AS/NZS 1425:2007

Australian/New Zealand Standard™

LP Gas fuel systems for vehicle engines

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 26 March 2007 and on behalf of the Council of Standards New Zealand on 15 June 2007.
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The following are represented on Committee ME-046:

Australian Automobile Association
Australian Chamber of Commerce and Industry
Australian Industrial Truck Association
Department of Mines and Energy (Queensland)
Department of the Premier and Cabinet
Department for Transport, Energy and Infrastructure (South Australia)
Energy Safety (Western Australia)
Engineers Australia
Federal Chamber of Automotive Industries
Gas Association of New Zealand
International Association for Natural Gas Vehicles
LPG Association of New Zealand
LPG Australia
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Motor Trade Association New Zealand
Motor Traders Association of New South Wales
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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 1425:2003.

The first edition of this Standard, published in Australia in 1973, was derived in the main from NFPA 58. A revision in 1979 introduced compartments and sub-compartments to control random leakage, required external filing points, and upgraded the strength of mountings, amongst other things. The first amendment in October 1980 introduced automatic fill limiters, and the second in 1981 virtually eliminated the hydrostatic relief valve.

The 1982 edition was generally a consolidation, in which editorial presentation was improved and a number of adjustments of detail occurred, the most significant of which was that attempts to make the excess flow valve more sensitive were abandoned in the face of experience with inadvertent shut-off of fuel to the engine. Amendment 1 of May 1984 corrected and clarified minor detail. Amendment 2 of December 1985, beside further polishing detail, upgraded a number of requirements related to the security of a container and its fittings in a collision.

Amendment 3 of July 1987 permitted safety valves to discharge into a sub-compartment or compartment. This represented a major reversal of the previous policy of insistence on piping such discharges to exit vertically outside the vehicle.

The 1989 edition of the Standard incorporated changes to the requirements for fixed liquid level gauges, sizing of ventilation ducts and their construction materials, heat shielding and the referencing of AS 3509—1988, *LP gas fuel vessels for automotive use.*

The 1999 edition was a Joint Standards Australia/Standards New Zealand edition and the layout and content of sections were restructured to facilitate easy referencing with the grouping of all material on a subject in the one location.

The 2003 edition introduced clauses related to the installation of fuel injection systems, the decommissioning of redundant LP gas fuel systems, medium pressure hose up to 450 kPa and an Appendix relating to exhaust emission testing. It also incorporated descriptive procedures for providing assurance of compliance with exhaust emission standards. Requirements were incorporated for certified kits to meet exhaust emission standards. Appendix D was introduced to outline requirements for testing vehicles, manufactured to comply with ADR 79/00, ADR 79/01, ADR 80/00 and ADR 80/01.

The 2007 edition of the Standard incorporates changes to requirements for valve materials and testing procedures and simplified emission testing requirements. In relation to ADR 79/02 vehicles, the committee will examine the need for further testing requirements for providing assurance of compliance.

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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