STATE OF LOUISIANA DEPARTMENT OF EDUCATION

(State Emblem)

MINIMUM STANDARDS FOR SCHOOL BUSES

IN LOUISIANA

BULLETIN 1213

1998 REVISED EDITION

BULLETIN 1213 MINIMUM STANDARDS FOR SCHOOL BUSES 1998

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INTRODUCTION

One of the most important functions of a school system's operation relative to pupil transportation is the purchasing, operation, and maintenance of safe school buses. This bulletin is designed to provide School Boards with a list of minimum standards which would allow for safe transportation of pupils. It enables bus dealers to bid competitively based on uniform standards which meet minimum specifications for every school district in the state. In addition, Optional Equipment Standards have been made a part of this bulletin in order to assist transportation officials in designing school buses which meet their specific needs.

The Department of Education is especially indebted to these Transportation Supervisors who have donated their valuable time and effort to the revision of this important document.

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FOREWORD

All pupil transportation vehicles purchased on or after July 1, 1999, shall meet or exceed the requirements herein.

The appropriate sections of these specifications apply to all school buses for pupil transportation in Louisiana which are purchased, owned, or operated by a district board of education and to all school buses leased or contracted to a district board of education by private owners for the transportation of pupils to and from school and all school-related activities.

GENERAL PROVISIONS

FEDERAL MOTOR VEHICLE SAFETY STANDARDS

- 1. All school buses shall meet or exceed the minimum requirements of these specifications and meet or exceed all applicable Federal Motor Vehicle Safety Standards (FMVSS).
- 2. All school buses shall be equipped as required by the minimum specifications contained herein and as required by applicable FMVSS.
- 3. In the event of a conflict between the requirements of an applicable FMVSS, as referred to in this section, and the minimum specifications contained in this regulation, the requirements of the FMVSS shall prevail.

USED SCHOOL BUSES

- 1. Any used school bus purchased for use in Louisiana by or for a school system shall meet legal requirements of the Louisiana Revised Statutes for motor vehicles and shall meet Louisiana specifications for school buses that were in effect on the date the vehicle was manufactured.
- 2. No school bus may be replaced by another school bus that was manufactured before the 1978 model year. This applies to buses purchased by veteran owners/operators, by newly hired owners/operators and by school boards, individual schools, booster clubs, etc. for the purposes of transporting children to and from school and school-related activities and for use as spare buses.
- 3. All replacement school buses, at the time they are acquired by the owner, must be ten (10) or less model years old for veteran owners/operators and school districts and five (5) or less model years old for newly hired owners/operators. The number of years shall be reckoned from the date of introduction of the model year. (Example, a 1988 model school bus is considered 10 model years old as of 1998.)

CHANGES IN SPECIFICATIONS

Any part of these specifications may be changed at any time by addenda adopted by the State Board of Elementary and Secondary Education. Changes will be made to comply with changing FMVSS or statutes of the Louisiana Legislature.

CERTIFICATION BY MANUFACTURERS

All school bus vendors shall certify to the purchaser (local education agency, contract or individual), upon delivery that the school bus(es) sold for use by Louisiana school systems meet or exceed all standards specified herein and comply with the applicable FMVSS set forth by the United States Department of Transportation. (See Appendix A T-10 Form)

REPAIRS

Any repairs or alterations to any bus that falls under the guidelines of this bulletin shall be made in accordance with all specifications contained herein and all applicable FMVSS.

RESPONSIBILITY OF DEALERS AND MANUFACTURERS

- 1. The responsibility of compliance with Bulletin 1213 specifications rests with the vendors and manufacturers.
- 2. If any vendor or manufacturer sells school transportation equipment that does not conform to all these and all other applicable State and Federal specifications, the vendor shall be required to make necessary conversions to bring the vehicle into compliance. All cost related to such alteration shall be borne by the vendor.
- 3. Local school systems shall have the option of imposing additional specifications that meet or exceed state and federal standards.

COMPLETION OF FORM T-10

It is mandatory that the seller of any new or used school bus shall complete a T-10 form verifying that the purchased vehicle meets all state and federal school bus specifications applicable at the time of manufacture.

