375-6-1-.09 Minimum Requirements for Inspection.

(1) Before an inspection sticker may be issued for a bus, the bus must pass a minimum North American Standard Vehicle Safety Inspection (Level 5).

(2) In addition to the minimum requirements of a North American Standard Vehicle Safety Inspection (Level 5), each bus must further meet the following requirements:

(A) Clearance and Marker Lights. Combination clearance and marker lights shall be installed at each of the four roof corners. The two such lights on the front of the vehicle shall be amber in color, and the two such lights on the rear of the vehicle shall be red in color. A cluster of three lights shall be mounted between the clearance and marker lights in the front and in the rear of the bus at the roof line thereof;

(B) Flasher Lights. The body of the bus shall be equipped with four hooded or recessed red flasher lights. Such lights shall be at least 5 3/4 inches in diameter, sealed beam, and must flash when the bus is stopped to receive or discharge passengers. Two such lights shall be mounted in the front of the body above the windshield, and two such lights shall be mounted on the rear of the body above the rear windows;

(C) Strobe Lights. Every bus shall have an outside roof mounted white flashing strobe light with clear lenses emitting light 360 degrees around its vertical axis. Such strobe light shall be no greater than one-third the distance from the rear of the bus to the front of the bus and shall flash when the bus is stopped to receive or discharge passengers.

(D) The requirements of paragraphs (2)(A-C) of this rule shall apply only to new school buses manufactured on or after January 1, 1993.

(E) Windshields and Windows.

(i) Windshields and windows shall have no obstruction located in such a way as to obscure the driver's view. All windshield and window glass shall be of a safety glazing type material.

(ii) No opaque or solid material including, but not limited to, cardboard, plastic and taped glass shall be used in lieu of glass.

(iii) No glass shall be approved that has a starburst or spider webbing effect greater than 3 inches by 3 inches.

(iv) Wiper(s) must be in good repair.

(F) Brakes.

(1) A bus must have brakes adequate to control the movement of, and to stop and hold, the vehicle.

(2) A bus must have:

(a) A service brake system that conforms to the requirements of 49 C.F.R. § 393.52;

(b) A parking brake system that conforms to the requirements of 49 C.F.R. § 393.41 and;

(c) If manufactured on or after July 1, 1973, must have an emergency brake system that conforms to the requirements of 49 C.F.R. § 393.52(b) and consists of either emergency features of the brake system or a system separate from the service brake system.

(d) A control by which the driver applies the emergency brake system must be located so that the driver can readily operate it when he or she is properly restrained by any seat belt assembly provided. The control for applying the emergency brake system may be combined with either the control for applying the service brake system or the control for applying the parking brake system. However, all three controls may not be combined.

(3) If the brake systems specified in sub-paragraph (2)(F) are interconnected in any way, they must be designed, constructed, and maintained so that, upon the failure of any part of the operating mechanism of one or more of the systems (except the service brake actuation pedal or valve):

(a) The vehicle will have operative brakes and;

(b) If manufactured on or after July 1, 1973, the vehicle will have operative brakes capable of performing as specified in 49 C.F.R. § 393.52(b).

(4) A vehicle that was manufactured in compliance with the emergency brake system requirements of Federal Motor Vehicle Safety Standard No. 105 conforms to the requirements of this sub-paragraph if:

(a) It is maintained in conformity with the emergency brake requirements of Standard No. 105 in effect on the date of manufacture and;

(b) It is capable of performing as specified in 49 C.F.R. § 393.52(b), except upon structural failure of its brake master cylinder body or effectiveness indicator body.

(5) A bus conforms to the requirements of sub-paragraph (2)(F)(3) of this chapter if it meets the requirements of 49 C.F.R. § 393.44 and is capable of performing as specified in 49 C.F.R. § 393.52(b).

(6) Parking brakes.

(a) All school buses shall at all times be equipped with a parking brake system adequate to hold the vehicle under any condition of loading as required by Federal Motor Vehicle Safety Standard 571.121.

(b) The parking brake system shall at all times be capable of being applied in conformance with the requirements of subparagraph (2)(F)(6)(a) by either the driver's muscular effort, or by spring action, or by other energy, provided, that if such other

energy is depended upon for application of the parking brake, then an accumulation of such energy shall be isolated from any common source and used exclusively for the operation of the parking brake.

