

# Code of Practice on Security Label System for LPG Vehicle Fuel Tanks

November 2016 Version

氣體安全監督  機電工程署

## Foreword

This code of practice is applicable to LPG vehicle fuel tanks (“fuel tanks”) that are equipped with an internal fuel pump (“fuel pump”).

Pursuant to the Gas Safety (Gas Supply) Regulations (Cap. 51B) and the Guideline for Revalidation of LPG Fuel Tanks for LPG Vehicles, revalidation of fuel tanks (“revalidation”) or replacement of internal or external components of a fuel tank (including replacement of fuel pump inside the fuel tank and associated components) must be carried out by a Competent Person at an LPG fuel tank workshop.

Pursuant to the Gas Safety Ordinance (Cap. 51), “supply” in relation to LPG means the supply of LPG in containers (i.e. fuel tanks), whether by sale or otherwise, to consumers; “manufacture” means the transfer of LPG in liquid form from one container to another container. All LPG fuel tank workshops operate LPG “supply” business, and those workshops involving in the transfer of LPG in liquid form are considered as operating LPG “manufacturing” business. As such, LPG fuel tank workshops are required to be registered as “gas supply companies” as stipulated in the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E). Registered gas supply companies shall employ or engage Competent Persons to carry out revalidation or replacement of internal or external components of a fuel tank on behalf of the company.

Pursuant to the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E), it shall be the duty of every registered gas supply company, so far as is reasonably practicable, to conduct its operations in a safe manner while carrying on its business as a gas supply company so that members of the public are not exposed to undue risks from gas. Therefore, upon completion of revalidation or replacement of internal or external components of a fuel tank, the LPG fuel tank workshop is required to affix a security label to the fuel tank so as to prevent someone from carrying out unlawful replacement of components. Details of the security label system will be elaborated in this code of practice.

This code of practice should be enforced in conjunction with the Gas Safety Ordinance (Cap. 51), its subsidiary regulations and the Guideline for Revalidation of LPG Fuel Tanks for LPG Vehicles.

Enquiries on this code of practice should be addressed to the Gas Standards Office of the Electrical and Mechanical Services Department.

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Appendix 1 Format and Affixing Locations of Fuel Tank Security Labels

## 1. Introduction and Scope

### 1.1 Introduction

1.1.1 This code of practice is developed by the Gas Standards Office of the Electrical and Mechanical Services Department to introduce in details the operation and requirements of the security label system for LPG vehicle fuel tanks, with a view to ensuring that revalidation or replacement of internal or external components of a fuel tank is carried out by a Competent Person employed or engaged by a registered gas supply company at its LPG fuel tank workshop. A security label will be affixed to the fuel tank by the registered gas supply company upon completion of work.

1.1.2 Pursuant to section 9 of the Gas Safety Ordinance (Cap. 51), this code of practice is approved by the Gas Authority ("the Authority"). The Authority has, by notice in the Gazette, specified the following requirements for which the code is so approved:

- (a) regulation 8(2) of the Gas Safety (Gas Supply) Regulations (Cap. 51B);
- (b) regulation 16 of the Gas Safety (Gas Supply) Regulations (Cap. 51B);  
and
- (c) regulation 9(1) of the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E).

### 1.2 Scope

1.2.1 There are two types of LPG vehicle fuel tanks, namely those "equipped with an internal fuel pump" and those "without an internal fuel pump". Fuel tank security label system is applicable to fuel tanks equipped with an internal fuel pump. As such, this code of practice is only applicable to fuel tanks equipped with an internal fuel pump.

## 2. Statutory Requirements

### 2.1 Statutory Requirements under the Gas Safety Ordinance (Cap. 51)

#### 2.1.1 Examinations and inspections to be carried out on fuel tanks

Pursuant to regulation 8(2) of the Gas Safety (Gas Supply) Regulations (Cap. 51B), the owner of an LPG cylinder shall not use the cylinder to contain LPG unless the cylinder (a fuel tank is an LPG cylinder) has been tested and examined not less than once in the five years period immediately preceding such use to ascertain whether the cylinder is safe to be so used.

