CNG Fuel System 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 Schedule I hereunder for inclusion in any CNG fuel system installed and operated in accordance with the requirements of New Zealand Standards NZS 5422, Part 2, 1980 (and any standard made in amendment thereto or in substitution therefor being applicable at the date of installation unless directed otherwise) subject to the conditions set out in Schedule II hereunder, and I hereby revoke the *Gazette* notices listed in Schedule III hereunder that refer to CNG fuel cylinders.

SCHEDULE I

CNG FUEL CYLINDERS

MOT Reference	Manufacturer	Country of Origin	Specification	Material	Inspection Authority	Test Pressure (MPa)
AF C03B 001	Nippon High Pressure Co.	Japan	BS 5045 Pt 1	Steel	Lloyds	27.6
AF C03B 002	Nippon High Pressure Co.	Japan	BS 5045 Pt 1	Steel	Lloyds	32.1
AF C03B 003	Nippon High Pressure Co.	Japan	JIS B8241	Steel	Bureau Veritas	27.5
AF C03B 004	US Steel Corp	U.S.A.	DOT 3AA/2850	Steel	R. W. Hunt	32.7
AF C03B 005	US Steel Corp	U.S.A.	DOT 3AA/2400	Steel	R. W. Hunt	27.6
AF C03B 006	US Steel Corp	U.S.A.	DOT 3AA/3000	Steel	R. W. Hunt	34.5
AF C03B 007	Tubemakers	Australia	AS B114	Steel	SAA Tubemakers	27.6
AF C03B 008	Mannesmann Handel (Kamerich Stahlform)	West Germany	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Lloyds	30.0
AF C03B 009	Faber	Italy	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Lloyds/IGMCTC	30.0
AF C03B 010	IMZ	Italy	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Lloyds/IGMCTC	30.0
AF C03B 011	Comwlth Industrial Gases	Australia	AS 1777	Aluminium	SAA CIG	28.5
AF C03B 012	Chesterfield Cylinder Co.	U.S.A.	DOT 3AA/2400	Steel	Lloyds	27.6
AF C03B 013	T. I. Chesterfield	U.K.	BS 5045 Pt 1	Steel	Lloyds/BIE	31.1
AF C03B 014	T. I. Chesterfield	U.K.	DOT 3AA/2400	Steel	Lloyds	27.6
AF C03B 015	Showa Koatsu	Japan	JIS B8241	Steel	Bureau Veritas	30.0
AF C03B 016	Showa Koatsu	Japan	JIS B8241	Steel	Bureau Veritas	27.5
AF C03B 017	Showa Koatsu	Japan	JIS B8241	Steel	Bureau Veritas	32.7
AF C03B 018	Showa Koatsu	Japan	DOT 3AA/2400	Steel	Arrowhead Ind. Services	27.6
AF C03B 019	Jos Heiser	Austria	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Bureau Veritas	30.0
AF C03B 020	Dalmine	Italy	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Lloyds/IGMCTC	30.0
AF C03B 021	Sumikin Kikoh (Sumitomo)	Japan	DOT 3AA/2400	Steel	Inteco	27.6
AF C03B 022	Simmel	Italy	Ital Regs DM 12/9/95 (ANCC Rules)	Steel	Lloyds/IGMCTC Bureau Veritas	30.0
AF C03B 023	BoGap	Italy	Ital Regs DM 12/9/25 (ANCC Rules)	Steel	Lloyds	30.0

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:
   (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 design charging pressure of the cylinder.
   (g) The nominal water capacity of the cylinder.
   (h) 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 form specified in British Standard BS 341 "Valve Fittings for Compressed Gas Cylinders".
4. That they shall not be charged with CNG to a greater pressure than that approved by the Chief Inspecting Engineer appointed under the Gas Act 1982, as notified in the *New Zealand Gazette.*
5. That they be provided with a cylinder shut off valve designed for the cylinder working pressure and compatable with 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 having a nominal melt temperature of 100°C. Should the alloy melt the burst disc shall yield at a pressure of not less than 24.7 MPa and not more than the test pressure of the cylinder, otherwise it shall remain inoperative. Cylinder valves shall be provided with an outlet thread of ¼ in NPT (female) and a stem thread compatible with the cylinder neck thread.
6. That they be tested at periods not exceeding five 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.
7. That the date of first installation in a motor vehicle of cylinders designed for a working pressure of less than 20 MPa and test pressure of less than 30 MPa in Schedule I is no later than 1 July 1986.