
NOTICES OF PROPOSED RULEMAKING

This section of the *Arizona Administrative Register* contains Notices of Proposed Rulemakings.

A proposed rulemaking is filed by an agency upon completion and submittal of a Notice of Rulemaking Docket Opening. Often these two documents are filed at the same time and published in the same *Register* issue.

When an agency files a Notice of Proposed Rulemaking under the Administrative Procedure Act (APA), the notice is published in the *Register* within three weeks of filing. See the publication schedule in the back of each issue of the *Register* for more information.

Under the APA, an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the *Register* before beginning any proceedings for making, amending, or repealing any rule. (A.R.S. §§ 41-1013 and 41-1022)

The Office of the Secretary of State is the filing office and publisher of these rules. Questions about the interpretation of the proposed rules should be addressed to the agency the promulgated the rules. Refer to item #4 below to contact the person charged with the rulemaking and item #10 for the close of record and information related to public hearings and oral comments.

NOTICE OF PROPOSED RULEMAKING

TITLE 13. PUBLIC SAFETY

CHAPTER 13. DEPARTMENT OF PUBLIC SAFETY - SCHOOL BUSES

[R15-81]

PREAMBLE

- | | |
|---|---------------------------------|
| <u>1. Article, Part, or Section Affected (as applicable)</u> | <u>Rulemaking Action</u> |
| R13-13-105 | Amend |
| R13-13-106 | Amend |
| R13-13-107 | Amend |
| R13-13-108 | Amend |
- 2. Citations to the agency’s statutory authority to include the authorizing statute (general) and the implementing statute (specific):**
 Authorizing statute: A.R.S. § 41-1713(A)(4)
 Implementing statute: A.R.S. § 28-900(A), (B), (C), and (D)
- 3. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:**
 Notice of Rulemaking Docket Opening: 21 A.A.R. 646, May 8, 2015
- 4. The agency’s contact person who can answer questions about the rulemaking:**
 Name: Lee Bradshaw, Police Sergeant
 Address: Arizona Department of Public Safety
 Student Transportation Unit, Mail Drop 1240
 P.O. Box 6638
 Phoenix, AZ 85005-6638
 Telephone: (602) 223-2646
 E-mail: schoolbus@azdps.gov
- 5. An agency’s justification and reason why the rule should be made, amended, repealed, or renumbered, to include an explanation about the rulemaking:**
 The Department is amending the rules to correct omissions in previous rulemakings in 2001, 2005 and 2008 to address inward opening service doors (also known as scissor doors or butterfly doors) and other equipment on school buses older than 2008. The Department of Public Safety took responsibility for the rules on July 24, 2014 as a result of HB2362 Fifty-first Legislature Second Regular Session and recodified the rules to 13 A.A.C. 13. Previous versions of the rules exempted school buses manufactured in 1996 or earlier. In 2001, school bus minimum standards were changed to permit only exterior opening service doors. School bus manufacturers continued to produce interior opening service doors generally through 2007. After 2007, manufacturers stopped producing interior opening service doors voluntarily due to requests from customers/school districts in favor of exterior opening service doors. In 2008, the School Bus Advisory Committee decided to grandfather pre-2008 school buses and enforcement officers followed the committee’s direction. However, through a series of miscommunication the rules were never officially amended to permit school buses older than 2008. This communication was likely due to the



uniqueness of the situation at the time where responsibility for the rules were split between the Department of Administration, Department of Transportation, Department of Public Safety, and the School Bus Advisory Council. The Department of Public Safety has taken a position to actively engage in enforcing adherence to the current rules as written and therefore is not able to certify approximately 30% of the state's total fleet of school buses until the rules are amended with the pre-2008 grandfathering language.

In 2015, the School Bus Advisory Council and the Department of Public Safety mutually agreed to amend the rule language to allow for buses older than May 31, 2008 to be certified if they comply with the current rules or if the school bus is being operated in accordance with its original manufacturers equipment in good working order or a combination of both. School buses introduced after May 31, 2008 shall only comply with the current rules with no exceptions.

The Department was granted an exception to the rulemaking moratorium contained in Executive Order 2015-01 in an e-mail from Mr. Ted Vogt, Chief of Operations, Office of the Arizona Governor dated April 1, 2015.

6. A reference to any study relevant to the rule that the agency reviewed and proposes to either rely on or not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

The Department did not review a study relevant to the rules. This rulemaking does not rely on scientific principles or methods.

7. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

The rulemaking does not diminish a previous grant of authority to a political subdivision.

8. The preliminary summary of the economic, small business, and consumer impact:

The Department's amendments to the rules will produce a minor to no economic impact to school districts. The Department is allowing for certification of buses older than May 31, 2008 using their original manufacturer's design service doors and other original equipment without the school districts incurring an economic burden for modification or replacement; a cost the school districts cannot afford. The Department will incur a minor to no economic impact as the effort to certify the older service door designs is the same as the effort to inspect more modern doors. The Department does not require any new full-time employees to administer the rule change. Business that supply services for retrofitting doors or that sell new buses would not benefit from the rule amendments. Private citizens may benefit from the rulemaking through reduced school/property tax or bond initiatives to fund the modifications or replacement. Private citizens may additionally benefit from having more available buses in use to handle existing school routes, no impact to school start/end times, and reduced passenger overcrowding.

9. The agency's contact person who can answer questions about the economic, small business, and consumer impact statement:

Name: Lee Bradshaw, Police Sergeant
Address: Arizona Department of Public Safety
Student Transportation Unit, Mail Drop 1240
P.O. Box 6638
Phoenix, AZ 85005-6638
Telephone: (602) 223-2646
E-mail: schoolbus@azdps.gov

10. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

An oral proceeding regarding the proposed rules will be held as follows:

Date: September 14, 2015
Time: 8:00 a.m.
Location: Arizona Peace Officer Standards and Training Board
2643 E. University Dr.
Phoenix, AZ 85034

Close of record: The rulemaking record will close at 5:00 p.m., Wednesday, September 16, 2015.

11. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

a. Whether the rule requires a permit, whether a general permit is used, and if not, the reason why a general permit is not used:

The Department issues a certification of compliance for each individual school bus. A general certification cannot be issued as the certification is based on a physical inspection of each school bus's safety and mechani-



cal systems. If the school bus passes its annual inspection, a decal is applied to the school bus at the time of inspection.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law, and if so, citation to the statutory authority to exceed the requirements of federal law:

The rules are not more stringent than corresponding federal law. Through the federal motor vehicle safety standards 49 CFR 571, the federal government controls the manufacturing of school buses to ensure that they are built to maximize safety. Additionally, a school bus designed to transport disabled passengers must conform to the accessibility guidelines in 49 CFR 38. State statutes do not specifically address the federal standards; therefore, the standards are incorporated in the A.A.C. in order for a state-certified peace officer to enforce any violations that arise during inspection.

c. Whether a person submitted an analysis to the agency that compares the rule’s impact of the competitiveness of business in this state to the impact on business in other states:

No analysis was submitted.

12. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

None

13. The full text of the rules follows:

TITLE 13. PUBLIC SAFETY

CHAPTER 13. DEPARTMENT OF PUBLIC SAFETY – SCHOOL BUSES

ARTICLE 1. SCHOOL BUS MINIMUM STANDARDS

Section

- R13-13-105. Special Needs Standards
- R13-13-106. Minimum Standards for School Bus Chassis
- R13-13-107. Minimum Standards for School Bus Body
- R13-13-108. Inspection, Maintenance, and Alterations

ARTICLE 1. SCHOOL BUS MINIMUM STANDARDS

R13-13-105. Special Needs Standards

A. General requirements:

1. ~~As of February 16, 1996 being introduced into Arizona, a~~ A school bus introduced to Arizona on or after May 31, 2008 used for transporting disabled passengers shall comply with the minimum standards applicable to school buses and the specifications contained in this Section. A school bus introduced to Arizona before May 31, 2008 used for transporting disabled passengers ~~that was introduced into Arizona before that date~~ shall comply with the minimum standards ~~in these rules this Section, including this Section, or those at A.A.C. R17-4-608~~ or shall be maintained in accordance with the manufacturer’s original specifications.
2. Any school bus that is used for transporting a passenger who uses a wheelchair shall be equipped with a wheelchair lift.
3. A wheelchair lift shall be located on the side of the bus body opposite the school bus driver. The wheelchair lift shall not be attached to the exterior sides of the school bus and shall be confined within the school bus body when not extended.
4. Any school bus that is used for transporting disabled passengers shall be equipped with a belt cutter that is accessible only to the school bus driver. The belt cutter shall be secured in a location within reach of the school bus driver while belted into the driver's seat. The school bus may be equipped with additional belt cutters. Additional belt cutters shall be accessible only to the school bus driver or adult aides or attendants.

B. Special-service entrance:

1. A school bus used for transporting disabled passengers shall have a special-service entrance of a width and depth to accommodate a wheelchair lift. The special-service entrance shall have a minimum clear opening of 30 inches horizontally to allow for the passage of a wheelchair.
2. The special-service entrance shall be located on the side of the bus opposite the school bus driver and far enough to the rear of the school bus to prevent the special-service entrance door from obstructing the service door when the special-service entrance door is open.
3. A drip molding shall be installed above the special-service entrance to divert water from the special-service entrance.
4. The frame surrounding the special-service entrance shall provide support and strength at least equal to at the conventional service and emergency doors.