Pursuant to regulation 49(3) of the Gas Safety (Gas Supply) Regulations (Cap. 51B), the owner of an LPG cylinder who contravenes regulation 8(2) commits an offence and is liable on conviction to a fine of \$10,000 and, in the case of a continuing offence, to a daily penalty of \$1,000.

#### 2.1.2 Competent Person

Pursuant to regulation 16 of the Gas Safety (Gas Supply) Regulations (Cap. 51B), no person shall carry out any work on or in relation to a gas pipe unless he is:

- (a) competent, by virtue of his training and substantial practical experience, to carry out that work; or
- (b) under the supervision of a person to whom paragraph (a) applies.

Pursuant to regulation 49(7) of the Gas Safety (Gas Supply) Regulations (Cap. 51B), any person who, without reasonable excuse, contravenes regulation 16 commits any offence and is liable on conviction to a fine of \$5,000.

#### 2.1.3 Registered gas supply companies

Pursuant to regulation 9(1) of the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E), it shall be the duty of every registered gas supply company, so far as is reasonably practicable, to ensure the

health and safety at work of all its employees and to conduct its operations in a safe manner while carrying on its business as a gas supply company so that members of the public are not exposed to undue risks from gas.

Pursuant to regulation 29(2) of the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E), any registered gas supply company which contravenes regulation 9(1) commits an offence and is liable on conviction to a fine of \$25,000 and, in the case of a continuing offence, to a daily penalty of \$2,000.

Pursuant to regulation 20 of the Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E), the Authority may take disciplinary action against a registered gas supply company:

(1) the Authority may, on any of the grounds specified in subregulation (2) which are applicable:

- (a) cancel the registration of a registered gas supply company;
- (b) suspend the registration of a registered gas supply company for such period as he thinks fit;
- (c) revoke a registered gas supply company's certificate of registration and issue a replacement certificate of registration stating new or altered conditions in respect of which the company is so registered; or
- (d) reprimand a registered gas supply company.

(2) Disciplinary action may be taken against a registered gas supply company:

- (a) the registration of which was obtained by fraud or misrepresentation in a material particular;
- (b) which is convicted of any offence against the Gas Safety Ordinance; or
- (c) which it appears to the Authority has not complied with a requirement under the Gas Safety Ordinance with which it is its obligation to comply.

#### 2.1.4 Improvement notices

Pursuant to section 13(1) of the Gas Supply Ordinance (Cap. 51), where the Authority is of the opinion that a person:

- (a) is contravening a requirement under this Ordinance; or
- (b) has contravened such a requirement in circumstances that make it likely that the contravention will continue or be repeated,

he may serve on him a notice stating that he is of that opinion, specifying the requirement as to which he is of that opinion, giving particulars of the reasons why he is of that opinion, and directing that person to remedy the contravention or, as the case may be, the matters occasioning it within such period as is specified in that notice.

Pursuant to section 27(1) of the Gas Supply Ordinance (Cap. 51), any person who contravenes any direction specified in an improvement notice (including any such notice as modified on an appeal under section 13) commits an offence and is liable on conviction to a fine of \$25,000 and to imprisonment for six months and, in the case of a continuing offence, to a daily penalty of \$2,000.

#### 2.2 Statutory Requirements under Other Ordinance

##### 2.2.1 Aiders, abettors and accessories

Pursuant to section 89 of the Criminal Procedure Ordinance (Cap. 221), any person who aids, abets, counsels or procures the commission by another person of the Gas Safety Ordinance (Cap. 51) shall be in contravention of the like ordinance.



