

**SCHOOL BUS MAINTENANCE AND SAFETY AUDIT PROGRAM
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SCHOOL BUS INSPECTION PROCEDURES

Effective Date: July 1, 2006

SCHOOL BUS INSPECTION PROCEDURE

This guide has been developed in accordance with the Public Education Department regulation 6.41.2 NMAC. This document will guide school district administrators and school transportation providers in the establishment of a Guide for School Bus Maintenance and a Safety Audit Program.

SCHOOL BUS INSPECTION PURPOSE

The purpose of this manual is to assist in identifying critical vehicle inspection items and to provide criteria for placing a vehicle(s) in a Pass Inspection or Does Not Meet Standards (Out Of Service) category subsequent to a school bus safety inspection.

I. RECORDS REQUIRED FOR CERTIFICATION AND SUBJECT TO AUDIT

In order to establish a School Bus Maintenance Program each school district shall establish written procedures to maintain the following:

MAINTENANCE RECORDS

Each service provider shall keep maintenance records for each school bus used to transport school children under the jurisdiction of the Public Education Department. A maintenance record shall contain at a minimum the following information in individual school bus files:

Year:

Make:

Model:

VIN:

Bus #:

Tire Size:

Owner Name:

Nature and due date of the various inspection and maintenance operations to be performed.

A record of all inspections, repairs and maintenance including date and nature.

DAILY PRE-TRIP AND POST-TRIP INSPECTION RECORDS

Each service provider shall ensure that pre-trip and post-trip inspections are conducted and documented before and after each trip. Each school bus shall be inspected by the school bus driver and/or persons designated by the transportation supervisor and/or transportation provider operating a public school bus under the jurisdiction of the Public Education Department. The inspections shall be conducted in accordance with the current standards for school bus operations, 6.41.4 NMAC.

The school district shall ensure that the service providers maintain records that document pre-trip and post-trip inspections on each school bus are being conducted. All faulty or improperly functioning equipment shall be reported in writing on a check sheet, which is signed by the driver, so that maintenance personnel are notified promptly allowing the condition to be repaired before the next trip in accordance with the criteria in the current maintenance guide. The school bus shall be placed **out-of-service** and may not be driven until **all** minimum standards for operation are met according to the current maintenance program guide.

RECORD KEEPING PROCEDURES

The maintenance records shall be accessible in individual files. The individual school bus files shall be readily accessible to inspectors or auditors authorized by the School Transportation Bureau of the Public Education Department.

MAINTENANCE FILE COMPONENTS

Maintenance files shall contain a written record of all mechanical work or service performed on a school bus. The file shall contain records of **all parts**, which are removed or replaced at periodic preventive maintenance intervals, or for any emergency service. Maintenance shall meet or exceed manufacture's recommended service interval for each body or chassis component and for all repairs.

II. CERTIFICATION OF INSPECTION AND MAINTENANCE

In order to establish a School Bus Maintenance and Safety Audit Program, the local school district shall designate a number of sufficient personnel to verify that school buses **meet standard conditions**, which includes a complete inspection of the body and chassis of each school bus operated by the school district or under contract to the school district under the jurisdiction of the Public Education Department.

PERSONNEL QUALIFIED TO CONDUCT SEMI-ANNUAL INSPECTION AND CERTIFICATION OF MAINTENANCE

The Public Education Department shall certify individuals to conduct semi-annual school bus inspections. School Bus Inspectors (SBI) act as agents and representatives of the Public Education Department while conducting school bus inspections. The school districts are required to contract or hire independent inspectors under contract or for hire, who are currently certified by the Public Education Department to conduct the semi-annual inspections.

INSPECTION CERTIFICATION PROCEDURE

After receiving training from a certified School Bus Inspector Trainer and with a Public Education Department School Bus Inspector (SBI) certification number, the SBI shall conduct a semi-annual inspection on each of the assigned school buses with only "G" or "SB" license plates. The SBI has authority and responsibility to audit any and all records related to school bus maintenance on a random basis. This includes Pre and Post-Trip Inspection forms and vehicle maintenance records. The SBI has the responsibility of notifying the School Transportation Bureau of any deficiencies they may note while providing bus inspections and audits of records. School Districts and Bus Contractors shall comply with any and all requests made by the SBI to review records and/or have wheels pulled. When providing school bus inspections, the final determination made on any deficiency found and noted in the electronic vehicle inspection report rests on the SBI. The SBI's determination at the time of inspection is final and the school district and/or bus contractor shall comply. ***The SBI shall require that a minimum of 10% of the school districts buses have wheels pulled at random during each cycle.*** The number of wheel positions that must be pulled on any school bus will be at the determination and discretion of the SBI. The vehicle owner shall bear the responsibility for securing the labor required, meeting timelines set by the SBI and any cost associated with having the required wheel positions pulled.

MEETS VEHICLE CONDITION STANDARDS

A school bus is considered to "**PASS**" inspection when **all** New Mexico Minimum Standards for School Buses, based on date of manufacture, are met, and all inspection criteria is met pursuant

to the New Mexico Guide for School Bus Maintenance and Safety Audit Program which outlines the specific established criteria.

PASS INSPECTION

Each school bus must "**PASS**" inspection before it is used to transport students under the jurisdiction of the Public Education Department. "Pass Inspection" means that no violations/defects exist on the school bus upon completion of inspection items contained in the New Mexico Guide for School Bus Maintenance and Safety Audit Program.

DOES NOT MEET VEHICLE CONDITION STANDARDS

Public Education Department Certified School Bus Inspectors **shall** declare any school bus "**OUT-OF-SERVICE**", which by reason of its mechanical or physical condition does not meet New Mexico Minimum Standards for School Buses, does not comply with inspection criteria as established in the New Mexico Guide for School Bus Maintenance and Safety Audit Program or would be likely to cause an accident or breakdown. **No school bus operation shall operate any school bus declared "OUT-OF-SERVICE" until all repairs required by the out of service notice have been satisfactorily completed and re-inspected by a certified school bus inspector.** The SBI shall make every effort to re-inspect the school bus when all required repairs have been completed.

Upon making the determination that a bus **does not** meet standard operating conditions the SBI shall properly indicate so in the electronic vehicle inspection report. If the owner can have the bus repaired at the inspection site, the SBI shall make every effort to re-inspect the school bus when all required repairs have been completed prior to his/her departure for the day. Upon completion of the re-inspection, if appropriate the SBI shall certify that the bus meets standards by indicating in the electronic vehicle inspection report. The school district may pay to the SBI a re-inspection fee.

If the repairs have not been satisfactorily completed prior to the SBI leaving for the day, the SBI shall then place a red "**out-of-service**" sticker on the windshield directly in the driver's line of sight. If it is not possible for the bus to be repaired at the inspection site for any reason and it is necessary to have it taken to a repair facility, a red "**out-of-service**" sticker shall immediately be placed on the school bus and the bus **shall be towed** from the site and delivered to the repair facility. If the SBI determines that the violation does not pose a danger to the driver or other motorists, then the SBI has discretion to allow the bus to be escorted to a repair facility. This **shall** be done by utilizing a school district administrator. Under **no** circumstance will a bus displaying an "**out-of-service**" sticker be driven on any public roadway without an authorized escort.

SCHOOL BUS PHASE OUT

School buses twenty (20) years of age, from the date of (body) manufacture shall be removed from service in accordance with Section 22-16-2, NMSA 1978.

SCHOOL BUS MAINTENANCE AND SAFETY AUDIT PROGRAM

A state electronic vehicle inspection report shall be submitted for each completed semi-annual inspection. The electronic vehicle inspection shall be certified and downloaded at the location authorized by the SBI. The SBI shall review the school bus maintenance files to assist them in conducting school bus inspections.

III. SCHOOL DISTRICT RESPONSIBILITIES

The school district is responsible for coordinating, in advance, with the SBI the time(s) and location(s) when school bus inspections shall be conducted. It is the responsibility of the school district to ensure that the school buses are at the agreed upon location(s) at the agreed upon time(s). The district is responsible for cooperating with the SBI to ensure that all school buses are inspected in accordance with NMPED Regulation 6.41.2 and the Guide for School Bus Inspections that govern the inspection of all school buses used for the transportation of school children. The district will maintain full responsibility for ensuring that all school buses owned by the school district or under contract to provide services to the school district are inspected as required and purchasing bus inspection professional liability insurance on behalf of the SBI with such coverage(s) and in such amount(s) as may be determined by the school district.

IV. RECORD RETENTION REQUIREMENTS MAINTENANCE RECORDS

Life of the school bus while under the Public Education Department.

SEMI-ANNUAL AND/OR RANDOM INSPECTIONS

Three (3) years.

DAILY PRE-TRIP POST-TRIP INSPECTIONS

One (1) school year.