C. Special-service entrance doors:



1. A school bus used for transporting passengers in wheelchairs shall provide a special-service entrance door not to exceed 50 inches in width.
 2. Two doors may be used for a special-service entrance on a school bus, if the doors are equipped with a positive latching mechanism to prevent accidental opening.
 3. The special-service entrance door shall be constructed to open toward the exterior of the school bus. A Type A school bus is exempt from this provision if its special-service entrance door is provided by the school bus chassis manufacturer.
 4. The special-service entrance door shall have a fastening device attached to the school bus body to hold the special-service entrance door in an open position.
 5. The special-service entrance door shall be weather-sealed by a waterproof cushion affixed to the door or door frame.
 6. Door materials, panels, and structural strength of a special-service entrance door shall be equivalent to the standards contained in R13-13-107 for a service door and an emergency door. Color, rub rail extensions, if installed, lettering, and all exterior features shall match adjacent sections of the school bus body.
 7. The window in the special-service entrance door shall be made of safety glass, mounted in a waterproof manner that is equal to the mounting of the other windows, and aligned with the side windows of the school bus.
 8. A pressure switch shall be installed in the special-service entrance door frame that will actuate a visible signal located in the school bus driver's compartment when the ignition is in the "on" position to warn the school bus driver when the special-service entrance door is not closed.
 9. A switch shall be installed in the special-service entrance door frame so the wheelchair lift will not operate when the special-service entrance door is closed.
- D. Wheelchair lift:**
1. A wheelchair lift shall be capable of lifting a minimum load of 800 pounds.
 2. When the wheelchair-lift platform is raised to the maximum position, it shall be held in position by the wheelchair-lift.
 3. Controls shall be provided that enable an individual authorized by the school bus driver to activate the wheelchair lift from either inside or outside the school bus.
 4. The wheelchair lift shall be equipped so it may be manually raised or lowered in the event of a power failure to the wheelchair lift.
 5. The wheelchair lift shall contain a safety device to prevent the wheelchair-lift platform from falling.
 6. The wheelchair lift shall be constructed so it allows the wheelchair-lift platform to rest completely on the ground.
 7. All edges of the wheelchair-lift platform shall be designed to restrain the wheelchair and prevent the feet of an individual in the wheelchair from becoming caught during the raising or lowering process.
 8. A barrier shall be attached along the outer non-loading edges of the wheelchair-lift platform that will prevent the wheelchair from rolling off the wheelchair-lift platform when the wheelchair-lift platform is placed in any position other than completely extended on ground level.
 9. A self-adjusting, skid-resistant plate shall be installed on the loading edge of the wheelchair-lift platform to reduce the incline from the wheelchair-lift platform to ground level. This plate shall be used as a restraining barrier on the loading edge of the wheelchair-lift platform. The wheelchair-lift platform shall be skid-resistant.
 10. A school bus may be provided with a battery to be used exclusively to operate the wheelchair lift. If a battery is installed for this purpose, an appropriate size circuit breaker meeting the wheelchair lift manufacturer's specifications shall be installed between the battery and the wheelchair lift motor. The circuit breaker shall be located as close to the power source as possible, but not within the school bus driver's compartment.
 11. The wheelchair lift shall be equipped with an adjustable switch that limits the electrical power to the wheelchair-lift motor and a bypass valve to prevent pressure from building in the hydraulic system when the wheelchair-lift platform reaches the maximum up or down position.
 12. A ramp may be carried on a school bus for use during an occurrence that requires evacuating the school bus. The ramp shall not be stored within the passenger compartment of the school bus.
- E. Wheelchair and wheelchair-passenger securement:**
1. Each wheelchair in a school bus shall be secured in a forward-facing position. Medical equipment and supplies required to accommodate a disabled passenger shall be secured in a school bus by means of alterations approved by the Department in accordance with R13-13-108(G).
 2. Each wheelchair-securement system location in a school bus shall have a minimum clear floor area of 30 inches in width from the interior school bus wall to the aisle and a minimum of 48 inches in length. A wheelchair shall not be placed in a position that prevents passage through the special-service entrance.
 3. Each wheelchair-securement system shall have four full-length tracks, with an L-track four-point tie-down configuration.
 4. The wheelchair-securement system shall provide a minimum of four wheelchair-securement anchorages attached to the school bus floor with a minimum of two anchorages located at the rear of the space designated for a wheelchair and a minimum of two anchorages located at the front of the space.



- 5. The wheelchair-securement system shall provide a minimum of one wheelchair-securement device located in each of the rear anchorages and a minimum of one wheelchair-securement device located in each of the front anchorages.
- 6. A wheelchair space shall have a minimum of one wheelchair-passenger shoulder restraint anchorage attached to the interior wall of the school bus and a minimum of two wheelchair-passenger restraint anchorages located at the rear of the space.
- 7. Each wheelchair space shall have one wheelchair-passenger restraint. A school bus equipped with a wheelchair-passenger restraint shall have the following information available on the school bus:
 - a. A telephone number where information may be obtained about installation, repair, and parts; and
 - b. Instructions regarding use of the restraint, including a diagram showing the proper placement of the wheelchair and positioning of securement devices and occupant restraints, including correct belt angles.
- F. Dome light: A dome light shall be placed in the interior ceiling of the school bus to illuminate the wheelchair lift area. The dome light shall be activated by a pressure switch located in the special-service entrance door or by a manually operated switch located in the interior of the school bus no more than one foot from the special-service entrance door. This switch shall be used exclusively for the dome light.
- G. Aisles: All aisles leading to an emergency door from any wheelchair space shall be a minimum of 30 inches in width. The emergency door opening shall be a minimum of 30 inches in width.
- H. Seating arrangements: All fixed seats in a special-needs school bus shall be forward facing.
- I. Emblems: A school bus used for transporting disabled passengers shall display two International Symbol of Accessibility emblems. One emblem shall be placed below the upper window on the emergency door or below the window on the special-service entrance door, and the second emblem shall be placed below the windshield on the side of the bus or on the bumper opposite the school bus driver. The emblems shall be made of blue, reflective material and be a minimum of 6 inches and a maximum of 12 inches in width and height and shall contain a reflective white wheelchair impression with a minimum of 1/8 inch reflective white border around the outer edges of the emblems.
- J. Types A and B school buses used to transport disabled passengers shall comply with the specifications contained in this Section except:
 - 1. A ramp may be installed in place of a wheelchair lift;
 - 2. If a ramp is used, it shall be of a strength and rigidity to support a wheelchair, passenger, and an individual attending the wheelchair passenger. The ramp shall be equipped with a barrier on each longitudinal side to prevent the wheelchair from leaving the ramp;
 - 3. The floor of the ramp shall be covered with nonskid material; and
 - 4. A ramp shall not be carried in the passenger compartment of a school bus.

R13-13-106. Minimum Standards for School Bus Chassis

~~As of February 16, 1996~~ the chassis of a school bus introduced to Arizona on or after May 31, 2008 shall meet the requirements of this Section ~~when the school bus is introduced into Arizona~~. The chassis of a school bus introduced to Arizona before May 31, 2008 ~~introduced into Arizona before that date~~ shall meet the requirements of this Section ~~or those at A.A.C. R17-4-609~~ or shall be maintained in accordance with the manufacturer's original specifications.

- 1. Air cleaner: An engine intake air cleaner shall be installed in the school bus that meets engine specifications defined by the school bus manufacturer.
- 2. Axles: The front and rear axles and suspension assemblies shall have a gross axle weight rating consistent with that stated by the chassis manufacturer on a notice located in the school bus driver's compartment.
- 3. Back-up alarm: If installed, an alarm that emits a warning sound when the school bus is backing shall conform to the following:
 - a. The alarm-signaling device shall be of electronic, solid state design and shall emit an audible sound of a minimum of 97 dB(A) measured at 4 feet, 0° access from the source of the sound.
 - b. The alarm-signaling device shall be wired into the backup light circuits and shall emit sound automatically when the gear shift lever is in "reverse" position.
 - c. The alarm-signaling device shall be attached to the school bus chassis or body behind the rear axle.
- 4. Brakes:
 - a. A school bus with a manufacturer-designed passenger capacity of 60 or less shall be equipped with a service-brake system that uses compressed air or hydraulic assist.
 - b. A school bus with a manufacturer-designed passenger capacity greater than 60 shall be equipped with a service-brake system that uses compressed air.
 - c. In addition to the service-brake system, a school bus shall be equipped with a parking-brake system to keep the school bus from moving when parked.
 - d. The service brakes in a compressed-air system shall be adjusted using the following criteria:

Type	Outside Diameter of Air Chamber	Brake Adjustment Limit
6	4 1/2 inches	1 1/4 inches



9	5 1/4 inches	1 3/8 inches
12	5 11/16 inches	1 3/8 inches
16	6 3/8 inches	1 3/4 inches
20	6 25/32 inches	1 3/4 inches
24	7 7/32 inches	1 3/4 inches
30	8 3/32 inches	2 inches
36	9 inches	2 1/4 inches

e. The service brakes in a “long stroke” clamp type brake system shall be adjusted using the following criteria:

Type	Outside Diameter of Air Chamber	Brake Adjustment Limit
12	5 11/16 inches	1 3/4 inches
16	6 3/8 inches	2 inches
20	6 25/32 inches	2 inches
24	7 7/32 inches	2 inches
24*	7 7/32 inches	2 1/2 inches
30	8 3/32 inches	2 1/2 inches