### 3. Security Label System

#### 3.1 Introduction to Security Labels

3.1.1 There are two types of security labels:

- (a) blue security labels, to be affixed by the Gas Standards Office or importers of LPG vehicles; and
- (b) red security labels, to be affixed by registered gas supply companies at LPG fuel tank workshops.

At the initial stage of implementation of the security label system, blue security labels will be affixed by the Gas Standards Office to the fuel tanks of existing LPG vehicles to prevent someone from carrying out unlawful replacement of internal or external components of fuel tanks prior to the next revalidation or replacement. Importers of LPG vehicles are required to affix blue security labels for newly imported LPG vehicles. Red security labels, however, have to be affixed by registered gas supply companies at LPG fuel tank workshops after revalidation or replacement of internal or external components of fuel tanks.

3.1.2 A warning statement, a label serial number and a hologram are printed on the label, with other security features incorporated. The sample security labels and the locations where labels should be affixed are given in Appendix 1.

3.1.3 Appendix 1 shows that each fuel tank is affixed with either three blue security labels or five red security labels, namely:

- (a) Label 1, at the connection between the side and the semi-container case of the fuel tank (location 1) ;
- (b) Label 2, at the connection between the underside and the semi-container case of the fuel tank (location 2) ;
- (c) Label 3, at the connection between the side and the LPG fuel inlet valve cover of the fuel tank (location 3) ;
- (d) Label 4, adjacent to the LPG content gauge cover of the fuel tank (location 4); and
- (e) Label 5, inside the LPG content gauge cover of the fuel tank (location 5).

3.1.4 Labels 4 and 5 are of the same group and having the same serial number, so they have to be replaced at the same time. Label 5 only bears a label serial number while Label 4 is printed with a warning statement and a label serial number.

3.1.5 After tearing open a security label on a fuel tank, the words “VOID OPEN 開封” will be appeared on the label surface, meaning the label has been tampered. Even affixing the label again, the words “VOID OPEN 開封” may still remain on the label, meaning the label has become null and void and a replacement is required.

### 3.2 Collection of Security Labels

3.2.1 Security labels are printed and issued by the Gas Standards Office. Only importers of LPG vehicles are allowed to obtain blue security labels and only registered gas supply companies are allowed to obtain red security labels from the Office.

3.2.2 The Gas Standards Office will record relevant information, including the label serial number, the company name and the collection date, when importers of LPG vehicles or registered gas supply companies obtain labels from the Office.

3.2.3 Each company may keep up to 3 000 security labels. If the number of labels needed to be kept by a registered gas supply company or an importer of LPG vehicles is beyond this limit, written application with reasonable justifications shall be made to the Gas Standards Office, which will consider each application individually.

### 3.3 Use of Security Labels (Requirements for Registered Gas Supply Companies)

3.3.1 Revalidation or replacement of internal or external components of a fuel tank shall be carried out by a Competent Person employed or engaged by a registered gas supply company at its LPG fuel tank workshop in accordance with the Guideline for Revalidation of LPG Fuel Tanks for LPG Vehicles.

- 3.3.2 Upon receipt of a fuel tank in need of revalidation or replacement of internal or external components, the registered gas supply company shall examine whether the security label is tampered. If the security label is found to be tampered, the registered gas supply company shall check whether the fuel tank is attached with an improvement notice issued by the Gas Standards Office. If it is indeed attached with an improvement notice, the registered gas supply company may proceed with the revalidation or replacement of internal or external components of the fuel tank, but shall record the process and time of the revalidation or replacement work and retain all the old parts removed from it for the Gas Standards Office's investigation; if there is no improvement notice, the registered gas supply company shall not revalidate or replace any internal or external components of the fuel tank and shall notify the Gas Standards Office within one working day. The Gas Standards Office will conduct an investigation and notify the registered gas supply company whether it may proceed with the revalidation or replacement work.
- 3.3.3 Each time after carrying out revalidation or replacement of internal or external components of a fuel tank, the registered gas supply company shall affix a new red security label to the locations shown in **Appendix 1**. In doing so, the registered gas supply company shall thoroughly remove any remainder of the old security label.
- 3.3.4 The registered gas supply company shall replace all security labels upon completion of revalidation. In replacing the internal or external components of a fuel tank, given that not every component affixed with a security label necessitates replacement, the registered gas supply company shall ensure that the security labels for components with no need of replacement are free from damage. The registered gas supply company shall replace the security labels if they are tampered.
- 3.3.5 The registered gas supply company shall ensure that all security labels are intact after revalidation or replacement of internal or external components of a fuel tank. In transporting the fuel tanks, intermediaries shall ensure that the security labels are free from damage. In detaching and re-

