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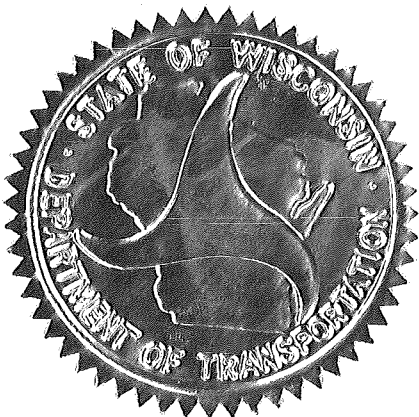
STATE OF WISCONSIN)
)
DEPARTMENT OF TRANSPORTATION)

TO ALL TO WHOM THESE PRESENT COME, GREETINGS:

I, Owen Ayres, Secretary of the Department of Transportation and custodian of the official records of the Department, do hereby certify that the annexed rules relating to school bus safety standards, were duly approved and adopted by this Department on December 17, 1982.

I further certify that this copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Hill Farms State Office Building in the city of Madison, this 17th day of December, 1982.



Owen Ayres
OWEN AYRES, P.E.
Secretary
Wisconsin Department of Transportation

3-1-83.

IN THE MATTER OF THE ADOPTION OF :
 AN EMERGENCY RULE REPEALING CHAPTER :
 MVD 17, WIS. ADMIN. CODE, AND :
 CREATING CHAPTER TRANS 300, WIS. :
 ADMIN. CODE, RELATING TO SCHOOL :
 BUS SAFETY STANDARDS :

ORDER
 ADOPTING
 RULE

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Analysis Prepared by the Department of Transportation

General summary of rule. This rule repeals present chapter MVD 17, Wisconsin Administrative Code, and creates Chapter TRANS 300, Wisconsin Administrative Code. The new rule provisions created hereby delete provisions presently found in chapter MVD 17, Wisconsin Administrative Code, relating to the following: all references to federal standards; many unnecessary definitions; the requirement that a driver submit a driver abstract to his or her employer; all physical qualifications for school bus driving (to be addressed in chapter TRANS 110, Wisconsin Administrative Code); employer's obligation to maintain an employee file; the requirement to maintain a chart for determining alternator requirements; the requirement that a school bus having a gross vehicle weight rating (GVWR) of 10,000 pounds or less have a reserve fuel tank; standards for adult seating in school buses; exhaust system heat baffle requirements; the requirement that fire extinguishers be cartridge actuated; the 24-unit first aid kit requirement; the requirement that step risers be within 1/2" of each other; the requirement that tires on an axle be of the same ply rating; and the requirement that buses be wired to accommodate an 8-light warning system.

The weight categories used to establish specifications for the following have been changed: minimum alternator size, bumper standards, painting standards for some components, and the permissible area where exhaust may exit from the tail pipe.

The rule more clearly articulates the requirement that a 12-inch aisle shall be available leading to any emergency door exit.

The rule adds the requirement that manufacturers of school bus bodies furnish the department proof that its school bus bodies comply with Wisconsin standards. Additionally, a new section establishing standards for universal joints, drive shafts and center bearings has been included. Also, a separate convex rearview mirror is now required on the right side of school buses. Finally, a standard is established for wheels, wheel bearings, and king pins.

Fiscal Estimate. The administrative rule changes should not increase pupil transportation service costs in Wisconsin. In fact, a positive impact is probable in many circumstances because vans may be used for transporting small groups under the new rule whereas a larger conventional school bus vehicle was required by the previously applicable administrative rule.

Pursuant to authority vested in the Wisconsin Department of Transportation by ss. 110.06, 347.25 and 347.44, Stats., the Department proposes to repeal

and create rules interpreting ss. 110.06, 347.25 and 347.44, Stats., as follows:

TEXT OF RULE

SECTION 1. Chapter MVD 17 of the Wisconsin Administrative Code is repealed.

SECTION 2. Chapter TRANS 300 of the Wisconsin Administrative Code is created to read:

TRANS 300

TRANSPORTATION OF SCHOOL CHILDREN

TRANS 300.01 PURPOSE AND SCOPE. (1) The purpose of this chapter is to promote the safe transportation of pupils and other authorized persons in school buses as defined in s. 340.01(56), Stats.

(2) This chapter is intended to provide specific safety-related standards regarding the design, construction, inspection, and operation of school buses.

(3) The chapter provides for differing standards for vehicles of varying size and configuration.

TRANS 300.02 DEFINITIONS. In this chapter: (1) "Department" means the department of transportation.

(2) "Driver's compartment" means the area forward of the rearmost portion of the driver's seat across the entire width of the bus.

(3) "GAWR" means the gross axle weight rating.

(4) "GVWR" means gross vehicle weight rating.

(5) "SAE" means the society of automotive engineers.

(6) "School bus" or "bus" means any vehicle defined in s. 340.01(56), Stats.

(7) "Secretary" means the secretary of the department of transportation.

(8) "Wheelchair" means any specially constructed wheeled device used exclusively for the movement of physically handicapped persons.

SUBCHAPTER I

Purchasing and Operating Requirements

TRANS 300.10 MANUFACTURER. It is the vehicle manufacturer and the school bus body manufacturer's responsibility to manufacture a school bus in compliance with all federal and state standards applicable to the manufacturer of school buses.

TRANS 300.11 DEALER. (1) It is the chassis dealer's responsibility to furnish a motor vehicle chassis that is to be combined with a school bus body which meets the applicable state standards that relate to chassis components. The chassis dealer is the statutory owner of the school bus.

(2) General practice through the years has made the school bus body distributor the person who actually delivers the school bus to the purchaser. The initial inspection shall be the responsibility of the dealer who sold the chassis.

(3) The dealer or distributor that is required to secure the initial inspection shall be clearly indicated on the purchase order.

TRANS 300.12 DISTRIBUTOR. The school bus body distributor acts as an agent of the final assembler of the school bus. The distributor is the agent that may arrange for the initial inspection of the school bus. If the purchaser wishes to arrange for the initial inspection this shall clearly be stated on the purchase order. The distributor shall furnish a school bus body which meets the applicable state standards that relate to body components.

TRANS 300.13 PURCHASER. (1) Any person intending to purchase a motor vehicle to be used as a school bus shall provide the seller with a written notice of such intent prior to the signing of the purchase order. A notation on the purchase order shall fulfill this requirement.

(2) Any person intending to purchase a school bus body to be combined with a motor vehicle chassis to form a body-on-chassis type school bus shall provide the seller or distributor with a written notice of such intent prior to the signing of the purchase order. A notation on the purchase order shall fulfill this requirement.

(3) Any person purchasing a school bus shall not use the vehicle for any pupil transportation unless the bus has been inspected by the department and approved for use as a school bus in Wisconsin. This shall not preclude such use if items needing correction or alteration after the initial inspection are of a nature that would not affect safe transportation of students. The inspecting officer shall advise the owner if a new bus may be used while the items not in compliance are being corrected.

TRANS 300.15 EMPLOYER REQUIREMENTS. (1) Each employer of school bus drivers shall be responsible to determine that only qualified personnel operate school buses according to safe practices and that each bus is qualified for pupil transportation.

(2) The operator or owner of a school bus shall have a maintenance record file for each school bus. The maintenance record file shall be kept at the principal repair facility used for the bus. If the bus owner does not operate a repair facility, the record file shall be kept current at another location accessible for inspection. The record file shall be maintained for the life of the bus and shall contain:

(a) Identification of the bus including make, model, vehicle identification number, and fleet number, if any.

(b) A record of repairs performed including the date and nature of repair.

(c) A record of the lubrication and preventive maintenance performed including date and nature of maintenance.

(d) The initial inspection and a copy of the latest inspection performed by state employees.

(3) All required records shall be open for inspection and presented to the secretary or his or her agent upon demand. The secretary may periodically authorize deletion or destruction of material contained in the record file.

(4) A driver's written report of a bus defect or of an unsafe bus as determined during a pre-trip inspection or during the bus operation shall be maintained for a period of 7 calendar days after repair.

TRANS 300.16 DRIVER REQUIREMENTS. (1) Prior to the start of any trip the driver shall check the condition of the bus, giving particular attention to brakes, tires, lights, emergency equipment, mirrors, windows, and interior cleanliness of the bus. Defects shall be reported in writing to the person in charge of bus maintenance. The driver shall be responsible for the cleanliness of the interior of the bus and shall ensure that the windshield and mirrors are clean before each school bus operation.

(2) Articles may not be transported within the bus body if there is or may be interference with pupils or with the driver or if the articles obstruct the aisle, stepwell, or steps. Articles other than those associated with school activity may not be transported. No animal, firearm, or other weapon of any sort, shall be permitted on a bus without the express, written authorization of the appropriate school administrator. The bus driver shall refuse admittance to any student not presenting the requisite express, written authorization. The driver shall designate where all articles not associated with school activity shall be carried in the bus. The provisions of this subsection shall not apply to dogs for the blind or the deaf which may be permitted in accord with s. 174.056(1), Stats.