SCHOOL BUS INSPECTOR SERVICE AGREEMENT

Three (3) years

LIGHTING SYSTEMS-HEAD LAMPS
1.01

STANDARD:

1. Headlamps shall be mounted so that the beams are readily adjustable, both vertically and horizontally and the mounting shall be that the aim is not readily disturbed by ordinary conditions of service.
2. Every school bus, shall be equipped with a head lamp system composed of at least two white head lamps, on the front at the same height, an equal number at each side of the vertical centerline as far apart as practical. Height above road surface in inches measured from the center of the lamp at curb weight, not less than 22 nor more than 54.
3. Aiming and intensity. Headlamps shall provide general, adequate and reliable illumination.
4. Headlamps must be fully operational, activated and deactivated by a switch which meets Original Equipment Manufactures (OEM) specifications.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Envelope is cracked or broken.
2. Headlamp aim is not proper.
3. All headlamps must have equal and adequate intensity.
4. The school bus does not have both headlamps operational on low and high beam.
5. Headlamps are not activated and deactivated by a switch, which meets OEM specifications.
6. Standards are not met.

LIGHTING SYSTEMS - DIRECTIONAL SIGNAL AND HAZARDOUS WARNING SIGNAL LIGHTS

1.02

STANDARD:

1. Every school bus shall be equipped with a signaling system that in addition to indicating a change in direction by emitting a flashing light on the side of the bus towards which a turn will be made shall have a switch or combination of switches that will cause the two front turn signals and the two rear turn signals to flash simultaneously as a vehicular traffic hazard warning.
2. Every school bus shall be equipped with two (2), amber front turn signals, at or near the front, one on each side of the vertical centerline at the same height and as far apart as practicable. Height above the road surface in inches measured from the center of the lamp at curb weight not less than 15 or more than 83.
3. Every school bus manufactured **after July 1, 1996** shall be equipped with two (2), amber rear turn signals, that are at least seven (7) inches in diameter or if a shape other than round, a minimum thirty-eight (38) square inches of illuminated area and meet SAE specifications. School buses manufactured **after July 1, 2003** shall be equipped with two (2) amber rear turn signal lamps of the **Light Emitting Diode (LED) TYPE**. Turn signal lamps shall be placed as wide apart as practical and their centerline shall be approximately eight (8) inches below the rear window. Type A-II conversion vehicle lamps must be at least 21 square inches in lens area and be in manufacture's standard color.
4. Every school bus manufactured **after July 1, 1996** shall be equipped with amber side-mounted turn signal lights. The turn signal lamp on the left side shall be mounted rearward of the stop signal arm and the turn signal lamp on the right side shall be mounted rearward of the service door.

DOES NOT MEET STANDARD

(Out of Service - Repair Before Next Dispatch)

1. The pilot light does not indicate to the driver that all signal lamps and four-way hazardous warning signal lamps are in operation.
2. Signal lamp lenses are cracked, missing, broken, obscured.
3. Does not have all turn signal lamps or four-way hazardous warning signal lamps operative.
4. Turn signal lamps do not flash automatically upon activation.
5. 1/4 (25%) or more individual lights out per LED lamp.
6. Any four-way hazardous warning system directional lamp does not automatically and simultaneously flash upon activation.
7. Directional signal lamps or hazardous warning signal lamps are not activated and deactivated by a switch, which meets OEM specifications.
8. Standards are not met.

LIGHTING SYSTEMS - SCHOOL BUS ALTERNATELY FLASHING SIGNAL LAMPS

1.03

STANDARD:

1. Every school bus shall be equipped with two (2) red lamps at the rear of the vehicle and two (2) red lamps at the front of the vehicle. School buses manufactured **after July 1, 2003** shall be equipped with RED lamps of the **LED TYPE**.
2. In addition to the four (4) red lamps described above, four (4) amber lamps shall be installed so that one (1) amber lamp is located near each red signal lamp, at the same level, but closer to the vertical centerline of the bus. School buses manufactured **after July 1, 2003** shall be equipped with AMBER lamps of the **LED TYPE**. The system of red and amber lamps shall be wired so that amber lamps are energized manually, and red lamps are automatically energized (with amber lamps being automatically de-energized) when stop signal arm is extended or when bus service door is opened. An amber pilot light and a red pilot light shall be installed adjacent to the driver controls or in the dash assembly for the flashing signal lamp to indicate to the driver which lamp system is activated.
3. Area around lens of each alternately flashing signal lamp and extending outward approximately three (3) inches and shall be black in color. In installation where there is no flat vertical portion of body immediately surrounding entire lens of lamp, a circular or square band of black approximately three (3) inches wide, immediately below and to both sides of the lens, shall be black in color on the body or roof area against which the signal lamp is seen (from distance of 500 feet along axis of vehicle). Visors or hoods, black in color, with a minimum depth of four (4) inches shall be provided **on 1987 and newer buses**.
4. Red lamps shall flash at any time stop signal arm is extended.
5. All flashers for alternately flashing red and amber signal lamps shall be enclosed in the body in a readily accessible location.

DOES NOT MEET STANDARD:

(Out of service - Repair Before Next Dispatch)

1. Any of the alternately flashing signal lamp lenses are cracked, missing, broken, faded or obscured.
2. The school bus does not have a visible or audible means of indicating to the driver that the alternating flashers are on.
3. The alternating flashers are not visible from a minimum distance of 500 feet to the front and rear of the vehicle.
4. 1/4 (25%) or more individual lights out per LED lamp.
5. Standards are not met.

LIGHTING SYSTEMS - CLEARANCE, SIDE MARKER, IDENTIFICATION LAMPS AND REFLEX REFLECTORS

1.04

STANDARD:

1. Identification lamps are required on all school buses eighty (80) inches in width or wider. Three (3) amber identification lamps shall be mounted on the front, one on the vertical centerline of the school bus, and one on either side. All three lamps shall be mounted on the same level as close as practical to the top of the bus with lamp centers spaced not less than six (6) inches or more than twelve (12) inches apart. Three (3) red identification lamps shall be mounted on the rear, one on the vertical centerline, one on each side with lamp centers spaced not less than six (6) inches or more than twelve (12) inches apart. All three on the same level as close as practical to the top of the bus.
2. Clearance lamps are required on all school buses eighty (80) inches in width or wider. Two (2) amber clearance lamps shall be mounted on the front, one on each side of the vertical centerline to indicate width. Both lamps shall be mounted on the same level as high as practicable. Two (2) red clearance lamps shall be mounted on the rear, one on each side of the vertical centerline to indicate width. Both lamps shall be mounted on the same level as high as practicable.
3. Side marker intermediate lamps, are required on all school buses thirty (30) feet or more in length. Two (2) amber intermediate, side marker lamps one on each side at or near midpoint between front and rear side marker lamps. Height above road surface in inches measured from the center of the lamp at curb weight not less than 15 inches. Two (2) amber front side marker lamps one on each side as far to the front as practicable. Height above road surface in inches measured from the center of the lamp at curb weight not less than 15 inches. Two (2) red rear side marker lamps one on each side as far to the rear as practicable. Height above road surface in inches measured from the center of the lamp at curb weight not less than 15 inches. Side reflex reflectors are required on school buses to be located between 15 and 60 inches above the road surface measured from the center at curb weight. Color of the reflex reflector shall correspond to color of the side marker lamps at corresponding locations. Rear reflex reflectors red in color are required on school buses one on each side of the vertical centerline as far apart as practicable.

DOES NOT MEET STANDARD :

(Out of service - Repair Before Next Dispatch)

1. Any lamp lens or reflex reflector is cracked, broken, missing, obscured.
2. Any identification lamp, side marker lamp or clearance marker lamp is inoperative.
3. Standards are not met.

LIGHTING SYSTEMS - STOP SIGNAL ARM AND LAMPS
1.05

STANDARD:

1. Every school bus shall be equipped with a stop signal arm that meets the requirements of 49 CFR 571.131 (FMVSS) and shall be double faced. Stop arm signals for all **1987 -2003** school buses shall be equipped with flashing strobe lamps connected to the alternating red flashing signal lamp circuits and visible to the front and rear. **Flashing lamps on buses manufactured after July 1, 2003 must be of the LED type.** Flashing lamps **on 1986** and older school buses may be incandescent or strobe. The stop signal arm shall be vacuum, electric, or air operated.
2. When two stop signal arms are installed on a school bus manufactured **after September 1, 1992**, the forward side of the rearmost stop signal shall not be reflectorized and shall not contain any lettering, symbols, or markings.
3. Stop signal arm(s) must fully extend to a 90 degree angle, **but not less than an 80 degree angle** when alternating flasher lamps are energized and the service door is opened, and must fully retract when the service door is closed according to OEM specifications.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Any lamp lens broken, cracked, missing, faded or obscured.
2. Audible air leak at proper connection.
3. Inoperable stop signal arm.
4. Inoperable red flashing lamps, strobe or LED lamps or not properly equipped with **LED Lamps on buses manufactured after July 1, 2003.**
5. 1/4 (25%) or more individual lights out per LED lamp.
6. Hose with audible air leak.
7. Stop arm does not fully extend to a 90 degree angle, but not less than an 80 degree angle or does not fully retract.
8. Standards are not met.

