

TRANSIT SCHOOL BUS SPECIFICATIONS, 84 PASSENGER HANDICAP

The bus is to be a 2010 model or newer as described in these specifications. Minimum specifications are listed below. Bidders' specifications must meet or exceed minimum specifications. All bus specifications shall meet or exceed those specifications as set forth by the Ohio Department of Public Safety, Federal Department of Transportation and the Ohio Department of Education, minimum construction standards.

CHASSIS SPECIFICATIONS

Air Compressor	13.2 CFM capacity at 1250 RPM, water cooled, gear driven. Clean inlet air obtained from charge air at engine intake. Air tank capacity 4760 cu. in.	
Alternator	12 volt, 240 amps	
Axles	Front 13,200 lbs. capacity, full power steering. Oil seals. Rear 21,000 lbs. capacity, single speed with a 5.29 ratio.	
Battery	Three 12 volt Group 31, 3375 CCA. Mounted in a battery box on a tray.	
Brakes, service	Dual full air, 16.5x6 front and 16.5x7 rear. "S" cam. Non-asbestos extended wear lining with dust shields. Automatic slack adjusters. Bendix AD-IP air dryer.	
Brakes, emergency	30 sq. in. spring brake system with treadle valve control. Separate valve for parking.	
Controls	Adjustable high idle switch. Electronic cruise control Key-type starter and stop switch. Dash mounted transmission shifter. Tilt/Telescopic steering wheel Rheostat dash dimmer on headlight switch	
Engine	Diesel, inline 6 cylinder, turbo charged, 220 HP @ 2500 RPM. Engine to be located in front of forward axle. Engine block heater. Heated Fuel/water separator, Racor. Automatic air intake pre-heater to assist cold starting Viscous fan, electromagnetic not acceptable).	
Exhaust	Tail pipe to exit at the rear.	
Fuel tank	Aluminized steel, 100 gallon capacity located behind rear axle between frame rails. Spring loaded locking fuel door and sending unit access plate required.	
Instruments	Speedometer Odometer Voltmeter Fuel level gauge Ammeter Tachometer	Water temperature gauge Dual air pressure gauges Oil pressure gauge Low air pressure warning light and buzzer Low coolant warning light and buzzer. Hour meter

	Digital clock, dash mounted Headlights "left on" warning chime Engine warning system high water temp/low oil pressure Resettable trip odometer
Lights	Four halogen headlights, daytime running lights.
Manuals	Complete maintenance manual and parts list of all parts used in the bus with part numbers.
Shock absorbers	Front and rear, double action piston type.
Springs	Front: Parabolic 13,200 lbs. capacity. Rear: 21,000 lbs. capacity
Transmission	Allison automatic, model 2500PTS. Transmission oil cooler separate from radiator. Transynd fluid.
Tires	Michelin 11R 22.5, 16 ply radial tubeless tires.
Tow hooks	Two front and rear, frame mounted.
Warranty	Minimum required, Chassis 2 years 24,000 miles, Engine 5 years 100,000 miles, Transmission 5 year unlimited miles.
Wheels	10 Stud disc type, hub-piloted, 22.5x8.25.
Wheelbase	Maximum of 232", curb turning radius not to exceed 35 feet.
Wiring	Color and number coded wiring.

BODY SPECIFICATIONS

Air intake	Mounted on right front below windshield level. Manual control for fresh air.
Arm rest	Driver's arm rest to left of driver on rear portion of switch panel.
Battery compartment	Enclosed compartment with slide-out tray. Tray to be held in place with a retaining pin. Door hinged at the side with a recessed handle.
Bumpers	1/4" plate steel front, 3/16" plate steel rear, one piece, die-formed. Frame mounted, front and rear at least 12" in height. Bumpers and bracing to be designed to permit lifting vehicle with a bumper jack. Front bumper to include a plate with a white reflective background for placement of State ID number.
Construction	Roof bows 14 gauge die formed, hat shaped one piece continuous from floor line

to floor line. Welding and/or splicing roof bows is not acceptable. Bows must not extend below the floor line.

Panels, roof, ceiling exterior and interior side panels must be fastened with rivets.

Rain visors over side windows to be embossed in roof panels to reduce seams.

Rub rails, four riveted rub rails located as follows, one below windows, one at passenger level, one near floor line, and one at the bottom of the skirt.

