

School Bus Inspection Manual Supplement

Index

1. Guide for Markings on Front of School Bus
2. Guide for Markings on Side of School Bus
3. Guide for markings on Rear of School Bus
4. Required Emergency Exits on a School Bus (As of December 1, 2008)
5. Addition Detailed Brake OOS Information

Additional Information can be obtained at the Ohio State Highway Patrol's Web Site:

www.statepatrol.ohio.gov

(Click on Publications)

Guide for Markings on Front of School Bus



1) State identification number on the front of the vehicle shall be placed on a seven by fourteen-inch piece of reflective material which shall be applied and centered on the front bumper (As of September 1, 1998). If the bumper is manufactured with the holes in the center for two hooks, the seven by fourteen-inch piece of material may be located on the driver's side of the bumper. If the bumper is less than six inches in height, a seven by fourteen-inch plate will be permanently attached to the bumper to accommodate the seven by fourteen-inch reflective material.

2) Identification Numbers shall be six inches in height.

3) Local school bus numbers, approximately five inches high, shall be located on the front of the body at the discretion of the owner.

4) The words "School Bus" shall be at least eight inches high on the front of the body. Lettering shall be placed as high as possible without impairment of visibility. For buses bid or manufactured on or after December 1, 2008, the "School Bus" marking shall be on a background of retro reflective national school bus yellow material. The material shall be the same quality and type as Federal Motor Vehicle Safety Standards requires for the marking of emergency exits.

* Note – This school bus roof is painted white, which is an approved option.

Guide for Markings on Side of School Bus



Guide for Markings on Side of School Bus

- 1) All lettering and numbering on exterior shall be black.
- 2) Required rub rails shall be black, optional rub rails may be color of body or black.
- 3) Name of the private school, school district or the school bus owner or operator shall appear on both sides of the vehicle at the belt line and be at least five inches high.
- 4) The county in which the private school or the school district resides shall appear on both sides of the vehicle in a minimum of three-inch letters, unless the name of the city or exempted village appears as a part of the school district or private school name.
- 5) All emergency windows shall be outlined in reflective yellow tape. (As of 1994)
- 6) All emergency windows shall be marked with the words “emergency exit” in two inch lettering.
- 7) Both sides of the bus body shall be marked with retro reflective national school bus yellow material, extending the length of the body (passenger area) and located at approximately the floor line. This marking shall be at least two inches in width and run parallel with the rub rails. This marking is required on school buses bid or manufactured on or after December 1, 2008.
- 8) School Safety Zone Decal
The decal shall be approximately seven inches by seven inches. At the top of the decal shall be the word "NOTICE", underlined, and immediately below the word “NOTICE” the symbol for no handgun allowed. Below the no handgun symbol, the decal shall state in black lettering on a white background “Unless Otherwise Authorized By Law, Pursuant to Ohio Revised Code Section 2923.122, No Person Shall Knowingly Possess, Have Under The Person’s Control, Convey Or Attempt To Convey A Deadly Weapon Or Dangerous Ordnance Onto A School Bus (School Safety Zone).”
- 9) Local school bus number, approximately five inches high, shall be on body near the service door.

Guide for Markings on Rear of School Bus



- 1) Reflective yellow material two inches in width (plus/minus one quarter inch) shall be applied to both corners of the rear of the bus and extend from the bumper vertically up to the top of the rear windows. (As of September 1, 1998)
- 2) All emergency doors shall be outlined only in reflective yellow tape. (As of 1994)
- 3) Fourteen-inch wide pieces of white to white-silver in color reflective material shall be applied to the rear of the bus to accommodate the state identification and local bus numbers (As of September 1, 1998). The state identification number and the local number shall be placed on individual seven by fourteen-inch pieces of reflective material which shall be applied and centered on the flat surface near the left and right lower taillights as the bus body design will allow.
- 4) Identification Numbers shall be six inches in height.
- 5) Local school bus numbers approximately five inches high and shall be located on the body, near the right lower tail light.
- 6) The words "School Bus" shall be at least eight inches high on the rear of the body. Lettering shall be placed as high as possible without impairment of visibility. For buses bid or manufactured on or after December 1, 2008, the "School Bus" marking shall be on a background of retro reflective national school bus yellow material. The material shall be the same quality and type as Federal Motor Vehicle Safety Standards requires for the marking of emergency exits.
- 7) "Stop" shall be on the rear of the bus in letters not less than ten inches centered on the metal panel of the rear emergency door or for rear engine buses, centered on the rear of the bus.
- 8) Emergency door shall display the words "emergency door" in two inch lettering.