SANCTION

Any school bus that does not meet the minimum specifications set forth in Bulletin 1213 must not be used until such time that the bus is in compliance with said Bulletin.

BUS BODY STANDARDS

DEFINITION OF SCHOOL BUS TYPES

-TYPE A-

A conversion or body constructed and installed upon a van-type compact truck or front-section vehicle, with a gross vehicle weight rating of 10,000 pounds or less, designed for carrying more than 10 persons.

Picture inserted on hard copy.

-TYPE B-

A conversion or body constructed and installed upon a van or front-section chassis, or stripped chassis, with a gross vehicle weight rating of more than 10,000 pounds, designed for carrying more than 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.

Picture inserted on hard copy.

-TYPE C-

A body installed upon a flat back cowl chassis with a gross vehicle weight rating of more than 10,000 pounds, designed for carrying more than 10 persons. All of the engine is in front of the windshield and the entrance door is behind the front wheels.

Picture inserted on hard copy.

-TYPE D-

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 10,000 pounds, designed for carrying more than 10 persons. The engine may be behind the windshield and beside the driver's seat. It may be 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.

Picture inserted on hard copy.

BUS BODY STANDARDS

AISLES

Minimum clearance of all aisles shall comply with current FMVSS, "School Bus Passenger Seating and Crash Protection". All emergency doors shall be accessible by a 12" minimum aisle.

AUXILIARY FAN

An auxiliary fan at least six (6) inches in diameter shall be located in the center of the windshield to provide maximum effectiveness for the right side of the windshield and the service door.

BACK UP AUDIBLE ALARM

Every new and used bus purchased shall be equipped with an automatic back-up audible alarm which sounds on backing. It must be capable of emitting sound audible under normal conditions from a distance of not less than one hundred feet. The alarm shall also be capable of operating automatically when the vehicle is in neutral or a forward gear but rolls backward.

BATTERY

The battery is to be furnished by the chassis manufacturer. The body manufacturer shall securely attach the battery on a slide out or swing tray in a closed, vented compartment in the body skirt, so that the battery is accessible for convenient servicing from the outside. Battery compartment door or cover shall be hinged at the front or top, and secured by an adequate and conveniently operated latch or other type fastener.

BODY SIZE

The "body length" shall be measured from the inside surface of the windshield to the outside surface at the rear of the bus.

	PUPIL CAPACITY			
Number of rows of seats	3-3 Plan Rump width of 13 inches	3-2 Plan Rump width of 13 inches		
4	23/24	19/20		
5	29/30	24/25		
6	35/36	29/30		
7	41/42	34/35		
8	47/48	39/40		
9	53/54	44/45		
10	59/60	49/50		
11	65/66	54/55		
12	71/72	59/60		
13	77/78	64/65		
14	83/84	69/70		
15	89/90	74/75		

BUMPERS

- 1. The front and rear bumpers shall meet current FMVSS. The front bumper shall extend to the outer edges of the fenders. The rear bumper shall be 10" in width and wrapped around the back corners of the bus extended forward at least 12".
- 2. No trailer hitch or other device designed for towing shall be designed, fixed, or attached upon any school bus operated in the State of Louisiana.

CEILING

Ceiling specifications shall meet all current FMVSS.

COLOR

- 1. The school bus body, including hood and fenders, shall be painted "National School Bus Yellow".
- 2. The body trim, including mirrors and rub rails, shall be glossy black.
- 3. The grill shall be black or grey.

- 4. The rear bumper and lettering shall be glossy black.
- 5. The wheels shall be black or grey.

CONSTRUCTION

The construction of the school bus body shall be in compliance with current FMVSS.

CROSSING CONTROL DEVICE

Every new and used bus purchased shall be equipped with a crossing control device actuated by the driver and operated in conjunction with the stop arm. The crossing control device shall pivot out from the right side of the front bumper to prevent persons from walking in front of the bus.

DEFROSTERS

Defrosters shall be of sufficient capacity to keep the windshield, window to the left of the driver, and glass in the entrance door clear of fog, frost, and snow. Defrosters shall be constructed to meet current FMVSS.

