



Kia ora

It's been another year of unpredictable and unprecedented events. I want to thank everyone for your dedication to keeping vehicles safe on our roads, despite the hurdles COVID continues to throw us.

There's a couple of highlights for me this year that I want to mention briefly. The first was working together with our service providers to provide advice for the Ministry of Transport on COVID extensions. It makes a huge difference when we're all on the same page and working together to get results. The second highlight was introducing the new risk framework for in-service inspections and the 'Compliance with Advisory' rating which you can read more about in this issue. This new approach means we're spending our time on what matters most - the things that impact safety.

Finally, I hope you're taking some time out this summer, to have a break and look after your health and wellbeing.

Nicole

### WoF

## Misidentified vehicles and the wrong vehicle getting a WoF

We're seeing an increasing number of WoFs being issued to the wrong plate number due to vehicle inspectors (VIs) not correctly identifying the vehicle they are inspecting.

The main reason is the VI is getting the VIN from an external source (eg CarJam) rather than the vehicle itself, as required.

This creates problems for everyone:

- the owner of the correct vehicle (whose car should have but doesn't have a WoF)
- the owner of the vehicle incorrectly issued a WoF (whose car will now have an incorrect WoF expiry)

- Waka Kotahi (who must spend time manually amending the records)
- the VI and the WoF site (who have to also spend time correcting their records and explaining themselves).

In future, we'll be visiting sites issuing misidentified WoFs because they've used VIN information from a source that is not the vehicle. This may result in an infraction notice being issued, so please ensure you check the VIN correctly to prevent this from happening.

## WoF quiz

- 1 What at class of vehicle is this?

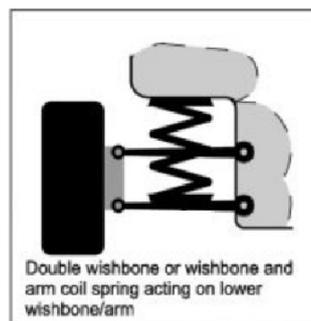


- 2 No corrosion damage is permitted within how many millimetres of a suspension mounting point?

- 3 What type of dipped beam pattern is this?



- 4 Where is the correct jacking point?



- 5 The tyres on an axle of a light vehicle can differ by no more than how many load indices?

Answers are on the last page.

### Recent VIRM amendments

As always, make sure you keep up to date with the latest VIRM amendments and update your QMS/PRS master records.

Go to the [VIRM amendments page](#) to make sure you haven't missed any changes.

## What is 'excessive' when it comes to an in-service inspection?

We're often asked what the term 'excessive' means as it's used throughout the VIRM. There are also references like 'beyond manufacturers specifications' which, as we know, can vary substantially between vehicle makes and models. So how can a vehicle inspector determine what is excessive? Over the next few issues of Inspection news we'll provide you with more information, including examples. In this issue we are looking at brake friction materials.

During a brake inspection, it can be extremely hard to determine if the wear you see at the time of inspection is excessive or beyond manufacturers specifications. Components are often hidden by other parts and difficult to see - even if the manufacturer has provided an inspection port. Excessively worn components should show up in the brake test but this doesn't always happen, so here are some key things to remember.



This is an example of a worn pad (removed from the vehicle for the photo) that is within manufacturers specifications and will most likely pass the brake test. However, this pad wouldn't last 12 months until the next inspection so a note or explanation to the owner should be made.

As a general rule, friction materials (including brake pads and shoe linings) wear much faster as they get thinner, so for in-service inspection purposes a minimum thickness cannot be used to determine pass or fail - the brake performance must meet the requirements. However, since brakes may become noncompliant between inspections, a note should be made on the check

sheet and you should mention the issue to the vehicle owner customer if you can see the material is worn down to approximately these amounts:

Disc pads: 1.5 - 3mm

(motorcycles 1-1.5mm)

Shoe linings (bonded): 1.5-3mm

Shoe linings (riveted): 1.5-2mm above the head of the rivet

### Repair

## Setting up support for repair certifiers

A key outcome of our 2020 roadshow to visit repair certifiers was the commitment Waka Kotahi made to ensuring the industry received the support they needed. Repair certifiers play a critical role in the safety of the land transport system by ensuring that damaged vehicles are repaired to within manufacturing tolerances, so they are safe to go back on the road.