assembling the fuel tanks, the LPG vehicle fuel system maintenance workshop shall ensure that the security labels are free from damage. If the intermediary or LPG vehicle fuel system maintenance workshop finds the security label tampered upon receipt of the fuel tank, they shall notify the registered gas supply company for it to handle the matter in accordance with the requirements stated in paragraph 3.3.2.

3.3.6 Registered gas supply companies shall record the following information for every security label used:

- (a) name of the LPG fuel tank workshop;
- (b) name of the person affixing the security label;
- (c) fuel tank serial number;
- (d) date of affixing the label;
- (e) label serial number and the corresponding location to be labelled (please refer to paragraphs 3.1.2 and 3.1.3);
- (f) serial number of the old security label (if applicable);

For security label 1 or 2 (i.e. labels affixed on the bottom cover of the LPG fuel tank), the following additional information shall be recorded:

- (a) serial number of the pair of pump cores inside the new fuel pump;
- (b) serial number of the new fuel pump base;
- (c) serial number of the pair of pump cores inside the old fuel pump;  
and
- (d) serial number of the old fuel pump base.

3.3.7 Registered gas supply companies are required to submit the record on use of security label to the Gas Standards Office by e-mail within seven working days after carrying out revalidation or replacement of internal or external components of a fuel tank.

3.3.8 Registered gas supply companies are required to submit the summary record on use of security labels of the previous month to the Gas Standards Office by e-mail on or before the third working day of each month.

3.3.9 Registered gas supply companies are required to keep all records properly. After disposing of the fuel tanks, registered gas supply companies may apply to the Gas Standards Office for permission to have the records related to the fuel tanks destroyed. Only after approval is granted by the Gas Standards Office, the records related to the fuel tanks can be destroyed. Registered gas supply companies may also ask the Gas Standards Office whether a fuel tank has been scrapped and whether the relevant record can be destroyed.

3.3.10 The Gas Standards Office will provide registered gas supply companies with the template file for the record.

#### 3.4 Use of Security Labels (Requirements for Importers of LPG Vehicles)

3.4.1 Importers of LPG vehicles are required to affix blue security labels 1, 2 and 3 to the fuel tanks of newly imported LPG vehicles at the locations shown in **Appendix 1** before putting up the vehicles for sale.

3.4.2 Importers of the LPG vehicles shall record the following information for every security label used:

- (a) name of the importer;
- (b) name of the person affixing the label;
- (c) fuel tank serial number;
- (d) date of affixing the label; and
- (e) label serial number and the corresponding location to be labelled (please refer to paragraphs 3.1.2 and 3.1.3).

For security label 1 or 2 (i.e. labels affixed on the bottom cover of a fuel tank), the following additional information shall be recorded:

- (a) serial number of the pair of pump cores inside the fuel pump; and
- (b) serial number of the fuel pump base.

3.4.3 Importers of LPG vehicles are required to submit the record on use of security labels to the Gas Standards Office by e-mail within seven working days after affixing the labels.

3.4.4 Importers of LPG vehicles are required to submit the summary record on use of security labels of the previous month to the Gas Standards Office by e-mail on or before the third working day of each month.

3.4.5 Importers of LPG vehicles are required to keep all records properly, and they may ask the Gas Standards Office whether a fuel tank has been scrapped and whether the relevant record can be destroyed.

