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| Time | Content | Assessment & Resources | Comments |
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| <p>Day 1 9.10 – 9.30</p> | <p>Aims, Objectives & Standards: Minimum standards explained, time of test and types of decision, objective & subjective, assessment criteria, inappropriate modifications and common areas of incorrect decisions.</p> | <p>Power point presentation, inspection manual & testing guide Throughout this course we will be referring to Matters of Testing</p> | <ul style="list-style-type: none"> • The sections can be integrated and delivered in any logical sequence providing all areas are covered. • Trainers will ask students what they know about MOT testing. • Emphasize that the student will be carrying out MOT testing on behalf of the Secretary of State for Transport. Being a tester carries a great responsibility, exercising the powers of the Secretary of State for Transport it is no exaggeration to say the consequences of getting it wrong could result in a prison sentence. • Enter into a discussion regarding the ethics of testing. Remind all present that they have a duty of care to themselves and, more importantly, to the general public at large. They have a duty to be honest, impartial and to test to the best of their ability as a wrong decision could lead to road deaths. This is very important. • Trainer to emphasize the importance of the manual, emphasize minimum standards condition at time of test only – highlight difference between MOT & Service standard. • From the slide of standards graph show explain the differences between service & MOT standards discuss in great depth these standards you must get across to the candidates the relevant basic minimum standard all candidates may have problems understanding this • Trainer to stress the very important paragraph below and to discuss what it means <p>“Inspection Manual Introduction 4. Assessment of component wear and Deterioration</p> <p>Because it is not practicable to lay down limits of wear and tolerances for all types of components on different types of vehicle, a NT is expected to use experience and judgement in assessing the condition of a component.</p> <p>The main criteria to be used when making such an assessment are:</p> <ul style="list-style-type: none"> a) Whether the component has reached the stage where it is obviously likely to affect adversely the roadworthiness of the vehicle b) Whether the component has clearly reached the stage when replacement, repair or adjustment is necessary” <p>Stress “obviously likely to affect adversely the roadworthiness” and that point must already have</p> |



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| | | | <p>been met before it fails.</p> <p>Similarly stress “Whether the component has clearly reached the stage when replacement, repair or adjustment is necessary”</p> <p>- That stage must already have occurred before the vehicle fails</p> <ul style="list-style-type: none"> • Emphasize that passenger vehicles are classed on seating capacity, goods vehicles are classed on DGW. Decide class at the time of the test. <ul style="list-style-type: none"> • Ask students in which areas MOT testers might get decisions wrong and give • examples e.g. ball joints, corrosion, suspension components, testable lights, number plates, condition and legal requirements of tyres |
| 9.30 – 9.45 | <p>Equipment: Explain authorized and accepted optional equipment applicable to LV testing. Show equipment that requires calibration emphasizing that it is the AE’s responsibility, state the difference between ATL and OPTL.</p> | <p>Power point presentation, Testing guide appendix 2</p> | <ul style="list-style-type: none"> • Pose the question? Which tools they are permitted to use for a test. Go through each one. • Pose the question: which items of equipment would need calibration? Where would we find this out? (Guide) • What about equipment failure (abort /abandon) • Make sure students understand only approved equipment can be used |
| 9.45 – 10.15 | <p>Test Classes: Explain all test classes relevant to vehicle type,</p> | <p>Power point presentation, Testing guide introduction & VT9a poster</p> | <ul style="list-style-type: none"> • Talk about test classes explain that test classes could change annually. Talk about the difference between ‘decline’ & ‘refuse’ and give an example e.g. a coach converted to a caravan, which class is it? Then ask could you test it and if not, why not? • Note - decline would be when a vehicle is of the correct test class but perhaps too large or heavy for your equipment eg coach converted to caravan now Class IV |