(c) The parking brake system shall be held in the applied position by energy other than fluid pressure, air pressure, or electric energy. The parking brake system shall be such that it cannot be released unless adequate energy is available upon release of the parking brake to make immediate further application with the required effectiveness.

(7) Every bus shall be equipped with brakes acting on all wheels.

(8) On every bus, if equipped with air brakes, the braking system shall be so constructed that in the event any brake line to any of the front wheels is broken, the driver can apply the brakes on the rear wheels despite such breakage. The means used to apply the brakes may be located forward of the driver's seat so long as it can be operated manually by the driver when the driver is properly restrained by any seat belt assembly provided. Every bus shall meet this requirement or comply with the regulations in effect at the time of its manufacture.

(9) Brake tubing and brake hose must:

(a) Be designed and constructed in such a manner that insures proper, adequate, and continued functioning of the tubing or hose;

(b) Be installed in such a manner that insures proper continued functioning of the tubing or hose;

(c) Be long and flexible enough to accommodate without damage all normal motions of the parts to which it is attached;

(d) Be suitably secured against chafing, kinking, or other mechanical damage;

(e) Be installed in a manner that prevents it from contacting the vehicle's exhaust system or any other source of high temperatures; and

(f) Conform to the applicable requirements of subparagraphs (2)(F)(10) and (2)(F)(11) of this chapter. In addition, all hose installed on and after January 1, 1981, must conform to the applicable subsections of 49 C.F.R. 571.106.

(10) Metallic brake tubing, nonmetallic brake tubing, coiled nonmetallic brake tubing, and brake hose installed on and after March 7, 1989, must meet or exceed one of the following specifications set forth in the SAE Handbook (1985 Edition):

(a) Metallic air brake tubing – SAE Recommended Practice J1149 – Metallic Air Brake System Tubing and Pipe – July 1976.

(b) Nonmetallic air brake tubing – SAE Recommended Practice J844 – Nonmetallic Air Brake System Type B – October 1980.

(c) Air brake hose – SAE Recommended Practice J1402 – Automotive Air Brake Hose and Hose Assemblies – June 1985.

(d) Hydraulic brake hose – SAE Recommended Practice J1401 – Road Vehicle Hydraulic Brake Hose Assemblies for Use with Non Petroleum Base Hydraulic Fluid – June 1985.

(e) Vacuum brake hose – SAE Recommended Practice J1403 – Vacuum Brake Hose – June 1985.

(f) Except as provided in sub-paragraph (2)(F)(11) of this chapter, brake hose and brake tubing installed prior to March 7, 1989, must conform to 49 C.F.R. § 393.45, as effective October 31, 1983.

(11) All connections for air, vacuum, or hydraulic braking systems shall:

(a) Be adequate in material and construction to insure proper continued functioning;

(b) Be designed, constructed, and installed so as to insure, when properly connected, an attachment free of leaks, constrictions, or other defects;

(c) Have suitable provision in every detachable connection to afford reasonable assurance against accidental disconnection;

(d) Have the vacuum brake engine manifold connection at 38 inches in diameter;

(e) If installed on a vehicle on or after January 1, 1981, meet the requirements of the applicable subsections of 49 C.F.R. § 571.106;

(f) Splices in tubing, if installed on a vehicle after March 7, 1989, must use fittings that meet the requirements of:

(i) SAE Standard J512 – Automotive Tube Fittings – October 1980; or

(ii) If an air brake system, SAE Standard J246 – Spherical and Flanged Sleeve (Compression) Tube Fittings – March 1981.

(12) The brake lining on every bus shall be so constructed and installed as not to be subject to excessive fading and grabbing and shall be no less than ¼ inch in thickness. Means of attachment and physical characteristics shall provide for safe and reliable stopping of the bus.

(13) (a) Every bus using air or vacuum for braking shall be equipped with reserve capacity or a reservoir sufficient to ensure a full service brake application with the engine stopped without depleting the air pressure or vacuum below seventy percent (70%) of that pressure or degree of vacuum indicated by the gauge immediately before the brake application is made. For purposes of this sub-paragraph, a full service brake application is considered to be made when the service brake pedal is pushed to the limit of its travel.