(3) The driver shall not smoke or permit smoking when any minors or students are aboard the school bus.

(4) A driver shall not operate a school bus while under the influence of alcohol or a controlled substance or a combination of alcohol and a controlled substance or permit the use of alcohol or a controlled substance on any school bus. The driver shall not operate a school bus if he or she is under any medication, or combination of medication and alcohol, which may affect the safe operation of the bus.

(5) The driver shall maintain order among passengers being transported and shall promptly report any misconduct to the proper authority. The driver may assign seating order.

(6) Loading stations or points shall be selected with due regard for traffic and pedestrian safety, and shall be approved by school authorities. When flashing red warning lights are used as required by s. 346.48, Stats., they shall be actuated continuously at least 100 feet

before stopping. The stop arm shall be used in conjunction with the flashing red warning lights and shall be extended only after the bus comes to a stop. Except where there are special loading zones where the bus is entirely off the traveled portion of the highway, the bus shall be stopped on the traveled portion of the highway in the lane farthest to the right which is improved, designed or ordinarily used for vehicular travel, excluding the berm or shoulder. The flashing red warning lights shall not be extinguished until loading or unloading is completed and persons who must cross the highway are safely across. The stop arm shall be retracted before putting the bus in motion.

(7) A school bus shall not be stopped on any portion of a highway for the loading or discharge of pupils or other persons unless the bus is painted the yellow and black school bus color combination, is equipped with a stop signal arm and alternating flashing red lights and is identified by a school bus sign. This subsection shall not apply to a vehicle which is operating within a municipality and which is not readily identifiable as a school bus. When loading or discharging pupils in a rural area, a vehicle not identifiable as a school bus shall do so off the highway and in such a manner that the pupils do not have to cross the highway.

(8) The driver shall make sure that there is no traffic danger before allowing pupils to cross the highway. Pupils obliged to cross the road highway shall be required to cross from a point at least 10 feet forward of the standing bus after receiving a signal from the driver. When discharging passengers the driver shall not proceed until they are safely across the street or highway. This subsection applies

only where flashing red signals are required by s. 346.48, Stats., or authorized by s. 349.21, Stats.

(9) A driver shall not leave the bus unattended with the engine running or the key in the ignition when pupils are in the bus or in the immediate area of the bus.

(10) Except as provided in sub. (13), the doors of a bus shall be closed securely before starting and shall remain closed while the bus is in motion. Abrupt starts and stops or sudden maneuvers are prohibited, except in an emergency.

(11) The driver shall not require nor permit any passenger to stand while the vehicle is in motion except while a passenger is going to a door or seat just prior to stopping or immediately after loading. This does not apply to chaperones or monitors in the performance of their duties. The driver shall not permit any passenger to sit anywhere on the bus except in seats provided.

(12) The driver shall not operate a school bus beyond the following limitations:

(a) Fifty-five miles per hour on any town, county, state or federal highway unless posted at a lower speed or unless conditions requiring a lower speed for safe operation exist .

(b) Legal posted limits in municipalities.

(13) The driver of a school bus required to stop at a railroad crossing by s. 346.45, Stats., shall come to a full stop at a distance of not less than 15 feet nor more than 50 feet before crossing at grade any track of a railroad. The hazard warning lights shall be used when the bus is slowing for the stop and shall remain on until the bus has resumed normal speed. While the bus is so stopped, the driver

shall open the service door and listen and look in both directions along the track for any approaching train and for signals indicating the approach of a train. After stopping and upon proceeding when it is safe to do so, the driver of the bus shall cross only in the gear of the bus that will make it unnecessary to manually shift gears while traversing the crossing, and the driver shall not shift gears while traversing the crossing. The service door shall remain open until the front wheels of the bus have cleared the first set of tracks for each required stop, but shall be closed before shifting. If the bus is an auto or station wagon not equipped with a service door controlled from the driver's seat, opening of the service door is not required provided the driver lowers the window to the left and provided that the service door glass is kept free of frost and fog.

(14) In case of an accident or a breakdown, when practicable, the driver shall remain with the bus and shall send two responsible pupils or other passengers to the nearest place for help unless aid has been secured by means of two-way communication.

(15) Drivers, school boards, transportation supervisors, and bus owners shall cooperate at all times with authorized division of state patrol personnel in carrying out the inspection of school buses and equipment.

TRANS 300.17 PASSENGERS. School bus passengers shall comply with any lawful order given by the driver in carrying out the driver's responsibility of transporting passengers safely.

TRANS 300.18 OUT OF SERVICE. (1) Any bus that is found to be in such condition that it is unsafe for use as a school bus shall have an "out of service" sticker attached to the upper glass on the service door,

and the vehicle shall not be used as a school bus while the sticker is displayed.

(2) A vehicle with an "out of service" sticker displayed shall be reinspected by and shall have the sticker removed by an agent of the State Patrol prior to reuse as a school bus.

(3) It shall be illegal for any person other than an agent of the department to remove, conceal or obstruct an "out of service" sticker unless the vehicle:

(a) Has the base school bus registration removed;

(b) Is re-registered in such a manner as to prohibit its use as a school bus; and,

(c) Is converted to meet the requirements of s. TRANS 300.19.

TRANS 300.19 REQUIREMENTS TO CONVERT A SCHOOL BUS. The owner of every vehicle identified as a school bus by color, signs, and lights which is converted from a school bus to some other type of vehicle shall comply with the following requirements:

(1) Repaint the entire vehicle to a color other than glossy yellow or any color commonly referred to as yellow.

(2) Physically remove the flashing red lights from the vehicle; the mere disconnection, covering or repainting of the flashing red lights shall not comply with this requirement.

(3) Remove the stop signal arm.

(4) Remove any sign identifying the vehicle as a school bus.

TRANS 300.20 ADOPTION OF STANDARDS: (1) Pursuant to s. 227.025, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the following standards.

(a) SAE J579c - Sealed Beam Headlamp Units for Motor Vehicles. SAE standard approved January 1940 and last revised by lighting committee December 1974. Editorial change December 1978.

(b) SAE J585e - Tail Lamps (rear position light). SAE standard approved March 1918 and last revised by lighting committee September 1977.

(c) SAE J586d - Stop Lamps. SAE standard approved February 1927 and last revised by lighting committee September 1977.

(d) SAE J587f - License Plate Lamps. SAE standard approved March 1918 and last revised by lighting committee January 1977.

(e) SAE J588f - Turn Signal Lamps. SAE standard approved February 1927 and last revised by lighting committee November 1978.

(f) SAE J592f - Clearance, Side marker, and Identification Lamps. SAE standard approved January 1937 and last revised by lighting committee September 1977.

(g) SAE J593e - Backup Lamps. SAE standard approved August 1947 and last revised March 1974.

(h) SAE J887a - School Bus Red Signal Lamps. SAE standard approved July 1964 and last revised February 1975.

(i) SAE J914b - Side Turn Signal Lamps. SAE recommended practice approved February 1965 and last revised July 1978.

(2) Copies of the references are on file in the offices of the division of state patrol, the secretary of state, and the revisor of statutes; or may be purchased from the Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA, 15096. The standards are noted in the SAE handbook, 1981 edition. Any standard or recommended

practice shall be treated as an approved standard and shall not be advisory in nature.

SUBCHAPTER II
EQUIPMENT STANDARDS

TRANS 300.25 AISLE. (1) Every school bus of more than 10,000 pounds GVWR, or of 10,000 pounds GVWR or less manufactured in two stages, shall have a center aisle with a minimum clearance of 12 inches wide. The aisle shall be the open area which pupils entering the service door utilize to gain access to their seats. The center aisle shall extend from the drivers compartment to the emergency exit at the rear of the bus. The school bus that has a side emergency door shall in addition, have a 12 inch wide aisle from the center aisle to the side emergency door. The intent of this requirement is to provide a 12 inch wide, unrestricted aisle to any emergency door.

(2) An open area for wheelchairs shall not be considered an aisle.

TRANS 300.26 ALTERNATOR, GENERATOR. (1) The alternator or generator shall have a capacity that meets or exceeds the minimum requirement for the reserve capacity rating of the battery.

(2) A school bus of more than 15,000 pounds GVWR shall be equipped with an alternator or generator of at least 100 ampere rating.

(3) A school bus of 15,000 pounds GVWR or less but more than 10,000 pounds GVWR shall be equipped with an alternator or generator of at least 80 ampere rating.

(4) A school bus of 10,000 pounds or less GVWR shall be equipped with an alternator or generator of at least 60 ampere rating. If this vehicle is equipped with a power lift it shall be equipped with a 80 ampere or more rated alternator or generator.