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| | <p>seating capacity, weight where applicable, how vehicles can change class, issues concerning dual purpose vehicles, structure of the two part VT9a classes poster, link to explain e mail alerts and matter of testing on line</p> | | <ul style="list-style-type: none"> • Explain the definition of a living van tell the students that this vehicle is tested according to its weight. • Refuse – these reasons are listed in the manual (introduction page4) • Ask students why you might refuse to test and list responses on a white board. Then ask students to look in the manual to check their answers. This also gets them used to using the manual. • Show slide to illustrate Class III. <p>Key learning outcomes are;</p> <ul style="list-style-type: none"> • Students can differentiate between various vehicle classes • Students need to identify vehicles and place them in the appropriate vehicle class • Be competent at referencing the testers manual & Guide |
| <p>10.15 – 11.00 including tea break</p> | <p>Reference Material and Special Notices: Explain how to access reference material and special notices, the rules concerning retention and printing of special notices. Show relevant sections of the introduction to the inspection manual & how to use this manual, for</p> | <p>Power point presentation, Inspection manual introduction</p> | <p>• Pose the question: what is a special notice? Then explain what a special notice is. Pose the question: what is a dual purpose vehicle? Then explain what a DP is. Ask the question: can we test DP in a class IV station? Refer to special notice 4-2013. This then introduces special notices. Point out that special notices which cannot be incorporated into manual are still active.</p> <ul style="list-style-type: none"> • Tell students about DVSA contact details and how to view matters of testing (GOV.UK website) • Introduce Inspection Manual. • Emphasise H&S requirements <p>Ensure you cover from the guide:</p> <ul style="list-style-type: none"> • Explain that the manual pages are divided into three columns • Column 1 explanatory notes • Column 2 method of inspection • Column 3 reason for rejection <ol style="list-style-type: none"> 1. Road Traffic Act 2. The Motor Vehicle Test Regulations |



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| | example, refuse to test, inspection procedure, assessment criteria, modified vehicles and any section the trainer feels relevant. | | <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Students must understand the importance of special notices and how to access them • Students must know how to access matters of testing and understand how it may assist them to test • Students must have the necessary skill to access and use the relevant manuals |
| 11.00 – 12.00 | <p>Structural Integrity & Corrosion: Explain prescribed areas, load bearing structure, sharp edges and projections, body and tow bar security. Methods of inspection, use of CAT and fail criteria. Methods of repair, seam welds, spot welds and manufacturer repair methods. Explain procedure if repair cannot be assessed</p> | <p>Power point presentation, inspection manual section 2, 3, 5, 6.1, 6.6 & appendix C. Show current DVD</p> | <ul style="list-style-type: none"> • Show DVD if you wish - it is not compulsory. From the slide, go through corrosion flow chart. • Clarify and explain prescribed areas, giving an example of confusion that can occur (Micra Radiator front cross member not structural). Make sure students understand that a prescribed area is radiated 30cm from the area of corrosion. • Following the slide, go through sharp edges & projections. • Give examples of tape over wheel arch. Go round students and ask them to commit pass or fail. • Talk about vehicles that have a separate chassis e.g. Land Rover. What would be the difference between pass/fail compared to monocoque construction? Use Q&A to promote debate regarding: <ol style="list-style-type: none"> 1. Methods of repair 2. Highly stressed components 3. Non-Metallic structures 4. Removal / Substitution of metal panels • Engine mountings explain and discuss. Remember if the engine mounting is performing its function of support and location, it is a pass irrespective of condition. • A practical of this session could be combined with other sections e.g. steering & suspension. <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Understand what a prescribed area is and how far it goes and indentify prescribed areas in relation to chassis-less and separate chassis type construction • Use the correct technique to assess corrosion • Use the corrosion assessment tool correctly |
| 12.00 – 13.00 | Lighting and | Power point | <ul style="list-style-type: none"> • Using a maker board or flip chart, ask students which lights are testable. What we check for: |



