Vehicle Inspections – New Manual

Alan Whitaker
DPTI

Sponsored by Capricorn & Into Training Australia

Gold Partners

Daimler Trucks Adelaide

Operated by Adtrans MVD240896

National Heavy Vehicle Inspection Manual

Alan Whitaker – DPTI

Government of South Australia
Department of Planning, Transport and Infrastructure

Background

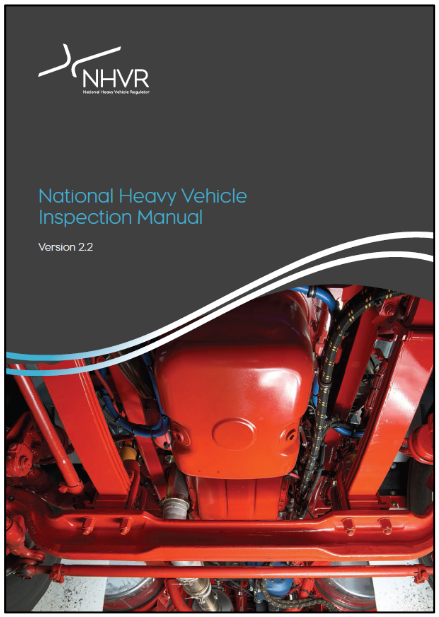
National Heavy Vehicle Regulator

Introduced on **1 January 2013**

National Heavy Vehicle Inspection Manual (V1.0)

Introduced on **1 February 2014**

New Manual



Version 2.2

To be Introduced on **1 July 2017**

Available from **www.nhvr. gov.au**

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Working Group

Acknowledgements

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- Access Canberra, ACT
- Australian New Zealand Policing Advisory Agency (ANZPAA)
- Australian Road Transport Suppliers Association (ARTSA)
- Australian Trucking Association (ATA)
- Bus Industry Confederation (BIC)
- Commercial Vehicle Industry Association of Australia (CVIAA)
- Department of Infrastructure, Energy and Resources, TAS
- Department of Planning, Transport and Infrastructure, SA
- Department of Transport, NT
- Department of Transport and Main Roads, QLD
- Heavy Vehicle Industry Australia (HVIA)
- National Road Transport Association (NatRoad)
- Roads and Maritime Services, NSW
- Truck Industry Council (TIC)
- VicRoads, VIC
- Victorian Automobile Chamber of Commerce (VACC)

The NHVR would also like to thank the following businesses for providing some of the diagrams and images displayed in this manual:

- Brisbane Kiz
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- Jost Australia
- Kangaroo Bus Lines

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7 Road Transport Authorities

- Including **DPTI**

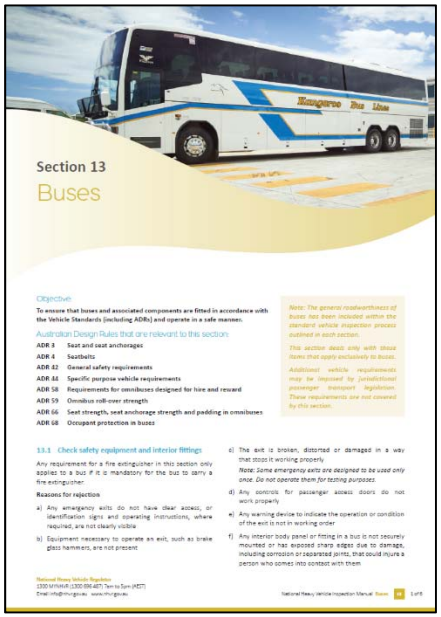
8 Industry Representatives

- Including **BIC**

Contents

- *Vehicle Identification*
- *Brakes*
- Couplings
- *Steering and Suspension*
- *Wheels, Tyres and Hubs*
- *Structure and Body condition*
- *Seats and Seatbelts*
- *Lights and Reflectors*
- *Mirrors*
- *Windscreens and Windows*
- *Engine Drivelines*
- *LPG and NG Vehicles*
- *Buses*
- Trailers
- Motorhomes, Caravans and Campervans
- *Vehicle Dimensions*

Section


Section 13
Buses

Section Objective

Relevant Australian Design Rules (ADRs)

“Reason for rejection”

Checklist

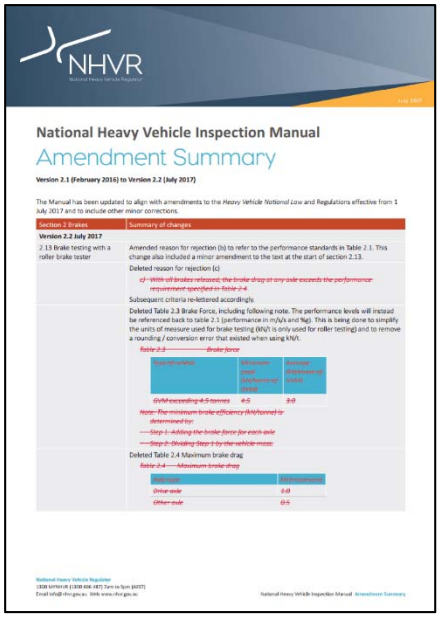
Heavy Vehicle Inspection Checklist

Checklist of heavy vehicle and trailer

Included in the Manual

Reflects sub-headings in each section

Key Amendments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National Heavy Vehicle Inspection Manual

Amendment Summary

Version 2.1 (February 2016) to Version 2.2 (July 2017)

The Manual has been updated to align with amendments to the *Heavy Vehicle National Law* and Regulations effective from 1 July 2017 and to include other minor corrections.

