

TITLE 575 STATE SCHOOL BUS COMMITTEE

ARTICLE 1. MINIMUM SPECIFICATIONS FOR SCHOOL BUSES

Rule 1. General Provisions

575 IAC 1-1-1 Applicability of specifications; definitions

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-1-5

Sec. 1. (a) The definitions in this section apply throughout this article.

(b) "School bus" means any motor vehicle, other than a special purpose bus as defined in IC 20-9.1-1-5, designed and constructed for the accommodation of more than ten (10) passengers that is used for the transportation of Indiana school children. The term includes either the chassis or the body, or both the chassis and the body.

(c) "School children" means children enrolled in private schools in grades kindergarten through twelve (12) and all children enrolled in public school corporations.

(d) "Type A school bus" means a conversion or body constructed upon a van-type or cutaway front-section vehicle with a left side driver's door, designed for carrying more than ten (10) persons. The term includes two (2) classifications:

(1) Type A-1, with a gross vehicle weight rating of ten thousand (10,000) pounds and under; and

(2) Type A-2, with a gross vehicle weight rating over ten thousand (10,000) pounds.

(e) "Type B school bus" means a conversion or body constructed and installed upon a van or front-section vehicle chassis or stripped chassis with a vehicle weight rating of more than ten thousand (10,000) pounds and designed for carrying more than ten (10) persons. Part of the engine is beneath and/or behind the windshield and beside the driver's seat. The entrance door is behind the front wheels.

(f) "Type C school bus" means a body installed upon a flat back cowl chassis with a gross vehicle weight rating of more than ten thousand (10,000) pounds and designed for carrying more than ten (10) persons. All of the engine is in front of the windshield. The entrance door is behind the front wheels.

(g) "Type D school bus" means a body installed upon a chassis with the engine mounted in the front, midship, or rear with a gross vehicle weight rating of more than ten thousand (10,000) pounds and designed for carrying more than ten (10) persons. The engine may be behind the windshield and beside the driver's seat, at the rear of the bus, behind the rear wheels, or midship between the front and rear axles. The entrance door is ahead of the front wheels.

(h) "Vehicles for transporting handicapped students" means vehicles designed and constructed to meet the requirements for the appropriate size school buses with specialized equipment as prescribed under 575 IAC 1-5. (*State School Bus Committee; Sec I; filed Feb 10, 1978, 3:31 p.m.: Rules and Regs. 1979, p. 323; filed Apr 14, 1981, 11:30 a.m.: 4 IR 778, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 a.m.: 11 IR 3819; filed Mar 19, 2001, 11:32 a.m.: 24 IR 2467; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-1-2 Purchasing specifications

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. (a) This section contains considerations for bid specification for a conventional type body-on-chassis vehicle. Although Type D, metropolitan, and various types of small vehicles present special problems that are not covered in this section, some of the major considerations set forth apply also in developing specifications for these other types of vehicles. School buses should be selected to meet particular needs of the purchaser. The purchaser should appraise local needs in terms of the operating area terrain, prevailing weather conditions, type of roads over which vehicles will be operating, traffic conditions, probable operating speeds, and the chassis ratings required to provide the capacities necessary for specific route situations.

(b) In selecting the chassis, specify the type and capacity of the school bus body desired, the length of the frame cowl to axle, the gross vehicle weight, and the capacity of such chassis components as axles, springs, and engine size.

The gross weight of the vehicle must correspond to the manufacturer's G.V.W. rating of the chassis. To determine the gross vehicle weight, add the weights of the chassis wet (with oil, water, and full tank of fuel), specified tires, the bus body, pupil passengers and the driver.

The recommended chassis manufacturer's rated GVW (gross vehicle weight) is the weight assigned to a complete vehicle. The department of education shall annually compile a list of major manufacturer's gross vehicle weight ratings.

(c) Each chassis component should be specified in terms of the job required of it. The following chassis components are generally considered integral parts of the power train: engine, clutch, transmission, drive shaft, and axles.

When ordering buses, use the chassis manufacturer's recommended engine axle ratio best suited to particular needs and environmental conditions. The size and weight of the vehicle and the terrain in which it is to operate will determine the specifications for the engine.

A Type C vehicle diesel unit must have a minimum rating of at least 165 horsepower. Buses with diesel engines and glow plugs may not use ether start equipment. Governors, power steering, air brakes and automatic transmissions reduce the acceleration potential of an engine.

(d) The chassis should be equipped with a clutch having a diameter of at least twelve (12) inches on a vehicle with a passenger capacity of 48 through 60 and a diameter of at least 13 inches on buses with a passenger capacity of 66.

(e) The transmission must have a minimum of four (4) or five (5) forward speeds, depending upon the chassis and capacity of the vehicle. The five-forward speed transmission is available normally in direct wide ratio, direct close ratio, and overdrive in fifth.

Automatic transmissions are a convenience and can extend the life of the motor, drive lines, and differentials. An automatic transmission is a safety factor.

(f) If the vehicle is to operate over unimproved roads, optional equipment or heavy duty front axles with greater capacity should be specified.

Full floating type rear axles meet current standards for rear axles.

A single-speed rear axle with sufficient capacity to carry the load of any school bus is available from various manufacturers. A two-speed axle should only be specified for vehicles that operate on the open highway and travel a long distance between stops. A large engine may be more efficient than a two-speed axle.

(g) Brakes available for school buses are of four (4) basic types: full compressed air brakes; vacuum-actuated power or assistor-type brakes; compressed-air-over-hydraulic brakes; and full hydraulic brakes. The line pressure of vacuum-actuated power brakes is as high as 2,000 pounds per square inch. Sudden stops require more than 115 pounds per square inch of line pressure. Full compressed-air brakes require less driver energy and provide greater stopping ability.

Heavy duty brakes of larger capacity are desirable for hilly country as well as for those vehicles that are to be operated in heavy traffic and make frequent stops. The performance standard (the capability of the braking system to stop the complete unit at a given speed within a given distance) represents a more satisfactory guideline for brake performance than the number of square inches of brake lining area.

(h) The cooling system provided in a school bus chassis by the manufacturer is usually sufficient for normal conditions.

(i) The electrical equipment and wiring on a school bus chassis is sufficient for normal operating requirements with the exception of the battery and the alternator. With the increased demand for sufficient current to operate larger windshield wiper motors, more effective heater fan motors, more powerful signal and other lamps, and optional equipment, batteries of greater capacity are essential. Other considerations are the location of the battery, ease of servicing, and shielding it from excessive heat.

(j) Proper springs and suspension assemblies on a chassis are important both for safe operation of the vehicle and for its operating life. Progressive type rear springs are required in all cases. Springs or suspension assemblies must be designed to carry their proportional share of the gross vehicle weight.

(k) The tires must support the gross weight of the loaded vehicle. Tire sizes, ply ratings, and rim sizes must conform to the current standards of the Tire and Rim Association. Consider the following factors in selecting school bus tires and rims: gross vehicle weight; type of road surface in the operational area; type of operation (i.e., long runs at open road speeds with a few stops or runs with many stops and starts); and size, type, and number of wheels. Special tire treads (snow tread, mud grip, etc.) may be specified.

(l) In selecting the school bus body, specify the type and capacity desired. This decision will affect other body and chassis characteristics such as: length and type chassis; chassis components; and seating arrangements. Consider school bus body needs in terms of capacity, safety and comfort, ease of maintenance, type of terrain and local road conditions, availability of parts and service, maneuverability in traffic, driver visibility, quality of construction, and cost. A bus may transport more children than the listed capacity of the bus if each child can be individually seated on a regular seat. However, no child shall stand in a school bus in Indiana while being transported. The conventional school bus body is on a chassis with the engine under a hood located ahead of the driver's seat and windshield. A school bus with a conventional body and a standard truck engine is easy to maintain, and replacement parts are relatively easy to obtain.

(m) A bus must be structurally safe. In comparing bus construction, over-all weight and the gauge of the steel components are not always accurate measures of the strength, durability, and resiliency. Reinforcing members must be joined together in such a way as to reduce stress points. Before purchasing a conventional type school bus, make comparisons in the following areas:

- (1) The floor system. The depth, width, length, shape, and gauge of the floor supports and the main and intermediate floor beams, as well as the distances between them, may disclose major structural differences.
- (2) Sides and roof. Determine the kind of structural support (body posts, roof bows, strainers, and stringers) behind the side panels and under the skin of the roof.
- (3) Rear of the vehicle. Determine if adequate collision protection is built into the vehicle.
- (4) Rust Protection. Adequate rust prevention can save a considerable amount of money over the life of the vehicle in eliminating the replacement of rust-damaged panels and in painting maintenance. Rust protection is also a safety factor.
- (5) Heaters and ventilation. BTU heater ratings and the capacity to circulate warmed air determine the efficiency of a heater. The bus must have an adequate number of heaters. A dual motor rear underseat heater at the rear of the wheelhouse and a right-hand front heater are needed to melt tracked-in ice and snow in the step-well area and to assure good defrosting of the entrance door windows and right front windshield. Fans or blowers must have enough power to defrost the entire front windshield.
- (6) Seats. The seat frame must resist bending and breaking, be made of rust-resistant material, and securely attached to the floor. The type, weight, and thickness of the cushion-filler padding and upholstery covering may be specified. If springs are used in the seat cushions, the number, free height, and the gauge of the springs may be specified. The backs of the seats may be protected with various types of materials such as specially coated steel or aluminum. They may also be padded. The driver's seat may be adjustable, both vertically and horizontally. It must be equipped with a seat belt.
- (7) Wiring. The wiring must be well insulated and adequately protected against chafing and wear. All wiring must run inside the bus to avoid exposure to the corrosive effects of dust, road salts, and moisture. The gauge of the wire must carry the required electrical load without loss of voltage. The wiring must be color-coded. The wiring circuits must be protected by circuit breakers. The electrical control panel must be illuminated.

(State School Bus Committee; Sec 1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 324; filed Jun 20, 1988, 8:50 am: 11 IR 3820; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-1-3 Information for bid proposals; checklist (Repealed)

Sec. 3. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-1-4 Written certification of compliance

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 4. (a) Body and chassis manufacturers shall annually certify to the state school bus committee that all school bus bodies and chassis supplied to Indiana schools comply with the provisions of 575 IAC 1. Manufacturers must submit the certification required under this section on or before January 1.

(b) No school bus shall be placed in service or remain in service in Indiana if it does not meet the minimum specifications of 575 IAC 1. *(State School Bus Committee; 575 IAC 1-1-4; filed Jun 20, 1988, 8:50 am: 11 IR 3825; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-1-4.5 Labeling requirements

Authority: IC 20-9.1-4-4; IC 20-9.1-4-4.5
Affected: IC 20-9.1

Sec. 4.5. (a) The school corporation identification number, as assigned by the department of education, must be placed on the rear emergency door between the upper and lower windows. The characters must be four (4) to six (6) inches high. On type D rear engine buses the identification number must appear in a corresponding location on the engine access cover.

(b) All letters and numbers must be black. *(State School Bus Committee; 575 IAC 1-1-4.5; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1150, eff Jul 1, 2002)*

575 IAC 1-1-5 Applicability of minimum specifications

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 5. (a) The minimum specifications outlined in this title apply to all school buses that are owned, operated, leased, or otherwise used by school corporations, private schools, or authorized agencies to transport children under IC 20-9.1.

(b) The revisions of February 26, 1981, apply to all school buses that were ordered for purchase or placed in production for use in Indiana before June 30, 1988.

(c) The revisions of March 31, 1988, apply to all school buses that were ordered for purchase and initially placed in service on or after July 1, 1988.

(d) Section 4.5 of this rule applies to all school buses with a body build date of July 1, 2002, or after. (*State School Bus Committee; 575 IAC 1-1-5; filed Jun 20, 1988, 8:50 am: 11 IR 3825; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1150, eff Jul 1, 2002*)

Rule 2. Type I Vehicles

575 IAC 1-2-1 Air cleaner

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 1. The engine intake cleaner must meet engine specifications and must be furnished and installed by the chassis manufacturer. (*State School Bus Committee; Sec II, Rule 1-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 336; filed Jun 20, 1988, 8:50 am: 11 IR 3825; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-2 Axles

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. Axles or other suspension assemblies must be compatible with a GVWR of at least 7,400 pounds. (*State School Bus Committee; Sec II, Rule 2-1, filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 337; filed Jun 20, 1988, 8:50 am: 11 IR 3825; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-3 Brakes

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 3. (a) A braking system, including a service brake and parking brake, must be provided.

(b) Brake lining areas must be protected by adequate dust covers. Brake linings must be made of non-asbestos materials. (*State School Bus Committee; Sec II, Rule 3-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 337; filed Apr 14, 1981, 11:30 am: 4 IR 778, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3826; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-4 Front bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 4. (a) The chassis manufacturer must furnish the front bumper as part of the chassis.

(b) The front bumper must extend to the outer edges of the fenders at the bumper top line and be strong enough to withstand the pushing of another vehicle of equal gross weight without permanent distortion to the bumper, the chassis, or the body.

(c) The only permissible applications on the front bumper are a yellow bus number and black, abrasive, non-skid tape. (*State School Bus Committee; Sec II, Rule 4-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 337; filed Jun 20, 1988, 8:50 am: 11 IR 3826; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-5 Clutch

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 5. Clutch torque capacity must be equal to or greater than the engine torque output. The clutch must be made of non-asbestos materials. (*State School Bus Committee; Sec II, Rule 5-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 337; filed Apr 14, 1981, 11:30 am: 4 IR 779, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3826; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-6 Color of chassis

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 6. The chassis, including the wheels and the front bumper, must be black. Rims may be gray or black. The hood, cowl, and fenders must be national school bus yellow. The grill may be black, national school bus yellow, or chrome plated. The top of the hood may be painted a low-luster national school bus yellow to minimize glare factor. All paint must be lead-free. (*State School Bus Committee; Sec II, Rule 6-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 338; filed Apr 14, 1981, 11:30 am: 4 IR 779, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3826; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-7 Drive shaft

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 7. The drive shaft must be protected by metal guards to prevent it from whipping through the floor if it breaks. (*State School Bus Committee; Sec II, Rule 7-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 338; filed Jun 20, 1988, 8:50 am: 11 IR 3826; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-8 Electrical system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 8. (a) The alternator and rectifier must have a minimum output capacity of 60 amperes in accordance with Society of Automotive Engineers rating of J544a.

(b) The battery must be conventional (lead-antimony) or maintenance free sealed (lead-calcium). The battery must have a capacity of twelve (12) volts with a minimum rating of 430 CCA at 0 degrees Fahrenheit per SAE J-537H specifications.

If the bus has a diesel engine, the battery system must have a minimum of 900 CCA.

(c) The chassis must have the following instruments and gauges:

- (1) speedometer;
- (2) odometer, which will indicate accrued mileage calibrated in tenths of miles;
- (3) voltmeter or ammeter;
- (4) oil pressure gauge;
- (5) water temperature gauge;
- (6) fuel gauge;
- (7) upper beam headlamp indicator; and
- (8) brake warning light.

(d) All wiring must conform to the current standards of the Society of Automotive Engineers and to the manufacturer's standards. The chassis manufacturer must install an accessible terminal strip or plug either on the body side of the cowl or in an accessible location in the engine compartment of a bus without a cowl that contains the following body connection terminals:

- (1) main 100 amp body circuit;
- (2) tail lamps;
- (3) right turn signal;
- (4) left turn signal;
- (5) stop lamps;
- (6) back up lamps; and
- (7) instrument panel lights that are rheostat-controlled by head lamp switch.

(e) The ignition switch must be located either on the right side of the steering column or on the instrument panel to the right of the steering column. (*State School Bus Committee; Sec II, Rule 8-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 338; filed Apr 14, 1981, 11:30 am: 4 IR 779, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3827; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-9 Exhaust system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 9. (a) The exhaust pipe, muffler, and tailpipe must be outside the bus body and attached to the chassis per the manufacturer's standards.

(b) The size of the tail pipe as received from the manufacturer may not be altered.

(c) The exhaust system must be insulated from the fuel tank by a metal shield at any point where the exhaust system is twelve (12) inches or less from the tank.

(d) The muffler must be constructed of corrosion-resistant material. (*State School Bus Committee; Sec II, Rule 9-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 339; filed Apr 14, 1981, 11:30 am: 4 IR 780, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3828; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-10 Front fender (Repealed)

Sec. 10. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-2-11 Frame

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 11. The frame must not increase the size of the wheel base. (*State School Bus Committee; Sec II, Rule 11-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 340; filed Jun 20, 1988, 8:50 am: 11 IR 3828; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-12 Fuel system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 12. (a) The fuel tank must meet manufacturer's standards and be mounted, filled and vented outside the body of the bus.

(b) A diesel engine may have either a fuel/water separator with a sight bowl or a warning indicator on the instrument panel. (*State School Bus Committee; Sec II, Rule 12-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 340; filed Jun 20, 1988, 8:50 am: 11 IR 3828; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-13 Governor (Repealed)

Sec. 13. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-2-14 Horn

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 14. Each bus must have two (2) electric horns that meet manufacturer's standards. Both horns must be installed under the hood. (*State School Bus Committee; Sec II, Rule 14-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 340; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-15 Heating system water lines

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 15. The chassis engine must be designed so as to provide for inlet and outlet holes in accessible locations for attachment of system water lines. *(State School Bus Committee; Sec II, Rule 15-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 341; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-16 Oil filter

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 16. The oil filter must meet the manufacturer's standards. *(State School Bus Committee; Sec II, Rule 16-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 341; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-17 Openings

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 17. All openings in the floorboard or the firewall between the chassis and the passenger compartment, such as the openings for the gearshift lever and the auxiliary brake lever, must be sealed. *(State School Bus Committee; Sec II, Rule 17-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 341; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-18 Overall length (Repealed)

Sec. 18. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-19 Passenger load (Repealed)

Sec. 19. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-20 Power

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 20. The GVWR may not exceed 185 pounds per net published horsepower of the engine at the manufacturer's recommended maximum number of revolutions per minute. *(State School Bus Committee; Sec II, Rule 20-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 341; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-21 Shock absorbers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 21. Each bus must have front and rear double-acting shock absorbers that are compatible with the manufacturer's rated axle capacity. *(State School Bus Committee; Sec II, Rule 21-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 342; filed Jun 20, 1988, 8:50 am: 11 IR 3829; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-22 Springs

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 22. The capacity of springs or suspension assemblies must be commensurate with the chassis manufacturer's gross vehicle weight rating. (*State School Bus Committee; Sec II, Rule 22-1; filed Feb 10, 1978, 3:31 p.m.: Rules and Regs. 1979, p. 342; filed Jun 20, 1988, 8:50 a.m.: 11 IR 3829; filed Mar 19, 2001, 11:32 a.m.: 24 IR 2468; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-23 Steering gear

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 23. (a) The steering gear must be approved by the chassis manufacturer and designed to assure safe and accurate performance when the bus is operated with a maximum load and at maximum speed. It must provide lash adjustment for lost motion. The chassis manufacturer must approve any alteration. There must be clearance of at least two (2) inches between the steering wheel and any other surface. Power steering is required. If the wear points are not permanently lubricated, the steering gear assembly must be designed so that the wear points can be lubricated.

(b) There must be nothing attached to the steering wheel. (*State School Bus Committee; Sec II, Rule 23-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 342; filed Apr 14, 1981, 11:30 am: 4 IR 780, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3830; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-24 Tires and rims

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 24. (a) The tires must be of equal size, construction, and ply rating and have rims of equal size. All tires must conform to the GAWR.

(b) Regrooved or retread tires on front or single rear wheels are prohibited.

(c) The bus distributor's or manufacturer's recommendations for tire and rim sizes must be followed. (*State School Bus Committee; Sec II, Rule 24-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 342; filed Apr 14, 1981, 11:30 am: 4 IR 781, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3830; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-25 Transmission

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 25. The transmission may be automatic or manual.

(1) An automatic transmission must have at least three (3) forward gear ratios. The transmission shift quadrant must have three (3) forward drive ranges plus neutral and reverse.

(2) A manual transmission must be synchromesh in all gears except first and reverse. It must have at least three (3) forward gears and one (1) reverse gear. The gearshift must not interfere with the operation of the service door.

(*State School Bus Committee; Sec II, Rule 25-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 342; filed Jun 20, 1988, 8:50 am: 11 IR 3830; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-26 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 26. The chassis manufacturer must coat the chassis-supplied body components subject to rust with a non-asbestos compound. The compound must meet or exceed federal specifications TT-C-520b. (*State School Bus Committee; Sec II, Rule 26-1;*

filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 343; filed Jun 20, 1988, 8:50 am: 11 IR 3831; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-2-27 Written certification of chassis compliance (Repealed)

Sec. 27. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-2-28 Aisle

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 28. (a) The width of the center aisle must be at least twelve (12) inches.

(b) The aisle supports of the seat backs must slant away from the aisle, leaving a clearance of at least 15 inches at the top of the seat backs. *(State School Bus Committee; Sec II, Rule 28-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 343; filed Jun 20, 1988, 8:50 am: 11 IR 3831; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-29 Axe (Repealed)

Sec. 29. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-2-30 Battery

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 30. The chassis manufacturer must mount the battery in or outside of the engine compartment. When the battery is temporarily mounted to the chassis frame, the body manufacturer must securely attach the battery on a slide-out tray in a closed, vented, and accessible compartment of the body skirt. The battery compartment cover must be secured by a fastener. *(State School Bus Committee; Sec II, Rule 30-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 343; filed Jun 20, 1988, 8:50 am: 11 IR 3831; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-31 Book rack (Repealed)

Sec. 31. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-2-32 Rear bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 32. The rear bumper must be painted glossy black with lead-free paint. Only the logo and emblems of the school bus manufacturer may be placed on the bumper. Chrome bumpers are prohibited. *(State School Bus Committee; Sec II, Rule 32-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 343; filed Jun 20, 1988, 8:50 am: 11 IR 3831; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-33 Capacity (Repealed)

Sec. 33. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-2-34 Tire chains (Repealed)

Sec. 34. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-2-35 Color of body

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 35. The body manufacturers or their agents must paint the bus body national school bus yellow in accordance with the colorimetric specification of Federal Standard No. 595a-Color 13432, using only lead-free paint. The trim, the bumpers, the lamp hoods, the emergency door arrow, and all lettering must be black with lead-free paint. (*State School Bus Committee; Sec II, Rule 35-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 344; filed Jun 20, 1988, 8:50 am: 11 IR 3831; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-36 Construction

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 36. (a) All structural materials must be constructed of either prime commercial quality galvanized steel or aluminum and must be fire-resistant.

(b) The body construction must be reasonably dustproof and water-tight.

(c) The rear corner framing of the body between the floor and the window sill and between the emergency door posts and the last side posts must consist of at least three (3) structural members, arranged to provide impact and penetration resistance equal to that provided by the side frame members. The ends of all structural members must be securely attached to the bus body. (*State School Bus Committee; Sec II, Rule 36-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 344; filed Jun 20, 1988, 8:50 am: 11 IR 3832; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-37 Defroster

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 37. Each bus must have a windshield defroster and defogging system that conforms to SAE standards J-381 and 382. The system must keep the windshield, the side window to the left of the driver, and the glass entrance doors clear of fog, frost, and snow. It must be capable of heating outside ambient air. The part of the system that furnishes additional air to the windshield may be used to recirculate the air. Auxillary [*sic.*] fans may not be used as the defrosting system. (*State School Bus Committee; Sec II, Rule 37-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 345; filed Jun 20, 1988, 8:50 am: 11 IR 3832; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-38 Doors

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 38. (a) The service door must:

(1) be power or manually operated by the driver and must open easily but must not open accidentally. The controls for an air, vacuum, or electric powered door must be located close to the driver's seat. A hand lever on a service door must be designed to prevent hand injuries.

(2) be located on the the side opposite the driver and within the driver's direct view.

(3) be designed as follows:

(A) split-type door (any sectioned door that divides and opens inward or outward). If one (1) section of the door opens inward and the other opens outward, the front section must open outward;

(B) fold-type door (jack-knife); or

(C) sedan-type door.

(4) except sedan-type, have a minimum horizontal opening of 24 inches and a minimum vertical opening of 54 inches.

(5) have lower and upper panels made of safety glass. The bottom of the lower glass panel must not be more than 35 inches from the ground when the bus is unloaded. The top of the upper glass panels must not be more than six (6) inches from the

top of the door.

(6) have flexible material covering the vertical closing edges of each door.

(7) have interior padding at least three (3) inches wide and one (1) inch thick, covering the full width of the top of each door opening.

(b) There may be a driver's service door to the left of the driver's seat.

(c) The emergency door must:

(1) Be located in the center of the back of the bus or in the back half of the driver's side of the bus.

(2) Have a minimum horizontal opening of 24 inches and a minimum vertical opening of 47 inches, measured from the floor.

(3) have the words "EMERGENCY DOOR" spelled in letters at least two (2) inches high, above the inside and outside of the emergency door.

(4) if hinged, open from the inside and outside of the bus and be equipped with a fastening device that releases quickly but not accidentally. If a double emergency door is used, it must be hinged on the outside edge and must have a three (3)-point fastening device. The device that opens the emergency door from the outside must be designed to prohibit the hitching of rides. Each door must have a label on it that explains how the door operates. Operation of the emergency door must not be controlled from the driver's seat.