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| <p>Lunch 13.00 – 13.30</p> | <p>Electrical Systems: Lamps to test, how to test, fail criteria for all testable lamps and relevant warning lamps. How to deal with additional lamps, variations depending on vehicle type and age. Types of head lamp, methods of checking beam aim and fail criteria. Battery and electrical wiring, including tow bar sockets, how to check and fail criteria. Emphasize the difference between lamps and signaling devices.</p> | <p>presentation, inspection manual section 1</p> | <ol style="list-style-type: none"> 1. Presence - are they required? 2. Operation - at least 50% must be working included in this are LED Lights 3. Condition - visible from a reasonable distance. <ul style="list-style-type: none"> • Explain daytime use only. Emphasize that lamps must be disconnected or removed to qualify for this. • Talk about HID lamps. Pose the question, what colour are they? Remember they appear to be a blue light but are in fact classed as emitting white light. • Pose the question: what about additional lamps? Are they testable? Does it depend on which system they are on? E.g. indicators. • Explain about positioning of lamps. Pose the question: what about LED lamps where some are not working? Would that be a pass or fail? In order to get students to use manual, ask them to research in appropriate section of manual. • Draw brake lamps on flipchart. Ask: are they all testable? Point out that centre brake lamps can only be failed if they are inoperative and you can prove that they are connected. If you cannot, you must pass and advise. • Registration plate lamps deliver as above. • For rear fog lights, pose the question: which are testable? Ask what if n/s fog light emits white light? Would that be a pass or fail? • Main beam telltale testable from first use date of 01/04/1986. • Discuss headlamps and aim to make intensive use of slide with various beam patterns. State that main beam telltale must work on vehicles post 1986. • Point out new spec headlamp testers for complex lights. Use this session to talk about electrical wiring and battery, including tow-wiring. Point out flap on seven pin can be absent, so you must test 13 pin with plug in device. <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Students must be competent in the use of beam setting equipment • Apply the relevant dates to operation of main beam warning lamps , hazards and indicators • Understand that indicators only need an audible tell tale • Understand hazard warning lights must have a visual tell tale • Understand the centre brake light must have a visible connection before it can be failed • Understand only one fog light fitted to the centre or offside is required and that the tell tale must be checked • Understand that reflective tape must not be accepted as substitute for reflectors • Round off this section with an in depth practical |
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| <p>13.30 – 14.15</p> | <p>Wheels & Tyres: Tyre structures, legal fitment, testable and non testable markings, dual markings, space saver tyres fail criteria, condition, damage and correct fitment, tread depth requirement variations for vehicle type and age. Extra requirements for class 5 & 7 vehicles. Wheel condition and security, extra requirements for class 5, 7 & large class 4 vehicles. Fitment and correct operation of TPMS if relevant to vehicle type and age.</p> | <p>Power point presentation, inspection manual section 4</p> | <ul style="list-style-type: none"> • Discuss nominal size and aspect ratio. Make sure that all students understand this. • Aspect Ratio: E.g. 215/55R15. What this means is that the tyre contact area on the road is 215mm and the height of the tyre wall is 55% of the contact area. The R stands for radial ply and that it is suitable for a 15 inch wheel. Explain the note from the manual & clarify. • Dual Marked: If the tyre is dual marked e.g. 185/75R14 may be marked 185R14. Both markings are clearly visible on the side wall then either marking would be acceptable. Explain the note from the manual & clarify. • Cuts: A cut must be 25mm in length or more than 10% of the tread width of the tyre, whichever is greater. The cord must be visible to the eye. It is permissible to use a probe to expose the cord but you must not dig. Emphasise that the probe must be a blunt instrument. • A lump or bulge caused by separation of the tread rubber – this will feel soft when pushed and should not be mistaken for something from the manufacturing process • Structure: Use slide to illustrate cross-ply, and radial. Explain that mixing of tyres on any axle is unacceptable and use the example of mixing on different axles. Emphasise and clarify the rules using the manual regarding <ul style="list-style-type: none"> ▪ Cross ply ▪ Bias belted ▪ Radial ply • Write the above three combinations on the flipchart and cover one up e.g. bias belted which would leave cross ply on the front axle and radial ply on the rear. This is an acceptable combination, but remembers where class VII is concerned, with twin wheels on the rear you can have cross ply on the rear and radial ply on the front. • Remember to point out space saver fitted as a road wheel & tyre at time of test is a failure. Emphasise wheel & tyre • Ensure that you and the students know the correct tread depth for tyres in the classes that you are training / testing. Be aware of primary groves and other groves. Emphasise tread area in contact with the road, this can tricky and not as straight forward as it seems, make use of the manual to go step by step to ensure understanding in this area. • Take care to explain the standards for cuts in tyres 25mm or 10% of the section width, whichever is greater. Tell students that use of a probe to check cuts is allowed but only to expose ply or cord, you must not “dig” with it. • Load Index & Speed Rating: For Class VII vehicles you must ensure that the correct load index is being used on the tyre fitted to the axle. The load index is a statement of the tyre strength. You should direct the students to the tyre tables in the rear appendix of the manual and give examples from the manual. For speed rating, you are looking for a tyre to be marked with one of the following speed ratings: A, B, C, D, E, F, G, J, or K. An absence of a speed |
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| | | | <p>rating mark is not a failure.</p> <ul style="list-style-type: none"> • A tyre fitted to an axle that has a direction of rotation instruction travelling in the wrong direction. • Examine the road wheels for a condition in which deflation may occur. • Stretched tyre: Ask students what is a stretched tyre? From matters of testing show students diagrams pointing out that the bead is not seated <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Understand and interpret <p>a) Understand Load rating b) Correct wear limits for various passenger vehicles c) Cuts on various areas of the tyre , including use of a probe d) Mixing of tyre construction on various vehicle axles e) Understand that testers must not remove wheel trims to access wheel fixings</p> |
| <p>14.15 – 15.00 Tea 15.00 – 15.15</p> | <p>Seat Belts: Correct type and fitment as required by legislation and vehicle age/type, belts to be tested, when fitted belt is not a seat belt, condition, operation and security, child seat fitted procedure. Supplementary restraint systems test procedure & fail criteria. Criteria for seat belt installation checks relevant</p> | <p>Power point presentation, inspection manual section 4</p> | <ul style="list-style-type: none"> • Using the flipchart, ask the student which belts are testable. Draw or list on flipchart. • Rear facing seats do not require belts. Rear seats in vans do not require belts unless the van is converted to car spec e.g. side windows, occasional seats fitted to people carriers e.g. VW Sharon require belts. Any seat with a corresponding belt facing in any direction is testable. A belt without a corresponding seat is not testable, irrespective of condition. • Use slide to carefully go through flow chart, checking knowledge and learning at each stage. • Damage to an attachment or fitting is not a reason for failure unless the operation of the belt will be affected. • Go through prescribed areas for seat belts e.g. 30cm of a load bearing area. Every effort should be made to lift folding seats to inspect fully. • SRS systems: If the SRS warning light indicates a fault the vehicle should be failed. Check any seatbelt pretension or load limiters as best you can; some cannot be tested because of accessibility. Any SRS system clearly missing or defective should be failed. Ask the question if the front seat is removed and the SRS light is on - pass or fail. Refer to 'Matters of Testing' which will show that a failure is the correct result • Child seats must not be disturbed in any way and the best examination possible should be carried out with this in mind. <p>Key learning points;</p> <ul style="list-style-type: none"> • Understand and interpret which seats need belts and which don't • Know how to correctly assess a seat belt • Understand what to do when faced with a child seat |