TRANS 300.27 BARRIERS. (1) Every school bus of more than 10,000 pounds GVWR shall be equipped with a barrier forward of the foremost right and left front seats.

(2) A school bus of 10,000 pounds GVWR or less manufactured in two stages shall be equipped with a barrier or a padded stanchion forward of the foremost right and left front seats. The stanchion shall extend from the wall to the aisle.

(3) If the bus meets any federal requirements relating to the use of seat belts, the bus shall in addition be equipped with barriers or stanchions as indicated in this section.

TRANS 300.28 BATTERY. The storage battery shall have a cranking performance rating equal to or greater than the cubic inch displacement of the engine powered by any means other than with diesel fuel.

TRANS 300.29 BATTERY CARRIER AND CONNECTIONS. (1) All batteries shall be securely attached in a manner to prevent dislocation in the event of an accident. The battery may be mounted in the engine compartment or when mounted outside of the engine compartment it shall be contained in a closed, drained, weather-tight and vented compartment which shall retain the battery in the event of upset or roll-over of the bus. If the battery is mounted in the body skirt, the battery compartment door or cover shall be secured by a latch. The battery shall not be located in the passenger compartment.

(2) The cables to the battery shall not be spliced.

TRANS 300.30 BOOK RACKS. (1) Book racks, if installed, shall be located above the side windows. They shall not extend forward of the foremost point of the front seat or across or above the emergency door.

(2) Book racks made of expanded, punched, or woven metal are not permitted.

(3) Book racks shall be free of projections or sharp edges.

(4) Book racks are permitted only in buses with a minimum of 72" head room.

TRANS 300.31 BRAKES. (1) Every school bus shall meet federal brake standards in effect at the time of manufacture. Each brake system including the parking brake shall be maintained in good working order. The system shall be free of any leaks. The lines and hoses shall not be chafed, flattened or restricted in anyway.

(2) A school bus of more than 10,000 pounds GVWR that uses air assisted brakes shall be equipped with a low pressure warning system which functions at 60 psi and lower. The governor cut out pressure may not exceed 135 psi. The governor cut in pressure may not be lower than 80 psi.

(3) A school bus of more than 10,000 pounds GVWR that uses vacuum assisted brakes shall be equipped with a low pressure warning system which functions when the vacuum is 8 inches of mercury and less.

(4) A school bus of more than 10,000 pounds GVWR when equipped with air or vacuum assisted brakes shall be equipped with a reserve tank having a capacity of not less than 1,000 cubic inches to provide additional air or vacuum for the primary brake system. There shall be a check valve or pressure protective valve to protect the system from loss of air or vacuum. There shall be no accessory except the low pressure warning device operated

from the air or vacuum reserve tank or its connecting lines. The low pressure warning system shall be installed to indicate the air pressure or vacuum in the tank. The gauge required to monitor this system shall be visible to the driver at all times.

(5) Every school bus shall be equipped with a power assist brake system.

(6) The interior of the brake drums and the brake linings shall not be contaminated from oil or grease.

(7) The brake systems shall be properly adjusted to provide maximum braking effort.

TRANS 300.32 BUMPERS. (1) The front bumper of buses of more than 10,000 pounds GVWR shall have not less than an 8-inch face and shall extend between the frame rails as a minimum. The bumper shall be of sufficient strength and be positioned to permit pushing a vehicle of similar weight without distortion.

(2) The rear bumper of buses of more than 10,000 pounds GVWR shall have not less than an 8-inch face and shall wrap around the rear corners of the body to a point at least 12 inches forward. The bumper shall be of sufficient strength and shall be positioned to permit the bus to be pushed without distortion to either the bumper or the bus body. There shall be no more than 1/2-inch space between the bumper and the body. Protective material may be utilized to fill all or part of the required 1/2-inch space.

(3) Buses of 10,000 pounds GVWR or less shall be equipped with bumpers on the front and on the rear.

TRANS 300.33 CAPACITY. (1) The passenger capacity of a school bus shall be determined by the following standards:

(a) Pupils through the 12th grade shall be allotted 13 inches of seating space.

(b) Each wheelchair location shall be counted as one seating position.

(2) There shall be displayed on the inside of the bus directly over the windshield on the right side, a sign indicating the maximum pupil passenger capacity. The size of the letters and numerals shall be large enough to permit them to be read by passengers. Transportation of passengers in excess of the number designated on the sign or of the actual seat measurement is prohibited. Buses with a seating capacity of 10 or less are exempt from the requirements of this subsection.

(3) The total available seating per seat shall determine the capacity of the bus. If a bus has seating that can temporarily be folded down without the use of special tools, such seating shall be counted in determining the total passenger carrying capacity. Fold down or fold up seats or reclining seats shall not be permitted except in station wagons or suburban type vehicles.

(4) All passengers aboard a school bus shall be seated in a permanently mounted seat. This subsection does not apply to persons transported in wheelchairs or in other devices where special care is required.

TRANS 300.34 COLOR (1) Except as provided in s. 347.44(2), Stats., school buses having a passenger carrying capacity of 7 or more including the driver shall be painted national school bus glossy yellow with the exception of the trim, and the bumpers. Grills may be bright metal but when any grill is painted it shall be painted yellow. Grills of plastic

or fiberglass construction impregnated with a black, gray or silver color are not required to be painted yellow.

(2) When painted, the bumper shall be painted black.

(3) The following are designated as trim and shall be painted black:

(a) Rub rails.

(b) Stop arm mounting brackets.

(4) The following may be designated as trim or body components and if painted shall be either black or yellow:

(a) Door handles.

(b) Grab handles.

(c) Window sash, seals, gaskets, and bands on exposed edges.

(d) Door seals and gaskets.

(e) Mirror frame and mounting brackets.

(f) Lamp flanges and housings.

(g) Reflector frames and flanges.

(h) Windshield wiper arms.

(i) Snow rails.

(j) License frame and mounting brackets.

(5) The body manufacturer's name including a logo may appear on the exterior of the vehicle in any color.

(6) Retroflective material is permitted on the rub rails, snow rails, bumpers, as school bus lettering and the owners identification as required in TRANS 300.61(6) or permitted in TRANS 300.61(7).

TRANS 300.35 CONSTRUCTION. (1) The construction shall be of prime commercial quality steel or other metal except for the grill, hood, or fenders.

(2) The construction shall provide a reasonably dustproof, weathertight and fume proof unit. Openings between the chassis and passenger compartment shall be sealed to prevent fumes or exhaust gas from entering the bus body.

(3) The floor or subfloor shall be of prime commercial quality steel of at least 14 gauge. Plywood may be used in addition to other flooring material. The floor shall be level from front to back and from side to side except in the wheel housing, toeboard, and driver's seat platform areas. The body cross members below the floor may have no more than 2 consecutive and no more than 3 total members that are completely rusted through.

(4) For buses of more than 10,000 pounds GVWR, all joints within bus bodies which employ discrete fasteners, specifically those which join panels to panels, shall achieve a significant portion of the strength of the parent metal, so that all available panel materials are capable of serving as part of the structure.

(5) All metal used in construction of the bus body shall be zinc- or aluminum-coated or treated by an equivalent process before the bus is constructed. Included are such items as structural members, inside and outside panels, floor panels and floor sill. Excluded are the door handles, grab handles, stanchions, interior decorative parts, and other interior plated parts.

(6) Annually between December 1 and December 15, each school bus manufacturer shall certify to the department that all school buses manufactured for sale in Wisconsin in the following calendar year will comply with this section. The certification shall be filed in the division of state patrol. The certification may be addressed to the

administrator, division of state patrol, P. O. Box 7912, Madison, WI 53707.

(7) Each school bus body manufacturer shall stamp the letters "WI" either preceding or following the body identification number to indicate that the bus body was built to meet Wisconsin school bus construction standards. The school bus body manufacturer shall furnish to the department a blueprint indicating the size and placement of the "WI" requirement on its buses to be sold in Wisconsin. A sample plate shall be furnished by the manufacturer to the division of state patrol showing the placement of the "WI". This subsection does not apply to vehicles in use as school buses in Wisconsin prior to March 1, 1979.

(8) Automobiles, station wagons and other vehicles of 10,000 pounds GVWR or less manufactured in a single stage are exempt from the requirements of this section.

TRANS 300.36 DEFROSTER. (1) The defrosting system shall have the capacity to keep the windshield, the window to the left of the driver and the glass in the service door clear of fog and frost. The defroster outlets shall not be restricted in any way.

(2) Fans may be used in addition to defrosters, but shall be mounted so as not to obstruct the driver's view.

(3) Any exposed fan blade shall have a shroud.

TRANS 300.37 DRIVE SHAFT. (1) Each segment of the drive shaft more than 18 inches long shall be equipped with a suitable guard to prevent an accident or injury in the event of its fracture or disconnection. This section does not apply to automobiles, station wagons, or to vehicles of 10,000 pounds GVWR or less manufactured in a single stage.