(5) Be equipped with a slide-bar, cam-operated lock with a minimum stroke of one (1) inch. All emergency door locks must have an electric plunger-type switch that is connected to a buzzer in the driver's compartment. The switch must be enclosed to prevent deactivation, and wires leading from the switch must be concealed in the bus body. Any movement of the slide-bar must immediately activate the switch and the buzzer. The emergency door lock must have an interior handle that extends approximately to the center of the emergency door. The lock may be released only by lifting the handle.

(6) Be hinged on the right side if the door is located in the back of the bus; the door must be hinged on the front side if on the driver's side of the bus.

(7) Have no steps leading to the emergency door.

(8) Contain at least 400 square inches of safety glass in the upper portion.

(9) Have an audible signal that alerts the driver when the emergency door is open. The ignition switch must activate the signal.

(10) Have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of each door opening.

(d) Passageway to the service and emergency doors must not be obstructed by any object. (*State School Bus Committee; Sec II, Rule 38-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 345; filed Apr 14, 1981, 11:30 am: 4 IR 781, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3832; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-39 Fire extinguisher

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 39. (a) Each bus must have at least one (1) dry-chemical fire extinguisher with a five (5) pound capacity, and be equipped with a pressure gauge. The extinguisher must be mounted in the manufacturer's extinguisher bracket and must be accessible to the driver.

(b) The fire extinguisher must display an Underwriter's Laboratories, Inc. rating of not less than 2A 10-B-C.

(c) Each fire extinguisher must have a hose. (*State School Bus Committee; Sec II, Rule 39-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 347; filed Jun 20, 1988, 8:50 am: 11 IR 3834; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-40 First aid kit

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 40. Each school bus must carry a dustproof, detachable first aid kit that does not have sharp protrusions and can accommodate at least 24 units. The kit must be mounted in plain view on the inside of the bus in an accessible location. All first aid kits are subject to inspection by the Indiana state police. Contents must be replaced in accordance with the first aid kit manufacturer's suggestions.

A 24 unit kit must contain:

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Item	No. Per Pkg.	24 Unit Kit
Absorbent Gauze	1	4
1" Adhesive Compress	16	4
Sting Kill Swabs (insect stings)	1 pkg.	1
2" Bandage Compress	4	4
4" Bandage Compress	1	3
1" × 5 yds. Adhesive Tape	1	1
Forceps and Scissors	1	1
Antiseptic Solution	10	2
3" Sterile Pads	4	3
Triangular Bandage	1	1

(State School Bus Committee; Sec II, Rule 40-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 347; filed Jun 20, 1988, 8:50 am: 11 IR 3834; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-2-41 Floor

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 41. (a) The floor must be made of commercial quality 14 gauge, galvanized steel or other material with equivalent strength. If plywood is used on top of a steel floor, the plywood must be at least 5-ply and one-half (1/2) inch thick. It must equal or exceed properties of exterior-type Douglas fir plywood, C-D Grade, as specified in standards issued by the U.S. Department of Commerce. The floor must be level, except in the wheel housing, the toe-board, the driver's compartment, and the fill-pipe cover areas.

(b) The floor under the seats, including on top of the wheel housings, in the driver's compartment, and on the toe-board, must have fire-resistant covering that has a minimum thickness of .125 inches.

(c) The floor covering in the aisle, including the platform area, must be fire-resistant, rubber, or equivalent, non-skid, wear-resistant, and ribbed with a minimum thickness of .1875 inches measured from the tops of the ribs. Floor covering must meet federal specifications. A rust proof aisle strip must be used, not exceeding one and one-fourth (1 1/4) inches in width, and must secure the aisle floor covering.

(d) The floor covering must be water-resistant and permanently bonded to the floor with a waterproof adhesive. All seams must be sealed with waterproof sealer.

(e) The floor of each school bus must be marked with a yellow or white, two (2) to four (4) inch wide insert, located behind the driver's seat and perpendicular to the longitudinal axis of the bus. A sign at the front of the bus must indicate that occupancy forward of the insert is prohibited. *(State School Bus Committee; Sec II, Rule 41-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 347; filed Jun 20, 1988, 8:50 am: 11 IR 3835; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-42 Heaters

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 42. (a) Each bus must have at least two (2) heaters, one (1) of which must have an intake at the top of the center of the bus that uses fresh air.

(b) The heating system must be capable of maintaining an inside temperature of 40 degrees Fahrenheit.

(c) All exposed rubber or plastic hose in the interior of the bus must be shielded to prevent harm to the driver and passengers.

(d) There must be a temperature regulating valve that is accessible to the bus driver.

(e) Each hot water system supplied by the body manufacturer must include an accessible shutoff valve installed in the pressure and return lines at or near the engine.

(f) Heater motors, cores, and fans must be accessible for service. Access panels may be provided if necessary.

(g) Portable heaters are prohibited. *(State School Bus Committee; Sec II, Rule 42-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 348; filed Jun 20, 1988, 8:50 am: 11 IR 3835; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-43 Identification and lettering

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 43. (a) There must be at least one (1) and no more than five (5) black longitudinal stripes on either side of the bus body. Each single black stripe must be four (4) to six (6) inches high and must extend the length of the bus body.

(b) All buses must have the words "SCHOOL BUS", printed in at least eight (8) inch high letters between the warning signal lamps on the outside of the bus body.

(c) The name of the school district must be placed on each side of the bus with four (4) to six (6) inch high black letters. The number may be placed on the side, the front or the back of the vehicle. If the number is placed on the side of the bus, it must conform to the specifications for lettering in subsection (b) of this section. If the number is placed on the front or back bumpers, the number must be yellow.

(d) All paint must be lead-free. All lettering must conform to Series "B" of the standard alphabets for highway signs.

(e) No other lettering is authorized unless specified in 575 IAC 1-7 (Optional Equipment). (*State School Bus Committee; Sec II, Rule 43-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 349; filed Jun 20, 1988, 8:50 am: 11 IR 3836; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-44 Inside height

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 44. The inside of the body must be at least 62 inches high, measured from the front vertical bow to the back bow at any point on the longitudinal center line. (*State School Bus Committee; Sec II, Rule 44-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 349; filed Jun 20, 1988, 8:50 am: 11 IR 3836; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-45 Insulation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 45. All ceiling and walls must be insulated with non-asbestos materials to minimize sound and vibrations. At least one (1) inch thick thermal insulation must be installed between panels to prevent settling. All materials must be fire resistant material and approved by Underwriter's Laboratories, Inc. (*State School Bus Committee; Sec II, Rule 45-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 349; filed Jun 20, 1988, 8:50 am: 11 IR 3836; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-46 Interior

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 46. (a) All ceilings and walls must include inner lining. If the joints in the ceiling overlap, each rear panel must overlap each forward panel. Exposed edges must be beaded, hemmed, or flanged to eliminate sharp edges.

(b) All dangerous protrusions must be eliminated from the interior.

(c) The noise level in the bus must not exceed 90 dBa when measured at the ear of the occupant nearest to the primary bus noise source. (*State School Bus Committee; Sec II, Rule 46-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 349; filed Jun 20, 1988, 8:50 am: 11 IR 3837; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-47 Lamps and signals

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 47. (a) The school bus must be equipped with headlamps as required by the State Statutes. Lamps must be of proper intensity and adjustment to meet standards of Society of Automotive Engineers.

(b) Each bus must have four combination red brake-tail lamps. Two (2) combination lamps with a minimum diameter of seven (7) inches (or if a shape other than round, a minimum 38 square inches of illuminated area) must be mounted on the rear of the bus just inside the turn signals. Two (2) combination lamps with a minimum diameter of four (4) inches (or if a shape other than round, a minimum twelve (12) square inches of illuminated area) must be placed on the rear of the body between the beltline and the floor line.

Brake lamps must have at least the intensity of the Class A turn signal lamps as established by the Society of Automotive Engineers. Stop lamps must emit a steady light when illuminated. Buses with bodies supplied by chassis manufacturer may have manufacturer's standard stop and tail lamps.

(c) Each bus must have two (2) back-up lights.

(d) All interior lamps must illuminate the aisle and the step-well.

(e) An alternately flashing signaling system must alert other highway users that the bus is stopped or about to stop to take on or let off students. The system on each school bus ordered and initially placed in service on or after July 1, 1988, must meet the following specifications:

(1) The flashing signaling system must include the following equipment:

(A) Two (2) seven (7) inch red warning lights at the front and the rear of the bus.

(B) In addition to the four (4) red lamps described above, one (1) amber lamp must be placed beside each of the four (4) red signal lamps. These lamps must be closer than the red lamps to the longitudinal center line of the bus. While the red lamps must be automatically energized, the amber lamps must be manually energized and de-energized when the service door is opened.

(2) The system must be activated 400-800 feet before the bus stops.

(3) It must be clear to the driver through visible or audible means that the signaling system has been turned on.

(4) Warning lamps must be installed as follows:

(A) Each lamp's axis must be mounted substantially parallel to the longitudinal axis of the bus.

(B) The front and back lamps must be spaced at least 60 inches apart.

(C) The front lamps must be mounted horizontally on the same center line, and above the windshield. The back lamps must be horizontally mounted on the same center line so that the lower edges of the lenses are not lower than the top line of the side windows.

(D) An individual's view of the front and back signal lamps must be unobstructed by all parts of the bus from five (5) degrees above to ten (10) degrees to the left of the center line of the bus.

(E) Area around the lens of each alternately flashing signal lamp, extending outward approximately three (3) inches must be painted black. Visors or hoods with appropriate black background may be used.

(F) Each lamp must be mounted with its aiming plane vertical and normal to the bus' axis.

(G) All flasher units in the signaling system must be enclosed in an accessible location.

(5) Decals or lettering must identify the alternately flashing system's master control switch. Activation of the system's switch and the door control switch must activate both the alternately flashing lamps and the stop arm signal in the following manner:

(A) Depressing the master switch must activate the amber indicator lights and the amber warning lights while the service door is closed.

(B) When the service door is opened, the amber indicator lights and the amber warning lights must turn off, and the red indicator lights and the red warning lights must flash, and the stop arm signal must be activated, with its lamps turning on.

(C) All lights must turn off and the stop arm signal must be deactivated when the service door is closed.

(D) Opening the service door without activating the master switch must not cause the lights to flash.

(E) When the service door is opened and the master switch is depressed, the red indicator lights, the red warning lamps, and the stop arm signal must be activated.

(f) Each school bus must contain at least three (3) reflectorized triangle road warning devices in an accessible location in the driver's compartment.

(g) Each bus must have a stop signal device to indicate that the bus is stopped. The device must meet the following specifications:

(1) The stop signal device must be a flat octagon-shaped device, approximately 18 inches wide and 18 inches long, exclusive of the mounting brackets, and meet SAE specifications J-1133.

(2) Both sides of the device must be a bright red with a one-half (1/2) inch white border. The word, "STOP" must be clearly

printed on both sides in at least six (6) inch high white letters. The sign, including the letters, must be reflectorized and must not lose over 20 percent of its reflectivity when wet.

(3) The stop signal device must contain double-faced, alternately flashing four (4) inch high red lamps, with one lamp placed near the top and one lamp placed near the bottom of the device.

(4) The device must be mounted outside and immediately below the driver's window.

(5) The stop signal device must have a driver-controlled mechanism, either mechanical, vacuum, electrical, or air that will hold the device in an extended or retracted position to prevent whipping in the wind. The driver must be able to operate the mechanism while remaining in the normal driving position. Diesel engines without a chassis-installed vacuum or air source must use an electric stop signal device.

(h) Reflectors on each bus must meet the following specifications:

(1) Reflectors are required in the following places on each bus:

(A) 2 red reflectors on the back of the bus;

(B) 2 amber reflectors on the front half of each side; and

(C) 2 red reflectors on the back half of each side.

(2) Reflectors must be mounted 15 to 60 inches above the ground.

(i) Each bus must have identification and side marker lamps.

(j) Each bus must have an ignition activated body cut-off switch.

(k) The rear of the bus must have seven (7) inch Class A amber turn signals that meet SAE standards. The front and rear turn signals must be mounted as high as practical and placed as wide apart as practical but not less than three (3) feet. The rear turn signal lamps' centerline must be at least eight (8) inches below the rear windows. Conversion vehicle lamps must be at least 21 square inches in lens area. These signals must be independent units and have a 4-way hazard warning switch that causes simultaneous flashing of the turn signal lamps when they are needed as a hazard warning. (*State School Bus Committee; Sec II, Rule 47-1; filed Feb 10, 1978, 3:31 pm; Rules and Regs. 1979, p. 349; filed Apr 14, 1981, 11:30 am: 4 IR 782, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3837; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-48 Metal treatment

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 48. (a) All metal used in the construction of the bus body must be either prime commercial quality galvanized steel or aluminum, except for door handles, grab handles, stanchions, interior decorative parts, and other plated parts.

(b) All metal that will be painted must be chemically cleaned, etched, zinc-phosphate-coated, and zinc-chromed or epoxy-primed.

(c) In meeting these requirements, close attention must be given to lapped surfaces, welded connections of structural members, cut edges, punched or drilled hole areas in sheet metal, closed or box sections, unvented or undrained areas, and surfaces subjected to abrasion during vehicle operation.

(d) Materials used in the construction of the bus body must not lose more than ten (10) percent of its weight after a 1,000 hour salt spray test as provided for in the latest revision of ASTM Designation: B117 "Standard Method of Salt Spray (Fog) Testing". (*State School Bus Committee; Sec II, Rule 48-1; filed Feb 10, 1978, 3:31 pm; Rules and Regs. 1979, p. 352; filed Jun 20, 1988, 8:50 am: 11 IR 3840; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-49 Mirrors

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 49. (a) The interior clear-view mirror, must be made of safety glass, be at least six (6) inches by 16 inches overall, and afford a good view of pupils. It must have rounded corners and protected edges.

(b) There must be one (1) exterior clear-view, rear-view mirror on the left side of the driver and one (1) clear-view, rear-view mirror on the right side of the driver. Each mirror must be at least 50 square inches and firmly supported and adjustable to give the driver a clear view of the left and right rear of the bus.

(c) When an indirect visibility system is used to meet the requirements of this section, the system must consist of two (2) cross-

over and two (2) rear-facing mirrors that are eight (8) inches convex and have a seven and one-half (7½) inch reflective area. This system must be mounted at the frontmost portion of the bus fender to provide visibility to the area in front of the bus and the area immediately adjacent to the left and right front wheels. Elliptical or hemispherical mirrors may be substituted on a two-for-one basis if indirect visibility requirements are met.

(d) Exterior mirror backs and bracket supports must be black. *(State School Bus Committee; Sec II, Rule 49-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 352; filed Jun 20, 1988, 8:50 am: 11 IR 3840; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-50 Mounting (Repealed)

Sec. 50. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-51 Overall length (Repealed)

Sec. 51. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-52 Width

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 52. The overall width of the bus body may not exceed 96 inches, excluding accessories. *(State School Bus Committee; Sec II, Rule 52-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 353; filed Jun 20, 1988, 8:50 am: 11 IR 3841; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-53 Posts (Repealed)

Sec. 53. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-54 Rub rails

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 54. (a) There must be two (2) rub rails on each side of the body.

(b) The rails do not have to extend across the wheel housing and access door areas.

(c) All rub rails must be at least four (4) inches wide in their finished form and made of at least 16 gauge corrugated or ribbed steel.

(d) Press-in or snap-on rub rails are prohibited. *(State School Bus Committee; Sec II, Rule 54-1; filed Feb 10, 1978, 3:31 p.m.: Rules and Regs. 1979, p. 353; filed Jun 20, 1988, 8:50 a.m.: 11 IR 3841; filed Mar 19, 2001, 11:32 a.m.: 24 IR 2468; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-55 Sanders (Repealed)

Sec. 55. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-2-56 Seat and seat belt for driver

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 56. The driver's seat and the driver's seat belt must meet the manufacturer's standards. *(State School Bus Committee; Sec II, Rule 56-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 354; filed Apr 14, 1981, 11:30 am: 4 IR 784, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3841; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2-57 Seats

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 57. The seats must provide at least a twenty-four (24) inch knee space, measured from the seat cushion level at the midpoint of the transverse line of the seat. The distance between the rearmost portion of the seat backs of the rear row of seats and the outside rear of the bus body, measured at the floor line, must be at least six (6) inches. All seat covering material must be free of holes or tears. (*State School Bus Committee; Sec II, Rule 57-1; filed Feb 10, 1978, 3:31 p.m.: Rules and Regs. 1979, p. 354; filed Jun 20, 1988, 8:50 a.m.: 11 IR 3841; filed Mar 19, 2001, 11:32 a.m.: 24 IR 2468; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-58 Steps

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 58. (a) The steps must conform to the manufacturer's standards.

(b) All steps must be enclosed to prevent the accumulation of ice and snow.

(c) The steps must not protrude beyond the side body lines.

(d) At least 30 inch long grab handles must be placed in an unobstructed location inside the doorway.

(e) A rubber tread with white nosing that is bonded to the metal must cover all steps.

(f) The step well must be made of rust-proof metal. (*State School Bus Committee; Sec II, Rule 58-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 355; filed Jun 20, 1988, 8:50 am: 11 IR 3842; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-59 Stirrup steps (Repealed)

Sec. 59. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-2-60 Storage compartment (Repealed)

Sec. 60. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-2-61 Sun shield

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 61. The sun shield must meet the manufacturer's standards. (*State School Bus Committee; Sec II, Rule 61-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 356; filed Jun 20, 1988, 8:50 am: 11 IR 3842; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-62 Tailpipe

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 62. The tailpipe must extend to but not beyond the perimeter of the body. (*State School Bus Committee; Sec II, Rule 62-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 356; filed Jun 20, 1988, 8:50 am: 11 IR 3842; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-63 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 63. (a) The entire underside of the bus body, including all floor sections, cross members, and below floor side panels must be coated with a rust-proofing compound for which the compound manufacturer has issued a notarized certification to the body builder that the compound meets or exceeds all performance and qualitative requirements of Federal Specifications TT-C-520b, using modified test procedures for the following requirements:

- (1) Salt spray resistance-pass test modified to 5% salt and 1,000 hours.
- (2) Abrasion resistance-pass.
- (3) Fire resistance-pass.

(b) The undercoating compound must be applied with airless or conventional spray equipment to the recommended thickness and show no evidence of voids in cured film. Undercoating must prevent rust for at least five (5) years. All materials must be asbestos-free. (*State School Bus Committee; Sec II, Rule 63-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 356; filed Jun 20, 1988, 8:50 am: 11 IR 3843; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-64 Ventilation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 64. (a) The bus body must have a controlled ventilating system that maintains the proper quantity of air without opening the windows except in extremely warm weather.

(b) A static non-closable exhaust ventilator must be installed in the low pressure area of the roof. (*State School Bus Committee; Sec II, Rule 64-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 357; filed Jun 20, 1988, 8:50 am: 11 IR 3843; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-65 Wheel housing

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 65. (a) The opening in the side of the body must be large enough to service the tires and to provide clearance for tire chains.

(b) The way in which the wheel housing is attached to the floor sheets must prevent water and dust from entering the body.

(c) The inside height of the wheel housing above the floor may not exceed twelve (12) inches. (*State School Bus Committee; Sec II, Rule 65-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 357; filed Jun 20, 1988, 8:50 am: 11 IR 3843; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-66 Windshield and windows

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 66. (a) Glass in the side and rear windows must be made of AS-2 or better grade, as specified in American Standards Association Code Z26.1 and must meet the manufacturer's standards.

(b) Federally approved plastic materials may be used in any bus window, except for the windshield and the windows to the immediate right and left of the driver and any rear window used for driver visibility.

(c) Each full side window must provide an unobstructed emergency opening that is at least nine (9) inches high and twenty-two (22) inches wide, attained by lowering the window.

(d) Type A-2 buses must have a minimum of one (1) push-out emergency split sash window on each side of the vehicle conforming to the emergency window exit requirements as specified in federal Motor Vehicle Safety Standard No. 217. The windows specified in this section are in addition to the emergency exit requirements of federal Motor Vehicle Safety Standard No. 217. (*State School Bus Committee; Sec II, Rule 66-1; filed Feb 10, 1978, 3:31 p.m.: Rules and Regs. 1979, p. 357; filed Apr 14, 1981, 11:30 a.m.: 4 IR 784, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 a.m.: 11 IR 3843; filed Mar 19, 2001, 11:32 a.m.: 24 IR 2468; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-67 Windshield washers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 67. Windshield washers must be standard equipment on each bus. (*State School Bus Committee; Sec II, Rule 67-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 357; filed Jun 20, 1988, 8:50 am: 11 IR 3844; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-68 Windshield wipers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 68. The bus must be equipped with two (2) speed air or electric windshield wipers that are powered by one (1) motor. (*State School Bus Committee; Sec II, Rule 68-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 358; filed Jun 20, 1988, 8:50 am: 11 IR 3844; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-69 Wiring

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

- Sec. 69. (a) All wiring must conform to the current standards of the Society of Automotive Engineers.
(b) Wiring must be arranged in at least eight (8) reAular [*sic.*] circuits using the following combinations:
(1) head, tail, brake, and instrument panel lights
(2) clearance and step-well lamps. The step-well lamp must turn on when the service door is opened.
(3) dome light.
(4) emergency door signal.
(5) turn signal lamps.
(6) alternately flashing signal lamps.

Any of the above combination circuits may be subdivided into additional independent circuits.

(c) At least one additional circuit must be installed if a heater and defrosters are used. All other electrical functions, such as optional equipment, must have independent and property protected circuits. Each circuit, except the starter motor and ignition circuits, must have a separate fuse or circuit breaker.

(d) Each body circuit must be coded by number, letter, or color. A diagram of the circuits must be attached to the body in an accessible location.

(e) All wires within the body must be insulated with a covering of fibrous loom or its equivalent that will protect them from external damage and minimize the danger of short circuiting. Whenever wires pass through body members, an insert must provide additional protection. Wires not enclosed within the body shell must be fastened securely at intervals of not more than 24 inches. All joints must be soldered or joined by connectors. (*State School Bus Committee; Sec II, Rule 69-1; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 358; filed Jun 20, 1988, 8:50 am: 11 IR 3844; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2-70 Written certification of body compliance (Repealed)

Sec. 70. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

Rule 2.5. Type B School Bus

575 IAC 1-2.5-1 Air cleaner

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 1. The engine intake air cleaner must meet engine specifications. (*State School Bus Committee; 575 IAC 1-2.5-1; filed*

Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-2.5-2 Axles

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. The axles or other suspension assemblies must be compatible with a GVWR of at least 10,000 pounds. *(State School Bus Committee; 575 IAC 1-2.5-2; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-3 Brakes

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 3. (a) A full compressed air or hydraulic brake system must be installed in each bus.

(b) All brake linings must be made of non-asbestos materials. Brake lining areas must be protected by an adequate dust cover.

(c) Buses using an hydraulic assist booster in the brake system must have audible and visible warning signals that provide continuous warning to the driver when there is a loss of fluid flow from the primary source or a loss of electricity to the back-up system.

(d) If an air brake system is used, alcohol evaporators or injectors are prohibited. *(State School Bus Committee; 575 IAC 1-2.5-3; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-4 Front bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 4. (a) The chassis manufacturer must furnish the front bumper as part of the chassis.

(b) The front bumper must extend to the outer edges of the fenders at the bumper top line and be made of pressed steel channel that is at least three-sixteenths (3/16) inches thick. Chrome bumpers are prohibited.

(c) The front bumper must be black.

(d) The only permissible applications on the front bumper are a yellow bus number and black, abrasive, non-skid tape. *(State School Bus Committee; 575 IAC 1-2.5-4; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-5 Clutch

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 5. The clutch torque capacity must be equal to or greater than the engine torque output. The clutch must be made of non-asbestos materials. *(State School Bus Committee; 575 IAC 1-2.5-5; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-6 Color of chassis

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 6. (a) The chassis, including the wheels and the front bumper, must be black. Rims may be gray or black. The hood, cowl, and fenders must be national school bus yellow. The top of the hood may be painted a low-luster yellow color to minimize glare.

(b) The grill may be black, national school bus yellow, or chrome plated.

(c) All paint must be lead-free. *(State School Bus Committee; 575 IAC 1-2.5-6; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-7 Drive shaft

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 7. The drive shaft must be protected by metal guards to prevent it from whipping through the floor if it breaks. (*State School Bus Committee; 575 IAC 1-2.5-7; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-8 Electrical system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 8. (a) The alternator and rectifier must have a minimum output capacity of 80 amperes. If the bus has a passenger capacity of more than 36, the output capacity must be at least 100 amperes. A single belt drive is permissible.

(b) The battery must be conventional (lead-antimony) or maintenance free sealed (lead-calcium). Each battery system must be twelve (12) volt with at least 430 CCA (cold cranking amperes) per J-537h specifications. If the bus has a diesel engine, the battery system must have a minimum of 900 CCA. If the battery is mounted outside of the engine compartment, it may be temporarily mounted to the chassis. One piece battery cables, SAE J-541, that are at least 36 inches longer than normally required to accommodate the battery when located 52 inches to the rear of the cowl, must be used.

(c) The chassis must be equipped with the following instruments and gauges:

- (1) speedometer;
- (2) odometer which will give accrued mileage, calibrated in tenths of miles;
- (3) voltmeter or ammeter;
- (4) oil pressure gauge;
- (5) water temperature gauge;
- (6) fuel gauge;
- (7) upper beam headlamp indicator; and
- (8) brake warning light.

