turn on the ignition and check that the engine Malfunction Indicator Lamp (MIL) illuminates and then goes off." If it does not follow this sequence, then this is categorised as a major defect.

Slide 38

Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Compression Ignition (Diesel)

- As with spark ignition, any Diesel Particulate Filters (DPF), Oxidation Catalyst or Selective Catalyst Reduction (SCR) valve that have been removed, obviously modified or defective will be a major fail

37 Safety Standards Service

As with petrol engines, if any emission control equipment fitted by the manufacturer is missing, obviously modified or obviously defective, then this is categorised as a major defect. This includes Diesel Particulate Filters (DPF), Oxidation Catalysts and Selective Catalyst Reduction (SCR) valves.

Slide 39

Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Compression Ignition (Diesel)

- There is **no** 'fast pass' although if after the first acceleration, the smoke level displayed on the meter is equal to, or less than the limit for the vehicle, the vehicle has passed the opacity test and a pass result will be displayed on the meter

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Driver & Vehicle Standards Agency

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What is changing?

Compression Ignition (Diesel)

- **Pre 1980 vehicles** – a visual check (see manual for details on how to perform this)
- **Post 1980 vehicles** - first used after 1980, check the emission level on the **manufacturer's plate** (if it is shown) for example 0.8 and use this value.

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Pre 1980 vehicles – a visual check (see manual for details on how to perform this)

Diesels first used after 1980, use the manufacturer's plate value if it has one.

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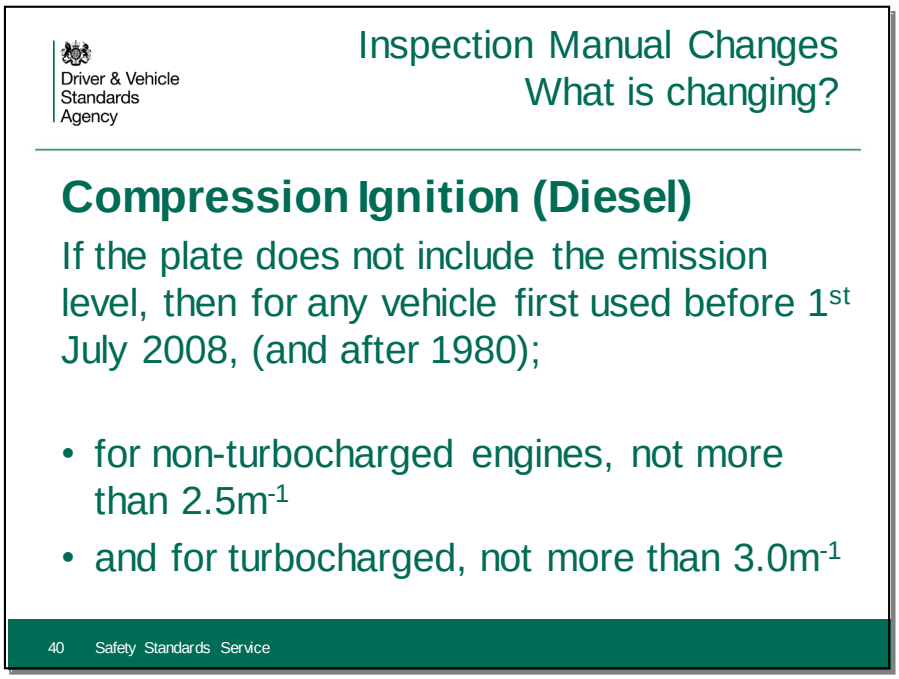

If the plate does not include the emission level, then;

For any vehicle first used before 1st July 2008, (and after 1980);

