

CNG 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, Trevor Alan Lister, Senior Automotive Engineer, hereby approve the CNG fuel cylinders listed in Schedule I hereunder for inclusion in any CNG fuel system installed and operated in accordance with the requirements of New Zealand Standard NZS 5422, Part 2, 1980 (and any standard made in Amendment thereto or in substitution therefor) subject to the conditions set out in Schedule II hereunder.

SCHEDULE I

CNG FUEL CYLINDERS MANUFACTURED PRIOR TO 1 SEPTEMBER 1980

MOT Reference	Manufacturer	Drawing No.	Material	Specification	Inspection Authority	Nominal Water Capacity (litres)	Test Pressure (MPa)
AF C03C 001	U.S. Steel Corp. U.S.A.	4 × 14639	Steel	DOT 3AA/2850	R. W. Hunt	138.5	32.7
AF C03C 002	Chesterfield Cylinder Co. U.S.A.	46400P	Steel	DOT 3AA/2400	Lloyds	50	27.5
AF C03C 003	Sumikin Kikoh (Sumitomo) Japan	SE 042.1 GE 921 SE 043.1	Steel Steel Steel	DOT 3AA/2400 DOT 3AA/2400 DOT 3AA/2400	Inteco Inteco Inteco	47.3 49.3 43.5	27.5 27.5 27.5

SCHEDULE II

CONDITIONS OF APPROVAL

CNG fuel cylinders are approved subject to the following conditions—

1. That they be permanently and clearly marked, on a thickened portion of the cylinder, 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:

- The specification to which the cylinder was manufactured.
- The manufacturer's name or mark, and the serial number of the cylinder.
- The date of the original cylinder inspection and the identification mark of the inspection authority who made the inspection.
- The date of any periodic cylinder test and the identification mark of the cylinder testing station who made each test.
- The cylinder test pressure.
- The design charging pressure of the cylinder at 15°C.
- The nominal water capacity of the cylinder.
- Where required by the marking provisions of the specification to which the cylinder was manufactured, the tare weight of the cylinder.

2. That they be clearly marked or labelled to indicate that the cylinder is suitable for use with CNG.

3. That they be provided with valve threads of the type $\frac{3}{4}$ inch NGT (National Gas Taper) and that each cylinder be supplied with a metal tag attached around the cylinder neck, between the cylinder and the cylinder valve, which identifies the valve thread type.

4. That they be provided with a cylinder shut off valve designed for a working pressure of 16.5 MPa and capable of withstanding the test pressure of the cylinder. Cylinder shut off valves shall be fitted with a handwheel to facilitate ease of opening and closing of the valve and shall be fitted with a pressure relief device, which remains in contact with the gas contained in the cylinder whether the handwheel is in the open or closed position, comprising of a burst disc backed by fusible alloy. The fusible alloy is to have a nominal yield temperature of 100° centigrade and the burst disc shall yield at a pressure of not less than 24.75 MPa and not more than the test pressure of the cylinder. Cylinder valves shall be provided with an outlet thread of $\frac{1}{4}$ inch NPT (female) and a stem thread compatible with the cylinder neck thread.

5. That they shall not be charged with CNG to a greater pressure than 16.5 MPa at 15° centigrade.

6. That they be tested at periods not exceeding 5 years in accordance with the requirements of Australian Standard AS 2337-1980 and in accordance with the periodic test requirements laid down in the specification to which the cylinder was manufactured.

NOTE—The effect of this notice is to allow the continued use in New Zealand of CNG fuel cylinders imported into New Zealand prior to the introduction of the Dangerous Goods (Class 2—Gases) Regulations 1980, and which were acceptable under previous dangerous goods requirements, but whose cylinder neck threads would disqualify them for general approval under the Tariff Regulations 1976. They are approved subject to the additional proviso that the cylinder valve thread type be clearly marked on a metal tag attached between the cylinder and the cylinder valve.

The terms of this approval do not allow the continued importation of such CNG fuel cylinders.

Dated at Wellington this 2nd day of March 1983.

T. A. LISTER, Senior Automotive Engineer.

*S.R. 1976/227

- Amendment No. 1: S.R. 1978/72
- Amendment No. 2: S.R. 1978/301
- Amendment No. 3: S.R. 1979/128
- Amendment No. 4: S.R. 1980/31
- Amendment No. 5: S.R. 1980/115
- Amendment No. 6: S.R. 1981/158
- Amendment No. 7: S.R. 1981/311
- Amendment No. 8: S.R. 1982/93

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