All instruments must be easily accessible for maintenance and repair. The instrument panel must have lamps of sufficient candlepower to illuminate all instruments and gauges.

(d) All wiring must conform to the manufacturer's standards and to the standards of the Society of Automotive Engineers. The chassis manufacturer must install a terminal strip or plug on the body side of the cowl or in an accessible location in the engine compartment if the bus has no cowl that contains the following body connection terminals:

- (1) main 100 amp body circuit;
- (2) tail lamps;
- (3) right turn signal;
- (4) left turn signal;
- (5) stop lamps;
- (6) back up lamps; and
- (7) instrument panel lights that are rheostat-controlled by the headlamp switch.

(e) The ignition switch must be located either on the right side of the steering column or on the instrument panel to the right of the steering column. (*State School Bus Committee; 575 IAC 1-2.5-8; filed Jun 20, 1988, 8:50 am: 11 IR 3845; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-9 Exhaust system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 9. (a) The exhaust pipe, muffler, and tail pipe must be outside the bus body and attached to the chassis per the manufacturer's standards. The tail pipe must be constructed of seamless or electrically welded tubing that is at least (16) gauge steel or its equivalent. The size of the tail pipe as received from the manufacturer may not be altered.

(b) The exhaust system must be insulated from the fuel tank by a metal shield at any point where the exhaust system is twelve (12) inches or less from the tank.

(c) The muffler must be constructed of corrosion-resistant material. *(State School Bus Committee; 575 IAC 1-2.5-9; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-10 Frame

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 10. The frame must not extend the wheel base. *(State School Bus Committee; 575 IAC 1-2.5-10; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-11 Fuel system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 11. (a) The fuel tank must meet the manufacturer's standards and must be mounted, filled, and vented outside the body.

(b) A diesel engine chassis must have a fuel/water separator with a sight bowl or a warning indicator on the instrument panel. *(State School Bus Committee; 575 IAC 1-2.5-11; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-12 Horn

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 12. Each bus must have two (2) electric horns of standard make that are installed under the hood. *(State School Bus Committee; 575 IAC 1-2.5-12; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-13 Heating system water lines

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 13. The chassis engine must contain plugged openings for supplying hot water to the bus heating system water lines. The openings must accommodate a hose connector with a three-fourths (3/4) inch pipe thread. The engine must supply water at 170 degrees Fahrenheit flowing 50 pounds per minute through 30 feet of automotive hot water heater hose which has an inside diameter of one (1) inch (SBMI Standard No. 001 – Standard Code for Testing and Rating Automotive Bus Hot Water Heating and Ventilating Equipment). The chassis manufacturer must install hose bibs in a location convenient for the installation of the heater hose by the body manufacturer. *(State School Bus Committee; 575 IAC 1-2.5-13; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-14 Oil filter

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 14. The oil filter must meet the manufacturer's standards. *(State School Bus Committee; 575 IAC 1-2.5-14; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-15 Openings

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 15. All openings in the floorboard and firewall between the chassis and passenger compartment, such as the openings for the gearshift lever and the auxiliary brake lever, must be sealed. *(State School Bus Committee; 575 IAC 1-2.5-15; filed Jun 20, 1988, 8:50 am: 11 IR 3846; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-16 Length

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 16. The length of the bus may not exceed 36 feet. *(State School Bus Committee; 575 IAC 1-2.5-16; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-17 Power

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 17. The GVWR may not exceed 185 pounds per net published horsepower of the engine at the manufacturer's recommended maximum number of revolutions per minute. *(State School Bus Committee; 575 IAC 1-2.5-17; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-18 Shock absorbers

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 18. Every bus must have front and rear double-acting shock absorbers, that meet the manufacturer's rated axle capacity. *(State School Bus Committee; 575 IAC 1-2.5-18; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-19 Springs

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 19. The springs or suspension assembly must accommodate a GVWR of at least 10,000 pounds. *(State School Bus Committee; 575 IAC 1-2.5-19; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-20 Steering gear

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 20. The steering gear must be approved by the chassis manufacturer and designed to assure safe and accurate performance when the bus is operated with a maximum load and at maximum speed. It must provide for lash adjustment for lost motion. The chassis manufacturer must approve an alteration of the steering apparatus. There must be at least two (2) inches between the steering wheel and any other surface. Nothing may be attached to the steering wheel. Power steering is required. If the wear points are not permanently lubricated, the steering gear assembly must be designed so that the wear points can be lubricated. *(State School Bus Committee; 575 IAC 1-2.5-20; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-21 Tires and rims

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 21. (a) The tires must be of equal size, construction, and ply rating and have rims of equal size. All tires must conform to the GAWR.

(b) Regrooved or retread tires on front or single rear wheels are prohibited.

(c) The bus distributor's or manufacturer's recommendation on tire and rim size must be followed. (*State School Bus Committee; 575 IAC 1-2.5-21; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-22 Transmission

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 22. The transmission may be automatic or manual.

(1) An automatic transmission must have at least three (3) forward gear ratios. The transmission shift quadrant must have three (3) forward drive ranges plus neutral and reverse. Within the range selected, ratio changes must occur automatically at full engine power, without the use of an engine disconnect clutch.

(2) A manual transmission must be synchromesh in all gears except first and reverse. It must have at least three (3) forward gears and one (1) reverse gear. The gearshift must not interfere with the operation of the service door.

(*State School Bus Committee; 575 IAC 1-2.5-22; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-23 Undercoating

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 23. The chassis manufacturer must coat the chassis-supplied body components that are subject to rust with a compound that meets or exceeds federal specifications TT-C520b. The compound must be made of non-asbestos material. (*State School Bus Committee; 575 IAC 1-2.5-23; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-24 Aisle

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 24. (a) The width of the center aisle must be at least twelve (12) inches.

(b) The aisle supports of the seat backs must slant away from the aisle, leaving a clearance of at least 15 inches at the top of the seat backs. (*State School Bus Committee; 575 IAC 1-2.5-24; filed Jun 20, 1988, 8:50 am: 11 IR 3847; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-25 Battery

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 25. The chassis manufacturer must mount the battery outside of the engine compartment. The body manufacturer must securely attach the battery on a slide-out tray in a closed, vented, and accessible compartment of the body skirt in accordance with SBMI Design Objectives Booklet, January, 1985. The battery compartment cover must be secured by a fastener. (*State School Bus Committee; 575 IAC 1-2.5-25; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-26 Rear bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 26. (a) The rear bumper must be made of pressed steel channel that is at least three-sixteenths (3/16) inches thick and eight (8) inches high. Chrome bumpers are prohibited.

(b) The bumper must wrap around the back corners of the bus. It must extend twelve (12) inches forward, measured from the rear-most point of the body and must extend at least one (1) inch beyond the rear-most part of the body surface when measured from

the ground.

(c) The way in which the bumper is attached must prevent the hitching of rides. The bumper must detach easily from the chassis frame.

(d) The bumper must be braced to withstand rear or side impact.

(e) Only the logo and emblems of the school bus manufacturer may be placed on the bumper. The bumper must be painted glossy [*sic.*] black with lead-free paint. (*State School Bus Committee; 575 IAC 1-2.5-26; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-27 Color of body

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 27. The body manufacturers or their agents must paint the bus body national school bus yellow in accordance with the colorimetric specifications of Federal Standard No. 595a-Color 13432, using only lead-free paint. (*State School Bus Committee; 575 IAC 1-2.5-27; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-28 Construction

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 28. (a) All structural materials must be constructed of either prime commercial quality galvanized steel or aluminum and must be fire-resistant.

(b) The body construction must be reasonably dustproof and water-tight.

(c) The rear corner framing of the bus body between the floor and the window sill and between the emergency door posts and the last side posts must consist of at least three (3) structural members, arranged to provide additional impact and penetration resistance equal to that provided by the side frame members. The ends of all structural members must be securely attached to the bus body. (*State School Bus Committee; 575 IAC 1-2.5-28; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-29 Defroster

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 29. Each school bus must have a windshield defroster and defogging system that must keep the windshield, the side window to the left of the driver, and the glass entrance door clear of fog, frost and snow. The system may use heat directly from an approved heater or auxiliary heaters. (*State School Bus Committee; 575 IAC 1-2.5-29; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-30 Doors

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 30. (a) The passenger service door must:

(1) Be power or manually operated by the driver and must open easily but must not open accidentally. The controls for an air, vacuum, or electric powered service door must be close to the driver's seat. A hand lever on on [*sic.*] a service door must be designed to prevent hand injuries.

(2) Be located on the side opposite the driver and within the driver's direct view.

(3) Be designed as follows:

(A) split-type door (any sectioned door that divides and opens inward or outward). If one (1) section of the door opens inward and the other opens outward, the front section must open outward;

(B) fold-type door (jack-knife).

- (4) Have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches.
- (5) Have lower and upper panels made of safety glass. The bottom of the lower glass panel must not be more than 35 inches from the ground when the bus is unloaded. The tops of the upper glass panels must not be more than six (6) inches from the top of the door.
- (6) Have flexible material covering the vertical closing edges of the door.
- (7) Have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of the door opening.
- (b) The emergency door must:
 - (1) Be located in the center of the back of the bus or in the back half of the driver's side of the bus.
 - (2) Have a minimum horizontal opening of 24 inches and a minimum vertical opening of 48 inches, measured from the floor.
 - (3) Have the words "EMERGENCY DOOR" spelled in letters at least two (2) inches high, over the inside and outside of the emergency door.
 - (4) If hinged, open from the inside and outside of the bus and be equipped with a fastening device that releases quickly but not accidentally. The device that opens the emergency door from the outside must be designed to prohibit the hitching of rides. Each door must have a label on it that explains how the door operates. Operation of the emergency door must not be controlled from the driver's seat.
 - (5) Be equipped with a slide-bar cam-operated lock that has a minimum stroke of one (1) inch. All emergency door locks must have an electric-type plunger switch that is connected to a buzzer in the driver's compartment. The switch must be enclosed to prevent deactivation, and wires leading from the switch must be concealed in the bus body. Any movement of the slide-bar must immediately activate the switch and the buzzer. The emergency door lock must have an interior handle that extends approximately to the center of the emergency door. The lock may be released only by lifting the handle.
 - (6) Be hinged on the right side if the door is located in the back of the bus; the door must be hinged on the front side if on the driver's side of the bus.
 - (7) Have no steps leading to the emergency door.
 - (8) Contain at least 400 square inches of safety glass in the upper portion and 350 square inches in the lower portion.
 - (9) Have an audible signal that alerts the driver when the emergency door is open. The ignition switch must activate the signal.
 - (10) Have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of the door opening.
- (c) Passageway to the service and emergency doors must not be obstructed by any object. (*State School Bus Committee; 575 IAC 1-2.5-30; filed Jun 20, 1988, 8:50 am: 11 IR 3848; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-31 Fire extinguisher

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 31. (a) Each bus must have at least one (1) dry-chemical fire extinguisher with a five (5) pound capacity and be equipped with a pressure gauge. The extinguisher must be mounted in the manufacturer's extinguisher bracket and must be accessible to the driver.

(b) The fire extinguisher must display an Underwriter's Laboratories, Inc. rating of not less than 2A 10-B-C.

(c) The fire extinguisher must have a hose. (*State School Bus Committee; 575 IAC 1-2.5-31; filed Jun 20, 1988, 8:50 am: 11 IR 3849; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-32 First aid kit

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 32. Each school bus must carry a dustproof, detachable first aid kit that does not have sharp protrusions and can accommodate [*sic.*] at least 24 units. The kit must be mounted in plain view on the inside of the bus in an accessible location. All first aid kits are subject to inspection by the Indiana state police. Contents must be replaced in accordance with the first aid kit manufacturer's suggestions.

A 24 unit kit must contain:

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Item	No. Per Pkg.	24 Unit Kit
Absorbent Gauze	1	4
1" Adhesive Compress	16	4
Sting Kill Swabs (insect stings)	1 pkg.	1
2" Bandage Compress	4	4
4" Bandage Compress	1	3
1" × 5 yds. Adhesive Tape	1	1
Forceps and Scissors	1	1
Antiseptic Solution	10	2
3" Sterile Pads	4	3
Triangular Bandage	1	1

(State School Bus Committee; 575 IAC 1-2.5-32; filed Jun 20, 1988, 8:50 am: 11 IR 3849; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-2.5-33 Floor

Authority: IC 20-9.1-4-4
 Affected: IC 20-9.1-5-17

Sec. 33. (a) The floor must be made of commercial quality 14 gauge, galvanized steel or other material with equivalent strength. If plywood is used on top of a steel floor, the plywood must be at least 5-ply and five-eighths (5/8) inches thick. It must equal or exceed properties of exterior-type Douglas fir plywood, C-D Grade, as specified in standards issued by the U.S. Department of Commerce. The floor must be level, except in the wheel housing, the toe-board, the driver's compartment, and the fill-pipe areas.

(b) The floor under the seats, including on top of the wheel housings, in the driver's compartment, and on the toe-board, must have fire-resistant covering that has a minimum thickness of .125 inches.

(c) The floor covering in the aisle, including the platform area must be fire-resistant, rubber, or equivalent non-skid, wear-resistant, and ribbed with a minimum thickness of .1875 inches measured from the tops of the ribs. The floor covering must meet federal specifications. A rust-proof aisle strip, not exceeding one and one-fourth (1 1/4) inches in width, must secure the floor covering.

(d) The floor covering must be water-resistant and permanently bonded to the floor with a waterproof adhesive. All seams must be sealed with waterproof sealer.

(e) The floor of each school bus must *[sic.]* marked with a yellow or white, two (2) to four (4) inch wide insert, located behind the driver's seat and perpendicular to the longitudinal axis of the bus. A sign at the front of the bus must indicate that occupancy forward of the insert is prohibited. *(State School Bus Committee; 575 IAC 1-2.5-33; filed Jun 20, 1988, 8:50 am: 11 IR 3849; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-34 Heaters

Authority: IC 20-9.1-4-4
 Affected: IC 20-9.1-5

Sec. 34. (a) The bus must have at least two (2) heaters, one (1) of which must have a fresh air intake located forward of the center of the bus. One (1) heater must be located to the right of the driver. It must have two (2) independently controlled motors; one (1) to run the heater and one (1) to run the defroster. Another heater must be located behind the bus' rear wheels.

(b) The heating system must be capable of maintaining an inside temperature of 40 degrees Fahrenheit. Hot water heaters must conform to the School Bus Manufacturers' Association Standard Code for Testing and Rating Automotive Bus Hot Water and Ventilating Equipment.

(c) All exposed rubber or plastic hose in the interior of the bus must be shielded to prevent harm to the driver and passengers.

(d) There must be a temperature regulating valve that is accessible to the bus driver.

(e) Each hot water system must include an accessible shutoff valve installed in the pressure and return lines at or near the engine.

(f) Heater motors, cores, and fans must be accessible for service. Access panels may be provided if necessary.

(g) Portable heaters are prohibited. (*State School Bus Committee; 575 IAC 1-2.5-34; filed Jun 20, 1988, 8:50 am: 11 IR 3850; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-35 Identification and lettering

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 35. (a) All body trim and exterior lettering must be black.

(b) There must be at least one (1) and no more than five (5) black longitudinal stripes on either side of the bus body. Each single black stripe must be four (4) to six (6) inches high and must extend the length of the bus body.

(c) All buses must have the words "SBHOOOL [*sic.*] BUS", printed in at least eight (8) inch high letters, between the warning signal lamps on the outside of the bus body. No other lettering on the bus is authorized unless specified in subsection (d) of this section. All lettering must conform to Series "B" of the standard alphabets for highway signs.

(d) The name of the school district must be placed on each side of the bus with four (4) to six (6) inch high black letters. The number may be placed on the side, the front or the back of the bus. If the number is placed on the side of the bus, it must conform to the specifications for lettering as specified in subsection (c) of this section. If the number is placed on the front or back bumpers, the number must be yellow.

(e) All paint must be lead-free. All lettering must conform to Series "B" of the standard alphabets for highway signs.

(f) No other lettering on the bus is authorized unless specified in 575 IAC 1-7 (Optional Equipment). (*State School Bus Committee; 575 IAC 1-2.5-35; filed Jun 20, 1988, 8:50 am: 11 IR 3850; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-36 Inside height

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 36. The inside of the body must be at least 72 inches high, measured from the front vertical bow to the back bow at any point on the longitudinal center line. (*State School Bus Committee; 575 IAC 1-2.5-36; filed Jun 20, 1988, 8:50 am: 11 IR 3850; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-37 Insulation

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 37. All ceiling and walls must be insulated with non-asbestos materials to minimize sound and vibrations. At least one (1) inch thick thermal insulation must be installed between panels to prevent settling. All materials must be fire resistant and approved by Underwriter's Laboratories, Inc. (*State School Bus Committee; 575 IAC 1-2.5-37; filed Jun 20, 1988, 8:50 am: 11 IR 3851; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-38 Interior

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 38. (a) All ceiling and walls must include inner lining. If the joints in the ceiling overlap, each rear panel must overlap each forward panel. Exposed edges must be beaded, hemmed, or flanged to eliminate sharp edges.

(b) All dangerous protrusions must be eliminated from the interior.

(c) The noise level in the bus must not exceed 90 dBA when measured at the ear of the occupant nearest to the primary bus noise source. (*State School Bus Committee; 575 IAC 1-2.5-38; filed Jun 20, 1988, 8:50 am: 11 IR 3851; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-39 Lamps and signals

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 39. (a) Each bus must have two (2) three and three-fourths (3 3/4) inch minimum tail and brake lamps and two (2) seven (7) inch tail and brake lamps, all of which must emit red light that is visible for 500 feet during normal weather conditions. Brake lamps must have at least the intensity of the Class A turn signal lamps as established by the Society of Automotive Engineers. Tail lamps must be mounted on the bus at least 40 inches from the center of the lamp to the ground. They must be placed below the window line and spaced at least five (5) feet apart.

(b) Each bus must have two (2) back-up lights.

(c) All interior lamps must illuminate the aisle and the step-well.

(d) An alternately flashing signaling system must alert other highway users that the bus is stopped or about to stop to take on or let off students. The system on each bus ordered and initially placed in service on or after July 1, 1988, must meet the following specifications:

(1) The signaling system must include the following equipment:

(A) Two (2) seven (7) inch red warning lights at the front and the rear of the bus.

(B) In addition to the four (4) red lamps described above, one (1) amber lamp must be placed beside each of the four (4) red signal lamps. These lamps must be closer than the red lamps to the longitudinal center line of the bus. While the red lamps must be automatically energized, the amber lamps must be manually energized and de-energized when the service door is opened.

(2) The system must be activated 400–800 feet before the bus stops.

(3) It must be clear through visible or audible means that the signalling system has been turned on.

(4) Signal lamps shall be installed as follows:

(A) Each signal lamp's axis shall be mounted substantially parallel to the longitudinal axis of the bus.

(B) The front and back signal lamps shall be spaced at least 60 inches apart.

(C) The front signal lamps shall be mounted horizontally on the same center line, above the windshield. The back lamps shall be horizontally mounted on the same center line so that the lower edges of the lenses are not lower than the top line of the side windows.

(D) An individual's view of the front and back signal lamps shall be unobstructed by all parts of the bus from five (5) degrees above to ten (10) degrees to the left of the center line of the bus.

(E) Area around the lens of each alternately flashing signal lamp, extending outward approximately three (3) inches, must be painted black, with lead-free paint. Visors or hoods with appropriate black paint may be used.

(F) Each lamp shall be mounted with its aiming plane vertical and normal to the bus' axis.

(G) All flasher units for alternately flashing red and amber signal lamps shall be enclosed in the body in an accessible location.

(5) Decals or lettering must identify the signalling system's master master [*sic.*] control switch. Activation of the system's switch and the door control switch must activate both the alternately flashing lamps and the stop arm signal in the following manner:

(A) Depressing the master switch must activate the amber indicator lights and the amber warning lights while the service [*sic.*] door is closed.

(B) When the service door is opened and the master switch is pressed, the amber indicator lights and the amber warning lights must turn off, and the red indicator lights and the red warning lights must flash, and the stop arm signal must be activated, with its lamps turning on.

(C) All lights must turn off and the stop arm signal must be deactivated when the service door is closed.

(D) Opening the service door without activating the master switch must not cause the lights to flash.

(E) When the service door is opened and the master switch is depressed, the red indicator lights, red warning lamps, and the stop arm signal must be activated.

(e) Each school bus must contain at least three (3) reflectorized triangle road warning devices in an accessible location in the driver's compartment.

(f) Each bus must have a stop signal device to indicate that the bus is stopped. The device must meet the following specifications:

- (1) The stop signal device must be a flat octagon-shaped device, approximately 18 inches wide and 18 inches long, exclusive of the mounting brackets, and meet SAE specifications J-1133.
- (2) Both sides of the device must be a bright red with a one half (1/2) inch border. The word "STOP" must be printed on both sides in at least six (6) inch high white letters. The sign, including the letters, must be reflectorized and must not lose over 20 percent of its reflectivity when wet.
- (3) The stop signal device must contain double-faced, alternately flashing four (4) inch high red lamps, with one (1) lamp placed near the top and one (1) lamp placed near the bottom of the device.
- (4) The device must be mounted outside and immediately below the driver's window.
- (5) The stop signal device must have a driver-controlled mechanism, either mechanical, vacuum, electrical, or air that will hold the device in an extended or retracted position to prevent whipping in the wind. The driver must be able to operate the mechanism while in the normal driving position. Diesel engines without a chassis-installed vacuum or air source must use an electric stop signal device.
- (g) Reflectors on each bus must meet the following specifications:
 - (1) Reflectors are required in the following places on each bus:
 - (A) two (2) red reflectors on the back of the bus;
 - (B) two (2) amber reflectors on the front half of each side; and
 - (C) two (2) red reflectors on the back half of each side.
 - (2) Reflectors must be mounted 15 to 60 inches above the ground.
 - (h) Three (3) clearance lights with two (2) candlepower bulbs each must be mounted in the center of the front and the back of the bus at the highest points and in a horizontal plane with other clearance lights.
 - (i) Each bus must have an ignition-activated body cut-off switch.
 - (j) The front and back of the bus must have seven (7) inch Class A amber turn signals that meet SAE standards. The front turn signals must be cowl mounted. These signals must be independent units and must be equipped with a 4-way hazard warning switch that causes simultaneous flashing of turn signal lamps when needed as a hazard warning. The operating switch must be self-cancelling. (*State School Bus Committee; 575 IAC 1-2.5-39; filed Jun 20, 1988, 8:50 am; 11 IR 3851; readopted filed Oct 10, 2001, 3:37 p.m.; 25 IR 938*)

575 IAC 1-2.5-40 Metal treatment

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

- Sec. 40. (a) All metal used in the construction of the bus body must be either prime commercial quality galvanized steel or aluminum, except for door handles, grab handles, stanchions, interior decorative parts, and other plated parts.
- (b) All metal parts that will be painted must be chemically cleaned, etched, zinc-phosphate-coated, and zinc-chromed or epoxy-primed.
- (c) In meeting these requirements, close attention must be given to lapped surfaces, welded connections of structural members, cut edges, punched or drilled hole areas in sheet metal, closed or box sections, unvented or undrained areas, and surfaces subjected to abrasion during vehicle operation.
- (d) Materials used in the construction of the bus body must not lose more than ten (10) percent of its weight after a 1000 hour salt spray test as provided for in the latest revision of ASTM Designation: B117 "Standard Method of Salt Spray (Fog) Testing". (*State School Bus Committee; 575 IAC 1-2.5-40; filed Jun 20, 1988, 8:50 am; 11 IR 3852; readopted filed Oct 10, 2001, 3:37 p.m.; 25 IR 938*)

575 IAC 1-2.5-41 Mirrors

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

- Sec. 41. (a) The interior clear-view mirror must be made of safety glass, be at least six (6) inches by 30 inches, and afford a good view of pupils. It must have rounded corners and protected edges.
- (b) There must be one (1) exterior clear-view, rear-view mirror on the left side of the driver and one (1) clear-view, rear-view mirror on the right side of the driver. Each mirror must be at least 50 square inches and firmly supported and adjustable to give the

driver a clear view of the left and right rear of the bus.

(c) When an indirect visibility system is used to meet the requirements of this section, the system must consist of two (2) cross-over and two (2) rear-facing mirrors that are eight (8) inches convex and have a seven and one-half (7 1/2) inch reflective area. This system must be mounted at the frontmost portion of the bus fender to provide visibility to the area in front of the bus and the area immediately adjacent to the left and right front wheels. Elliptical or hemispherical mirrors may be substituted on a two-for-one basis if indirect visibility requirements are met.

(d) Exterior mirror backs and bracket supports must be black. (*State School Bus Committee; 575 IAC 1-2.5-41; filed Jun 20, 1988, 8:50 am: 11 IR 3852; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-42 Mounting

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 42. (a) The chassis frame must extend to the rear edge of the rear body cross member. The way in which the bus body is attached to the chassis frame must prevent shifting or separation of the body from the chassis under severe operating conditions.

(b) The way in which the body front is attached and sealed to the chassis cowl must prevent the entry of water, dust, and fumes through the joints.

