

Australian/New Zealand Standard™

**Natural gas (CNG) fuel systems for
vehicle engines**

AS/NZS 2739:2003

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-046, Gas Fuel Systems for Vehicle Engines. It was approved on behalf of the Council of Standards Australia on 22 October 2003 and on behalf of the Council of Standards New Zealand on 12 November 2003. It was published on 24 December 2003.

The following are represented on Committee ME-046:

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Australian Chamber of Commerce and Industry
Australian Industrial Truck Association
The Australian Gas Association
Australian Liquefied Petroleum Gas Association
Box Hill Institute of TAFE
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Auckland University
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Australian/New Zealand Standard™

Natural gas (CNG) fuel systems for vehicle engines

Originated in Australia as AS 2739—1984.
Originated in New Zealand as NZS 5422.2:1980.
Previous edition AS/NZS 2739:1999.
Fourth editions 2003.

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Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 5598 4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-046, Gas Fuel Systems for Vehicle Engines, to supersede AS/NZS 2739:1999.

This edition has been expanded to include exhaust emission testing (Clause 1.8.2 and Appendix E) and acceptance of components complying with ISO 15500, Parts 1 to 19.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the Appendix to which they apply. A 'normative' Appendix is an integral part of a Standard, whereas an 'informative' Appendix is only for information and guidance.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Natural gas (CNG) fuel systems for vehicle engines

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for natural gas (CNG) fuel systems for engines mounted on motor vehicles, either for the propulsion of the vehicles or for driving some auxiliary function, e.g. a mixer or a pump. It provides requirements for the design and construction of component parts, and for their installation in vehicles, and for tests, commissioning, and periodic inspection. It applies to all vehicle types, e.g. rigid chassis, articulated chassis and semitrailers.

This Standard does not apply to forklifts, floor sweepers, polishers, tow tractors, elevating work platforms and industrial stationary engines and to other CNG usage, such as the gas supply system for appliances in caravans, mobile homes or for the propulsion of marine craft.

This Standard does not cover the areas where major structural modifications are to be carried out to the vehicle (major structural modifications are those not defined in Clause 1.7). Prior to commencement of such work guidance should be sought from the vehicle manufacturer or a professional engineer who is experienced in the automotive disciplines.

1.2 OBJECTIVE

The objective of this Standard is to provide designers, manufacturers, installers and regulatory authorities with technical requirements for natural gas fuel systems for vehicle engines so as to provide functional, safe installations.

1.3 REFERENCED DOCUMENTS

A list of the Standards referenced in this Standard is given in Appendix A.

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Approved, approval

Approved by or approval of the regulatory authority.

1.4.2 Authority

The authority having statutory powers to control any aspect of the design, manufacture, installation and use of equipment described in this Standard in the Country, State or Territory in which the vehicle is registered.

1.4.3 Authorized person

In Australia—a person qualified and licensed by the relevant statutory authority to install or service natural gas equipment in automotive vehicles.