



Daily Bus Inspection Work Instructions TRN-W003

Clarksville-Montgomery County School System

1.0 SCOPE:

1.1 This instruction outlines the process for performing Daily Bus Inspection for school buses. This inspection should only be performed by the bus driver with a valid Commercial Drivers License.

The online version of this work instruction is official. Therefore, all printed versions of this document are unofficial copies.

2.0 RESPONSIBILITY:

2.1 CMCSS Bus Driver

3.0 APPROVAL AUTHORITY:

3.1 CMCSS Transportation Manager

4.0 DEFINITIONS:

4.1 cdl - Cracks, damaged and loose
4.2 pms – Properly mounted and secure

5.0 WORK INSTRUCTION

5.1 Upon approaching the front of the bus:

- 5.1.1 Check the attitude of the bus, leaning could indicate a flat or missing spring.
- 5.1.2 Check under the bus for any leaks, hoses and belts.
- 5.1.3 Check the lights and all covers for cleanliness cdl. Identify each light.
- 5.1.4 Check the windshield including wiper arm and blades for cleanliness and breakage.
- 5.1.5 Check the mirrors to ensure they are not cdl.
- 5.1.6 Check coolant and power steering fluid levels. Fill if needed.
- 5.1.7 Check washer fluid level. Fill if needed.
- 5.1.8 Check front for body damage.
- 5.1.9 Check alternator pms / attached to the serpentine belt
- 5.1.10 Check Serpentine Belt for proper tension & pms
- 5.1.11 Check water pump pms / leaks / attached to the serpentine belt
- 5.1.12 Check the power steering pump (gear or belt driven) pms / leaks and condition of all hoses
- 5.1.13 Check the air compressor (gear or belt driven) pms/leaks

5.2 Driver's Side under bus:

Check Steering System:

- 5.2.1 Check steering arm for cracks, bends and security.
- 5.2.2 Check steering gear box and hose for leaks and ensure it is securely mounted.
- 5.2.3 Check tie rod for any bends and security.
- 5.2.4 Check the pitman arm for any bends and security.
- 5.2.5 Check draglink for any bends and security.

Check Brake System:

- 5.2.6 Check brake hoses for leaks, cracks and rub marks pms
- 5.2.7 Check air chamber for leaks and ensure it is pms.
- 5.2.8 Check slack adjusters and push rod for bends and security, less than 1" pull play in front and 90-degree angle in rear.
- 5.2.9 Check drums for cracks, welds and oil leaks.



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5.2.10 Check brake pads and lining for wear cdl.

Check Suspension System

- 5.2.11 Check shocks for leaks, pms.
- 5.2.12 Check spring leafs for separation pms.
- 5.2.13 Check hangers/spring mounts to be pms.
- 5.2.14 Check shackles to be pms.
- 5.2.15 Check the U-bolts to be pms.

5.3 Starting around the driver's side of the bus:

- 5.3.1 Continue to check the windows, clearance light covers for pms and cdl.
- 5.3.2 Check the window seals and all reflectors for proper location and pms.
- 5.3.3 Check the body for any dents, scratches and any loose metal.
- 5.3.4 Check stop arm lights, cable and rubber boot for pms and cdl.
- 5.3.5 Check cargo doors and cargo area for cdl.

5.4 Front Tires

- 5.4.1 Check for any cuts, bulges and excessive wear inside and outside.
- 5.4.2 Check the rim for crack bends and welds inside and outside.
- 5.4.3 On the front tires, there should only be 4/32" of minimum tread. No re-caps.
- 5.4.4 Do not mix radial and bias type tires. All tires should be the same size.
- 5.4.5 Check lug nuts for tightness and any rust (indicating looseness).
- 5.4.6 Check oil hub seal for any leaks if equipped with a leveler check proper oil level.
- 5.4.7 Check valve stems for cracks, air leaks and valve cap.
- 5.4.8 Check tire pressure with a tire gauge only (90-100psi).
- 5.4.9 Check mud flaps for pms.

5.5 Check undercarriage between front and rear tires:

- 5.5.1 Check frame for bends, cracks and missing parts.
- 5.5.2 Check exhaust system for holes, leaks, security, any bent pipes, missing or loose hangers, clamps or straps and no wires touching.
- 5.5.3 Make sure nothing is in the exhaust and it is pms.
- 5.5.4 Check Drive Shaft for damage, safety hangers in place, where it meets transmission no leaks, where it meets rear difference no leaks.
- 5.5.5 Check air drier and air tanks for leaks pms.

5.6 At Rear Tire Area

Check the Brake System

- 5.6.1 Check brake hoses for leaks, cracks, rub marks and pms.
- 5.6.2 Check the air chamber for leaks and ensure it is pms.
- 5.6.3 Check the slack adjusters and Push Rod for security, 90-degree angle in rear if brakes on, if brakes released, less than 1" pull play push rods for bends, cdl.
- 5.6.4 Check the drums for cracks, welds and oil leaks.
- 5.6.5 Check the brake pads and lining for wear pms.

Check the Suspension System

- 5.6.6 Check the shocks for security, leaks, dents and bends.
- 5.6.7 Check the spring leafs for separation.



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- 5.6.8 Check the hangers/spring mounts for bends, looseness and security.
- 5.6.9 Check the shackles for cracks, looseness and security.
- 5.6.10 Check U-bolts for looseness and security.
- 5.6.11 Check air bellow for leaks and torque arm for security (if equipped).