(c) Non-asbestos insulating materials must be placed wherever the body and the chassis frame touch. The materials must be approximately one-fourth (1/4) inch thick and must not shift under severe operating conditions. (*State School Bus Committee; 575 IAC 1-2.5-42; filed Jun 20, 1988, 8:50 am: 11 IR 3853; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-43 Width

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 43. The overall width of the bus body may not exceed 96 inches, excluding accessories. (*State School Bus Committee; 575 IAC 1-2.5-43; filed Jun 20, 1988, 8:50 am: 11 IR 3853; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-44 Rub rails

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 44. (a) There must be three (3) rub rails on each side of the body that must be able to resist impact and body crushing. The rub rails must extend the length of the body. The rails do not have to extend to the wheel housings or door access areas. Press-in or snap-on rub rails do not satisfy the requirements of this section.

(b) The rails must be placed in the following locations:

(1) The seat line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side and must wrap around the rear corner radius.

(2) The floor line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(3) The skirt line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(c) All rub rails must be at least four (4) inches wide, made of at least 16 gauge steel and be corrugated or ribbed. (*State School Bus Committee; 575 IAC 1-2.5-44; filed Jun 20, 1988, 8:50 am: 11 IR 3853; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-45 Seat; seat belt for driver

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 45. (a) A locking retractor seat belt must be provided for the driver. The belt must be booted to keep the buckle and button latch off the floor and within easy reach of the driver. The way in which the belt is anchored or guided at the seat frame must

prevent the driver from sliding sideways under the belt.

(b) There must be at least eleven (11) inches between the steering wheel and the back of the driver's seat. The driver's seat must be securely attached to the floor and have at least a four (4) inch fore-and-aft adjustment. The vertical seat adjustment must be at least three (3) inches. (*State School Bus Committee; 575 IAC 1-2.5-45; filed Jun 20, 1988, 8:50 am: 11 IR 3853; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-46 Seats

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 46. (a) Jump seats and portable seats are prohibited.

(b) The seats must provide at least a 24 inch knee space, measured from the seat cushion level at the midpoint of the transverse line of the seat. An allowable average rump width of 13 inches in a 3-3 seating plan and 15 inches in a 3-2 seating plan will determine seating capacity. All seats must have at least 15 inch depth.

(c) The distance between the rearmost portion of the seat backs of the rear row of seats and the outside rear of the bus body, measured at the floor line, must be at least six (6) inches.

(d) All seats must be forward facing and must be securely fastened to the floor or to the part of the bus that supports the seat by the following methods:

(1) At least two (2) bolts, washers, and nuts or washer/nut combinations must secure each seat leg to the floor.

(2) At least two (2) bolts, washers, and nuts or washer/nut combinations must secure each seat frame to the seat rail.

(e) The forward most pupil seat on the right side of the bus must not interfere with the driver's vision.

(f) Each seat, seat back cushion and crash barrier must be covered with a non-asbestos material which has a 42 ounce finished weight, 54 inch width, and a finished vinyl coating of 1.06 broken twill or its equivalent in tensile strength, tear strength, seam strength, adhesion strength, resistance to abrasion and cold, and flex separation. All seat covering material must be free of holes or tears. (*State School Bus Committee; 575 IAC 1-2.5-46; filed Jun 20, 1988, 8:50 am: 11 IR 3853; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-47 Steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 47. (a) The first step at the service door must be twelve (12) to 16 inches from the ground, based on standard chassis specifications.

(b) The riser of the upper step at the service door must not be more than 15 inches high. When more than two (2) steps are used, the risers must be within one-half (1/2) inch of equal height; if a plywood floor is used on steel, the differential may be increased by the thickness of the plywood.

(c) All steps must be enclosed to prevent the accumulation of ice and snow.

(d) The steps must not protrude beyond the side body lines.

(e) At least 30 inch long grab handles must be placed inside the doorway.

(f) A rubber step tread with white nosing that is bonded to the metal must cover all steps.

(g) The step well must be made of rust-proof metal. (*State School Bus Committee; 575 IAC 1-2.5-47; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-48 Stirrup steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 48. There must be one (1) stirrup step and a handle on each side of the front of the body or chassis cowl that is accessible to the windshield and the lamps. (*State School Bus Committee; 575 IAC 1-2.5-48; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-49 Sun shield

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 49. An interior adjustable transparent sun shield at least six (6) inches by 30 inches with a finished edge must be installed in a position that is convenient for the driver. (*State School Bus Committee; 575 IAC 1-2.5-49; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-50 Tail pipe

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 50. The tail pipe must extend to but not beyond the perimeter of the body. (*State School Bus Committee; 575 IAC 1-2.5-50; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-51 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 51. (a) The entire underside of the bus body, including all floor sections, cross members, and below floor side panels must be coated with a rust-proofing compound for which the compound manufacturer has issued a notarized certification to the body builder that the compound meets or exceeds all performance and qualitative requirements of Federal Specifications TT-C-520b, using modified test procedures for the following specifications:

- (1) Salt spray resistance-pass test modified to five percent (5%) salt and 1,000 hours.
- (2) Abrasion resistance-pass.
- (3) Fire resistance-pass.

(b) The undercoating compound must be applied with airless or conventional spray equipment to the recommended film thickness and show no evidence of voids in cured film. Undercoating must prevent rust for at least five (5) years. All materials must be asbestos-free. (*State School Bus Committee; 575 IAC 1-2.5-51; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-52 Ventilation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 52. (a) The bus body must have a controlled, ventilating system that maintains the proper quantity of air without opening the windows except in extremely warm weather.

(b) A static, non-closable exhaust ventilator must be installed in the low pressure area of the roof. (*State School Bus Committee; 575 IAC 1-2.5-52; filed Jun 20, 1988, 8:50 am: 11 IR 3854; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-53 Wheel housing

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 53. (a) The opening in the side of the body must be large enough to service the tire and to provide clearance for tire chains.

(b) The way in which the wheel housing is attached to the floor sheets must prevent water and dust from entering the body.

(c) The inside height of the wheel housing above the floor may not not [*sic.*] exceed twelve (12) inches. (*State School Bus Committee; 575 IAC 1-2.5-53; filed Jun 20, 1988, 8:50 am: 11 IR 3855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-2.5-54 Windshield and windows

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 54. (a) All glass in windshields and windows must be made of safety glass that shows permanent marks and prevents distortion of view. Plastic material, approved under Federal standards, may be used in any window except for the windshield and the windows to the immediate right and left of the driver and any rear windows used for driver visibility.

(b) The windshield must:

- (1) Be constructed as one (1) or two (2) piece curved or wrap-around; or one (1) or two (2) piece flat; or four (4) piece flat.
- (2) Be laminated plate glass. The windshield must allow the driver to see the roadway clearly, must be slanted to reduce glare, and must be installed between the front corner posts, which are placed so that the driver's view is not obstructed.
- (3) Have a horizontal gradient band starting from slightly above the line of the driver's vision and gradually decreasing in light transmission to 20 percent or less at the top of the windshield.

(c) Side and rear windows must meet the following criteria:

(1) Glass in the side and rear windows must be made of AS-2 or better grade, as specified in American Standards Association Code Z26.1.

(2) Each full side window must provide an unobstructed emergency opening of at least nine (9) inches high and 22 inches wide, attained by lowering the window.

(d) At least one (1) push-out, emergency split sash window must be installed near the center of each side of the bus body. Side emergency windows must have the words "EMERGENCY EXIT" in at least two (2) inch high letters on the inside of the bus, above the side emergency windows.

(e) All exposed edges of glass must be banded. *(State School Bus Committee; 575 IAC 1-2.5-54; filed Jun 20, 1988, 8:50 am: 11 IR 3855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-55 Windshield washers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 55. Windshield washers must be standard equipment on each bus. *(State School Bus Committee; 575 IAC 1-2.5-55; filed Jun 20, 1988, 8:50 am: 11 IR 3855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-56 Windshield wipers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 56. The bus must be equipped with two (2) speed air or electric windshield wipers that are powered by two (2) motors. *(State School Bus Committee; 575 IAC 1-2.5-56; filed Jun 20, 1988, 8:50 am: 11 IR 3855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-2.5-57 Wiring

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 57. (a) All wiring must conform to current SAE standards.

(b) Wiring must be arranged in at least eight (8) regular circuits using the following combinations:

- (1) Head, tail, brake, and instrument panel lights.
- (2) Clearance and step-well lamps. The step-well lamp must turn on when the service door is opened.
- (3) Dome lamp.
- (4) Emergency door signal.
- (5) Turn signal lamps.
- (6) Alternately flashing signal lamps.

Any of the above combination circuits may be subdivided into additional independent circuits.

(c) At least one (1) additional circuit must be installed if a heater and defrosters are used. All other electrical functions, such as optional equipment, must have independent and properly protected circuits. Each circuit, except the starter motor and ignition circuits, must have a separate fuse or circuit breaker.

(d) Each body circuit must be coded by number, letter, or color. A diagram of the circuits must be attached to the body in an accessible location.

(e) All wires within the body must be insulated with a covering of fibrous loom or its equivalent that will protect them from external damage and minimize the danger of short circuiting. Whenever wires pass through body members, an insert must provide additional protection. Wires not enclosed within the body shell must be fastened securely at intervals of not more than 24 inches. All joints must be soldered or joined by connectors. (*State School Bus Committee; 575 IAC 1-2.5-57; filed Jun 20, 1988, 8:50 am: 11 IR 3855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

Rule 3. Type II Vehicles

575 IAC 1-3-1 Engine intake air cleaner

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 1. The engine intake air cleaner must meet engine specifications and must be furnished and installed by the chassis manufacturer. (*State School Bus Committee; Sec III, Rule 1-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Jun 20, 1988, 8:50 am: 11 IR 3856; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-2 Axles

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. (a) The front axle or other suspension assembly must have the following minimum capacity:

- (1) 6,000 lbs. for a bus with a 30-54 passenger capacity;
- (2) 7,500 lbs. for a bus with a 55-66 passenger capacity; and
- (3) 8,000 lbs. for a bus with a diesel engine.

(b) The bus must have a full-floating rear axle or other type of suspension assembly with a GVWR of at least:

- (1) 15,000 lbs. for a bus with a 30-54 passenger capacity; and
- (2) 17,000 lbs. for a bus with a 55-66 passenger capacity.

(c) The chassis manufacturer must submit the GVWR to the department of education for each type of axle installed on an Indiana school bus. The department must relay this information to the state agency [*sic.*] responsible for the development and enforcement of state school bus standards. (*State School Bus Committee; Sec III, Rule 2-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Jun 20, 1988, 8:50 am: 11 IR 3856; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-3 Brakes

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 3. (a) The chassis must be equipped with a full compressed air or hydraulic brake system.

(b) All brake linings must be made of non-asbestos materials. Brake lining areas must be protected by an adequate dust cover.

(c) Buses using an hydraulic assist booster in the brake system must have audible and visible warning signals that provide continuous warning to the driver when there is a loss of fluid flow from the primary source or a loss of electricity to the back-up system.

(d) If an air brake system is used, alcohol evaporators or injectors are prohibited. (*State School Bus Committee; Sec III, Rule 3-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Apr 14, 1981, 11:30 am: 4 IR 785, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3856; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-4 Front bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 4. (a) The chassis manufacturer must furnish the front bumper as part of the chassis.

(b) The front bumper must extend to the outer edges of the fenders at the bumper top line and be made of pressed steel channel that is at least three-sixteenths (3/16) inches thick. Chrome bumpers are prohibited.

(c) The front bumper must be black.

(d) The only permissible applications on the front bumper are a yellow bus number and black, abrasive, non-skid tape. (*State School Bus Committee; Sec III, Rule 4-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Jun 20, 1988, 8:50 am: 11 IR 3856; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-5 Clutch

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 5. Clutch torque capacity must be equal to or greater than the engine torque output. The clutch must be made of non-asbestos materials. (*State School Bus Committee; Sec III, Rule 5-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Apr 14, 1981, 11:30 am: 4 IR 785, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-6 Color of chassis

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 6. The chassis, including the wheels and the front bumper, must be black. Rims may be gray or black. The hood, cowl, and fenders must be national school bus yellow. Grills may be black, national school bus yellow, or chrome plated. The top of the hood may be painted a low-luster national school bus yellow to minimize glare. All paint must be lead-free. (*State School Bus Committee; Sec III; Rule 6-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 359; filed Apr 14, 1981, 11:30 am: 4 IR 785, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-7 Drive shaft

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 7. The drive shaft must be protected by metal guards to prevent it from whipping through the floor if it breaks. (*State School Bus Committee; Sec III, Rule 7-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 360; filed Jun 20, 1988, 8:50 am: 11 IR 3857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-8 Electrical system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 8. (a) The alternator with a rectifier must have a minimum output capacity of 100 amperes in accordance with the Society of Automotive Engineers rating of J544a. It must have a minimum charging rate of 40 amperes at the manufacturer's recommended engine idling speed. It must be ventilated and voltage controlled [*sic.*] and have a dual belt drive, or an approved equivalent. The voltage regulator must be compatible with the alternator.

(b) Each battery must be conventional (lead-antimony) or maintenance free sealed (lead-calcium). Each battery system must be 12 volt and have a minimum rating of 625 CCA (cold cranking amperes) at 0 degrees Fahrenheit per SAE J-537H specifications. If the bus has a diesel engine, the battery system must have a minimum of 900 CCA.

(c) The chassis must have the following instruments and gauges:

- (1) speedometer;
- (2) odometer which will give accrued mileage, calibrated in tenths of miles;
- (3) voltmeter or ammeter;
- (4) oil pressure gauge;
- (5) water temperature gauge;
- (6) fuel gauge;
- (7) upper beam headlamp indicator; and
- (8) brake warning light.

All instruments must be easily accessible for maintenance and repair. The instrument panel must have lamps of sufficient candlepower to illuminate all instruments and gauges.

(d) All wiring must conform to the manufacturer's standards and to the standards of the Society of Automotive Engineers. The chassis manufacturer must install a terminal strip or plug on the body side of the cowl that contains the following body connection terminals:

- (1) main 100 amp body circuit;
- (2) tail lamps;
- (3) right turn signal;
- (4) left turn signal;
- (5) stop lamps;
- (6) back up lamps; and
- (7) instrument panel lights that are rheostat-controlled by the headlamp switch.

(e) The ignition switch must be located either on the right side of the steering column or on the instrument panel to the right of the steering column. (*State School Bus Committee; Sec III, Rule 8-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 360; filed Apr 14, 1981, 11:30 am: 4 IR 785, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-9 Exhaust system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 9. (a) The exhaust pipe, muffler, and tail pipe must be outside the bus body and attached to the chassis per the manufacturer's standards. The tail pipe must be constructed of seamless or electrically welded tubing that is at least 16 gauge steel or its equivalent [*sic.*]. The size of the tailpipe as received from the manufacturer may not be altered.

(b) The exhaust system must be insulated from the fuel tank by a metal shield at any point where the exhaust system is twelve (12) inches or less from the tank.

(c) The muffler must be constructed of corrosion-resistant material. (*State School Bus Committee; Sec III, Rule 9-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 361; filed Apr 14, 1981, 11:30 am: 4 IR 786, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3858; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-10 Front fenders

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 10. (a) The width of the front fenders, measured at the fender line, must exceed the spread of the front wheels. They must be adequately braced and free from any body attachment.

(b) The chassis sheet metal must not extend beyond the rear face of the cowl. (*State School Bus Committee; Sec III, Rule 10-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 361; filed Jun 20, 1988, 8:50 am: 11 IR 3858; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-11 Frame

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 11. (a) The frame must be able to accommodate the weight of the load that it will carry.

(b) The chassis frame must extend to the rear of the rear body cross member. Extensions of frame lengths are permissible only when alterations are made behind the rear hangers or rear springs and do not extend the wheel base.

(c) Frame side members must be constructed in one (1) piece. No one other than the body or chassis manufacturer may weld anything to frame side rails. No holes in the flanges of the frame side members, other than those provided for in the original chassis frame, are permitted. Only the body or chassis manufacturer may design, furnish, and install frame side member extensions. No side member may be extended unless the installer warrants the extension to be free of defects. (*State School Bus Committee; Sec III, Rule 11-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 361; filed Jun 20, 1988, 8:50 am: 11 IR 3858; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-12 Fuel system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 12. (a) The fuel tank must have a minimum capacity of 30 gallons.

(b) A diesel engine chassis must have a fuel/water separator with a sight bowl or a warning indicator on the instrument panel. (*State School Bus Committee; Sec III, Rule 12-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 361; filed Jun 20, 1988, 8:50 am: 11 IR 3859; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-13 Governor (Repealed)

Sec. 13. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-14 Horn

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 14. Each bus must have two (2) electric horns of standard make that are installed under the hood. (*State School Bus Committee; Sec III, Rule 14-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 361; filed Jun 20, 1988, 8:50 am: 11 IR 3859; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-15 Heating system water lines

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 15. The chassis engine must contain plugged openings for supplying hot water to the bus heating system. The openings must accommodate a hose connector with a three-fourths (3/4) inch pipe thread. The engine must supply water at 170 degrees Fahrenheit flowing 50 pounds per minute through 30 feet of automotive hot water heater hose which has an inside diameter of one (1) inch (SBMI Standard No. 001 – Standard Code for Testing and Rating Automotive Bus Hot Water Heating and Ventilating Equipment). The chassis manufacturer must install hose bibs in a location convenient for the installation of the heater hose by the body manufacturer. (*State School Bus Committee; Sec III, Rule 15-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3859; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-16 Oil filter

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 16. The oil filter must have a replaceable element or cartridge, and at least a one (1) quart capacity. If it is not mounted on the engine, the oil filter must connect to the engine with flexible oil lines. (*State School Bus Committee; Sec III, Rule 16-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3859; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-17 Openings

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 17. All openings in the floorboard or firewall between the chassis and passenger compartment, such as the openings for the gearshift lever and the auxiliary brake lever, must be sealed. (*State School Bus Committee; Sec III, Rule 17-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-18 Length

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 18. The length of the school bus may not exceed 36 feet. (*State School Bus Committee; Sec III, Rule 18-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-19 Passenger load (Repealed)

Sec. 19. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-20 Power

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 20. The GVWR may not exceed 185 pounds per net published horsepower of the engine at the manufacturer's recommended maximum number of revolutions per minute. (*State School Bus Committee; Sec III, Rule 20-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-21 Shock absorbers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 21. Every bus must have front and rear double-acting shock absorbers, that meet the manufacturer's rated axle capacity. (*State School Bus Committee; Sec III, Rule 21-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 362; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-22 Springs

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 22. (a) The springs or suspension assembly must accommodate the GVWR of the bus as determined by the chassis manufacturer.

(b) The rear springs must be progressive. (*State School Bus Committee; Sec III, Rule 22-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 363; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-23 Steering gear

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 23. The steering gear must be approved by the chassis manufacturer and designed to assure safe and accurate performance when the vehicle is operated with a maximum load and at maximum speed. It must provide lash adjustment for lost motion. The chassis manufacturer must approve any alteration of the steering apparatus. There must be at least two (2) inches between the steering wheel and any other surface. Nothing may be attached to the steering wheel. Power steering is required. If the wear points are not permanently lubricated, the steering gear assembly must be designed so that the wear points can be lubricated. (*State School Bus Committee; Sec III, Rule 23-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 363; filed Apr 14, 1981, 11:30 am: 4 IR 786, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-24 Tires and rims

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 24. (a) The tires must be of equal size, construction, and ply rating and have rims of equal size. All tires must conform to the GAWR.

(b) Regrooved or retread tires on front or single rear wheels are prohibited.

(c) The bus distributor's or manufacturer's recommendation on tire and rim size must be followed. (*State School Bus Committee; Sec III, Rule 24-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 363; filed Apr 14, 1981, 11:30 am: 4 IR 787, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3860; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-25 Transmission

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 25. The transmission may be automatic or manual.

(1) An automatic transmission must have at least four (4) forward gear ratios, with down shift inhibitors in all forward speed ranges and forward to reverse. The transmission shift quadrant must have four (4) forward drive ranges plus neutral and reverse. Within the range selected, ratio changes must occur automatically at full engine power, without the use of an engine disconnect clutch.

(2) A manual transmission must be synchromesh in all gears except first and reverse. It must have a [*sic.*] least four (4) forward gears and one (1) reverse gear. The gearshift must not interfere with the operation of the service door.

(*State School Bus Committee; Sec III, Rule 25-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 363; filed Jun 20, 1988, 8:50 am: 11 IR 3861; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-26 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 26. The chassis manufacturer must coat the undersides of the front fenders and other chassis-supplied body components subject to rust with a compound that prevents rust. The compound must meet or exceed federal specifications TT-C520b. All materials must be asbestos-free. (*State School Bus Committee; Sec III, Rule 26-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 363; filed Jun 20, 1988, 8:50 am: 11 IR 3861; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-27 Written certification of chassis compliance (Repealed)

Sec. 27. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-28 Aisle

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 28. (a) The width of the center aisle must be at least twelve (12) inches.

(b) The aisle supports of the seat backs must slant away from the aisle, leaving a clearance of at least 15 inches at the top of the seat backs. *(State School Bus Committee; Sec III, Rule 28-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 364; filed Jun 20, 1988, 8:50 am: 11 IR 3861; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-29 Axe (Repealed)

Sec. 29. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-3-30 Battery

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 30. The chassis manufacturer must mount the battery outside of the engine compartment. The body manufacturer must securely attach the battery on a slideout tray in a closed, vented, and accessible compartment of the body skirt in accordance with SBMI Design Objectives Booklet, January, 1985. The battery compartment cover must be secured by a fastener. *(State School Bus Committee; Sec III, Rule 30-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 364; filed Jun 20, 1988, 8:50 am: 11 IR 3861; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-31 Book rack (Repealed)

Sec. 31. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-3-32 Rear bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 32. (a) The rear bumper must be made of pressed steel channel that is at least three-sixteenths (3/16) inches thick and eight (8) inches high. Chrome bumpers are prohibited.

(b) The bumper must wrap around the back corners of the bus. It must extend twelve (12) inches forward, measured from the rear-most point of the body and must extend at least one (1) inch beyond the rear-most part of the body surface when measured from the ground.

(c) The way in which the bumper is attached must prevent the hitching of rides. The bumper must detach easily from the chassis frame.

(d) The bumper must be braced to withstand rear or side impact.

(e) Only the logo and emblems of the school bus manufacturer may be placed on the bumper. The bumper must be painted glossy black with lead free paint. *(State School Bus Committee; Sec III, Rule 32-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 364; filed Jun 20, 1988, 8:50 am: 11 IR 3861; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-33 Capacity (Repealed)

Sec. 33. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-3-34 Tire chains (Repealed)

Sec. 34. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-3-35 Color of body

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 35. The body manufacturers or their agents must paint the bus body national school bus yellow in accordance with the

colormetric specification of Federal Standard No. 595a-Color 13432, using only lead-free paint. (*State School Bus Committee; Sec III, Rule 35-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 364; filed Jun 20, 1988, 8:50 am: 11 IR 3862; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-36 Construction

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 36. (a) All structural materials must be constructed of either prime commercial quality galvanized steel or aluminum and must be fire-resistant.

(b) The body construction must be reasonably dustproof and water-tight.

(c) The rear corner framing of the body between the floor and the window sill and between the emergency door posts and the last side posts must consist of at least three (3) structural members, arranged to provide impact and penetration resistance equal to that provided by the side frame members. The ends of all structural members must be securely attached to the bus body. (*State School Bus Committee; Sec III, Rule 36-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 364; filed Jun 20, 1988, 8:50 am: 11 IR 3862; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-37 Defroster

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 37. Each school bus must have a windshield defroster and defogging system. The system must keep the windshield, the side window to the left of the driver, and the glass entrance door clear of fog, frost, and snow. The system may use heat directly from an approved heater or auxiliary heaters. (*State School Bus Committee; Sec III, Rule 37-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 365; filed Jun 20, 1988, 8:50 am: 11 IR 3862; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-38 Doors

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 38. (a) The passenger service door must:

(1) be power or manually operated by the driver and must open easily but must not open accidentally. The controls for an air, vacuum, or electric powered service door must be located close to the driver's seat. A hand lever on a service door must be designed to prevent hand injuries.

(2) be located on the side opposite the driver and within the driver's direct view.

(3) be designed as follows:

(A) split-type door (any sectioned door that divides and opens inward or outward). If one (1) section of the door opens inward and the other opens outward, the front section must open outward; or

(B) sedan-type door; or

(C) fold-type door (jack-knife).

(4) have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches.

(5) have lower and upper panels made of safety glass (sedan-type door excluded). The bottom of the lower glass panel must not be more than 35 inches from the ground when the bus is unloaded. The tops of the upper glass panels must not be more than six (6) inches from the top of the door.

(6) have flexible material covering the vertical closing edges of each door.

(7) have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of each door opening.

(b) The emergency door must:

(1) be located in the center of the back of the bus or in the back half of the driver's side of the bus.

(2) have a minimum horizontal opening of 24 inches and a minimum vertical opening of 48 inches, measured from the floor.

(3) have the words "EMERGENCY DOOR" spelled in letters at least two (2) inches high, over the inside and outside of the

emergency door.

(4) if hinged, open from the inside and outside of the bus and be equipped with a fastening device that releases quickly but not accidentally. The device that opens the emergency door from the outside must be designed to prohibit the hitching of rides. Each door must have a label on it that explains how the door operates. Operation of the emergency door must not be controlled from the driver's seat.

