

## 540 CMR: REGISTRY OF MOTOR VEHICLES

### 540 CMR 4.00: ANNUAL SAFETY AND COMBINED SAFETY AND EMISSIONS INSPECTION OF ALL MOTOR VEHICLES, TRAILERS, SEMI-TRAILERS AND CONVERTER DOLLIES; CERTIFICATION OF SPECIAL SAFETY REQUIREMENTS

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#### 4.01: Scope and Applicability

540 CMR 4.00 is adopted by the Registrar of Motor Vehicles pursuant to the authority of M.G.L. c. 90, § 31. 540 CMR 4.00 establishes Rules and Regulations for the Safety and Combined Safety and Emissions Inspections of all motor vehicles registered in the Commonwealth of Massachusetts under the authority of M.G.L. c. 90, § 7A. 540 CMR 4.00 also establishes regulations for the issuance of various inspection certificates pursuant to M.G.L. c. 90, § 7V(a), (b) and (c), and Regulations for the licensing of stations and inspectors pursuant to M.G.L. c. 90, § 7W. The failure of a motor vehicle to meet the requirements of the Safety and Combined Safety and Emissions Inspections will result in the suspension of the vehicle's certificate of registration pursuant of M.G.L. c. 90, § 20.

540 CMR 4.00 further and separately establishes the requirements, standards and specifications for Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s), and Backup Cameras for any Commonwealth Heavy Vehicle or Contractor Heavy Vehicle, as defined herein.

#### 4.02: Definitions

In addition to the definitions set forth in M.G.L. c. 90, § 1, the following definitions shall also apply:

Aftermarket Modification. Any modification made to a vehicle that is not part of the original equipment manufacturer (OEM) specifications, comprised of replacement or modification parts, accessories, or components of a vehicle made by a company other than a vehicle's OEM.

Antique Motor Car. Any motor vehicle which has been assigned an "Antique" registration plate.

Back-up Camera. A device that provides a visual image of the area directly behind a vehicle to the vehicle operator when the vehicle is in reverse gear, meeting the requirements of Federal Motor Vehicle Safety Standard No. 111, 49 CFR 571.111.

Certificate of Inspection. A serially numbered, adhesive sticker, device, document or symbol, as may be prescribed by the Registrar, indicating a motor vehicle or motorcycle has met the inspection requirements established by the Registrar. The Registrar may prescribe the use of one or more categories of said Certificates.

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Certificate of Rejection. A serially numbered, adhesive sticker, device, document or symbol, as may be prescribed by the Registrar, indicating a motor vehicle or motorcycle has failed to meet the Safety and Combined Safety and Emissions Inspection requirements.

Certificate of Waiver. A serially numbered device or symbol, as may be prescribed by the Registrar, indicating that the requirement of passing the Emissions portion of the Combined Safety and Emissions Inspection has been waived for a vehicle pursuant to 540 CMR 4.00.

Class A License. The license issued to a Public or Fleet inspection station conducting non-commercial light duty gas and diesel inspections of vehicles 10,000 lbs Gross Vehicle Weight Ratings (GVWR) or less.

Class B License. The license issued to a Public or Fleet inspection station conducting commercial and non-commercial light and medium duty gas and diesel inspections of vehicles 26,000 lbs. (GVWR) or less including light-duty pole or pull trailers only.

Class C License. The license issued to a Public or Fleet inspection station conducting all commercial medium and heavy duty inspections of vehicles over 10,000 lbs. (GVWR), including all trailers, semi-trailers and converter dollies.

Class D License. The license issued to a Public or Fleet inspection station conducting all commercial and non-commercial light, medium and heavy duty inspections of all vehicles including all trailers, semi-trailers and converter dollies.

Class E License. The license issued to a Public or Fleet inspection station conducting heavy duty commercial inspection of vehicles over 26,000 lbs. (GVWR), including all trailers, semi-trailers and converter dollies.