On 18 August, Waka Kotahi signed a three year contract with Specialist Certification Management (Repair) Ltd (SCM Repair) to support repair certifiers. SCM Repair operate under the established and successful Low Volume Vehicle Technical Association (LVVTA). The LVVTA ensure all modified cars are designed and constructed so they can be safely operated on New Zealand's roads, so are well versed in managing and meeting regulatory compliance.

Since the contract was signed, SCM Repair have met with all certifiers and are prioritising a work programme. Kane Patena, Director of Land Transport says, 'We're really impressed with the progress they've made and our Safer Vehicles team are now working on a plan to transition the support aspects of our repair work to them.'

'Working with SCM Repair is an example of understanding our capabilities and recognising when there is a better way to fulfil our commitment to stakeholders', says Kane. Well done to all involved for living out the Waka Kotahi value *kia māia* (be brave) and doing things differently.

## Cargo barriers: VIRM change to modifications that don't require LVV certification

Cargo barriers are fitted inside of a vehicle to help prevent cargo from moving around, limiting the risk of cargo impacting occupants in a crash or rapid stop.

Recently it's come to light that there are approximately 4000 Hyundai i-Load vans with cargo barriers fitted that were not certified. The barriers don't meet the technical requirements for LVV certification as they're less than 300mm from the back of a seat that doesn't have a head rest.

Removing the cargo barriers is not a suitable solution as they provide a significant safety benefit to the vehicle occupants (removing them may increase the risk of injury). There are other economic options available that remove the safety risk of a head hitting a hard surface.

These options are detailed in the **General vehicles 7-7 Interior impact** section of the VIRM. The modification threshold table has been updated and we've added images to explain the options.



Suitable impact absorbing padding on a solid cargo barrier



Collapsible mechanisms

## Roller brake machine testing of cardan shaft brakes

Transmission mounted or driveshaft park brakes, more commonly referred to as a cardan shaft park brakes, are found in many light trucks and some off-road vehicles such as telehandlers on building sites. They are fitted to approximately 55,000 light commercial vehicles in New Zealand.

There have been incidents of the park brakes failing, causing vehicles to run away, which led Waka Kotahi to commission **independent research** to find out if roller brake machines could be used to test vehicles fitted with cardan shaft brakes. The cardan shaft park brakes on two trucks were tested with a simulated slope (pull) test and in a brake roller machine and no damage to the trucks' driveline and park brake assemblies was found.

This builds on earlier work which identified in-service performance faults with transmission mounted park brakes.

The next step for Waka Kotahi is to continue testing using a wider range of vehicles and roller brake machines. Testing was carried out at VINZ Palmerston North at the end of November and another round of testing is planned for early next year. This will inform decisions on whether to mandate roller brake testing for cardan shaft brakes.



## CoF

### Brake testing protocol update

The **Heavy vehicle brake testing: CoF and entry certification brake test protocol and procedure** has been updated. The brake testing protocol contains the procedure for testing a vehicle fitted with a Cardan shaft park brake during entry certification and in-service CoF B inspections.

Heavy vehicle brake testing is a vital part of the inspection process, which relies heavily on the brake testing protocol being followed and adopted by all CoF B issuing partners and entry compliance certifiers. The protocol also provides guidance to the heavy vehicle

brake certifiers engaged in certifying any heavy vehicle brake system modification.

This update includes an expanded explanation of the 'stall test method', which must be used where the vehicle is fitted with a cardan shaft/transmission park brake. Waka Kotahi is putting a lot of work into cardan shaft brake safety, including ongoing testing and commissioning of independent research (see article on previous page - *Roller brake machine testing of cardan shaft brakes*).

## WoF CoF

### Pulling together during tough times

We want to give a shout out to people at two vehicle inspection sites who went above and beyond when tough times hit.

Northland COF Ltd in Kaikohe provides certificate of fitness (CoF) services for heavy vehicles across mid-Northland. Recently one of their vehicle inspectors sadly passed away and a second was injured during a fall and is off work for two months.