LIGHTING SYSTEMS - STOP/TAIL LAMPS

1.06

STANDARD:

1. Every school bus shall be equipped with two combination stop/tail lamps with a minimum diameter of seven (7) inches, or if a shape other than round, a minimum 38 square inches of illuminated area shall be mounted on the rear of the body just inside the turn signal lamps. School buses manufactured **after July 1, 2003** shall be equipped with stop/tail lamps of the **LED TYPE**.
2. School buses manufactured **after July 1, 1996** shall be equipped with two combination stop/tail lamps with a minimum diameter of four (4) inches, or if a shape other than round, a minimum twelve (12) square inches of illuminated area shall be placed on the rear of the body between the belt line and the floor line. School buses manufactured **after July 1, 2003** shall be equipped with stop/tail lamps of the **LED TYPE**.
3. Stop lamps shall be activated by the service brakes and shall emit a steady light when illuminated.
4. Type A-II buses may have manufacture's standard stop/tail lamps.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Lamp lenses are missing, cracked, broken, faded or obscured.
2. Does not have two stop lamps on the rear of the vehicle visible at 500 feet when service brakes are applied.
3. Does not have two steady burning tail lamps on the rear of the vehicle visible at 500 feet.
4. 1/4 (25%) or more individual lights out per LED lamp.
5. Standards are not met.

LIGHTING SYSTEMS - BACKUP LAMPS

1.07

STANDARD:

1. Every school bus body shall be equipped with two white rear backup lamp signals that are at least four (4) inches in diameter or, if a shape other than round, a minimum of thirteen (13) square inches of illuminated area, meeting SAE specifications. Backup lamps are required to operate when school bus is in reverse. If backup lamps are placed on the same line as the brake lamps and turn signal lamps, they shall be to the inside.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Lamp lenses are missing, cracked, broken, faded or obscured.
2. Does not have two operable backup lamps.
3. Standards are not met.

LIGHTING SYSTEM - INTERIOR LIGHTS

1.08

STANDARD:

1. Every school bus shall be equipped with interior lamps, which adequately illuminate aisle and step well. Step well light, shall be illuminated by a service door operated switch, and to illuminate only when headlamps and/or clearance lamps are on and service door is open.
2. Body instrument panel lights, shall be controlled by an independent rheostat switch.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Does not have all interior lamps operable.
2. Body instrument panel lights, not controlled by an independent rheostat switch.
3. Standards are not met.

GLAZING AND WINDOW CONSTRUCTION
2.00

STANDARD:

1. Glazing shall not exceed 28% and shall be installed in all doors, windows, and windshields consistent with federal, state, and local regulations. This does not apply to school buses that were manufactured **before November 15, 2005**.
2. Every school bus windshield shall be free of discoloration or other damage in that portion thereof extending upward from the height of the topmost portion of the steering wheel, but not including a 2-inch border at the top and a 1-inch border at each side of the windshield or each panel thereof, except that discoloration and damage as follows are allowable: (1) Coloring or tinting applied in manufacture, for reduction of glare; (2) Any crack not over ¼-inch wide, if not intersected by any other crack; (3) Any damaged area which can be covered by a disc ¾-inch in diameter, if not closer than 3 inches to any other such damaged area.
3. Each full side school bus window, other than emergency exits designated to comply with 49 CFR 571.217 (FMVSS), shall provide an unobstructed emergency opening of at least 9 inches but not more than 13 inches high and 22 inches wide, obtained by lowering the window. One side window on each side of the school bus may be less than 22 inches wide. Approved safety glass shall be used in all side and rear windows; windshields shall be approved laminated safety glass.

DOES NOT MEET STANDARD :

(Out of Service - Repair Before Next Dispatch)

1. Broken, missing, or cracked glass must be replaced on side or rear windows. Any glass cracked, broken, or shattered to an extent that splinters are exposed or that an opening is visible.
2. Any crack in excess of ¼-inch long or any crack intersected by any other crack.
3. Any damaged area which cannot be covered by a disc ¾-inch in diameter.
4. Any damaged area within 3 inches of any other damaged area.
5. Any windshield repair that obstructs vision.
6. Extensively pitted or sandblasted causing light reflection on windshield.
7. No unauthorized glazing.
8. Standards are not met.

MIRRORS - INTERIOR MIRROR
3.01

STANDARD:

1. Interior mirror shall be either clear view laminated glass or clear view glass bonded to a backing in the event of breakage. Mirror shall have rounded corners and protected edges. All Type A buses shall have a minimum of a 6 inch x 16 inch mirror; and Type B, C, and D buses shall have a minimum of a 6 inch x 30 inch mirror. Mirrors must provide full vision of the entire passenger compartment.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Wrong size mirror.
2. Mirror is cracked, loose, discolored, broken or contains non-transparent materials.
3. Interior mirror is missing.
4. Standards are not met.

MIRRORS - EXTERIOR MIRRORS
3.02

STANDARD:

1. Every school bus shall be equipped with two exterior mirror systems. System A rearview mirrors and system B cross view mirrors. System A rearview mirrors shall be located with stable supports so that the portion of the system on the bus's left side and the portion on the right side each includes at least one mirror of unit magnification with not less than 50 square inches of reflective surface. **Effective April 26, 1995**, there is no requirement for an additional convex mirror on the rearview mirror system. System A rearview mirrors shall provide a view of the ground from the rear wheels to a point not less than 200 feet rearward from the mirror surface.
2. System B cross view mirrors shall provide the driver with indirect vision of an area at ground level from the front bumper forward to distance of at least 12 feet and the entire width of the school bus to a point where the driver can see by the direct vision. The system B mirrors shall also provide the driver with indirect vision of the area at ground level around the left and right front corners of the school bus to include the tires and the service entrance on all types of school buses to a point where it overlaps with the system A rearview mirrors. Each mirror system shall be installed with stable support to dampen vibration.
3. All mirrors shall be securely mounted free of cracks, discoloration or non-transparent materials.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. System A rear view mirrors are not properly adjusted to provide the driver with a view of the ground from the rear wheels to a point not less than 200 feet rearward from the mirror surface.
2. System B cross view mirrors are not properly adjusted to provide the driver with a view of the minimum distance required by FMVSS 111 of at least 12 feet from the front bumper forward and the entire width of the school bus to a point where the driver can see by the direct vision.
3. Any mirror is cracked, loose, discolored, broken or contains non-transparent materials.
4. Standards are not met.

WINDSHIELD WIPERS
4.00

STANDARD:

1. Every school bus shall be equipped with a windshield wiping system, two-speed or variable speed, with an intermittent feature.
2. The windshield wipers shall be operated by one or more air or electric motors of sufficient power to operate wipers. If one motor is used, the wipers shall work in tandem to give full sweep of windshield.
3. A windshield washer system shall be provided and shall be operational.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. No windshield washer fluid.
2. Inoperative or ineffective wiper. Missing or damaged parts which may render the wiper ineffective.
3. Standards are not met.

DEFROSTER/HEATERS

5.00

STANDARD:

Defrosters

1. Defrosting and defogging equipment shall direct a sufficient flow of heated air onto the windshield, the window to the left of the driver and the glass in the viewing area directly to right of the driver to eliminate frost, fog and snow.
2. The defrosting system shall conform to SAE standards J381 and J382.
3. The defroster and defogging system shall be capable of furnishing heated outside ambient air, except the part of the system furnishing **additional** air to the windshield, entrance door and step well may be of the re-circulating type.
4. Auxiliary fans are not considered defrosting or defogging systems.
5. Portable heaters shall not be used.

Heaters

1. Heater shall be hot water and /or combustion type.
2. If only one heater is used, it shall be fresh-air or combination fresh-air and re-circulation type.
3. If more than one heater is used, additional heaters may be re-circulating air type.
4. The heating system shall be capable of maintaining bus interior temperatures as specified in SAE test procedure J2233.
5. All heaters installed by body manufacturers shall bear a name plate that indicates the heater rating. The plate shall be affixed by the heater manufacturer and shall constitute certification that the heater performance is as shown on the plate.
6. Heater hoses shall be adequately supported to guard against excessive wear due to vibration. The hoses shall not dangle or rub against the chassis or any sharp edges and shall not interfere with or restrict the operation of any engine function. Heater hoses shall conform to SAE Standard J20. Heater lines on the interior of bus shall be shielded to prevent scalding of the driver or passengers.
7. Each hot water system installed by a body manufacturer shall include one shut-off valve in the pressure line and one shut-off valve in the return line with both valves at the engine in an accessible location, except that on all Types A and B buses, the valves may be installed in another accessible location.
8. There shall be a water flow-regulating valve installed in the pressure line for convenient operation by the driver while seated.