*For 3" maximum stroke type 24 chambers

- f. The service-brake system in a compressed-air system shall contain an emergency-brake system that will activate when the air loss in the service-brake system reaches 20 to 40 pounds per square inch.
 - g. A school bus using a compressed-air or hydraulic-assist service-brake system shall be equipped with a signal located in the school bus driver's compartment that emits a continuous audible or visible warning to the school bus driver when:
 - i. The air pressure available in a compressed-air braking system is 60 pounds per square inch or less; or
 - ii. There is a loss of fluid flow from the main hydraulic pump or loss of electric source powering the back-up system in a hydraulic-assist system.
 - h. A school bus using a compressed-air service-brake system shall be equipped with one or two illuminated gauges located in the school bus driver's compartment that show the pounds per square inch of compressed air available for the operation of the brake.
 - i. A compressed-air brake system with a dry reservoir shall have a one-way valve that will prevent the loss of compressed air between the dry reservoir and the source of compressed air.
 - j. A brake system with a wet reservoir shall have a valve located at the bottom of the wet reservoir that operates automatically or can be operated remotely or manually to eject the moisture from the reservoir.
 - k. Compressed-air or hydraulic-assist brake lines and booster-assist lines shall be installed in a manner that prevents heat, vibration, and chafing damage.
 - l. The brake systems of Types C and D school buses shall be installed so the chassis components can be visually inspected to detect brake lining wear without removal of any of the chassis components.
5. Front bumper: The front bumper shall be positioned at the forward-most part of the school bus and extend to the outer edges of the school bus.
 6. Child alert notification system: A school bus may be equipped with an electronic or mechanical child alert notification system. If a school bus is equipped with a child alert notification system, the device shall be installed in a manner that does not interfere with any other existing operating or electrical component. A child alert notification system in a school bus shall not have an override or bypass capability.
 7. Clutch: The clutch torque capacity shall be equal to or greater than the engine torque output.
 8. Color: The chassis, including wheels and front bumper, shall be painted black. The hood and fenders shall be painted National School Bus Yellow as described in R13-13-107(6).
 9. Cooling system: A school bus shall be equipped with a cooling system that maintains the engine temperature operating range required to prevent damage to the school bus engine.
 10. Drive shaft: Each section of the drive shaft to the rear driving axle shall be protected by a metal guard around its circumference to reduce the possibility of the drive shaft penetrating through the school bus floor or dropping to the ground.
 11. Electrical system:
 - a. Battery:



- i. The battery shall have a minimum cold-cranking capacity rating equal to the cranking current required by the engine for 30 seconds at 0° F. and a minimum reserve capacity rating of 120 minutes at 25 amperes.
 - ii. The battery shall have a higher capacity than specified in subsection (11)(a)(i) if optional equipment installed on the school bus requires the higher capacity.
 - iii. Because all batteries are to be secured in a sliding tray in the bus body as required by R13-13-107, chassis manufacturers shall mount batteries temporarily on the chassis frame, except that a van conversion or cut-away front-section chassis may be secured in accordance with the manufacturer's standard configuration. However, in all cases the battery cable provided with the chassis shall have sufficient length to allow some slack, and shall be of sufficient gauge to carry the required amperage.
 - b. Alternator:
 - i. All alternators shall conform to the recommended practices of Standard J180, January 2002 (no later amendments or editions) published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, which is incorporated by reference and on file with the Department.
 - ii. All Type A-2 and Type B buses with a GVWR of 15,000 pounds or less shall have an alternator with a minimum of 130 amps.
 - iii. All Type A-2 and Type B buses with a GVWR over 15,000 pounds, and all Type C and D buses shall be equipped with a heavy-duty truck or bus-type alternator meeting Standard J180, which is incorporated by reference in subsection (b)(i), having a minimum output rating of 130 amps, and shall produce a minimum current output of 50% of the rating at engine idle speed. The alternator may be either pad-mounted or hinge-mounted.
 - iv. Buses equipped with an electrically powered wheelchair lift or air conditioning may be equipped with a device that monitors the electrical system voltage and advances the engine idle speed when the voltage drops to, or below, a pre-set level.
 - v. A belt-driven alternator shall be capable of handling the rated capacity of the alternator with no detrimental effect on any other driven components.
 - vi. A direct-drive alternator may be installed instead of a belt-driven alternator.
 - vii. If the school bus is equipped with an air conditioning system, the alternator shall have a minimum charging rate of 160 amperes per hour.
 - viii. The alternator on a school bus shall contain a regulator to control the voltage to the battery.
 - c. Wiring:
 - i. All wiring shall conform to the recommended practices of Standard J1292, October 1981 (no later amendments or editions), published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department.
 - ii. All wiring shall use a standard color or number coding and each chassis shall contain a wiring diagram that details the wiring of the chassis.
 - iii. The chassis shall be equipped with a connection to provide electrical power to the school bus. The connection shall be located on the chassis cowl or on the engine compartment of a school bus designed without a chassis cowl. The connection shall contain terminals for the main 100 ampere body circuit, tail lamps, right-turn signal, left-turn signal, stop lamps, backup lamps, and instrument panel lights. The instrument panel lights shall have a rheostat control.
- 12. Engine horsepower: The gross vehicle weight rating of a school bus shall not exceed 185 pounds for each engine horsepower as published by the manufacturer on a notice located on the school bus engine.
- 13. Exhaust system:
 - a. The exhaust pipe, muffler, and tailpipe shall be located under the school bus body and attached to the chassis.
 - b. The tailpipe shall be constructed of a corrosion-resistant tubing material at least equal in strength and durability to 16-gauge steel tubing.
 - c. The exhaust system on a gasoline-powered chassis shall be insulated from the fuel tank and fuel tank connections by a shield at any point where the exhaust system is 12 inches or less from the fuel tank or fuel tank connections.
- 14. Frame:
 - a. A school bus frame shall be of a design and strength capable of supporting the gross vehicle weight of the school bus.
 - b. A school bus frame shall not be altered for any purpose.
 - c. Holes in top or bottom flanges of frame rails are not permitted except as provided by the manufacturer. There shall be no welding to the frame rails except by the chassis or body manufacturer or the manufacturer's certified agent.
 - d. The school bus frame shall not be cracked, loose, sagging, or broken.
 - e. Brackets securing the cab or the body of the school bus to the frame shall not be loose, broken, or missing.
 - f. The frame rail flanges shall not be bent, cut, or notched, except as specified by the manufacturer.
 - g. All accessories mounted to the school bus shall be secured as specified by the manufacturer.



- h. Holes shall not be drilled in the top or bottom rail flanges, except as specified by the manufacturer.
- 15. Front fenders of a Type C school bus: The outer edges of the front fenders shall be wider than the outer edges of the front tires when the front wheels are in the straight-ahead position.
- 16. Fuel system:
 - a. A school bus shall contain a fuel tank with a minimum 30-gallon capacity, with a minimum dispersion of 25 gallons of fuel to the engine. The fuel tank shall be vented to the outside of the school bus body so fuel spillage will not contact any part of the exhaust system.
 - b. On a Type B, Type C, or Type D school bus, no portion of the fuel system that is located outside of the engine compartment, except the filler tube, shall extend above the top of the chassis frame.
 - c. A fuel filter with replaceable element shall be installed between the fuel tank and engine.
 - d. The fuel line that supplies fuel to the engine shall be located at the top of the fuel tank.
- 17. Horn: A school bus shall be equipped with at least one horn capable of producing a sound level between 82 and 102 dB(A) when tested according to the Standard J377, March 2001 (no later amendments or editions) published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department.
- 18. Instruments and instrument panel:
 - a. The chassis shall be equipped with the following instruments:
 - i. Speedometer;
 - ii. Odometer that will give accrued mileage to seven digits, including tenths of miles;
 - iii. Voltmeter or ammeter;
 - iv. Oil pressure gauge;
 - v. Water temperature gauge;
 - vi. Fuel gauge;
 - vii. Upper beam head lamp indicator;
 - viii. Brake system signal as required by R13-13-106(4)(f);
 - ix. Turn signal indicator; and
 - x. Air pressure or hydraulic gauge.
 - b. The instruments shall be mounted on the instrument panel in the school bus driver's compartment and visible to the school bus driver while seated in the driver's seat.
 - c. The instrument panel shall be equipped with a rheostat switch that controls the illumination to the instrument panel and the gear shift selector indicator.
- 19. Oil filter: A replaceable element or cartridge-type oil filter shall be provided with a minimum capacity that meets or exceeds the capacity recommended by the manufacturer of the school bus engine.
- 20. Openings: All openings in the floorboard and in the fire wall between the chassis and passenger compartment shall be sealed.
- 21. Splash guards:
 - a. A school bus shall be equipped with rear fender splash guards constructed of flexible rubberized material.
 - b. The splash guards shall be wide enough to cover the tire tread width, installed close enough to the tire tread surface to control side-throw of road surface material, and extend to within 8 inches of ground level.
- 22. Steering system:
 - a. Power steering is required on all school buses manufactured after January 1, 1984.
 - b. Bracing extending from the center of the steering wheel to the steering wheel ring shall not be cracked or missing.
 - c. The distance of movement of the steering wheel between two points of resistance shall not be greater than the following when measured with the engine running:

Steering wheel diameter	Power steering	Manual steering
16 in. or less	6 3/4 inches	4 1/2 in.
18 in.	7 1/8 inches	4 3/4 in.
20 in.	7 7/8 inches	5 1/4 in.
22 in.	8 5/8 inches	5 3/4 in.

- d. There shall be clearance of at least 2 inches between the steering wheel and any object in the driver's compartment.
- e. A non-adjustable steering column shall be fastened in a fixed position. An adjustable steering column shall be equipped with a locking mechanism.
- f. The steering gear housing shall not have loose or missing mounting bolts. There shall not be cracks in the gear housing or its mounting brackets.
- g. The connecting arm on the steering gear power source shall not be loose.
- h. The steering wheel shall turn freely in both directions.



