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AMENDMENT 1
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**Road vehicles — Compressed natural
gas (CNG) fuel system components —**

**Part 6:
Automatic valve**

AMENDMENT 1

*Véhicules routiers — Composants des systèmes de combustible gaz
naturel comprimé (GNC) —*

Partie 6: Valve automatique

AMENDEMENT 1



Reference number
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Amendment 1 to ISO 15500-6:2012 was prepared by Technical Committee ISO/TC 22, *Road Vehicles*, Subcommittee SC 41, *Specific aspects for gaseous fuels*.

Road vehicles — Compressed natural gas (CNG) fuel system components —

Part 6: Automatic valve

AMENDMENT 1

Page 2, Clause 4

Add the following after the Note:

In addition to the markings specified above, if the valve is compatible with start/stop systems, one of the following additional marks shall be used for automatic cylinder valves:

- “H1” if the valve is to be used with an engine that shuts off automatically when the vehicle comes to a halt;
- “H2” if the valve is to be used with an engine that, in addition to (a), it also shuts off automatically when the vehicle drives with an electric motor only;
- “H3” if the valve is to be used with an engine that, in addition to (a) or (b), it also shuts off automatically when the accelerator pedal is released

Page 2, Clause 5

Replace Clause 5 with the following:

5 Construction and assembly

The automatic valve shall comply with the applicable provisions of [ISO 15500-1](#) and [ISO 15500-2](#), and with the tests specified in Clause 6. All automatic valves, including solenoid valves, cylinder valves and valves with manual by-pass, shall comply with the tests specified in [Clause 6](#). Tolerances should follow the specifications of ISO 15500-2.

An automatic valve shall be closed when de-energized.

An automatic valve with manual by-pass shall meet the minimum requirements of this part of [ISO 15500](#).

Replace Table 1 with the following:

Table 1 — Applicable tests

Test	Applicable	Test procedure as required by ISO 15500-2	Specific test requirements of this part of ISO 15500
Hydrostatic strength	X	X	X (see 6.2)
Leakage	X	X	X (see 6.3)
Excess torque resistance	X	X	
Bending moment	X	X	
Continued operation	X	X	X (see 6.4)
Corrosion resistance	X	X	
Oxygen ageing	X	X	
Ozone ageing	X	X	
Heat Ageing	X	X	
Automotive Fluids	X	X	
Electrical overvoltages	X	X	
Non-metallic material immersion	X	X	
Vibration resistance	X	X	
Brass material compatibility	X	X	
Insulation resistance	X		X (see 6.5)
Minimum opening voltage	X		X (see 6.6)
Pressure impulse	X		X (see 6.7)

Replace 6.4 with the following:

6.4.1 Test the automatic valve in accordance with the procedure for testing continued operation given in ISO 15500-2, for 50 000 cycles, but lower the downstream pressure of the test fixture to less than 2 % of working pressure, and perform the leakage test in accordance with 6.3. The valve shall continue to operate according to the manufacturer’s specifications.

6.4.2 Following cycling and leakage testing, perform the hydrostatic strength test in accordance with 6.2.

6.4.3 If the automatic valve is to be used in vehicles with start-stop systems, and closed during commanded stop phases, the valve shall be submitted to the following numbers of operations during test:

- a) 200 000 cycles (mark “H1”) if the engine shuts off automatically when the vehicle comes to a halt;
- b) 500 000 cycles (mark “H2”) if, in addition to a), the engine also shuts off automatically when the vehicle drives with the electric motor only;
- c) 1 000 000 cycles (mark “H3”) if, in addition to a) or b), the engine also shuts off automatically when the accelerator pedal is released.