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DEFROSTERS/HEATERS
(cont'd)

9. All combustion heaters shall be in compliance with current Federal Motor Carrier Safety Regulations.
10. Accessible bleeder valves shall be installed in an appropriate place in the return lines of body company-installed heaters to remove air from the heater lines.
11. Access panels shall be provided to make heater motors, cores, and fans readily accessible for service.
12. Outside access panel may be provided for the driver heater.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. If any defrosting, defogging, or heating equipment is not operable.
2. When operating under conditions such that ice, snow, or frost would be likely to collect on the outside of the windshield. This equipment shall be sufficient to prevent or remove such obstruction from the drivers' view.
3. Standards are not met.

**HORN
6.00**

STANDARD:

1. Bus shall be equipped with horn or 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 and tested in accordance with SAE J-377.
2. Horn(s) must be activated using OEM method of operation.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Sound of horn under normal road conditions cannot be heard 200 feet away.
2. Horn is mounted and wired using some other configuration other than the OEM mounting system.
3. Standards are not met.

EXIT SYSTEMS
7.00

STANDARD:

Service Door

1. Service door shall be in the driver's control, and designed to afford easy release and provide a positive latching device on manual operating doors to prevent accidental opening. When a hand lever is used, no part shall come together that will shear or crush fingers. Manual door controls shall not require more than 25 pounds of force to operate at any point throughout the range of operation. **All type A, C and D Buses manufactured after July 1, 2003 shall be equipped with an air or electric operated door switch located in the driver's panel.** On power operated service doors the emergency release valve, switch or device to release the service door must be placed above or to the immediate left or right of the service door and clearly labeled.
2. Service door shall be located on the right side of the bus, opposite and within direct view of driver.
3. Service door shall have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches. Type A-II vehicles shall have a minimum opening area of 1200 square inches.
4. Service door shall be a split-type, sedan-type, or jack-knife type. (Split-type door includes any sectioned door, which divides and opens inward or outward.) If one section of a split-type door opens inward and the other opens outward, the front section shall open outward.
5. Lower as well as upper door panels shall be of approved safety glass. Bottom of each lower glass panel shall not be more than 10 inches from the top surface of bottom step. Top of each upper glass panel shall not be more than 3 inches from the top of the door. Type A vehicles shall have an upper panel (windows) of safety glass with an area of at least 350 square inches.
6. Vertical closing edges on split-type or folding-type entrance doors shall be equipped with flexible material to protect children's fingers. Type A-II vehicles may be equipped with chassis manufacturer's standard entrance door.
7. There shall be no door to left of driver on Type B, C, or D vehicles. All Type A vehicles may be equipped with chassis manufacturer's standard door.
8. All doors shall be equipped with padding at the top edge of each door opening. Padding shall be at least 3 inches wide and 1 inch thick and extend the full width of the door opening.
9. On power operated service doors, the emergency release valve, switch or device to release the service door must be placed above or to the immediate left or right of the service door and clearly labeled.

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EXIT SYSTEMS (cont'd)

Emergency Exits

1. Emergency door(s) and other emergency exits shall comply with the requirements of 49 CFR 571.217 (FMVSS) and any of the requirements of these standards that exceed 49 CFR 571.217 (FMVSS).
2. Emergency window requirements
 - a. The rear emergency window shall have a lifting assistance device that will aid in lifting and holding the rear emergency window open.
 - b. Side emergency exit windows, when installed, may be vertical hinged on the forward side of the window. No side emergency exit window will be located above a stop arm.
3. Emergency door requirements
 - a. The upper portion of the emergency door shall be equipped with approved safety glazing, the exposed area of which shall be at least 400 square inches. The lower portion of the rear emergency doors on Types A-2, B, C, and D vehicles shall be equipped with a minimum of 350 square inches of approved safety glazing.
 - b. There shall be no steps leading to an emergency door.
 - c. The words "EMERGENCY DOOR," in letters at least 2 inches high, shall be placed at the top of or directly above the emergency door, or on the door in the metal panel above the top glass, both inside and outside the bus.
 - d. The emergency door(s) shall be equipped with padding at top edge of each door opening. Padding shall be at least 3 inches wide and 1 inch thick, and extend the full width of the door opening.
 - e. The side emergency door, if installed, must meet the requirements as set forth in 49 CFR 571.217 (FMVSS), regardless of its use with any other combination of emergency exits.
 - f. There shall be no obstruction higher than 1/4 inch across the bottom of any emergency door opening.
 - g. The emergency exits shall be equipped with a device that will actuate an audible signal to alert the driver when an exit is not securely closed.
 - h. Each school bus emergency exit shall have the designation "Emergency Door" or "Emergency Exit", as appropriate, in letters at least 5 centimeters high, of a color that contrasts with its background. The designation for emergency roof exits shall be located on an inside surface of the exit, or within 30 centimeters of the roof exit opening.

(cont'd on next page)

EXIT SYSTEMS (cont'd)

- i. Concise operating instructions describing the motions necessary to unlatch and open the emergency exit shall be located within 15 centimeters of the release mechanism on the inside surface of the school bus. These instructions shall be in letters at least 1 centimeter high and of a color that contrasts with its background.

Wheelchair access doors

1. Shall be equipped with padding at top edge of each door opening. Padding shall be at least 3 inches wide and 1 inch thick, and extend the full width of the door opening.
2. Wheelchair access doors shall be equipped with a device that will actuate an audible signal to alert the driver when an exit is not securely closed.
3. **School buses built after July 1, 2003 equipped with a power wheelchair lift shall have a spring park brake and transmission locking system** that automatically activates when the transmission is in the neutral position and special service door is in the open position. An interlock key shall be provided that disables the vehicle and automatically increases the engine idle while the interlock key is removed from the system.

DOES NOT MEET STANDARD :

(Out of Service - Repair Before Next Dispatch)

1. Any exit system equipment not fully operational and in compliance as described in the previously listed standards.
2. Standards are not met.

EMERGENCY EQUIPMENT - FIRE EXTINGUISHER
8.01

STANDARD:

1. Each school bus shall be equipped with at least one fully charged UL-approved pressurized, dry chemical fire extinguisher complete with hose, meeting OSHA recommendations. Extinguisher shall be mounted in a bracket, located in the driver compartment and readily accessible to the driver and passengers. A pressure gauge shall be mounted on the extinguisher and be easily read without moving the extinguisher from its mounted position.
2. The fire extinguisher shall have a total rating of 2A10BC or greater. The operating mechanism shall be sealed with a type of seal, which will not interfere with the use of the fire extinguisher.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Extinguisher and or hose is missing.
2. Extinguisher is under or over charged.
3. Extinguisher is not mounted in a bracket, located in the driver compartment and readily accessible to the driver and passengers.
4. Extinguisher does not have a total rating of 2A10BC or greater.
5. The operating mechanism is not sealed with a type of seal that does not interfere with the use of the fire extinguisher.
3. Standards are not met.

EMERGENCY EQUIPMENT - FIRST AID KIT
8.02

STANDARD:

1. Each school bus shall have a removable, moisture proof and dust-proof first aid kit, meeting OSHA recommendations, in an accessible place within driver's compartment. It shall be properly mounted and identified as a first aid kit. The location for the first aid kit shall be marked. Contents of first aid kit shall be in compliance with the following standards.
 - A. A first-aid kit for all school buses is described as follows:
 - 2 - 1 inch x 2 1/2 yards adhesive tape rolls
 - 24 - sterile gauze pads 3 inches x 3 inches
 - 100 - 3/4 inches x 3 inches adhesive bandages
 - 8 - 2 inch bandage compresses
 - 10 - 3 inch bandage compresses
 - 2 - 2 inch x 6 yards sterile gauze roller bandages
 - 2 - non-sterile triangular bandages approximately 40 inches x 36 inches x 54 inches with 2 safety pins
 - 3 - sterile gauze pads 36 inches x 36 inches
 - 3 - sterile eye pads
 - 1 - rounded-end scissors
 - 1 - pair latex gloves
 - 1 - mouth-to-mouth airway

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. First aid kit is missing.
2. First aid kit is missing any of previously described contents to be in compliance with standards.
3. First aid kit is not properly mounted and or identified as a first aid kit.
4. First aid kit is not located in the driver compartment.
5. Standards are not met.

EMERGENCY EQUIPMENT - BODY FLUID CLEAN-UP KIT
8.03

STANDARD:

1. Each school bus shall have a removable and moisture-proof body fluid clean-up kit, meeting OSHA recommendations, in the driver compartment and accessible to the driver. It shall be properly mounted and identified as a body fluid clean-up kit.
2. Contents of body fluid clean-up kit shall include:
 - 1 - Disposable bag with closing device
 - 1 - Scoop
 - 1 - Scraper
 - 1 - Disinfectant
 - 1 - Surface wipe
 - 1 - Pair of latex gloves

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Body fluid clean-up kit is missing.
2. Body fluid clean-up kit is missing any of previously described contents to be in compliance with standards.
3. Body fluid clean-up kit is not properly mounted and or identified as a body fluid clean up kit.
4. Body fluid clean-up kit is not located in the driver compartment.
5. Standards are not met.