- i. The steering system shall have a means for lubrication of all wear-points.
- 23. Suspension:
 - a. Shock absorbers:
 - i. A school bus shall be equipped with front and rear double-acting shock absorbers. Replacements to shock absorbers shall be made according to the specifications of the manufacturer's part number as stamped on the shock absorber.
 - ii. If a school bus is manufactured with tandem rear axles, rear shock absorbers are not required.
 - b. Suspension system:
 - i. Capacity of suspension assemblies shall be commensurate with the chassis manufacturer's gross vehicle weight rating.
 - ii. If leaf-type rear springs are used, they shall be a progressive rate or multi-stage design.
- 24. Tires and wheels:
 - a. Tires and wheels shall have an accumulated load rating at least equal to the gross vehicle weight rating.
 - b. Dual rear tires shall be provided on all school buses that have a gross vehicle weight rating of more than 10,000 pounds.
 - c. Each tire on a particular axle shall be the same size.
 - d. All tires on a school bus shall be bias or all tires on a school bus shall be radial and shall not differ more than one size between front and rear axles.
 - e. On a Type C or D school bus, a spare tire, if present, shall be in a carrier mounted outside the passenger compartment.
- 25. Transmission: The school bus transmission shall have no fewer than three forward speeds and one reverse speed.
- 26. Turning radius:
 - a. A chassis with a wheelbase of 264 inches or less shall have a right and left turning radius of not more than 42 1/2 feet, as measured to the edge of the front tire at the outside of a circle as the school bus moves within the circle.
 - b. A chassis with a wheelbase of more than 264 inches shall have a right and left turning radius of not more than 44 1/2 feet, as measured to the edge of the front tire at the outside of a circle as the school bus moves within the circle.
- 27. Weight:
 - a. The gross vehicle weight of a school bus shall not exceed the chassis manufacturer's gross vehicle weight rating for the chassis as recorded on a notice located in the school bus driver's compartment.
 - b. To calculate the gross vehicle weight of a school bus, add the chassis weight, the school bus body weight, the school bus driver's weight, and the total seated passenger weight.
 - i. For the purpose of calculation, the school bus driver's weight is 150 pounds.
 - ii. For the purpose of calculation, the passenger weight is 120 pounds per seated passenger.
 - c. The weight distribution of a school bus on a level surface that is fully loaded according to the gross vehicle weight rating shall not exceed the front axle gross weight rating or rear axle gross weight rating as recorded on a notice located in the school bus driver's compartment.

R13-13-107. Minimum Standards for School Bus Body

~~As of February 16, 1996 the~~ The body of a school bus introduced to Arizona on or after May 31, 2008 shall meet the requirements of this Section when the school bus is introduced into Arizona. The body of a school bus introduced to Arizona before May 31, 2008 introduced into Arizona before that date shall meet the requirements of this Section or those at A.A.C. R17-4-610 or shall be maintained in accordance with the manufacturer's original specifications.

- 1. Air conditioning system: The school bus may be installed with an air conditioning system. If installed, the air conditioning system shall:
 - a. Be of a mechanical vapor compression refrigeration type;
 - b. Be manufactured to conform to the requirements of Standard J639, June 2005 (no later amendments or editions) published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department;
 - c. Have sufficient power for simultaneous cooling, circulating, and dehumidifying the air;
 - d. Be provided with refrigerant that is nontoxic, nonflammable, and non-explosive;
 - e. Have all power and grounding installed according to the manufacturer's specifications; and
 - f. Have exhaust system exit from the rear of the vehicle, and extend to, but not more than 2 inches beyond the outer edge of the rear bumper.
- 2. Aisle:
 - a. The center aisle of a school bus shall have a clearance of not less than 12 inches at the bottom of the seat cushion, increasing to 15 inches at the top of the seat backs.
 - b. Aisles to side emergency doors shall have a minimum clearance of 12 inches which may be achieved by using flip-up type seats.
- 3. Auxiliary fan:



- a. An auxiliary fan, if installed, shall be placed in a location that does not obstruct the school bus driver's view of any mirror located on the school bus.
- b. An auxiliary fan, if installed, shall have a 6-inch nominal diameter, with the fan blades covered by a protective cage.
- c. Each installed auxiliary fan shall be controlled by a switch that is independent of any other electrical system.
- 4. Battery:
 - a. A battery shall be secured to a slide-out or swing-out tray in a vented compartment in the school bus body, so the battery is accessible to the outside for servicing. If the battery compartment has a door that is not removable, the door shall be secured by a fastening device when the door is in a closed position. If the battery compartment has a removable cover, the cover shall be secured by a fastening device when the cover is in place.
 - b. The word "Battery" shall be printed in unshaded black letters that are no more than 2 inches in height on the battery-compartment door or cover or immediately above the battery-compartment door or cover.
 - c. Buses with a battery located under the engine hood are exempt from these provisions.
- 5. Belt cutter: A school bus with passenger seat belts shall be equipped with a belt cutter having a full width handgrip and a protected, replaceable or non-corrodible blade. The belt cutter shall be mounted in a location accessible to the seated driver, and in an easily detachable manner. The belt cutter shall be accessible only to the school bus driver.
- 6. Color:
 - a. A school bus body shall be painted National School Bus Yellow according to the following specifications and tolerances:

Description	Reflectance	Chromaticity	
	Y	X	Y
Centroid	41.5%	.5139	.4434
V+ Light Limit	42.9%	.5139	.4427
V- Dark Limit	39.8%	.5133	.4422
H+ Green Limit	41.6%	.5123	.4368
H- Red Limit	41.7%	.5168	.4489
C+ Vivid Limit	41.5%	.5188	.4457
C- Weak Limit	41.5%	.5095	.4405

- b. The bumpers, lamp hoods, lettering, and rub rails on a school bus body shall be black.
- 7. Crossing control arm:
 - a. A school bus may be equipped with a crossing control arm. If installed, all components and all connections of the crossing control arm shall:
 - i. Meet the requirements set forth in Standard J1133, November 2004 (no later amendments or editions) published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department;
 - ii. Be mounted on the right side of the front bumper;
 - iii. When opened, extend in a line parallel to the body side and aligned with the right side wheel;
 - iv. Be weatherproofed;
 - v. Incorporate system connectors (electrical, vacuum, or air) at the gate and be easily removable to allow for towing of the school bus;
 - vi. Be constructed of non-corrodible or nonferrous material, or treated in accordance with the school bus body sheet metal specification;
 - vii. Have no sharp edges or projections that could cause injury or be a hazard to students;
 - viii. Be rounded at the end of the crossing control arm;
 - ix. Extend approximately 70 inches (measured from the bumper at the arm assembly attachment point) when in the extended position;
 - x. Not extend past the end of the bumper when in the stowed position;
 - xi. Extend simultaneously with the stop signal arm, activated by the stop signal arm control; and
 - xii. Include a device attached to the bumper near the end of the arm to automatically retain the arm while in the stowed position. The device shall not interfere with the normal operations of the crossing control arm.
 - b. An automatic recycling interrupt switch may be installed for temporarily disabling the crossing control arm.
- 8. Defrosters:
 - a. Defrosting and defogging equipment shall direct a flow of heated air onto the windshield, the window to the left of the driver, and the glass in the viewing area directly to the right of the driver to eliminate frost, fog, and snow.



- b. The defrosting system shall conform to Standards J381 September 2000 (no later amendments or editions) and J382, September 2000 (no later amendments or editions), both published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001 incorporated by reference and on file with the Department.
- c. An auxiliary fan shall not be used in place of a defrosting and defogging system.
- d. A portable heater shall not be used in place of a defrosting or defogging system.
- 9. Electrical wiring:
 - a. All electrical wiring on a school bus shall conform to the standards contained in Standard J1292, October 1981 (no later amendments or editions), published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001 and incorporated by reference and on file with the Department.
 - b. Electrical wiring that is coded by color shall be coded as follows:
 - i. Left Rear Directional Light: Yellow
 - ii. Right Rear Directional Light: Dark Green
 - iii. Stoplights: Red
 - iv. Back-up Lights: Blue
 - v. Taillights: Brown
 - vi. Ground: White
 - vii. Ignition Feed, Primary Feed: Black
 - c. Circuits: Electrical wiring circuits shall be protected by a fuse, circuit breaker, or Field Effect Transistor and shall be coded by number or color on an electrical wiring diagram located in the driver's compartment or the electrical access panel door. There shall be at least seven circuits as follows:
 - i. Head, tail, stop, and instrument panel lamps;
 - ii. Clearance and step-well lamps;
 - iii. Dome lamps;
 - iv. Ignition and emergency door signal;
 - v. Turn signal lamps;
 - vi. Alternately flashing signal lamps; and
 - vii. Heaters and defrosters.
 - d. All electrical wires passing through metal openings shall be protected by a non-metal grommet.
 - e. Electrical wires not enclosed within the school bus body shall be fastened at intervals of not more than 18 inches.
- 10. Emergency exits: A door, push-out window, or roof hatch used as an emergency exit shall conform to the following:
 - a. On the inside and outside of a school bus, the words "EMERGENCY EXIT" or "EMERGENCY DOOR" shall be printed in black, unshaded letters at least 2 inches high above an emergency door or push-out window and at least 1 inch high on a roof hatch.
 - b. Each emergency exit shall open toward the exterior of the school bus and shall be labeled within 6 inches of the interior release mechanism with black lettering at least 3/8 of an inch high instructing how the exit is to be opened.
 - c. On a Type A school bus with double rear doors used as emergency exits, the rear doors shall be secured with upper, center, and lower latches to the door frame.
 - d. The upper portion of each door used as an emergency exit shall be equipped with a window made of safety glass with an area not less than 400 square inches. A door located in the rear end of the school bus used as an emergency exit shall also contain a lower window panel of safety glass of not less than 350 square inches. A Type A school bus that contains double rear doors used as emergency exits is exempt from this provision.
 - e. There shall be no steps on the outside of the school bus leading to an emergency exit.
 - f. A header pad filled with a material to protect against injury shall be attached to the top edge of the frame of a door used as an emergency exit. The header pad shall be a minimum of 3 inches wide and 1 inch thick and extend the full width of the door opening.
 - g. Each emergency exit shall be equipped with a latch that opens from the inside of the school bus and is connected to an electrical buzzer audible in the driver's compartment that actuates when the latch is being released.
 - h. Except for interlock/barrel bolt devices, if a lock is installed on an emergency exit, the lock shall be secured only by using a key and shall deactivate the ignition system of the school bus when locked.
- 11. Emergency equipment:
 - a. All emergency equipment shall be mounted in the driver's compartment or adjacent to either side of the service entrance and shall be readily accessible. If the emergency equipment is mounted within a closed compartment, the compartment shall be clearly labeled as containing the emergency equipment.
 - b. Fire extinguisher:
 - i. A school bus shall be equipped with a minimum of one 5-pound pressurized, dry, chemical fire extinguisher of a type rated not less than 2A-10-BC by the Underwriter's Laboratories, Inc., as described by the National Fire Protection Association, Inc., One Batterymarch Park, Quincy, MA 02269, in NFPA 10: Stan-



