540 CMR 21.00: SEMIANNUAL SAFETY INSPECTION OF SCHOOL PUPIL TRANSPORT

VEHICLES

Section

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21.01: Purpose, Scope and Applicability

540 CMR 21.00 is adopted by the Registrar of Motor Vehicles pursuant to M.G.L. c. 90, §§ 7A and 31, to establish rules and regulations for the semiannual safety inspection of school pupil transportation vehicles under M.G.L. c. 90, § 7D, ("7D vehicle") to be performed by licensed Safety Inspection Stations.

21.02: General Inspection Procedures

- (1) All inspections shall be performed in accordance with 540 CMR 21.00 by a Safety Inspection Station licensed by the Registry of Motor Vehicles.
- (2) Before beginning the vehicle inspection, the Inspector shall:
 - (a) complete a 7D vehicle inspection report form and remove the old 7D vehicle sticker;
 - (b) verify the registration, vin number, date of expiration, school pupil plate which must be displayed pursuant to M.G.L. c. 90, § 2, and annual certificate of inspection. If the certificate of inspection is missing or invalid, the vehicle shall be rejected (R). If there are any errors on the certificate of inspection, a defect equipment card (E.Q.) shall be issued.
 - (c) ensure that the vehicle is a passenger vehicle with a Gross Vehicle Weight Rating (GVWR) of less than 10,000 lbs. If it is not it shall be rejected.

with the model year 20188 8

(d) ensure the vehicle is properly marked. All 'School Pupil Transport Vehicles' shall-conspicuously display on each side of the vehicle, the company name, the city or town and state, in lettering at least 2 inches high with a ¾ inch brush stroke in glossy black lettering. If the vehicle is not so marked, it must be rejected.

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- (3) After the vehicle inspection is completed, the Inspector shall issue:
 - (a) a Certificate of Inspection if the vehicle is found to be in compliance with the requirements of 540 CMR 21.00; or
 - (b) a Certificate of Rejection for any safety-related defects as identified in 540 CMR 21.03, and for any exigent condition which, in the opinion of the Inspector, may jeopardize the public safety whether or not specified in 540 CMR 21.03; or
 - (c) a Defective Equipment Card for all minor, non-safety related defects. To prevent further enforcement action by the Registry of Motor Vehicles, the owner or person in control of a vehicle for which a Defective Equipment Card is issued must have the noted defects corrected immediately, and must complete and return the Defective Equipment Card to the Registry within seven days in accordance with the instructions on the Card.

21.03: Vehicle Inspection Procedures

- (1) The Inspector shall reject, and issue a Certificate of Rejection for, any vehicle that fails to satisfy any one of the following requirements:
 - (a) <u>Floor</u>. The vehicle floor shall be free of any holes or tears that may allow toxic exhaust fumes to enter the passenger compartment.
 - (b) Brakes
 - 1. The parking brake shall be tested by accelerating the motor to approximately 1200 to 1300 RPM's with the vehicle in the lowest forward gear against the brake in the applied position, and shall be found to hold the vehicle.
 - 2. The service brake shall be tested at a speed between four and eight m.p.h. and shall be found to be reasonably equalized so that the vehicle does not pull noticeably to either

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side when applied; and, with the first application of the service brake pedal, to not travel more than 50% of the total distance the brake pedal can travel. In all questionable cases, service brakes shall be adequate to stop the vehicle while traveling at a speed of 20 m.p.h. in not more than the distance of 30 feet. Any vacuum assisted system for service brakes shall be in good working order.

(c) <u>Seatbelts</u>. The vehicle shall be equipped with a seat belt for each permanent seating accommodation, in good working order, and in compliance with the United States Department of Transportation's Safety Standard.

(d) Window Tinting. Any window tinting shall comply with 540 CMR 4.04.

