

GUIDELINES - Gas Inspection Regulations

1. Recommendations for camping site owners

- Offer gas tests by recognized experts for camping guests.
- Keep a record for gas tests. Write down the date and who tested your gas pipes.
- Offer leak spray, regulators, tubes, smoke detectors and gas detectors in your camping shop.
- Define regular gas tests in your rental and leasing agreements.
- Place fire extinguishers every 25 m. Test and maintain them every two years. Offer your guests free training for handling fire extinguishers. Place the locations of fire extinguishers on a site map and hang this in several places on the camping site. Additionally, draw a 25m radius around each fire extinguisher location on the site map to determine the coverage of the entire camping site.
- Check the Fairway Information Service (FIS) regularly and keep record of this in order to prevent the scorching of electrical installations.
- Limit the number of gas bottles stored in your warehouse.
- Store gas bottles in the warehouse in lattice boxes. Ban smoking and fire near the gas warehouse. Keep fire extinguishers in the warehouse. Mark full products and empty products with signs. Put caps on all bottles. Put up transport regulations. No electrical sparks in the area of the warehouse. No electrical equipment in the area of the warehouse.
- Put up fire safety instructions.
- Deposit fire blankets at several points on the camping site.
- Arrange collective parking areas.
- Create an explosion protection document.
- Establish rules for how to change gas bottles.
- Install fire protection walls, e.g. Aquapanel Cement Bord Outdoor or Celsion Fire Protection Systems.

2. Using the new certificate



Die neue Plakette

Die richtige Handhabung der neuen Prüfplaketten (anzuwenden ab 2013)

Einleitung

Die bislang verwendete Plakette beinhaltete bis auf das Jahr der keine weiteren Angaben zum Zeitpunkt oder Zeitraum. Die Erfahrung in der Praxis hat gezeigt, dass die Kombination aus einer taggenauen Prüfung und einer ungenauen Kennzeichnung zu häufigen Fragen geführt hat.

Darüber hinaus macht eine Veränderung der Technischen Regeln Flüssiggas (TRF2012) eine weitere Anpassung der Plakette erforderlich. Die TRF 2012 ermöglichen unter bestimmten Voraussetzungen, Flüssiggas-Anlagen in Mobilheimen sowie in Forsthütten und Gartenlauben nach EN 1949 zu errichten und nach DVGW-Arbeitsblatt G 607 zu betreiben und zu prüfen.



Bild 1 alte Plakette bis 2012 eingesetzt

Neue Plakette



Die neue Plakette wurde anhand diverser Vorschläge und Eingaben aus der Praxis entwickelt und zeichnet sich durch eine modernere, klarer strukturierte Erscheinung aus und vermittelt mehr relevante Information.

- Lesbarkeit durch klarere Gestaltung verbessert
- Anwendungsbereich über verständliche Piktogramme

Bild 2 neue Plakette Die auf silberglänzender Folie aufgedruckte Plakette trägt mittig im Hintergrund das Logo des DVFG und die Wortmarken

DVGW © DVFG im Bogen angeordnet. Ebenfalls zentral angeordnet finden sich die Piktogramme für Freizeitfahrzeuge und Leichtgebäude sowie das Jahr der nächsten Prüfung. Im mattierten äußeren Ring sind die Monatszahlen angeordnet, wobei der Monat Juni schwarz hinterlegt ist.

Anbringen und lesen

Die Plakette ist am Fahrzeugheck im Bereich des amtlichen Kennzeichens (jedoch nicht am Kennzeichen selbst!) anzubringen. Das Jahr der nächsten Prüfung ist auf der Plakette aufgedruckt, der Monat wird über die Drehung der Plakette festgelegt.

Wie abgebildet deutet die Plakette an, dass die nächste Prüfung spätestens im Oktober 2015 zu erfolgen hat.



