B149.5-15

Installation code for propane fuel systems and containers on motor vehicles

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CSA Group

Standards Update Service

B149.5-15
August 2015

Title: *Installation code for propane fuel systems and containers on motor vehicles*
Pagination: 50 pages (x preliminary and 40 text), each dated **August 2015**

To register for e-mail notification about any updates to this publication

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Published in August 2015 by CSA Group
A not-for-profit private sector organization
178 Rexdale Blvd., Toronto, Ontario, Canada M9W 1R3
1-800-463-6727 • 416-747-4044

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ISBN 978-1-77139-763-6

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Preface

This is the fifth edition of CSA B149.5, *Installation code for propane fuel systems and containers on motor vehicles*. It supersedes the previous editions, published in 2010, 2005 and 2000 by the Canadian Standards Association (CSA) as CAN/CSA-B149.5, and in 1995 by the Canadian Gas Association (CGA) as CAN/CGA-B149.5, under the title *Installation code for propane fuel systems and tanks on highway vehicles*.

These requirements for the installation of propane fuel systems and tanks on motor vehicles were originally published in 1982 as an amendment to CAN/CGA-B149.2-80, *Propane Installation Code*, and were subsequently incorporated as Part 15 in the editions of CAN/CGA-B149.2 published in 1986 and 1991. In 1995, the Part 15 requirements were removed from CAN/CGA-B149.2 to create CAN/CGA-B149.5 for the convenience of those individuals involved with converting propane vehicles who do not require the CSA B149.1 and B149.2 Codes.

In this 2015 edition, where a major change or addition to the previous edition of the Code has been made, the clause, table, or figure affected is identified by the symbol delta (Δ) in the margin. Users of the Code are advised that the change markers in the text are not intended to be all-inclusive and are provided as a convenience only; such markers cannot constitute a comprehensive guide to the revisions made to the Code. Care must therefore be taken not to rely on the change markers to determine the current requirements of the Code. As always, users of the Code must consider the entire Code and any local amendments.

The CSA B149.5 Installation Code for Propane Fuel Systems and Containers on Motor Vehicles Committee, which is responsible for preparing this Code, consists of members of the provincial gas inspection authorities, propane distributors, appliance, equipment, and accessory manufacturers, certification organizations, and representatives from the federal government departments. This Code has been formally approved by the CSA B149.5 Technical Committee for Propane Fuel Systems and Containers on Motor Vehicles and by the Interprovincial Gas Advisory Council.

Notes:

(1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

(2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

(3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*

(4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*
(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
(b) provide an explanation of circumstances surrounding the actual field condition; and
(c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.
Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* ***standardsactivities.csa.ca****.*

(5) *This Standard is subject to review five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*
(a) Standard designation (number);
(b) relevant clause, table, and/or figure number;
(c) wording of the proposed change; and
(d) rationale for the change.

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1 Scope

Δ **1.1**

This Code applies to

(a) the installation, servicing, and repair of propane fuel system ***components*** and ***containers*** on motor vehicles for the provision of motive power; and

(b) the installation of containers, on motor vehicles such as ***recreational vehicles***, outdoor food service units, and ***wash-mobiles*** when propane is to be used for fuel purposes (other than motive power).

Note: *Motor vehicles include when propane is used as an engine fuel in other than highway vehicles such as ice resurfacing machines, lift trucks, lawnmowers, etc.*

Δ **1.2**

This Code does not apply to

(a) vehicles qualified under the *Canada Motor Vehicle Safety Regulations**;

(b) propane used on boats; and

(c) the installation of ***appliances***.

**For confirmation of CMVSS compliance, you may contact the vehicle manufacturer or Transport Canada.*

1.3

Where the term "propane" is used, the requirements of this Code include, and apply equally to, any material that is composed predominantly of any of the following hydrocarbons or a mixture of them: propane, propylene, butane (normal butane or isobutane), and butylenes.

1.4

This Code and any Standards referenced in it do not make or imply any assurance or guarantee with respect to the life expectancy, durability, or operating performance of ***equipment*** and materials referenced in the Code.

1.5

The values given in yard/pound units are the standard. This Code contains SI (metric) equivalents to yard/pound units so that the Code can be used in SI (metric) units. SI (metric) equivalents may be approximate.

1.6

In this Code, unless ***approved*** otherwise by the ***authority having jurisdiction***, "shall" indicates a mandatory requirement; "should" indicates a recommendation or that which is advised but not mandatory; and "may" indicates an advisory or optional statement. Notes to the text do not include mandatory or alternative requirements. The purpose of a note is to separate from the text explanatory or informative material that is not properly a part of this Code. Notes to figures and tables, however, are considered part of the figure or table and may be written as mandatory requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.