

Testing Times

Issue 28

Welcome

Welcome to Issue 28 of Testing Times.

There have been some significant changes in roadworthiness requirements which apply to all vehicles. These changes are covered in this issue.

As always, if you have questions or comments about any of the articles or want to provide feedback, please email:

roadworthy@roads.vic.gov.au

This document constitutes a direction under CHAPTER 6 - TESTING AND REPAIR OF VEHICLES of the *Road Safety (Vehicles) Regulations 2009*.

Photographic evidence

As explained in VicRoads' letter, dated June 2011, licensed vehicle testers must take and store digital photographs of the vehicles being inspected during a roadworthiness test.

From 1 January 2012 all testers should have been meeting this requirement.

While the photograph requirement was implemented to ensure there is evidence that the vehicle was tested at the time and place specified on the certificate of roadworthiness, there are other benefits.

VicRoads' requirements are based on existing good practice by some testers who were using photographic evidence to protect themselves from claims of poor vehicle inspections, poor repairs or damage to clients' vehicles in their workshops.

What camera to use – at least five megapixels

To take good quality colour photographs that can be enlarged, you need to use a camera with at least five megapixels or more. The camera may be part of another device, such as a mobile phone, provided it has a five megapixel resolution or more.

It is recommended that the camera can also record video. This allows the tester to make a video of the vehicle or the vehicle's parts if desired, however this is not mandatory. A separate video camera might also be used for this purpose. As with photographs, any video footage should show the vehicle at the tester's premises, the vehicle's odometer reading, Vehicle Identification Number, Inspection Certificate Number and date and time of inspection.

Roadworthy certificate number

The roadworthy certificate number only needs to be displayed in the first and last photograph of a series for the first inspection. If the vehicle is found to be roadworthy on the first inspection no other photographs are required. Further photographs may be taken at the tester's discretion.

Second inspection photographs

If you are inspecting a vehicle for a second time, you must be able to validate, with a photograph that the vehicle was in your workshop for a re-inspection at the date and time specified. This photograph should show the roadworthy certificate number. Further photographs may be taken at the tester's discretion.

Keep photos for seven years

To cover any future inquiries, you must keep all digital photographs for at least seven years and provide electronic copies to VicRoads upon request.

More information

If you need more information, call (03) 9811 8380 or email roadworthy@roads.vic.gov.au

It is much better to get a second opinion from VicRoads or other testers than to make a mistake or be caught out.

Warning lamps

Change to roadworthy testing requirements

On 30 June 2011 VicRoads issued a letter that stated "If any warning light is illuminated on the dashboard then the fault must be rectified and when re-presented the warning light must be functional but not illuminated."

Contents

Photographic evidence	Page 1
Warning lamps	Page 1
Mirrors, tint and vision	Page 2
Brake test meters	Page 2
Penalties	Page 3
Window tint test equipment	Page 3
Re-trimming of seats with air bags	Page 3
LPG tank test marking	Page 4
Email addresses	Page 4
What is a bus?	Page 4
Older vehicle standards	Page 4
Structural course	Page 4

This requirement applies to lights that are connected or linked to safety systems. It does not apply to other systems such as entertainment units or purely comfort related items such as heated seats.

Safety systems on motor vehicles have evolved so that items that were previously optional are now being integrated into mandatory systems. The most recent example of this is Electronic Stability Control (ESC), which became mandatory on most passenger cars and people movers compliance plated from 1 January 2011, when first registered in Victoria.

ESC typically uses sensors that are also applicable to traction control and ABS so it is essential that those related systems are also operational. Some of those sensors may also supply information to the Electronic Control Unit (ECU) which controls supplementary restraint systems.

Testers should take care to ensure they understand the implications of any warning light being on.

Checking for faulty warning lights during a roadworthiness inspection

The simplest check that can be applied during a roadworthiness inspection is to verify that there are no fault indicating warning lights on the dashboard that are illuminated when the engine is running.