(2) The universal joints and the center bearing of every bus subject to inspection shall not be loose or worn.

TRANS 300.38 EMERGENCY WARNING EQUIPMENT. (1) Each school bus shall be equipped with 3 bidirectional emergency triangles. Oil burning pot flares shall not be carried on a school bus.

(2) All emergency equipment shall be kept in suitable fasteners or containers in a readily accessible place in the driver's compartment. The container or units shall be secured to the bus.

(3) Emergency equipment may be locked or kept in a locked compartment provided it is not locked when passengers are being transported.

(4) This section shall not preclude the carrying of additional emergency equipment.

(5) This section does not apply to automobiles or station wagons.

TRANS 300.39 EMERGENCY EXIT. (1) Each school bus shall have an emergency exit. The exit shall be an emergency door located either in the back or on the left side of the bus. If a left side emergency door is utilized, there shall also be an emergency exit window located in the back of the bus. A window by itself does not meet this requirement for an emergency exit.

(2) Every emergency exit shall be designed to be opened from both the inside and the outside of the bus.

(3) There shall not be any obstructions in the aisle or inside of the door that would delay or hinder an orderly use of the emergency exit.

(4) Steps leading to an emergency door are prohibited.

(5) The upper and lower portion of the central rear emergency door shall be equipped with approved safety glass, the area of which shall be

not less than 400 square inches in the upper portion and not less than 280 square inches in the lower portion. Van type buses are exempt from the requirement to have glazing in the lower part of the door. The left side emergency door shall be equipped with safety glass in the upper portion and the lower portion shall be of at least the same gauge metal as the body. The emergency door shall be hinged on the right side if it is in the rear of the bus and on the front side if it is in the left side and shall open only outward. Control of the emergency door from the driver's seat shall not be permitted.

(6) The emergency door shall be equipped with a slide bar, cam-operated latch which shall have a minimum stroke of one inch. The latch shall be equipped with an electric plunger-type switch connected with a distinctive signal audible to the driver which shall be automatically operated, which shall clearly indicate the unlatching of the emergency door and which may not have a cutoff switch installed in the circuit. The switch shall be enclosed in a case, which will prevent tampering, and wires leading from the switch shall be concealed in the body. The switch shall be so installed that the plunger contacts the farthest edge of the slide bar in such a manner that any movement of the slide bar will immediately close the circuit and activate the signal. The door latch shall be equipped with an interior handle which shall be capable of quick release but shall be protected against accidental release. The handle shall lift up to release the latch. The outside handle shall be such as to minimize hitching and shall be a nondetachable device.

(7) If locks are installed on the emergency door they shall include a device to prevent the activating of the starter mechanism of the

bus engine while any door is locked. An audio alarm shall indicate to the driver when any door lock is in the locked position while the ignition switch is in the "on" position. Any locking device on a school bus manufactured after July 1, 1977 or installed on any school bus after July 1, 1977 shall comply with these requirements.

(8) A rear emergency window at least 16 inches in height and as wide as practicable shall be provided in any bus where the emergency door is not in the rear. It shall be hinged at the top and designed to prevent accidental closing in an emergency. A positive latch on the inside of the window shall provide for quick release, but offer protection against accidental release. The outside handle shall be nondetachable and designed to minimize hitching.

(9) The inside of each emergency window shall have the designation "Emergency Exit". An emergency door shall be identified with either the words "Emergency Exit" or "Emergency Door" on the inside at the top of the door. Concise operating instructions shall be located within 6 inches of the release mechanism. When a release mechanism is not located within an occupant space of an adjacent seat, a label that indicates the location of the nearest mechanism shall be placed within that occupant space. The outside of the emergency door shall be clearly marked "Emergency Door" or "Emergency Exit" in letters 2 inches high at the top of the door. An arrow at least 6 inches long and 3/4 inch in width indicating the direction the release mechanism should be turned to open the door shall be painted in black on the yellow background. The outside of the emergency window shall be labeled "Emergency Exit" in letters at least 2 inches high, directly above the window. There shall not be any labeling on the glazing indicating an emergency exit or emergency door.

(10) A distinctive audible signal automatically operated shall clearly indicate to the driver the unlatching of any emergency window and no cutoff switch shall be installed in the circuit.

(11) The area on the inside above the emergency door shall be covered with padding at least 2 inches high the entire width of the door opening.

(12) If the bus has a side emergency door, there shall be a clear, unrestricted area to permit an exit aisle of 12 inches from the center aisle of the bus without having to go over any obstructing seat. The 12-inch measurement may be taken at any position from floor to roof. The intent of this subsection is to provide a 12-inch unrestricted aisle to and through the side emergency door.

(13) Buses of 10,000 pounds GVWR or less manufactured in 2 stages (chassis-body) shall provide emergency exits as required for larger vehicles.

(14) Buses of 10,000 pounds GVWR or less manufactured in a single stage need not have an emergency exit providing there are two separate openings where persons may exit under normal conditions. All doors on this bus shall be capable of being opened from the inside and outside.

TRANS 300.40 EXHAUST SYSTEM. (1) The exhaust system which includes the exhaust manifolds, joining gaskets, piping leading from the exhaust manifold, muffler and tail pipe shall not enter the bus body at any location. The exhaust system pipes shall be of nonflexible steel except that those buses which utilize a diesel engine may be equipped with a flexible pipe of not more than 18 inches long between the engine and the first exhaust pipe hanger.

(2) An exhaust system that has its exit on the left side shall have the exit point located no further forward than behind the driver's position.

(3) An exhaust system that has its exit on the right side shall have the exit point located behind the rear wheels.

(4) An exhaust system that exits at the rear shall extend to, but not beyond, the rear limit of the bumper.

(5) Every exhaust system exit shall extend to, but not over 1 inch beyond the body limits of the bus. The exhaust shall be directed to prevent an accumulation of exhaust gases underneath the bus.

(6) The complete exhaust system shall be tightly connected and free from leaks.

TRANS 300.41 FIRE EXTINGUISHER. (1) Each bus shall be equipped with a fire extinguisher mounted in full view in the driver's compartment or mounted inside a compartment in the driver's area if the compartment is in plain view and is labeled "Fire Extinguisher" in red letters to indicate its location.

(2) The fire extinguisher may be locked or kept in a locked compartment provided it is not locked when passengers are being transported.

(3) Any fire extinguisher purchased after July 1, 1977, or utilized on a bus that was manufactured after January 1, 1978, shall utilize dry powder. The fire extinguisher shall be 10 BC rating or a combination of 2 extinguishers with a total of at least 10 BC rating. Any bus manufactured after January 1, 1984, shall use only a single extinguisher.

(4) Each extinguisher shall be kept fully charged and sealed.

(5) Automobiles and station wagons shall have an extinguisher rated at least 5 BC and shall utilize dry powder.

TRANS 300.42 FIRST AID KIT. (1) Each school bus shall carry a first aid kit. The container shall be moistureproof and dustproof and of rigid construction. The kit shall be mounted in full view in the driver's compartment, or it may be placed in an enclosed unlocked compartment in the driver's area providing the compartment is labeled "FIRST AID KIT" or marked with a red cross emblem in plain view indicating the location of the kit. The kit shall be removable without the use of any tools or keys.

(2) School buses with a seating capacity of more than 10 persons shall carry a 16 unit kit or larger containing at least the following items.

Adhesive bandage, 1-inch.....	2 packets
Bandage compress, 2-inch.....	2 packets
Bandage compress, 4-inch.....	4 packets
Gauze bandage, 4-inch.....	2 packets
Gauze compress, 3-inch x 3-inch.....	2 packets
Gauze compress, 24-inch x 24-inch minimum.....	1 packet
Triangular bandage, 40-inch.....	2 packets
Wire splint.....	1 packet

(3) A school bus with a passenger carrying capacity of 10 or less persons shall have a 10 unit kit containing the following:

Adhesive bandage, 1-inch.....	2 packets
Bandage compress, 2-inch.....	2 packets
Bandage compress, 4-inch.....	4 packets
Gauze compress, 24-inch x 24-inch minimum.....	1 packet
Triangular bandage, 40-inch.....	1 packet

(4) An automobile may carry the kit in the locked luggage compartment or trunk of the vehicle.

(5) All units shall be in sanitized packages.

TRANS 300.43 FENDERS. Each school bus shall provide protection from debris thrown by the tires by the use of fenders or body

construction. The tire tread shall be within the fender or body construction.

TRANS 300.44 FLOOR COVERING (1) The floor in the underseat, driver's compartment, step-well and the toeboard areas including the tops of the wheel housings, shall be covered with a fire-resistant material.

(2) Buses of 10,000 pounds GVWR or less shall have the floor covering secured so it cannot shift. The edges and seams shall be secured. The covering shall be of a non-skid material.