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| | <p>to vehicle type and age. Emphasize procedure for modified vehicles</p> | | <ul style="list-style-type: none"> • Class vehicles correctly for seat belt purposes • Side & rear facing seat do not need belts but if one is present it is testable • That you can assemble a foldaway seat provided you do not need tools to assemble it • Interpret correctly the SRS warning light |
| <p>15.15 – 16.00</p> | <p>Body, Structure & General Items: Some areas already covered under structural integrity and corrosion, 6.1 & 6.2 Engine mountings, fail criteria, seats and doors, test procedure and fail criteria relevant to vehicle type, age and modification. Registration plates and VIN test procedure and fail criteria relevant to vehicle type and age. Load security, spare wheel and carrier, speed limiter fitment to relevant</p> | <p>Power point presentation, inspection manual section 6</p> | <ul style="list-style-type: none"> • Emphasize that a sharp edge must be caused by damage or corrosion and likely to injure before it can be failed. • Tow bars are part of the test and must be examined for security, remember that corrosion within 12 cm of a load bearing member (suspension, steering, and brakes) will result in a failure. Clarify & explain the types using the manual • Check seats for security e.g. ensure that the seat is secure enough for the driver to retain control of the vehicle in all situations and that additional passenger seats are safe for use without potential injury. Ensure the seat adjusts as intended, but be aware not all seats actually adjust. Make sure all back rests are secure in the right position; electrically operated seats do not require a memory check. Check that driver and passenger doors can be opened and closed by the relevant control. • Emphasize that a sharp edge must be caused by damage or corrosion and likely to injure before it can • Vehicles with a separate chassis: The general security of the body to the chassis must be assessed. Even if body securing devices are missing, if the general security indicates no adverse effect on braking, steering or acceleration, then the vehicle should be passed. • Make sure number plates are not obscured by any fittings, including the tow bar. Numbers and letters that are clearly not correct in terms of height and width or that could be misread e.g. arranged in such a way to read a name or be offensive. Refer to the number plate examples in the manual. • Speedo: Make sure that the Speedo is in such a condition that it cannot be interfered with e.g. broken dial glass that could impair the correct reading of the road speed. Make sure the Speedo is illuminated so that the driver can read it at night. <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Understand how front & rear doors must open & close for MOT purposes • Understand & interpret the meaning of a modification • Correctly assess tow bars • Understand how to apply the correct test procedures to the driver's seat |