Bild 3 korrekte Ausrichtung am Beispiel Okt 2015

3. Liquefied Natural Gas (LNG) safety for caravans and motorhomes

Problems or defects in LNG systems for caravans and motorhomes are dangerous for humans and can destroy property. For the sake of prevention the following rules are defined in Technical Rules for Liquid Gas:

- 1. Installation and modifications to the gas system must be carried out by specialists. LNG systems must be checked by an expert, e.g. from the Technical Inspection Agency (MOT). After 2 years, the gas system must be checked again. Regulator and exhaust pipes must also be checked. The operator of the vehicle is responsible for ordering the inspection.
- 2. Gas bottles must always be stored vertically. Bottle boxes must be sealed and have a minimum 100-square-centimeters-large non-closable ventilation hole in or immediately above the bottom.
- 3. Use only special caravan regulators with a safety valve, other regulators are not permitted (see DVGW G 607) and are not sufficient. Regulators are to be carefully connected to the bottle by hand (no keys, pliers or similar). At temperatures below 5 degrees Celsius, please use a defroster on the regulator. Please only use special hoses which are suitable for winter camping.
- 4. When using the stove, oven or grill, the skylight or window must be open. Neither these devices nor heaters or any devices that use air in the room for combustion shall be used under any circumstances to heat the caravan. Disregarding this rule poses danger to life caused by a lack of oxygen and carbon monoxide. If you turn on gas devices that use an operating grip that must be pressed to ignite, the grip must jump back into place by itself when released.
- 5. The exhaust gas management from the heater must rise along the entire length of the heater and must be firmly mounted with several rings and, if necessary, pipe brackets. The exhaust pipe must be connected tightly and securely to the heater as well as the fireplace and should not be damaged. Older exhaust pipes must be replaced with stainless steel tubes.
- 6. The safety ventilation in the caravan shall not be closed. If no ventilation is provided (which is often the case with mobile homes) please take other measures to allow for adequate ventilation.
- 7. Clear snow from the fireplace before starting the heater. Use flue extensions if you need them. Furthermore, the combustion air intake under the vehicle is to be cleaned of dirt and slush so that the CO content in the exhaust gases does not become too high.
- 8. In the event of deflagration (misfire), the system or the exhaust system of the particular device must be checked in accordance with point 5 of these rules.
- 9. For heaters with exhaust systems under the caravan floor, the floor should not have any openings leading into the interior. In this case, the ventilation

opening for the gas bottle box should not be in the floor. The ventilation opening must be guided latterly near the floor through the outer wall. There should not be snow walls or aprons on the caravan, so that the exhaust gas can dissipate freely. Intake pipes and exhaust outlets under the vehicle floor must be kept clean.

- 10. Read the equipment manuals carefully. Ask for missing instructions from the manufacturer stating the type and model year. A tip against operator error: Attach the instructions close to the devices so that they can be seen. Please read the suggestions.
- 11. As operator, you are responsible for the reliable condition of the LNG system. Please replace facility components which are subject to wear or aging, such as pressure control systems, hoses and isolating valves. Pressure regulators and hose lines must be replaced 10 years after the date of manufacture.

Experts from the Technical Control Board (TÜV) can confirm the traffic safety of your vehicle during general inspection. This way you can be sure that the brakes, tires, lights and condition of the vehicle correspond to the Straßenverkehrs-Zuslassungs-Ordnung, StVZO (National Vehicle Safety Standard). To ensure that the LNG system of your caravan or motorhome is safe, it must go through a separate inspection by a TÜV expert, for example. If you are unable to submit a valid certificate for the liquefied gas installation of your vehicle during the general inspection, this counts as a defect. Therefore, mobile homes will not receive a valid sticker because of the possible danger of a gas leak. If caravans have the same defect, it will be noted in the inspection report, but the inspector or expert may still award a sticker.

4. Directions for LPG bottles (except LPG cylinders and LPG cylinder installations)

4.1. Properties of LPG

LPG (propane, butane and mixtures thereof) is a highly flammable, colourless gas with a noticeable odour. It is heavier than air and flammable even in low mixtures with air. Caution: Unchecked escaping gas could deflagrate or explode. LPG is under pressure in the bottle. Protect from heat above 40 degrees Celcius! At higher temperatures, especially under the influence of fire, there is a higher risk of uncontrolled gas leakage and the bottle bursting.

