



COLORADO DEPARTMENT OF EDUCATION

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TR-67-10D

TO: Transportation Directors, Supervisors

FROM: Bruce D. Little, Senior Transportation Consultant, (303) 866-6655
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DATE: April 23, 2010

SUBJECT: 1 CCR 301-29, Annual Inspection Rules Revision

Enclosed is the revision of 1 CCR 301-26, Rules for the Annual Inspection and Preventative Maintenance of School Transportation Vehicles. These revisions will become effective June 1, 2010.

The major revisions include:

Grammatical changes

Update of statute numbers and terminology

2.08 Change of the term "Retarder" to "Secondary Braking System"

8.01(b) added pad to floor surface

10.01(c) added verifiable

10.01(h) listed Inspector Qualification File

10.02 added requirements to recertify if inspector certificate has expired

11.01(a) through (d) numbered and clarified items

13.00 Preventative Maintenance Program criteria moved to 15.00

14.02(d) added rails and cross members

14.03(a) 2. added that tread depth be measured at three different major grooves and that the minimum reading be recorded

14.11(a) 1. Removed test since no other test is listed

14.11(f) 1. Added using the applied method

- 14.15 added radiator and water pump
- 14.17(a) added windshield wipers and washer
- 14.21(a) clarified warning buzzers for emergency doors and windows
- 14.23(c) clarified raises automatically
- 14.25 added defrosters
- 14.29 added horn
- 14.31 added if safety related
- 14.32 added pre-inspection road test
- 15.01 and 15.01(a) reworded to clarify
- 15.01(b) new section
- 15.02 new section

Revised written tests for the annual inspectors will be sent out later this summer.

This letter with enclosure should be placed in Section D of the Colorado School Transportation Administrator's Reference Manual. Previous memo number, TR-31-03D and previous rules, should be removed. Please mark off TR-67 on the Check List page at the front of the manual.

DEPARTMENT OF EDUCATION

Colorado State Board of Education

RULES FOR THE ANNUAL INSPECTION AND PREVENTATIVE MAINTENANCE OF SCHOOL TRANSPORTATION VEHICLES

1 CCR 301-29

2251-R-1.00 Statement of Basis and Purpose

The statutory authority for these rules and regulations adopted by the State Board of Education is found in 22-2-107(l)(c), 22-51-108, and 42-4-1904, C.R.S.

The purpose of this rule is to establish annual inspection and preventative maintenance criteria to insure that Colorado school transportation vehicles are regularly maintained and inspected in the interest of the safety of the students transported in these vehicles.

1.01 Effective date: These rules shall become effective June 1, 2010.

2251-R-2.00 Definitions

- 2.01 “Annually” means to the last day of the month twelve months from the previous inspection.
- 2.02 “Brakes” refers to all types of OEM foundation brake systems unless specified.
- 2.03 “CDE” refers to the School Transportation Unit, Colorado Department of Education.
- 2.04 “Inspecting Site” refers to the CDE certified garage or facility where the vehicles are annually inspected. This site may be owned and operated by the district or an outside facility.
- 2.05 “Inspector” refers to the CDE certified annual inspector who certifies the annual inspection on a school transportation vehicle.
- 2.06 “OEM” refers to original equipment manufacturer.
- 2.07 “Preventative Maintenance” refers to scheduled regular maintenance and inspection performed on a school transportation vehicle.
- 2.08 “Secondary braking system” meeting CDE Minimum Standards, 301- 25, Section 31, is used to supplement the primary brake system.
- 2.09 “School District” refers to the public school district, private carrier under contract to a public school district, or any school deemed to be responsible to CDE transportation rules and regulations.
- 2.10 “School Transportation Vehicle” includes school bus, small vehicle, and multifunction bus in the operation of transporting students as defined in Minimum Standards Governing School Transportation Vehicles, 1 CCR 301-25. The obsolete category of ‘Activity Bus’ is still required to have a current annual inspection.