EMERGENCY EQUIPMENT - WARNING DEVICES
8.04

STANDARD:

1. Each school bus shall contain at least three (3) reflectorized triangle road-warning devices mounted in an accessible place. These devices must meet requirements in 49 CFR 571.125 (FMVSS).
2. Any of the emergency equipment may be mounted in an enclosed compartment, provided the compartment is labeled in not less than one-inch letters, stating the piece(s) of equipment contained therein. The enclosed compartment shall be located in the driver compartment.
3. **Fusees (road flares) are not permitted.**

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Warning devices are missing, not operable or damaged.
2. Warning devices are not located in the driver compartment.
3. Standards are not met.

TIRES
9.00

STANDARD:

1. Tires of the proper size and with a load rating commensurate with chassis manufacturer's gross vehicle weight rating shall be provided. The use of multi-piece rims or tube-type tires shall not be permitted on any school bus ordered after **July 1, 1996**.
2. Dual rear tires shall be provided on Type C and Type D school buses. Type A school buses may have single or dual rear tires.
3. All tires on a vehicle shall be of the same size and load range. The tires shall meet or exceed the GVWR as required by 49 CFR 571.120 (FMVSS).
4. If the vehicle is equipped with a spare tire, it shall be the same size and load range as those mounted on the vehicle.
5. If a tire carrier is required, it shall be suitably mounted in an accessible location outside the passenger compartment. Exception: On type A school buses, spare tire and carrier may be mounted behind the last seat at the rear of the bus if adequately secured and mounted in such a way as not to interfere with the emergency exit.

Tires-Steering Axle:

1. Tire shall not be worn to a minimum of 4/32 inch tread groove pattern depth when measured in any two adjacent major tread grooves at any location on the tire. (Excluding, wear bar area).
2. Tire shall not be recapped, retread, or re-grooved on steering axle.
3. Tire shall have adequate tire pressure rating.
4. Tire shall not reflect weakness characteristics along the tire body such as knots, bulges, tread cuts, or snags in excess of one (1) inch or deep enough to expose body cords.

Tires-All Tires Other Than Those found On Steering Axle:

1. Tire shall not be worn to a minimum of 2/32 inch tread groove pattern depth when measured in any two adjacent major tread grooves at any location on the tire. (Excluding wear bar area).
2. Tire shall have adequate tire pressure rating.
3. Tire shall not reflect weakness characteristics along the tire body such as knots, bulges, tread cuts, or snags in excess of one (1) inch or deep enough to expose body cords.

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**TIRES
(cont'd)**

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Use of multi-piece rims or tube-type tires on any school bus ordered **after July 1, 1996**.
2. Any tire worn to the point where any part of the ply or breaker strip construction is exposed.
3. Tire tread:
 - a. Steering axle – Any tire worn to a minimum of 4/32 inch tread groove pattern depth when measured in any two adjacent major tread grooves at any location on the tire. (Excluding wear bar area).
 - b. Any bus equipped with recapped, retread, or re-grooved tire on the steering axle.
 - c. All tires other than those found on steering axle. Any tire worn to a minimum of 2/32 inch tread groove pattern depth when measured in any two adjacent major tread grooves at any location on the tire. (Excluding wear bar area)
4. When sidewall is cut, worn, or damaged to the extent the ply cord is exposed or sidewall wear indicator (if so marked) is not visible.
5. Visually observable bump, bulge, or knot apparently related to tread or side wall separation.
6. Tire is flat or has noticeable leak.
7. Tires are not the same circumference.
8. Radial and bias tires are on the same axle.
9. Any tire mounted or inflated so that it comes in contact with any part of the vehicle.
10. Utilizing a tire size or load rating range less than manufacture's specification.
11. Standards are not met.

WHEELS AND RIMS
10.00

STANDARD:

1. Rims of the proper size commensurate with chassis manufacturer's gross vehicle weight rating shall be provided. The use of multi-piece rims shall not be permitted on any school bus manufactured **after July 1, 1996**.
2. Wheels and rims shall not be cracked or broken.
3. Stud or bolt holes on wheels shall not be elongated or out of round.
4. Nuts and bolts shall be properly fastened and secured.
5. On to and from school buses, wheels and rims shall be steel and painted black.
6. Demountable rims, if used, may be silver, gray or black as received from the wheel manufacturer. Wheels may be polished aluminum, chrome or of a team color on activity buses only.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. TWO OR THREE PIECE RIMS
 - a. Lock or side ring: Bent, broken, cracked, improperly seated, sprung or mismatched ring(s).
 - b. Rim or wheel flange is loose, cracked, defective or has more than 3/8 inch run out.
 - c. Multi-piece rims on 1997 and newer model buses.
2. RIM CRACKS
 - a. Any circumferential crack, except an intentional manufacturer crack at a valve stem hole.
3. DISC WHEEL
 - a. Cracks
 1. Any single crack 3" or more in length.
 2. Any crack extending between any two holes including: hand holes, stud holes, and center hole.
 3. Two or more cracks any place on the wheel.
 - b. Stud holes (disc wheels) 50% or more elongated stud holes (fasteners tight).
4. SPOKE WHEELS
 - a. Cracks
 1. Two or more cracks more than 1 inch long across a spoke or hub section.
 2. Two or more web areas with cracks.

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**WHEELS AND RIMS
(cont'd)**

5. FASTENERS
 - a. Any fastener loose, missing, broken, cracked, stripped or ineffective.
6. WELDS
 - a. Any welded repair.
7. Wheels and rims other than steel and black on to and from school buses.
8. Demountable rims, if used, being any other color than silver, gray or black as received from the wheel manufacturer. Wheels other than polished aluminum, chrome or a team color on activity buses.
9. Standards are not met.

FUEL SYSTEM
11.00

STANDARD:

1. Fuel tank or tanks having a minimum 30-gallon capacity with a 25-gallon actual draw shall be provided by the chassis manufacturer. The tank shall be filled and vented to the outside of the body, in a location where accidental fuel spillage will not drip or drain on any part of the exhaust system.
2. Vehicles with a wheel base of 193 inches and larger shall be equipped with fuel tank or tanks of a minimum 60-gallon capacity with a 50-gallon actual draw.
3. No portion of the fuel system, which is located outside the engine compartment, except the filler tube, shall extend above the top of the chassis frame rail. Fuel lines shall be mounted to obtain maximum possible protection from the chassis frame.
4. Fuel filter with replaceable element shall be installed between the fuel tank and engine.
5. Fuel tank installation shall be in accordance with design objectives and all Federal Motor Vehicle Safety Standards in effect on the date of manufacture of the bus.
 - a. Fuel tank(s) may be mounted between the chassis frame rails or outboard of the frame rails on either the left or right side of the vehicle. On vehicles constructed for transporting special needs students, the fuel tank may be mounted on the left frame rail or behind the rear wheels on the vehicle.
 - b. The actual draw capacity of each fuel tank shall be 83% of the tank capacity.
6. Unless specific agreement has been made between the body and chassis manufacturers, fuel tanks and filler spouts shall not be located in spaces restricted by design objectives.
7. Installation of alternative fuel systems, including fuel tanks and piping from tank to engine, shall comply with all applicable fire codes and applicable Federal Motor Vehicle Safety Standards in effect on the date of manufacture of the bus.
 - a. Installation of LPG tanks shall comply with National Fire Protection Association (NFPA) 58.
8. No detectable fuel system leaks.
9. Presence of fuel tank mounting straps, securely fastened.

DOES NOT MEET STANDARD

(Out of Service - Repair Before Next Dispatch)

1. Leaks in fuel system.
2. Damaged fuel tank mounting straps.

(cont'd on next page)

**FUEL SYSTEM
(cont'd)**

3. Fuel tank filler cap missing.
4. Any fuel system equipment not fully operational and in compliance as described in the previously listed standards.
5. Standards are not met.

EXHAUST SYSTEM 12.00

STANDARD:

1. Exhaust pipe, muffler and tailpipe shall be outside the bus body compartment and attached to the chassis so as not to damage any other chassis component.
2. Tailpipe shall be constructed of a corrosion-resistant tubing material at least equal in strength and durability to 16-gauge steel tubing.
3. Chassis manufacturers shall furnish an exhaust system with tailpipe of sufficient length to exit the rear of the bus or at the left side of the bus body no more than 18 inches forward of the front edge of the rear wheelhouse opening. If designed to exit at the rear of the bus, the tailpipe shall extend at least five inches beyond the end of the chassis frame. If designed to exit to the side of the bus, the tailpipe shall extend at least 48.5 inches (51.5 inches if the body is to be 102 inches wide) outboard from the chassis centerline.
 - a. On Types C and D vehicles, the tailpipe shall not exit beneath a fuel fill or emergency door exit.
 - b. Type A chassis may be furnished with the manufacturer's standard tailpipe configuration.
4. Exhaust system on a chassis shall be properly insulated from the fuel tank connections by securely attached metal shield at any point where it is 12 inches or less from tank or tank connection. **The metal shield requirement for exhaust systems on school buses manufactured before July 1, 1996, apply to gas powered chassis only.**
5. Muffler shall be constructed of corrosion-resistant material.
6. The exhaust system on vehicles equipped with a power lift unit may be routed to the left of the right frame rail to allow for the installation of a power lift unit on the right side of the vehicle.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Vehicle is not equipped with proper exhaust system.
2. Loose or leaking joints.
3. Holes, leaking seams, or patches on the exhaust system.
4. Tailpipe end is badly pinched or damaged. (25% or more from OEM)
5. Elements of the system are not securely fastened.