21.03: continued

- (e) <u>Side Doors and Rear Doors</u>. The vehicle shall have, in good working order, an emergency door buzzer or warning device to indicate when door is open.
- (f) <u>School Bus Signs, Alternating Flashing Red Signal Lamps and Actuation</u>. The vehicle shall comply with all applicable provisions of 49 CFR 571.108.
- (g) Windshield. The windshield shall be free of any of the following defects:
 - 1. any broken glass with sharp or jagged edges inside or outside;
 - 2. any stone bruise, star break, or bull's eye damage in excess of one inch in diameter within the area covered by the sweep of the vehicle's wipers provided by the vehicle's manufacturer ("the critical viewing area") or larger than two inches outside the critical viewing area, or multiple such damage;
 - 3. any single line crack which extends more than three inches into the critical viewing area;
 - 4. multiple cracks one or more which extends into the critical viewing area;
 - 5. any wiper scrapes in excess of 1/4 inch wide within the critical viewing area;
 - 6. any clouding extending more than three inches within perimeter of the exposed glass;
 - 7. any poster, sticker, decal, or similar object, attached to the windshield in such a manner as to obstruct the vision of the operator.
- (h) <u>Windshield Wipers/Washer System</u>. The windshield wipers <u>and washer system</u> shall be in good working order.
- (i) <u>Steering Box</u>. The steering box shall be tested by turning the steering wheel until motion is detected at the front wheels, with the engine running if the vehicle is equipped with power steering, and found to have play not to exceed two inches on a steering wheel up to a diameter of 18 inches or 2½ inches on a steering wheel with a diameter in excess of 18 inches.
- (j) Horn. The horn shall be securely fastened to the vehicle, and provide adequate signal.
- (k) Turn Signals. The turn signals shall be in good working order.
- (l) Emergency Four-Way Flashers. The emergency flasher shall be in good working order.
- (m) Ignition Lock. The ignition lock shall be in good working order.
- (n) <u>Interior of Vehicle</u>. All panels and seats shall be free of holes and tears larger than two inches. The vehicle interior shall be free of any sharp or protruding objects or defects.
- (o) Fluid. The vehicle shall be free of any fluid leaks or seepage:
 - 1. in the brake or fuel system;
 - 2. that may be a source of combustion;
 - $3. \ \ that \ may \ come \ in \ contact \ with \ brake \ pads, \ linings, \ or \ exhaust \ system.$
- (p) <u>Headlamps</u>. The headlamps shall be properly aligned and securely mounted.
- (q) <u>Tires</u>. The tires shall conform to the following standards:
 - 1. All tires shall be free of any fabric break or cut in excess of one inch, any bulge, bump or knot related to the deterioration of the tire structure or any ply or cord structure which is visible:
 - 2. All tires shall have tread depth of at least 2/32nds 4/32nds of an inch in any re-cut, regrooved, siped, or original tread groove, when measured with a tire depth gauge in a major tread groove nearest the tire center at two points, 15 inches apart, on the circumference.
 - 3. No studded tires shall be used between May 1 and November 1, unless approved by the Registrar of Motor Vehicles.
 - 4. No vehicle shall have radial tires on the same axle with non-radial tires, or radial tires on the front axle with non-radial tires on the rear axle, with the exception that vehicles equipped with dual rear tires may have radial or non-radial on any axle, provided they are not intermixed on the same axle.
- (r) <u>Wheels</u>. Wheels shall not be missing, bent, cracked, have broken tire rims, broken studs or missing nuts.
- (s) <u>Front End</u>. Both sides of all vehicles shall be raised and all ball joints, tie rod ends, drag links, pitman arm, idler arm, and king pins shall be visually or manually examined and found not to be excessively worn.
- (t) <u>Muffler and Exhaust System</u>. The muffler and exhaust system shall be tested by accelerating the motor, and shall be found to prevent unnecessary noise and emission of any unreasonable amount of smoke. The exhaust system, exhaust manifolds, exhaust pipes, mufflers and tail pipe shall be free of leaks. Systems components shall be securely fastened with fasteners in place and undamaged. All motor vehicle exhaust systems shall discharge

the exhaust beyond the operator, passenger and or trunk compartment.

21.03.: continued

- (u) Fuel Tank. The fuel tank shall not leak and shall be securely attached to the vehicle's body or chassis.
- (v) Springs. All springs shall be in good condition. The main leaf shall not be broken or have more than one broken leaf per spring. The center bolt shall not be broken. Spring shackle and U-bolts must maintain proper axle alignment.
- (w) Tail Lights. The vehicle shall be equipped with two tail lights and two stop lights, one of each mounted at each side of the rear of the vehicle, provided both functions may be combined on a single tail lamp, one at each side.
- (x) <u>Bumpers</u>. All bumpers as originally equipped by the manufacturer shall be securely mounted in place and shall not be bent, broken or twisted or have any sharp edges or protrusions.
- (y) Hood, Doors, and Compartment Lids. The hood and all doors and compartment lids shall open and close properly and be capable of being firmly latched.
- (z) Fenders (front and rear). All fenders shall be securely mounted in place, and shall not be bent or broken. The exterior sheet metal or moldings shall be free of sharp edges or abnormal protrusions extending beyond normal vehicle extremities. Any vehicle whose tires extend beyond the fender or body shall be equipped with flaps or other suitable guards to reduce spray or splash to the rear and side.