(5) be equipped with a slide-bar, cam-operated lock that has a minimum stroke of one (1) inch. All emergency door locks must have an electric plunger-type switch that is connected to a buzzer in the driver's compartment. The switch must be enclosed to prevent deactivation, and wires leading from the switch must be concealed in the bus body. Any movement of the slide-bar must immediately activate the switch and the buzzer. The emergency door lock must have an interior handle that extends approximately to the center of the emergency door. The lock may be released only by lifting the handle.

(6) be hinged on the right side if the door is located in the back of the bus; the door must be hinged on the front side if on the driver's side of the bus.

(7) have no steps leading to the emergency door.

(8) contain at least 400 square inches of safety glass in the upper portion and 350 square inches in the lower portion.

(9) have an audible signal that alerts the driver when the emergency door is open. The ignition switch must activate the signal.

(10) have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of the door opening.

(c) Passageway to the service and emergency doors must not be obstructed by any object. *(State School Bus Committee; Sec III, Rule 38-2; filed Feb 10, 1978, 3:31 pm; Rules and Regs. 1979, p. 365; filed Apr 14, 1981, 11:30 am; 4 IR 787, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am; 11 IR 3863; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-39 Fire extinguisher

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 39. (a) Each bus must have at least one (1) dry-chemical fire extinguisher with a five (5) pound capacity, and be equipped with a pressure gauge. The extinguisher must be mounted in the manufacturer's extinguisher bracket and must be accessible to the driver.

(b) The fire extinguisher must display an Underwriter's Laboratories, Inc. rating of not less than 2A 10-B-C.

(c) Each fire extinguisher must have a hose. *(State School Bus Committee; Sec III, Rule 39-2; filed Feb 10, 1978, 3:31 pm; Rules and Regs. 1979, p. 367; filed Jun 20, 1988, 8:50 am; 11 IR 3864; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-40 First aid kit

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 40. Each school bus must carry a dustproof, detachable first aid kit that does not have sharp protrusions and can accommodate at least 24 units. The kit must be mounted in plain view on the inside of the bus in an accessible location. All first aid kits are subject to inspection by the Indiana state police. Contents must be replaced in accordance with the first aid kit manufacturer's suggestions. A 24 unit kit must contain:

Item	No. Per Pkg.	24 Unit Kit
Absorbent Gauze	1	4
1" Adhesive Compress	16	4
Sting Kill Swabs (insect stings)	1 pkg.	1
2" Bandage Compress	4	4
4" Bandage Compress	1	3
1" x 5 yds. Adhesive Tape	1	1
Forceps and Scissors	1	1
Antiseptic Solution	10	2
3" Sterile Pads	4	3

Triangular Bandage

1

1

(*State School Bus Committee; Sec III, Rule 40-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 367; filed Jun 20, 1988, 8:50 am: 11 IR 3864; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-41 Floor

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 41. (a) The floor must be made of commercial quality 14 gauge, galvanized steel or other material with equivalent strength. If plywood is used on top of a steel floor, the plywood must be at least 5-ply and five-eighths (5/8) inches thick. It must equal or exceed properties of exterior-type Douglas fir plywood, C-D Grade, as specified in standards issued by the U.S. Department of Commerce. The floor must be level, except in the wheel housing, the toe-board, the driver's compartment, and the fillpipe cover areas.

(b) The floor under the seats, including on top of the wheel housings, in the driver's compartment, and on the toe-board must have fire-resistant covering, that has a minimum thickness of .125 inches.

(c) The floor covering in the aisle must be fire-resistant, rubber, or equivalent, non-skid, wear-resistant, and ribbed with a minimum thickness of .1875 inches measured from the tops of the ribs. Floor covering must meet Federal Specifications. A rust-proof aisle strip, not exceeding one and one-fourth (1 1/4) inches in width, must secure the aisle floor covering.

(d) The floor covering must be water-resistant and permanently bonded to the floor with a waterproof adhesive. All seams must be sealed with waterproof sealer.

(e) The floor of each school bus must be marked with a yellow or white, two (2) to four (4) inch wide insert, located behind the driver's seat and perpendicular to the longitudinal axis of the bus. A sign at the front of the bus must indicate that occupancy forward of the insert is prohibited. (*State School Bus Committee; Sec III, Rule 41-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 367; filed Jun 20, 1988, 8:50 am: 11 IR 3865; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-42 Heaters

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 42. (a) The bus must have at least three (3) heaters, one (1) of which must have a fresh air intake located forward of the center of the bus. One (1) heater must be placed to the left of the driver. This heater must have three (3) motors which are independently controlled; two (2) to run the heater and one (1) to run the defroster. Another heater must have two (2) independently controlled motors; one (1) to defrost the windshield and the other to heat the step-well. The third heater must be located behind the rear wheels.

(b) The heating system must be capable of maintaining an inside temperature of 40 degrees Fahrenheit. Hot water heaters must conform to the School Bus Manufacturers' Association Standard Code for Testing and Rating Automotive Bus Hot Water and Ventilating Equipment.

(c) All exposed rubber or plastic hose in the interior of the bus must be shielded to prevent harm to the driver and passengers.

(d) There must be a temperature regulating valve that is accessible to the bus driver.

(e) Each hot water system must include an accessible shutoff valve installed in the pressure and return lines at or near the engine.

(f) Heater motors, cores, and fans must be accessible for service. Access panels may be provided if necessary.

(g) Portable heaters are prohibited. (*State School Bus Committee; Sec III, Rule 49-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 368; filed Jun 20, 1988, 8:50 am: 11 IR 3865; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-43 Identification and lettering

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 43. (a) All body trim and exterior lettering must be black.

(b) There must be at least one (1) and no more than five (5) black longitudinal stripes on either side of the bus body. Each

single black stripe must be four (4) to six (6) inches high and must extend the length of the bus body.

(c) All buses must have the words "SCHOOL BUS" printed in at least eight (8) inch high letters between the warning signal lamps on the outside of the bus body.

(d) The name of the school district must be placed on each side of the bus with four (4) to six (6) inch high black letters. The number may be placed on the side, the front or the back of the vehicle. If the number is placed on the side of the bus, it must conform to the specifications for lettering in subsection (b) of this section. If the number is placed on the front or back bumpers, the number must be yellow.

(e) All paint must be lead-free. All lettering must conform to Series "B" of the standard alphabets for highway signs.

(f) No other lettering is authorized unless specified in Rule 7 (Optional Equipment) of 575 IAC. (*State School Bus Committee; Sec III, Rule 43-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 368; filed Jun 20, 1988, 8:50 am: 11 IR 3866; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-44 Inside height

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 44. The inside of the body must be at least 72 inches high, measured from the front vertical bow to the rear vertical bow at any point on the longitudinal center line. (*State School Bus Committee; Sec III, Rule 44-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 369; filed Jun 20, 1988, 8:50 am: 11 IR 3866; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-45 Insulation

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 45. All ceiling and walls must be insulated with non-asbestos materials to minimize sound and vibrations. At least one (1) inch thick thermal insulation must be installed between panels to prevent settling. All materials must be fire resistant material and approved by Underwriter's Laboratories, Inc. (*State School Bus Committee; Sec III, Rule 45-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 369; filed Jun 20, 1988, 8:50 am: 11 IR 3866; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-46 Interior

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 46. (a) All ceiling and walls must include inner lining. If the joints in the ceiling overlap, each rear panel must overlap each forward panel. Exposed edges must be beaded, hemmed, or flanged to eliminate sharp edges.

(b) All dangerous protrusions must be eliminated from the interior of the bus.

(c) The noise level in the bus must not exceed 90 dBa when measured at the ear of the occupant nearest to the primary bus noise source. (*State School Bus Committee; Sec III, Rule 46-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 369; filed Jun 20, 1988, 8:50 am: 11 IR 3866; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-47 Lamps and signals

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 47. (a) Each bus must have two (2) 3 3/4 inch tail and brake lamps and two (2) seven (7) inch tail and brake lamps, all of which emit a red light that is visible for 500 feet during normal weather conditions. Brake lamps must have at least the intensity of the Class A turn signal lamps as established by the Society of Automotive Engineers. Tail lamps must be mounted on the bus at least 40 inches from the center of the lamp to the ground. They must be placed below the window line and spaced at least five (5) feet apart.

(b) Each bus must have two (2) back-up lights.

(c) All interior lamps must illuminate the aisle and the step-well.

(d) An alternately flashing signaling system must alert other highway users that the bus is stopped or about to stop to take on or let off students. The signaling system on each bus ordered and initially placed in service on or after July 1, 1988, must meet the following specifications:

(1) The signaling system must include the following equipment:

(A) Two (2) seven (7) inch red warning lights at the front and the rear of the bus.

(B) In addition to the four (4) red lamps described above, one (1) amber lamp must be placed beside each of the four (4) signal lamps. These lamps must be closer than the red lamps to the longitudinal center line of the bus. While the red lamps must be automatically energized, amber lamps must be manually energized and de-energized when the service door is opened.

(2) The system must be activated 400-800 feet before the bus stops.

(3) It must be clear to the driver through visible or audible means that the signaling system has been activated.

(4) Signal lamps must be installed as follows:

(A) Each signal lamp's axis must be mounted substantially parallel to the longitudinal axis of the bus.

(B) The front and back signal lamps must be spaced at least 60 inches apart.

(C) The front signal lamps must be mounted horizontally on the same center line, above the windshield. The back lamps must be horizontally mounted on the same center line so that the lower edges of the lenses are not lower than the top line of the side windows.

(D) An individual's view of the front and back signal lamps must be unobstructed by all parts of the bus from five (5) degrees above to ten (10) degrees to the left of the center line of the bus.

(E) Area around the lens of each alternately flashing signal lamp, extending outward approximately 3 inches, must be painted black. Visors or hoods with appropriate black background may be used. All paint must be lead-free.

(F) Each lamp must be mounted with its aiming plane vertical and normal to the bus' axis.

(G) All flasher units for alternately flashing red and amber signal lamps must be enclosed in the body in an accessible location.

(5) Decals or lettering must identify the signaling system's master control switch. Activation of the system's switch and the door control switch must activate both the alternately flashing lamps and the stop arm signal in the following manner:

(A) Depressing the master switch must activate the amber indicator lights and the amber warning lights while the service door is closed.

(B) When the service door is opened, the amber indicator lights and the amber warning lights must turn off, and the red indicator lights and the red warning lights must flash, and the stop arm signal must be activated, with its lamps turning on.

(C) All lights must turn off and the stop arm signal must be deactivated when the service door is closed.

(D) Opening the service door without activating the master switch must not cause the lights to flash.

(E) When the service door is opened and the master switch is pressed the red indicator lights, the red warning lights, and the stop arm signal must be activated.

(e) Each school bus must contain at least three (3) reflectorized triangle road warning devices in an accessible location in the driver's compartment.

(f) Each bus must have a stop signal device to indicate that the bus is stopped. The device must meet the following specifications:

(1) The stop signal device must be a flat octagon-shaped device approximately 18 inches wide and 18 inches long, exclusive of the mounting brackets, and meet SAE specifications J-1133.

(2) Both sides of the device must be a bright red with a 1/2 inch white border. The word "STOP" must be printed on both sides in at least six (6) inch high white letters. The sign, including the letters, must be reflectorized and must not lose over 20 percent of its reflectivity when wet.

(3) The stop signal device must contain double-faced, alternately flashing four (4) inch high red lamps, with one lamp placed near the top and one lamp placed near the bottom of the device.

(4) The device must be mounted outside and immediately below the driver's window.

(5) The stop signal device must have a driver-controlled mechanism, either mechanical, vacuum, electrical, or air, that will hold the device in an extended or retracted position to prevent whipping in the wind. The driver must be able to operate the mechanism while remaining in the normal driving position. Diesel engines without a chassis-installed vacuum or air source must use an electric stop signal device.

(g) Reflectors on each bus must meet the following specifications:

(1) Reflectors are required in the following places on each bus:

- (A) 2 red reflectors on the back of the bus;
- (B) 2 amber reflectors on the front half of each side; and
- (C) 2 red reflectors on the back half of each side.

(2) Reflectors must be mounted 15 to 60 inches above the ground.

(h) Three (3) clearance lights with two (2) candlepower bulbs each must be mounted in the center of the front and the back of the bus at the highest points and in a horizontal plane with other clearance lights.

(i) Each bus must have an ignition-activated body cut-off switch.

(j) The front and back of the bus must have seven (7) inch Class A amber turn signals that meet SAE standards. The front turn signals must be cowl mounted. These signals must be independent units and have a four (4)-way hazard warning switch that causes simultaneous flashing of the turn signal lamps when they are needed as a hazard warning. (*State School Bus Committee; Sec III, Rule 47-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 369; filed Apr 14, 1981, 11:30 am: 4 IR 788, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3867; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-48 Metal treatment

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 48. (a) All metal used in the construction of the bus body must be either prime commercial quality galvanized steel or aluminum, except for door handles, grab handles, stanchions, interior decorative parts, and other plated parts.

(b) All metal parts that will be painted must be chemically cleaned, etched, zinc-phosphate-coated and zinc-chromed or epoxy-primed.

(c) In meeting these requirements, close attention must be given to lapped surfaces, welded connections of structural members, cut edges, punched or drilled hole areas in sheet metal, closed or box sections, unvented or undrained areas, and surfaces subjected to abrasion during vehicle operation.

(d) Materials used in the construction of the bus body must not lose more than ten (10) percent of its weight after a 1,000 hour salt spray test as provided for in the latest revision of ASTM Designation: B117 "Standard Method of Salt Spray (Fog) Testing". (*State School Bus Committee; Sec III, Rule 48-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 372; filed Jun 20, 1988, 8:50 am: 11 IR 3870; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-49 Mirrors

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 49. (a) The interior clear-view mirror, must be made of safety glass, be at least six (6) inches by 30 inches overall, and afford a good view of pupils. It must have rounded corners and protected edges.

(b) There must be one (1) exterior clear-view, rear-view mirror on the left side of the driver and one (1) clear-view, rear-view mirror on the right side of the driver. Each mirror must be at least 50 square inches and firmly supported and adjustable to give the driver a clear view of the left and right rear of the bus.

(c) When an indirect visibility system is used to meet the requirements of this section, the system must consist of two (2) cross-over and two (2) rear-facing mirrors that are eight (8) inches convex and have a 7 1/2 inch reflective area. This system must be mounted at the frontmost portion of the bus fender to provide visibility to the area in front of the bus and the area immediately adjacent to the left and right front wheels. Elliptical or hemispherical mirrors may be substituted on a two-for one basis if indirect visibility requirements are met.

(d) Exterior mirror backs and bracket supports must be black. (*State School Bus Committee; Sec III, Rule 49-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 372; filed Jun 20, 1988, 8:50 am: 11 IR 3870; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-50 Mounting

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 50. (a) The chassis frame must extend to the rear edge of the rear body cross member. The way in which the bus body is attached to the chassis frame must prevent shifting or separation of the body from the chassis under severe operating conditions.

(b) The way in which the body front is attached and sealed to the chassis cowl must prevent the entry of water, dust, and fumes through the joints.

(c) Non-asbestos insulating materials must be placed wherever the body and the chassis frame touch. The materials must be approximately 1/4 inch thick and must not shift under severe operating conditions. (*State School Bus Committee; Sec III, Rule 50-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 373; filed Jun 20, 1988, 8:50 am: 11 IR 3870; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-51 Overall length (Repealed)

Sec. 51. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-52 Overall width

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 52. The overall width of the bus body may not exceed 96 inches, excluding accessories. (*State School Bus Committee; Sec III, Rule 52-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 373; filed Jun 20, 1988, 8:50 am: 11 IR 3871; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-53 Posts (Repealed)

Sec. 53. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-54 Rub rails

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 54. (a) There must be three (3) rub rails on each side of the body that must be able to resist impact and body crushing. The rub rails must extend the length of the body. The rails do not have to extend to the wheel housings or door access areas. Press-in or snap-on rub rails do not satisfy the requirements of this section.

(b) The rails must be placed in the following locations:

(1) The seat line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side and must wrap around the rear corner radius.

(2) The floor line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(3) The skirt line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(c) All rub rails must be at least four (4) inches or more wide, made of at least 16 gauge steel, and be corrugated or ribbed. (*State School Bus Committee; Sec III, Rule 54-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 373; filed Jun 20, 1988, 8:50 am: 11 IR 3871; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-55 Sanders (Repealed)

Sec. 55. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-3-56 Seat and seat belt for driver

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-2-6; IC 20-9.1-4-4

Sec. 56. (a) A locking retractor seat belt must be provided for the driver. The belt must be booted to keep the buckle and button latch off the floor and within easy reach of the driver. The way in which the belt is anchored or guided at the seat frame must prevent the driver from sliding sideways under the belt.

(b) There must be at least eleven (11) inches between the steering wheel and the back of the driver's seat. The driver's seat must be securely attached to the floor and have at least a four (4) inch fore-and-aft adjustment. The vertical seat adjustment must be at least three (3) inches. (*State School Bus Committee; Sec III, Rule 56-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 374; filed Apr 14, 1981, 11:30 am: 4 IR 790, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3871; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-57 Seats

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 57. (a) Jump seats or portable seats are not permissible [*sic.*].

(b) The seats must provide at least a 24 inch knee space, measured from the seat cushion level at the midpoint of the transverse line of the seat. An allowable average rump width of 13 inches in a 3-3 seating plan and 15 inches in a 3-2 seating plan will determine seating capacity. All seats must have at least a 15 inch depth.

(c) The distance between the rearmost portion of the seat backs of the rear row of seats and the outside rear of the bus body, measured at the floor line, must be at least eight (8) inches.

(d) All seats must be forward facing and must be securely fastened to the floor or to the part of the bus that supports the seat by the following methods:

(1) At least two (2) bolts, washers, and nuts or washer/nut combinations must secure each seat leg to the floor.

(2) At least two (2) bolts, washers, and nuts or washer/nut combinations must secure each seat frame to the seat rail.

(e) The forward most pupil seat on the right side of the bus must not interfere with the driver's vision.

(f) Each seat, seat back cushion and crash barrier must be covered with a non-asbestos material which has a 42 ounce finished weight, 54 inch width, and a finished vinyl coating of 1.06 broken twill or its equivalent in tensile strength, tear strength, seam strength, adhesion strength, resistance to abrasion and cold, and flex separation. All seat covering material must be free of holes or tears. (*State School Bus Committee; Sec III, Rule 57-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 374; filed Jun 20, 1988, 8:50 am: 11 IR 3871; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-58 Steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 58. (a) The first step at the service door must be twelve (12) to 16 inches from the ground, based on standard chassis specifications.

(b) All steps must be enclosed to prevent accumulation of ice and snow.

(c) The steps must not protrude beyond the side body lines.

(d) At least 30 inch long grab handles must be placed inside the doorway.

(e) A rubber tread with white nosing that is bonded to the metal must cover all steps.

(f) The step well must be made of rust-proof metal. (*State School Bus Committee; Sec III, Rule 58-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 374; filed Jun 20, 1988, 8:50 am: 11 IR 3872; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-59 Stirrup steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 59. There must be one (1) stirrup step and a handle on each side of the front of the body or chassis cowl that is accessible to the windshield and the lamps. *(State School Bus Committee; Sec III, Rule 59-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 374; filed Jun 20, 1988, 8:50 am: 11 IR 3872; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-60 Storage compartments (Repealed)

Sec. 60. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-3-61 Sun shield

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 61. An interior adjustable transparent sun shield at least six (6) inches by 30 inches with a finished edge must be installed in a position that is convenient for the driver. *(State School Bus Committee; Sec III, Rule 61-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 374; filed Jun 20, 1988, 8:50 am: 11 IR 3872; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-62 Tail pipe

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 62. The tail pipe must extend to but not beyond the perimeter of the body. *(State School Bus Committee; Sec III, Rule 62-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 375; filed Jun 20, 1988, 8:50 am: 11 IR 3872; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-63 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 63. (a) The entire underside of the bus body, including all floor sections, cross members, and below floor side panels must be coated with a rust-proofing compound for which the compound manufacturer has issued a notarized certification to the body builder that the compound meets or exceeds all performance and qualitative requirements of Federal Specifications TT-C-520b, using modified test procedures for the following specifications:

- (1) Salt spray resistance-pass test modified to 5% salt and 1,000 hours.
- (2) Abrasion resistance-pass.
- (3) Fire resistance-pass.

(b) The undercoating compound must be applied with airless or conventional spray equipment to recommended film thickness and show no evidence of voids in cured film. Undercoating must prevent rust for at least five (5) years. All materials must be asbestos-free. *(State School Bus Committee; Sec III, Rule 63-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 375; filed Jun 20, 1988, 8:50 am: 11 IR 3872; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-64 Ventilation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 64. (a) The bus body must have a controlled ventilating system that maintains the proper quantity of air without opening the windows except in extremely warm weather.

(b) A static non-closable exhaust ventilator must be installed in the low pressure area of the roof. *(State School Bus Committee; Sec III, Rule 64-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 375; filed Jun 20, 1988, 8:50 am: 11 IR 3873; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-3-65 Wheel housing

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 65. (a) The opening [*sic.*] in the side of the body must be large enough to service the tire and to provide clearance for tire chains.

(b) The way in which the wheel housing is attached to the floor sheets must prevent water and dust from entering the body.

(c) The inside height of the wheel housing above the floor may not exceed twelve (12) inches. (*State School Bus Committee; Sec III, Rule 65-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 375; filed Jun 20, 1988, 8:50 am: 11 IR 3873; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-66 Windshield and windows

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 66. (a) All glass in windshields and windows must be made of safety glass that shows permanent marks and prevents distortion of view.

Plastic material, approved under Federal standards, may be used in any window except for the windshield and the windows to the immediate right and left of the driver and any rear windows used for driver visibility.

(b) The windshield must:

(1) be constructed as one (1) or two (2) piece curved or wrap-around; or one (1) or two (2) piece flat; or four (4) piece flat;

(2) be laminated plate glass. The windshield must allow the driver to see the roadway clearly, must be slanted to reduce glare, and must be installed between the front corner posts, which are placed so that the driver's view is not obstructed; and

(3) have a horizontal gradient band starting from slightly above the line of the driver's vision and gradually decreasing in light transmission to 20 percent or less at the top of the windshield.

(c) Side and rear windows must meet the following criteria:

(1) Glass in the side and rear windows must be made of AS-2 or better grade, as specified in American Standards Association Code Z26.1.

(2) Each full side window must provide an unobstructed emergency opening at least nine (9) inches high and 22 inches wide, attained by lowering the window.

(d) At least one push-out, emergency split sash window must be installed near the center of each side of the bus body. Side emergency windows must have the words "EMERGENCY EXIT" in at least two (2) inch high letters on the inside of the bus, above the side emergency windows. (*State School Bus Committee; Sec III, Rule 66-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 375; filed Apr 14, 1981, 11:30 am: 4 IR 790, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3873; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-67 Windshield washers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 67. Windshield washers must be standard equipment on each bus. (*State School Bus Committee; Sec III, Rule 67-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 376; filed Jun 20, 1988, 8:50 am: 11 IR 3874; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-68 Windshield wipers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 68. The bus must be equipped with two (2) speed air or electric windshield wipers that are powered by two (2) motors. (*State School Bus Committee; Sec III, Rule 68-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 376; filed Jun 20, 1988, 8:50 am: 11 IR 3874; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-69 Wiring

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 69. (a) All wiring must conform to the current standards of the Society of Automotive Engineers.

(b) Wiring must be arranged in at least eight (8) regular circuits using the following combinations:

(1) Head, tail, brake, and instrument panel lights.

(2) Clearance and step-well lamps. The step-well lamp must turn on when the service door is opened.

(3) Dome lamp.

(4) Emergency door signal.

(5) Turn signal lamps.

(6) Alternately flashing signal lamps.

Any of the above combination circuits may be subdivided into additional independent circuits.

(c) At least one additional circuit must be installed if a heater and defrosters are used. All other electrical functions, such as optional equipment, must have independent and properly protected circuits. Each circuit, except the starter motor and ignition circuits, must have a separate fuse or circuit breaker.

(d) Each body circuit must be coded by number, letter, or color. A diagram of the circuits must be attached to the body in an accessible location.

(e) All wires within the body must be insulated with a covering of fibrous loom or its equivalent that will protect them from external damage and minimize the danger of short circuiting. Whenever wires pass through body members, an insert must provide additional protection. Wires not enclosed within the body shell must be fastened securely at intervals of not more than 24 inches. All joints must be soldered or joined by connectors. (*State School Bus Committee; Sec III, Rule 69-2; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 376; filed Jun 20, 1988, 8:50 am: 11 IR 3874; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-3-70 Written certification of body compliance (Repealed)

Sec. 70. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

Rule 4. Transit Vehicles

575 IAC 1-4-1 Engine intake air cleaner

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 1. The engine intake air cleaner must meet engine specifications and must be furnished and installed by the chassis manufacturer. (*State School Bus Committee; Sec IV, Rule 1-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 377; filed Jun 20, 1988, 8:50 am: 11 IR 3875; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-2 Axles

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. (a) The front axle must be wide-track and heavy-duty and must have a GVWR at the ground equal to or exceeding that portion of the total load that is supported by the front axle.