(3) Buses of more than 10,000 pounds GVWR shall have floor covering the total floor area and in the aisle, step-well and entrance shall be of nonskid material, either when wet or dry, and shall be of a rib type. The covering shall not be cracked and shall be securely bonded or fastened to the floor. All seams shall be sealed.

TRANS 300.45 FRAME. (1) Alterations to the frame side members may only be made by the chassis or body manufacturer.

(2) Holes shall not be permitted except where originally provided in the chassis frame. There shall be no welding to the frame except by the chassis or body manufacturer.

TRANS 300.46 FUEL TANK AND FUEL SYSTEM INTEGRITY. (1) All fuel systems and tanks must be maintained free of leaks. The fuel tank shall be attached to the bus in a manner that prevents any movement of the tank while the bus is in motion.

(2) All fuel lines shall be secured in a manner that will prevent wear.

(3) The filler pipe or device shall be located so that the fuel, if spilled or overfilled, will not drip or drain on any part of the exhaust system.

(4) Every fuel system shall be properly vented to prevent any accumulation of fumes.

(5) The fuel tank shall meet any national standards applicable for the type of fuel used.

TRANS 300.47 HEATERS. (1) An inside temperature of not less than 50° fahrenheit at average minimum January temperatures as established by the U.S. department of commerce, weather bureau, for the area in which the bus is to be operated shall be maintained throughout the bus.

(2) The heater hose shall be adequately supported to guard against excessive wear or abrasion and shall not interfere with or restrict the operation of any engine function. Heater lines inside the passenger compartment shall be shielded to prevent accidental contact by the driver or passengers.

TRANS 300.48 HORN. Every bus used to transport pupils shall be equipped with a horn in good working order and capable of emitting a sound audible under normal traffic from a distance of not less than 200 feet.

TRANS 300.49 INSIDE HEIGHT. (1) The inside height of the school bus shall be 72 inches or more, measured metal to metal, at any point on longitudinal center line from front vertical bow to rear vertical bow.

(2) Buses of 10,000 pounds GVWR or less need not comply with this section.

TRANS 300.50 INSULATION. The ceilings and walls of buses manufactured in two stages and all buses of more than 10,000 pounds GVWR shall be insulated to reduce heat and cold transfer.

TRANS 300.51 INSTRUMENTS, GAUGES. (1) Every school bus shall be equipped with the following illuminated instruments to indicate malfunctions or gauges to indicate a measure or capacity:

(a) Air pressure or vacuum, where air or vacuum brakes are used with low energy supply warning system.

(b) Ammeter or voltmeter.

(c) Fuel.

(d) Odometer-speedometer

(e) Oil pressure.

(f) Water temperature.

(2) All instruments and gauges shall be in operating condition and shall be mounted so as to be clearly visible to the seated driver.

TRANS 300.52 INTERIOR. (1) Every school bus shall have a fire resistant inner lining on the ceilings and walls. The interior rearward metal panels shall be lapped over forward panels to reduce the likelihood of injury in the event of separation. The exposed edges of all interior panels shall be beaded, hemmed or flanged.

(2) Projections from the ceiling shall not be allowed in the entrance way or aisle. All speakers shall be flush mounted except in the driver's compartment.

TRANS 300.53 LADDERS. A school bus shall not have a ladder attached to the interior or exterior while it is in motion.

TRANS 300.54 LIGHTS, LAMPS, AND REFLECTORS. (1) The following lights, lamps, and reflectors are required on a school bus painted the yellow and black color combination. Each lamp shall be operational.

(a) The bus shall be equipped with alternating red flashing lamps.

1. The bus shall be equipped with 2 red warning lamps at the rear of the bus and 2 red warning lamps at the front of the bus, which shall be controlled by a manually actuated switch and shall flash alternately at rate of 60 to 120 cycles per minute. A brake or door operated

switch shall not be permitted. The "on" period shall be long enough to permit bulb filament to come up to full brightness.

a. An option is permitted, whereby, 2 additional alternating flashing red lights may be mounted on both the front and rear of the bus. The additional front facing lights shall be located between the bottom of the windshield and the top of the highest headlamp. They may be mounted on the fender or the cowl.

b. The additional rear facing lights may be separate lamps mounted within 12 inches above or below the directional turn signals or may be incorporated in an existing lamp. Any incorporation with an existing unit shall not interfere with or override the existing unit's function.

c. The optional system shall have units with a red lens of at least the same diameter as the required alternating lights. The alternating "on," "off" positions shall be opposite from those of the required alternating lights. The effect will produce the required top mounted flashing light and an optional mid-height mounted light to flash on opposite sides simultaneously. The result can be described as a "wig-wag" or "cross-arm" effect.

2. The red warning lamps shall be of seal beam construction or other improved type such as strobe, not less than 5 inches in diameter and visible from a distance of at least 500 feet along the axis of the vehicle in bright sunlight.

3. There shall be a visible or audible means of giving clear and unmistakable indication to driver when the signaling system is turned on.

4. Each red warning signal lamp shall be mounted with its axis substantially parallel to the longitudinal axis of the bus.

5. The front and rear red warning signal lamps shall be spaced as far apart laterally as practicable, and in no case shall the spacing between lamp centers be less than 3 feet.

6. The front red warning signal lamps shall be located so that they can be clearly distinguished when headlamps are lighted on lower beam.

7. The warning signal lamps shall be mounted at the front above the windshield and at the rear so that the lower edge of the lens is not lower than the top line of the side window openings.

8. The front and the rear signal lamps shall be unobstructed by any part of the bus from 5° above to 10° below horizontal and from 30° to the right and 30° to the left of the centerline of the bus.

9. The area around the lens of each alternately flashing red signal lamp and extending outward approximately 3 inches shall be painted black on all school buses. This subdivision shall not apply to vehicles not specifically manufactured as school buses and which have red warning signal lamps mounted above the roof top. Red warning signal lamps on such buses shall be equipped with black hoods at least 3 inches long.

10. Except as provided in sub. (9) above, red warning signal lamps may be equipped with hoods to shield from rays of sun for improved visibility.

11. Lamps shall meet the requirements of SAE J887a.

12. School buses painted other than glossy yellow are prohibited from having the alternating red flashing lights mounted on the vehicle.

(b) Two backup lamps shall be provided which shall conform to SAE J593e.

(c) There shall be 2 red clearance lamps on the rear and 2 amber clearance lamps on the front, mounted as high and wide as practicable to

indicate it's extreme width. Buses less than 80 inches wide are exempt from this paragraph.

(d) The bus shall be equipped with direction or turn signal lamps.

1. There shall be at or near the front, facing forward, one amber turn signal light on each side of the vertical centerline mounted at the same height, as wide as practicable. The bus may be equipped with signals mounted in the body. If not equipped with body mounted front turn signals, double faced signals shall be installed either on the fender or hood and shall not extend beyond the outer edge of the fender but shall be as wide as practicable. Mounting shall not be higher than the bottom of the windshield or lower than the headlamps. This paragraph does not apply to buses of 10,000 pounds GVWR or less provided the bus meets the requirements of s. 347.15, Stats.

2. There shall be on the rear, one red or amber signal on each side of the vertical centerline as wide as practicable mounted at the same height.

3. Rear turn signals shall be mounted no less than 15 inches nor more than 83 inches above the roadway.

4. Both the front and the rear direction signals shall comply with SAE J588f.

5. An auxiliary side mounted signal shall be installed on the sides of the body at approximately seat level, rub rail height, just to the rear of the service door on the right side and approximately opposite the driver's seat on the left side. These shall operate in conjunction with the turn signals. This subdivision applies to school buses of 30 feet or more in length. These lamps shall comply with SAE J914a.

(e) Each bus shall be equipped with a four-way hazard warning operating unit which shall operate independently of the ignition or equivalent switch and when activated shall cause the turn signal lamps to flash simultaneously.

(f) The headlamps shall comply with SAE J579c.

(g) Each bus shall be equipped with a light designed to indicate when the high beam headlamps are lit and located to be visible to the driver.

(h) Each bus, 80 or more inches wide shall be equipped with 3 amber identification lamps to the front and 3 red identification lamps to the rear with lamp centers no less than 6 inches nor more than 12 inches apart. No part of the front lamp or mountings shall be below the top of the bus windshield.

(i) Each bus, 30 feet or more in length shall be equipped with intermediate side marker lamps meeting SAE J592e mounted no less than 15 inches above the road surface and at or near mid-point between the front and rear side marker lamps.

(j) Each bus shall have a license plate lamp to illuminate the rear license plate. The lamp shall meet the standards of SAE J587e.

(k) Each bus shall be equipped with side marker lights. One amber lamp shall be located on the side as far forward as possible and one red lamp shall be located as far rearward as practicable. The lamps shall conform to SAE J592e.