(aa) Additional Required Equipment.

(aa) _-The vehicle shall carry a first aid kit, body fluid clean-up kit, two chock blocks, aseat belt cutter (accessible to the driver), a fire/evacuation blanket (wheel chair vehicles only), and a Class C fire extinguisher with a total rating of 2A10BC or greater (accessible to the driver) and three reflective triangles.

- (1) The vehicle shall be equipped with a pressurized, dry chemical fire extinguisher complete with hose. Extinguisher must be mounted in a bracket, located in the driver's compartment and readily accessible to the driver and passengers. A pressure gauge shall be mounted on the extinguisher so as to be easily read without moving the extinguisher from its mounted position.
- The fire extinguisher shall be of a type approved by the Underwriters Laboratories, Inc. The seal shall be in tact and gauge shall read green at all times. and flares in compliance with the United States Motor Vehicle Department of Transportation Safety Standard and Underwriters Laboratories, Inc., No. 125.
- Back-up Warning Alarm. All 'School Pupil Transport Vehicles' shall be equipped with an audible back-up alarm effective July 1, 20182. This alarm shall be located behind the rear axle.
- (cc) School Bus Light Indicator. All 'School Pupil Transport Vehicles' shall be equipped with a school bus light indicator effective July 1, 20182. Such indicator must be equipped with a continuous warning light(s) readily visible to the driver to indicate if the school bus
- (dd) Child Reminder System. All 'School Transport Vehicles' shall be equipped with a child reminder system. The child reminder system must include an audible device that must be disengaged by the driver before leaving the vehicle. The child reminder system shall be installed on all school buses model year 2018 or newer. The child reminder system control shall be located in the rear most seating compartment.8
- (2) The Inspector shall issue a Defective Equipment Card for any vehicle that fails to satisfy any one of the following requirements:
 - (a) Speedometer. The speedometer shall be in good working order.
 - (b) Sun Visor and Rear View Mirror. The sun visor and rear view mirror shall be in good condition.
 - (c) Windows. In addition to the requirements for the windshield, all windows shall be free of broken glass, cracks, or any condition that may constitute a hazard.
 - (d) <u>Defroster and Heater</u>. The defroster and heater shall be in good working order.
 - (e) Interior Lights. All interior lights shall be in good working order to illuminate the interior of the vehicle.
 - (f) Instruments, Lamps, and Gauges. All instruments, lamps and gauges shall be in good working order.
 - (g) Power train, cooling system or steering system. The power train, cooling system and

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steering system shall be free of any fluid leaks or seepage.

- (h) <u>Battery</u>. The battery shall be securely mounted in a carrier and free of excessive terminal corrosion (bungy straps are not acceptable as tie downs).
- (i) <u>Belts (Alternator/Power steering</u>). Belts shall not be loose and shall be in good condition. Adjustment shall be tested by turning the drive pulley, which should not turn by hand. If the vehicle is equipped with a serpentine belt, a visual inspection shall be performed for the presence of cracks or chaffing, and to check alignment.
- (j) <u>Mirrors</u>. Mirrors shall be in good condition and mounted one on each side of the vehicle with a clear view to the rear.
- (k) <u>Side Marker Lamps</u>. The side marker lamps shall be as installed by the manufacturer, and in good working order.
- (l) <u>Shock Absorbers</u>. The vehicle shall have two shock absorbers in the front and two in the rear, and they shall not be damaged, worn, broken or hanging.

21.04: Inspection Dates

School pupil transport vehicles shall undergo two inspections each year; one to be performed during the month of October or November, and the other during the month of February or March.

REGULATORY AUTHORITY

540 CMR 21.00: M.G.L. c. 90, §§ 7A and 31.

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