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Section	Change
General Information	Minimum warranty labor rate established
Ι	Exhaust system requirements changed for A2 buses
II	Engine displacement requirement change
II	Exhaust system requirements changed for Type B, C, and D buses
II	Convoluted loom requirement added for chassis wiring
II	77 capacity GVWR revised
II	Option for silicone-only chassis and heater hoses
III	Battery disconnect switch requirements added
III	Driver's seat belt color requirement added
III	Convoluted loom requirement added for body wiring
III	Requirement for latest generation LED lights added
III	Backup light requirements changed
III	Stainless steel exterior fastener requirements modified
III	Floor covering requirements modified
III	Mirror stabilizer brackets requirements added
III	Sun shield requirements revised
III	Silicone-only heater hose option added
III	Driver's seat with integrated belt option added
III	Steering wheel mounted controls option added
III	Zonar pre/post-trip documentation system option added
III	Compass option added
III	Option for battery disconnect switch label added
IV	Wheelchair track length requirement modified

2008 Florida School Bus Specifications Revisions

This is not intended to be an all-inclusive list of changes, but is provided as a guide to the major revisions in this edition of "Florida School Bus Specifications." Please review the manual carefully for all changes.

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FOREWORD

Florida School Bus Specifications are adopted as authorized under Section 1006.25, Florida Statutes (F.S.),

and Rule 6A-3.0291, Florida Administrative Code (FAC).

FLORIDA SCHOOL BUS SPECIFICATIONS

General Information and Warranty Provisions

- 1. All public school buses (bodies and chassis) owned, operated, rented, leased, and contracted for by any public school board in Florida, used to transport children to and from school or school-related events, and purchased after the effective date of this document, as specified in Rule 6A-3.0291, FAC, shall:
 - a. Meet or exceed the minimum requirements of these specifications; and,
 - b. Meet all applicable Federal Motor Vehicle Safety Standards; and,
 - c. Meet or exceed the 2005 National School Transportation Specifications and Procedures (also referred to herein as the 2005 National Specifications) except when in conflict with the requirements herein. In such cases, the requirements specified in this document shall prevail.
- 2. The requirements specified herein are the minimum requirements for school buses in Florida. The date used to determine the applicability of these specifications shall be defined as the date the vendor receives the purchase order or signs a valid sales contract with the purchaser.
- 3. All school bus chassis and body manufacturers shall certify to the Commissioner of Education, Florida Department of Education, by letter, that all school buses offered for sale to or use by the public school systems in Florida meet or exceed all standards, specifications, and requirements as specified herein.
- 4. Used school buses purchased or operated by a public school board in Florida shall meet or exceed all federal and state requirements for public school buses that were in effect on the date the vehicle was manufactured.
- 5. Under the authority of Section 316.615, F.S., certain capacity size school buses owned, operated, or leased by nonpublic schools in Florida are required to meet the specifications prescribed herein.

6. Definition of School Bus:

<u>State Definition</u>: In Section 1006.25, F.S.: a "school bus" is defined as a "motor vehicle regularly used for the transportation of prekindergarten through grade 12 students of the public schools to and from school or to and from school activities, and owned, operated, rented, contracted, or leased by any school board..."

Federal Definition: Title 49 CFR Part 571.3 reads: "... 'school bus' means a bus that is sold or introduced in interstate commerce for purposes that include carrying students to and from school or related events."

7. School Bus Types:

- **Type A:** A Type A school bus is a conversion bus constructed utilizing a cutaway front-section vehicle with a left side driver's door. This definition includes two classifications: Type A-1, with a Gross Vehicle Weight Rating (GVWR) of 14,500 pounds or less; and Type A-2, with a GVWR greater than 14,500 pounds and less than or equal to 21,500 pounds.
- **Type B:** A Type B school bus is constructed utilizing a stripped chassis. The entrance door is behind the front wheels. This definition includes two classifications: Type B-1, with a GVWR of 14,500 pounds or less; and Type B-2, with a GVWR greater than 14,500 pounds.
- **Type C:** A Type C school bus is constructed utilizing a chassis with a hood and front fender assembly. The entrance door is behind the front wheels; also known as a conventional school bus. This type also includes the cutaway truck chassis or truck chassis with cab, with or without a left side door, and with a GVWR greater than 21,500 pounds.
- **Type D:** A Type D school bus is constructed utilizing a stripped chassis. The entrance door is ahead of the front wheels; also known as a rear engine or front engine transit-style school bus.