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| | vehicles, tow bars and speedometer issues, driving controls and glazing for class 5 vehicles only. | | |
| 16.00 – 16.45 | <p>Steering: Methods of inspection for steering controls, free play, play under load, static inspection, lock to lock and checks relevant to power steering. Emphasize correct fail criteria for all steering defects and most importantly, the correct methods of inspection relevant to vehicle positioning (hard standing or turn plates) Mention modified vehicles</p> | <p>Power point presentation, inspection manual section 2.1 – 2.3 & introduction section. Embedded film clips available</p> | <ul style="list-style-type: none"> • Steering wheel condition: Rejection should only be applied if the steering wheel is likely to cause injury e.g. chewed by a dog resulting in sharp edges which could injure the driver. • Reference to the note in section 2.1. RfR should be referred to. • Top Column Bush: It must be emphasized that the top column bush is the only testable bush in the column. Any other bush should be pass & advise. Pay attention to flexible joints to ensure failure is not concluded by misinterpretation of built in “flexing” of universal couplings or flexible joints, where some moving is to be expected. Make sure that an adjustable steering column is locked in position; you do not need to check that it adjusts but you must be satisfied that it is locked in one position. • Steering Lock: This can sound challenging, but in reality this check is effectively done when the ignition is switched on and off. If the steering lock is not present, this is acceptable provided the engine has an immobilizer. • With the road wheels on hard standing, check the free play in the steering system – you are looking for 75mm for non rack and 13mm for rack. You are not expected to measure this, it is visual judgment. • Free play: Emphasise that the road wheels must be on the ground. • Play under load: Emphasise that the road wheels must be on the ground. Get the assistant to rock the steering from side to side and examine as much of the steering system as you can. You may need to open the bonnet for this check. • It is acceptable for rear steering systems to be inoperative, but it must be emphasized that rear steered wheels must be substantially in the straight ahead position. • Static inspection: Emphasise that the road wheels must be on the ground. Explain using the manual. • Lock to lock: For this inspection the vehicle must be on unlocked turn plates. Use the manual to explain this. • Fluid Leaks: Fluid used in power steering systems is often low viscosity oils and in wet weather can, in some instances, be confused with rain water. The benefit of the doubt should be given to the presenter. • Locking Devices: These devices can take many forms and are not necessarily conventional. |



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| | | | <ul style="list-style-type: none"> • Power steering: With the road wheels on the ground. Observe al H&S eg hand brake applied vehicle in neutral. Run the engine and rock the steering. A visual check of the fluid level is all that is permissible. Reservoir caps must not be removed to check levels. Make sure you emphasise the notes section when delivering this. • A drive belt in poor condition at the time of inspection is not a reason for failure, provided at the time of test of it is fulfilling its function. • With the steered wheels on turn plates, turn the steering from lock to lock and feel for any undue roughness in the system. • In the manual where you are asked to check the power steering fluid level, you can only check an opaque reservoir. Removal of the cap is not permitted. • Electric power steering: Make sure the MIL light for the steering system does not indicate a problem. <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Power steering must be operative for all power steering checks • Correct assessment of steering on hard standing & turn plates • Correct use of turn plates • Correct testing technique on turn plates • Correct use of an assistant • Correct assessment of the power steering Mil lamp • Practical session must be used here |
| <p>Day 2 9.15 – 10.30 Tea 10.30 – 10.45</p> | <p>Suspension: Methods of inspection and fail criteria for all relevant spring types, relevant checks on all moving and static suspension components, differentiate between testable (part of suspension)</p> | <p>Power point presentation, inspection manual section 2.4 – 2.8 & introduction section. Embedded film clip available</p> | <ul style="list-style-type: none"> • This must be carried out over a pit or raised lift. Emphasise jacking procedures use the manual and supporting diagrams to explain this section. • Make sure that the system has enough clearance between the axle and the body so as not to foul. Remember no welding is allowed on suspension systems and components. • Leaf Springs: Clips to keep the springs from splaying, which are missing are not a reason for failure, provided the spring leaves are not splaying. • Note: 2mm for a 12mm pin, 3mm for a 25mm pin & 10% wear of a pin 25mm. No more than 6mm of side play – these are usually assessed by eye using the judgment of the tester. If in doubt, the benefit of the doubt should be given to the presenter. • Coil Springs & Torsion Bars: Coil springs that lower the ride height are acceptable, provided that when the vehicle is lowered down from the jacked up position no assistance is given to the spring by the tester to “locate it”. • Fracture, displacement, serious weakening by damage or corrosion are reasons for rejection. The same issues apply to torsion bars. • Note: seriously weakened means, in this case, failure highly likely. |