(b) The rear axle must be full-floating and heavy-duty and must have a GVWR at the ground equal to or exceeding that portion of the total load that is supported by the rear axle.

(c) The chassis manufacturer's rating for each axle on each model used in an Indiana school bus must be furnished in duplicate by the chassis manufacturer to the department of education. The department of education must, in turn, transmit the ratings to each state agency responsible for the development and enforcement of state school bus standards. (*State School Bus Committee; Sec IV, Rule 2-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 377; filed Jun 20, 1988, 8:50 am: 11 IR 3875; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-3 Brakes

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 3. (a) The chassis must be equipped with a full compressed air or hydraulic brake system.

(b) If an air brake system is used, alcohol evaporators or injectors are prohibited. (*State School Bus Committee; Sec IV, Rule 3-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Jun 20, 1988, 8:50 am: 11 IR 3875; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-4 Front bumper

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 4. (a) The chassis or the body manufacturer must furnish the front bumper as part of the chassis.

(b) The front bumper must be made of pressed steel channel that is at least three-sixteenths (3/16) inches thick. Chrome bumpers are prohibited.

(c) The front bumper must be black.

(d) The only permissible applications on the front bumper are a yellow bus number and black, abrasive, non-skid tape. (*State School Bus Committee; Sec IV, Rule 4-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Jun 20, 1988, 8:50 am: 11 IR 3875; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-5 Clutch

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 5. Clutch torque capacity must be equal to or greater than the engine torque output. The clutch must be made of non-asbestos materials. (*State School Bus Committee; Sec IV, Rule 5-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Apr 14, 1981, 11:30 am: 4 IR 790, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3876; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-6 Color of chassis

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 6. The chassis, including the wheels and the front bumper, must be black. Rims may be gray or black. The cowl and fenders must be national school bus yellow. The grill may be black, national school bus yellow, or chrome plated. All paint must be lead-free. (*State School Bus Committee; Sec IV, Rule 6-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Jun 20, 1988, 8:50 am: 11 IR 3876; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-7 Drive shaft

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 7. The drive shaft on a bus with the engine located in front of the rear axle must be protected by metal guards to prevent it from whipping through the floor if it breaks. (*State School Bus Committee; Sec IV, Rule 7-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Jun 20, 1988, 8:50 am: 11 IR 3876; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-8 Electrical system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 8. (a) The alternator with a rectifier must have a minimum output capacity of 130 amperes in accordance with the Society of Automotive Engineers rating J544a. It must have a minimum charging rate of 40 amperes at the manufacturer's recommended engine idling speed (12 volt system). It must be ventilated and voltage controlled. The dual belt drive or an approved equivalent must be used with the alternator. The voltage regulator must be compatible with the alternator.

(b) The battery must be conventional (lead-antimony) or maintenance free sealed (lead-calcium) Each battery system must be twelve (12) volt capacity and 900 CCA (cold cranking amperes) at zero degrees Fahrenheit per SAE J-537H specifications. If the bus has a diesel engine, the battery system must have a minimum of 900 CCA.

(c) The chassis must have the following instruments and gauges:

- (1) speedometer;
- (2) odometer which will give accrued mileage, calibrated in tenths of miles;
- (3) voltmeter or ammeter;
- (4) oil pressure gauge;
- (5) water temperature gauge;
- (6) fuel gauge;
- (7) upper beam headlamp indicator; and
- (8) brake warning light.

All instruments must be easily accessible for maintenance and repair. All instruments, including but not limited to a safety (kill) switch, must be installed in rear-engine units. The rear-engine starter switch must not be activated when the transmission is engaged. The instrument panel must have lamps of sufficient candlepower to illuminate all instruments and gauges.

(d) All wiring must conform to the current standards of the Society of Automotive Engineers and to the manufacturer's standards. The chassis manufacturer must provide the following electric circuits:

- (1) head, parking, tail, and instrument panel lamps;
- (2) stop lamps;
- (3) starter (open circuit);
- (4) ignition (open circuit); The ignition switch must be located either on the right side of the steering column or on the instrument panel to the right of the steering column.
- (5) horn;
- (6) self-cancelling turn signal switch; and
- (7) hazard warning switch.

(State School Bus Committee; Sec IV, Rule 8-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 378; filed Apr 14, 1981, 11:30 am: 4 IR 791, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3876; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-4-9 Exhaust system

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 9. (a) The exhaust pipe, muffler, and tail pipe must be outside the bus body and attached to the chassis except for the rearmost attachment which may be attached to the body. The tail pipe must be constructed of seamless or electrically welded tubing that is at least 16 gauge steel or its equivalent. The size of the tail pipe as received from the manufacturer may not be altered.

(b) The exhaust system must be insulated from the fuel tank by a metal shield at any point where the exhaust system is twelve (12) inches or less from the tank.

(c) The muffler must be constructed of corrosion-resistant material. *(State School Bus Committee; Sec IV, Rule 9-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 380; filed Apr 14, 1981, 11:30 am: 4 IR 792, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3877; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-10 Front fenders (Repealed)

Sec. 10. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

575 IAC 1-4-11 Frame

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 11. (a) The frame must correspond to standard practice for trucks with the same general characteristics that are used for highway service. The chassis frame must extend to the rear of the rear body cross member.

(b) Frame side members must be constructed in one (1) piece and placed between front and rear spring hangers. Only the body or chassis manufacturer may design, furnish, and install frame side member extensions. No side member must be extended unless the installer warrants the extension to be free of defects. Extensions of frame length are permissible [*sic.*] only when the extension does not extend the wheel base.

(c) No holes in the flanges of the frame side rails other than those provided for in the original chassis frame, are permitted. No one other than the chassis or body manufacturer may weld the side rails or anything to the side rails. (*State School Bus Committee; Sec IV, Rule 11-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 380; filed Jun 20, 1988, 8:50 am: 11 IR 3877; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-12 Fuel system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 12. (a) The fuel tank must have a capacity of at least 60 gallons.

(b) A diesel engine chassis must have a fuel/water separator with sight bowl or a warning indicator on the instrument panel. (*State School Bus Committee; Sec IV, Rule 12-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 380; filed Jun 20, 1988, 8:50 am: 11 IR 3878; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-13 Governors (Repealed)

Sec. 13. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-14 Horn

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 14. Each bus must have two (2) electric horns of standard make that are installed within the perimeter of the body of the sheet metal. (*State School Bus Committee; Sec IV, Rule 14-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 381; filed Jun 20, 1988, 8:50 am: 11 IR 3878; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-15 Heating system water lines

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 15. The chassis engine must contain plugged openings for supplying hot water to the bus heating system water lines. The openings must accommodate a hose connector with a 3/4 inch pipe thread. The engine must supply water at 170 degrees Fahrenheit flowing 50 pounds per minute through 30 feet of automotive hot water heater hose which has an inside diameter of one (1) inch (SBMI Standard No. 001—Standard Code for Testing and Rating Automotive Bus Hot Water Heating and Ventilating Equipment). The chassis manufacturer must install hose bibs in a location convenient for the installation of the heater hose by the body manufacturer. (*State School Bus Committee; Sec IV, Rule 15-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 381; filed Jun 20, 1988, 8:50 am: 11 IR 3878; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-16 Oil filter

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 16. The oil filter must have a replacement element or cartridge and at least a one (1) quart capacity. If the oil filter is not mounted on the engine, it must connect to the engine with flexible oil lines. (*State School Bus Committee; Sec IV, Rule 16-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 381; filed Jun 20, 1988, 8:50 am: 11 IR 3878; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-17 Openings

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 17. All openings in the floorboard or firewall between the chassis and passenger compartment, such as the openings for the gearshift lever and the auxiliary brake lever, must be sealed. (*State School Bus Committee; Sec IV, Rule 17-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 381; filed Jun 20, 1988, 8:50 am: 11 IR 3878; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-18 Length

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 18. The length of the bus may not exceed 42 feet. (*State School Bus Committee; Sec IV, Rule 18-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 381; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-19 Passenger load (Repealed)

Sec. 19. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-20 Power

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 20. The GVWR may not exceed 185 pounds per net published horsepower of the engine at the manufacturer's recommended maximum number of revolutions per minute. (*State School Bus Committee; Sec IV, Rule 20-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-21 Shock absorbers

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 21. Every bus must have front and rear double-acting shock absorbers, that meet the manufacturer's rated axle capacity. (*State School Bus Committee; Sec IV, Rule 21-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-22 Springs

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 22. (a) The springs or other suspension assemblies must be able to sustain a loaded bus without evidence of an overload.

(b) The springs or other suspension assemblies must be designed to carry their proportional share of GVW.

(c) Rear springs must be progressive. (*State School Bus Committee; Sec IV, Rule 22-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-23 Steering gear

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 23. The steering gear must be approved by the chassis manufacturer and designed to assure safe and accurate performance when the bus is operated with a maximum load and at maximum speed. It must provide lash adjustment for lost motion. The chassis manufacturer must approve any alteration of the steering apparatus. There must be at least two (2) inches between the steering wheel and any other surface. Nothing may be attached to the steering wheel. Power steering is required. If the wear points are not permanently lubricated, the steering gear assembly must be designed so that the wear points can be lubricated. (*State School Bus Committee; Sec IV, Rule 23-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Apr 14, 1981, 11:30 am: 4 IR 792, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-24 Tires and rims

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 24. (a) The tires must be of equal size, construction, and ply rating and have rims of equal size. All tires must conform to the GAWR.

(b) regrooved or retread tires on front or single rear wheels are prohibited.

(c) The bus distributor's or manufacturer's recommendations on tire and rim size must be followed. (*State School Bus Committee; Sec IV, Rule 24-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Apr 14, 1981, 11:30 am: 4 IR 792, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3879; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-25 Transmission

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 25. The transmission may be automatic or manual.

(1) An automatic transmission must have at least four (4) forward gear ratios, with down shift inhibitors in all forward speed ranges, and forward to reverse. The transmission shift quadrant must have four (4) forward drive ranges plus neutral and reverse. Within the range selected, ratio changes must occur automatically and at full engine power, without the use of an engine disconnect clutch.

(2) A manual transmission must be synchromesh in all gears except first and reverse. It must have at least four (4) forward gears and one (1) reverse gear. The gearshift must not interfere with the operation of the service door.

(*State School Bus Committee; Sec IV, Rule 25-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 382; filed Jun 20, 1988, 8:50 am: 11 IR 3880; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-26 Undercoating (Repealed)

Sec. 26. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-27 Written certification of chassis compliance (Repealed)

Sec. 27. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-28 Aisle

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 28. (a) The width of the center aisle must be at least twelve (12) inches.

(b) The aisle supports of the seat backs must slant away from the aisle, leaving a clearance of at least 15 inches at the top of

the seat backs. (*State School Bus Committee; Sec IV, Rule 28-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 383; filed Jun 20, 1988, 8:50 am: 11 IR 3880; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-29 Axe (Repealed)

Sec. 29. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-30 Battery

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 30. The chassis manufacturer must mount the battery outside of the engine compartment. The body manufacturer must securely attach the battery on a slide-out tray in a closed, vented, and accessible compartment of the body skirt in accordance with SBMI Design Objectives Booklet, January, 1985. The battery compartment cover must be secured by a fastener. (*State School Bus Committee; Sec IV, Rule 30-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 383; filed Jun 20, 1988, 8:50 am: 11 IR 3880; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-31 Book racks (Repealed)

Sec. 31. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-32 Rear bumper

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 32. (a) The rear bumper must be made of pressed steel channel that is at least 3/16 inches thick and eight (8) inches high. Chrome bumpers are prohibited.

(b) The bumper must wrap around the back corners *Bf [sic.]* the bus. It must extend forward at least twelve (12) inches, measured from the rear-most point of the body and must extend at least one (1) inch beyond the rear-most part of the body surface when measured from the ground.

(c) The way in which the bumper is attached to the chassis frame must prevent the hitching of rides. The bumper must detach easily from the chassis frame.

(d) The bumper must be braced to withstand rear or side impact.

(e) Only the logo and emblems of the school bus manufacturer may be placed on the bumper. The bumper must be painted glossy black with lead-free paint. (*State School Bus Committee; Sec IV, Rule 32-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 384; filed Jun 20, 1988, 8:50 am: 11 IR 3880; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-33 Capacity (Repealed)

Sec. 33. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-34 Tire chains (Repealed)

Sec. 34. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-35 Color of body

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 35. The body manufacturers or their agents must paint the bus body national school bus yellow in accordance with the colorimetric specification of Federal Standard No. 595a-Color 13432, using only lead-free paint. (*State School Bus Committee; Sec*

IV, Rule 35-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 384; filed Jun 20, 1988, 8:50 am: 11 IR 3881; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-4-36 Construction

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 36. (a) All structural materials must be constructed of either prime commercial quality galvanized steel or aluminum and must be fire-resistant.

(b) The body construction must be reasonably dustproof and water-tight.

(c) On a bus with a rear emergency door, the rear corner framing of the body between the floor and the window sill and between the emergency door posts and the last side posts must consist of at least three (3) structural members, arranged to provide impact and penetration resistance equal to that provided by the side frame members. The ends of all structural members must be securely attached to the bus body. *(State School Bus Committee; Sec IV, Rule 36-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 384; filed Jun 20, 1988, 8:50 am: 11 IR 3881; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-37 Defroster

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 37. Each school bus must have a windshield defroster and defogging system. The system must keep the windshield, the window to the left of the driver, and the glass entrance door clear of fog, frost, and snow. The system may use heat directly from an approved heater or auxiliary heaters. *(State School Bus Committee; Sec IV, Rule 37-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 385; filed Jun 20, 1988, 8:50 am: 11 IR 3881; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-38 Doors

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 38. (a) The passenger service door must:

(1) Be power or manually operated by the driver and must open easily but must not open accidentally. The controls for an air, vacuum, or electric powered service door must be located close to the driver's seat. A hand lever on a service door must be designed to prevent hand injuries.

(2) Be located on the side opposite the driver and within the driver's direct view.

(3) Be designed as follows:

(A) split-type door (any sectioned door that divides and opens inward or outward). If one (1) section of the door opens inward and the other opens outward, the front section must open outward; or

(B) fold-type door (jack-knife).

(4) Have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches.

(5) Have lower and upper panels made of safety glass. The bottom of the lower panel must not be more than 35 inches from the ground when the bus is unloaded. The tops of the upper glass panels must not be more than six (6) inches from the top of the door.

(6) Have flexible material covering the vertical closing edges of each door.

(7) There must be no service door on the driver's side of the bus.

(8) have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of each door opening.

(b) The emergency door must:

(1) Be located in the center of the back of the bus or in the back half of the driver's side of the bus.

(2) If located on left side of bus, have an emergency push-out window at the rear of the bus that is at least 16 inches by 54 inches.

(3) Have a minimum horizontal opening of 24 inches and a minimum vertical opening of 48 inches, measured from the floor.

(4) Have the words "EMERGENCY DOOR" spelled in letters at least two (2) inches high above the inside and outside of

the emergency door.

(5) If hinged, open from the inside and outside of the bus and be equipped with a fastening device that releases quickly but not accidentally. The device that opens the emergency door from the outside must be designed to prohibit the hitching of rides. Each door must have a label on it that explains how the door operates. Operation of the emergency door must not be controlled from the driver's seat.

(6) Be equipped with a slide-bar cam-operated lock that has a minimum stroke of one (1) inch. The emergency door lock must have an electric plunger-type switch that is connected to a buzzer in the driver's compartment. The switch must be enclosed to prevent deactivation, and wires leading from the switch must be concealed in the bus body. Any movement of the slide-bar must immediately activate the switch and the buzzer. The emergency door lock must have an interior handle that extends approximately to the center of the emergency door. The lock may be released only by lifting the handle.

(7) Be hinged on the right side if the door is located in the back of the bus; the door must be hinged on the front side if on the driver's side of the bus.

(8) Have no steps leading to the emergency door.

(9) Contain at least 400 square inches of approved safety glass in the upper portion and 350 square inches in the lower portion, except on side emergency doors.

(10) Have an audible signal that alerts the driver when the emergency door is open. The ignition switch must activate the signal.

(11) If on the driver's side, may have a flip-up seat in front of it. When the seat is upright, there must be at least twelve (12) inches between the forward-most portion of the flip-up seat and the back of the seat in front of the flip-up seat.

(12) Have interior padding, at least three (3) inches wide and one (1) inch thick, covering the full width of the top of each door opening.

(c) Passageway to the service and rear emergency doors must not be obstructed by any object, except as allowed in sub-section eleven (11) of this section. (*State School Bus Committee; Sec IV, Rule 38-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 385; filed Apr 14, 1981, 11:30 am: 4 IR 792, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3882; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-39 Fire extinguisher

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 39. (a) Each bus must have at least one (1) dry-chemical fire extinguisher with a five (5) pound capacity, and be equipped with a pressure gauge. The extinguisher must be mounted in the manufacturer's extinguisher bracket and must be accessible to the driver.

(b) The fire extinguisher must display an Underwriter's Laboratories, Inc. rating of not less than 2A 10-B-C.

(c) Each fire extinguisher must have a hose. (*State School Bus Committee; Sec IV, Rule 39-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 387; filed Jun 20, 1988, 8:50 am: 11 IR 3883; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-40 First aid kit

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 40. Each school bus must carry a dustproof, detachable first aid kit that does not have sharp protrusions and can accommodate at least 24 units. The kit must be mounted in plain view on the inside of the bus in an accessible location. All first aid kits are subject to inspection by the Indiana state police. Contents must be replaced in accordance with the first aid kit manufacturer's suggestions.

A 24 unit kit must contain:

Item	No. Per Pkg.	24 Unit Kit
Absorbent Gauze	1	4
1" Adhesive Compress	16	4
Sting Kill Swabs (insect stings)	1 pkg.	1

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2" Bandage Compress	4	4
4" Bandage Compress	1	3
1" × 5 yds. Adhesive Tape	1	1
Forceps and Scissors	1	1
Antiseptic Solution	10	2
3" Sterile Pads	4	3
Triangular Bandage	1	1

(State School Bus Committee; Sec IV, Rule 40-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 387; filed Jun 20, 1988, 8:50 am: 11 IR 3883; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-4-41 Floor

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 41. (a) The floor must be made of commercial quality 14 gauge galvanized steel or other material with equivalent strength. If plywood is used on top of a steel floor, the plywood must be at least 5-ply and 5/8 inches thick. It must equal or exceed properties of exterior-type Douglas fir plywood, C-D Grade, as specified in standards issued by the U.S. Department of Commerce. The floor must be level, except in the wheel housing, the toe-board, the driver's compartment, and the fill-pipe cover areas.

(b) The floor under the seats, including on top of the wheel housings, in the driver's compartment, and on the toe board must have fire-resistant covering that has a minimum thickness of .125 inches.

(c) The floor covering in the aisle, including the platform area, must be fire-resistant, rubber or equivalent, non-skid, wear-resistant, and ribbed with a minimum thickness of .1875 inches, measured from the tops of the ribs. The floor covering must meet Federal Specifications. A rustproof aisle strip, not exceeding 1 1/4 inches in width, must secure the aisle floor covering.

(d) The floor covering must be water-resistant and permanently bonded to the floor with a water-proof adhesive. All seams must be sealed with water-proof sealer.

(e) The floor of each school bus must be marked with a yellow or white, two (2) to four (4) inch wide insert, located behind the driver's seat and perpendicular to the longitudinal axis of the bus. A sign at the front of the bus must indicate that occupancy forward of the insert is prohibited. *(State School Bus Committee; Sec IV, Rule 41-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 387; filed Jun 20, 1988, 8:50 am: 11 IR 3884; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-42 Heaters

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 42. (a) The bus must have at least three (3) heaters, one (1) of which must have a fresh air intake located forward of the center of the bus. One (1) heater must be close to the driver's compartment. One (1) heater must defrost the windshield and throw heat into the step-well and must have two (2) motors; one (1) to operate the heater and one (1) to operate the defroster. Each motor must be independently controlled. At least one (1) heater must be placed in back of the rear wheels and must be equipped with dual motors.

(b) Hot water heaters must equal or exceed the rating of the School Bus Manufacturers' Association Standard Code for Testing and Rating Automotive Bus Hot Water Heaters and Ventilating Equipment.

(c) The heating system must be capable of maintaining an inside temperature of 40 degrees Fahrenheit.

(d) All exposed rubber or plastic hose in the interior of the bus must be shielded to prevent harm to the driver and passengers.

(e) There must be a temperature regulating valve that is accessible to the bus driver.

(f) Each hot water system must include an accessible shutoff valve installed in the pressure and return lines at or near the engine.

(g) Heater motors, cores, and fans must be accessible for service. Access panels may be provided if necessary.

(h) Portable heaters are prohibited. *(State School Bus Committee; Sec IV, Rule 42-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 388; filed Jun 20, 1988, 8:50 am: 11 IR 3884; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-43 Identification and lettering

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 43. (a) All body trim and exterior lettering must be black.

(b) There must be at least one (1) and no more than five (5) black longitudinal stripes on either side of the bus body. Each single black stripe must be four (4) to six (6) inches high and must extend the length of the bus body.

(c) All buses must have the words "SCHOOL BUS", printed in at least eight (8) inch high letters between the warning signal lamps on the outside of the bus body.

(d) The name of the school district must be placed on each side of the bus with four (4) to six (6) inch high black letters. The number may be placed on the side, the front or the back of the vehicle. If the number is placed on the side of the bus, it must conform to the specifications for lettering in subsection (b) of this section. If the number is placed on the front or back bumpers, the number must be yellow.

(e) All paint must be lead-free. All lettering must conform to Series "B" of the standard alphabets for highway signs.

(f) No other lettering is authorized unless specified in Rule 7 (Optional Equipment) of 575 IAC. (*State School Bus Committee; Sec IV, Rule 43-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 388; filed Jun 20, 1988, 8:50 am: 11 IR 3885; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-44 Inside height

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 44. The inside of the body must be at least 72 inches high, measured from the front vertical bow to the rear vertical bow any point on the longitudinal center line. (*State School Bus Committee; Sec IV, Rule 44-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 389; filed Jun 20, 1988, 8:50 am: 11 IR 3885; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-45 Insulation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 45. All ceiling and walls must be insulated with non-asbestos materials to minimize sound and vibrations. At least one (1) inch thick thermal insulation must be installed between panels to prevent settling. All materials must be fire resistant and approved by Underwriter's Laboratories, Inc. (*State School Bus Committee; Sec IV, Rule 45-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 389; filed Jun 20, 1988, 8:50 am: 11 IR 3886; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-46 Interior

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 46. (a) All ceilings and walls must include inner lining. If the joints in the ceiling overlap, each rear panel must overlap each forward panel. Exposed edges must be beaded, hemmed, or flanged to eliminate sharp edges.

(b) All dangerous protrusions must be eliminated from the interior.

(c) The noise level in the bus must not exceed 90 dBa when measured at the ear of the occupant nearest to the primary bus noise source (Noise Test Procedure). (*State School Bus Committee; Sec IV, Rule 46-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 389; filed Jun 20, 1988, 8:50 am: 11 IR 3886; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-47 Lamps and signals

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 47. (a) Each bus must have two (2) 3 3/4 inch tail and brake lamps and two (2) seven (7) inch tail and brake lamps, all

of which emit a red light that is visible for distance of at least 500 feet during normal weather conditions. Brake lamps must have at least the intensity of Class A turn signal lamps as established by the Society of Automotive Engineers. Tail lamps must be mounted on the bus at least 40 inches from the center of the lamp to the ground. They must be placed below the window line at least five (5) feet apart.

(b) Each bus must have two (2) back-up lights.

(c) All interior lamps must illuminate the aisle and the step-well.

(d) An alternately flashing signaling system must alert other highway users that the bus is stopped or about to stop to take on or let off students. The system on each bus ordered and initially placed in service on or after July 1, 1988, must meet the following specifications:

(1) The signaling system must include the following equipment:

(A) Two (2) seven (7) inch red warning lights at the front and the rear of the bus.

(B) In addition to the four (4) red lamps described in (d)(1)(A) of this section, one (1) amber lamp must be placed beside each of the four (4) red signal lamps. These lamps must be closer than the red lamps to the longitudinal center line of the bus. While the red lamps must be automatically energized, the amber lamps must be manually energized and de-energized when the service door is opened.

(2) The system must be activated 400-800 feet before the bus stops.

(3) It must be clear to the driver through visible or audible means that the signaling system has been turned on.

(4) Signal lamps must be installed as follows:

(A) Each signal lamp's axis must be mounted substantially parallel to the longitudinal axis of the bus.

(B) The front and back signal lamps must be spaced at least 60 inches apart.

(C) The front signal lamps must be mounted horizontally on the same center line, above the windshield. The back lamps must be horizontally mounted on the same center line so that the lower edges of the lenses are not lower than the top line of the side windows.

(D) An individual's view of the front and back signal lamps must be unobstructed by all parts of the bus from five (5) degrees above to ten (10) degrees to the left of the center line of the bus.

(E) Area around the lens of each alternately flashing signal lamp, extending outward approximately 3 inches, must be painted black. Visors or hoods, with appropriate black background, may be used. Paint must be lead-free.

(F) Each lamp must be mounted with its aiming plane vertical and normal to the bus' axis.

(G) All flasher units for alternately flashing red and amber signal lamps must be enclosed in the body in an accessible location.