- standard for Portable Fire Extinguishers, published in 2006 (no later amendments or editions), incorporated by reference and on file with the Department.
- ii. A pressure gauge shall be mounted on the fire extinguisher to be readable in its mounted position.
 - iii. The operating mechanism of the fire extinguisher shall be sealed with a type of seal that will not interfere with the use of the fire extinguisher.
- c. Warning devices: A school bus shall have a minimum of three reflective triangle road-warning devices that comply with the standards at 49 CFR 571.125, October 2006 (no later amendments or editions), published by the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328, incorporated by reference and on file with the Department.
12. Floor:
 - a. The floor beneath the seats, including the tops of the wheel housings and the floor in the driver's compartment, shall be covered with fire-resistant floor-covering material having a minimum overall thickness of .10 inch.
 - b. The aisle floor shall be covered with a fire-resistant ribbed or non-skid floor-covering material with a minimum thickness of .10 inch.
 - c. The floor-covering material shall be bonded to the floor with a waterproof adhesive and shall not crack when subjected to changes in air temperature.
 13. Handrail: A handrail at a school bus service entrance shall be secured to the school bus wall in a manner that causes the crevice formed by the distance between the handrail and the wall to pass the inspection procedure described by the National Highway Traffic Safety Administration, Washington, D.C. 20590, in School Bus Safety Assurance Program Recall Listing: January 1991 Through June 1996 (no later amendments or editions), incorporated by reference and on file with the Department.
 14. Heating system:
 - a. Heaters shall be of the hot-water type.
 - b. The heating system shall be capable of maintaining bus interior temperatures as specified in the procedure set forth in Standard J2233, June 2002 (no later amendments or editions), published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department.
 - c. A minimum of one heater shall be a fresh-air or combination fresh-air and recirculating-air type.
 - d. If more than one heater is used, additional heaters may be of recirculating-air type.
 - e. All heater hoses shall be secured in all areas of the school bus body and chassis to prevent wear due to vibration. Heater lines in the interior of the bus shall be covered by a protective shield to prevent scalding of the driver or passengers.
 - f. Except on Type A school buses, the heater system shall include shutoff valves installed at the engine in the water pressure lines and return lines.
 15. Identification:
 - a. Only signs, lettering, and objects approved by state law or these rules shall appear on the interior or exterior of a school bus, including all glass areas.
 - b. Each school bus owned by a school or a private company shall display either the name of the school and school number, if any, or the name of the private company on each exterior side of the school bus between the rub rails at the center line and seat cushion levels in black unshaded letters that are at least 5 inches in height. Additionally, a school bus owned by a private company that displays the name of the school and school number as described above, may display the company's name on each exterior side of the school bus below the floor line in black unshaded letters that are a maximum of 2 inches in height.
 - c. An identification number assigned to a school bus by an owner shall be placed on the front and rear bumpers of the school bus and on each exterior side of the school bus below the floor line rub rail and forward of the centerline of the school bus. The identification number on each bumper shall be National School Bus Yellow. The identification number on each exterior side shall be black. Each identification number shall be a minimum of 5 inches in height.
 - d. In addition to an identification number, a school bus may be identified by an emblem placed on the loading side of the front bumper or the exterior wall of the loading side below the floor line rub rail and forward of the center line of the school bus, or both. The emblem shall be painted or decaled on or attached to a magnetic backing.
 - e. In addition to an identification number, a school bus may display a route identification sign. If displayed, the route identification sign shall:
 - i. Be installed with a heavy duty Velcro, magnetic, screw-type or similar fixture;
 - ii. Be a minimum of 5 inches in height; and
 - iii. Be located on a flat surface of the bus body, excluding glass.
 16. Interior: If the ceiling is constructed with overlapping panels, the first panel placed in the ceiling shall be overlapped by the following panel and each panel shall consecutively overlap to the rear end of the school bus. Exposed edges in the interior of the school bus shall be beaded, hemmed, flanged, or rounded to eliminate sharp edges.
 17. Lamps and signals:



- a. All lamps on the exterior of a school bus shall conform to the provisions contained in 49 CFR 393.9 et seq. of the Federal Motor Carrier Safety Regulations, October, 2006 (no later amendments or editions) published at the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328, incorporated by reference and on file with the Department.
- b. Interior lamps shall be provided that illuminate the center aisle and step well.
- c. Alternately flashing signal lamps:
 - i. When a school bus is equipped with a four-lamp system, the system shall consist of two red alternately flashing signal lamps located one on the left and one on the right above the rear windows of the school bus and two red alternately flashing signal lamps located one on the left and one on the right above the windshield.
 - ii. When a school bus is equipped with an eight-lamp system, the four red alternately flashing signal lamps shall be installed as described in subsection (14)(c)(i) and the four amber alternately flashing signal lamps shall be installed as follows: one amber alternately flashing signal lamp shall be located adjacent to each red alternately flashing signal lamp, at the same level, but closer to the vertical centerline of the school bus. The system of red and amber alternately flashing signal lamps shall be wired so the amber alternately flashing signal lamps are activated manually and the red alternately flashing signal lamps are activated automatically or manually.
 - iii. Except for LED lamps, each alternately flashing signal lamp shall be covered by a lamp hood.
- d. Turn signal and stop lamps:
 - i. Except as provided in subsections (17)(d)(iii) and (17)(d)(iv), all school buses shall be equipped with amber side-mounted turn signals. The turn signal lamp on the left side of the bus may be mounted rearward of the stop signal arm and the turn signal lamp on the right side may be mounted rearward of the entrance door.
 - ii. Except on Type A school buses, a school bus body shall be equipped with rear turn signal lamps that are at least 7 inches in diameter, or if the lamp shape is other than round, a minimum of 38 square inches of illuminated area. The lens area of the rear turn signal lamps on Type A school buses shall be at least 21 square inches. The rear turn signal lamps shall be connected to the hazard warning switch located in the driver's compartment to allow the school bus driver to activate simultaneous flashing of turn signal lamps when needed as a traffic hazard warning. The rear turn signal lamps shall be located to the far left and right sides of the flat surface of the rear of the school bus body and below the rear window.
 - iii. A Type C school bus may have a double-faced turn signal lamp that is visible from the front and rear of the school bus and mounted on the tops or sides of both front fenders or may have a turn signal lamp mounted on the left and right sides of the grill and may have a turn signal lamp mounted on each side of the school bus body between the window line and the second rub rail and forward of the vertical centerline.
 - iv. A Type D school bus may have a turn signal lamp mounted at the front of the school bus body above each head lamp and may have a turn signal lamp mounted on each side of the school bus body between the window line and second rub rails and forward of the vertical centerline of the school bus.
 - v. A 7 inch diameter stop lamp, or if the lamp shape is other than round, a stop lamp with a minimum of 38 square inches of illuminated area shall be located toward the centerline and adjacent to each of the rear turn signal lamps.
- e. Backup lamps: A school bus shall be equipped with two backup lamps with clear lenses, located one on the right and one on the left rear panels below the rear windows.
- f. White flashing strobe lamp: If used on a school bus, a strobe lamp shall have a single clear lens that emits light 360 degrees around its vertical axis and shall be located on the longitudinal centerline of the school bus roof 1/3 to 1/2 of the distance forward from the rear of the school bus body unless this placement restricts the view of the strobe lamp.
 - i. If the view of the strobe lamp is restricted when the strobe lamp is located 1/3 to 1/2 of the distance forward from the rear of the school bus body, the strobe lamp may be mounted immediately to the rear of the roof hatch.
 - ii. The strobe lamp shall be controlled by a manual switch located in the driver's compartment.
 - iii. A pilot lamp shall be located in the driver's compartment to show the school bus driver that the strobe lamp is activated.