- for non-turbocharged engines, not more than 2.5m^{-1}

and

- for turbocharged, not more than 3.0m^{-1}

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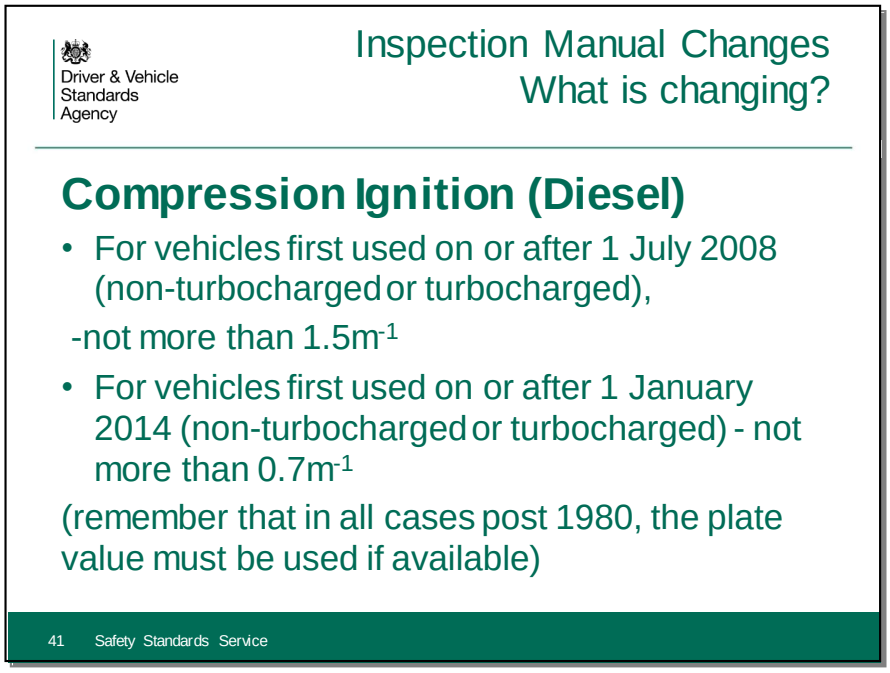

For vehicles first used on or after 1 July 2008 (non-turbocharged or turbocharged):

- not more than 1.5m^{-1}

For vehicles first used on or after 1 January 2014 (non-turbocharged or turbocharged),

- not more than 0.7m^{-1}

*However, remember that in all cases post 1980, the plate value must be used if available.

This is a plate photographed from a Vauxhall VIN Plate (with Opel branding).

The value here is shown as 0.52, so therefore, this is the value to be used for the Diesel Smoke Test.

Note, not all vehicles will use exactly the same format as shown here.

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Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Compression Ignition (Diesel)

- If the vehicle is fitted with a DPF and emits smoke of any colour, this is a major defect
- As with petrol engines, the MIL is now part of the test and will be a major defect if it is inoperative or indicates a malfunction

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Driver & Vehicle Standards Agency

Inspection Manual Changes
What is changing?

Fluid Leaks

- A new section that covers all leaks but excludes engine coolant, screen wash and Selective Catalyst Reduction (SCR) fluid.
- Note: Many sections of the manual have their own defect categorisation for leaks, e.g. Power Steering.
- Leaks are considered excessive if they deposit more than a 75mm diameter pool in 5 minutes (collectively). For leaks to fail, they must pose an environmental threat, so discharges from air conditioning units (water) would not be included.

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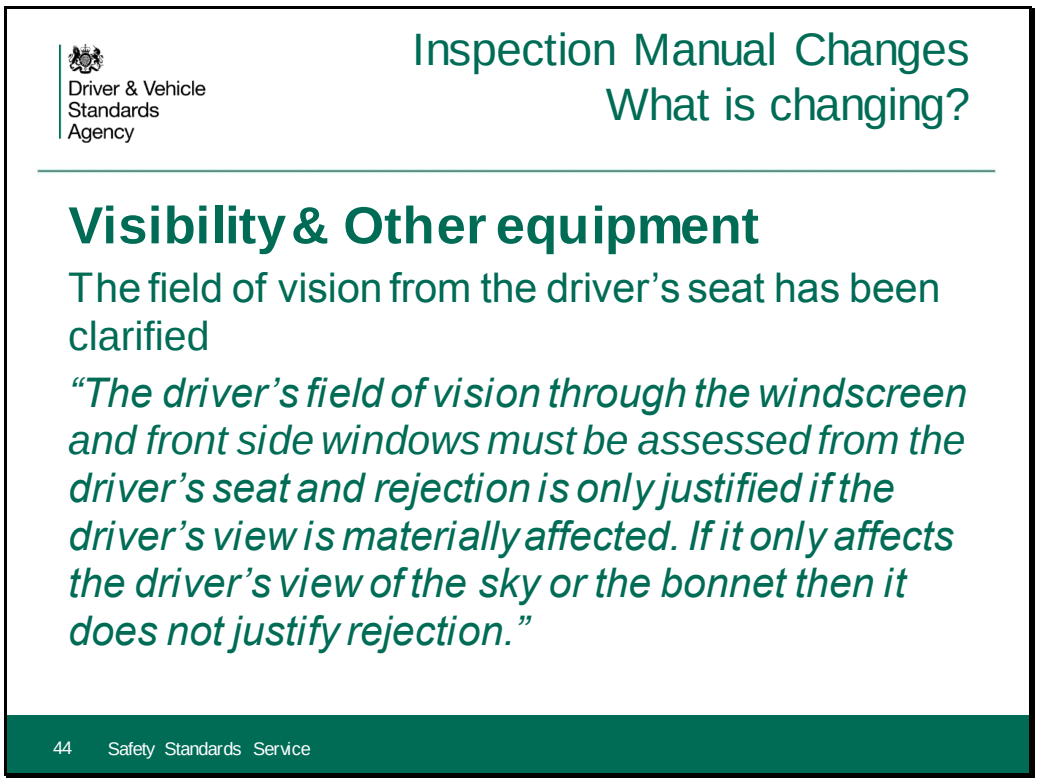