(5) Decals or lettering must identify the signaling system's master control switch. Activation of the system's switch and the door control switch must activate both the alternately flashing lamps and the stop arm signal in the following manner:

(A) Depressing the master switch must activate the amber indicator lights and the amber warning lights while the service door is closed.

(B) When the service door is opened, the amber indicator lights and the amber warning lights must turn off, and the red indicator lights and the red warning lights must flash, and the stop arm signal must be activated, with its lamps turning on.

(C) All lights must turn off and the stop arm signal must be deactivated when the service door is closed.

(D) Opening the service door without activating the master switch must not cause the lights to flash.

(E) When the service door is opened and the master switch is pressed, the red indicator lights, the red warning lamps, and the stop arm signal must be activated.

(e) Each school bus must contain at least three (3) reflectorized triangle road warning devices in an accessible location in the driver's compartment.

(f) Each bus must have a stop signal device to indicate that the bus is stopped. The device must meet the following specifications:

(1) The stop signal device must be a flat octagon-shaped device approximately 18 inches wide and 18 inches long, exclusive of the mounting brackets, and meet SAE specifications J-1133.

(2) Both sides of the device must be a bright red with a 1/2 inch white border. The word "STOP" must be printed on both sides in at least six (6) inch high white letters. The sign, including the letters, must be reflectorized and must not lose over 20 percent of its reflectivity when wet.

(3) The stop signal device must contain double-faced, alternately flashing four (4) inch high red lamps, with one (1) lamp

placed near the top and one (1) lamp placed near the bottom of the device.

(4) The device must be mounted outside and immediately below the driver's window.

(5) The stop signal device must have a driver-controlled mechanism, either mechanical, vacuum, electrical, or air, that will hold the device in an extended or retracted position to prevent whipping in the wind. The driver must be able to operate the mechanism while remaining in the normal driving position. Diesel engines without a chassis-installed vacuum or air source must use an electric stop signal device.

(g) Reflectors on each bus must meet the following specifications:

(1) Reflectors are required in the following places on each bus:

(A) two (2) red reflectors on the back of the bus;

(B) two (2) amber reflectors on the front half of each side; and

(C) two (2) red reflectors on the back half of each side.

(2) Reflectors must be mounted 15 to 60 inches above the ground.

(h) Three (3) clearance lights with two (2) candlepower bulbs each must be mounted in the center of the front and the back of the bus at the highest points and in a horizontal plane with the other clearance lights.

(i) Each bus must have an ignition-activated body cut-off switch.

(j) The front and back of the bus must have seven (7) inch Class A amber turn signals that meet SAE standards. These signals must be independent units and have a four (4)-way hazard warning switch that causes simultaneous flashing of the turn signal lamps when they are needed as a hazard warning. (*State School Bus Committee; Sec IV, Rule 47-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 389; filed Apr 14, 1981, 11:30 am: 4 IR 794, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3886; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-48 Metal treatment

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 48. (a) All metal used in the construction of the bus body must be either prime commercial quality galvanized steel or aluminum, except for door handles, grab handles, stanchions, interior decorative parts, and other interior plated parts.

(b) All metal parts that will be painted must be chemically cleaned, etched, zinc-phosphate-coated, and zinc-chromed or epoxy-primed.

(c) In meeting these requirements, close attention must be given to the lapped surfaces, welded connections of structural members, cut edges, punched or drilled hole areas in sheet metal, closed or box sections, unvented or undrained areas, and surfaces subjected to abrasion during vehicle operation.

(d) Materials used in the construction of the bus body must not lose more than ten (10) percent of its weight after a 1,000 hour salt spray test as provided for in the latest revision of ASTM Designation: B117 "Standard Method of Salt [*sic.*] (Fog) Testing". (*State School Bus Committee; Sec IV, Rule 48-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 392; filed Jun 20, 1988, 8:50 am: 11 IR 3889; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-49 Mirrors

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 49. (a) The interior clear-view mirror, must be made of safety glass, be at least six (6) inches by 30 inches overall, and afford a good view of pupils. It must have rounded corners and protected edges.

(b) There must be one (1) exterior clear-view, rear-view mirror on the left side of the driver and one (1) clear-view, rear-view mirror on the right side of the driver. Each mirror must be at least 50 square inches and firmly supported and adjustable to give the driver a clear view of the left and right rear of the bus.

(c) When an indirect visibility system is used to meet the requirements of this section, the system must consist of a cross-over mirror on the right side and two (2) rear-facing mirrors that are eight (8) inches convex and have a seven and one-half (7 1/2) inch reflective area. This system must be mounted at the frontmost portion of the bus windshield post to provide visibility to the area in front of the bus and the area immediately adjacent to the left and right front wheels. Elliptical or hemispherical mirrors may be substituted on a two-for-one basis if indirect visibility requirements are met.

(d) Exterior mirror backs and bracket supports must be black. (*State School Bus Committee; Sec IV, Rule 49-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 392; filed Jun 20, 1988, 8:50 am: 11 IR 3889; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-50 Mounting

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 50. (a) The chassis frame must extend to the rear edge of the rear body cross member. The way in which the bus body is attached to the chassis frame must prevent shifting or separation of the body from the chassis under severe operating conditions.

(b) The way in which the body is attached and sealed to the chassis must prevent the entry of water, dust, and fumes through the joints.

(c) Non-asbestos insulating materials must be placed wherever the body and the chassis frame touch. The materials must be approximately 1/4 inch thick and must not shift under severe operating conditions. (*State School Bus Committee; Sec IV, Rule 50-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 393; filed Jun 20, 1988, 8:50 am: 11 IR 3889; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-51 Overall length (Repealed)

Sec. 51. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-52 Width

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 52. The overall width of the bus body may not exceed 96 inches, excluding accessories. (*State School Bus Committee; Sec IV, Rule 52-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 393; filed Jun 20, 1988, 8:50 am: 11 IR 3890; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-53 Posts (Repealed)

Sec. 53. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-54 Rub rails

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 54. (a) There must be three (3) rub rails on each side of the body that must be able to resist impact and body crushing.

(b) These rails must be placed in the following approximate locations:

(1) The seat line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side and must wrap around the rear corner radius.

(2) The floor line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(3) The skirt line rub rail must extend from the windshield post on the driver's side and from the service door post on the right side to the rear corner radius.

(c) Press-in or snap-on rub rails do not satisfy these requirements.

(d) All rub rails must be at least four (4) inches or more wide, made of at least 16 gauge steel, and be corrugated or ribbed.

(e) Rub rail extensions are not required for wheel housing or access door areas. (*State School Bus Committee; Sec IV, Rule 54-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 393; filed Jun 20, 1988, 8:50 am: 11 IR 3890; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-55 Sanders (Repealed)

Sec. 55. (Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)

575 IAC 1-4-56 Seat and seat belt for driver

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 56. (a) A locking retractor seat belt must be provided for the driver. The belt must be booted to keep the buckle and button latch off the floor and within easy reach of the driver. The way in which the belt is anchored or guided at the seat frame must prevent the driver from sliding sideways under the belt.

(b) There must be at least eleven (11) inches between the steering wheel and the back of the driver's seat. The driver's seat must be securely attached to the floor and have at least a four (4) inch fore-and-aft adjustment. The vertical seat adjustment must be at least three (3) inches. (*State School Bus Committee; Sec IV, Rule 56-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 394; filed Apr 14, 1981, 11:30 am: 4 IR 796, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3890; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-57 Seats

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 57. (a) All seats must have a minimum depth of 15 inches. An allowable average rump width of 13 inches in a 3-3 seating plan and 15 inches in a 3-2 seating plan will determine seating capacity.

(b) All seats must be forward facing and must be securely fastened to the floor or to the part of the bus that supports the seats by one of the following methods:

(1) At least two (2) bolts, washers and nuts or washer/nut combinations must secure each seat leg to the floor.

(2) At least two (2) bolts, washers, and nuts or washer/nut combinations must secure each seat frame to the seat rail.

(c) Jump seats and portable seats are prohibited. A flip-up seat may be placed in front of a driver's side emergency door if there is at least twelve (12) inches between the forward most portion of the flip-up seat and the back of the seat in front of the flip-up seat.

(d) The forward most pupil seat on the right side of the bus must not interfere with the driver's vision.

(e) Each seat, seat back cushion, and crash barrier must be covered with a non-asbestos material which has a 42 ounce finished weight, 54 inch width, and a finished vinyl coating of 1.06 broken twill or its equivalent in tensile strength, tear strength, seam strength, adhesion strength, resistance to abrasion and cold, and flex separation. All seat covering material must be free of holes or tears.

(f) The seats must provide for at least a 24 inch knee space, measured from the seat cushion level at the midpoint of the transverse line of the seat.

(g) The distance between the rearmost portion of the seat backs of the rear row of seats and the outside rear of the bus body, measured at the floor line, must be at least eight (8) inches. (*State School Bus Committee; Sec IV, Rule 56-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 394; filed Jun 20, 1988, 8:50 am: 11 IR 3890; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-58 Steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 58. (a) The first step at the service door must be 13 to 17 inches from the ground, based on standard chassis specifications.

(b) All steps must be enclosed to prevent accumulation of ice and snow.

(c) The steps must not protrude beyond the side of the bus body.

(d) At least 30 inch long grab handles must be placed inside the doorway.

(e) A rubber tread with white nosing that is bonded to the metal must cover all steps.

(f) The step-well must be made of rust-proof metal. (*State School Bus Committee; Sec IV, 58-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 395; filed Jun 20, 1988, 8:50 am: 11 IR 3892; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-59 Stirrup steps

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 59. There must be at least one (1) step and a handle on each side of the front of the body that is accessible to the windshield and the lamps. The front bumper will suffice as the step if the windshield and lamps are accessible. (*State School Bus Committee; Sec IV, Rule 59-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 395; filed Jun 20, 1988, 8:50 am: 11 IR 3892; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-60 Storage compartment (Repealed)

Sec. 60. (*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

575 IAC 1-4-61 Sun shield

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 61. An interior adjustable transparent sun shield at least six (6) inches by 30 inches with a finished edge must be installed in a position that is convenient for the driver. (*State School Bus Committee; Sec IV, Rule 61-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Jun 20, 1988, 8:50 am: 11 IR 3892; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-62 Tail pipe

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 62. The tail pipe must extend to but not beyond the perimeter of the body. (*State School Bus Committee; Sec IV, Rule 62-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Jun 20, 1988, 8:50 am: 11 IR 3892; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-63 Undercoating

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 63. (a) The entire underside of the bus body, including all floor sections, cross members, and below floor side panels must be coated with a rust-proofing compound for which the manufacturer has issued a notarized certification to the body builder that the compound meets or exceeds all performance and qualitative requirements of Federal Specification TT-C-520b, using modified test procedures for the following requirements:

- (1) Salt spray resistance-pass test modified to five percent (5%) salt and 1,000 hours.
- (2) Abrasion resistance-pass.
- (3) Fire resistance-pass.

(b) The undercoating compound must be applied with airless or conventional spray equipment to the recommended film thickness and show no evidence of voids in cured film. Undercoating must prevent rust at least five (5) years. All materials must be asbestos-free. (*State School Bus Committee; Sec IV, Rule 63-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Jun 20, 1988, 8:50 am: 11 IR 3892; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-64 Ventilation

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 64. (a) The bus body must have a controlled ventilation system that maintains the proper quantity of air without opening the windows except in extremely warm weather.

(b) A static non-closable exhaust ventilator must be installed in the low pressure area of the roof. (*State School Bus Committee; Sec IV, Rule 64-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Jun 20, 1988, 8:50 am: 11 IR 3893; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-65 Wheel housing

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 65. (a) The opening in the side of the body must be large enough to service the tires and to provide clearance for tire chains.

(b) The way in which the wheel housing is attached to the floor sheets must prevent water and dust from entering the body.

(c) The inside height of the wheel housing above the floor may not exceed twelve (12) inches. (*State School Bus Committee; Sec IV, Rule 65-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Jun 20, 1988, 8:50 am: 11 IR 3893; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-66 Windshield and windows

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 66. (a) All glass in the windshield and the windows must be made of safety glass that shows permanent marks and prevents distortion of view.

Federally approved plastic materials may be used in any window except for the windshield and the windows to the immediate right and left of the driver and any rear windows used for driver visibility.

(b) The windshield must:

(1) be constructed as one (1) or two (2) piece curved or wrap-around; or one (1) or two (2) piece flat; or four (4) piece flat; and

(2) be laminated plate glass. The windshield must allow the driver to see the roadway clearly, must be slanted to reduce glare, and must be installed between the front corner posts, which are placed so that the driver's view is not obstructed; and

(3) have a horizontal gradient band starting from slightly above the line of the driver's vision and gradually decreasing in light transmission to 20 percent or less at the top of the windshield.

(c) Side and rear windows must meet the following criteria:

(1) Glass in the side and rear windows must be made of AS-2 or better grade as specified in American Standards Association Code Z26.1.

(2) Each full side window must provide an unobstructed emergency opening of at least nine (9) inches high and 22 inches wide, attained by lowering the window.

(d) At least two (2) push-out type, emergency split sash windows must be installed near the center of each side of the bus body. Side emergency windows must have the words "EMERGENCY EXIT" in at least two (2) inch high letters on the inside of the bus, above the side emergency windows. Buses with rear engines must have only one (1) emergency window on each side of the body. (*State School Bus Committee; Sec IV, Rule 66-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 396; filed Apr 14, 1981, 11:30 am: 4 IR 796, eff Jul 1, 1981; filed Jun 20, 1988, 8:50 am: 11 IR 3893; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-67 Windshield washers

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 67. Windshield washers must be standard equipment on each bus. (*State School Bus Committee; Sec IV, Rule 67-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 397; filed Jun 20, 1988, 8:50 am: 11 IR 3894; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-4-68 Windshield wipers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 68. The bus must be equipped with two (2) speed air or electric windshield wipers that are powered by two (2) motors. *(State School Bus Committee; Sec IV, Rule 68-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 397; filed Jun 20, 1988, 8:50 am: 11 IR 3894; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-69 Wiring

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 69. (a) All wiring must conform to the current standards of the Society of Automotive Engineers.

(b) Wiring must be arranged in at least eight (8) regular circuits using the following combinations:

- (1) Head, tail, brake, and instrument panel lights.
- (2) Clearance and step-well lamps. The step-well lamp must turn on when the service door is opened.
- (3) Dome lamp.
- (4) Emergency door signal.
- (5) Turn signal lamps.
- (6) Alternately flashing signal lamps.

Any of the above combination circuits may be subdivided into additional independent circuits.

(c) At least one (1) additional circuit must be installed if a heater and defrosters are used. All other electrical functions, such as optional equipment, must have independent and properly protected circuits. Each circuit, except the starter motor and ignition circuits, must have a separate fuse or circuit breaker.

(d) Each body circuit must be coded by number, letter, or color. A diagram of the circuits must be attached to the body in an accessible location.

(e) All wires within the body must be insulated with a covering of fibrous loom or its equivalent that will protect them from external damage and minimize the danger of short circuiting. Whenever wires pass through body members, an insert must provide additional protection. Wires not enclosed within the body shell must be fastened securely at intervals of not more than 24 inches. All joints must be soldered or joined by equally effective connectors. *(State School Bus Committee; Sec IV, Rule 69-T; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 397; filed Jun 20, 1988, 8:50 am: 11 IR 3894; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-4-70 Written certification of body compliance (Repealed)

Sec. 70. *(Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898)*

Rule 5. Vehicles for Transporting the Handicapped

575 IAC 1-5-1 General requirements

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-2-6; IC 20-9.1-4-4; IC 20-9.1-5

Sec. 1. General Requirements

(1) Vehicles constructed and designed for transporting handicapped children shall comply generally with the standards for school buses, but due to the need for special equipment, modifications to these minimum standards must be made.

(2) All buses, whether modified or constructed for the transportation of handicapped children must meet or exceed the requirements, as set forth for the applicable type school bus except as provided herein under Special Equipment.

(State School Bus Committee; Sec V, General Requirements; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 398; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-5-2 Special equipment

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-2-6; IC 20-9.1-4-4; IC 20-9.1-5

Sec. 2. Special Equipment

(1) Special Service Door

(A) Special service door opening shall be located on right side of bus and far enough to the rear to prevent door, when open, from obstructing right front service door. Door opening shall be not less than 30 inches in width.

(B) Door shall be constructed of two (2) panels of approximate equal width, equipped with hinges and securely hinged to side of bus and each panel shall open outward. Forward panel shall be flush with rear panel or provided with overlapping flange to close space where door panels meet and weather seal shall be provided to close all door edges.

(i) Special service door may be one (1) single panel meeting all requirements set forth under 1.a and 1.b (subsections (1)(A) and (1)(B) of this section).

(C) Two (2) panel door shall be equipped with at least two-point fastening device to floor level and header on, both, rear door panel and forward door panel and single door panel shall be equipped with two-point fastening device to floor level and header, all manually controlled or operated.

(D) Door shall be equipped with device that will actuate audible signal, located in driver compartment, when doors are not securely closed. Exception: When two-panel door is used, with front panel overlapping rear panel, audible signal shall be actuated when front panel is opened but may be deactivated when rear panel is opened.

(E) Each door shall contain fixed or movable window, aligned with lower line of other windows of bus and as nearly as practicable, of same size as other bus windows.

(F) Each door panel shall open outward and positive fastening device shall be installed to hold each door panel in open position.

(G) Door panel shall be constructed so as to be equivalent in strength and materials to other school bus doors.

(H) When ramps are used, door panels shall cover ramp container opening. When specific construction requires an opening in the floor, door panels shall extend below to full length of skirt.

(I) Floor shall be adequately supported at front and rear of door opening to support front with same strength as other floor portions.

(2) Ramp

(A) If ramp is used, it shall be of sufficient strength and rigidity to support wheel chair, occupant and attendant. It shall be equipped with protective flange on each longitudinal side to keep wheel chair on ramp.

(B) Ramp floor shall be unflattened expanded metal, covered by flat plate, except in the walking area of ramp. In addition, the flat plate area shall be covered with a non-skid material.

(C) Ramp shall be of such weight and equipped with handle or handles, to permit one person to put ramp in place or return it to storage position.

(D) Provisions shall be made to secure ramp to side of bus for use without danger of detachment and ramp shall be connected to bus at floor level in such a manner as to permit easy access of wheels of wheel chairs to floor of bus.

(E) Ramp shall be of at least 80 inches in length for Type II buses and at least 88 inches in length for Type I buses, and width shall conform generally to width of door opening.

(F) Dustproof and waterproof enclosed container shall be provided if ramp is stored under the floor.

(3) Power Lift

(A) If power lift is used, it shall be of sufficient strength, rigidity, and capacity to lift a minimum of 500 pounds and shall be designed so as to be operable through four complete full load cycles with engine off.

(B) Power lift platform shall be not less than 26 inches in width nor less than 45 inches long for double-door installation and not less than 26 inches in width nor less than 41 inches long for single door installation, including guard panels or rails.

(C) Power lift platform shall be covered with non-skid material.

(D) Self-adjusting steel (or equivalent) ramp of sufficient width to minimize incline to lift platform shall be attached to lift platform. Ramp shall be equipped with non-skid material.

(E) Power lift shall be controlled from panel within the bus or by a portable control unit which shall be adjacent to the lift and shall be capable of operation by attendant standing upon lift when lift is in any position.

- (F) A device shall be installed which will prevent operation of lift until doors are in open position.
- (G) All chains, wires, and other mechanisms, except lift control panel, necessary to effect upward and downward movement of lift platform, shall be concealed and installed in such a manner so as to prevent accessibility by children.
- (4) Guard Panel
 - (A) Guard panels shall be installed at both rear and front edges of special service door opening, extending into bus. If power lifts are used, and when construction requires opening in the floor, a chain shall be installed between guard panels to enclose area of power lift.
 - (B) Restraining barriers shall be installed immediately to the rear of the driver's platform and immediately to the rear of the step-well on buses which are constructed and equipped so as the wheel chair spaces are located in front portion of bus.
- (5) Wheel Chairs
 - (A) Positive fastening devices shall be provided, attached to floor or walls, or both, that will securely hold wheel chair in position when in bus.
 - (B) Distance between the rearmost extremities of the wheelchair (measured at floor line) when the wheelchair is in any position and the outside rear of the bus shall be not less than eight (8) inches on Type I buses and not less than six (6) inches on Type II buses.

NOTE: Parents or guardians of wheel chair pupils are encouraged to provide pupil restraining devices, attached to the wheel chair.
- (6) Seat Restraining Devices
 - (A) Seat frames shall be equipped with rings or other devices to which belts or restraining harness for each passenger may be attached or otherwise equipped so as to be in full compliance with any applicable Federal Motor Vehicle Safety Standard.
- (7) Aisle
 - (A) All aisles, including aisle leading to emergency door shall have a minimum clearance of not less than 12 inches.
- (8) Special Seats
 - (A) Longitudinal seats, not exceeding 45 inches in length are permissible over the wheelhousings. If used, such seats shall be securely fastened and equipped with seat arm rests and positive pupil restraining devices.
- (9) Fuel System
 - (A) The fuel tank shall be manufacturers' standard; mounted, filled, and vented outside of body and shall conform to all requirements set forth under Federal Motor Vehicle Safety Standard (FMVSS) No. 301.
- (10) Battery
 - (A) Battery shall be 12 volt of either Conventional a (lead-antimony) or Maintenance Free Sealed (lead-calcium) design.
 - (B) Minimum capacity shall be 100 reserve minutes and 430 CCA (cold cranking amperes) at 0 degrees F. per S-537A standard. (Essentially meets 70 amperes per hour capacity.)
 - (C) Handicapped vehicles equipped with power lifts shall have storage battery capacity sufficient, when fully charged, to satisfy electrical demand of lift through (4) complete full load cycles, with engine off and have sufficient capacity left to re-start engine.
- (11) Special Light
 - (A) Light shall be placed inside bus, over special service door, and shall be operated from door area to adequately illuminate the special service door area.
- (12) Grab Handle
 - (A) Grab handles shall be provided on each side of front right service door on buses constructed for the transportation of handicapped children.

(State School Bus Committee; Sec V, Special Equipment; filed Feb 10, 1978, 3:31 pm: Rules and Regs. 1979, p. 398; filed Apr 14, 1981, 11:30 am: 4 IR 796, eff Jul 1, 1981; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

Rule 5.5. Vehicles for Transporting the Handicapped

575 IAC 1-5.5-1 General requirements

Authority: IC 20-9.1-4-4

Affected: IC 20-1-6-1; IC 20-9.1

Sec. 1. (a) A bus constructed and designed for transporting handicapped children must comply with the standards outlined in 575 IAC 1-1 through 575 IAC 1-4. Modifications to some of the standards are necessary to accommodate the special equipment necessary to transport handicapped students.

(b) Any school bus used to transport a child confined to a wheelchair or other device that prohibits the use of the regular passenger service door, must be equipped with a power lift. If a special unloading device is needed for unusual circumstances, a waiver from the school bus committee is required.

(c) A bus transporting more than two (2) wheelchair-confined students must have at least a one hundred (100) amp alternator.

(d) All special needs children must be properly and appropriately restrained for safe transportation. Special needs children means children defined under IC 20-1-6-1.

(e) Federal Motor Vehicle Safety Standards referred to in this rule are found at 49 CFR Ch. V (10-1-89 Edition), Part 571, and are herein incorporated and made a part of this rule by reference. Copies of these federal standards are on file with the department of education or may be obtained from the U.S. Government Printing Office, Washington, D.C. (*State School Bus Committee; 575 IAC 1-5.5-1; filed May 24, 1990, 4:20 p.m.: 13 IR 1855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-2 Aisles

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 2. The aisle leading from the wheelchair area to all emergency doors must be at least thirty (30) inches wide. (*State School Bus Committee; 575 IAC 1-5.5-2; filed May 24, 1990, 4:20 p.m.: 13 IR 1855; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-3 Wheelchairs

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 3. (a) A student who can reasonably be moved from the student's wheelchair, stroller, or special seating device must be transferred during transportation to and from school to:

(1) an original equipment manufacturer forward facing vehicle seat equipped with dynamically tested occupant restraints; or

(2) a child seat that complies with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) 213.

(b) A wheelchair must be adequately secured during transportation. An occupied wheelchair must face forward.

(c) Occupied three-wheeled, cart-type units and other stroller-type devices may not be transported in a school bus unless there is impact test evidence to demonstrate that the unit can be secured under impact loading conditions using a four-point strap-type tiedown.

(d) Manufacturers of the three-wheeled, cart-type units and other stroller-type devices must verify that the unit can be secured under impact loading conditions.

(e) A wheelchair or stroller-type unit designed and approved by the manufacturer for use during transportation must be used according to the manufacturer's instructions.

(f) The distance between the rearmost part of a secured wheelchair and the outside rear of the bus must be at least the following:

(1) Six (6) inches on Type A and Type B buses.

(2) Eight (8) inches on Type C and Type D buses.

(*State School Bus Committee; 575 IAC 1-5.5-3; filed May 24, 1990, 4:20 p.m.: 13 IR 1855; filed May 21, 1992, 5:00 p.m.: 15 IR 2220; filed Mar 9, 2000, 7:45 a.m.: 23 IR 1649*)

575 IAC 1-5.5-4 Wheelchair and occupant restraint systems

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 4. (a) A strap-type wheelchair securement system must be provided that meets the following requirements:

(1) Anchors to the floor of the bus at four (4) or more places.