Section 2 Brakes	Summary of changes
Version 2.2 July 2017	
2.13 Brake testing with a roller brake tester	Amended reason for rejection (b) to refer to the performance standards in Table 2.1. This change also included a minor amendment to the text at the start of section 2.13. Deleted reason for rejection (c) ~~c) With all brakes released, the brake drag at any axle exceeds the performance requirement specified in Table 2.4~~ Subsequent criteria re-lettered accordingly. Deleted Table 2.3 Brake Force, including following note. The performance levels will instead be referenced back to table 2.1 (performance in m/s/s and %g). This is being done to simplify the units of measure used for brake testing (kN/t is only used for roller testing) and to remove a rounding / conversion error that existed when using kN/t. ~~Table 2.3 Brake force~~ ~~GVM exceeding 4.5 tonnes 4.5 3.0~~ ~~Note: The minimum brake efficiency (kN/tonne) is determined by:~~ ~~Step 1: Adding the brake force for each axle~~ ~~Step 2: Dividing Step 1 by the vehicle mass~~ Deleted Table 2.4 Maximum brake drag ~~Table 2.4 Maximum brake drag~~ ~~Axle type Kg/tonne~~ ~~Drive axle 1.0~~ ~~Other axle 0.5~~

National Heavy Vehicle Register

National Heavy Vehicle Inspection Manual Amendment Summary

Brake performance testing

Aligning the requirements between roller brake testing and other testing methods

Lights and reflectors

Including daytime running lights and conspicuity marking

Vehicle dimensions

Simplifying the wording

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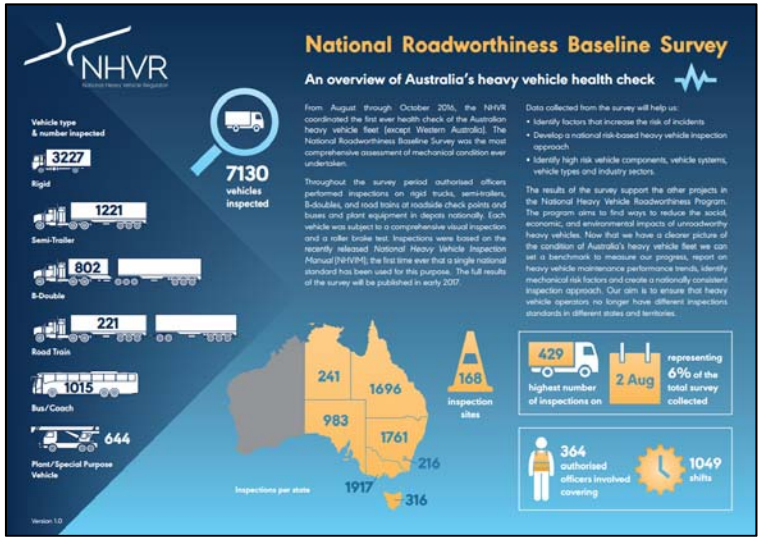
Amendment in ‘Buses’ Section

Section 13 Buses	Summary of changes
Version 2.2 July 2017	
13.12 Engine and fuel system	Note added after reason for rejection (b) to clarify requirements for separating the fuel system from the engine compartment. *Note: A fuel tank is considered to be separated from the engine compartment if it is separated by a chassis rail or by a fuel resistant partition.* *A filler pipe, including the filler inlet, is considered to be separated from the engine compartment if it is separated by:* • *a fuel resistant partition; or* • *by a distance not less than 900 mm, so that they are not exposed to excessive heat and that in the event of any fuel spillage during filling operations or leaks from the filler cap connection, fuel cannot fall on to the engine or exhaust system.*

Baseline Survey



Conducted from **August** through **October 2016**

First National Survey

Based on the requirements in the Manual

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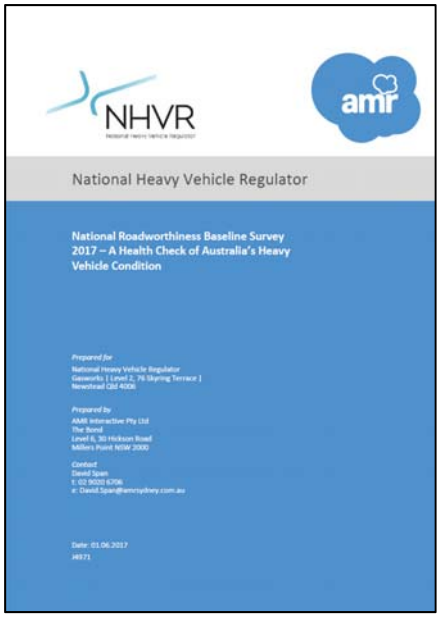
baseline survey Go

Common Failures for Buses



Engine, drivelines and exhaust **(11.1 %)**

Brakes **(8.7%)**

Steering suspension **(8.3%)**

Lights and reflectors **(6.7%)**

Buses in SA

Baseline Survey

136 buses surveyed in SA

7.4% of buses had issues

- 2.5% of 7.4% was major issue
- 4.9% of 7.4% was minor issue or formal warning

Buses in SA

Annual Inspection

1317 buses inspected in 2016 - 17

- Metro: 650
- Country: 667

10.7% of buses failed the initial inspection

- Metro: 14.9%
- Country: 6.6%

Vehicle Standards Bulletin 6

National Code of Practice for Heavy Vehicle Modification

Currently under a review

Expected to be completed by **September 2017**

Questions

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