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| | <p>and non testable (not part of suspension) rear drive shafts. All relevant checks on wheel bearings, front drive shafts and universal joints, dampers and gaiters. Emphasize jacking procedure and correct use of turn plates. Mention modified vehicles. Small pinch bar maybe used to assist with this inspection</p> | | <ul style="list-style-type: none"> • Fluid Systems: The tester must be satisfied that the system is leaking before failure, otherwise a pass & advice should be issued. • Rubber/Synthetic Bushes: Movement in these types of suspension joint occur naturally. The bush should be so deteriorated as to be incapable of its proper function before it is deemed a fail. • Drive shafts: Front & rear drive shafts are testable use the manual to explain this. • Wheel Bearings: Explain this procedure using the manual. • A suspension system so stiff that movement is negligible. Show the slide with the various suspension systems. Ask question: at which points do you think these vehicles should be raised? • Round off this section with a practical in the test bay. Make sure candidates understand the correct use of turn plates and use of an assistant during steering & suspension examination. <p>Key learning outcomes;</p> <ul style="list-style-type: none"> • Correct use of jacking procedures at both front & rear axles • Correct testing technique must be clearly demonstrated • Correct use of an assistant • A practical element is essential in the learning of this section it can and should be incorporated with the steering checks |
| <p>10.45 – 11.45</p> | <p>Braking systems: Cover all aspects of test procedure for parking brakes, including electronic type, service brakes, hydraulic operation, full power braking, ABS and ESP</p> | <p>Power point presentation, inspection manual section 3 & introduction. Embedded film clip available.</p> | <ul style="list-style-type: none"> • Pay particular attention to the procedures regarding the Electronic Parking Brake (EPB). These can present problems in such that some require pre-conditioning – make students aware of this fact. Demonstrate, as part of a practical session, the testing of a conventional parking brake. Lift the lever into the applied position and show students that reserve travel must be present. Rock lever from side to side to ensure no excessive free play; the lever cannot be released in this action. • Check the condition and security of the brake pedal during your top side check. This is done by grasping the pedal to ensure its security. Also check the condition of the pedal rubber. Tell students that a smooth pedal rubber is acceptable but a smooth steel pedal with worn smooth anti-slip is a failure. • For hydraulic systems on vehicles fitted with diesel engines, the pedal will “creep” almost to the floor when held under pressure. This is quite normal on certain vehicle types. Encourage students to find out all the information regarding this issue. Remember to check servo |



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| | <p>systems, all hydraulic and mechanical components, auxiliary braking including electronic braking for class 5 only. Cover all aspects of brake performance testing using an RBT and decelerometer, cover plate testing if essential. Cover methods of calculating brake efficiency and imbalance for class 4 & 7 vehicles as well as all fail criteria and correct test methods. Mention modified vehicles</p> | | <p>assistance by emptying the servo and starting the engine whilst applying pressure to the brake pedal. On engine start, the pedal will move down slightly.</p> <ul style="list-style-type: none"> • Checking of the fluid level is restricted to an external check only; reservoir caps must not be removed. • Anti-Lock Braking & Electronic Stability Control Systems: Check that the warning light operates as stated for the vehicle system. Where a system has been removed completely, this is acceptable provided the whole system has been removed. Remind students that when the wheels are off the ground not to rotate the wheels with the ignition on, as this can lead to a fault being recorded on the system. • Braking Systems & Additional Braking Devices: Note a brake pipe reduced in thickness by 1/3 of its original thickness. Emphasize that scraping of brake pipes is only permissible if no corrosion protection is present that includes paint. This area has traditionally caused issues for pass/fail criteria. • Brake Performance: The manual states that you must ensure that a vehicle is in a fit condition for a brake check; this may include other areas, not just the braking system e.g. condition of tyres or suspension & steering components. • Roller Brake Testing: A practical demonstration is essential and candidates must be informed that various make and models of brake tester are used, dating from the very modern to the very old. The candidate must familiarize themselves with the type in use at their VTS. • Calculating Brake performance: This activity should be carried out in conjunction with the manual; it is best delivered in a classroom situation. Show easy examples of brake calculation. • Note - (Passenger vehicles with not more than eight passenger seats not including the driver's seat) on or after 01/09/2010 service brake efficiency is 58%, but for goods vehicles in Classes IV & VII after this date, the service brake efficiency is 50%. • Brake Efficiency Tables: Use of the stated values in the manual should be used here. MOT Testers will be able to: |
| <p>11.45 – 12.30 Lunch 12.30 – 13.00</p> | <p>Fuel, Exhaust & Emissions: <i>Correct test procedures for fuel & exhaust</i></p> | <p>Power point presentation, inspection manual section 7</p> | <ol style="list-style-type: none"> Demonstrate how to test different types of braking system State what standards apply to Class IV & VII Demonstrate how to calculate braking efficiency for Class IV & VII <ul style="list-style-type: none"> • Run through a roller brake test and invite debate, using Q&A techniques to check |