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**EXHAUST SYSTEM
(cont'd)**

6. An exhaust system cutout or similar device that allows excessive noise.
7. Any part of the system passes through occupant compartment.
8. Tailpipe does not extend to or extends (more than 1") beyond the perimeter of the body or bumper.
9. The components are not attached to the chassis properly.
10. Exhaust system on chassis is not properly insulated from the fuel tank connections by a securely attached metal shield at any point where it is 12 inches or less from fuel tank or fuel tank connections.
11. Standards are not met.

DRIVE SHAFT GUARDS
13.00

STANDARD:

1. Drive shafts shall be protected by a metal guard or guards around the circumference of the drive shafts to reduce the possibility of its whipping through the floor or dropping to the ground if broken.
2. Front drive shaft on four (4) wheel drive chassis may have a metal guard on buses manufactured **prior to July 1, 1996**.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Any damaged, loose or missing drive shaft or metal guard(s).
2. Standards are not met.

SUSPENSION SYSTEMS
14.00

STANDARD:

1. AXLES: No axle positioning part shall be cracked, broken, loose, or missing. All axles must be in proper alignment.
2. LEAF SPRINGS: No leaf spring shall be cracked, broken, missing, or shifted out of position. A soft ride suspension system (taper leaf) low friction parabolic springs, variable rate and two stage steel leaf rear springs shall be provided on Type C and D buses where lift equipment is required on school buses that were manufactured **after July 1, 1996**.
3. COIL SPRINGS: No coil spring shall be cracked or broken.
4. TORSION BAR: No torsion bar or torsion bar suspension shall be cracked or broken.
5. AIR SUSPENSION: The air pressure regulator valve shall not allow air into the suspension system until at least 55 P.S.I. is in the braking system. The vehicle shall be level (not tilting to left or right). Air leakage shall not be greater than 3 P.S.I. in a five (5) minute period when the vehicle's air pressure gauge shows normal operating pressure.
6. SHOCK ABSORBERS: No leaks visible and securely mounted.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

SUSPENSION

1. Axle/part members.
 - a. Any U-bolts, spring hanger(s) or other axle positioning part(s) cracked, broken, loose or missing resulting in shifting of an axle from its normal position.

NOTE: After a turn, lateral axle displacement is normal with some suspensions. Forward and reverse operation in a straight line will cause the axle to return to alignment.

SPRING ASSEMBLY

1. Any broken leaf in a leaf spring assembly.
2. Springs are broken or missing. Spring bolts broken or nuts missing. Spring hangers or spring shackles damaged.
3. Coil spring, missing or broken.
4. Rubber stopper, missing or damaged.
5. One or more leafs displaced in a manner that could result in contact with a tire, rim, brake drums or frame.

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SUSPENSION SYSTEMS (cont'd)

6. Broken torsion bar in torsion bar suspension.
7. Deflated air suspension.
8. Standards are not met.

SHOCK ABSORBERS

1. Any shock absorber with a visible fluid leak.
2. Any loose, cracked, or missing shock absorber nuts or bolts.
3. Standards are not met.

FRAME
15.00

STANDARD:

1. Frame or equivalent shall be of such design and strength characteristics as to correspond at least to standard practice for trucks of the same general load characteristics, which are used for highway service.
2. Any secondary manufacturer that modifies the original chassis frame shall guarantee the performance of workmanship and materials resulting from such modification.
3. Frames shall not be modified for the purpose of extending the wheelbase.
4. Holes in top or bottom flanges or side units of the frame, and welding to the frame, shall not be permitted except as provided or accepted by chassis manufacturer.
5. Frame lengths shall be in accordance with design criteria for the vehicle.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Any loose, broken, or missing body-clip or bracket securing the body of the vehicle to the frame.
2. Any cracked, loose, sagging, or broken frame side-rail permitting shifting of the body onto moving parts or other condition indicating an imminent collapse of the frame.
3. Any cracked, loose, or broken frame member adversely affecting support of functional components such as steering gear, engine, transmission, body parts and suspension.
4. Any crack in the frame side-rail web, which is directed toward the bottom flange.
5. Any crack extending from the frame side-rail web around the radius, continuing into the bottom flange.
6. One inch or longer crack in side-rail bottom flange.
7. Any non-manufactured holes in top or bottom flanges or side rails of the frame.
8. Any non-manufactured welding to the frame, unless accepted by the manufacturer.
9. Standards are not met.

**STEERING MECHANISM
16.00**

STANDARD:

STEERING WHEEL

1. The steering wheel shall be secured and shall not have any spokes cracked through or missing.
2. The steering wheel play shall be less than the following parameters:

Steering Wheel Diameter	Manual Steering System 30 Degrees or	Power Steering System +45 Degrees or
16" or less	4-1/2" (or more)	6-3/4" (or more)
18" or less	4-3/4" (or more)	7-1/8" (or more)
19" or less	5" (or more)	7-1/2" (or more)
20" or less	5-1/4" (or more)	7-7/8" (or more)
21" or less	5-1/2" (or more)	8-1/4" (or more)
22" or less	5-3/4" (or more)	8-5/8" (or more)

3. Steering wheel shall turn freely through the limit of travel in both directions.

STEERING COLUMN

1. The steering column shall be securely fastened.
2. There shall be a clearance of at least 2 inches between the steering wheel and cowl, instrument panel, windshield, or any other surface.

STEERING SYSTEM

1. The steering gear shall be approved by the chassis manufacturer and designed to ensure safe and accurate performance when the vehicle is operated with maximum load and at maximum speed.
2. No changes shall be made in the steering apparatus, which are not approved by the chassis manufacturer.
3. If external adjustments are required, steering mechanism shall be accessible to accomplish same.
4. The steering system shall be designed to provide a means for lubrication of all wear-points, if wear-points are not permanently lubricated.
5. Universal joints shall not be worn, faulty, or repaired by welding.
6. The steering gear box shall not have loose or missing mounting bolts or cracks in the steering gear box or mounting brackets. The pitman arm on the steering out-put shaft shall not be loose.

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STEERING MECHANISM (cont'd)

POWER STEERING

1. Power steering is required and shall be of the integral type with integral valves.
2. All components of the power steering system shall be in operating condition.
3. No part shall be loose or broken. Belts shall not be excessively frayed, cracked, or slipping. Normal wear cracks are acceptable.
4. The system shall not leak. A leak is defined as a visible drip. The power steering system shall have sufficient fluid in the reservoir.

DOES NOT MEET STANDARD:

(Out of Service – Repair Before Next Dispatch)

STEERING MECHANISM:

1. Steering Wheel Free Play:
(See previous chart: When any of these values - inch movement or degrees - are met or exceeded, vehicle shall be placed **out-of-service**. For power steering systems, engine must be running). For power systems, if steering wheel movement exceeds 45 degrees before steering axle tires move, rock the steering wheel left to right between points of power steering valve resistance. If that motion exceeds 30 degrees (or the inch movement values shown for manual steering), vehicle shall be placed **out-of-service**.
2. Steering Column:
 - a. Any absence or looseness of U-bolts or positioning part(s).
 - b. Worn, faulty, or obviously repair-welded universal joint(s).
 - c. Steering wheel not properly secured.
3. Front Axle Beam and All Steering Components Other Than Steering Column:
 - a. Any cracks.
 - b. Any obvious welded repair(s).
4. Steering Gear Box:
 - a. Any mounting bolt(s) loose or missing.
 - b. Any crack(s) in gear, box or mounting brackets.
 - c. Any obvious welded repair(s).
5. Pitman Arm:
 - a. Any looseness of the pitman arm on the steering gear output shaft.
 - b. Any obvious welded repair(s).
6. Power Steering:
 - a. Auxiliary power assist cylinder loose.
 - b. Reservoir leaking. (A leak is a visible drip.)

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STEERING MECHANISM (cont'd)

7. Ball and Socket Joints:
 - a. Any movement under steering load of a stud nut.
 - b. Any motion, other than rotational, between any linkage member and its attachment point or 1/8 inch measured with hand pressure only.