18. Mirrors:
 - a. Interior mirror: The interior mirror shall be made of either laminated glass or glass bonded to a backing that will retain the glass in the event of breakage. The interior mirror in Types B, C, and D school buses shall be a minimum of 6 inches in height and 30 inches in length surrounded by a frame with rounded corners. The interior mirror in Type A buses shall be a minimum of 6 inches in height and 16 inches in length.
 - b. Exterior mirrors: A school bus shall comply with the requirements contained in 49 CFR 571.111, October 2006 (no later amendments or editions), published at the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328, incorporated by reference and on file with the Department.
19. Noise suppression switch: A school bus shall be equipped with a manual noise suppression switch. Identification shall be provided on or adjacent to the switch, in order to clearly state its purpose and distinguish it from other controls. This switch shall be an on-off type that deactivates body equipment that produces noise, including, at least, the AM-FM radio, heaters, air conditioners, fans, and defrosters. This switch shall not deactivate safety systems, such as windshield wipers or lighting systems.
20. Overall length: The overall length of a school bus shall not exceed 45 feet including accessories.
21. Overall width: The overall width of a school bus shall not exceed 102 inches excluding mirrors.
22. Rear bumper:
 - a. The rear bumper shall be made of a minimum of 3/16 inch thick pressed steel that is a minimum of 8 inches in total height.
 - b. The rear bumper shall be wrapped around the back corners of the bus and shall extend toward the front of the school bus for at least 12 inches as measured from the rear-most point of the school bus body at the floor line.
 - c. The rear bumper shall be attached to the chassis frame and braced to support the rear corners of the bumper.
 - d. The rear bumper shall extend at least 1 inch beyond the rear-most part of the school bus body as measured at the floor line.
 - e. The rear bumper shall not be equipped with footholds or handles.
 - f. A Type A school bus equipped with the chassis manufacturer's rear bumper is exempt from subsections (22)(a) through (22)(c).
23. Restraining barrier:
 - a. The restraining barrier shall be a minimum of 38 inches high as measured from the interior floor of the school bus to the top of the restraining barrier.
 - b. The restraining barrier shall be the same width as the seat directly behind the restraining barrier.
24. Rub rails:
 - a. There shall be no fewer than two rub rails located on a school bus as follows:
 - i. One rub rail shall be located on each side of the school bus approximately at seat cushion level and shall extend from the rear post of the service door frame completely around the school bus body, excluding the emergency door, to the front post of the school bus driver's window.
 - ii. One rub rail shall be located on each side of the school bus approximately at the floor line and shall extend from the rear post of the service door frame to the rear corner post of the school bus body and from the front post of the school bus driver's window to the rear corner post on the driver's side.
 - b. Rub rails are not required on emergency doors, special-service entrance door, access panels and compartment doors, and wheel well openings.
 - c. Each rub rail shall be attached to the outside of the school bus body at each structural post in the school bus body.
 - d. Each rub rail shall be a minimum of 4 inches in width and constructed of corrugated or ribbed 16-gauge steel.
25. Seat belt for school bus driver: A seat belt for the school bus driver shall be installed in the driver's compartment. The seat belt shall be equipped with a retractor on each side of the school bus driver's seat to keep the seat belt retracted and off the floor when not in use.
26. Seats:
 - a. Each seat shall have a minimum depth of 15 inches measured from the front of the seat cushion to the seat back.
 - b. Each seat shall be a minimum of 38 inches in height measured from the interior floor of the school bus to the top of the back cushion.
 - c. Seat spacing shall meet the requirements of 49 CFR 571.222, October 2006 (no later amendments or editions), published at the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D. C. 20402-9328, incorporated by reference and on file with the Department. Seat spacing shall not be less than 24 inches between the front of a seat back cushion to the back surface of the cushion on the preceding seat. Seat spacing shall be measured at cushion height, at the center of the seat, on a plane parallel to the center line of the bus. The seat upholstery may be placed against the seat cushion padding, but without compressing the padding, before measurement is taken.



- d. The school bus driver's seat shall be adjustable, without the use of tools, both vertically and horizontally for a minimum of 4 inches. Seats with vertical adjustments are not required on Types A and B school buses.
- 27. Service door:
 - a. The service door shall be located on the right side of the school bus opposite the school bus driver and within direct view of the school bus driver when seated in the school bus driver's seat. Types A and B school buses are exempt from this provision.
 - b. The service door shall have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches. Type A school buses shall have a service door with a minimum opening of 1200 square inches.
 - c. Windows in the upper and lower panels of the service door shall be made of safety glass. The bottom of each lower window panel shall be no more than 10 inches from the top surface of the lower step of the service entrance. The top of each upper window panel shall be no more than 6 inches below the top of the service door. Type A buses are exempt from this provision.
 - d. To protect passengers' fingers, a flexible rubber material shall be attached by number 10 3/4 inch metal screws to the opening and closing edges of the service door. Type A school buses are exempt from this provision.
 - e. The service door shall open towards the exterior of the school bus. A Type A school bus is exempt from this provision if the service door is provided by the school bus chassis manufacturer.
 - f. A header pad, filled with a material to protect against injury, shall be attached to the top edge of the frame of the service door. The header pad shall be at least 3 inches wide and 1 inch thick and extend the full width of the service entrance.
 - g. A Type A school bus with the chassis manufacturer's standard service entrance is exempt from subsections (27)(a) through (27)(d).
- 28. Steps:
 - a. The risers of the steps in the service entrance shall be equal. When plywood is laid over the steel floor of the school bus, the height of the top step may be increased by the thickness of the plywood.
 - b. The first step at the service entrance shall be no less than 10 inches and no more than 16 inches from the ground.
 - c. Steps shall be enclosed in the school bus body.
 - d. Steps shall not extend beyond the side of the school bus body.
 - e. A handrail not less than 10 inches in length shall be provided inside the doorway.
- 29. Step treads:
 - a. All steps, including the floor-line platform area, shall be covered with ribbed or non-skid floor-covering material that is mounted on a metal plate.
 - b. The metal back of the step tread shall be a minimum 24-gauge cold rolled steel and shall be permanently bonded to the ribbed or non-skid material.
 - c. If ribbed material is used, the ribbed design shall run from the risers toward the service entrance. Each step tread shall have a 1 1/2 inch white nosing.
- 30. Stirrup steps: There shall be a handle and at least one folding stirrup step or recessed foothold located on each side of the front of a school bus for accessibility for cleaning the windshield and lamps. Type A school buses are exempt from this provision.
- 31. Stop signal arm:
 - a. School buses shall be equipped with a stop signal arm on the left side of the school bus body that extends 90° from the school bus body when opened.
 - b. The stop signal arm shall be either air or electrically driven, and meet the requirements of Standard J1133, November 2004 (no later amendments or editions) published by the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001, incorporated by reference and on file with the Department.
 - c. The stop signal arm shall be an 18-inch octagon, constructed of a red material that reflects light, with the word "STOP" printed on both sides in white letters not less than 5 inches high. Additionally, the word "STOP" may be illuminated by a light-emitting diode system on both sides of the stop signal arm.
- 32. Sun shield: An interior adjustable transparent sun shield or visor not less than 6 inches x 30 inches with a finished edge shall be installed over the windshield in the driver's compartment. School buses with a gross vehicle weight rating of 10,000 pounds or less are exempt from this provision.
- 33. Tailpipe:
 - a. The tailpipe shall extend to, but not more than 2 inches beyond, the outer edge of the rear bumper;
 - b. The tailpipe shall exit in the rear of the vehicle behind the rear drive axle, and shall be placed according to the manufacturer's specifications; and
 - c. The tailpipe shall not exit beneath any fuel filler location or beneath any emergency door.
- 34. Undercoating:
 - a. The entire underside of the school bus body, including floor sections, cross member and below-floor-line side panels, shall be coated with rust-proofing material for which the material manufacturer has issued to the bus



body manufacturer notarized certification that materials meet or exceed all performance and qualitative requirements of paragraph 3.4 of Federal Specification TT-C-520B, Coating Compound, Bituminous, Solvent Type, Underbody (For Motor Vehicles), February 2, 1973 (no later amendments or editions), published by the General Services Administration acting as an agent for the Superintendent of Documents, Washington D.C. 20402, and incorporated by reference and on file with the Department. Modified test procedures shall be used for the following requirements:

- i. Salt spray resistance - test modified to 5% salt and 1,000 hours,
 - ii. Abrasion resistance, and
 - iii. Fire resistance.
- b. Test panels shall be prepared in accordance with paragraph 4.6.12 of Federal Specification TT-C-520B, with a modified procedure requiring that the test shall be made on a 48-hour air-cured film at a thickness recommended by the material manufacturer.
 - c. Undercoating is not required if the underside of the school bus is constructed of noncorrosive material.
 - d. The undercoating material shall be applied with suitable airless or conventional spray equipment to the recommended film thickness and shall show no evidence of voids in the cured film.
35. Ventilation: An immovable, non-closing exhaust ventilator shall be installed in the school bus roof.
36. Wheel housing:
- a. The wheel-housing opening shall be large enough to allow for the removal of the tire and wheel.
 - b. The wheel housing shall be constructed of 16-gauge steel or fiberglass of equal strength and sealed to the school bus floor.
 - c. The wheel housing shall not extend more than 12 inches above the floor inside the school bus body and shall not extend into the emergency door opening.
 - d. The wheel housing shall provide clearance for tire chains installed on the tires of the driving wheels.
37. Windows: Each side window in the passenger compartment of a school bus body shall provide an unobstructed opening of at least 190 square inches when the window is open.
38. Windshield washer system: A windshield washer system that provides an application of cleaning solution to the windshield shall be installed.
39. Windshield wipers:
- a. A windshield wiping system with a minimum of two speeds shall be provided.
 - b. The windshield wipers shall be operated by one or more air or electric motors.

R13-13-108. Inspection, Maintenance, and Alterations

- A. A school bus shall be inspected by the Department before the school bus is introduced into Arizona to transport passengers.
1. After inspecting a school bus, the Department shall place a decal that contains a number used by the Department to identify the school bus above the school bus driver's side window in the driver's compartment. This decal shall not be removed from the school bus while it is operated in Arizona except by the Department. Before the school bus is transferred or retired from service, the school bus owner shall contact the Department to have this decal removed.
 2. If the Department finds that no major defect exists on a school bus, the Department shall place a safety inspection decal that contains the month and year of inspection on the right side of the centerline of the windshield of the school bus in a position that does not interfere with the school bus driver's line of vision.
 3. If the Department finds a major defect on the school bus, the Department shall place the school bus out of service. Before the school bus may be placed back into service, the Department shall reinspect the school bus to determine that the major defect has been corrected. If the major defect has been corrected, the Department shall place a safety inspection decal on the school bus in accordance with subsection (A)(2).
 4. If the Department finds a minor defect on a school bus, the Department shall issue an inspection order, but the school bus may be operated to transport passengers while the minor defect is being corrected. A copy of the inspection order shall be returned to the Department within 15 working days from the date of inspection and shall show that the minor defect has been corrected unless, in accordance with the provisions of subsection (A)(5), the school bus owner obtains an extension of time to correct the minor defect.
 5. Upon receipt of a written request from the school bus owner, the Department shall grant one or more extensions of time to correct a minor defect if:
 - a. The school bus owner submits to the Department written documentation that the:
 - i. School bus owner's action or inaction did not cause or contribute to the delay in completing the repair;
 - ii. School bus owner has secured a written estimated expedited delivery or completion date from the provider of the materials or services required to complete the repair; and
 - iii. School bus owner made reasonable attempts to secure the materials or services, or materials or services of equivalent quality, at a substantially similar price from alternate sources; and
 - b. The Department determines that an extension of time to correct the minor defect will not increase the probability of an accident involving the school bus or passengers or the risk of injury to the school bus driver or passengers.