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| <p><i>systems and issues surrounding missing DPF for Diesel vehicles and Catalyst for petrol and Diesel, identifying vehicles by age and relevant emissions test. Carry out correct emission test applicable to available vehicle cover test methods and fail criteria. Issues with Diesel testing including pre checks, use of temperature sensor, low revs and no printout.</i></p> | | | <p>understanding.</p> <ul style="list-style-type: none">• Brake balance between axles should again be done on a flipchart giving easy examples. It is important to check student understanding.• Decelerometer: Show students a decelerometer; explain its use and all the safety precautions required e.g. 10/15 mph straight flat road devoid of traffic.• Explain the use of a plate brake tester.• Class VII: Explain the procedure for testing this class and give examples on the flip chart, referring to the manual for guidance.• It is highly recommended that this section is rounded off with an in depth practical session in the test bay. <p style="text-align: center;">Key learning outcomes;</p> <ul style="list-style-type: none">• Students must be able to carry out a practical roller brake test and interpret the results• Students must understand how to use a decelerometer & use it safely• Students must understand how to calculate braking efficiency & brake imbalance• Students must be able to use & understand the testers manual to find out the correct braking requirements for each class of vehicle• Students must understand the locked brake requirements that will result in a pass and their effect on balance requirements• Understand how to find the information and test electronic parking brakes <ul style="list-style-type: none">• Make use of the flow charts printed in the manual during delivery of this section.• The statutory and standard fitting of exhaust and fuel system components to various vehicle and fuel system types including catalyst & DPF. Identify all accessible exhaust and fuel system components.• In order to fail a vehicle for the absence of a catalyst or DPF if the “can” is present, the tester must have sufficient evidence to prove its deletion, especially if it passes the relevant emissions check.• An exhaust bobbin or mounting missing is a failure. Testers must be satisfied that the bobbin or mounting is missing and not just part of a different model specification e.g. some manufacturers produce vehicles with a full complement of exhaust fittings and mountings but may vary the securing method from spec to spec e.g. base model or GT. With dual exhaust systems where the system does not merge into one at any point, an average reading should be taken e.g. CO $6+4/2=5$. <p style="text-align: center;">Key learning outcomes;</p> <ul style="list-style-type: none">• Before any emissions test, the vehicle must be up to normal running temperature. This is vital |
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| | | | <p>for diesel vehicles fitted with cam belts.</p> <ul style="list-style-type: none"> • Use the gas analyser or smoke meter, following the correct methods of inspection as detailed in the inspection manual or, by following the prompts on the emissions equipment, referring to any relevant special notice if applicable. • Apply the correct standards when making the decision to pass, pass and advise or, fail either system using the correct section and criteria from the inspection manual in line with results given by the gas analyzer or smoke meter, whichever is applicable. Go through the flowcharts in the manual with the students explaining the various emission tests; point out a CAT test does not necessarily mean the vehicle has a cat fitted. • The trainer should demonstrate the use of the emissions tester and smoke meter to the prospective group of students, but must stress the importance of learning the particular emissions/smoke tester relevant to the students' place of work. • Follow the flow charts in the testers manual |
| 13.00 – 13.30 | <p>Drivers View of the Road: Correct MOI and RFR for Mirrors, washers and wipers. Explain the rationale for inspection of driver's view of the road, the issues to consider, emphasize "it is view of the road" cover procedure for checking bonnet closure.</p> | <p>Power point presentation, inspection manual section 8, SN 3-2014</p> | <p>Make use of the manual at each stage of delivery of this section.</p> <ul style="list-style-type: none"> • Show slide and explain from the manual the zones e.g. A – 290mm centred around the steering, B – the remainder of the swept area. Any damage behind a fixture e.g. interior mirror that would normally not be seen is not a reason for failure. 10mm of damage in zone A is considered a failure. In zone B, 40mm or a combination of damage adding up to 40mm is considered a failure if the view to the road is materially impaired. A temporary windscreen fitted is a RfR. • It is a good idea to take the students in the test bay and using some stickers or dry-wipe pen, place/draw obstructions in the swept areas. Invite students to assess this. • Wipers must be able to be stopped off screen (not necessarily park automatically). Design features must be taken into account e.g. split screen. • Washers must provide sufficient liquid to clear the screen use the manual to explain this. • Official stickers are those that are connected with road enforcement or crime prevention, and should only be failed if they seriously block the view of the road. • A sun visor that cannot be stored off screen and poses an obstruction of view on the driver's side is considered a failure; on the passenger side it would be a pass. • If a bonnet mascot is fitted and it obstructs the view it is not a reason for rejection under this section. Repaired screens are acceptable but must be assessed to the same criteria as original screens. • A defective wiper blade that manages to clear the screen is not a failure. Provided washers/washer can clear the screen this is a pass/pass & advise. • Any "toys" dangling from the interior mirror that would lead to failure may be removed at the tester's discretion, this includes navigation devices. • An indirect vision device maybe a camera. |