8. Tie Rods and Drag Links:
 - a. Loose clamp(s) or clamp bolt(s) on tie rods or drag link.
 - b. Any looseness in any threaded joint.

9. Nuts:
 - a. Loose or missing on tie rods, pitman arm, drag link, steering arms, or tie rod arm.
 - b. Missing nut-locking device (cotter pin, etc.), where required.

10. Steering System:
 - a. Any modification or other condition that interferes with free movement of any steering component.

11. Standards are not met.

BRAKE SYSTEM
17.00

STANDARD:

1. A bus must have a brake system adequate to control the movement of, and to stop and to hold the vehicle. The brake system shall include the service brake and a parking brake /emergency brake.
2. Buses using air or vacuum in the operation of the brake system shall be equipped with warning signals, readily audible and visible to the driver, that will give a continuous warning when the air pressure available in the system for braking is 60 psi (pounds per square inch) or less or the vacuum in the system available for braking is eight (8) inches of mercury or less.
3. An illuminated gauge shall be provided that will indicate to the driver the air pressure in psi or the inches of mercury vacuum available for the operation of the brakes.
 - a. Vacuum-assist brake systems shall have a reservoir used exclusively for brakes that shall adequately ensure a full stroke application that loss in vacuum shall not exceed 30 percent with the engine off. Brake systems on gas-powered engines shall include suitable and convenient connections for the installation of a separate vacuum reservoir.
 - b. Any brake system with a dry reservoir shall be equipped with a check-valve or equivalent device to ensure that in the event of failure or leakage in its connection to the source of compressed air or vacuum, the stored dry air or vacuum shall not be depleted by the leakage or failure.
4. Buses using a hydraulic-assist brake shall be equipped with warning signals, readily audible and visible to the driver, that will provide continuous warning in the event of a loss of fluid flow from primary source and in the event of discontinuity in that portion of the vehicle electrical system that supplies power to the backup system.
5. The brake lines and booster-assist lines shall be protected from excessive heat and vibration and installed in a manner, which prevents chafing.
6. All brake systems shall be designed to permit visual inspection of brake lining wear without removal of any chassis components.
7. Antilock brake systems for either air or hydraulic brakes shall include control of all axles in compliance with 49 CFR 571.105 or 571.121 (FMVSS).
8. All Type C and Type D school buses **59 passenger** or larger manufactured **after July 1, 1996** shall be equipped with air brakes and on **65 passenger** school buses manufactured **prior to July 1, 1996** to present.
9. **Effective July 31, 2000**, all Type C and Type D, 47 passenger or larger school buses shall be equipped with air brakes.
10. All brake system components must be operable and free of defects.

(cont'd on next page)

BRAKE SYSTEM (cont'd)

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

AIR COMPRESSOR

Noticeable oil leak(s).

DEFECTIVE BRAKE:

A defective brake includes any brake that meets one of the following criteria:

1. Absence of effective braking action upon application of the service brakes (such as brake lining failing to move or contact braking surface upon application).
2. Missing or broken mechanical or inoperative components, including shoes, linings, pads, springs, anchor pins, spiders, cam rollers, push rods, cam shaft brackets, and air chamber mounting bolts, air chambers and cam shaft support brackets.
3. Audible air leak at brake chamber (e.g., ruptured diaphragm, loose chamber clamp).
NOTE: Also check air loss rate.
4. Mismatched across any axle:
 - a. Air chamber sizes
 - b. Slack adjuster length
 - c. Obvious mismatched push rod length (prior to brake application)
5. Brake lining on brake shoe or brake pad:
 - a. Cracked, loose or missing lining.
 - b. Lining cracks or voids of 1/16" in width observable on the edge or the lining.
 - c. Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.
 - d. Cracks exceed 1 ½" in length.
 - e. Loose lining segments. (Approximately 1/16" or more in movement.)
 - f. Complete lining segment missing.
 - g. Evidence of oil seepage into or out of brake lining/drum interface area. This must include wet contamination or the lining edge accompanied by evidence that further contamination will occur – such as oil running from the drum or a bearing seal.
NOTE: Grease on the lining edge, back of shoe, or drum edge and oil stains with no evidence of fresh oil leakage are not conditions for out-of-service.
 - h. Riveted Brake Shoes: Measured at the top of any rivet, lining with a thickness less than 2/32 inch or to wear indicator if lining is so marked.
 - i. Disc/Riveted Pads: Measured at the top of any rivet, lining with a thickness less than 2/32 inch or to wear indicator if lining is so marked.
 - j. Bonded Linings: Measured from the base of the brake shoe or pad, lining with a thickness less than 2/32 inch, or manufacturer's specifications, or to wear indicator if so marked.

(cont'd on next page)

**BRAKE SYSTEM
(cont'd)**

6. Missing brake on any axle required to have brakes.
7. Brake adjustment limits. Bring reservoir pressure between 90 and 100 psi, turn engine off and then fully apply the brakes.
 - a. One brake beyond the adjustment limit.
 - b. Push rod stroke measurement difference of ½ inch or more from one steering axle brake to the other.
 - c. Any wedge brake where the combined brake lining movement of both top and bottom shoes exceeds 1/8 inch.
8. **Effective July 31, 2000**, a Type C or Type D, 47 passenger or larger school bus not equipped with air brakes.
9. Standards are not met.

Brake Adjustment: Shall not exceed those specifications contained hereunder relating to "Brake Adjustment Limit". (Dimensions are in inches.)

CLAMP-TYPE BRAKE CHAMBER DATA

<u>Type</u>	<u>Outside Diameter</u>	<u>Brakes Adjustment Limit</u>
6	4-1/2	1-1/4
9	5-1/4	1-3/8
12	5-11/16	1-3/8
16	6-3/8	1-3/4
20	6-25/32	1-3/4
24	7-7/8	1-3/4
30	8-3/32	2-0
36	9	2-1/4

NOTE: A brake found at the adjustment limit is not a violation.

"LONG STROKE" CLAMP-TYPE BRAKE CHAMBER DATA

<u>Type</u>	<u>Outside Diameter</u>	<u>Brake Adjustment Limit</u>
16	6-3/4	2.0
20	6-25/32	2.0
24	7-7/32	2.0
24*	7-7/32	2.5
30	8-3/32	2.5

* For maximum stroke type 24 chambers.

NOTE: A brake found at the adjustment limit is not a violation.

TIE ROD STYLE PISTON BRAKE CHAMBER DATA

<u>Size</u>	<u>Outside Diameter</u>	<u>Brake Adjustment Limit</u>
30	6-1/2	2.5

NOTE: A brake found at the adjustment limit is not a violation.

(cont'd on next page)

**BRAKE SYSTEM
(cont'd)**

BOLT TYPE BRAKE CHAMBER DATA

<u>Type</u>	<u>Outside Diameter</u>	<u>Brake Adjustment Limit</u>
A	6-15/16	1-3/8
B	9-3/16	1-3/4
C	8-1/16	1-3/4
D	5-1/4	1-1/4
E	6-3/16	1-3/8
F	11	2-1/4
G	9-7/8	2

NOTE: A brake found at the adjustment limit is not a violation.

ROTOCHAMBER DATA

<u>Type</u>	<u>Outside Diameter</u>	<u>Brake Adjustment Limit</u>
9	4-9/32	1-1/2
12	4-13/16	1-1/2
16	5-13/32	2
20	5-15/16	2
24	6-13/32	2
30	7-1/16	2-1/4
36	7-5/8	2-3/4
50	8-7/8	3

NOTE: A brake found at the adjustment limit is not a violation.

WEDGE BRAKE DATA

The combined movement of both brake shoe lining scribe marks shall not exceed 1/8 inch.

Parking Brakes

1. Inoperable brake system. No parking brake application upon actuation of the parking brake control.
2. Any non-manufactured holes or cracks in the spring brake housing section of the parking brake.
3. Standards are not met.

Brake Drums or Rotors (Disc)

1. Drums with an external crack or cracks that open upon brake application. (NOTE: Do not confuse short hair-line heat check cracks with flexural cracks.)
2. Any portion of the drum or rotor (disc) missing or in danger of falling off.
3. Drums out of round.
4. Cracked rotors.
5. Drums or rotors below minimum thickness measurement.
6. Standards are not met.

(cont'd on next page)

BRAKE SYSTEMS (cont'd)

Brake Hose

1. Hose with external damage extending through the outer reinforcement ply. (Rubber-impregnated fabric cover is not a reinforcement ply. Thermoplastic nylon may have braid reinforcement or color difference between cover and inner tube. Exposure of second color is Out-Of-Service.)
2. Bulge or swelling when air pressure is applied.
3. Hose or connection with audible/visual leak.
4. Two hoses improperly joined such as a splice made by sliding the hose over a piece of tubing and clamping the hose to the tube.
5. Air hose cracked, broken or crimped in such a manner as to restrict airflow.
6. Standards are not met.

Brake Tubing

1. Tubing with an audible/visual leak at other than a proper connection.
2. Tubing cracked, damaged by heat, broken or crimped.
3. Standards are not met.

