



Testing Times

Issue 10

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Welcome

This is the first edition of Testing Times that is subject to the GST. But don't worry, it won't cost you any more – it's still free and 10% of nothing is still nothing. By now you will all have probably submitted at least one GST Activity Statement (some of us are sure glad the Tax Office extended the deadline) and this means your financial books are up to date and correct, doesn't it!



However, are your LVT books and records just as up to date and correct? And how often do you do spot checks/audits on your LVT paperwork? Some advice on this follows.

Simple Audits

Just like the Tax Office, VicRoads expects that you keep your records up to date and the Road Safety (Vehicles) Regulations 1999 requires that certain documents must be completed within a set time.

For example, Roadworthiness Certificates (RWCs) must be filled in on the day the inspection is carried out (also see item below).



Unless you have good records you may be missing out on GST credits or paying more tax than you need to. You may also leave yourself liable should there be a dispute about some work you did (or did not do) or if some of your RWCs should go astray (gasp!).

It is therefore worthwhile doing some simple cross checking. Every now and then, select a few issued RWCs and check them against your register and your job cards. Do they match up? Look at the dates they were issued and compare these with the dates the vehicles were at your premises. At the end of some days you should look at the serial numbers on all the certificates issued for that day and check that each is recorded in the register and you have job cards for each vehicle. If not, either you are not keeping good records or worse still, some of your RWCs are somehow being issued for vehicles you did not inspect!

RWC to be completed at time of inspection

As indicated above, the regulations require that the RWC must be completed and signed on the day the test is carried out. This is essential for the integrity and validity of the whole Licensed Vehicle Tester scheme.

Some licence holders, particularly those that are also Licensed Motor Car Traders are tempted to delay filling out the RWC until the vehicle is actually sold either for their own convenience or to save the need for a re-test if the certificate has expired. The actual date of sale may be some considerable time after the inspection and the vehicle may no longer be roadworthy. Compliance with this aspect of the requirements is easy to check and any tester found not complying risks licence suspension or cancellation.

In this issue:

Simple audits	P1
RWC to be completed at time of inspection	P1
Engaged nuts	P2
Looking for cracks	P2
Cracks in VS Commodores	P2
"They don't make e'm like they used to"	P3
Bodgey repairs - rust	P3
Bodgey repairs(cont'd) - Insurance write-offs	P4
Seminar series	P4
VicRoads website	P4

Engaged nuts

The replacement parts bin at your Ford dealer has upper inner control arm bushes with different length studs for EA, EB & ED Falcons. The standard (short stud) version is fitted as original equipment (OE) without shims. However, on the longer stud version, the centreline of the bush to the mounting face is shorter than the OE part producing negative camber on an undamaged vehicle. Shims are also provided with these bushes to enable a range of adjustment to correct for minor distortion in the front end. Ford advises that the standard short stud OE bushes may also be shimmed if required but for both the long and the short stud parts, the fixing nuts must fully engage the stud with at least one to one and a half threads protruding.

Several instances of the standard bush being shimmed to the extent that the studs do not protrude through the nuts have been seen.

The bush in the picture was found on a taxi and clearly shows that with the shims used on this vehicle the nut would only have a few threads engaged.



This is particularly dangerous as, apart from the risk of the thread stripping, the nuts are required to be self-locking (either “crimped thread” as in the example shown or “NyLock” type as supplied by Ford with the long stud version of the bush). Self locking nuts require the studs to project right through if they are going to work and ensure they do not loosen in service.

If the short studs on the OE part will not protrude beyond the nuts with the number and thickness of shims proposed then the bushes should be replaced with the long stud version. If these do not result in the studs protruding through the nuts when the shims are in place then the vehicle structure or suspension is excessively distorted and requires repair.

As a general rule, a vehicle is unroadworthy if any nut does not engage for at least the same thread length as provided originally by the vehicle manufacturer. Therefore, when checking these particular Falcon models (especially taxis) attention should be given to the nut engagement length for the upper inner control arm bushes.