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| | | | <ul style="list-style-type: none"> • Only two mirrors need to be fitted e.g. offside, nearside or interior; one of which must be fitted to the offside (refer to chart in section 8.1 of the manual and the information section). • Goods vehicles of any age require two mirrors. If the interior mirror does not give any view to the rear because of; for example a bulkhead, the interior mirror is not a testable item and it will need a mirror fitted to each side of the vehicle. • A bonnet that cannot be secured in the closed position or a badly damaged or deteriorated bonnet locking device is a reason for failure. <p style="color: red;">Key learning outcomes:</p> <ul style="list-style-type: none"> • This inspection only applies to obligatory mirrors • View to the rear must be seriously impaired • Students must be made aware of the special notice regarding drivers view of the road • Students must understand that the view to the front is the road itself not the bonnet or sky • Know the standards regarding mascots mounted on the bonnet • Understand and apply the correct pass/fail criteria for washers & wipers • The secondary catch is not part of the test but the tester should advise if defective <p>Show students all documentation & demonstrate use of MOT Testing Service (MTS)</p> <ul style="list-style-type: none"> ▪ Key learning outcomes ▪ Students can identify VT20, VT30 ▪ Understand the difference between abort & abandon a test |
| <p>16:00 – 16:30</p> | <p>Retest Procedure: Cover retest procedure as quoted on the VT9a classes' sheet and the MOT Testing Guide, ensure delegates</p> | <p>Power point presentation, VT9a & Testing guide section B5</p> | |



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| | understand the correct procedure for using the PRS function. | | |
| 16:30 – 17:00 | Contingency Procedure: Explain the procedures for contingency testing in the event of a serious problem with the MOT Testing Service (MTS). Security of certificates, retention requirements and record keeping. Possible use of 3G/4G dongle in case of broadband problem | Power point presentation | Key learning outcomes; <ul style="list-style-type: none">• Correct use of contingency certificates• Identify<ol style="list-style-type: none">a) CT20b) CT30c) CT32 |
| | Practical Demonstration Test: Carry out a full MOT test including RBT and head lamp aim. Keep | Inspection Manual Section introduction Recommended test routine | Students must undertake a practical mock test & demonstrate competence in all areas |



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| | delegates involved with test at all times, ensure areas of common mistakes are emphasized e.g. steering and suspension checks, brake performance testing of linked brakes etc. and wheel alignment. | | |
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As stated timings are simply for guidance please modify to suit the class requirements. Time is allocated to the outgoing VTS system, when this is no longer required more time can be spent on current procedures.

The trainer has the autonomy to change the order of course delivery to suit class requirements providing, the agreed course content is covered.

Please do not show out of date DVD presentations.