(b)(1) Every bus, when equipped with air or vacuum reservoirs and regardless of date of manufacture, shall have such reservoirs so safeguarded by a check valve or equivalent device that in the event of failure or leakage in its connection to the source

of compressed air or vacuum the air or vacuum supply in the reservoir shall not be depleted by the leak or failure.

(2) Means shall be provided to establish the check valve to be in working order. On and after May 1, 1966, means other than loosening or disconnection of any connection between the source of compressed air or vacuum and the check valve, and necessary tools for operation of such means, shall be provided to prove that the check valve is in working order. The means shall be readily accessible either from the front, side, or rear of the vehicle, or from the driver's compartment.

(i) In air brake systems with one reservoir, the means shall be a cock, valve, plug, or equivalent device arranged to vent a cavity having free communication with the connection between the check valve and the source of compressed air or vacuum.

(ii) Where air is delivered by a compressor into one tank or compartment (wet tank), and air for braking is taken directly from another tank or compartment (dry tank) only, with the required check valve between the tanks or compartments, a manually operated drain cock on the first (wet) tank or compartment will serve as a means herein required if it conforms to the requirements herein.

(iii) In vacuum systems, stopping the engine will serve as the required means, the system remaining evacuated as indicated by the vacuum gauge.

(14) A bus must be equipped with a signal that provides a warning to the driver when a failure occurs in the vehicle's service brake system:

(a)A vehicle manufactured on or after July 1, 1973, and having service brakes activated by hydraulic fluid must be equipped with a warning signal that performs as follows:

(1)If 49 C.F.R. § 571.105 was applicable to the vehicle at the time it was manufactured, the warning signal must conform to the requirements of that standard.

(2)If 49 C.F.R. § 571.105 was not applicable to the vehicle at the time it was manufactured, the warning signal must become operative, before or upon application of the brakes, in the event of a hydraulic-type complete failure of a partial system. The signal must be readily audible or visible to the driver.

(b)A vehicle (regardless of the date of manufacture) having service brakes activated by compressed air (air mechanical brakes) or a vehicle towing a vehicle having service brakes activated by compressed air (air mechanical brakes) must be equipped and perform as follows:

(1)If 49 C.F.R. § 571.121 was applicable to the vehicle at the time it was manufactured, the vehicle must have a low air pressure-warning device that conforms to the requirements of that standard.

(2)If 49 C.F.R. § 571.121 was not applicable to the vehicle at the time it was manufactured, the vehicle must have a low air pressure warning device that provides a readily audible or visible continuous warning to the driver whenever the pressure of the

compressed air in the braking system is below a specified pressure, which must be at least one-half of the compressor governor cutout pressure.

(3)The vehicle must have a pressure gauge that indicates to the driver the pressure in pounds per square inch available for braking.

(c)A vehicle (regardless of the date of manufacture) having service brakes activated by vacuum must be equipped with:

(1)A device that provides a readily audible or visible continuous warning to the driver whenever the vacuum in the vehicle's supply reservoir is less than eight (8) inches of mercury and;

(2)A vacuum gauge that indicates to the driver the vacuum in inches of mercury available for braking.

(d)A vehicle having a braking system in which hydraulically activated service brakes are applied or assisted by compressed air or vacuum must be equipped with both a warning signal that conforms to the requirements of sub-paragraph (a) and a warding device that conforms to the requirements of either sub-paragraph (b) or (c), whichever is applicable.

(e)All warning signals, devices, and gauges required must be maintained in operative condition.

(15) Upon application of its service brakes, a bus must, under any condition of loading in which it is found on a public highway, be capable of:

(a)(1) Developing a braking force at least equal to the percentage of its gross weight specified in the table in sub-paragraph (15)(d) of this chapter;

(2)Decelerating to a stop from 20 miles per hour in a distance, measured from the point at which movement of the service brake pedal or control begins, that is not greater than the distance specified in the table in sub-paragraph (15)(d) of this chapter;

(3)Stopping from 20 miles per hour in a distance, measured from the point at which movement of the service brake pedal or control begins, that is not greater than the distance specified in the table in sub-paragraph (15)(d) of this chapter;

(b)Upon application of its emergency brake system and with no other brake system applied, a bus must, under any condition of loading in which it is found on a public highway, be capable of stopping from 20 miles per hour in a distance, measured from the point at which movement of the emergency brake control begins, that is not greater than the distance specified in the table in sub-paragraph (15)(d) of this chapter.