**Emergency Exit Requirements and
Federal Motor Vehicle Safety Standard 571.217 Excerpt**

All school buses bid or if not bid, manufactured after December 1, 2008 shall be equipped with:

Seating Capacity from 1 to 45 – one roof exit

Seating Capacity from 46 and above – two roof exits

In addition to the above required roof exits, shall meet Federal Motor Vehicle Safety Standards for emergency exits as noted below.

S5.2.3 School buses. Except as provided in S5.2.3.4, each school bus shall comply with S5.2.3.1 through S5.2.3.3.

S5.2.3.1. Each school bus shall be equipped with the exits specified in either S5.2.3.1 (a) or S5.2.3.1 (b), chosen at the option of the manufacturer.

(a) One rear emergency door that opens outward and is hinged on the right side (either side in the case of a bus with a GVWR of 10,000 pounds or less), and the additional exits, if any, specified by Table 1.

(b) One emergency door on the vehicle's left side that is hinged on its forward side and meets the requirements of S5.2.3.2 (a), and a push-out rear window that provides a minimum opening clearance 41 centimeters high and 122 centimeters wide and meets the requirements of S5.2.3.2 (c), and the additional exits, if any, specified by Table 2.

TABLE 1

Seating capacity	Additional exits required*
1-45	None.
46-62	1 left side exit door or 2 windows.
63-70	1 left side exit door or 2 windows, and 1 roof exit.
71 and above.	1 left side exit door or 2 exit windows, and 1 roof exit, and any combination of door, roof, or window such that the total capacity credit specified in Table 3 for these exits, plus 70, is greater than the seating capacity of the bus.
*Side emergency exit doors must meet the requirements of S5.2.3.2(a), emergency roof exits must	

meet the requirements of S5.2.3.2(b), emergency window exits must meet the requirements of S5.2.3.2(c).

TABLE 2

Seating capacity	Additional exits required*
1-57	None.
58-74	1 right side exit door or 2 windows.
75-82	1 right side exit door or 2 windows, and 1 roof exit.
83 and above.	1 right side exit door or 2 windows, and 1 roof exit, and any combination of door, roof, or windows such that the total capacity credit specified in Table 3 for these exits plus 82 is greater than the capacity of the bus.
*Side emergency exit doors must meet the requirements of S5.2.3.2(a), emergency roof exits must meet the requirements of S5.2.3.2(b), emergency window exits must meet the requirements of S5.2.3.2(c).	

TABLE 3

Exit Type	Capacity Credit
Side Door	16
Window	8
Roof Exit	8

(c) The area of an opening equipped with a wheelchair lift may be credited toward the required additional exits if it meets the requirements of paragraphs (a) or (b) of S5.2.3.1 and if the lift folds or stows in such a manner that the area is available for use by persons not needing the lift. With the lift in the folded or stowed position, such opening is considered a side emergency exit door.

S5.2.3.2 All emergency exits required by S5.2.3.1 (a) and S5.2.3.1 (b) shall meet the following criteria:

(a) Side emergency exit doors.

(1) Each side emergency exit door shall be hinged on its forward side.

(2) The first side emergency exit door installed pursuant to Table 1 shall be located on the left side of the bus and as near as practicable to the mid-point of the passenger compartment. A second side emergency exit door installed pursuant to Table 1 shall be located on the right side of the bus. In the case of a bus equipped with three side emergency door exits pursuant to Table 1, the third shall be located on the left side of the bus.

(3) The first side emergency exit door installed pursuant to Table 2 shall be located on the right side of the bus. A second side emergency door exit installed pursuant to Table 2 shall be located on the left side of the bus. In the case of a bus equipped with three side emergency door exits pursuant to Table 2, the third shall be located on the right side of the bus.

(4) No two side emergency exit doors shall be located, in whole or in part, within the same post and roof bow panel space.

(b) Emergency roof exit.

(1) Each emergency roof exit shall be hinged on its forward side, and shall be operable from both inside and outside the vehicle.

(2) In a bus equipped with a single emergency roof exit, the exit shall be located as near as practicable to the midpoint of the passenger compartment.

(3) In a bus equipped with two emergency roof exits, one shall be located as near as practicable to a point equidistant between the midpoint of the passenger compartment and the foremost limit of the passenger compartment and the other shall be located as near as practicable to a point equidistant between the midpoint of the passenger compartment and the rearmost point of the passenger compartment.

(4) In a bus equipped with three or more emergency roof exits, the roof exits shall be installed so that, to the extent practicable, the longitudinal distance between each pair of adjacent roof exits is the same and equal to the distance from the foremost point of the passenger compartment to the foremost roof exit and to the distance from the rearmost point of that compartment to the rearmost roof exit.

(5) Except as provided in paragraph (b) (6) of this section, each emergency roof exit shall be installed with its longitudinal centerline coinciding with a longitudinal vertical plane passing through the longitudinal centerline of the school bus.