DOORS-SERVICE AND EMERGENCY

- 1. Service and emergency doors shall be constructed and located in compliance with current FMVSS.
- 2. The emergency door shall be marked directly above the door with the words "EMERGENCY DOOR" OR "EMERGENCY EXIT" on both the inside and outside of the bus in letters at least two (2) inches high.
- 3. No decals or other markings may be placed on either emergency glass panel.
- 4. The installation of locks on the emergency and service doors shall include a device to prevent the activation of the starter mechanism while the emergency door is locked.
- 5. There shall be no manual locking of any doors while the bus is in operation.

ELECTRICAL SYSTEM

The electrical system shall be in compliance with current FMVSS.

FIRE EXTINGUISHER

Each bus shall be equipped with at least one dry-chemical type fire extinguisher with a gauge of at least five (5) pound capacity, Type A,B,C, mounted in the manufacturer's bracket and located in the driver's compartment in a clearly marked location. The fire extinguisher shall bear the label of Underwriters' Laboratories, Inc. showing a rating of not less than 2A-10B;C.

FIRST AID KIT

1. The bus shall have a removable moisture proof and dust proof first aid kit mounted in an accessible area within the driver's compartment, and shall be marked to indicate its location.

2. A minimum unit shall include the following supplies:

Two (2) single units	Adhesive Tape1 inch x 2 1/2 yards
Two (2) single units	Sterile Gauze Pads3 inches x 3 inches (12 per unit)
One (1) single unit	Adhesive Bandage3 inches x 3/4 inches (100 per unit)
One (1) single unit	Bandage Compress2 inch (12 per unit)
One (1) single unit	Bandage Compress3 inch (12 per unit)
Two (2) single units	Sterile Gauze Roller Bandage2 inches x 6 yards
Two (2) single units	Non-sterile Triangular Bandageapproximately
	40 inches x 36 inches x 54 inches with 2 safety pins
Three (3) single units	Sterile Gauze36 inches x 36 inches (U.S.P. 2428 count)
Three (3) single units	Sterile Eye Pad(1 per unit)
One (1) pair	Scissors

FLOOR

The floor shall meet current FMVSS.

HEATERS

Heaters shall be constructed and installed in compliance with current FMVSS.

IDENTIFICATION

- 1. Only lettering and signs approved by state law or regulation shall appear on school buses. Lettering shall be limited to the name of the owner or operator necessary for identification, including the name of the parish/city school system. All lettering shall be in block form.
- 2. The lettering shall be placed as high as possible to provide maximum visibility and conform to "series B" of Standard Alphabets for Highway Signs. (Contact the National Commission

- on Safety Education; 1201 Sixteenth Street NW, Washington, D.C.,20036 for more information.)
- 3. All letters and numbers used for identification purposes shall be in glossy black enamel or glossy black vinyl decals.
- 4. The body shall bear the words "SCHOOL BUS" in glossy black letters at least eight (8) inches high on both the front and rear of the school bus or on signs attached thereto.
- 5. The bus shall have the name of the owner on the left side of the bus under the driver's side window in glossy black lettering at least two (2) inches in height, but not more than four (4) inches in height. The name should be the owner's legal name and should not contain nicknames, handles, etc.
- 6. The numbers located on the front bumper shall be of contrasting color.
- 7. The numbering system on school buses shall be a minimum of five (5) inches in height and is required in and limited to four locations.
 - a. On the right side of the bus, it is behind the service door below the window line and not to exceed twenty-four (24) inches below this point.
 - b. On the left side, it is directly below the driver's window.
 - c. On the rear, it is beneath the right rear tail light.
 - d. On the front, it is either in the center of the front bumper, the right side of the bumper, or on a panel along the bumper. The numbers on the front bumper shall be of contrasting color to the bumper.
- 8. Only the following signs/decals are approved for use on school buses:
 - a. Decals indicating handicapped riders are on board.
 - b. A decal indicating the school bus stops for all railroad crossings.

INSIDE HEIGHT

The inside height shall be a nominal seventy-two (72) inches or more, measured metal to metal, at any point on the longitudinal centerline from front vertical bow to rear vertical bow.

LAMPS AND SIGNALS

- 1. All school buses shall be equipped with lamps and reflectors in accordance with current FMVSS.
- 2. Two reflex reflectors shall be installed on each side of the bus, one at or near the front and one

at or near the rear.

