7. Be operated by an electric switch with a pilot lamp mounted on the instrument panel located to be exclusively controlled by the driver.

8. Be equipped with a gauge to indicate that the hopper has reached the one quarter level (and needs to be refilled); and

9. Be designed to prevent freezing of all activation components and moving parts.

B. Automatic traction chains may be installed.

TRANSMISSION

A. Automatic transmissions shall have no fewer than three forward speeds and one reverse speed. Mechanical shift selectors shall provide a detent between each gear position when the gear selector quadrant and shift selector are not steering column mounted. Automatic transmissions shall be standard for all type school buses.

B. Automatic transmissions shall have a transmission shifter interlock controlled by the application of the service brake to prohibit accidental engagement of the transmission.

TRASH CONTAINER AND HOLDING DEVICE (OPTIONAL)

When requested or used, the trash container shall be secured by a holding device that is designed to prevent movement and to allow easy removal and replacement. It shall be installed in an accessible location in the driver's compartment, not obstructing passenger access to the entrance door.

TURNING RADIUS

A. A chassis with a wheelbase of 264 inches or less shall have a right and left turning radius of not more than 42 ½ feet, curb-to-curb measurement.

B. A chassis with a wheelbase of 265 inches or more shall have a right and left turning radius of not more than 44 ½ feet, curb-to-curb measurement.

UNDERCOATING

A. The entire underside of the bus body, including floor sections, cross member and below floor-line side panels, shall be coated with rust-proofing material for which the material manufacturer has issued to the bus body manufacturer a notarized

certification to the bus body manufacturer that materials meet or exceed all performance requirements of SAE J1959, Sept. 2003 Edition of the Standard.

B. The undercoating material shall be applied with suitable airless or conventional spray equipment to the undercoating material manufacturer recommended film thickness and shall show no evidence of voids in the cured film.

C. The undercoating material shall not cover any exhaust components of the chassis.

VENTILATION

A. Auxiliary Fan(s) shall meet the following requirements:

B. Fan(s) shall be placed in a location where they can be adjusted for maximum effectiveness and where they do not obstruct the driver's vision to the mirrors or interfere with the safe operation of the vehicle.

1. Fans shall have six-inch (nominal) diameter.

2. Fan blades shall be enclosed in a protective cage. Each fan shall be controlled by a separate switch.

C. The bus body shall be equipped with a suitably controlled ventilating system with capacity sufficient to maintain the proper quantity of air flow under operating conditions without having to open a window except in extremely warm weather.

D. Static-type, non-closeable exhaust ventilation shall be installed in a low-pressure area of the roof.

E. Roof hatches designed to provide ventilation in all types of exterior weather conditions may be provided.

WHEELHOUSING

A. The wheel housing opening shall allow for easy tire removal and service.

B. Wheel housings shall be attached to the floor panels in a manner to prevent any dust, water or fumes from entering the body. Wheel housings shall be constructed of 16-gauge (or thicker) steel.

C. The inside height of the wheel housings above the floor line shall not exceed 12 inches.

D. The wheel housings shall provide clearance for installation and use of tire chains on single or dual (if so equipped) power-driving wheels.

E. No part of a raised wheel housing shall extend into the emergency door opening.

WINDOWS

A. Other than emergency exits designated to comply with FMVSS No. 217, *Bus Emergency Exits and Window Retention and Release*, each side window shall provide an unobstructed opening of at least nine inches high (but not more than 13 inches high) and at least 22 inches wide, obtained by lowering the window. One window on each side of the bus may be less than 22 inches wide.

B. Optional tinted and/or frost-free glazing may be installed in all doors or windows.

C. Windshields shall comply with federal, state and local regulations.

WINDSHIELD WASHERS

A windshield washer system shall be provided.

WINDSHIELD WIPERS

A. A windshield wiping system, two speed or variable speed, with an intermittent feature shall be provided. The wipers shall meet the requirements of FMVSS 104.