Inspection assistant Kire Kire Tahere stepped up by studying the VIRM before work each day to get his vehicle inspector authority for warrants of fitness - passing his test first go. Replacing a CoF B inspector is difficult and owners Iain and Kirsten Forrester reached out to others in the industry for help.

Waka Kotahi wants to acknowledge Brent Butler and Blair Drinkwater, of Commercial Diesel Limited (Warkworth, Whangarei and Awanui) who agreed to lend heavy vehicle inspectors Shaun Lambert and Shane Parker to Northland COF Limited. Shaun and Shane take turns helping out.

'We may be competitors most of the time, but keeping the big rigs rolling safely for Northland is vitally important for our communities. Shaun and Shane were happy to help,' Brent says. It's great to see that, when needed, there are people who can see the big picture to keep the wheels turning. It's a good reminder that we all have the same goal to keep the land transport system moving safely.



Pictured at Northland COF recently (L to R): Iain and Kirsten Forrester, CDL COF B VI Shaun Lambert, new VI Kire Kire Tahere, and Morgan Forrester (Office).

## Improving compliance outcomes

Safer Vehicles introduced a new risk matrix in the middle of the year that improved review outcomes for inspecting organisations and vehicle inspectors.

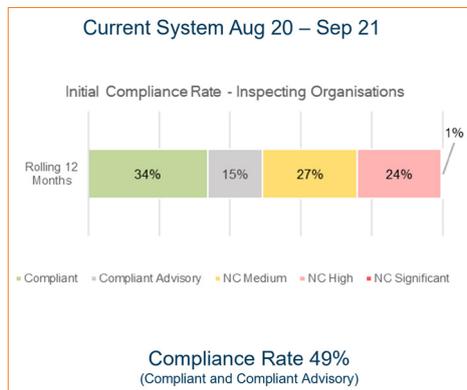
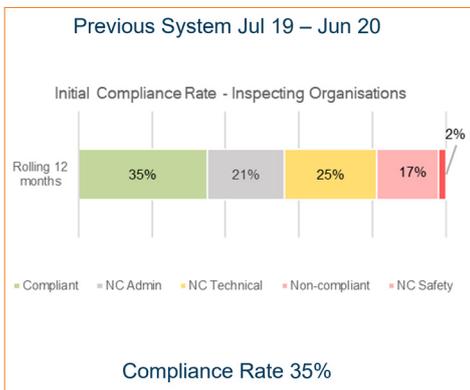
The risk matrix promotes consistency in reviews and reduces the time required from all involved for follow-up visits. It also recognises that some non-compliant activity ie unsigned management records, doesn't impact the safety of vehicles.

A new outcome was introduced called 'Compliant with Advisory (CWA)'. CWA allows an inspecting organisation to sort out identified issues and forward a copy of their records to the Safer Vehicles team within an agreed time frame, without being marked as non-compliant, as they were previously. It also allows for on-the-spot advice/guidance to be given to vehicle inspectors for areas of minor non-compliance that don't impact safety. The review period of three years remains in place and the outcome is only escalated if the requested action isn't carried out.

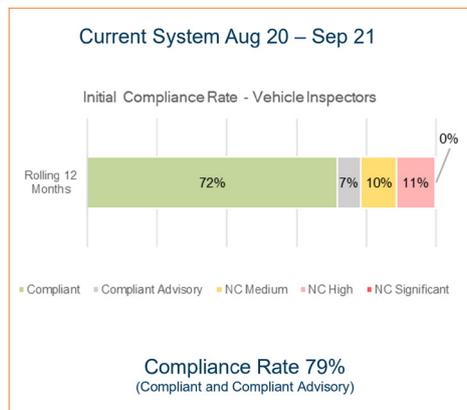
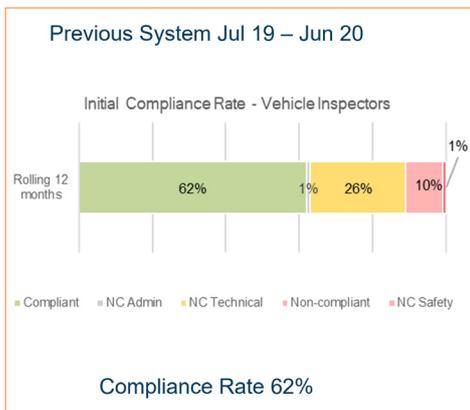
The review process conducted by Certification Officers remains the same, and outcomes range from Compliant, Compliant with Advisory, Medium Non-Compliance through to High Non-Compliance or Significant Non-Compliance.