Class F License. The license issued to an individual or corporation performing inspections on commercial vehicles or school pupil transport vehicles of all fuel types and weights, including all trailers, semi-trailers and converter dollies, owned or leased by a fleet, using mobile equipment for the performance of such vehicle inspections. The performance of commercial vehicle inspections at multiple repair and maintenance facilities owned by the fleet shall be subject to the following conditions:

- (a) The repair facility shall consist of a building on-site with a discernible address for the purposes of fleet administration. Said fleet is contracting the inspection of existing commercial vehicles with gross vehicle weight ratings of 10,001 lbs. or more, including all trailers, semi-trailers and converter dollies to the Class F licensee at the same physical location.
- (b) Vehicles owned or leased by said fleet and registered as "noncommercial" motor vehicles shall not be eligible for inspection by Class F licensees, except for such "noncommercial" motor vehicles used exclusively as rental vehicles.
- (c) Noncommercial motor vehicles furnished for regular use by individual employees of said fleet shall not be eligible for inspection by Class F licensees.
- (d) All Class F licensees utilizing mobile equipment for the testing of such commercial vehicles, trailers, semi-trailers or converter dollies owned or leased by said fleet shall have on-site OBD, opacity or any other emissions equipped workstation capable of performing such emissions inspections as required by 310 CMR 60.02: *Massachusetts Motor Vehicle Emissions Inspection and Maintenance Program*.
- (e) The annual number of commercially registered vehicles, trailers, semi-trailers or converter dollies inspected by Class F licensees with gross vehicle weight ratings of less than 10,001 lbs. shall not exceed the annual number of commercially registered vehicles with gross vehicle weight ratings of more than 10,001 lbs. (GVWR).

Class M License. The license issued to a Public or Fleet inspection station conducting motorcycle inspections.

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Class 3 Vehicle. All two-axle, four-tire, vehicles, other than passenger cars, including pickups, panels, vans, and other vehicles such as campers, auto homes, house trailers, ambulances, hearses, carryalls, and minibuses. Other two-axle, four-tire single-unit vehicles pulling recreational or other light trailers are included in this classification; or as otherwise defined by the Federal Highway Administration.

Commercial Motor Vehicle. For the purposes of Inspections, a commercial motor vehicle shall mean any motor vehicle which is not a private passenger motor vehicle, antique motor car, motorcycle, auto home, house trailer, taxicab, ambulance, hearse, livery vehicle, school pupil transport vehicle or off-road equipment. A commercial motor vehicle shall include the following vehicles:

- (a) The vehicle has a gross vehicle weight rating or gross combination weight rating of 10,001 or more lbs., unless such vehicle has a body type of a pickup, sport utility vehicle or van meeting the definition of a private passenger vehicle; or
- (b) The vehicle is designed to transport more than 15 passengers, including the driver; or
- (c) The vehicle is used in the transportation of hazardous materials in a quantity requiring placarding in accordance with the Hazardous Materials Regulations of the United States Department of Transportation. Any commercial motor vehicle that singularly has a gross vehicle weight rating of 10,001 lbs. or less and is designed to meet emissions standards, shall be submitted for an emissions inspection in addition to all applicable safety inspection requirements; or
- (d) A single, full or semi trailer, used in commerce, with a manufacturer's gross vehicle weight rating over 3,000 lbs.

Commercial Motor Vehicle Inspector. An individual licensed by the Registrar as properly qualified under 540 CMR 4.08(1)(h).

Commissioner. The Commissioner of the Department of Environmental Protection for the Commonwealth.

Commonwealth Heavy Vehicle. A Heavy Vehicle leased or purchased by the Commonwealth on or after January 1, 2023.

Contractor Heavy Vehicle. A Heavy Vehicle operated in the Commonwealth of Massachusetts by a contractor, subcontractor, or vendor under a contract with the Commonwealth of Massachusetts, that was (a) executed by the parties on or after January 1, 2025, and requires, in writing or by necessary implication, that Heavy Vehicles be used in connection with the services to be provided by such contractor, subcontractor, or vendor under such contract except for seasonal snow and ice management and removal and towing services or (b) executed on or after July 1, 2025 for seasonal Commonwealth snow and ice management and removal, and Commonwealth towing services.

Convex Mirror. A door-mounted, wide-angle mirror that enables an operator to see objects along the left and right sides of a motor vehicle, trailer, semi-trailer or semi-trailer unit.

Cross-over Mirror. A mirror mounted on a hood or fender that enables the operator to see objects in the area immediately in front of a conventional cab hood.

DEP. The Department of Environmental Protection.