4.2. Errors or leaks

(e.g. the smell of gas, noises that indicate leakage)

- Close valve (clockwise) immediately!
- Extinguish all open fires!
- Call an expert!
- Do not smoke!
- Do not use electronic switches!

Do not use phones!

(in buildings/vehicles) additionally:

- Open doors and windows!
- Bring leaking bottles outside as quickly as possible!
- Exit the building/vehicle!

In case of fire:

- Call the fire brigade
- Communicate that there are liquefied gas bottles present!
- If possible, remove bottles from flammable surroundings or cool them down with water.

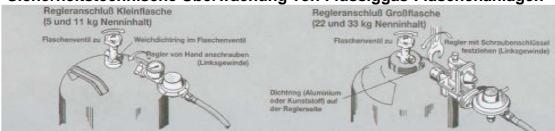
4.3 Use of liquefied gas bottles

- Only experts are allowed to install, run, change and inspect liquefied gas bottle installations.
- In the industrial sector, liquefied gas bottle installations have to be installed by trained staff and checked by an expert or authorized staff (see "Unfallverhütungsvorschrift BGV D 34" / regulations for the prevention of industrial accidents").
- The bottle has to be kept upright. If the bottles are upside down, deflagration can occur.
- Attention should also be paid to the operating instructions provided by the manufacturer of the liquefied gas installation in case of errors.
- The user of a liquefied gas installation has to ensure that an expert (or in the industrial sector, assigned trained staff) checks and certifies the installation before it can be used the first time or changes are made.
- When the installation is decommissioned for a longer period, the valves –beginning from the shut-off vales to the vales of the bottlehave to be closed. When running the installation again, open the valves beginning from the bottle to the shut-off vales.
- Open fire and smoking is prohibited in the bottle installation area and
- near bottle installations. Ventilation openings in the installation area and the bottle cabinet must be kept clear at all times. Written warnings must be posted.
- It is prohibited for owners to decant liquefied gas themselves!

4.4 Changing bottles

- Only disconnect when the valve of the bottle is fully closed (clockwise).
 The pressure regulator has to be tightly attached. Pay attention to the seal (see image). Be aware of the left-hand-thread! Check if the regulator connection is tightly attached (using soap, for example) after the bottles have been changed.
- If installation contains more than one bottle: close the tank connection shut-off valve, switch change-over switch to the full bottles.

Sicherheitstechnische Überwachung von Flüssiggas-Flaschenanlagen



4.5 Safety-relevant monitoring of liquefied gas bottles

Liquefied gas bottle installations have to be checked regularly. This has to be arranged by the owner.

- Fixed installations in buildings with bottles with a capacity of up to 11kg have to be checked by an expert every five years.
- Fixed installations in buildings with bottles with a capacity between 22 and 33kg have to be checked by an expert every ten years.
- In the industrial sector, according to the regulations for the prevention of industrial accidents "Unfallverhütungsvorschrift BGV D 34", depending on the type of installation: every four years, two years or yearly.
- Installations in vehicles both private and industrial: every two years
- Installations on private boats: every two years

Parts that are liable to wear, such as the regulator or tubes, have to be changed if needed.

4.6 Transport and storage

- Full and empty liquefied gas bottles are only allowed to be transported or stored when their valves are closed (wear-out nut and cap) to prevent damage to the valves or gas emission.
- When transporting gas bottles in a vehicle, ensure that the storage area has proper ventilation. The bottles have to be safely protected against unpredictable movements that can occur during transportation.
- Bottles, including empty ones, are to be stored standing upright and only
 in ventilated places. They are not to be stored underground, e.g. in
 basements or chambers, in stairwells, corridors, passages, emergency
 exits, emergency routes and building passages or in close proximity to
 them.
- Only two small bottles may be kept in apartments. They have to be kept in different rooms, however, and not in the bedroom.

All uses of energy are potentially dangerous. Therefore, carefully read these instructions and manual!