Item and Method of Inspection	Out of Service
1. Any cause for rejection of a Liquiefied Natural Gas (LNG) system must be indicated as " Out of Service" on the inspection report. 2. If pressure fuel system is present it must work or be removed. 3. All points and sections contained in the Society of Automotive Engineers (SAE) Standard J2343 titled "Recommended Practice for LNG Medium and Heavy Duty Powered Vehicles", and the National Fire Protection Association (NFPA) Standard 52 "Vehicular Gaseous Fuel Systems Code," 2010 edition.	
1. Gas Safety Branch Decal/Required Markings	
a) Gas Safety Branch decal	a) decal is not visible on lower left corner of windshield or left side door window(s) – correct fuel identification – incorrect decal is affixed to the vehicle – information on decal is not readable
b) LNG supply/container marking (as required by NFPA 52)	b) missing, not visible directly or by use of mirror – no indication of set-to-discharge pressure – no indication of working pressure of fuel supply – remote filling inlets not visibly marked with the lowest working pressure of any fuel supply container in system
2. Methane Gas Detection	
a) methane gas detection system	a) missing, disconnected, not functioning as OEM – sensors not located in engine, driver and passenger compartments – alarm not visual and audible to the driver before entering the drivers compartment and while seated in the normal driving position – system does not function continuously at all times

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3. Fuel Supply Container	
a) LNG container **NOTE: No container shall be repaired unless authorized by a certified inspector. The replacement of valves, fittings and accessories with compliant parts intended for the same purpose is not considered a repair.**	a) not oriented and mounted as specified by the manufacturer – not located in a protected location as designed by the vehicle manufacturer or as determined by a qualified professional engineer – any part of the container is repaired by welding. **NOTE: only saddle plates, brackets or non-pressure components that were provided and installed by the manufacturer may be field welded.** – any portion of the container or container valves in communication with the liquid or vapour are not located behind the rear frame cross member
b) roof mounted container	b) vehicle was not manufactured or originally designed to have roof mounted containers – modified to have roof mounted containers
c) containers on buses	c) located in or above the passenger compartment – container installed so that gas from fuelling and gauging operations or from relief valves can be released inside the driver, passenger or luggage compartments
d) mounting brackets	d) not marked with manufacture's name or logo – self locking nuts (if so equipped) have been reused after removal
e) BUSES ONLY: Plumbing Chamber Door (if equipped) intended for access to the service valve in emergency situations	e) not located on sidewall – not hinged and latched – locked
4. Vent Lines and Outlets	
a) ALL SAFETY DEVICES THAT MAY DISCHARGE TO THE ATMOSPHERE MUST BE VENTED TO THE OUTSIDE OF THE VEHICLE.	a) any safety device does not vent to the outside of the vehicle
b) line material	b) aluminum, copper

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c) vent lines	c) discharge line port size is not equal or greater than the main automatic or manual shut off valve – line installed inside a compartment does not extend to the outside – not located as far as practicable from the engine exhaust outlet – does not direct escaping gas upward within 45 degrees – escaping gas impinges fuel supply. – directed into wheel well – directed at engine air intake inlets – direction of escaping gas may cause a hazard to other road users – not at least 1.5 times the Maximum Allowable Working Pressure of the container they are connected to. (When discharged into a manifold or line of increased diameter, the pressure requirement of that manifold or line must be calculated by a professional engineer to determine compliance. – fuel exiting the vaporiser has not been completely converted to a gaseous state at a temperature suitable for introduction to the remainder of the fuel system as Compressed Natural Gas (CNG) – any vent line from the LNG fuel system is combined with CNG vent line BUSES ONLY: – vent line from the safety relief valve not located at the rear of the vehicle, directed upward and extended to the top of vehicle roof
5. Shut-off Valve	
NOTE: Valves, valve packings, gaskets and seats must be compliant for the intended service.	

