

2008 Specifications Changes

Florida School Bus
Specifications

- **Caterpillar Oil Pan**
- **The committee approved a requirement for deep sump oil pans on all Type C and D diesel engines if available.**
- **Rationale – The committee recognizes that the increase in oil change intervals will offset any cost increase for this item.**

■ Engine Requirements

- The committee approved a reduction of the current engine displacement requirements from 7.0 liters to 6.4 liters.
- Rationale - With changing engine technology from manufacturers, this change will allow Florida school districts to receive engines that meet their needs at the most competitive prices.

- Exhaust System Requirements
- Manufacturers must ensure that exhaust temperature exiting the tailpipe during any normal loading or unloading activity with the engine running will not produce first, second, or third degree burns on students or other individuals present. The bus shall not automatically regenerate the diesel particulate filter while the bus is not moving.
- Delete the requirement for an exhaust turn-down.
- **Rationale - These changes are necessary to protect students while complying with new emissions requirements.**

- **Low Profile Tires on 77 Capacity, Type C Buses**
- **Committee Recommendation – The committee approved the reduction of the rear GAWR for the Type C 77 Capacity bus in order to allow for low-pro tires.**
- **Rationale – Since the highest rear GAWR available for low-pro tires is slightly less than the currently required GAWR of this unit, an adjustment is necessary to allow availability of the 77 straight floor bus.**

■ Accident Disclosure

- The committee approved a proposal to add wording to the bid package requiring same.
- Rationale - The committee is aware of a district that was involved in legal actions due to a crash of a new bus being delivered by the delivery company from the factory. This will at least make the district aware of damage and possible legal concerns with new buses. The committee recognizes that this recommendation was advisory only, because it is technically within the purview of the FAPT School Bus Purchasing Committee.

- **Silicone Only Hoses**
- **Committee Recommendation – The committee approved the creation of an approved option for “silicone-only” hoses.**
- **Rationale – This would allow those districts that wanted the benefit of this hose to purchase them on new buses.**

- **Driver's Seat with Integrated Seat Belt**
- **Committee Recommendation – The committee approved the creation of an approved option for driver's seats with integrated belts.**
- **Rationale - The committee determined that two of the three large bus manufacturers would have to reduce bus capacity by two passengers in order to use this seat design. Therefore, the committee believed that the individual districts should be able to make the decision of whether the potential benefits outweigh the disadvantage in reduction of passenger capacity.**

- **Stainless Steel Exterior Fasteners**
- **Committee Recommendation – The committee approved the use of fasteners coated with the dacromat or magnaguard process to be allowed in lieu of stainless steel.**
- **Rationale – Manufacturers provided testing data proving that these processes would prevent fasteners from corroding in Florida service.**

- **Steering Wheel Controls**
- **The committee approved the creation of an approved option for steering wheel control of the pupil warning lights and entrance doors.**
- **Rationale - The committee agreed that this system may benefit some districts; however, since it is not currently available from all manufacturers, it should not be required on all buses.**

■ **Warranty Labor Rates**

- **The committee approved the adoption of a standard minimum warranty labor rate of \$60 per hour.**
- **Rationale – This will provide all districts an equitable reimbursement for warranty related repairs.**

Latest Generation LED Lights

- The committee approved the requirement for the latest generation of LED lights be used in all positions where LED lights are required
- Rationale - The committee determined that the current "generation two cluster" LED's are brighter and more durable than the LEDs currently in use.

■ Back Up Lights

- The committee approved the use of a sealed incandescent light in place of an LED back-up light.
- Rationale - The committee found that LED back-up lights are more expensive than other LED lights and incandescent lights can do an equivalent job at a much lower cost.

- **Zonar Inspection / Child Alarm System**
- **Original Proposal – To allow an option for the Zonar pre-trip inspection and sleeping child alert system.**
- **The committee approved the creation of an approved option for the Zonar pre-trip inspection and sleeping child alert system.**
- **Rationale –This item can provide districts with documentation that drivers perform pre-trip inspections. This system documents the driver's pre-trip inspection and also that the driver walked to the rear of the bus to check for passengers at the end of the run.**

- **Wheelchair Tie Down Track Length**
- **The committee approved the allowance of more than one piece of track in any 50-inch section of track. The specification states that no more than two pieces of track may be used in any 50 inch section and no track may be shorter than 16 inches.**
- **Rationale - This will still provide the flexibility and strength needed for wheelchair tie-down positions., while slightly reducing cost.**

- **Compass on School Bus**
- **The committee approved the creation of an approved for a compass on all buses to provide information to operators about their direction of travel.**
- **Rationale - The committee believed this may provide helpful information to some operators.**

■ Battery Cut-Off Switch

- The committee approved the requirement of a labeled battery cut-off switch in the A/C or battery compartment or within 3 feet of the battery box if no A/C box is available. The label on the exterior of the door shall read "BATTERY DISCONNECT SWITCH INSIDE"
- Rationale – There have been several bus fires over the last several years attributed to direct shorts within the electrical systems of the buses. This item will provide extra safety in such instances by allowing the driver or another person to cut off the current at its source.

- **Rubber Mirror Mounts**
- **The committee approved the requirement for through-the-fender rubber or nylon mounts with stainless steel caps on all crosswalk mirror stabilizer brackets on all Type B and C composite hoods.**
- **Rationale – To stabilize the mirror and reduce vibration emanating from the engine and the road. Additionally this should stop the sawing effect being experienced with the current mounting bolt system.**

- **Fire Prevention**
- **Committee Recommendation** The committee approved a requirement that all body and chassis wiring be protected with convoluted loom.
- **Rationale** – The committee is moving forward to try to reduce the number of serious school bus fires by eliminating the most common source of these fires.

■ Sun Visors

- The committee approved a proposal to revert to the previous style of sun visors.
- Rationale – Due to concerns of reliability and cost of the most recently required visor, the committee believed reverting to the previous system was the prudent course of action.

- **Driver's Seat Belt**
- **Original Proposal** – The committee approved the requirement for driver's seat belts to be bright orange or fluorescent lime green in color. On type A buses, a sleeve may be used.
- **Rationale** - The committee and others have observed school bus drivers not wearing their seat belts or wearing them improperly (for example, with the shoulder strap behind their backs). Properly worn driver seat belts are important to student safety because they keep drivers restrained in the seat where they can maintain control of the bus in an evasive maneuver. They also significantly reduce injuries to drivers in accident situations, where the driver may be called upon to assist students in evacuating or help those with injuries. The highly visible driver seat belts will increase safety by making improper belt use more visible to all, thereby encouraging all drivers to wear their seat belts properly and aiding enforcement efforts by supervisors.

■ One Piece Floor Material

Committee Recommendation – The committee approved a proposal to allow one-piece floor rubber, with no molding required at the center aisle, and meeting all other requirements of flooring material.

- **Rationale – The committee believed that this system will provide some cost reduction and do a much better job of protecting the plywood sub-floor of most buses.**

Items Currently Under Review

- School Bus Cost Analysis
- Further AC Spec Improvements
- LED Pupil Warning Lights
- New Crossover Mirrors

Items Currently Under Review

- Fire Suppression
- Crossing Gate Material
- Allison 2500 on 77 Capacity C
- Delete Interior Color Requirements