What is changing?

The field of vision from the driver's seat has been clarified:

"The driver's field of vision through the windscreen and front side windows must be assessed from the driver's seat and rejection is only justified if the driver's view is materially affected. If it only affects the driver's view of the sky or the bonnet then it does not justify rejection."

"This is a general assessment of driver's view – you are not required to speculate on the effects on tall or short drivers."

The associated wording on the defects has also been changed, which should help testers come to a decision.

The view of the exterior mirrors is also included but not the view through the mirrors, which has its own criteria.

A wiper blade missing or obviously not cleaning the windscreen is a major defect.

A new failure for excessively tinted glass (including side window when affecting view of obligatory external mirror)

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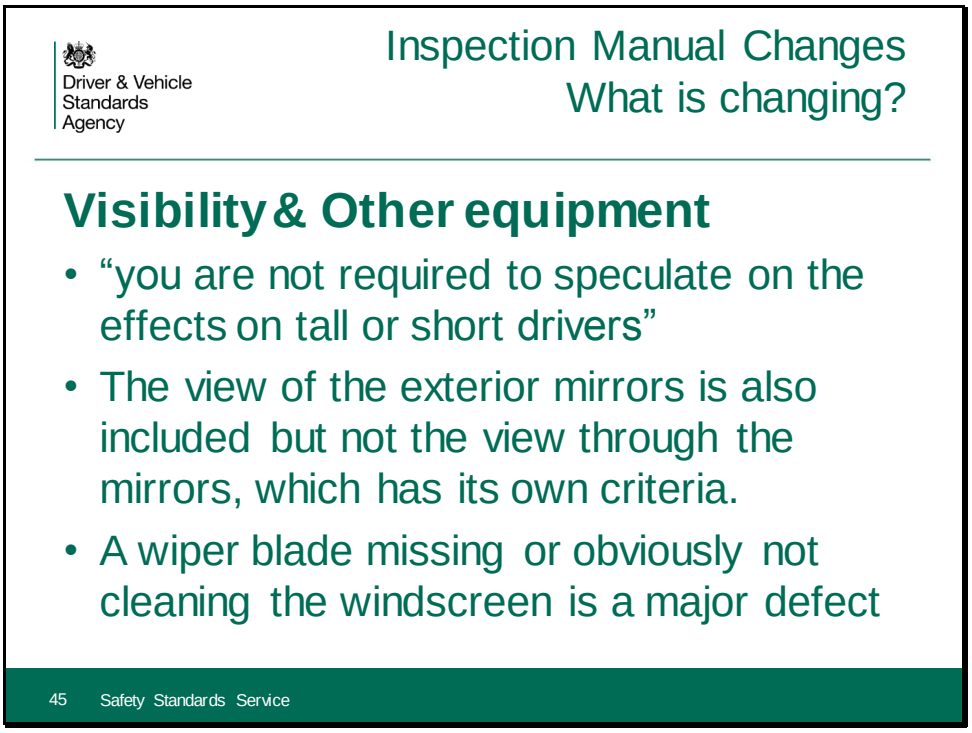