Looking for Cracks

It is common knowledge that structural cracks develop in particular places on certain models. For example, some Commodore models are known to develop floor pan cracks around the front seat anchorages and even “Blind Freddy” can see these cracks because they are out in the open in a usually relatively clean area. However, cracks in other places are not so easily seen even if you are specifically looking for them. They can be even harder to see if you are not specially looking for them and even harder again if you are working in the dark.

And working in the dark is what some testers are doing.

At some tester's premises the standard of lighting provided is absolutely medieval. It is so poor that it would be hard enough reading newspaper headlines let alone seeing cracks.

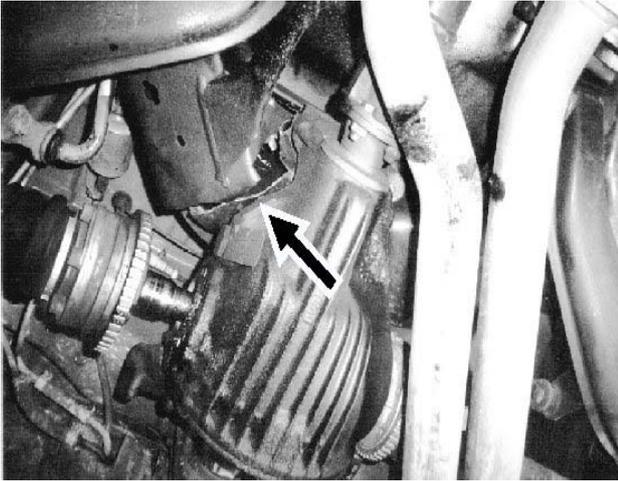


Good lighting in your inspection bay is essential and this usually means much more than the simple hand held lead lamp although a good hand held lamp is also useful when you have spotted something and want a closer look.

Remember, when considering whether you have carried out an acceptable inspection or not it is assumed that there was adequate lighting in the inspection bay. If you have not provided adequate lighting then you only have yourself to blame for the consequences if you miss cracks that you should have seen.

Cracks in VS Commodores

While we're talking about cracks, there have been several reports of cracks in the rear cross members of VS Commodores. It's apparently more common on the V8 models. The photo on the next page is from the RTA NSW web site. Other instances may not be as graphic and obvious so particular attention should be paid to this area when inspecting these vehicles.



Cracked rear crossmember on a VS Commodore

“They don’t make e’m like they used to”

Well actually this is getting less true in some areas as some of the old construction techniques are coming back. In the early 1900s car bodies were often made from pieces of wood laminated or bonded together with glue. But glues (or adhesives) have come a long way from the products of the “knacker’s yards” and high tech adhesives are now being used more and more in the structural components of modern cars. Laminated windscreens have been bonded in on passenger cars for many years now and this adds significant structural strength to the body. Commodores have had “bonded in” firewalls for several years and door skins and some other body components are now fixed with adhesives as this is tidier and stronger than spot welding. In addition to the bonding of door and hood skins on the AU series II Falcon, this vehicle also has a laminated steel firewall specially spot welded into the structure. Laminated steels are also finding their way into other vehicles and this and the trend to bonding of components is likely to increase.

All this gluing and use of special laminated steels makes for a stronger, lighter car and reduces noise but does create some problems in the crash repair industry. **What can be done on the production line is not so easy to do in a panel shop.** One of the advantages of bonding is that it can distribute the load more evenly and provide controlled flex whereas some of the alternative fixing methods used in the “after market” cannot. Consequently, crash repairs may not result in a vehicle anywhere near as good, safe or strong as the original.

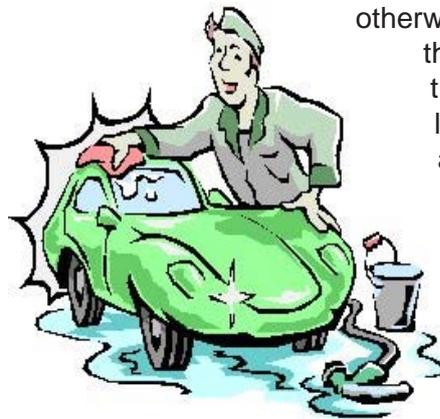
So what does this mean for you when you are doing a roadworthiness inspection on a modern car that’s been repaired? Well, if from the repairs it is very obvious that it has been in a crash then it is likely that the structural repairs have not been well done either. If you are at all in doubt about the quality of repairs you should seek the opinion of a reputable panel shop. Your area supervisor can provide you with an *Accident Damage Repair Report* form that is suitable for this. However, even the panel shop can only say if the repairs are consistent with current industry practice. They cannot guarantee that the vehicle is as good as new.