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Item and Method of Inspection	Out of Service
a) manual shut-off valve (if equipped) – If the manual shut-off valve cannot be readily installed due to the compact design of the LNG fuel container, an automatic shut-off valve meeting section b) automatic shut-off valve and is located downstream in the CNG portion of the fuel system.	a) not installed in the outlet of the manifold – not marked with "MANUAL SHUT-OFF VALVE" **NOTE: Decals or stencils are acceptable.**
b) automatic shut-off valve (if equipped)	b) not installed in the outlet of the manifold – not marked with "AUTOMATIC SHUT-OFF VALVE" (Note: decals or stencils are acceptable) – does not shut off when the engine is stopped or ignition switch is in the off or at accessory positions – low engine oil pressure is not sensed – does not shut off when engine vacuum is not present
c) working pressure (Any device used in leak testing of the fuel system must have an accuracy of +/- 2% of the MAWP of the system.)	c) not clearly marked – not suitable for the maximum allowable pressure of the container – leakage occurs at less than 1.5 times the maximum allowable working pressure
6. Valves	
NOTE: Valves, valve packings, gaskets and seats must be compliant for the intended service.	
a) pressure relief valve (at highest setting) (Any device used in leak testing of the fuel system must have an accuracy of +/- 2% of the MAWP of the system.)	a) leaks at less than relief pressure at highest setting
b) automatic fuel supply shut off valve	b) not adjacent to the manual shut-off valve – not protected as required – not activated by the absence of engine rotation or oil pressure

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Item and Method of Inspection	Out of Service
7. Pressure Gauges	
a) gauge installation	a) not readily visible by the driver when: – engine enclosure is removed or when standing on either side of the vehicle
b) location	b) not located outside driver or passenger compartment – not equipped with a limiting orifice – not equipped with a shatter-proof dial lens – not equipped with a body relief
8. Pressure Regulators	
a) mounting	a) regulator not securely mounted
b) protection	b) not protected as required to prevent malfunction from low ambient air temperatures(-40 degrees C)
9. Pipes, Tubing, Hose, and Fittings	
a) material **NOTE: all materials and assemblies must be designed for the widest pressure and temperature ranges to which they may be subjected with a pressure safety factor of at least four.**	a) aluminum or copper between the container and first stage regulator – material pressure safety factor not at least four
b) piping installation	b) components fail to make adequate allowance for vibration; are not protected against damage or breakage due to strain or wear
c) pipe thread sealant (where applicable or as required for component repair / replacement)	c) sealant not impervious to the action of fuel; not applied to male pipe threads prior to assembly
d) condition	d) presence of threading burrs or scaling – ends not reamed
e) bends	e) not made using proper bending tools – any bend weakens the pipe or tubing

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10. Supply Lines	
a) support	a) not supported at least every 61 cm
b) condition	b) sagging or damaged (damaged lines must be replaced) – repaired
11. Gaseous Fuel Cut-off	
a) operation (For application where by a small diesel fuel is injected into the cylinder of the engine during pre-ignition or for duel fuel application only.)	a) no means provided to prevent the flow of gaseous fuel to the carburetor or injector fuel rail when diesel fuel used in pre 'ignition' when in the off or accessory position or from the carburetor when engine vacuum is not present
12. Bypass Relief Device	
NOTE: A stand alone device is not required if vehicle is equipped with a fuel pump containing a bypass relief device as OEM.	
a) relief device in fuel pump (if OEM)	a) not functioning as OEM
b) installation	b) not between the fuel pump and automatic shut off valve in the liquid fuel line to carburetor – not between the fuel pump and automatic shut off valve in injector fuel rail on vehicles with dual fuel systems
13. Vehicle Fuelling Connection	
a) vehicle	a) does not have a approved fuelling connection for each pressure based fuel system as equipped
b) Protection	b) not protected from moving parts; liftable cab enclosure; engine cover; hinges; direct side impact

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14. Fuel-carrying Components (excluding service valves, tubing, and fittings)	
a) label	a) not labelled or stamped with manufactuer's name or symbol – model designation – maximum allowable working pressure – design temperature range – direction of flow of fuel – capacity or electrical rating as applicable – scheduled replacement date if applicable
15. Road Clearance	
a) height	a) lowest part of any component in the system, including protective guards, is below the lowest edge of the wheel rim
16. Fuel System Protection	
a) fuel system components	a) not protected from – moving parts in engine compartment – liftable cab enclosure – engine cover, hinges or support devices – direct side impact

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