- 6. Each extension of time shall be for 60 days or less. The Department shall determine the length of each extension of time after giving consideration to the information provided under subsection (A)(5)(a). When the minor defect is corrected, the school bus owner shall return to the Department a copy of the inspection order issued by the Department.
 - 7. If a minor defect on a school bus is not corrected within 15 working days or at the end of an extension period, if applicable, the Department shall remove the safety inspection decal and the school bus shall be placed out of service until further inspection by the Department shows that the minor defect is corrected.
- B.** The Department shall use the following criteria to determine whether a major or minor defect is present on a school bus introduced into Arizona on or after ~~February 16, 1996~~ May 31, 2008. For a school bus introduced into Arizona before ~~that date~~ May 31, 2008, the Department shall determine whether the school bus is in an unsafe condition by using the following criteria ~~or those at A.A.C. R17-4-612~~ or if the item does not comply with the criteria due to its original design, the Department shall determine if the school bus is in an unsafe condition by determining if the school bus is maintained in accordance with the manufacturer's original design specifications for the specific make and model of school bus. A defect that causes a school bus introduced into Arizona before February 16, 1996 to be in an unsafe condition shall be deemed a major defect as defined in this Article.

INSPECTION ITEM	MAJOR DEFECT	MINOR DEFECT
Air conditioning system, if installed	Missing hose covers or trim panels Missing air conditioning louvres Loose or missing air conditioning mounting fasteners Refrigerant leaks from evaporators or hoses in the interior of the bus Broken compressor brackets Broken mounting bolts Electrical wiring hanging out of evaporator covers Missing evaporator covers Missing air diffusers Evaporators not secured to ceiling or bulkhead	Broken or loose evaporator covers Unsecured refrigerant hoses Loose, missing or severely cracked belts
Alarm, back-up, if installed		Low volume Not working
Auxiliary fan, if installed	Obstructs school bus driver's view of any mirror Used in place of defrosting or defogging system Not covered by protective cage	Incorrect size Not controlled by independent switch
Battery (Types C and D buses only)	Not mounted according to the manufacturer's instructions	Incorrect or no identification
Belt cutter	Missing	
Body fluid cleanup kit	Absence of body fluid cleanup kit Any item missing from body fluid cleanup kit	
Brakes, compressed air	Inoperative or missing visual or audible low air signal Compressed-air gauge missing Grease or oil leakage into brake system Exposed or damaged ply on any air hose Air capacity less than 90 pounds per square inch at idle speed Wet-reservoir valve missing or inoperative Leaking, cracked, or broken hose or connection Audible air leak Pushrod exceeds limitation Low-air warning system does not activate at 60 psi and remains activated at less than 60 psi	



Brakes, hydraulic-assisted	Inoperative or missing visual or audible signal	
Brakes, emergency-brake system	Inoperative Does not activate when service brake system reaches 20 to 40 pounds psi	
Bumpers	Break or rip Loose bumper Foothold or handle present on rear bumper	Not painted black
Cooling system		Leak in system Fluid level in radiator not full
Crossing control arm, if installed	Has sharp edges or projections that could injure a student Will not retract	Not working Fails to open completely
Defroster	Inoperative Ventilation opening blocked	
Drive shaft	Absence of protective metal guard installed by the manufacturer around the drive shaft to any driving axle	
Dust boots	Missing, torn, split, or loose around floor-mounted gear shift, parking brake handle, or steering column.	
Emergency warning devices	Having fewer than two operable	Missing one
Emergency door	Inoperative latch Broken or missing portion of seal around door Window not of safety glass Inoperative warning device Lock is not the ignition shut-off type	No header pad
Emergency exit	Inoperative warning device or latch on all emergency exits except roof exit Not properly identified Header pad missing or damaged Broken seal around window	Inoperative roof exit
Engine compartment	Inoperative hood latch	Deterioration of hose, belt, or wiring Deterioration of battery hold-down clamp, corrosive acid buildup on terminal
Exhaust system	Exhaust leak Exhaust tailpipe extends more than 2 inches beyond the outer edge of the rear bumper or fails to terminate flush with the outside edge of the school bus body in the rear of the school bus	Exhaust pipe bracket not attached to the chassis and the tailpipe End of tailpipe pinched or bent
Exterior paint		Exposed metal or base primer Incorrect color
Fire extinguisher	Absence of fire extinguisher Not at full charge	Not mounted in required position
First-aid kit	Absence of first-aid kit Three or more items missing from first-aid kit	One or two items missing from first-aid kit



Frame	Crack in frame Cracked, loose, or missing body mount or body-mount bolt Welded repair not performed by body or chassis manufacturer or manufacturer's certified agent	
Fuel system	Fuel tank not mounted to the chassis frame or not vented to outside of engine compartment Fuel system extends above chassis frame (does not apply to filler tube or Type A bus) Fuel tank bracket cracked or broken Leaking tank or fuel line Fuel line attached to bottom of fuel tank Missing or improper fuel cap	
Handrail	Handrail does not pass the inspection procedure described in R13-13-107(13)	
Heating system	Heater missing or inoperative Heater line in interior of school bus not covered by protective shield No shutoff valve	Unsecured heater hose Inadequate heat-producing capacity
Horn (Air or electrical)	Missing or inoperative	
Instrument panel	Missing or inoperative ignition power-deactivation switch if the ignition does not use a key. Any inoperative gauge or switch, except auxiliary fan switch Improper illumination	Inoperative auxiliary fan switch
Interior, aisles	Incorrect clearance	
Interior, seats	Broken, cracked, exposed, or loose seat frame Screw or mounting bolt missing	
Interior, floor covering	Hole Improper material Improperly bonded Loose metal trim	
Lamps, clearance	Inoperative Cracked, broken, or missing lens	Incorrect color Dust behind lens
Lamps, head	Low beam inoperative Not mounted as required by 49 CFR 393.24 Both high beams inoperative	One high beam inoperative Inoperative dimmer switch on a bus not operated when head lamps are required Cracked, broken, or missing lens
Lamps, back-up	Inoperative	Incorrect color Cracked, broken, or missing lens Dust behind lens
Lamps, interior Over aisle		Inoperative Cracked, broken, or missing lens



Lamps, interior Over step-well	Inoperative	Cracked, broken, or missing lens
Lamps, turn signal	Inoperative	Cracked, broken, or missing lens Dust behind lens Incorrect size Incorrect location
Lamps, strobe, if installed	Pilot or strobe lamp missing or inoperative Cracked, broken, or missing lens Incorrect color Incorrect location	
Lamps, identifica- tion		Inoperative Incorrect color Cracked, broken, or missing lens Dust behind lens
Lamps, hazard	Inoperative	
Lamps, stop	Both inoperative	One inoperative Cracked, broken, or missing lens Dust behind lens
Lamps, tail	Both inoperative	One inoperative Cracked, broken, or missing lens Dust behind lens
Lamps, side marker		Inoperative Incorrect color Cracked, broken, or missing lens Dust behind lens
Lamps, alternately flashing signal	One or more inoperative lamps	Incorrect color Lamp hood missing Cracked, broken, or missing lens Dust behind lens
Lettering and num- bering		Missing any lettering or numbering Incorrect size, color, or location Unauthorized sign, letter, or object
Mirrors, cross-view	Missing Broken or loose mounting Broken or clouded glass	



Mirrors	<ul style="list-style-type: none"> Interior or exterior mirror missing Loose or broken mounting bracket Crack, break, or flaking of reflective material affixed to back of mirror glass Crack or break of mirror glass Loose or missing mounting bracket bolt or screw Incorrect size Do not meet safety standards contained in 49 CFR 571.111 	
Miscellaneous	<ul style="list-style-type: none"> Object not secured inside the school bus Any item noted by the Department that could cause injury or present a danger to a passenger or school bus driver 	Any item noted by the Department that needs to be repaired because it could interfere with the safe operation of the school bus but that is not a major defect
Noise suppression switch	<ul style="list-style-type: none"> Out of service Malfunctioning 	
Parking brake	Inoperative, missing part, or not in proper adjustment	
Restraining barrier	<ul style="list-style-type: none"> Missing Incorrect size Loose 	
Rub rails	<ul style="list-style-type: none"> Missing more than one Loose or dangling 	<ul style="list-style-type: none"> Missing one Incorrect location Incorrect color Incorrect width
School bus body	<ul style="list-style-type: none"> Damage resulting in cut or rip to the exterior of school bus body Hole that would allow exhaust gases or dust to enter the passenger compartment Bolt attaching body to chassis loose, broken, or missing Exceeds length or width limitations 	<ul style="list-style-type: none"> Absence of undercoating Loose or missing rivet, screw, or bolt
Seat belt	<ul style="list-style-type: none"> Absence of driver seat belt or inoperative driver seat belt buckle or retraction system Frayed seat belt material 	
Seats	<ul style="list-style-type: none"> One or more missing Incorrect size or location Driver seat does not meet requirements for adjustment Loose seat cushions Exposed frame 	Torn seat cushions
Service door	<ul style="list-style-type: none"> Incomplete closing of door assembly Does not contain safeguards to prevent accidental opening Window not made of safety glass Broken or cracked window panel Inoperative door control Does not open towards exterior of the school bus Scissors or butterfly doors prohibited. Absence of flexible material on outer edge of service door Absence of header pad 	