You will need to familiarise yourself with the meaning of some of the less obvious warning lights. You will also need to determine why any light remains lit. For example, in the illustration below, the seatbelt warning lamp is illuminated but it will remain on, even if the engine is started, because the driver's seatbelt may not be done up.



Seatbelt warning lamp lit

When doing a roadworthy inspection, if a safety related warning light does not automatically go off after you have tried to address the issue, you have no option but to reject the vehicle.

Mirrors, tint and vision

A rear window tint which has lifted, peeled or bubbled may reduce a driver's rear vision and should be rejected.

The simple rule is that if the mirror can't be used effectively for its designed purpose because the driver's view is blocked, then it isn't effectively a mirror so the vehicle doesn't comply.



Likewise, the door open warning lamp will not go off until all doors and hatches are properly closed.

Brake test meters

Accelerometers are devices that measure the rate of change of velocity. When incorporated into a brake test meter they can also measure the deceleration rate (how quickly a vehicle slows down).

Testers use brake test meters to diagnose the effectiveness of braking systems, i.e. a performance test.

There are some meters available that were manufactured in accordance with specifications set down by the RTA

in New South Wales. Part of the specification included a pass or fail notification based on New South Wales' roadworthiness testing requirements which is based on an average deceleration rate.



Translock Brake Decelerometer



Turnkey Instruments Brake Decelerometer

The Victorian requirement is different and uses a peak reading, rather than an average reading to determine the brake effectiveness. The difference between the two is important because the tests are done differently. If you follow your training manual you will see that the Victorian test method is designed to minimise the risk of wheel lockup and potential skidding.

As a Licensed Vehicle Tester, you should refer to your training manual. This explains how you should start braking gently and then build up the pressure, finishing the test just before the vehicle stops. It will therefore be possible to get a good peak reading and still see FAIL on the average reading section of the printout.

The purpose of the brake test

The purpose of the brake test is to see if a vehicle's braking performance is consistent with your experience of other vehicles of a similar make and model. Most vehicles will achieve 0.6g (light vehicles) with the rear brakes inoperative, so you should look for a lower than average reading for that make or type of vehicle. Lower than expected readings indicate that something is wrong. It is important that the brake tester is seen as a diagnostic tool and not just a pass/fail gauge.

When the brake test is completed, a printed copy of the test result showing the peak deceleration must be attached to the book copy of the test report.

Similarly, if a roller brake tester is used, a printed copy of the test results must be attached as specified above.

Penalties

VicRoads makes determinations that result in tester licence cancellations, suspensions and warnings as a result of sub-standard testing. This applies to testers who fail to comply with administrative requirements. From January 2010 to March 2012, VicRoads made 69 determinations, resulting in 15 outright cancellations and 54 suspensions to licences.

This shouldn't be necessary. The ideal situation is an environment where sanctions don't need to be applied.

You should refer to the insert from Issue 27 of Testing Times, titled "When it goes wrong" to familiarise yourself with the complaints handling process. Visit vicroads.vic.gov.au/testingtimes to view Issue 27.

A window accessory which is becoming increasingly popular is slip-on shade cloth. This is commonly used to replace internal stick-on window shades. Slip-on shade cloth is OK, as long as it is fitted to side windows behind the "B" pillar. Slip-on shade cloth is not seen as window tint, however it can inhibit vision.

Window tint test equipment

Portable tint meters

VicRoads has trialled the Laser Labs Model 200 tint meters which don't need cords connecting the two parts.



Laser Labs Model 200 Tint Meter

These meters make it easier to check deeper windows or glass with graduated tint because they don't require a physical connection between the inside component and the outside component. This makes it particularly easy to check rear windows and side windows on buses.

Re-trimming of seats with air bags

Further to the article on seat mounted air bags in Issue 27 of Testing Times, there have been a number of instances reported where seat trims were repaired or replaced without taking account of the air bag.

VicRoads has become aware of two issues:

- using a non air bag design trim so there is no provision for the bag to "burst" through the trim; and,
- repairing a "burst" trim using the wrong stitching materials and stitch patterns.