Brake Peddle

1. Brake Peddle cover is missing.
2. Brake peddle extension.
3. Standards are not met.

Low Pressure Warning Device

1. Low pressure warning device missing, inoperative, or does not operate at 55 psi and below, or ½ of the governor cutout pressure, whichever is less. (NOTE: If either an audible or visual warning device is working, vehicle should not be placed out-of-service.)
2. Standards are not met.

Air Loss Rate

1. If an air leak is discovered and the reservoir pressure is not maintained when:
 - a. Governor is cut-in;
 - b. Reservoir is between 80 & 90 psi;
 - c. Engine is at idle, and
 - d. Service brakes are fully applied.
2. Standards are not met.

Air Reservoir

1. Air reservoir security; loose retaining bolt or brackets or separated from its original attachment points.
2. Air reservoir with audible/visual leak.
3. Standards are not met.

Air Compressor

1. Loose compressor, mounting bolts.
2. Cracked, broken, or loose pulley.
3. Cracked or broken mounting brackets, braces, or adapters.
4. Compressor drive belts in condition of impending or probable failure.
5. Air compressor with audible/visual leak.
6. Standards are not met.

(cont'd on next page)

BRAKE SYSTEMS (cont'd)

Hydraulic Brakes

(Including; Power Assist over Hydraulic and Engine Driven Hydraulic Booster).

1. No pedal reserve with the engine running.
2. Master cylinder less than $\frac{1}{4}$ full.
3. Power assist unit fails to operate.
4. Seeping or swelling brake hose(s) under application or pressure.
5. Hydraulic hose(s) abraded (chafed) through the outer cover-to-fabric layer.
6. Fluid lines or connections restricted, crimped, cracked, or broken.
7. Any visually observed leaking hydraulic fluid in the brake system upon full application.
8. Hydraulic System: Brake failure light/low fluid warning light on and/or inoperative.
9. Hydraulic System with audible/visual leak.
10. Standards are not met.

Vacuum System

1. Insufficient vacuum reserve to permit one full brake application after engine is shut off.
2. Vacuum hose(s) restricted, abraded (chafed) through outer cover-to-cord ply, crimped, cracked, broken, or has collapse of vacuum hose(s) when vacuum is applied.
3. Missing or inoperative, low-vacuum warning device.
4. Vacuum System with audible/visual leak.
5. Standards are not met.

COLOR
18.00

STANDARD:

1. The school bus body shall be painted National School Bus Yellow (NSBY).
2. The body exterior paint trim shall be black.
3. The roof of the bus shall be painted white extending down to the drip rails on the sides of the body, except that front and rear roof caps shall remain NSBY. This does not apply to school buses that were manufactured prior to **November 15, 2005**.
4. The body cowl, hood and fenders shall be in NSBY. The flat top surface of the hood may be non-reflective NSBY.
5. Activity school buses that were manufactured **after November 15, 2005** may be team colors.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Bus roof is not painted white for school buses manufactured after **November 15, 2005**.
2. Bus body cowl, hood and/or fenders are not NSBY.
3. Standards are not met.

LETTERING/NUMBERING
19.00

STANDARD:

LETTERING:

1. Body shall bear words "SCHOOL BUS" in black letters at least 8 inches high on both front and rear of body or on signs attached thereto. Lettering shall be placed as high as possible without impairment of visibility. Letters shall conform to "Series B" of Standard Alphabets for highway signs. "SCHOOL BUS" lettering shall have a reflective background, or as an option, may be illuminated by back lighting.
2. The name of the school district **shall** be displayed in the belt line for all to and from, spare and activity buses manufactured **after July 1, 1996**. This does not apply to buses that were manufactured **prior to July 1, 1996**.
3. Optional lettering may be displayed as follows:
 - a. The name of the owner or operator identification may be displayed on the side of the bus, but cannot be more than 10x10 inches.
 - b. The location of the battery(ies) may be identified by the word "BATTERY" or "BATTERIES" on the battery compartment door in 2" lettering.
 - c. Manufacturer, dealer or school identification or logos.
 - d. Symbols identifying the bus as equipped for or transporting students with special needs may display (on the front and/or side of the bus as close to the special service entrance where it is visible when the door is in it's open position) the International Symbol of Accessibility. Such emblems shall be white on blue background, shall not exceed 12 inches in size, and shall be of a high-intensity, reflectorized material meeting U.S. Department of Transportation FHA FP-85 Standards.
 - e. Lettering on the rear of the bus relating to school bus flashing signal lamps, no right turn on red or railroad stop procedures.

NUMBERING:

A school bus numbering system is required.

1. Location: Side-on the panel immediately below the first passenger window on each side; Or on the first passenger window if there is a need for changing numbers; Or placed above the service door on the right side and above the driver window on the left side and front and rear - on each bumper or other location that would be readily visible; Or in the right-hand corner of the windshield and right-hand rear window so as not to obstruct driver vision, if there is need for changing numbers.
2. Size: Numbers a minimum of five inches (5") in height.
3. Color: Black on National School Bus Yellow background or National School Bus Yellow on black background.
4. In addition the operator may have a vehicle control # displayed on the front and/or back of the bus, but not larger than 1 inch black lettering.
5. Buses purchased exclusively for activities may have school district logo on the side or the roofline of the bus.

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**LETTERING/NUMBERING
(cont'd)**

6. A school bus identified as an "activity bus" may have a lighted front sign, which may allow for a "logo" or team name in lieu of "SCHOOL BUS". These buses are prohibited from use for to and from school. Logos may be school district team colors.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Required identification numbers not properly displayed on the bus body.
2. Any school bus, which does not bear the words "SCHOOL BUS" in black letters at least 8" high in front and rear of the body. Exception for dedicated activity buses only.
3. Standards are not met.

VEHICLE CONDITION
20.00

STANDARD:

1. Meets or exceeds all requirements outlined in the New Mexico Minimum Standards For School Bus Construction Standards, which corresponds to the model year of the bus being inspected.

DOES NOT MEET STANDARD:

(Out of Service - Repair Before Next Dispatch)

1. Overall cleanliness is questionable.
2. Improper vehicle identification plates including license and vehicle identification number. School District owned buses must have a government "G" plate and buses owned and operated by transportation service providers (contractors) as dedicated to and from or spares must have a yellow school bus "SB" plate with red lettering.
3. Passenger seats not securely fastened to the floor by a minimum of (2) bolts, washers and nuts per seat leg. Flange-head nuts may be used in lieu of nuts and washers or seats may be track mounted in conformance with 49 CFR 571.222 (FMVSS). Metal separation, metal projections or springs protruding through seat fabric, seat back, side panels or other objects which present injury potential to occupants. When the seat padding is dislodged in such a way that any portion of the metal seat frame can be felt thus compromising the safety provided through compartmentalization. Seat tears where foam or metal is accessible in the seat interior.
4. Seat cushions not securely fastened to the rear portion of the seat frame with positive fastening devices so as to prevent the seat cushion from flipping forward in the event of a frontal collision, thus compromising the safety provided through compartmentalization.
5. **DRIVER'S SEAT:** **Effective July 1, 2003** all Type C and D school buses manufactured on or after **October 1, 2003 shall be equipped** with a driver's seat that has a Type 2 lap belt/shoulder harness of the integrated type. Specifically, the lap belt and shoulder harness shall be integrated into the seat design and **not anchored** to the side of the bus body or floor in any way.
6. Any type of loose item(s) or other equipment in the interior of the bus not properly secured with a proper fastening device that could become a flying projectile and cause potential injury to occupants within the bus in the event of an unexpected driving maneuver or collision.
7. Inoperable, missing or improper hood latches that are damaged to the point that they interfere with the safe operation of the school bus.

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**VEHICLE CONDITION
(cont'd)**

8. Any **engine, body or chassis** condition which may interfere with the safe, normal, or proper operation of the school bus; or, any **engine, body or chassis** condition which may be hazardous to the safety and welfare of the school bus occupants.
9. Loose, missing or non-compliant handrail(s).
10. Battery compartment door or cover not hinged at front or top, and secured by an adequate and conveniently-operated latch or other type fastener.
11. Securement and restraint system for wheelchair/mobility aid and occupant shall be in compliance with New Mexico School Bus Construction Standards.
13. **Manufacturer's specifications** – any school bus shall be placed **out-of-service** at any time these standards are found to be non-existent in accordance with the construction standards in effect, which corresponds to the model year of the school bus being inspected or the specifications altered in any manner.

Effective July 1, 2003, any approved options added to the school bus body or chassis must be installed at the time of manufacture and meet or exceed all OEM specifications and standards- Including, but not limited to:

- a. Any electrical and mechanical switches or dials, including electrical wiring;
 - b. Any additional lighting equipment, other than OEM replacement parts;
 - c. Onboard Video Camera boxes;
 - d. AM/FM stereo configurations
14. Standards are not met.