8. Warranties and Parts Availability: New Vehicles

All warranties listed herein shall apply to all school buses manufactured after the effective date of these specifications and sold through the state school bus bid purchase program. Body and chassis manufacturers' warranty policies shall allow revision of warranty start date for each vehicle to the actual in-service date by the school district. Appropriate forms to update chassis warranty shall be included in the owner-operator's packet supplied with the chassis and shall be conveyed along with the body warranty by the body builder to the district upon delivery of the completed unit. Above requirements shall apply to the basic warranties, all component warranties, and any extended warranties offered or required. There shall be no hours-of-use limitation on any warranty required in these specifications or the associated state bid for school buses.

Manufacturers offering school bus chassis or bodies for sale in the State of Florida shall make available replacement parts for said buses for a period of no less than 10 years.

The minimum labor rate for all warranty related repairs shall be \$60.00 per hour.

a. Chassis Warranties

- (1) Chassis warranty shall be manufacturer's standard, and minimum 12,000 miles or 12 months.
- (2) Diesel engines (including flywheel, flex plate, and harmonic balancer) on Type A2, Type B, Type C, and Type D units shall be warranted for 60 months/unlimited mileage, 100 percent parts and labor.
- (3) The chassis or component supplier for all Type A2, B, C, and D chassis shall warranty or provide extended service coverage for the following items, including removal and replacement, for 5-years, unlimited mileage, 100 percent parts and labor: drive shafts and U-joints, differential, rear axles, and rear wheel bearings, but not including gaskets and seals covered under the basic 12 month/12,000 miles chassis warranty. Type C and D buses shall be required to provide a 5-year, unlimited mileage, 100 percent parts and labor warranty on rear axle seals and brake components if the axle is not equipped with oil diverter rings. Chassis frame rails, fuel tanks, front axle I-beams, and rear axle housings shall be warranted for a period of 10 years, unlimited mileage, 100 percent parts and labor. Automatic transmissions shall be warranted for 3 years, 50,000 miles, 100 percent parts and labor, for all Type A, B, C, and D school buses. Radiator and coolant recovery tank shall be warranted for 5 years unlimited mileage.
- (4) All bus chassis electrical components, including wiring, switches, alternators, computers, and controllers, shall be warranted for 60 months/unlimited mileage against failure, 100 percent parts and labor, including, but not limited to, damage resulting from wiring or connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture or use.
- (5) Paint finish coats to chassis hood, fenders, and cowl shall be warranted for 60 months unlimited mileage, 100 percent parts and labor, for adhesion, color retention, and gloss retention. Acceptable lower limits during the warranty period are as follows:

Adhesion:

During the 60-month warranty period, paint and priming compounds shall not fail to adhere to the bus with normal use and care.

Color Retention:

During the first 36 months from the in-service date, the color coat shall not shift colors more than 4 ΔE from the centroid as specified in School Bus Manufacturers Technical Council Publication SBMTC-008.

During the 60-month warranty period, the color coat shall not shift color more than 8 ΔE from the centroid as specified in SBMTC-008.

Gloss:

During the first 36 months from the in-service date, the gloss reading shall not fall below 60 at 60° . During the 60-month warranty period, the gloss reading shall not drop below 30 at 60° .