(l) There shall be 2 red stop lamps meeting the requirements of SAE J586c mounted on the rear, one on each side of the vertical centerline at the same height and as far apart as practicable. The stop lamps shall be a separate unit from the tail lamp. Buses of more than 10,000 pounds

GVWR shall be equipped with lamps at least 7 inch in diameter. The stop lamps shall activate upon application of the service brakes.

(m) There shall be 2 red tail lamps meeting the requirements of SAE J585d mounted on the rear, one on each side of the vertical centerline at the same height and as far apart as practicable. The tail lamps shall activate in conjunction with the headlamps.

(n) There shall be reflex reflectors mounted on the bus located as follows:

1. On the rear, 2 red reflectors equally spaced as far apart from the center as practicable.

2. On the side, 2 reflectors; one amber at or near the front and one red at or near the rear.

3. On the side of buses 30 feet or more in length, one amber reflector located at or near the center.

4. Each reflector shall be mounted no less than 15 inches nor more than 60 inches above the road surface.

(2) Retroflective tape or sheeting may be used on a school bus as an additional warning device. It may cover the rub and snow rails, rear bumper, and the words "School Bus" on the rear.

(3) Any lamp, light, or reflector shall be replaced only with a unit meeting the standards of this section.

(4) A strobe light, the use of which is permitted under s. 347.25(2), Stats., is an optional piece of equipment to be used on a school bus that is painted the yellow and black color scheme and shall comply with the following requirements:

(a) The strobe light shall be of solid state construction. It shall emit a white light by flashing, not rotating, 360° around the vertical axis.

(b) The strobe light shall be capable of operating continuously without any significant change in the flash rate under all operating conditions or weather extremes experienced in this state. The flash rate shall be no less than 60 nor more than 120 per minute. The double flash effect shall be counted as a single flash.

(c) The electronic power supply circuit shall provide a minimum of 10 joules to the strobe tube. The flash shall be so designed that there is a double flash or pulsing of the flash tube. The effect will produce an apparent double flash with an interval before another double flash. The double flash may have different intensities with the first flash having the highest intensity. A singular or steady flash, even though within the specified flash rate, does not meet the requirements of this paragraph.

(d) The strobe light shall be permanently mounted on the centerline of the bus roof. A strobe unit may not extend more than 6-1/2 inches above the roof.

(e) The unit shall be wired with an independent switch with an indicator light in the driver's compartment showing when the light is in operation.

TRANS 300.55 MIRRORS. (1) Buses of more than 10,000 pounds GVWR shall comply with the following:

(a) There shall be one interior rearview mirror of at least 6 by 30 inches. The mirror shall be so constructed that the corners are rounded and the edges are smooth or protected.

(b) There shall be 2 outside rearview mirrors, one to the right and one to the left of the driver. Each mirror shall have not less than 50 square inches of unobstructed reflective surface and shall be firmly supported and adjustable to give the driver a clear view past both the right and left rear of the bus.

(c) There shall be a separate adjustable convex mirror mounted on the right side to provide an additional close-in field of vision from the service door rearward. This mirror may be mounted on the bracket containing the mirror required in par. (b) or may be mounted on the bracket required for the cross view mirror. The mirror required in this paragraph shall be independently adjustable. It shall have at least a 5 inch diameter face. A mirror affixed to the face of a mirror described in par. (b) does not meet the requirements of this paragraph.

(2) Buses of 10,000 pounds GVWR or less shall have an interior and 2 exterior rearview mirrors, one on the right and one on the left side of the bus capable of reflecting a view past the rear of the bus. Mirrors shall not have sharp corners or edges.

(3) All buses except automobiles and station wagons shall be equipped with at least one 7-inch diameter convex mirror which shall be mounted in such a manner that the driver may observe a reflection of the road from beneath the front bumper forward to a point where direct observation is possible.

(4) Each mirror required in this section shall not be broken, cracked or discolored.

TRANS 300.56 MOUNTING OF BODY. (1) The chassis frame for body-on-chassis type buses shall extend to the rear edge of the rear body cross member. Insulating material used at body to frame contact points

shall be so attached that it will remain in position under any anticipated maintenance or bus operating conditions.

(2) The body shall be securely fastened to the chassis frame. Every body attachment device shall be securely fastened and maintained with proper tension.

TRANS 300.57 OPENINGS. (1) All openings in the floorboard or firewall, between chassis and passenger compartment, such as for the gear shift lever and auxiliary brake lever, shall be sealed to prevent fumes or foreign material from entering the passenger compartment.

(2) Every school bus shall be free of rusted or deteriorated areas which could permit the entrance of foreign substance into the interior of the vehicle.

TRANS 300.58 RUB RAILS. (1) Every bus shall contain a rub rail located at approximately seat level. Except at the emergency door or rear compartment, the rub rail shall extend from the rear side of the service door completely around the bus body, to a point of curvature near the front of the body on the left side. On a bus of 10,000 pounds GVWR or less the rub rail need not extend around the rear corners of the bus.

(2) There shall be one rub rail located between the floor line and 9 inches above the floor line. It shall extend over the same longitudinal distance as the upper rub rail, except where it meets the wheel housing, and may terminate at the radii of the right and left rear corners.

(3) Rub rails shall be constructed of 16 gauge longitudinally corrugated or ribbed steel of 4-inch minimum width, flange to flange. Each rub rail flange shall be attached at each body post and all other upright structural members.

(4) Rub rails that are pressed in or snapped on do not meet the requirements of this section and are not permitted.

(5) Rub rails applied to transit type buses with the engine in the rear may terminate at the forward edge of the engine compartment.

(6) This section applies to all buses of more than 10,000 pounds GVWR, all buses where the body is manufactured by an entity other than the chassis manufacturer and all buses painted the yellow and black traditional school bus color.

TRANS 300.59 SEATING. (1) All seats shall be forward facing and securely fastened to that part or parts of the body which support them. Passenger seat cushions shall be fastened to prevent the cushions from disengaging from the seat frames in event of an accident. There shall be a minimum space of 24 inches between the forward surface of a seat back and the rear surface of the seat or barrier ahead measured across the seat cushion without depressing any surface.

(2) The forwardmost seat on the right side of the bus shall be located so as not to interfere with the driver's vision.

(3) A minimum of 36 inches of headroom for the sitting position above the top of the undepressed cushion line of all seats shall be provided. The measurement shall be made vertically not more than 11 inches from the side wall at cushion height and at the fore and aft center of the cushion.

(4) (a) The backs of seats of similar size shall be of the same width at the top and of the same height from the floor and shall slant at the same angle with the floor. The top corners, and at least 10 inches of the top of the back surface of the seat backs shall be padded sufficiently to reduce the likelihood of injury upon impact. Seat

cushions and seat backs shall not have any torn or worn-through covering material.

(b) The seat back of the rearmost seat shall be of the same dimension as the seat immediately forward. Failure to comply with this standard will result in the loss of one seating position, or two seating positions if this situations occurs in both rows, when determining the capacity of the bus. This requirement shall apply only to school buses of more than 10,000 pounds GVWR, manufactured after January 1, 1984.

(5) Fold down, fold up or reclining seats or seat backs will not be permitted in a school bus except in a station wagon or suburban type vehicle. Rear facing or center facing seats in a station wagon are not permitted.

TRANS 300.60 SERVICE DOOR. (1) The service door shall be under control of the driver and so designed as to prevent accidental opening. When a hand lever is used, no parts shall come together so as to shear or crush any fingers.

(2) The service door shall be located on the right side of the bus and within the view of the driver.

(3) The service door shall have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches.

(4) The upper and lower glass panels of the service door shall be of safety glass. The bottom of the lower glass panel shall not be more than 35 inches from the ground when the bus is unloaded. The top of the upper glass panel shall not be more than 6 inches from the top of door. The upper glass must be hermetically sealed.

(5) Any lock used in conjunction with the service door must be constructed to insure that the lock is not in the locked position while transporting passengers.

(6) The service door shall be equipped with a seal to prevent dust and cold air from entering the vehicle.

(7) Buses having a GVWR of 10,000 pounds or less need not comply with subs. (3) and (4).

(8) Autos and station wagons are exempt from this section.

TRANS 300.61 SIGNS AND LETTERING. (1) Only signs and lettering approved by state law or rule shall appear on or in the bus.

(2) The body shall bear words "School Bus" in black letters at least 8 inches high and one-inch stroke on both front and rear or on yellow signs attached thereto. The lettering shall be placed above the rear window and the front windshield. This lettering shall only appear on buses painted the yellow and black school bus colors and meeting all the requirements of ch. TRANS 300.

(3) Each school bus painted the yellow and black color scheme shall have a fleet number consisting of no more than four digits. The fleet number shall appear on the front and the rear of the bus. Additional fleet number locations may be utilized at the owners option.

(4) Fleet numbers shall be no less than 3 inches nor more than 6 inches high with a 1/2-inch brush stroke.

(5) Fleet numbers are prohibited in the black area around the alternately flashing red lights.