LENGTH AND WIDTH

The overall width of the bus shall not exceed eight (8) feet and the overall length shall not exceed forty (40) feet.

METAL TREATMENT

All metal used in the construction of the bus shall be in compliance with current FMVSS.

MIRRORS

- 1. All buses shall be equipped with an interior mirror mounted so the driver can view the entire interior of the bus while in a normal seated driving position.
- 2. The interior mirror shall have rounded corners and protected edges.
- 3. All exterior mirrors shall be in compliance with current FMVSS.
- 4. All buses shall be equipped with two (2) exterior mirrors (one on each side) each giving an unobstructed view from the mounting position to the rear of the bus while the driver is in a normal seated driving position. The exterior mirrors shall be easily adjustable and rigidly mounted to reduce vibration.
- 5. Each bus shall have a mirror system which provides a clear, unobstructed view of the area in front of the bus and immediately adjacent to the right and left front wheels and at the entrance door.

MOUNTING

The body shall be mounted on the chassis in compliance with current FMVSS.

MUD FLAPS

All buses shall be equipped with mud flaps on the rear of the vehicle or immediately behind the rear wheels.

OVERHEAD STORAGE

Overhead storage compartments or racks are not allowed in the passenger compartment of any bus.

RUB RAILS

All buses shall be equipped with two rub rails constructed and installed in compliance with current FMVSS.

SEAT BELT FOR DRIVER

A lap belt/shoulder harness seat belt for the bus driver shall be provided in compliance with current FMVSS.

SEATS

- 1. All seats and seat covering shall be in compliance with current FMVSS.
- 2. All seats shall be forward facing and securely fastened to the floor.

STEERING WHEEL

The steering wheel shall be constructed and installed in compliance with current FMVSS and have a minimum clearance of at least two (2) inches between the steering wheel and the cowl instrument panel.

STEPS

- 1. All steps shall be constructed and installed in compliance with current FMVSS.
- 2. The first step at the service door shall not be less than ten (10) inches and not more than fourteen (14) inches from the ground when measures from the top of the step.
- 3. Steps shall be enclosed to prevent the accumulation of ice and snow.
- 4. At least one device shall be designed to assist passengers during ingress and egress, and be of such design as to eliminate entanglement.

STOP SIGNAL ARMS

All school buses shall be equipped with two semaphore arms, constructed and placed in compliance with current FMVSS.

SUN SHIELD

The sun shield shall be a minimum of six (6) inches X thirty (30) inches, adjustable, transparent, and mounted on two brackets.

UNDERCOATING

The entire underside of the bus body, including floor sections, cross members, and below floor line side panels, shall be coated with rust-proofing compound for which the compound manufacturer has issued notarized certification of compliance to the bus body builder that the compound meets or exceeds all performance and qualitative requirements of paragraph 3.4 of Federal Specification TT-C-520B.

VENTILATION

- 1. The body shall be equipped with a suitable controlled ventilating system of sufficient capacity to maintain proper quantity of air under operating conditions, without having to open windows except in extremely warm weather.
- 2. Static-type non-closeable exhaust ventilation shall be installed in low-pressure area of roof.
- 3. Roof hatches designed to provide ventilation, regardless of the exterior weather conditions, may be provided.

WEIGHT DISTRIBUTION

Weight distribution of a fully-loaded bus on a level surface shall be such as not to exceed the manufacturer's front gross axle rating and rear gross axle weight rating.

WHEEL HOUSING

- 1. The wheel housing shall allow for easy tire removal and servicing and be designed to support seat and passenger loads.
- 2. The wheel housing shall be attached to the floor sheets in such a manner as to prevent any dust or water from entering the bus body and have an inside height of ten (10) inches or less.

WINDOWS

1. Each full side window, other than emergency exits designated to comply with FMVSS 217, shall provide an unobstructed emergency opening of at least nine (9) inches, but not more than thirteen

- (13) inches high and twenty-two (22) inches wide, obtained by lowering the window. One side window on each side of the bus may be less than twenty-two (22) inches wide.
- 2. Optional tinted and/or frost-free glazing may be installed in all doors, windows, and windshields consistent with federal, state, and local regulations.