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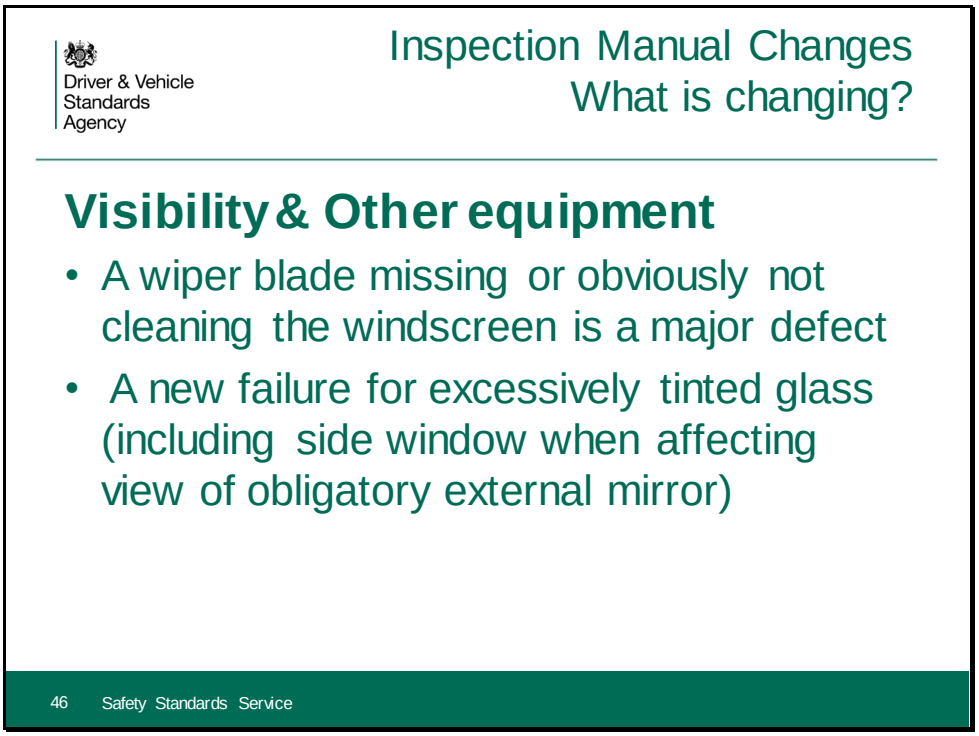

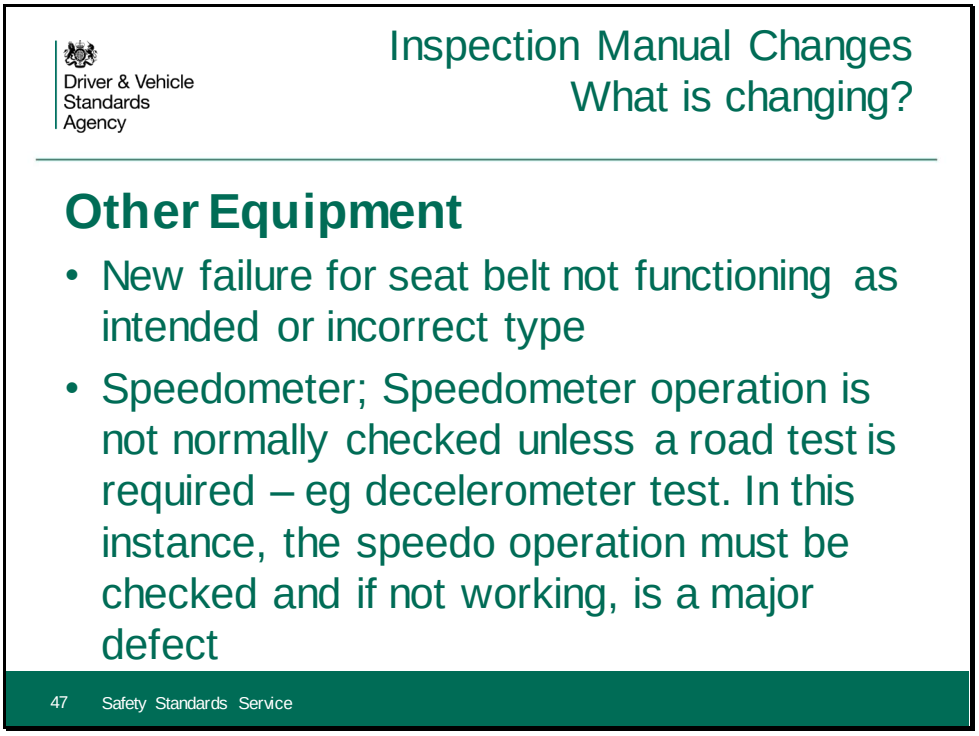

Other Equipment

This section does not have many changes but there are a few of note.

- Seat belt fitment information moved to Appendix C
- Seat belt installation checks moved to Section 10
- New failure for seat belt not functioning as intended or incorrect type
- Speedometer; Speedometer operation is not normally checked unless a road test is required – eg decelerometer test. In this instance, the speedo operation must be checked and if not working, is a major defect.