B. The wipers shall be operated by one or more air or electric motors of sufficient power to operate the wipers. Type A-I and A-II buses utilizing the chassis manufacturer's one-piece windshield may be equipped with two wipers driven by either one or two electric motors.

SPECIALLY EQUIPPED SCHOOL BUS SPECIFICATIONS INTRODUCTION

Equipping buses to accommodate students with disabilities is dependent upon the needs of the passengers. While one bus may be fitted with a lift, another may have belts installed to secure child seats. Buses so equipped are not to be considered a separate class of school bus, but simply a regular school bus that is equipped for special accommodations.

The specifications in this section are intended to supplement specifications in the chassis and body sections. In general, specially equipped buses shall meet all the requirements of the preceding sections, plus those listed in this section. It is recognized that the field of special transportation is characterized by varied needs for individual cases and by rapidly emerging technologies for meeting individual student needs. A flexible, "common-sense" approach to the adoption and enforcement of specifications for these vehicles, therefore, is prudent.

As defined by 49 Code of Federal Regulations (CFR) §571.3, "*Bus* means a motor vehicle with motive power, except a trailer, designed for carrying more than ten persons" (eleven or more including the driver). This definition also embraces the more specific category, *school bus.* Vehicles with ten or fewer occupant positions (including the driver) are not classified as buses. For this reason, the federal vehicle classification *multipurpose passenger vehicle* (49 CFR § 571.3), or MPV, must be used by manufacturers for these vehicles in lieu of the classification *school bus.* The definition of *designated seating position* in 49 CFR § 571.3 states that, in the case of "vehicles sold or introduced into interstate commerce for purposes that include carrying students to and from school or related events" and which are "intended for securement of an occupied wheelchair during vehicle operations," each wheelchair securement position shall be counted as four designated seating positions when determining the classification (whether *school bus or MPV*). This classification system does not preclude state or local agencies or these national specifications from requiring compliance of school bus-type MPVs with the more stringent federal standards for school buses. The following specifications address modifications as they pertain to school buses that, with standard seating arrangements prior to modification, would accommodate eleven or more occupants including the driver. If by addition of a power lift, wheelchair positions or other modifications, the capacity is reduced such that vehicles become MPVs, the intent of these specifications is to require these vehicles to meet the same specifications they would have had to meet prior to such modifications, and such MPVs are included in all references to school buses and requirements for school buses which follow.

DEFINITION

A *specially equipped school bus* is any school bus that is designed, equipped and/or modified to accommodate students with special transportation needs.

GENERAL REQUIREMENTS

A. Specially equipped school buses shall comply with the National School Transportation Specifications and Procedures and with the Federal Motor Vehicle Safety Standards (FMVSSs) applicable to their respective model year and with gross vehicle weight rating (GVWR) category.

B. Specially equipped school buses shall comply with Mississippi specifications as enumerated in the Bus Body and Chassis Specifications section of this document.

C. Any school bus to be used for the transportation of children who utilize a wheelchair or other mobile positioning device, or who require life-support equipment that prohibits use of the regular service entrance, shall be equipped with a power lift.

AIR CONDITIONING

Special needs buses shall be equipped with air conditioning. Refer to School Bus Body and Chassis Specifications, for minimum heating and air conditioning standards.

AISLES

All school buses equipped with a power lift shall provide a minimum 30-inch pathway leading from any wheelchair position to at least one 30 inches wide emergency exit door. A wheelchair securement position shall never be located directly in front of (blocking) a power lift door location.

COMMUNICATION SYSTEM

A. All school buses that transport individuals with disabilities shall be equipped with a two-way electronic voice communication system that can be used at any point on the vehicle's route.

B. Each bus should have a public address system capable of driver communication with passengers inside and outside the bus.

CRASH BARRIERS

A. A crash barrier with an aluminized courtesy panel extending to the floor and walls shall be placed between the lift and any seat position on a front-mounted lift (bench seat or wheelchair position). Stanchions are not acceptable.