WINDSHIELD

The windshield shall be constructed and installed in compliance with current FMVSS.

WINDSHIELD WASHERS

A windshield washer system shall be installed in compliance with current FMVSS.

WINDSHIELD WIPERS

- 1. All windshield wiper systems shall comply with current FMVSS.
- 2. A windshield wiping system, two speed or variable speed with an intermittent feature, shall be provided.
- 3. The wipers shall be operated by one or more air or electric motors of sufficient power to operate the wipers. If one motor is used, the wipers shall work in tandem.

WIRING

All wiring shall comply with current FMVSS.

BUS CHASSIS STANDARDS

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All chassis specifications shall apply to Type A, B, C, and D school buses unless exceptions are noted in exceptions to minimum standards.

AIR CLEANER

The air cleaner installation shall be in compliance with the current FMVSS.

AXLES

The front and rear axle shall have a capacity which is in compliance with the current FMVSS.

BATTERY

The storage battery, as established by the manufacturer's rating, shall be of sufficient capacity to care for starting, lighting, signal devices, heating, other electrical devices and have a minimum of 475 cold cranking amperes.

BRAKES

All school buses shall be equipped with brakes in compliance with the current FMVSS, "Hydraulic Brake System" or "Air Brake System", as appropriate. All repairs and/or adjustments shall meet current FMVSS.

CLUTCH

Clutch torque capacity shall be equal to or greater than the engine torque output, and shall have a starter interlock device installed to prevent actuation of the starter if the clutch is not depressed. All repairs and/or adjustments shall be in compliance with the current FMVSS.

COLOR

Chassis, including wheels and front bumper, shall be black. Body cowl, hood, and fenders shall be national school bus yellow. The flat surface of the hood may be non-reflective black or national school bus yellow.

DRIVE SHAFT

The drive shaft shall be protected by a metal guard or guards to prevent it from whipping through the floor or dropping to the ground.

EXHAUST SYSTEM

- 1. The exhaust system shall be properly insulated from the fuel tank and fuel tank connections by a securely attached metal shield at any point where it is twelve (12) inches or less from the fuel tank.
- 2. The exhaust pipe, muffler, and tailpipe shall be outside the bus body and secured to the chassis.
- 3. The tailpipe shall be constructed of seamless or electrically welded tubing of at least 16-gauge steel or equivalent.
- 4. The tailpipe shall be located in such a manner as to deflect exhaust past the extreme rear corner of the bus.
- 5. The tailpipe shall NOT be located within twenty-two (22) inches of the center of the rear bumper and shall extend past the rear bumper at a length not to exceed two (2) inches.
- 6. Any repairs or modifications to the exhaust system shall be in compliance with this bulletin and current FMVSS.
- 7. The muffler shall be constructed of corrosion-resistant material.

FENDERS

Fenders shall be constructed in compliance with current FMVSS.

FRAME

The frame shall be constructed in compliance with current FMVSS.

FUEL TANK

The fuel tank and fuel system shall be in compliance with current FMVSS and hold a minimum of thirty (30) gallons.

GENERATOR OR ALTERNATOR

- 1. All Type A and Type B buses, up to 15,000 pounds gross vehicle weight rating, shall have a minimum 60-amp alternator.
- 2. All buses equipped with an electrically powered lift shall be equipped with a minimum 100-amp alternator.
- 3. All wiring and mounting shall be in compliance with current FMVSS.

GOVERNOR

An engine speed governor is permissible. When it is desired to limit road speed, a road speed governor should be installed.

HORN

Each bus shall be equipped with two (2) horns of standard make with each horn capable of producing a complex sound in bands of audio frequencies between 250 and 2,000 cycles per second.

INSTRUMENTS AND INSTRUMENT PANEL

- 1. The chassis shall be equipped with the following instruments and gauges (lights in lieu of gauges are not acceptable):
 - a. Speedometer
 - b. Odometer
 - c. Voltmeter with graduated scale
 - d. Oil pressure gauge
 - e. Water temperature gauge
 - f. Fuel gauge
 - g. High beam indicator
 - h. Air pressure or vacuum gauge in compliance with current FMVSS.