3.4.6 The Gas Standards Office will provide importers of LPG vehicles with the template file for the record.

### 3.5 Examination of Security Labels and Follow-up Measures

3.5.1 The Gas Standards Office will regularly or irregularly inspect the LPG fuel tank workshops and workshops of importers of LPG vehicles to check whether the security labels are kept properly and used appropriately. The Gas Standards Office will also inspect the vehicle maintenance workshops from time to time to check whether the security labels are kept intact.

3.5.2 The Gas Standards Office will send officers to government vehicle examination centres under the Transport Department during the vehicle annual inspections to check whether the security labels are intact. If the label is found to be tampered, the Gas Standards Office will immediately issue an improvement notice to the registered vehicle owner in accordance with Section 13(1) of the Gas Safety Ordinance (Cap. 51). If the driver of the vehicle is not the registered vehicle owner, the Gas Standards Office will notify the vehicle driver in writing and deliver the improvement notice to the registered vehicle owner by registered post afterwards. The Gas Standards Office will also notify the Transport Department that an improvement notice has been issued to the vehicle driver concerned. Upon receipt of notification, the Vehicle Examiner of the Transport Department will declare that the vehicle has failed the annual inspection. Concurrently, the Gas Standards Office will conduct an investigation in accordance with the Gas Safety Ordinance (Cap. 51) and initiate prosecution where necessary.

- 3.5.3 The Gas Standards Office will also conduct random inspections at LPG filling stations to check if the security labels are intact. If the labels are found to be tampered, the issuing of improvement notice will be handled in the same way as described in paragraph 3.5.2, whereas the Transport Department will also follow up on the matter.
- 3.5.4 The improvement notice requires that the registered vehicle owner sends the LPG fuel tank to an LPG fuel tank workshop for examination and inspection and for replacement of the tampered security labels; and deliver the vehicle to the designated place within 14 working days for the Gas Standards Office to re-examine if the security labels are intact and properly affixed.
- 3.5.5 If the registered vehicle owner violates any direction specified in an improvement notice, the Gas Standards Office will conduct an investigation in accordance with the Gas Safety Ordinance (Cap. 51) and initiate prosecution where necessary. Concurrently, the Gas Standards Office will also notify the Transport Department, which will follow up on the matter by, for instance, cancel the vehicle licence.
- 3.5.6 In inspecting the security labels, the Gas Standards Office may, when necessary, tear down the security labels to check their authenticity. After the inspection, the Gas Standards Office will affix a new security label. The record will be updated.
- 3.6 Others
- 3.6.1 The registered owner of an LPG vehicle is the owner of the fuel tank, so the registered vehicle owner needs to properly protect the security labels against damage by external factors.
- 3.6.2 Pursuant to regulation 8(2) of the Gas Safety (Gas Supply) Regulations (Cap. 51B), the owner of a fuel tank shall not use the fuel tank to contain LPG unless he is certain that the fuel tank is safe to be so used. If a label is tampered, the internal or external components of the fuel tank may have been replaced in an unlawful manner or the fuel tank may be unsafe to use for containing LPG. The owner of the fuel tank shall immediately

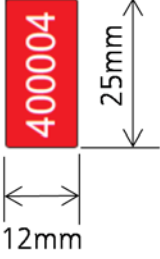
send the vehicle or fuel tank to an LPG fuel tank workshop for examination and inspection and for replacement of the tampered label. He should also report to the Gas Standards Office. After receiving the report on damage of security label, the Gas Standards Office will conduct an investigation in accordance with the Gas Safety Ordinance (Cap. 51) and initiate prosecution where necessary.