(c)Conformity to the stopping distance requirements of sub-paragraphs (a) and (b) shall be determined under the following conditions:

(1) Any test must be made with the vehicle on a hard surface that is substantially level, dry, smooth, and free of loose material.

(2) The vehicle must be in the center of a 12-foot wide lane when the test begins and must not deviate from that lane during the test.

(d) Vehicle brake performance table:

	Service brake systems	Service brake systems	Service brake systems	Emergency brake systems
Type of bus	Braking force as a percentage of gross vehicle weight	Deceleration in feet per second	Application and braking distance in feet from initial speed of 20 m.p.h.	Application and braking distance in feet from initial speed of 20 m.p.h.
Buses with a seating capacity of more than 10 persons, including driver, and built on a passenger car chassis; vehicles built on a truck or bus chassis and having a manufacturer's GVWR of 10,000 pounds or less	52.8	17	25	66
All other passenger-carrying vehicles	43.5	14	35	85

(16)(a) Each bus manufactured on or after October 20, 1993, and equipped with a hydraulic brake system shall meet the automatic brake adjustment system requirements of 49 C.F.R. § 571.105 applicable to the vehicle at the time that it was manufactured.

(b) Each bus manufactured on or after October 20, 1994, and equipped with an air brake system shall meet the automatic brake adjustment system requirements of 49 C.F.R. § 571.121 applicable to the vehicle at the time that it was manufactured.

(c) On each bus manufactured on or after October 20, 1994, and equipped with an air brake system that contains an external automatic adjustment mechanism and an exposed pushrod, the condition of service brake under-adjustment shall be displayed by a brake adjustment indicator conforming to the requirements of 49 C.F.R. § 571.121 applicable to the vehicle at the time that it was manufactured.

(17)(a) Each bus manufactured on or after March 1, 1999, and equipped with a hydraulic brake system shall be equipped with an antilock brake system that meets the requirements of 49 C.F.R. § 571.105.

(b) Each hydraulic braked bus manufactured on or after March 1, 1999, and equipped with a hydraulic brake system shall be equipped with an antilock brake system malfunction indicator system that meets the requirements of 49 C.F.R. § 571.105.

(c) Each bus manufactured on or after March 1, 1998, and equipped with an air brake system shall be equipped with an antilock brake system that meets the requirements of 49 C.F.R. § 571.121.

(d) Each air braked bus manufactured on or after March 1, 1998, and equipped with an air brake system shall be equipped with an electrical circuit that is capable of signaling a malfunction that affects the generation or transmission of response or control signals to the vehicle's antilock brake system that meets the requirements of 49 C.F.R. § 571.121.

(G) Tires.

(1) Tires marked "not for highway use" or "for racing purposes only" or "unsafe for highway use" shall not be permitted.

(2) All tires shall be free from bumps, bulges or separations.

(H) Steering Mechanism. Steering wheels shall turn freely through the limit of travel in both directions.

(I) Exhaust System.

(1) Exhaust system includes the piping leading from the flange of the exhaust manifold to and including the muffler(s), and tail pipes.

(2) Flexible pipe is prohibited except for use on diesel tractors or as per manufacturers original specifications.

(3) Exhaust emission point shall extend to the rear or outside of the passenger compartment.

(4) There shall be no holes, leaking seams nor loose or perceptively leaking joints in the exhaust system. Patches are prohibited on muffler(s). Tail pipe ends pinched, rusted, or broken off shall be cause for rejection. (Small holes made by the manufacturer for drainage are permitted.)

(5) The exhaust system and/or its elements shall be securely fastened, including the consideration of missing or broken hangers.

(6) There shall be no muffler cutouts, muffler bypasses or similar devices or any devices or additions to the exhaust system that allows excessive or unusual noise.

(7) There shall be no part of the exhaust system passing through the passenger compartment, or any exposed stack so located that any individual entering or leaving the vehicle may be burned.

Authority: O.C.G.A. §§ 40-8-220 (f); 40-8-111, 40-8-74.

Filed: September 13, 2002; effective October 3, 2002.