

## SCHEDULE 4

### GAS CONTAINERS

#### PART I

##### **Definitions relating to gas containers**

1. In this Schedule, unless the context otherwise requires, the following expressions have the meanings hereby assigned to them respectively, that is to say—

“gas container” means a container fitted to a motor vehicle or a trailer and intended for the storage of gaseous fuel for the purpose of the propulsion of the vehicle or the drawing vehicle as the case may be;

“gas cylinder” means a container fitted to a motor vehicle or a trailer and intended for the storage of compressed gas for the purpose of the propulsion of the vehicle or the drawing vehicle as the case may be;

“compressed gas” means gaseous fuel under a pressure exceeding 1.0325 bar above atmospheric pressure;

“pipe line” means all pipes connecting a gas container or containers—

- (a) to the engine or the mixing device for the supply of a mixture of gas and air to the engine; and
- (b) to the filling point on the vehicle;

“pressure pipe line” means any part of a pipe line intended for the conveyance of compressed gas; and

“reducing valve” means an apparatus which automatically reduces the pressure of the gas passing through it.

##### **Gas containers**

2. Every gas container shall—

- (a) be securely attached to the vehicle in such manner as not to be liable to displacement or damage due to vibration or other cause; and
- (b) be so placed or insulated as not to be adversely affected by the heat from the exhaust system.

##### **Pipe lines**

3.—(1) Every pipe line shall be supported in such manner as to be protected from excessive vibration and strain.

(2) No part of a pipe line shall be in such a position that it may be subjected to undue heat from the exhaust system.

(3) Every pressure pipe line shall be made of steel solid drawn.

(4) The maximum unsupported length of a pressure pipe line shall not exceed 920 mm.

##### **Unions**

4.—(1) Every union shall be so constructed and fitted that it will—

- (a) not be liable to work loose or develop leakage when in use; and
  - (b) be readily accessible for inspection and adjustment.
- (2) No union on a pressure pipe line or on a gas cylinder shall contain a joint other than a metal to metal joint.

### **Reducing valves**

5. Every reducing valve shall be—
- (a) so fitted as to be readily accessible; and
  - (b) so constructed that there can be no escape of gas when the engine is not running.

### **Valves and cocks**

- 6.—(1) Every valve or cock intended to be subjected to a pressure exceeding 6.8948 bar shall be of forged steel or of brass or bronze complying with the specification contained in Part II of this Schedule.
- (2) A valve or cock shall be fitted to the pipe line to enable the supply of gas from the container or containers to the mixing device to be shut off.
- (a) (3) (a) In the case of a pressure pipe line the valve or cock shall be placed between the reducing valve and the container or containers and shall be readily visible and accessible from the outside of the vehicle and a notice indicating its position and method of operation shall be affixed in a conspicuous position on the outside of the vehicle carrying the gas container or containers.
  - (b) In other cases, if the valve or cock is not so visible and accessible as aforesaid, a notice indicating its position shall be affixed in a conspicuous position on the outside of the vehicle carrying the container or containers.

### **Pressure gauges**

7. Every pressure gauge connected to a pressure pipe line shall be so constructed as not to be liable to deterioration under the action of the particular gases employed and shall be so constructed and fitted that—
- (a) in the event of failure of such pressure gauge no gas can escape into any part of the vehicle;
  - (b) it is not possible owing to leakage of gas into the casing of the pressure gauge for pressure to increase therein to such extent as to be liable to cause a breakage of the glass thereof; and
  - (c) in the event of failure of such pressure gauge the supply of gas thereto may be readily cut off.

### **Charging connections**

- 8.—(1) Every connection for charging a gas container shall be outside the vehicle and in the case of a public service vehicle no such connection shall be within 610 mm of any entrance or exit.
- (2) An efficient shut-off valve shall be fitted as near as practicable to the filling point.
- Provided that in cases where compressed gas is not used a cock or an efficient non-return valve may be fitted in lieu thereof.
- (3) Where compressed gas is used an additional emergency shut-off valve shall be fitted adjacent to the valve referred to in sub-paragraph (2) of this paragraph.
- (4) A cap shall be fitted to the gas filling point on the vehicle and where compressed gas is used this cap shall be made of steel with a metal to metal joint.

## **Trailers**

**9.**—(1) Where a trailer is used for the carriage of a gas cylinder, a reducing valve shall be fitted on the trailer.

(2) No pipe used for conveying gas from a trailer to the engine of a vehicle shall contain compressed gas.

## **Construction, etc., of system**

**10.** Every part of a gas container propulsion system shall be—

- (a) so placed or protected as not to be exposed to accidental damage and shall be soundly and properly constructed of suitable and well-finished materials capable of withstanding the loads and stresses likely to be met with in operation and shall be maintained in an efficient, safe and clean condition; and
- (b) so designed and constructed that leakage of gas is not likely to occur under normal working conditions, whether or not the engine is running.