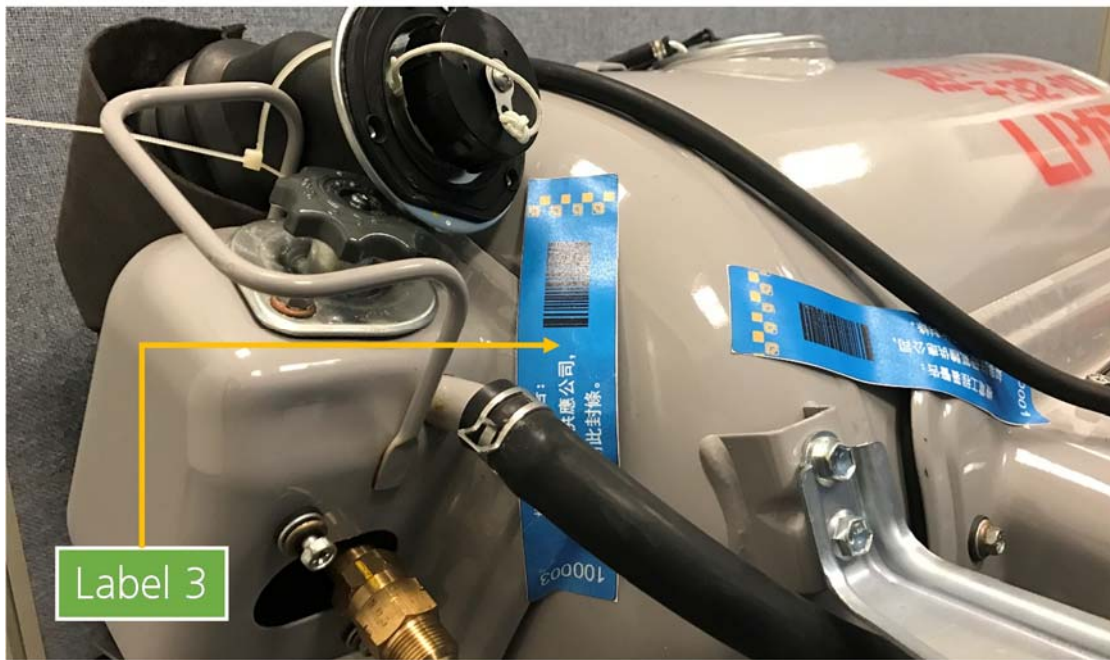
## Appendix 1

## Format and Affixing Locations of Fuel Tank Security Labels

<b>Blue Security Labels (to be affixed by the Gas Standards Office or importers of LPG vehicles)</b>	
<ul style="list-style-type: none"> <li>● Label 1</li> <li>● Label 2</li> <li>● Label 3</li> </ul>	 <p>Note: only Chinese version of the security label is available. The content reads: "Warning from the Electrical and Mechanical Services Department: Do not tear open this label if you are not a registered gas supply company."</p>
<b>Red Security Labels (to be affixed by registered gas supply companies at LPG fuel tank workshops)</b>	
<ul style="list-style-type: none"> <li>● Label 1</li> <li>● Label 2</li> <li>● Label 3</li> </ul>	 <p>Note: only Chinese version of the security label is available. The content reads: "Warning from the Electrical and Mechanical Services Department: Do not tear open this label if you are not a registered gas supply company."</p>
<ul style="list-style-type: none"> <li>● Label 4</li> </ul>	 <p>Note: only Chinese version of the security label is available. The content reads: "Warning from the Electrical and Mechanical Services Department: Do not tear open this label and the label inside the LPG content gauge cover if you are not a registered gas supply company."</p>

● Label 5	 <p>The diagram shows a red vertical rectangle with the number '400004' written inside. To the right of the rectangle, a vertical double-headed arrow indicates a height of 25mm. Below the rectangle, a horizontal double-headed arrow indicates a width of 12mm.</p>
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**Blue Security Labels (to be affixed by the Gas Standards Office or importers of LPG vehicles)**



Red Security Labels (to be affixed by registered gas supply companies at LPG fuel tank workshops)