(6) The name and address (and telephone number, if desired) of the owner or operator shall be displayed below the window line in the panel to the rear of, and as close as possible to, the service door in letters

not less than 2 inches high nor more than 3 inches high by 1/4-inch stroke. If desired, this marking may also be painted on the left side of the bus below the driver's window. Owner's decals may be used to comply with this subsection if the decals do not violate other provisions of this section.

(7) The name of the school or school bus firm may appear on the sides of the bus between the seat line rub rail and the bottom window line in contrasting yellow or black letters not more than 10 inches high. This option shall not relieve the owner or operator from the requirements of sub. (6).

(8) The vehicle's registration card or a photocopy of the card shall be displayed in the driver's compartment and shall be mounted in a holder so the card can be read without removal. The passenger capacity shall appear on the inside of the bus above the front windshield so it can be easily read. It shall indicate the number of seated passengers that may legally be transported. Each wheelchair position shall be counted as a seated passenger.

(9) Each school bus with an emergency exit shall have the exit identified as required in s. TRANS 300.39.

(10) The following signs are the only other decals, stickers, or lettering that may appear on the bus:

- (a) No smoking, eating or drinking, (maximum 2-inch high letters).
- (b) Any signs required by the federal bureau of motor carrier safety or national highway traffic safety administration.
- (c) Identification as to location of emergency equipment.
- (d) Seat belt use required in this vehicle.

(e) Seating chart, (maximum size $8\frac{1}{2}$ x 11 inches).

(f) Rules pertaining to passenger conduct, (maximum $8\frac{1}{2}$ x 11 inches).

(g) Any decal denoting membership in an association dealing with school transportation. The decal shall be placed within 12 inches to the rear of service door and below window line. It may not exceed 36 square inches.

(h) A sign indicating type of fuel used.

(i) A placard, decal or other device, not to exceed 90 square inches in size, to identify the bus to the children.

(11) Automobiles, station wagons and other vehicles not identified as a school bus by color may, but need not comply with this section.

TRANS 300.62 STEERING. (1) No changes may be made in the steering apparatus without the approval of the chassis manufacturer.

(2) There shall be a clearance of at least 2 inches between the steering wheel and the cowl, instrument panel, windshield, or any other surface.

(3) The steering components shall not be loose, worn, or binding and steering stops shall be adjusted so the tire does not rub at any point. The steering wheel lash may not exceed $1/8$ turn.

(4) The power steering system shall not leak nor shall the drive belt be cracked, frayed or worn.

TRANS 300.63 STEPS. (1) The first step at the service door shall not be more than 16 inches from the ground.

(2) The riser of any step shall not be more than 15 inches. If there are two or more risers they shall be approximately equal in height.

(3) The step may not protrude beyond the widest part of the body.

(4) Each step shall be covered with or constructed of nonskid material.

(5) All steps shall be enclosed to prevent the accumulation of ice or snow except the first step of a bus of 10,000 pounds GVWR or less which may have an exposed step with a nonskid surface.

(6) Each bus shall be equipped with a stepwell light which activates automatically upon opening of the service door to illuminate the steps.

(7) Each school bus except an automobile, station wagon, or suburban type vehicle shall be equipped with a grab handle at least 10 inches in length, located inside the service door entrance for providing assistance to enter or leave the bus.

TRANS 300.64 STOP SIGNAL ARM. (1) A stop signal arm is required on every school bus painted with the yellow and black color scheme. The stop signal arm shall not be extended until the bus is completely stopped.

(2) Any bus manufactured after January 1, 1978, shall have the stop signal arm controlled by the service door. The stop signal arm shall not become operational until the service door opens. The stop signal arm shall be installed in such a manner that it cannot be activated unless the alternately flashing red lamps are in operation.

(3) The following specifications shall govern installation of the stop signal arm:

(a) It shall be a metal octagon-shaped sign at least 18 inches wide and 18 inches long exclusive of the mounting bracket. All sheet metal parts shall be 16 gauge or heavier.

(b) It shall have the word "STOP" on both sides in white letters at least 6 inches high and 7/8-inch wide on a bright red background. The outer edge shall have a white border at least 1/2-inch wide. All other parts of the assembly shall be painted black.

(c) It shall be equipped with two 4-inch or larger, double faced alternating flashing red lamps to be mounted near the perimeter of the sign with a minimum of 12 inches spacing between lamp centers. These lamps shall be wired to the circuit of the flashing red warning lamps mounted on the front and rear of the bus.

(4) Reflectorizing of the sign shall be optional.

(5) The stop signal arm shall be mounted on the left side of bus as close to the driver's window as practicable.

(6) The requirements of this section for installation and operation of the stop signal arm shall not apply to school buses which are operated only in areas where use of the flashing red warning lights is not permitted, nor to vehicles painted other than glossy yellow and not identified by school bus signs.

TRANS 300.65 SUNSHIELD. Each school bus shall have an interior sunshield installed above the windshield. Each bus of more than 10,000 pounds GVWR shall have one of a size not less than 6 by 16 inches.

TRANS 300.66 SUSPENSION SYSTEM. (1) The bus shall be equipped with front and rear shock absorbers.

(2) The shock absorbers shall be maintained free of leaks and all mountings shall be in good working order.

(3) A school bus shall not be operated with any broken springleaf or worn, loose, mislocated shackles or "U" bolts.

TRANS 300.67 TIRES. (1) The front tires shall have tread depth of at least $4/32$ -inch and rear tires shall have tread depth of at least $2/32$ -inch around the entire periphery measured at 2 points no less than 15 inches apart in any major tread groove.

(2) A school bus shall not be operated with regrooved, recapped, or retreaded tires on the front wheels.

(3) A school bus shall not be operated with cuts or chunks missing exposing the cord, recaps peeled loose or off, or showing an indication of ply separation.

(4) Tires of different size or ply rating may be used except that all tires on an axle must be the same size.

(5) All tires shall be maintained to meet the manufacturer's GAWR and GVWR.

TRANS 300.68 WHEELS. (1) A bus may not be operated with any cracked rims, loose lug bolts or nuts or elongated stud holes.

(2) The wheel bearings shall not have more than $1/4$ -inch free play when measured at the tire level.

(3) The following measurements are the maximum amount of play permitted in the king pins or ball joints when measured at the outside of the tire:

(a) When the wheel diameter is 16 inches or less, not more than $1/4$ inch play is permitted.

(b) When the wheel diameter is greater than 16 inches the play permitted is $3/8$ inch.

TRANS 300.69 WINDOWS. (1) In this section:

(a) "ANS Z26.1" means the standards for glazing in land vehicles adopted by the American national standards institute, 1430 Broadway, New

York, New York, 10018, under its designation Z26.1-1966, including supplement Z26.1a-1969. These standards are on file in the offices of the department of transportation, the secretary of state, and the revisor of statutes and may also be obtained from the American national standards institute at the address given above.

(b) "AS 1" to "AS 11" have the same meaning as in section 6 of ANS Z26.1.

(c) "AS 12" means a safety plastic material that:

1. Complies with tests 10, 13, 16, 17, 21, and 24 of ANS Z26.1;
2. Complies with tests 19 and 20 of ANS Z26.1 with the exception of the test for resistance to undiluted denatured alcohol; and
3. In new buses or in replacement glazing, having affixed a manufacturer's label specifying instructions and agents for cleaning the material that will minimize the loss of transparency.

(d) "AS 13" means a safety plastic material that:

1. Complies with tests 16, 22 and either 23 or 24 of ANS Z26.1;
2. Complies with tests 19 and 20 of ANS Z26.1 with the exception of the test for resistance to undiluted denatured alcohol; and
3. In new buses or in replacement glazing having affixed a manufacturer's label specifying instructions and agents for cleaning the glazing that will minimize the loss of transparency.

(2) The glazing in windows to the right and left of driver shall be identified by the designation AS 1 or AS 2. The rearmost windows shall be designated AS 1, AS 2, AS 4 or AS 5, except that the lower glazed portion of the emergency door may be designated AS 8. Any other side push-out or kick-out windows may be identified with glazing designated as AS 1, AS 2, AS 3, AS 4, AS 5, AS 12, or AS 13.

(3) On buses of more than 10,000 pounds GVWR, the window to the driver's immediate left and the window immediately to the rear of the service door shall be hermetically sealed glass with an insulating air space.

(4) Each full side window shall provide a vertical opening of at least 9 inches, obtained by lowering the top portion of the window. The driver's window may be of a sliding forward and rearward construction. A bus of 10,000 pounds GVWR or less, having windows which do not open from the top shall have no more than a 5-inch wide opening.

(5) All windows shall operate freely. The side window latches shall be capable of holding the window securely in place in all positions.

(6) All exposed edges shall be banded or ground.