- 2. All instruments shall be easily accessible for maintenance and repair, and mounted in an instrument panel so as to be clearly visible to the driver in a normal seated position.
- 3. The instrument panel shall have lamps of sufficient candlepower to illuminate all instruments and gauges.

OIL FILTER

An oil filter with a replaceable element shall be provided and connected by flexible oil lines if not built in or an engine mount design. The oil filter shall have a minimum of at least one (1) quart capacity.

OPENINGS

All openings in the floorboard or firewall between the chassis and the passenger compartment shall be sealed.

PASSENGER LOAD

It shall be unlawful for anyone responsible for the transportation of school children on school buses, including drivers or operators of buses, transportation supervisors, school superintendents, and members of parish and city school boards to permit a number of children exceeding the number of seats available on a bus to be transported at one time on such bus. [Louisiana Statute R.S.32:293 (C)]

SHOCK ABSORBERS

The bus shall be equipped with double action shock absorbers compatible with the manufacturer's rated axle capacity.

SPRINGS

The capacity of springs or suspension assemblies shall be commensurate with the chassis manufacturer's gross vehicle weight rating.

STEERING GEAR

The steering gear and assembly shall be in compliance with current FMVSS. Power steering is required.

TIRES AND RIMS

- 1. Tires and rims of proper size, and tires with load rating commensurate with the chassis manufacturer's gross vehicle weight rating, shall be provided.
- 2. All tires and rims on a given vehicle shall be of the same size and rating.
- 3. A spare tire, if carried, shall be properly mounted outside the passenger compartment.
- 4. Recapped tires, if used, shall be used only on the rear wheels.

TRANSMISSION

- 1. Automatic transmissions shall have no fewer than three forward speeds and one reverse speed. The shift selector shall provide an indent between each gear position when the gear selector and shift selector are not steering column mounted.
- 2. In manual transmissions, second gear and higher shall be synchronized.

UNDERCOATING

The undersides of the steel or metallic-constructed front fenders shall be undercoated with a rust proofing compound that meets or exceeds the requirement of paragraph 3.4 of Federal Specification TT-C-520B.

EXCEPTIONS TO MINIMUM STANDARDS

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TYPE "A" BUSES

- 1. The vehicle must meet all Federal Motor Safety Standards and Specifications.
- 2. All minimum standards applying to Type C and Type D buses shall apply to Type A buses with the following exceptions:

The vehicle shall:

- a. have a minimum headroom of sixty-three (63) inches.
- b. be equipped with one flashing stop arm.
- c. have a minimum gross vehicle weight of 8,200 pounds.
- d. be equipped with a 100 ampere alternator or an 80 ampere alternator and two batteries, if it is equipped with a lift.
- e. have a minimum aisle width of twenty-six (26) inches from front to back, if the vehicle is equipped with a lift.
- f. have the rear bumper at manufacturer's standards equipment on van conversions or a minimum of eight (8) inches when body is constructed on a van type truck.
- g. have a heater at manufacturer's standards.
- h. have a grab handle not less than ten (10) inches in length and attached to the barrier.
- 3. Fender level marker lights are not required.
- 4. A barrier conforming to federal standards shall be installed on the right side immediately behind the entrance door.

EXCEPTIONS TO MINIMUM STANDARDS

TYPE "B" BUSES

- 1. The vehicle must meet all current FMVSS and Specifications.
- 2. All minimum standards applying to Type C and Type D buses shall apply to all Type B buses with the following exceptions:

The vehicle shall:

- a. be equipped with a 100 ampere alternator or an 80 ampere alternator, or one (1) group 8D battery if equipped with a lift.
- b. have a minimum aisle width of thirty (30) inches from front to back if the vehicle is equipped with a lift.
- 3. The gross vehicle weight of the vehicle shall be more than 10,000 pounds.
- 4. A door may be located to the left of the driver on a GP chassis.

STANDARDS FOR SPECIALLY EQUIPPED SCHOOL BUSES

VEHICLES DESIGNED TO TRANSPORT STUDENTS WITH DISABILITIES

GENERAL REQUIREMENTS

Vehicles designed to transport students with disabilities shall comply generally with all minimum standards for school buses.