2251-R-3.00 Inspection Interval

- 3.01 School districts shall inspect or have inspected annually all school transportation vehicles. Recently purchased school transportation vehicles shall have a CDE annual inspection before they are placed in service transporting students.

2251-R-4.00 Disclaimer

- 4.01 Any expense incurred during or after the inspections) shall be the responsibility of the vehicle owner. CDE shall not assume any responsibility as a result of the inspection procedure. The inspecting site is not responsible for repairs of any defect found unless the inspecting site is also the vehicle owner.

2251-R-5.00 Noncompliance

- 5.01 CDE shall certify and monitor the operation of inspecting sites and annual inspectors. CDE shall revoke or suspend, including the surrender of the CDE certificate(s), upon finding that such site is not properly equipped, that annual inspections have not been properly conducted or noncertified personnel are signing the CDE Affidavit of Annual Inspection form.

2251-R-6.00 Penalty

- 6.01 Any school district not in compliance with these rules and regulations shall not be entitled to any transportation fund reimbursement pursuant to 22-51-107, C.R.S. as amended.

2251-R-7.00 Inspection Reviews

- 7.01 Inspection reviews shall be performed by CDE. These inspection procedures may differ from the procedures utilized for the annual inspection.

2251-R-8.00 Criteria for the Inspecting Site Certification

- 8.01 Facility needed by the inspecting site to perform vehicle inspections:
- 8.01(a) Shall be large enough to accommodate the vehicle, equipment, and tools necessary to perform the inspection.
 - 8.01(b) Shall have a floor surface or pad adequate to safely support the maximum weight of the largest vehicle to be inspected.
 - 8.01(c) Shall have adequate lighting and ventilation.
 - 8.01(d) Shall have the equipment and tools necessary to properly complete the annual inspection.
 - 8.01(e) Shall have tools designed and calibrated to take accurate readings of appropriate measurements; such as, brakes and tires.
- 8.02 The inspecting site shall submit a request for certification on Form STU 22 that the above criteria has been satisfied.

2251-R-9.00 Inspector Qualifications

- 9.01 Each inspector shall maintain a current CDE Inspector Qualification Certificate.

2251-R-10.00 Criteria for the CDE Inspector Qualification Certificate

10.01 The inspector qualifications include:

- 10.01(a) Be in possession of a valid driver's license with the proper class and endorsements for the size and type of vehicle to be inspected.
- 10.01(b) Have on file a CDE Brake Inspector Qualifications Certificate or equivalent meeting US Department of Transportation (DOT) standards.
- 10.01(c) Have at least two (2) years verifiable experience or training in the maintenance of light, medium, or heavy duty vehicles.
- 10.01(d) Understand the inspection criteria set forth in the Rules for the Annual Inspection and Preventative Maintenance of School Transportation Vehicles. 1 CCR 301-29.
- 10.01(e) Be knowledgeable of the tools, methods, procedures and equipment necessary to perform the annual inspection.
- 10.01(f) Pass the CDE Annual Inspector Qualification Written Test initially and every three years thereafter pass the CDE Annual Inspector Recertification Written Test.
- 10.01(g) Pass the CDE initial hands-on performance test.
- 10.01(h) Maintain an Inspector Qualification File containing documentation certifying that the above criteria has been met. Any criteria becoming invalid means that the inspectors certificate is invalid until that criteria is made valid.

10.02 To recertify if the inspector certificate has expired:

- 10.02(a). If the certificate has been expired for less than 6 months, then only the CDE Annual Inspector Recertification Written Test is required.
- 10.02(b). If the certificate has been expired between 6 and 12 months, then the CDE Annual Inspector Qualification Written Test is required.
- 10.02(c). If the certificate has been expired for more than one year, then both the CDE Annual Inspector Qualification Written Test and the CDE hands-on performance test is required.

10.03 The inspecting site shall submit a request for certification/recertification of the inspector on Form STU 20 that the above criteria have been satisfied.

