



## A roadmap for truck replacement parts recognition

civil courts and comes up from time to time, particularly when a crash occurs in which brake fade or poor stopping distance are factors. Drivers often report poor stopping performance as a factor in crashes and the operator and/or workshop will have to justify their prior actions.

There is little chance that a replacement parts certification scheme will be introduced by the NHVR in the next five years. There are other priorities and this domain is complex. It is probably not within the NHVR's scope to start regulating replacement parts. The NHVR will probably rely upon CoR sanctions and civil challenges, however these are reactive measures that are unlikely to change practices with replacement part supply. Workshops that install a non-genuine safety-critical replacement part are modifying the vehicle and the procedures and sanctions prescribed in Section 3.3 of the National Heavy Vehicle Law apply. As use of non-genuine parts can constitute a modification, the recognition of parts can be dealt with within Vehicle Standards Bulletin No. 6, the National Heavy Vehicle Modification Code of Practice. It is time to sort out the replacement-parts mess. Government cannot do it all and industry associations should be part of the solution. A risk-based approach is appropriate.

### RISK CLASSIFICATION OF REPLACEMENT PARTS

A risk-approach can be used to classify replacement parts. We should start by sorting out the status of high-risk parts. Here is my ranking:  
High risk – safety or compliance. A single failure or non-compliance could cause a crash or injury.

- Foundation brake lining and actuator changes
- Steering system links, pins etc.
- Wheel rims
- Mechanical coupling parts
- Integral suspension seats
- Drawbars
- Towbars
- ABS/EBS/ESC brake systems

Medium risk – safety or compliance.  
A single failure could make the vehicle unroadworthy or non-compliant.

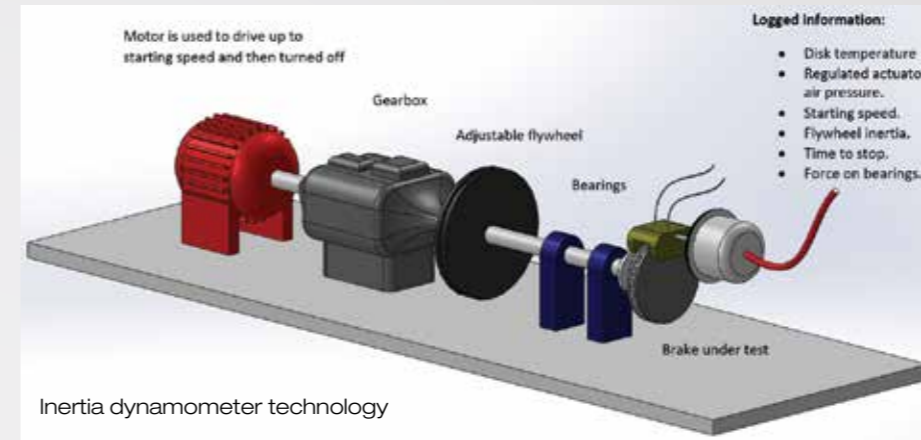
- Retreaded and new tyres
- Wheel guards and spray flaps
- Signal lamps and headlights
- Glazing materials
- Drive-shafts
- Exhaust system parts that affect noise or emissions performance
- Bull bars/front-underrun protection bars
- Seatbelts
- Suspension damper changes
- Air brake system modifications
- S-cam and slack-adjuster changes

Low risk

- Cosmetic parts
- Attached parts that are unlikely to detach

### THE EUROPEAN CE MARK PROVIDES A MODEL

The European Union has a 'CE' marking requirement that applies to most manufactured goods (excluding replacement parts for vehicles). The EU has defined the applicable technical standards and these are listed in EU Directives. European law requires suppliers to make a public declaration that a part complies with technical standards specified in the applicable safety directive. If the declaration is incorrect and this becomes public



knowledge, action can be taken. This approach does not require a formal certification process. It does allow the marketplace to challenge false claims

and, in severe cases, prosecute. The CE approach puts the responsibility on suppliers to comply with technical standards. It is a low red-tape approach and should be acceptable to government.

### A SIX-POINT PLAN TO RECOGNISE ACCEPTABLE REPLACEMENT PARTS

Here are the six steps needed to sort out the use of safety-critical high- and medium-risk replacement parts:

- 1 Australian heavy vehicle industry associations should take the lead in nominating acceptable technical standards for each type of part. The standards could be listed in a new appendix to the National Heavy Vehicle Modification Code (NHVMC) VSB 6 ('Appendix – Parts'). This project should start with high-risk parts.
- 2 Industry associations should cooperate to establish a replacement-parts recognition scheme. This would allow member companies to affix a sticker to a replacement part that identifies that the supplier makes a claim of compliance with a nominated technical standard. Such a part is a 'recognised replacement part'.
- 3 The NHVR should declare alternative

compliance procedures that apply to a modification that involves installation of a *recognised replacement part*. These compliance procedures would allow a workshop or operator to install a *recognised replacement part* without requiring an engineer (AVE) sign off, and the NHVR can specify conditions under Section 706 of the NHVL.

- 4 Industry associations acting together should set up a website that lists the make, supplier and part number of *recognised replacement parts*. Important technical and ratings information should also be listed. This website would provide a reference point for workshops and operators to identify *recognised replacement parts*.

- 5 Inertia dynamometer tests for foundation brakes should be re-introduced into ADR 38 (the trailer brake rule). This would allow replacement brake linings to be tested efficiently without road testing. For these high-risk parts, the technical standard should be in the ADR 38 rule and also in 'Appendix - Parts' in VSB 6.
- 6 Brake-burnishing requirements should be introduced into ADR 38. These could be taken from UN ECE regulations 13 or 90. This is needed to achieve stable test performance during certification testing of foundation brakes.

It is worth noting that NHVMC VSB 6 was initiated by industry, and not government. It then became a joint industry and government project. Australia could follow this path to sort out replacement-part suitability in Australia. I do not believe that a change in law is needed!

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### NEWS FLASH

ARTSA Training: Certification, Truck-Trailer Engineering and Forensics.  
20, 21, 22 February 2017