Specifications for additional equipment or modifications necessary for special needs transportation:

- 1. Wheelchair lift doors shall be located on the right side of the bus and far enough to the rear to prevent the door, when opened, from obstructing the service door.
- 2. The wheelchair lift door shall open outwards, and a positive fastening device shall be installed to hold the door in an open position.
- 3. The wheelchair lift door shall be constructed of materials as the other school bus doors and equivalent in strength.
- 4. The door panel(s) shall extend below the full length of the skirt when an elevator type lift is used.
- 5. A two panel door is optional. If used, the panels shall be of approximately equal width, equipped with hinges and hinged to the side of the bus. Both panels shall open outward.
- 6. A two panel door shall be equipped with at least a one-point fastening device on the rear panel to the floor or header and at least two-point devices to the floor and header on the forward door panel.
- 7. The door shall be equipped with a device that will actuate an audible or visible signal located in the driver's compartment when the doors are not secured.
- 8. Each door shall contain a fixed or moveable window aligned with the lower line of the other windows of the bus, and, as nearly as practicable, the same size as the other bus windows.
- 9. The forward panel shall be equipped with an overlapping flange to close the space where the panels meet.
- 10. A weather seal shall be provided to close all door edges.
- 11. Door posts and headers shall be reinforced sufficiently to provide support and strength to the

areas of the side of the bus not used for service doors.

POWER LIFT

- 1. The power lift shall have a minimum capacity of 750 pounds.
- 2. The power lift platform shall be a minimum of twenty-eight (28) inches wide and forty (40) inches long, including guard panels and rails.
- 3. The platform shall be covered with non-skid material.
- 4. A self-adjusting or equivalent ramp of sufficient width to minimize the incline to the lift platform shall be attached to the lift platform.
- 5. Controls shall be provided that enable the operator to activate the lift mechanism from either inside or outside of the bus.
- 6. A device shall be installed on the lift to prevent its operation until the door or doors are opened.
- 7. The power lift shall extend only from the side of the vehicle.
- 8. If a wheelchair lift is installed just rear of the service door, a stanchion and guard panel shall be installed between the lift and the service door.
- 9. A circuit breaker shall be installed between the power source and the lift motor.

RAMPS

- 1. Ramps are not permissible for use on Type "C" and "D" buses, except for emergency purposes.
- 2. Ramps shall be sufficient to hold 750 pounds of sustained weight.
- 3. Each ramp shall be equipped with protective flange on each longitudinal side to keep the wheelchair on the ramp.
- 4. The ramp shall be covered with nonskid material (i.e. webbed steel or rubberized material).
- 5. The ramp shall be equipped with a handle or handles and of such a weight as to permit one person to put the ramp in place and return it to the storage place.

AISLES

- 1. All aisles leading to the emergency door(s) from the wheelchair area shall be of sufficient width (minimum thirty (30) inches) to permit passage of a maximum sized wheelchair.
- 2. Thirty-nine (39) inch seats are permitted forward of the wheelchair area.

OTHER EQUIPMENT

Securing devices necessary to hold portable student support equipment such as oxygen bottles, ventilators, crutches, etc. shall be installed.

WHEELCHAIR FASTENING DEVICES

Position fastening devices shall be provided and meet current FMVSS.

OPTIONAL EQUIPMENT

OPTIONAL EQUIPMENT

SPECIFICATIONS

- 1. A system to monitor the exterior lights on the front and rear of the bus from the driver's seated position is permissible. Such a system shall indicate to the driver whether a light is operating.
- 2. A power service door is permissible if it is equipped with a manual override that allows the driver to manually operate the door if the power system fails.
- 3. A public address system with speakers inside and outside the bus is permissible if it is equipped with a selector switch that permits the driver to select "inside" or "outside" speakers and is mounted in the driver's compartment.
- 4. A lock with two (2) keys is permissible to be installed on the fuel supply service door.
- 5. An AM or FM radio, cassette player, or compact disc player are permissible.
- 6. Fog lamps are permissible and shall conform to current FMVSS.
- 7. Two way radio systems and/or cellular phones are permissible.
- 8. Buses may be equipped with four (4) seven (7) inch arrow faced turn signals.
- 9. Buses may be equipped with a fuel gauge inspection plate located immediately above the sending unit.
- 10. A seat designed for the bus attendant is permissible. The attendant's seat must be installed facing either the front or rear of the bus.
- 11. Body fluid clean-up kits are permissible.
- 12. Additional emergency exits are allowed provided they meet current FMVSS.
- 13. A bus may be equipped with tinted windows provided the window is shaded within Louisiana Department of Public Safety guidelines.
- 14. A heater booster pump may be installed on diesel powered buses.
- 15. An engine pre-heating device may be installed on diesel powered buses.
- 16. Combination side marker/turn signals may be installed.