Bodgey Repairs

1. Rust

You will have noticed that some models always seem to rust in the same place. This is usually because of poor design and you should always check these known places. However, rust in all sorts of other places is often covered over with body filler and re-painted or otherwise hidden and the car polished so that from a casual look the vehicle appears OK.



But a casual look is not what you should be doing for a roadworthiness inspection!

Some attempts at disguising rusted areas are very good but even so there are usually some telltale signs – bubbled or blistering paintwork, staining around fittings or drain holes, etc. When there is any evidence or telltale signs for rust or strange looking repairs you should investigate further. This does not mean you are expected to poke holes in or bash areas of the vehicle but light tapping of suspect panels will reveal whether there is sound metal behind. In some cases simple removal of trim or lifting of floor mats can expose the “other side” of the suspect area. Areas covered with new sound deadener or areas not normally covered with sound deadener that are now covered should also be treated with suspicion.

Bodgy Repairs (cont'd)

2. Insurance Write-offs

Because of the way cars are now built and the complexity (and cost) of making a good repair, a vehicle may be an insurance write-off for what appears on the surface to be relatively little damage. It is not uncommon for such vehicles to be purchased at auction and "repaired" in someone's back yard. **Watch out for these!** The repairs are often little more than knocking it roughly back into shape and replacing some panels and patching others with body filler. The resultant vehicle may look OK but its handling or braking may be poor or it may not have adequate structural integrity. Any evidence of a vehicle having been an insurance write-off or having been "cut and shut" should start the alarm bells ringing loudly.

**Ring-ring!
Ring-ring!
Ring-ring!**



This may also be the sound of the cash register as, in addition to a licence suspension if obviously poor and unsafe repairs are missed, purchasers are frequently successful in forcing the tester to pay the cost of fixing the vehicle.

As with rust, areas covered with new sound deadener or areas not normally covered with sound deadener that are now covered should be treated with suspicion. Excessive use of body filler, extremes in front end adjustment, out of line axles, bent or damaged steering and suspension components or poor fitting panels are indicators that further careful inspection is needed.



As mentioned earlier, where you have any doubt as to the quality of the repairs you should seek the opinion of a reputable panel shop and get them to complete an *Accident Damage Repair Report* for you.

Seminar Series

Did you know that VicRoads is still running its series of LVT seminars at various locations in city and country Victoria? You may not have realised this as they are now being organised on behalf of VicRoads by the Institute of Automotive Mechanical Engineers with some assistance from the Victorian Automobile Chamber of Commerce. However, they are still VicRoads seminars and VicRoads' LVT supervisors are still doing the presentations. So keep your eye out for advice of one near you and go along.

It is surprising how much you can learn no matter how long you have been in the LVT business and many testers leave after a seminar realising just how much they had forgotten.

VicRoads' web site

For the latest Vehicle Standards Information (VSI) sheets or that answer you need in a hurry don't forget VicRoads' web site. Just get on the internet and type in

www.vicroads.vic.gov.au/road_safe

This takes you to the Road Safety page and when it opens you can go directly to the vehicle section by clicking on the [**V**] in the strip of letters across the page.



Fee changes

Another reminder. The fee for the annual renewal of your licence is now \$15.50. Also, if you change your testing premises or want additional premises on your licence, a fee of \$78.00 now applies.

And don't forget, a book of 100 Roadworthiness Certificates now costs \$105.00.

Note:

*All supplies can be obtained from
VicRoads' Bookshop
Ground Floor
60 Denmark Street
KEW VIC 3101*

Phone (03) 9854 2782 or Fax (03) 9854 2468

Open weekdays between 8.30am and 4.30pm