As seen in the graphs below, since the risk matrix and the CWA outcome was introduced, compliance has increased and everyone is welcoming the fair results.

### Inspecting organisations



### Vehicle inspectors



## Heavy entry certification update

### QMS is on the way

In early 2022 we'll be introducing the quality management system (QMS) to heavy vehicle inspecting organisations.

This will align heavy entry certification with other review activities. There will be a 'bedding in' process where Certification Officers carry out practice reviews so that all parties can become accustomed to the new process and its requirements.

### Heavy vehicle certifier application and assessment process

We'll also be introducing a new application and assessment process for heavy entry vehicle certifiers early next year. This aligns heavy entry certification with our other vehicle certifier and inspector processes. We've started discussions with IOs about this to ensure a smooth roll out.

## Ordering labels and forms over Christmas and New Year's

Blue Star will close on Friday 17 December 2021 and will reopen for orders on Wednesday 5 January 2022.

If you place an order from Monday 20 December 2021 onwards, it'll be dispatched on Wednesday 5 January 2022.

If you need an emergency order after 17 December, call 0800 504 704 between 8.30am and 5pm (excluding statutory holidays).

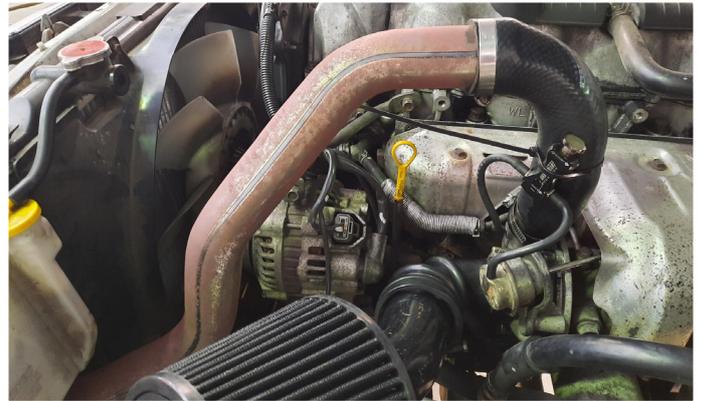
Make sure you order now to cover the holiday period. Due to high demand before Christmas your order could take a couple of days longer to arrive.

# What the...!

If you come across anything a bit dodgy, send in some pictures with your thoughts and tell us how you dealt with it. Just email [vehicles@nzta.govt.nz](mailto:vehicles@nzta.govt.nz) with 'Inspection news' in the subject line.



Mad Max might like this one.



And the best part is – if the tailpipe falls off the exhaust, there's already a spare!

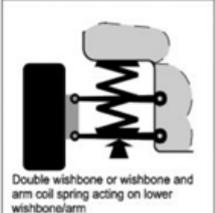


Na, I'm sure there won't be a problem with blow-by if I fit a turbo.



Hard to complete the structural inspection.

## WoF quiz answers

1. Class MA  
**Introduction 3**  
**Inspection and certification process: 3-2**  
**Identifying the vehicle class**  
Table 3-2-1
  2. 150mm  
**9 Steering and suspension: 9-1**  
**Steering and suspension systems**  
Reason for rejection 10b
  3. Modern symmetric dipped beam  
**4 Lighting: 4-1**  
**Headlamps**  
Figure 4-1-2
  4.   
**Technical bulletins (general) 4: Jacking points for common suspension types**
- 2 load indices  
**10 Tyres, wheels and hubs: 10-1**  
**Tyres and wheels**  
Reason for rejection 4

For general enquiries or contact information about Waka Kotahi please visit [www.nzta.govt.nz](http://www.nzta.govt.nz) or email us at [info@nzta.govt.nz](mailto:info@nzta.govt.nz)

We welcome your feedback. Please send comments to: Vehicle Standards team, Waka Kotahi, Private Bag 6995, Wellington 6145  
Email: [vehicles@nzta.govt.nz](mailto:vehicles@nzta.govt.nz)

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