Exempt Vehicles from Emission Standards. Any motor vehicle exempted under 310 CMR 60.02: *Massachusetts Motor Vehicle Emissions Inspection and Maintenance Program* and in accordance with M.G.L. c. 111, § 142M.

Federal Motor Carrier Safety Regulations. The most current published edition of Title 49 U.S.C. Parts 390 to 397, including appendix G as identified by USDOT/FHWA/OMC.

Fleet Inspection Station. A business which owns, leases or maintains a fleet of at least 15 motor vehicles and/or trailers maintains a garage for the repair and maintenance of those vehicles and is licensed by the Registrar to perform the Safety or Combined Safety and Emissions Inspection on its motor vehicles or motor vehicles owned by other fleets that are in the same vehicle class.

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Heavy Vehicle. A motor vehicle, trailer, semi-trailer or semi-trailer unit classified as a class 3 or above by the Federal Highway Administration, with a gross vehicle weight rating of 10,001 pounds or more.

General Registration Holder. Any manufacturer, dealer, repairman, owner-contractor, transporter, farmer, dealer in recreational vehicles, trailers, boat trailers, or forester, all as defined in M.G.L. c. 90, § 1 and regulated by 540 CMR 18.00: *Minimum Standards for the Issuance and Use of General Registrations and General Registration Numbers Plates Issued under the Provisions of M.G.L. c. 90, § 5*, who has been issued a general registration plate pursuant to M.G.L. c. 90, § 5.

Inspection Station Agreement. The contract between the Network Contractor and the Inspection Stations which sets forth their respective responsibilities and duties.

Lateral Protective Device. An apparatus installed on a motor vehicle, trailer, semi-trailer or semi-trailer unit between the front and rear wheels to help prevent injuries to a vulnerable user, particularly from falling underneath the vehicle.

Licensed Inspector. An individual licensed by the Registrar in accordance with 540 CMR 4.00 as properly trained to perform a Massachusetts Motor Vehicle Safety and/or Emissions Inspection.

Licensee. A holder of an Inspection Station License of any Class issued in accordance with 540 CMR 4.00.

Mobile Commercial Motor Vehicle Inspector. An individual, certified and licensed, who meets the requirements of 540 CMR 4.00 who may inspect commercial motor vehicles, rental fleet vehicles, and school pupil transport vehicles at a repair facility of any commercial motor vehicle operation that meets the minimum requirements for inspections prescribed for Commercial Vehicle Inspection Facilities by the Registrar.

Network Contractor. The private entity which contracts with the DEP and RMV to develop, manage and implement the enhanced emissions and safety inspection program.

New Car Endorsement. An endorsement to a Class A, B or D license which permits Class 1 automobile dealers to inspect new vehicles under 10,000 GVWR prior to delivery to a customer in accordance with 310 CMR 6.02: *Initial Inspection of New Motor Vehicles* and in accordance with all regulations, policies and procedures promulgated by the Registrar.

Off-road Equipment. A piece of construction equipment that is used predominantly off-road, but travels on public ways to and from a worksite.

Out-of-service Criteria. The most current Out-of-service Criteria as prescribed in the *North American Uniform Out-of-service Criteria* published by the Commercial Vehicle Safety Alliance (CVSA).

Pedestrian. Any person who is not an occupant of a vehicle, including a person on foot, a person standing, walking, running, jogging, hiking, sitting, or lying within the trafficway or on private property, a person assisted with a cane or walker, a person pushing a baby carriage/stroller, a person ejected from a transport vehicle who has come to rest in the trafficway during a prior unstabilized situation and struck in a second or subsequent unstabilized situation.

Referee Station. A location which may be designated by the Registrar to verify the accuracy of inspections performed by Licensed Inspection stations and to grant certificates of waiver.

Registrar. The Registrar of Motor Vehicles.

Semi-trailer. A trailer designed and used in combination with a tractor so that some part of the weight of the trailer and that of its load rests upon, and is carried by, the tractor.

Trailer. Any vehicle or object on wheels and having no motor power of its own, but is drawn by, or used in combination with, a motor vehicle.