5.7 Rear Tire:

- 5.7.1 On the back tires, there can be 2/32" of minimum tread, Recaps are allowed.
- 5.7.2 Do not mix radial and bias type tires. All tires should be the same size.
- 5.7.3 Check for any cuts, bulges and excessive wear (Inside and Outside).
- 5.7.4 Check the lug nuts for tightness and any rust (indicating looseness).
- 5.7.5 Check the oil hub seal for any leaks.
- 5.7.6 Check the rims for cracks, bends and welds (Inside and Outside).
- 5.7.7 Check the spacers if equipped and make sure nothing is between the tires.
- 5.7.8 Check the valve stems for cracks, air leaks, and valve cap.
- 5.7.9 Check the tire pressure with a tire gauge only (90-100psi). Check the mud flaps for pms.

5.8 At the Back of the Bus

- 5.8.1 Check the rear for body damage.
- 5.8.2 Check the windows for cdl.
- 5.8.3 Check the lenses for cdl and clean. (Identification of each light).
- 5.8.4 Check the strobe light on the top of the bus.
- 5.8.5 Check the emergency exits for security, with the door open, check the condition of the inside aisle pms, door seal and note the highway emergency warning triangles (3).

5.9 Starting Around Passenger Side of the Bus:

- 5.9.1 Check the condition of the bus in the same manner as the driver side.
- 5.9.2 Check the fuel door, cap, and the fuel neck for leaks and security.
- 5.9.3 Check the fuel tank for pms and check for leaks.

5.10 Upon Reaching the Door:

- 5.10.1 Check the glass for cleanliness, breakage, operational and the rubber seals.
- 5.10.2 Check the steps for loose matting pms.
- 5.10.3 Check the handrail for pms.
- 5.10.4 Fire extinguisher (safety pin, pressure gauge in the green, and security), nine-item First Aid Kit, Body Fluid Kit, fuses/circuit breakers if equipped and seat belts.
- 5.10.5 Check seats for damage and pms.
- 5.10.6 Check windows for cleanliness, cdl and operable.

Put ignition switch in the "ON" position

- 5.10.7 Check all emergency exits (roof hatches, windows and back door) for warning buzzers, seals and operational.

5.11 Engine Area:

- 5.11.1 Check oil level with engine off.
- 5.11.2 Check transmission levels with engine running.
- 5.11.3 Check hoses for condition.



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5.12 Instrument Panel: Secure Seat Belt.

- 5.12.1 Check high and low beams indicators.
- 5.12.2 Check left and right turn signal indicators.
- 5.12.3 Check 4-Way indicators.
- 5.12.4 Check horn for operational.
- 5.12.5 Check mirrors and seat for proper adjustment including Three Student Mirrors.
- 5.12.6 Check ABS light comes on and goes out.
- 5.12.7 Check water pressure gauge to ensure it is operational.
- 5.12.8 Check oil gauge for operational.
- 5.12.9 Check battery amps and volts gauges.
- 5.12.10 Check air pressure gauge to ensure it is operational.
- 5.12.11 Check interior lights.
- 5.12.12 Check heaters and defrost blowers.
- 5.12.13 Check pilot light for stop arm, amber, and reds.
- 5.12.14 Check DVR.

5.13 Air Brake System Check:

- 5.13.1 **Safe Start:** Make sure tires are chocked, gear selector is in the "Park" or "Neutral" position, and brake is applied.
- 5.13.2 Start engine and call out "ABS light came on and off, Amps are charging, Air is rising, Oil pressure is rising, and Temperature is normal". Run engine until air pressure is around 100 psi.
- 5.13.3 Turn engine off (leave key in the "ON" position).
- 5.13.4 Release the parking brake.
- 5.13.5 Open the driver's window and passenger door and listen for one (1) minute for any air leaks. There should be no more than 2 psi drop in air pressure.
- 5.13.6 Apply pressure to brake and HOLD for one (1) minute while listening for any air loss. Air pressure should not exceed 3 psi drop in air pressure.
- 5.13.7 Pump brakes rapidly until the low air pressure warning light or buzzer comes on at around 60 – 70 psi.
- 5.13.8 Continue pumping until the emergency (spring) brakes engage between 30-40 psi.
- 5.13.9 Start engine and put transmission in "Drive" and apply light accelerator pressure to ensure emergency brake will prevent vehicle from moving.
- 5.13.10 Place transmission in "Neutral" and while air pressure is building, check outside lights.
- 5.13.11 Turn on headlights, clearance lights and strobe lights (leave on).
- 5.13.12 Check high and low beam, left and right turn signal, four-way flashers, warning lights, Amber and Reds (open door to activate red lights), in the Rear, check all the same lights including the rear brake lights and backup lights.

6.0 Service Brake Check:

After air pressure has built up to at least 100 psi, put into gear and move forward until you reach 5 mph. At that time, step on the brake to check if the bus stops without pulling to the left or right. If bus pulls to either side, you may have bad brake pads or slack adjusters out of alignment.



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7.0 Things to Know:

- **Hills:** Five things; check brakes, traffic, speed, one gear lower going down than going up and apply light braking pressure.
- **Overpasses and bridges;** if nothing is posted, assume it is OK to enter.
- If parking uphill, turn front wheels away from curb and if parking down hill, turn front wheels into curb.
- Check the battery for corrosion and door is secure.
- Check air drain tanks at the end of the day for water and oil.
- Check steering wheel for no more than 2" play on a 20" wheel.
- Check radio is working and on proper channel.

8.0 ASSOCIATED DOCUMENTS:

- 8.1 Daily Bus Inspection Check List ([TRN-F007](#))

***** End of Instruction *****