Interior wheel housings to be protected with a one piece molded rubber cover.

Door, entrance	Air operated outward opening. Grab rails located on both sides.
Door, emergency	Rear emergency door is required 52.5" x 37.7". Door to have dual 6" hinges with grease fittings and a positive retainer to hold the door open.
Emergency Equipment	All required State specifications mounted in a compartment above windshield.
Floor	5/8" Marine grade plywood installed over steel floor.
Glove box	Located above windshield on the right side with a door and latch 11" x 6".
Headroom	Minimum of 77 inch headroom at the aisle measured over the plywood floor.
Heaters	All heaters with the exception of the driver's are required to have cleanable filters. 90,000 BTU right front heater, three speeds, with defroster for entrance door and windshield. Heater cutoff valves to be ball type 1/4 turn shutoff. 12,000 BTU driver's heater located to the left of the driver. 50,000 BTU midship heater located in front of rear wheelhouse and mounted off of the floor with a two speed fan. 80,000 BTU rear wall mounted heater with a two speed fan. Two 6" auxiliary fans with two speed motors located above the windshield to assist with defrosting.
Insulation	Fiberglass insulation in the ceiling with mineral wool insulation in the side walls to reduce settling with additional insulation in driver's area. All ceiling panels to be perforated to reduce engine noise (full length acoustic headliner).
Interior	Interior to be astro white. Dash area to be Gray. Seat frames and heaters to be black.

Lift	Right rear mounted Braun L919 w/ADA door
Lights	Warning light system meeting current state specifications shall be furnished with a Weldon flasher. Warning lights shall be hooded to improve visibility. Stoparm to have LED lights. Seven inch stop, tail, brake, turn signal, back-up lights. 16 lamp light monitor. Low strobe light. Separate dome light for the driver, other dome lights to be mounted over the aisle.
Mirrors	Interior, rearview 6"x30", sun visor 6"x30" plexiglass. All exterior mirrors heated
Paint	Exterior, heat cured polyurethane. White roof
Radio	AM/FM/CD/PA radio with eight speakers.
Reflective tape	In addition to State requirements Install reflective vinyl as follows: under "School Bus" front and rear a 2 inch wide strip at floor level full length both sides.
Roof hatches	Two, evenly spaced, Transpec
Rustproofing	Body parts thoroughly rust proofed after fabrication and before assembly.
Seat, driver's	National air ride, hi-back, cloth upholstery with a foam cushion and back, entire seat adjustable without tools. Track adjustable driver's shoulder belt required.
Seat, passenger back	42 oz. green seat upholstery. Cushions to have plywood bottoms. 39" wide seats, 12" aisle at cushion level, 14" at the top of the seats. Seat frames constructed with square steel tubing and "C" channels with a metal filler panel in the seat for added strength. All seats seatbelt ready. Staggered seating floor plan.
Track mounted seats	Four track mounted seats to be included
Minimum body length	39' 4".
Service access panels	Swing up fiberglass engine hood with an aluminum insert for access to engine and transmission items. Engine cover to be no more than 7.5" above the floor. A handle and hood prop are required. Swing out front panels for access to radiator and wiper motors.
Restraints	Q-Straint (one included)

Stepwell	Three step, non-skid rubber covered steps must be bolted on and not welded.
Switch panel	All accessory switches: heaters, warning lights, etc. must be mounted on a separate panel located just below the driver's window or on the right side dash area and placed within easy reach of the driver. Must have a cutoff switch for interior noise. (aka railroad/quiet switch)
Undercoating	Unit to be fully undercoated before mounting on chassis and baked on.
Windows	Four piece flat shaded windshield, tinted passenger windows. Assist handles installed above the windshield and stirrup steps in the front bumper for easy access to clean windshield.
Wipers	Dual electric, bottom mounted, wet arm, intermittent operation
Wiring	Color coded in molding above side windows. Body wiring protected by automatic resetting circuit breakers. Locking outside wiring access door 27"x 16" located just below the driver's window with a 12 volt light controlled by a switch.
Selling dealer	Selling dealer must be located within 60 miles of school.

NOTE: All companies are encouraged to bid but any exceptions taken to these specifications or alternates provided must be listed on the bid form or a separate sheet attached to the bid form. If a list is not submitted with the bid it will be assumed the bus delivered will meet all of the requested specifications.