- 17. If the stop arm is electrically controlled, it is permissible to equip it with a slip clutch for motor and transmission protection.
- 18. Alternative fuel systems are allowed provided they meet current FMVSS.
- 19. A clear lens strobe light may be installed on the rear one-third of the bus.
- 20. A video system to monitor driver and student behavior may be installed.
- 21. Exterior motion devices may be installed.
- 22. Buses may be equipped with low profile tires.
- 23. Reflective bus markings are allowed provided they meet all current FMVSS and state regulations.
- 24. Electronic security systems are permissible.
- 25. Hubometers are permissible.
- 26. Bus roofs may be painted white. The white paint may not extend beyond the drip rail. Front and rear caps must remain yellow.
- 27. External baggage compartments are allowed.
- 28. Diesel engine noise reduction packages are allowed.
- 29. Seat spacing may be altered to accommodate special devices. All seats must be forward facing.
- 30. An electronically controlled "cruise control" is permissible.
- 31. LED type stop arms are permissible.

MOTOR AND CHASSIS SPECIFICATIONS

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MOTOR

The chassis shall be equipped with a diesel engine that meets the specifications shown in the following table. It must also be a truck type engine. Diesel powered vehicles with hydraulically assisted hydraulic brakes shall have a chassis air or vacuum for stop arm operation. The vehicle shall also be equipped with power steering, dual horns, batteries with 1875 CCA, and front and rear shock absorbers.

Capacity	48 or less	53/54	59/60	65/66	71/72	77/78 or greater
Tire Size	10R x 22.5	10R x 22.5	10R x 22.5	10R x 22.5	10R x 22.5	11R x 22.5
Rim Size	22.5	22.5	22.5	22.5	22.5	22.5
Gross Vehicle Weight Rating	25,000	27,000	27,000	30,000	30,000	30,000
Gross Horsepower	180	190	190	190	190	210
Forward Transmission Speeds	4	4	4	4	4	5
Front Axle	10,000	12,000	12,000	12,000	12,000	12,000
Rear Axle	15,000	19,000	19,000	19,000	19,000	21,000
Alternator	130	130	130	130	130	130
Front Springs	10,000	12,000	12,000	12,000	12,000	12,000
Rear Springs	15,000	19,000	19,000	19,000	19,000	19,000

APPENDIX A FORM T-10

MANDATORY

FORM T-10 REV: 7/94

STATE DEPARTMENT OF EDUCATION	DATE: GUARANTEED FROZEN MILEAGE:
I propose to sell(Contract Owner or School Board)	the following described NEW/USED school bus. (circle one)
CHASSIS YEAR MODEL MAKE SERIAL NUMBER MILEAGE CONDITION	BODY YEAR MODEL MAKE SERIAL NUMBER MILEAGE CONDITION
This vehicle meets all Federal Motor Vehicle Safety manufacture.	Standards and Bulletin 1213 specifications applicable at the date of
I verify that the above information is true and correc	t to the best of my knowledge.
OFFICIAL PURCHASE AGREEMENT DATE: LICENSE NUMBER:	
	SIGNATURE (Seller)
	COMPANY
	ADDRESS
Purchased by:SIGNATURE	Approved by:LOCAL SCHOOL SYSTEM
ADDRESS	
	SIGNATURE OF LOCAL SCHOOL SYSTEM SUPERINTENDENT/TRANSPORTATION SUPERVISOR
COPIES SENT TO: WHITE/STATE DEPARTMENT OF EDUCATION	
CANARY/TRANSPORTATION DEPARTMENT	

PINK/PURCHASER GOLD/VENDOR

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