

LPG Fuel System Approvals—Concessional Fuel Cylinder Approvals

PURSUANT to regulation 90B of the Traffic Regulations 1976* (as inserted by the Traffic Regulations 1976, Amendment No. 7) and pursuant to the powers delegated to me by the Secretary for Transport, I, Robert Norman Abram, Chief Automotive Engineer, hereby approve the components listed in the Schedule hereto for inclusion in any LPG automotive fuel system installed and operated in accordance with the requirements of New Zealand Standard NZS 5422, Part 1, 1980 (and any standard made in amendment thereto or in substitution thereof) subject to the conditions of approval set out in respect of any component in the said Schedule.

SCHEDULE
LPG FUEL CYLINDERS

MOT Reference	Manufacturer	Country of Origin	Specification	Material	Inspection Authority	Working Pressure Rating (MPa)	Test Pressure (MPa)	Nominal Water Capacity (litres)
AF LO3C 027	Manchester Tank Co.	U.S.A.	ASME 8/1	Steel	ASME	1.64 (238 psi)	2.46 (358 psi)	72 (19.2 U.S. gal)

CONDITIONS OF APPROVAL

LPG fuel cylinders are approved subject to the following conditions:

1. That they be permanently and clearly marked, on a suitably attached metal plate, with characters not less than 6 mm high if space permits but in any case not less than 3 mm high, displaying the following information:
 - (a) The specification to which the cylinder was manufactured.
 - (b) The manufacturer's name or mark and the serial number of the cylinder.
 - (c) The date of the original cylinder inspection and the identification mark of the inspection authority who made the inspection.
 - (d) The date of any periodic cylinder test and the identification mark of the cylinder testing station who made each test.
 - (e) The cylinder test pressure.
 - (f) The nominal water capacity of the cylinder.
 - (g) The tare weight of the cylinder.
2. That they be clearly marked or labelled to indicate that the cylinder is suitable for use with LPG.
3. That they be provided with valve threads and fittings which provide the following functions:
 - (a) Filling connection incorporating a non-return valve.
 - (b) Service valve incorporating an excess-flow valve.
 - (c) Contents gauge.
 - (d) Pressure relief valve.
 - (e) A fixed liquid level indicator and an automatic fill shut off device which prevents the cylinder being filled beyond 85 percent of the total cylinder capacity.

Valves and fittings shall have a service pressure rating of at least that of the cylinder to which they are fitted and shall be dimensioned, threaded and marked in accordance with the requirements of section 2.3 of New Zealand Standard NZS 5422 "The use of LPG and CNG Fuels in Internal Combustion Engines—Part 1 LPG Fuel".
4. That they be tested at periods not exceeding 5 years in accordance with the requirements of Australian Standard AS 2337-1980 or in accordance with the periodic test requirements laid down in the specification to which the cylinder was manufactured.
5. That they be fitted to a motor vehicle in such a position that they will not be subject to the direct rays of the sun, either by fitting them within a suitable vehicle compartment, or by providing a suitable shield if the cylinders are fitted to the exterior of the vehicle.
6. The terms of this approval do not allow the continued importation of such LPG fuel cylinders and it does not apply to cylinders which have not been installed in a motor vehicle by 31 December 1985.

NOTES: The effect of this notice is to allow the continued use of LPG fuel cylinders which are known to have been imported into New Zealand prior to the introduction of the Dangerous Goods (Class 2—Gases) Regulations 1980 and which were acceptable under the previous dangerous goods requirements, but whose working pressure rating would disqualify them for approval for general use under the Traffic Regulations 1976. They are approved subject to the additional proviso that they must not be exposed to direct sunlight (to reduce the possibility that solar radiation would raise the temperature of the contents of the cylinder such that the developed pressure of the cylinder contents exceeded the working pressure rating of the cylinder).

Dated at Wellington this 25th day of August 1986.

R. N. ABRAM, Chief Automotive Engineer.

*S.R. 1976/227

(M.O.T. 14/1/17/16)