## LPG 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 the First 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 therefor) subject to the conditions of approval set out in respect of any component in the said First Schedule, and I hereby revoke those Gazette notices listed in the Second Schedule hereunder.

## FIRST SCHEDULE · LPG FUEL CYLINDERS

| MOT<br>Reference           | Manufacturer                     | Country<br>of Origin | Specification       | Material           | Inspection<br>Authority       | Working<br>Pressure<br>Rating<br>(MPa) | Test<br>Pressure<br>(MPa) |
|----------------------------|----------------------------------|----------------------|---------------------|--------------------|-------------------------------|--|---------------------------|
| AF L03B 001<br>AF L03B 002 | Dye Industries<br>Dye Industries | N.Z.<br>N.Z.         | AS 1210<br>ASME 8/1 | Steel<br>Steel     | Lloyds<br>ABS                 | 2.32<br>2.15                           | 3.48<br>3.2               |
| †                          |                                  |                      |                     |                    |                               |  |                           |
| AF L03B 004<br>†           | Van Leer                         | Belgium              | AS 1210 Int. 1      | Steel              | Dienst Voor Het<br>Stoomwezen | 2.55                                   | 3.3                       |
| AF L03B 006                | Rheem                            | Australia            | AS 1210 Int. 1      | Steel              | SAA Rheem                     | 2.55                                   | 3.3                       |
| AF L03B 007                | Indeng Gasplant                  | Australia            | AS 1210 Int. 1      | Steel              | SAA Gasplant                  | 2.55                                   | 3.3                       |
|                            | • •                              |                      |                     |                    | •                             |  |                           |
| AF L03B 008                | Vickers Hoskins                  | Australia            | AS 1210 Int. 1      | Steel              | SAA Vickers<br>Hoskins        | 2.55                                   | 3.3                       |
| AF L03B 009                | KCK Corp                         | Japan                | AS 1210 Int. 1      | Steel              | Lloyds                        | 2.55                                   | 3.3                       |
| AF L03B 010                | Aust. Gas Car Co.<br>Richards    | Australia            | AS 1210 Int. 1      | Steel              | SAA Richards                  | 2.55                                   | 3.3                       |
| AF L03B 011                | Usher Industries                 | Australia            | AS 1210 Int. 1      | Steel              | SAA Auth                      | 2.55                                   | 3.3                       |
| AF L03B 012                | Witte Van Moort                  | Holland              | AS 1210 Int. 1      | Steel              | Dienst Voor Het<br>Stoomwezen | 2.55                                   | 3.3                       |
| AF L03B 013                | Cameron and Jason                | Australia            | AS 1210 Int. 1      | Steel              | SAA Auth                      | 2.55                                   | 3.3                       |
| AF L03B 014                | Mytton Rodd                      | Australia            | AS 1210 Int. 1      | Stainless<br>Steel | SAA Mytton<br>Rodd            | 2.55                                   | 3.3                       |
| AF L03B 015                | Hagio Koatsu Yoki                | Japan                | AS 1210 Int. 1      | Steel              | Nippon Kaiji<br>Kyokai        | 2.55                                   | 3.3                       |
| AF L03B 016                | IN CO GE                         | Italy                | AS 1210 Int. 1      | Steel              | IGMCTC                        | 2.55                                   | 3.3                       |
| AF L03B 017                | Manchester Tank Co.              | U.S.A.               | ASME 8/1            | Steel              | ASME                          | 2.15                                   | 3.2                       |
| AF L03B 018                | Brunner Eng.                     | U.S.A.               | ASME 8/1            | Steel              | ASME                          | 2.15                                   | 3.2                       |
| AF L03B 019                | Gregg Mfg. Co.                   | U.S.A.               | ASME 8/1            | Steel              | ASME                          | 2.15                                   | 3.2                       |
| AF L03B 020                | Cylgas srl                       | Italy                | AS 1210             | Steel              | Lloyds                        | 2.55                                   | 3.3                       |
|                            |                                  |                      |                     |                    |                               |  |                           |

## CONDITIONS OF APPROVAL

LPG fuel cylinders are approved subject to the following conditions-

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.
- That they be provided with valve threads and fittings which provide the following functions-

(a) Filling connection incorporating a non return valve.

(a) Fining connection incorporating a non-return varve.
(b) Service valve incorporating an excess flow valve.
(c) Contents gauge.
(d) Safety valve.
(e) A fixed liquid level indicator or 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 CNC Fields in Proceedings of the CNC Fields in Procedings of the CNG Fuels in Internal Combustion Engines-Part 1 LPG Fuel".

4. That they be tested at periods not exceeding five 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.