2251-R-11.00 General Annual Inspection Procedures

11.01 The CDE Affidavit of Annual Inspection form and CDE equivalent inspecting site annual inspection check-list form shall be used by the inspector insuring:

- 11.01(a) All items have been completed or marked as not applicable.
- 11.01(b) The inspector has signed the forms certifying that the items checked on the check-list were in satisfactory condition as of the completion date.
- 11.01(c) The annual inspector number has been recorded, and

- 11.01(d) The date has been recorded when the inspection was completed.
- 11.02 The original of the completed inspection forms shall be maintained at the inspecting site.
- 11.03 The current CDE Affidavit of Annual Inspection form shall be maintained in the vehicle.
- 11.04 Information on the registration form, Vehicle Identification Number, and license plate number shall be checked for agreement and any inconsistency rectified.
- 11.05 During the annual inspection, all four (4) wheels shall be pulled for full inspection of the foundation brake system.
- 11.05(a) The two exceptions are:
1. School transportation vehicles with less than 4,000 miles since the previous annual inspection shall have two (2) wheels (one front and one rear) pulled different than those pulled for the previous inspection.
 2. School transportation vehicles equipped with a retarder meeting the specifications of the CDE Minimum Standards, 301-25, shall have two (2) wheels (one front and one rear) pulled which are different than those pulled for the previous inspection.
- 11.05(b) Actual measurements shall be documented. This includes new components instead of noting that the component is 'new'.
- 11.06 Any vehicle not in compliance with these rules is prohibited from transporting students until the defect has been repaired and re-inspected.

2251-R-12.00 School District/Service Provider Rules

- 12.01 None of these rules shall preclude a school district/service provider from establishing a more rigid standard or policy when deemed necessary.

2251-R-13.00 (Reserved)

2251-R-14.00 Minimum Annual Inspection Criteria

All annual inspection criteria must meet or exceed manufacturer's specifications.

CHASSIS

- 14.01 Steering
- 14.01(a) Steering play and binding
- 14.01(b) Steering column components
- 14.01(c) Power steering system and components
- 14.01(d) Steering linkage and components
- 14.02 Suspension
- 14.02(a) Springs and components

- 14.02(b) Shock absorbers
- 14.02(c) Air ride systems and components
- 14.02(d) Frame rails, cross members and body attachments
- 14.03 Tires and Wheels
 - 14.03(a) Appearance and condition of tires
 - 1. Tire inflation - record reading
 - 2. Tread depth - record reading
Tread depth shall not be less than 4/32 inch on the steering axle and 2/32 on the rear axle measured at three different major tread grooves at the lowest point but not on a wear bar. The minimum reading shall be recorded.
 - 3. Size and tire tread match on same axle
 - 14.03(b) Appearance and condition of wheels, studs, lug nuts
 - 1. Wheels on same axle shall be of the same size including width, type, and shall meet OEM specification.
- 14.04 Power Train
 - 14.04(a) Drive line safety straps
 - 14.04(b) Drive shaft components condition
 - 14.04(c) Engine/transmission mounting
 - 14.04(d) Excessive leakage
 - 14.04(e) Transmission linkage components
 - 14.04(f) Drive axle/components/excess leakage
 - 14.04(g) Secondary braking system/components/operation if equipped
 - 14.04(h) Clutch condition and components
- 14.05 Fuel Systems (all types)
 - 14.05(a) Fuel tank/mounting/components condition
 - 14.05(b) Fuel tank cage(s) if applicable
 - 14.05(c) Fuel lines/components/shields
 - 14.05(d) Any leaks
- 14.06 Exhaust System
 - 14.06(a) Exhaust system components condition

14.06(b) Shields if applicable

14.07 Brake Systems - General

14.07(a) General components (all systems)

14.07(b) All four wheels shall be pulled except as noted in Section 11.05, measurements recorded, and all components inspected. List manufacturer specifications.