(2) Attaches to the wheelchair at a minimum of two (2) front and two (2) rear securement points.

(3) Complies with Society of Automotive Engineers Recommended Practice J-2249.

(4) A wheelchair that weighs two hundred (200) pounds or greater, transported on a school bus, ten thousand (10,000) pounds or less in gross vehicle weight, must be secured with more than two (2) rear tiedown straps.

(5) A wheelchair that weighs two hundred fifty (250) pounds or greater, transported on a school bus exceeding ten thousand (10,000) pounds in gross vehicle weight, must be secured with more than two (2) rear tiedown straps.

(b) An occupant restraint system must be provided for each wheelchair occupant that complies with Society of Automotive Engineers Recommended Practice J-2249 such that it meets the following requirements:

(1) Includes upper and lower torso restraints.

(2) Has been tested at thirty (30) miles per hour and twenty (20) G frontal impact conditions which have been verified by the manufacturer of the occupant restraint system.

(3) If the occupant restraining devices are incorporated in the wheelchair restraining devices, the load imposed on the anchorage system is the sum of the loads specified for the wheelchair restraint devices and the occupant restraint system.

(4) Has a lap belt attached to the wheelchair or tiedown system at an angle of forty-five (45) degrees or greater to the horizontal.

(5) Has a shoulder belt attached to the tiedown strap at or below the hip point of the occupant, or has a shoulder belt attached to the lap belt.

(6) Has the upper end of the shoulder belt attached to the vehicle at or above the height of the occupant's shoulder.

(7) Does not transfer occupant forces to the wheelchair.

(c) Static load tests must be as follows:

(1) Conducted with appropriate size washers and steel plating or with actual tiedown/restraint washers and backing plates on the underside of sheet metal floors to adequately distribute the applied loads.

(2) Verified by the school bus manufacturer or other engineering test facility.

(State School Bus Committee; 575 IAC 1-5.5-4; filed May 24, 1990, 4:20 p.m.: 13 IR 1856; errata, 13 IR 2005; filed May 21, 1992, 5:00 p.m.: 15 IR 2221; filed Mar 9, 2000, 7:45 a.m.: 23 IR 1649)

575 IAC 1-5.5-5 Power lift

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 5. (a) The lifting mechanism must:

(1) be able to lift a minimum load of eight hundred (800) pounds;

(2) have a battery that, when the bus engine is off, will sustain the electrical demand of the lift through four (4) complete full-load cycles and then restart the bus engine;

(3) be located on the right side of the bus body;

(4) have manual controls in the event of a power failure;

(5) not permit the platform to fall if the power fails while the lift is in operation;

(6) have controls that enable the operator to activate the lift while standing on the platform;

(7) have a circuit breaker or fuse connecting the lift motor to the power source; and

(8) have limit switches or bypass valves to prevent excess pressure from building in the hydraulic system when the platform is upright or extended.

(b) The power lift must:

(1) have a clear horizontal opening and platform large enough to accommodate a thirty (30) inch wide wheelchair on the bus;

(2) be confined within the perimeter of the bus body when not in use;

(3) mechanically lock when the lift is in the upright position by means other than a support or lug on the door;

(4) move smoothly and rest solidly on the ground;

(5) have sides at least one and one-half (1½) inches high on the platform;

(6) be designed to prevent the operator from being entangled in the lift during raising and lowering of the platform;

(7) have a skid-resistant platform surface;

(8) have a self-adjusting, skid-resistant inclined plate on the outer edge to facilitate movement from the ground to the platform;

(9) have a plate or panel on the outer edge to prevent a wheelchair from rolling off when the platform is raised; and

(10) have padding on the crossbar on the top of the lift, if the lift is equipped with a crossbar.

(c) The power lift may have a handrail. (*State School Bus Committee; 575 IAC 1-5.5-5; filed May 24, 1990, 4:20 p.m.: 13 IR 1857; filed May 21, 1992, 5:00 p.m.: 15 IR 2221; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-6 Regular service entrance door

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 6. (a) There must be three (3) riser steps approximately equal in height in the entrance well of Type C and Type D buses. The first step must not be less than ten (10) inches or more than fourteen (14) inches from the ground based on standard chassis specifications.

(b) An additional fold-out lower step may be provided to make the lowest step no more than six (6) inches from the ground.

(c) A bus constructed for transportation of handicapped children must have grab handles located on each side of the regular service door. (*State School Bus Committee; 575 IAC 1-5.5-6; filed May 24, 1990, 4:20 p.m.: 13 IR 1857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-7 Special light

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 7. A bus must have interior light(s) that:

- (1) are automatically or manually activated;
- (2) sufficiently illuminate the lift area; and
- (3) are activated from the door area.

(*State School Bus Committee; 575 IAC 1-5.5-7; filed May 24, 1990, 4:20 p.m.: 13 IR 1857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-8 Special service entrance

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 8. (a) Bus bodies may have a special service entrance to accommodate a wheelchair lift. The special service entrance must meet the following specifications:

- (1) The entrance opening must be on the right side of the bus.
- (2) The entrance must be located so the doors, when open, do not obstruct the right front regular service door.
- (3) If the entrance extends below the floor of the body skirt, reinforcements must be installed at the front and back of the floor opening to support the floor and give the same strength as other floor openings.
- (4) A drip molding must be located above the opening that diverts water from the entrance.
- (5) The entrance must be wide enough to accommodate a mechanical lift, lift accessories, and the lift platform.
- (6) Entrance door posts and headers must be reinforced.

(b) A school corporation may purchase a bus with a special service entrance with the intention of using it to transport handicapped students in the future. While the bus is used to transport nonhandicapped students the special service door must:

- (1) be sealed and inoperable;
- (2) have no handles; and
- (3) have the words NOT AN EXIT placed in black letters at least two (2) inches high above the door on the interior and exterior of the bus.

(c) When a school corporation decides to use a bus under subsection (b) to transport handicapped students, it must remove the words NOT AN EXIT from above the door.

(d) The entrance must have interior padding at least three (3) inches wide and one (1) inch thick covering the full width of the top of each door opening. (*State School Bus Committee; 575 IAC 1-5.5-8; filed May 24, 1990, 4:20 p.m.: 13 IR 1857; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-9 Special service entrance door

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 9. (a) The special service entrance door(s) must meet the following specifications:

- (1) All doors must open outward.
- (2) The door(s) must have an opening wide enough to permit proper operation of a lift meeting the requirements of section 5 of this rule, but may not exceed forty-three (43) inches in width.
- (3) If the special service entrance opening is more than forty-three (43) inches wide, two (2) doors must be used.
- (4) The door must have fastening devices to hold it open.
- (5) The doors must be weather sealed.
- (6) Buses with two (2) doors must have a flange on the forward door that overlaps the edge of the rear door when closed.
- (7) Power doors may be used, but the design must provide for manual operation from inside the bus.
- (8) The door materials, colors, lettering, and other exterior features must correspond with or match adjacent sections of the bus body, except for rub rails.
- (9) The door materials, panels, and structural strength must be equivalent to the regular service and emergency doors.
- (10) The door must have a switch that prevents the power lift from operating when the platform door is closed.
- (b) If manually operated dual doors are used, the following specifications must be met:
 - (1) The rear door must have at least a one-point fastening device that fastens to the header.
 - (2) The forward mounted door must have at least three (3) fastening devices which fasten to:
 - (A) the header;
 - (B) the floor line of the body; and
 - (C) the rear door.
 - (3) The fastening devices must provide maximum safety when the doors are closed.
 - (4) The door and hinge mechanisms must be constructed to withstand the same use as a regular service door.
- (c) The doors must have windows that are:
 - (1) set in rubber; and
 - (2) within one (1) inch of the lower line of the adjacent sash.
- (d) There must be a device in the driver's compartment that activates a red, flashing visible signal when the ignition is on and the special service door is not securely closed.

(e) Seats may be placed in front of an inoperable door of a bus described under section 8(b) of this rule. *(State School Bus Committee; 575 IAC 1-5.5-9; filed May 24, 1990, 4:20 p.m.: 13 IR 1858; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-5.5-10 Panels

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 10. (a) A restraining barrier or seat back that meets FMVSS 222 must be located in front of any forward facing seat.

(b) A bus with wheelchair spaces located in the front portion of the bus must have padded protection panels behind the driver's platform and in back of the front step well. The bottom of the panel cannot be more than three (3) inches from the floor of the bus.

(c) If modification for a power lift requires an opening in the floor, a chain must be installed between the protection panels to enclose the lift area.

(d) A protection panel must be located between the inner lift frame structure and the bus sidewall. The panel must extend from the top of the window to no more than three (3) inches from the floor. *(State School Bus Committee; 575 IAC 1-5.5-10; filed May 24, 1990, 4:20 p.m.: 13 IR 1858; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-5.5-11 Special requirements

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1

Sec. 11. (a) Any passenger seat that has a child safety seat or restraint system attached to it must:

- (1) have a reinforced frame; and
- (2) meet the requirements of FMVSS 208, 209, and 210.
- (b) All child safety seats or restraint systems used in a school bus must be secured to a bus seat in a manner prescribed and approved by the manufacturer, and must meet safety specifications as follows:
 - (1) A child weighing less than fifty (50) pounds must be transported in a child safety seat or restraint system meeting FMVSS 213.
 - (2) A child weighing less than thirty (30) pounds must be transported in a car seat meeting FMVSS 213.
 - (3) A child weighing less than thirty (30) pounds with a tracheostomy must be transported in a car seat without a shield or armrest.
 - (4) A safety seat used to transport a child under twenty (20) pounds must be attached to the bus seat in a rearward facing position.
 - (c) Lap boards attached to wheelchairs or to adaptive equipment must be removed and secured separately during transport.
 - (d) All respiratory related equipment, such as oxygen, aspirators, and ventilators, must be securely mounted or fastened to a wheelchair, bus seat, bus floor, or to the bus wall below the window line during transit.
 - (e) Tanks of compressed oxygen transported in a school bus may be no larger than twenty-two (22) cubic feet and must be securely mounted inside the bus. Tanks must have valves and regulators that are protected against breakage. Tanks must be secured to avoid exposure to intense heat, flames, sparks, or friction.
 - (f) Any liquid oxygen container transported in a school bus may be no larger than thirty-eight (38) cubic feet and must be securely mounted and fastened to prevent damage and exposure to intense heat.
 - (g) Subsection (a) applies to school buses ordered for purchase and initially placed in service on or after July 1, 1990. School buses ordered for purchase and initially placed in service prior to July 1, 1990, may comply with subsection (a). (*State School Bus Committee; 575 IAC 1-5.5-11; filed May 24, 1990, 4:20 p.m.: 13 IR 1859; filed May 21, 1992, 5:00 p.m.: 15 IR 2222; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-5.5-12 Applicability of rule

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1

Sec. 12. (a) The revisions of 575 IAC 1-5, effective July 1, 1981, apply to all school buses ordered for purchase or placed in production for use in Indiana before June 30, 1990.

(b) The requirements of this rule apply to all school buses ordered for purchase and initially placed in service on or after July 1, 1990.

(c) Sections 3(a), 3(c) through 3(e), and 11(b) through 11(f) of this rule apply to all school buses regardless of when the school buses were ordered or placed in service. (*State School Bus Committee; 575 IAC 1-5.5-12; filed May 24, 1990, 4:20 p.m.: 13 IR 1859; filed May 21, 1992, 5:00 p.m.: 15 IR 2222; filed Mar 9, 2000, 7:45 a.m.: 23 IR 1650*)

Rule 6. Optional Equipment (Repealed)

(*Repealed by State School Bus Committee; filed Jun 20, 1988, 8:50 am: 11 IR 3898*)

Rule 7. Optional Equipment

575 IAC 1-7-1 General provision

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 1. Any deviation from the preceding standards must be approved by the department of education. If the department denies a request to place additional equipment on the bus, an appeal may be made to the state school bus committee. (*State School Bus Committee; 575 IAC 1-7-1; filed Jun 20, 1988, 8:50 am: 11 IR 3894; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-2 Adjustable roof ventilator

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 2. An adjustable roof ventilator may be installed if it is hinged and has a handle to provide an emergency exit. (*State School Bus Committee; 575 IAC 1-7-2; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-3 Air conditioning

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 3. Air conditioning may be installed per the manufacturer's standards. (*State School Bus Committee; 575 IAC 1-7-3; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-4 Air horn

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 4. An air horn may be used in Type A, B, and C buses if the horn is installed under the hood. The air horn may be used in a Type D bus if it is installed within the perimeter of the body of the sheet metal. (*State School Bus Committee; 575 IAC 1-7-4; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-5 Anti-vandalism device

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 5. (a) An anti-vandalism security device may be installed on the emergency and service doors.

(b) If placed on the emergency door, the device must prevent the bus' ignition system from activating if the emergency door is locked or inoperable from either the inside or the outside of the bus. The device must audibly alert the driver and prevent the engine from shutting off if the door lock is closed after the engine has started. If placed on the service door, the device must be manufacturer-designed and approved by the state school bus committee so that the door can be locked from only the outside. The device may be manually operated, or electrically operated if the device can be manually operated in the event of a power failure. (*State School Bus Committee; 575 IAC 1-7-5; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-6 Auxiliary fans

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 6. (a) Auxiliary fans may be used on the bus. They must be placed in an accessible location.

(b) Each fan must be at least six (6) inches in diameter.

(c) A protective cage must cover the fan blades.

(d) A separate switch must control each fan. (*State School Bus Committee; 575 IAC 1-7-6; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-7 Axe

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 7. One (1) fire axe may be placed in the bus. The shaft of the axe must be 24 inches long. The axe must have a pick-type

head that weighs two and one-fourth (2 1/4) pounds. (*State School Bus Committee; 575 IAC 1-7-7; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-8 Back-up warning alarm

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 8. An automatic audible alarm may be installed behind the rear axle. It must comply with the Society of Automotive Engineers' Back-up Alarm Standards (SAE 994b) that specify 97 plus/minus 4dBA for vehicles with rubber tires. (*State School Bus Committee; 575 IAC 1-7-8; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-9 Communication system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 9. A one-way or two-way radio communication system may be installed in the bus. Its controls must be accessible to the driver. The system must be designed and installed to prevent injuries to the driver and passengers in the event of sudden stops. (*State School Bus Committee; 575 IAC 1-7-9; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-10 Engine compartment fire extinguisher

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 10. (a) An engine compartment fire extinguisher that has been approved by Underwriter's Laboratories, Inc. may be used.
(b) The cylinder of the fire extinguisher must be placed in the driver's compartment. Lines from the cylinder must pass through the fire wall of the bus to each side of the engine. A discharge head must be placed on the end of each line.
(c) A pull cable that connects the cylinder to the discharge valve must be controlled from the driver control panel. The cable must be identified on the panel with the words "Pull for engine fire only".
(d) A gauge attached to the cylinder must indicate pounds per square inch. (*State School Bus Committee; 575 IAC 1-7-10; filed Jun 20, 1988, 8:50 am: 11 IR 3895; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-11 Engine heater

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 11. An engine heater may be used. (*State School Bus Committee; 575 IAC 1-7-11; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-12 Exhaust system

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 12. A one (1) piece bellows-type pipe that extends from the manifold to the muffler may be used in the exhaust system. (*State School Bus Committee; 575 IAC 1-7-12; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-13 Fog lamps

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 13. One (1) or two (2) fog lamps may be permanently mounted on the front bumper and:

- (1) measuring from the center of each lamp, must be twelve (12) to 30 inches above the ground;
- (2) if two (2) lamps are used, each must be placed not more than 15 inches from the center of the front bumper;
- (3) must be both vertically and horizontally adjustable;
- (4) must adequately illuminate the area in front of the bus;
- (5) they and all wiring must meet the SAE standards for "Electric Head Lamps for Motor Vehicles" or "Sealed Beam Lamp Units for Motor Vehicles";
- (6) must be controlled by an independent switch and powered by an independent fuse and/or breaker.

(State School Bus Committee; 575 IAC 1-7-13; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-7-14 Fuels

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 14. (a) The following fuels may be used:

- (1) diesel;
- (2) liquified petroleum (LP);
- (3) compressed natural gas (CNG); or
- (4) gasoline and a combination of dual fuels.

(b) Guidelines for the installation and use of LP, CNG, and dual fuel systems are available from the division of school traffic safety in the department of education. *(State School Bus Committee; 575 IAC 1-7-14; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-7-15 Governor

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 15. A governor may be used per the manufacturer's standards. *(State School Bus Committee; 575 IAC 1-7-15; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-7-16 Identification and lettering

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 16. (a) The driver's name may appear on the exterior of the bus in black, series "B" lettering that is no more than two (2) inches high. It must be placed on the right side of the bus, behind the service door and midway between the window line and the floor line.

(b) The bus number may appear on the exterior of the roof in black, series "B" lettering that is no more than three (3) feet high and three (3) inches wide. *(State School Bus Committee; 575 IAC 1-7-16; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-7-17 Inspection plates

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 17. One (1) or two (2) inspection plates may be used to make the fuel system connections accessible. The plates must be mounted, flush with the floor, and covered with floor covering. *(State School Bus Committee; 575 IAC 1-7-17; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)*

575 IAC 1-7-18 Mirrors

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 18. (a) Exterior heated mirrors and wide angle rear window lenses may be placed on the bus.

(b) Remote-controlled exterior mirrors may be placed on the bus. (*State School Bus Committee; 575 IAC 1-7-18; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-19 Monitoring system for lights

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 19. A driver may use a system to indicate whether the bus lights are working correctly as long as the system does not monitor only the electrical currents and whether the current is traveling to a lamp. The system must be accessible from the driver's seat. (*State School Bus Committee; 575 IAC 1-7-19; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-20 Radios and tape decks

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 20. (a) Conventional radios and tape decks may be installed with the permission of the local governing body.

(b) Each system must be designed and installed in such a way as to prevent injuries to the driver and the passengers in the event of a sudden stop.

(c) Radio speakers may be installed under the seats but must not obstruct the seats or the aisle. There must be no sharp corners or protrusions. (*State School Bus Committee; 575 IAC 1-7-20; filed Jun 20, 1988, 8:50 am: 11 IR 3896; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-21 Sanders

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 21. Sanders may be used. (*State School Bus Committee; 575 IAC 1-7-21; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-22 Internal and external speakers

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5

Sec. 22. (a) Internal and external speakers that are used for communication may be installed in the bus with the permission of the local governing body.

(b) Internal speakers must be designed and installed to prevent injury and have no sharp corners or protrusions.

(c) External speakers must not extend beyond the bus body and must not obstruct visibility of the flashing warning lights, the clearance lights, and any identification lights or lettering. (*State School Bus Committee; 575 IAC 1-7-22; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-23 Speed control device

Authority: IC 20-9.1-4-4
Affected: IC 20-9.1-5-10

Sec. 23. A combination speed control/engine governor that controls road speed from 30 to 70 m.p.h. and engine revolutions

from 2100 to 4500 r.p.m. may be used. (*State School Bus Committee; 575 IAC 1-7-23; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-24 Strobe lights

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 24. (a) A white strobe light meeting SAE standards may be installed; it must be mounted on top of the center of the bus, above the rear wheels. A red strobe light meeting SAE standards may be installed in the stop signal device.

(b) A strobe light must be controlled by a switch that is independent of the ignition system.

(c) The candlepower must be at least 800 on a horizontal plane and at least 20 percent of horizontal light measurement at plus or minus seven and one-half (7 1/2) degrees at the vertical plane. Light intensity must be measured in accordance with the Blondell-Rae equation for intensity; only the light visible to the human eye must be measured.

(d) The strobe light must operate only when the bus transports students during periods of reduced visibility caused by conditions other than darkness or in emergency situations. (*State School Bus Committee; 575 IAC 1-7-24; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-25 Tachometer/tachograph

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 25. An electrical or mechanical tachometer/tachograph may be used. (*State School Bus Committee; 575 IAC 1-7-25; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-26 Tires

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 26. Radial, mud, and snow tires may be used. A spare tire may be used but it must not be mounted inside the passenger compartment. (*State School Bus Committee; 575 IAC 1-7-26; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-27 Tire chains

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 27. Automatic or manual tire chains may be used on the bus' tires. (*State School Bus Committee; 575 IAC 1-7-27; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-28 Tire overspray guard

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 28. Tire overspray guards, such as mud flaps and overspray systems, may be used. (*State School Bus Committee; 575 IAC 1-7-28; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-29 Wind guard

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 29. A wind guard may be installed to prevent the stop signal device from whipping in the wind. (*State School Bus*

Committee; 575 IAC 1-7-29; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

575 IAC 1-7-30 Windows

Authority: IC 20-9.1-4-4

Affected: IC 9-19-9; IC 20-9.1-5

Sec. 30. Frost-free windows may be installed. Windows and the windshield may be tinted but must comply with IC 9-8-6-38(e) [IC 9-8-6-38 repealed by P.L.2-1991, SECTION 109.]. No person shall drive any motor vehicle which has:

- (1) windshield;
- (2) side wing; or
- (3) side window;

which is part of a front door; which is tinted to the extent, or manufactured in such a way, that the occupants of the vehicle cannot be easily identified through that window. (*State School Bus Committee; 575 IAC 1-7-30; filed Jun 20, 1988, 8:50 am: 11 IR 3897; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-31 Windshield wipers

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 31. Heated windshield wipers may be used. (*State School Bus Committee; 575 IAC 1-7-31; filed Jun 20, 1988, 8:50 am: 11 IR 3898; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-32 Bodily fluid spill kits and materials

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 32. (a) School buses may carry a dustproof, detachable bodily fluid spill kit that is commercially produced. The kit must not have sharp protrusions and must be securely mounted on the inside of the bus, in an accessible location, in the driver compartment. Minimum contents of the kit should include the following items as recommended by the state board of health:

- gloves (rubber or plastic)
- bleach or appropriate disinfectant – (dry, chlorine absorbent)
- leakproof bags
- soap
- paper towels

(b) School buses may also carry bodily fluid spill kits which have been produced by school corporations. The kit must meet the same requirements and contain the same materials as described in subsection (a) of this section. (*State School Bus Committee; 575 IAC 1-7-32; filed Jun 20, 1988, 8:50 am: 11 IR 3898; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938*)

575 IAC 1-7-33 Reflective material

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 33. (a) Reflective material:

- (1) may be applied to the body of a school bus to make it more visible;
 - (2) must be of a color to match National School Bus Yellow, Federal Standard No. 595a; and
 - (3) must be at least three (3) inches wide, but not more than six (6) inches wide.
- (b) The reflective material may only be placed on the following locations on the school bus:
- (1) The front and/or rear of the school bus between the warning lamps.
 - (2) Each side beltline that contains the school corporation name.
 - (3) The rear of the bus outlining the emergency door.
 - (4) Across the rear of the bus directly over the rear bumper.

(c) Lettering must be:

(1) black;

(2) nonreflective; and

(3) in conformance with size and style requirements specified in 575 IAC 1-2-43, 575 IAC 1-2.5-35, 575 IAC 1-3-43, and 575 IAC 1-4-43.

(State School Bus Committee; 575 IAC 1-7-33; filed May 24, 1990, 4:20 p.m.: 13 IR 1859; readopted filed Oct 10, 2001, 3:37 p.m.: 25 IR 938)

Rule 8. School Bus Driver Physical Performance Standards and Measurements

575 IAC 1-8-1 Exiting the bus

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 1. (a) Driver shall demonstrate the ability to exit the bus from a seat belted position in the driver's seat and exiting from the rearmost emergency door.

(b) The measurement is pass/fail. *(State School Bus Committee; 575 IAC 1-8-1; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1149)*

575 IAC 1-8-2 Quick reaction time between accelerator and service brake

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 2. (a) Driver shall demonstrate quick reaction time between accelerator and service brake.

(b) In a seat belted position, driver shall with the right foot, alternately depress the accelerator and service brake ten (10) times in ten (10) seconds or less. *(State School Bus Committee; 575 IAC 1-8-2; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1149)*

575 IAC 1-8-3 Climbing and descending bus service door steps

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 3. (a) Driver shall demonstrate the ability to climb and descend the bus service door steps in a forward facing position two (2) times without stopping.

(b) The measurement is pass/fail. *(State School Bus Committee; 575 IAC 1-8-3; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1149)*

575 IAC 1-8-4 Opening and closing bus service door

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 4. (a) Driver shall demonstrate the ability to open and close the bus service door two (2) times without stopping from a seat belted position.

(b) The measurement is pass/fail. *(State School Bus Committee; 575 IAC 1-8-4; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1149)*

575 IAC 1-8-5 Operating hand controls or steering wheel

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 5. (a) Driver shall demonstrate the ability to operate one (1) hand control on each side of the steering wheel while the bus is in a safe forward motion.

(b) The measurement is pass/fail. *(State School Bus Committee; 575 IAC 1-8-5; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1150)*

575 IAC 1-8-6 School bus driver physical performance standards and measurements; applicability

Authority: IC 20-9.1-4-4

Affected: IC 20-9.1-5

Sec. 6. The performance standards and measurements outlined in this rule apply to drivers who receive a state school bus committee standard certificate after the effective date of the rule. (*State School Bus Committee; 575 IAC 1-8-6; filed Dec 2, 2001, 12:22 p.m.; 25 IR 1150*)

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