(7) A distinctive audible signal automatically operated shall clearly indicate to the driver the unlatching of an emergency window when the ignition is in the "on" position. A cut-off shall not be installed in the circuit.

TRANS 300.70 WINDSHIELD. (1) The glass in the windshield shall be laminated safety glass identified by the designation AS 1. This mark shall be visible and legible. The glass shall be of such quality as to prevent distortion of view in any direction.

(2) The windshield shall not be obstructed.

TRANS 300.71 WINDSHIELD WASHER. (1) Each school bus shall be equipped with an operational windshield washer system that provides fluid for the windshield wipers to effectively clean the windshield.

(2) The washer shall be maintained and operational.

TRANS 300.72 WINDSHIELD WIPERS. Every school bus shall be equipped with 2 complete and operational windshield wipers. The system shall have at least 2 speeds.

TRANS 300.73 WIRING. All circuits of the bus shall be protected by a circuit breaker or fuse of sufficient rating to handle the current load.

SUBCHAPTER III

SPECIAL ADDITIONAL REQUIREMENTS

TRANS 300.75 SPECIAL SERVICE OPENING. (1) Every school bus used for transporting persons in wheelchairs shall have an enclosed door opening located on the right side of the vehicle which will permit the use of a ramp or lift.

(2) The door of the special opening shall be equipped with a device to hold it open.

(3) Each door shall have a window.

(4) The opening shall be equipped with material which seals out dirt, water, and fumes.

(5) There shall be a light which illuminates the platform and the area outside the opening.

(6) A drip moulding shall be installed to effectively divert water from the opening.

TRANS 300.76 POWER LIFT OR RAMPS. (1) Every school bus transporting persons in wheelchairs shall be equipped with either a power lift or ramp which utilizes the special service opening specified in s. TRANS 300.75.

(2) If a school bus uses a ramp it shall have a nonslip material on the surface or may have a metal nonslip surface construction. The ramp shall be in a secured position while the bus is in motion. The ramp shall be at least 30 inches wide on the surface.

(3) A power lift may be of varying design and operation. A lift may be designed to cause only minor vehicle design change other than for the special service opening, or a different design lift may be built to raise or lower through the floor of the vehicle. Each of these designs shall have a minimum lifting capacity of 700 pounds. A label stating that the lift meets this requirement shall be either permanently affixed to the power lift in a visible location or the information may be permanently stamped in a visible location.

(4) The power source and mechanism of the lift shall be enclosed.

(5) The platform of the power lift shall be covered with nonslip material or it may be of nonslip construction. The surface shall be at least 30 inches wide.

(6) Every platform of a power lift shall be designed and constructed to prevent any movement when it is in the stored position. This requirement may be met by either a mechanical locking device or by the internal design of the lift.

(7) The power lift shall be so designed that the operator has positive control to move, stop, or reverse the lift travel at will. In addition, the lift shall be controlled by a limit switch or by-pass valve which will immediately stop the direction of travel upon contact with the ground or a foreign object.

(8) The power lift shall be so designed that the platform does not fall in the event of a power failure.

(9) The platform shall have a device on the curb side to prevent any wheelchair from rolling off when the lift is in any horizontal position other than at ground level.

(10) The power lift shall be designed to prevent the operator or the person being transported from becoming entangled or crushed during the lift operation.

(11) When in the stored position, every power lift or ramp shall have the surface facing to the center and the surface facing to the rear of the bus padded to prevent injury in the event of contact in an accident. This requirement shall not apply to the platform surface but shall apply to the sides of the platform if they are exposed and not concealed by a padded super structure.

TRANS 300.77 WHEELCHAIR FASTENERS. (1) Each wheelchair shall be secured to the bus with a fastening device with sufficient strength to:

- (a) Retain the chair in the event the bus overturns.
- (b) Prevent the chair from moving.
- (c) Prevent the chair's wheels from leaving the floor in the event of a sudden stop or start.

(2) The fastening device may be either a metal locking unit that secures the wheelchair to the wall or floor or a webbing belt system that accomplishes the same purpose.

(3) No wheelchair may be attached to any door.

(4) A webbing belt system shall be secured to the bus at not less than 2 points. It shall be anchored in the bus frame, body posts or other metal structure. Interior paneling shall not be considered an adequate anchorage.

(5) A webbing belt used to secure the wheelchair to the body frame shall not be used to also secure the passenger to the wheelchair.

TRANS 300.78 SEATS AND RESTRAINTS. (1) Seat frames may be equipped to accept seat belts or other types of restraints.

(2) Every occupant shall be secured to the wheelchair while being transported. This securement shall be separate and in addition to that required in s. TRANS 300.77.

(3) Aisle facing seats in buses transporting wheelchairs are permitted over the wheel housing provided they are equipped with a device to prevent a passenger from sliding off either end. These seats shall be permanently mounted and shall not have a retractable seating surface.

SUBCHAPTER IV

GENERAL REQUIREMENT

TRANS 300.85 REPLACEMENT EQUIPMENT. Any item of equipment if covered by a standard in this chapter shall, upon replacement, be replaced with an item meeting the original standard. Any modification of a school bus shall be in conformity with state rules in effect at the time of the modification.

TRANS 300.86 ENFORCEMENT POLICY. (1) The enforcement policy of the division of state patrol shall take into consideration the age, condition, and equipment of buses before granting approval for their continued use. The division shall not permit the use of any bus for school transportation purposes which is deemed to be unsafe or unfit for such service.

(2) In construing and enforcing the provisions of this chapter, the act, omission or failure of any officer, agent, servant or other person acting for or employed by the registered owner or the lessee of the bus, whoever has control, done within the scope of his employment is deemed to be the act, omission or failure of such registered owner or lessee. This subsection shall not apply to violations of ch. 346, Stats.

TRANS 300.87 INSPECTION PROCEDURES. Upon notification by the department of transportation, or the department of public instruction, or any public school official, the owner or operator shall present all school buses for inspection at the time and place designated or the department may, at its option, inspect the school buses at the owner's place of business.

TRANS 300.88 PROHIBITED VEHICLES. The following vehicles are prohibited from being utilized as a school bus:

- (1) A panel truck.
- (2) A station wagon utilizing wood in the body construction.

TRANS 300.89 APPLICABILITY. (1) School buses manufactured prior to January 1, 1983 shall be subject to the rules applicable at the time the vehicle was first registered as a school bus in Wisconsin. School buses subject to previous standards may be made to conform to the standards in ch. TRANS 300 when these standards are less stringent.

(2) All school buses manufactured on January 1, 1983 or later shall be subject to this rule. The department will consider the date of manufacture as being the date on which the second stage manufacturer or the school bus body manufacturer completes the installation of the body on the chassis or the date a single manufacturer completes the unit.

(3) A school bus previously utilized in another state which is now to be used for Wisconsin pupil transportation shall meet all the requirements in effect at the time it is first introduced into the Wisconsin system. In addition, the bus shall meet the requirements of s. TRANS 300.35(6) and (7). A school bus that does not meet these requirements shall not be used for pupil transportation in Wisconsin.

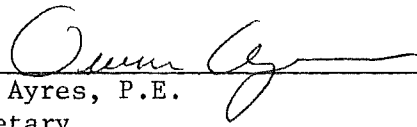
TRANS 300.90 SEVERABILITY. Should any section, paragraph, phrase, sentence or clause of this chapter be declared invalid or unconstitutional, the remainder of this chapter shall not be affected thereby.

TRANS 300.91 PENALTIES. Violations of any provision of ch. TRANS 300 shall be prosecuted under the governing statute. Where no penalty is provided, the violation shall be prosecuted as set forth in s. 341.04(3), Stats.

(End)

This rule shall take effect as provided in s. 227.026(1)(intro.), Stats.

Dated at Madison, Wisconsin, this 17TH
day of December, 1982.



Owen Ayres, P.E.
Secretary
Wisconsin Department of Transportation



State of Wisconsin \

DEPARTMENT OF TRANSPORTATION



PLEASE REPLY TO:

OFFICE OF GENERAL COUNSEL

4802 Sheboygan Avenue

P. O. Box 7910

Madison, WI 53707

Telephone: (608) 266-8810

December 16, 1982

OGC 82-81

Mr. Orlan L. Prestegard
Revisor of Statutes
Room 411 West, State Capitol
Madison, Wisconsin 53702

RECEIVED

DEC 17 1982

Re: Clearinghouse Rule 82-83

Revisor of Statutes
Bureau

Dear Mr. Prestegard:

Enclosed for filing, pursuant to sec. 227.023, Wis. Stats., is a certified copy of CR 82-83, an administrative rule relating to school bus safety standards. An additional uncertified copy of CR 82-83 is enclosed for use as a printer's copy. This rule is submitted by the Wisconsin Department of Transportation.

Sincerely,

Philip Peterson
Deputy General Counsel

PPP:hml

Enclosures

cc: William Harvey
Michael Moschkau
Carl Zutz