1. Brake drums/rotors - record readings - record manufacturer specifications
2. Brake shoes/pads - record readings - Lining thickness shall be measured from the shoe table or to OEM specifications and not be less than the following: (this table is for larger brake systems).

Type of system	steering axle	non-steering axle
air disc	4/32 inch	4/32 inch
air drum - shoe center	8/32 inch	8/32 inch
hydraulic disc	2/32 inch	2/32 inch
hydraulic drum - shoe center	8/32 inch	2/32 inch

3. Small vehicle brake lining thickness shall meet OEM specifications

14.07(c) System inspected for any leaks

14.07(d) Inspect and test anti-lock brake system for any malfunction

14.08 Brake Warning System

14.08(a) All components must be operational

14.09 Parking Brake System

14.09(a) All components must be operational

14.10 Brake Lines, Hoses, Cables

14.10(a) Good operable condition

14.11 Air Brake System

14.11(a) Air compressor and components

14.11(b) Air tanks

14.11(c) Air dryer

14.11(d) All valves operational

14.11(e) Air brake chambers (including caging bolt dust cover or cap)

14.11(f) Slack adjusters condition

1. Record stroke of all four brakes using the applied method

14.11(g) Rock guard (optional)

14.12 Hydraulic Brakes

14.12(a) Booster system/warning system

14.12(b) Master cylinder/wheel cylinders/calipers

14.12(c) Fluid level

14.12(d) Pedal reserve

UNDERHOOD

14.13 Check all fluid levels/excessive leaks

14.14 Check condition of belts/hoses/wiring

14.15 Radiator, water pump and mountings

BODY SYSTEMS

14.16 Electrical Systems

14.16(a) All electrical accessories operational

14.16(b) All lamp systems operational and visible

14.16(c) 8-way system/stop arm

14.16(d) Battery and alternator

14.17 Defect free glass and mirrors/driver visor and hardware

14.17(a) Windshield wipers/washer

14.18 All reflectors intact

14.19 All required lettering and numbering inside and outside intact and readable

14.20 Body/bumpers/tow hooks in good condition

14.21 Windows/doors/hatches/seals operational

14.21(a) Warning buzzers for emergency doors and windows operational

14.21(b) Ignition interlock operational when required

BODY INTERIOR

14.22 Stepwell and treads/handrail/modesty panels

14.22(a) Check for proper clearance and securement

14.23 Barriers and all seats securement and condition

- 14.23(a) Seat foam envelope covers seat back frame and core
- 14.23(b) Seat cushions are secure
- 14.23(c) Flip seat bottom cushion rises automatically
- 14.24 No sharp projections within passengers compartment
- 14.25 Floor coverings and trim in good condition
- 14.26 All fans and heaters operational
- 14.27 All emergency equipment operational, accessible and secure
- 14.28 Seat belt/shoulder harness operational
- 14.29 All gauges, horn, warning and indicator lights, buzzers operational
- 14.30 Special Equipment
 - 14.30(a) Mobility aid devices
 1. Securement devices
 2. Lift/access door
 3. Additional pertinent equipment secured
 4. International Symbol of Accessibility on bus
- 14.31 Optional equipment – if safety related
- 14.32 Pre and post inspection road test drive

2251-R-15.00 Preventative Maintenance Program Minimum Criteria

- 15.01 The district/service provider shall ensure that preventative maintenance is performed and documented on all school transportation vehicles. The preventative maintenance inspection on air brake systems shall include, as a minimum; that the brake rod travel has been checked and recorded. The applied pressure method shall be used.
 - 15.01(a) The inspection interval program shall not exceed 4,000 miles for school buses equipped with a manual slack adjuster air brake system.
 - 15.01(b) The inspection interval program shall not exceed 6,000 miles for school buses equipped with an automatic slack adjuster air brake system.
- 15.02 If brake adjustment or repair is needed, the work shall be completed by or supervised by a DOT qualified brake inspector.