All measurements shall be the average of 12 readings taken at various points on the bus, but no reading shall be more than 3 points under the stated minimum. All readings shall be taken after the bus is thoroughly washed to remove road film and dust.

b. Body Warranties

- (1) Body warranty shall be manufacturer's standard, minimum 12 months.
- (2) Wheelchair lifts on any bus so equipped shall be warranted for 2 years from the updated in-service date of the vehicle. The warranty shall provide 100 percent coverage for parts.
- (3) The total air conditioner system on any bus so equipped shall be warranted for 2 years, including parts (excluding fluids, gases, and air filters used in normal preventive maintenance) and labor with no warranty limitation on number of operating hours. Warranty shall include at least the items listed in Appendix B. Chassis engine-driven air conditioner compressor applications must be approved in writing by the engine manufacturer, stating that the installation will not void or reduce the engine manufacturer's warranty or extended service liabilities in any way.
- (4) Required white flashing (roof-mounted) strobe light shall be warranted for 100 percent parts and labor coverage as follows: 12 months for flash tube; 18 months for remainder of light.
- (5) Stop signal arm material shall be warranted for 10 years against cracking, delaminating, bubbles, wrinkles, or significant color changes (such as fading of red background). Warranty shall include full replacement cost of material (not including labor).
- (6) All mirror assemblies (including mounting bracketry) shall be warranted (100 percent parts replacement coverage) for 5 years against rust and corrosion and against any reduction in clarity of view due to discoloration or other deterioration of the lens.
- (7) All bus body electrical wiring and switches shall be warranted for 60 months/unlimited mileage against failure, 100 percent parts and labor, including, but not limited to, damage resulting from wiring or connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture or use.
- (8) Paint finish coats to body, hood, and cowl shall be warranted for 60 months unlimited mileage, 100 percent parts and labor, for adhesion, color retention, and gloss retention. Acceptable lower limits during the warranty period are as follows:

Adhesion:

During the 60-month warranty period, paint and priming compounds shall not fail to adhere to the bus with normal use and care.

Color Retention:

During the first 36 months from the in-service date, the color coat shall not shift colors more than $4 \Delta E$ from the centroid, as specified in SBMTC-008.

During the 60-month warranty period, the color coat shall not shift color more than 8 ΔE from the centroid, as specified in SBMTC-008.

Gloss:

During the first 36 months from the in-service date, the gloss reading shall not fall below 60 at 60° . During the 60-month warranty period, the gloss reading shall not drop below 30 at 60° .

All measurements shall be the average of 12 readings taken at various points on the bus but no reading shall be more than 3 points under the stated minimum. All readings shall be taken after the bus is thoroughly washed to remove road film and dust.

- (9) All emergency exit roof hatches shall be warranted (100 percent parts and labor) for 5 years, unlimited mileage against defects in material and workmanship and against leakage.
- (10) Driver's seat and pedestal shall be warranted (100 percent parts and labor) for the life of the school bus against structural failure of any primary support.
- (11) All passenger seat back cushions and seat frame assemblies shall be warranted for 5 years, unlimited mileage, 100 percent parts and labor. This warranty shall not apply to vandalism of any exposed foam.
- (12) All powered entrance doors and operating and control systems shall be warranted for a period of 5 years, unlimited mileage, 100 percent parts and labor.
- (13) All reflective markings shall be warranted for 5 years, unlimited mileage, 100 percent parts and labor.

9. Changes or Clarification of Specifications:

Florida School Bus Specifications may be amended pursuant to the provisions of Rule 6A-3.0291, FAC.

The School Transportation Management Section, with approval of the Florida Association for Pupil Transportation, School Bus Specifications Committee, and consistent with Florida purchasing laws and the bus bid contract, may at its discretion grant variances or exemptions and may from time to time issue clarifications of these specifications as necessary to provide safe, efficient, and cost-effective equipment to Florida school districts and to provide for advances in technology.

Should a clarification or interpretation of these Florida School Bus Specifications be requested, inquiries should be directed to Administrator, School Transportation Management Section, Florida Department of Education, 325 West Gaines Street, Suite 1134, Tallahassee, Florida 32399-0400.