(6) In a bus equipped with two or more emergency roof exits, for each roof exit offset from the longitudinal vertical plane specified in paragraph (b)(5) of this

section, there shall be another roof exit offset from that plane an equal distance to the other side.

(c) Emergency exit windows. A bus equipped with emergency exit windows shall have an even number of such windows, not counting the push-out rear window required by S5.2.3.1 (b). Any side emergency exit windows shall be evenly divided between the right and left sides of the bus. School buses shall not be equipped with horizontally-sliding emergency exit windows. Further, except for buses equipped with rear push-out emergency exit windows in accordance with S5.2.3.1 (b), school buses shall not be equipped with both sliding and push-out emergency exit windows.

S5.2.3.3 The engine starting system of a bus shall not operate if any emergency exit is locked from either inside or outside the bus. For purposes of this requirement, "locked" means that the release mechanism cannot be activated and the exit opened by a person at the exit without a special device such as a key or special information such as a combination.

S5.2.3.4 Each school bus manufactured before September 1, 1994 may, at the manufacturer's option, comply with either S5.2.3.4 (a) or S5.2.3.4 (b) instead of S5.2.3.1 through S5.2.3.3.

(a) Each bus shall be equipped with one rear emergency door that opens outward and is hinged on the right side (either side in the case of a bus with a GVWR of 4,536 kilograms or less); or

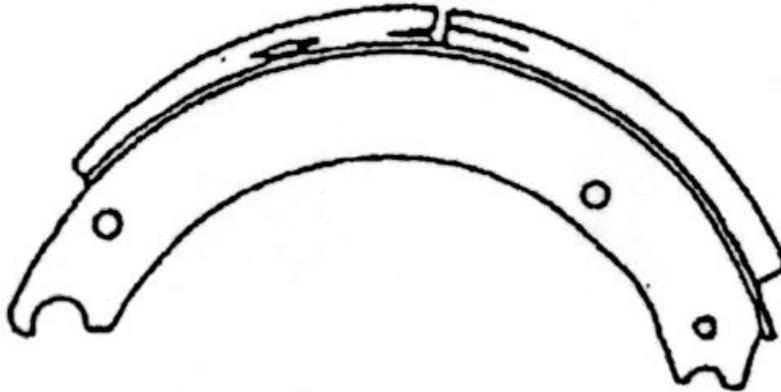
(b) Each bus shall be equipped with one emergency door on the vehicle's left side that is hinged on its forward side and meets the requirements of S5.2.3.2 (a), and a push-out rear window that provides a minimum opening clearance 41 centimeters high and 122 centimeters wide and meets the requirements of S5.2.3.2 (c).

Ohio School Out of Service Criteria

Additional Information for OOS (B) (1) (d)

Cracked, loose or missing lining

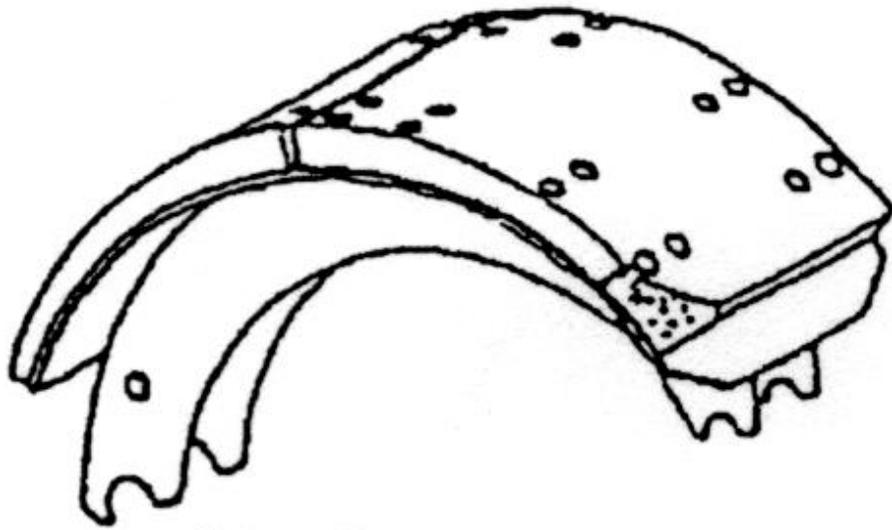
- 1) Lining cracks or voids of 1/16 inch in width observable on the edge of the lining.
- 2) Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.
- 3) Cracks that exceed 1 1/2 inch in length.
- 4) Loose lining segments. (approximately 1/16 inch or more movement)
- 5) Complete lining segment missing.



Out-of-Service

Cracks or voids that exceed 1/16" in width.

Cracks that exceed 1 1/2" in length.



Out-of-Service

Portion of lining missing that exposes a fastening device.