<p>Special needs school bus</p>	<p>Incorrect location or size of special-service entrance Incorrect size of special-service entrance door Window not made of safety glass Inoperative pressure switch No safety device in wheelchair lift No restraining barrier on wheelchair-lift platform Fails to provide wheelchair-securement device or anchorage Special-service entrance door does not open towards exterior of school bus (except Type A school bus) Wheelchair lift inoperable</p>	<p>Drip molding not installed above the special-service entrance Special-service entrance door not weather-sealed Incorrect color of door material or panel Lacks wheelchair emblem Missing fastening device for special-service entrance door Dome light missing or inoperative</p>
<p>Splash guards</p>		<p>Bottom edge of guard is more than 8 inches above the ground Does not cover entire width of single or dual tire Missing splash guard</p>
<p>Steering</p>	<p>Distance of movement not within parameters of R13-13-106(22)(c) Steering wheel does not move freely when turning the wheel Missing or cracked steering-wheel ring or bracing from center of steering wheel to steering-wheel ring Steering column not in a fixed position or locking mechanism missing or inoperative on adjustable steering column Steering column mounting bracket cracked or missing Loose or missing mounting bolt in steering gear housing Loose connecting arm on steering gear power source</p>	<p>Leakage of lubricant Power-steering belt cracked, frayed, or slipping Fluid does not fill power steering reservoir to the full level on the dipstick</p>
<p>Steps</p>	<p>Loose or missing grab handle in step-well Missing stirrup step or handle</p>	<p>Incorrect distance between steps Incorrect floor covering</p>
<p>Stop signal arm</p>	<p>Any stop arm inoperative Air leak If equipped with a light-emitting diode system, one or more lights missing Missing any stop arm</p>	<p>Incorrect lettering or color on stop signal arm Incorrect size of stop signal arm</p>
<p>Sun shield or visor (if required)</p>	<p>Broken, cracked, or missing</p>	<p>Not transparent</p>
<p>Suspension</p>	<p>Broken, damaged, or missing suspension part U-bolt loose, broken, cracked, or missing</p>	<p>Leaking shock absorber</p>



Tires	<p>Tires on same axle not of the same size</p> <p>Combination of bias and radial tires</p> <p>Tires vary more than one size between axles</p> <p>Tires not correct size for gross vehicle weight rating of school bus</p> <p>Single rear tire on school bus with gross vehicle weight rating of more than 10,000 pounds</p> <p>Regrooved, recapped, or retreaded tire mounted on a front wheel</p> <p>Tread groove depth less than 4/32 of an inch, measured in a tread groove on a tire on a front wheel</p> <p>Tire is mounted or inflated so it comes in contact with any part of the school bus or other tire</p> <p>Tread groove depth less than 2/32 of an inch, measured in a tread groove on a tire on a rear wheel</p> <p>Bump, knot, or bulge present on any tire</p> <p>Sidewall is cut, worn, or damaged to the extent that ply cord is exposed</p> <p>Separation of tread from tire casing</p> <p>Exposed ply or belting on any tire</p> <p>Flat tire or audible leak from a tire on any wheel</p> <p>If present, spare tire on Type C or D school bus not mounted outside passenger compartment</p>	
Ventilation	Non-closing exhaust ventilator missing	
Wheel housing	Incorrect size or construction of wheel housing or opening	
Wheels	<p>Not correct size for gross vehicle weight rating of school bus</p> <p>Loose or missing lug nut</p> <p>Broken stud bolt</p> <p>Crack or welded repair in wheel assembly</p>	Not painted black
Windows	<p>Not of safety glass</p> <p>Opening too small</p> <p>Cracked or broken</p> <p>Placement of non-transparent material</p> <p>Inoperative latch</p>	
Windshield	<p>Placement of non-transparent material</p> <p>Crack, chip, or pitting that interferes with the school bus driver's vision</p>	Crack, chip or pitting that does not interfere with the school bus driver's vision
Windshield washer system	Missing	Low or no cleaning solution
Windshield wipers	<p>Inoperative or missing wiper on school bus driver's side</p> <p>Inoperative or missing wiper on side opposite the school bus driver</p>	<p>Inoperative speed control</p> <p>Split or hardened wiper blade</p>



Wiring	Incorrect color or number coding Wiring circuit not protected by fuse or circuit breaker One or more non-metal grommets missing Electrical wires outside the school bus body improperly secured	
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- C. A school bus shall be inspected annually, according to a schedule established by the Department and the standards contained in subsections (A) and (B) and this subsection.
1. If the Department finds a major defect, the Department shall remove the current safety inspection decal and replace with a new safety inspection decal only after the major defect is repaired.
 2. If the Department finds a minor defect, the Department shall remove the current safety inspection decal and replace with a new safety inspection decal and allow the school bus owner to make repairs in accordance with the provisions at R13-13-108 (A)(4) through (A)(7).
- D. A school bus driver shall perform the following operations checks and tasks on the school bus:
1. Before a school bus is operated for the first time each day, conduct a pre-trip operations check of the school bus to determine that the following are operational and are not damaged:
 - a. All lamps, including alternately flashing, back-up, clearance, hazard, head, identification, interior, side marker, stop, tail, turn signal, and strobe lamps, if any, and emergency warning devices;
 - b. Tires, wheels, and wheel fasteners;
 - c. Service door;
 - d. Steps and step wells;
 - e. Emergency exits and signals;
 - f. Emergency doors and signals;
 - g. Wheelchair lift and wheelchair lift dome lamp;
 - h. Wheelchair-securement devices;
 - i. Wheelchair-securement anchorages;
 - j. Special-service entrance door;
 - k. Special-service entrance door signal;
 - l. Windows;
 - m. Windshield;
 - n. Windshield wipers;
 - o. Instrument panel and gauges;
 - p. Service brakes;
 - q. Service brake warning devices;
 - r. Parking brake;
 - s. Bumpers;
 - t. Seats and seat frames;
 - u. Floor coverings;
 - v. School bus body;
 - w. Engine fluid levels;
 - x. Engine compartment steering components;
 - y. Stop arm;
 - z. Horn;
 - aa. Mirrors;
 - bb. Engine fluid gauges;
 - cc. Noise suppression switch;
 - dd. Child alert notification system, if installed;
 - ee. Crossing control arm, if installed; and
 - ff. Air conditioning system, if installed.
 2. Each time a pre-trip operations check of a school bus is conducted, check all emergency equipment to determine that the emergency equipment complies with the standards at R13-13-107(11) and R13-13-110.
 3. Each time a school bus is operated subsequent to the first time the school bus is operated each day, conduct a walk-around operations check to determine whether there is an obvious engine fluid leak and the following are operational and are not damaged:
 - a. All lamps listed in subsection (D)(1)(a);
 - b. Tires, wheels, and wheel fasteners;
 - c. Bumpers;
 - d. School bus body;
 - e. Windows;



- f. Stop arm; and
 - g. Windshield.
 - 4. Once daily, sweep and clean the interior of the school bus.
 - 5. After completing each operations check, the school bus driver shall complete the portions of a written monthly operations check report that provide the following information:
 - a. Date and time of the operations check;
 - b. Name of the school bus driver conducting the operations check;
 - c. Name of the employer;
 - d. Number assigned to the school bus by the school bus owner and painted on the outside of the school bus body; and
 - e. Indication of whether an item is operational, inoperative, or damaged.
 - 6. A school bus driver who performs an operations check and finds any item listed in subsections (D)(1) through (D)(3) inoperative or damaged shall immediately complete and submit a written repair order to the school bus owner through the employer.
 - a. The school bus owner shall use the standards contained in subsection (B) to determine whether an item reported on a repair order as inoperative or damaged is a major or minor defect.
 - b. If the school bus owner finds that a major defect exists, the school bus owner shall place the school bus out of service until the major defect is repaired.
 - c. If the school bus owner finds that a minor defect exists, the school bus may be used to transport passengers, but the school bus owner shall repair the defect in accordance with the provisions at R13-13-108(A)(4) through(A)(7). Time in which to make the minor repair shall be calculated from the date of the written repair order.
 - 7. After a school bus makes its final trip on the last day the school bus is driven in a particular month the school bus driver operating the school bus shall submit the written monthly operations check report to the school bus owner through the employer.
- E.** In addition to the operations checks described in subsection (D), a school bus owner shall systematically inspect, repair, and maintain, or cause to be systematically inspected, repaired, and maintained, all parts of a school bus chassis and body described in Sections R13-13-106 and R13-13-107 and any other parts and accessories that may affect safe operation of the school bus. The school bus owner shall ensure that the maintenance of a school bus and repair of major defects is done by:
- 1. An ASE-certified technician,
 - 2. An individual working under the supervision of an ASE-certified master school bus technician,
 - 3. An individual with at least one year of participation in a school bus manufacturer-sponsored or commercial vehicle maintenance training program, or
 - 4. An individual with at least one year of experience as a school bus mechanic.
- F.** Records
- 1. A school bus owner shall maintain the following records in a separate file for each school bus for as long as the school bus is in operation in Arizona:
 - a. Number assigned to the school bus by the school bus owner,
 - b. Name of the school bus body manufacturer,
 - c. Name of the school bus chassis manufacturer,
 - d. Identification number of the school bus located in the driver's compartment,
 - e. Year the school bus body was assembled upon the school bus chassis, and
 - f. Size of the tires placed on the school bus.
 - 2. A school bus owner shall maintain all records of initial inspection, subsequent inspections, and repairs and maintenance procedures performed on the school bus for three years from the date of inspection, repair, or maintenance. The school bus owner shall ensure that all records of repairs and maintenance procedures include verification from the owner of the business responsible for the repairs and maintenance procedures that the individual who actually performs the repairs and maintenance procedures is qualified under subsection (E).
 - 3. If a school bus is sold, the school bus owner shall transfer the records required by subsections (F)(1) and (F)(2) to the purchaser.
 - 4. A school bus owner shall maintain monthly operations check reports for three months from the date of the report.
- G.** Alterations
- 1. Before a school bus owner alters a school bus, the school bus owner shall submit a request in writing to the Department describing the proposed alteration and the reason for the proposal.
 - 2. Within 60 days of receiving a request for alteration, the Department shall inform the school bus owner in writing whether the request has been approved or denied. The Department shall base its decision to approve or deny on an assessment of whether the proposed alteration affects the operations of a school bus, complies with the statutes and rules applicable to school buses, or affects the health, safety, or welfare of any individual.