Seat Stitching for Air Bag Deployment

The airbag's effectiveness is lost if it doesn't work properly and either of these faults can result in serious injury to the seat occupant if the air bag is incorrectly deployed. In the illustration below, the line of stitching where the air bag tag is attached is stitched internally and as you can see, it is very difficult to see the nature and condition of the stitching.

However, for this particular model, if that stitching had been reinforced externally, like the vertical stitching, then you could be sure it is not original and would need following up.

If you are dealing with automotive upholstery trimmers make sure they understand these two issues and be suspicious of any re-trimmed seats you come across. Most seats with air bags have tags attached. If there are no tags where you expect to see them, this could indicate that the seat cover has been altered.

LPG tank test marking

All authorised LPG tank testers have their own unique identifying number which must be marked on the tank they have tested along with the test date. Prior to 2007, testers could use their own logo and incorporate their unique identifying number into this logo.

However, VicRoads has received reports of LPG tanks that do not include the testers' accreditation markings.

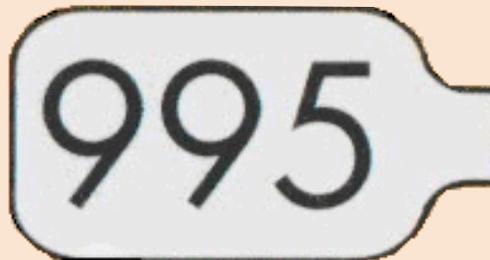
All tank testers must now include a standard logo (image of a gas bottle on its side as shown below) containing their three digit accreditation number.

Note that the logo and test information must not be stamped on the pressure-retaining portion of the tank, but should be stamped onto a permanent attachment to the tank in a position where it will be visible when the tank is installed in the vehicle.

If for some reason direct stamping cannot be done, the information may be marked on a metal tag or plate permanently fixed to the sub-compartment or mounts or on a self-destructing adhesive metallic label.

Where the information is marked on a plate or label, in addition to the logo with the tester's number and the date of the test, the serial number of the tank must be included to create a positive identifying link to the tank.

As the identity of the tank tester is a mandatory requirement, any LPG tank with a current date stamp but no tester identification should be rejected as it is quite likely that the tank has not been properly or legally tested.



Email addresses

If you haven't received information from VicRoads by email, here are some possible reasons:

- We don't have your address;
- We have the wrong address; or
- Whoever reads your emails isn't passing the message on.

Please check your details on the website at:

vicroads.vic.gov.au/lvt

If your details are incorrect, please email us at:

roadworthy@roads.vic.gov.au

Please make sure you quote your tester number in your email.

It is important that you update your email address details, as the next edition of Testing Times will be sent out by email only.

What is a bus?

A bus is a vehicle with 10 or more seats, including the driver's seat.

Some testers are testing what they think are vans or light commercial vehicles, when they are actually buses. This can have serious consequences for a tester if something goes wrong.

Older vehicle standards

VicRoads Vehicle Fitness receives the occasional call for help from testers who have to inspect a very old car.

Wooden spoke wheels and two wheel brakes can be a bit daunting to inspect when compared to modern vehicles.

Standards for older vehicles

The standards that apply to older vehicles are those that applied when the vehicle was first built.

For example, a 1910 model T Ford does not need front brakes, a high beam headlight or indicators to meet roadworthy standards.

When assessing the condition of an older vehicle, you should apply your trade knowledge to make accurate decisions about the vehicle's roadworthiness.

If an older vehicle has substantial or significant modifications, the tester should use their best efforts to test the vehicle for compliance with any guidelines or vehicle standards information sheet applicable at the time of modification.

If you are not sure, please call VicRoads Vehicle Fitness on (03) 9811 8380.

Structural Course

All roadworthiness testing mechanics are reminded that they must have completed the structural awareness training by July 2013. If you leave it till the last minute you won't be able to get on a course and that will prevent you from testing.

Ordering VicRoads publications

All LVT Roadworthy Certificates (RWC) and Vehicle Identity Validation (VIV) books are now available by contacting VicRoads on (03) 9854 2782.