## 4.02: continued

Vulnerable User. A pedestrian, including a person engaged in work upon a way or upon utility facilities along a way or engaged in the provision of emergency services within the way; a Bus/Train/Trolley Passenger; a person operating a bicycle, electric bicycle, skateboard, handcycle, tricycle, skateboard, roller skates, in-line skates, non-motorized scooter, wheelchair, electric personal assistive mobility device, horse, horse-drawn carriage, motorized bicycle, motorized scooter, or other micromobility device, or a farm tractor or similar vehicle designed primarily for farm use.

Windshield Replacement Certificate. A serially numbered adhesive sticker, device or symbol as prescribed by the Registrar to be used in conjunction with any legible valid Certificate of Inspection, irrespective of any void displayed, removed due to the replacement of a windshield and displayed on the newly installed windshield on the same vehicle. Such Certificate shall be issued in accordance with all regulations, policies and procedures established by the Registrar.

Workstation. The complete set of inspection equipment approved by the Department and required by the Registrar for an inspection station.

7D Endorsement. An endorsement to a Class A, B, D or F license which permits the licensee to inspect 7D (pupil transport) vehicles in accordance with M.G.L. c. 90, § 7D and 540 CMR 21.00: *Semiannual Safety Inspection of School Pupil Transport Vehicles.*

4.03: Requirements for Initial and Subsequent Annual Inspection

(1) General Provisions. Every owner or person in control of a Massachusetts registered motor vehicle shall submit the vehicle for inspection under 540 CMR 4.03(1)(a) through (i):

(a) Inspection Upon Registration. Every owner or person in control of a motor vehicle which is newly acquired in the Commonwealth shall submit such motor vehicle for a required inspection within seven days of the date on which the motor vehicle is registered to said owner in the Commonwealth.

(b) Subsequent Inspection. Every owner or person in control of a Massachusetts registered motor vehicle shall submit the vehicle for the required inspection annually, no later than the date of expiration on the previously issued Certificate of Inspection or as notified in a manner prescribed by the Registrar. Early renewals are permitted.

(c) Validity of Certificates of Inspection. Certificates of Inspection displaying void(s) due to a windshield replacement, which are also displaying a duly issued Windshield Replacement Certificate, shall be valid until the expiration of the Certificate of Inspection or when ownership of the vehicle is transferred, or as notified in a manner prescribed by the Registrar, whichever occurs first.

(d) General Registration Holders. Every motor vehicle owned by a General Registration holder, except for motor vehicles held for sale and demonstration by a dealer, shall be inspected pursuant to 540 CMR 4.00.

(e) Farm Tractor. Any tractor or other self propelled vehicle used exclusively for agricultural or farming purposes, except automobiles and trucks, the use of which is declared by the owner or person in control thereof to be restricted to the period from a ½ hour before sunrise to a ½ hour after sunset and which is operated in or upon any way during such period shall be inspected and shall be equipped with one stop light and with brakes as manufactured, including a stationary brake with ratchet and pawl.

(f) Out of State Registration. Motor vehicles submitted for inspections that are registered in any other state or jurisdiction shall be inspected in accordance with the applicable provisions of 540 CMR 4.00 and the policies and procedures established by the Registrar. Vehicles registered in any other state or jurisdictions are not required to have an active or valid registration.

(g) Inspection upon Return to Commonwealth. A motor vehicle which is not garaged or operated within the Commonwealth during its assigned inspection period may be operated for 15 days after its return to the Commonwealth if the motor vehicle bears satisfactory proof of adequate Emissions or Safety and Emissions Inspection from another jurisdiction. The owner or person in control of the vehicle shall submit the vehicle for required inspection within said 15 days. A motor vehicle which is not garaged or operated within the Commonwealth during its assigned inspection period may be operated for three days after its return to the Commonwealth if the motor vehicle does not bear satisfactory proof of inspection from another jurisdiction. The owner or person in control of the vehicle shall submit the vehicle for required inspection within said three days. All vehicles actively registered which are either not garaged or operated within the Commonwealth or temporarily off the road and unable to be inspected during their assigned inspection period must notify

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the Registrar no later than the date of expiration on the previously issued Certificate of Inspection in a manner prescribed by the Registrar.

(h) Common Carrier Motor Vehicles. The mandatory inspection requirements of 540 CMR 4.00 are not a substitute for any inspection which may be required by the Department of Public Utilities pursuant to M.G.L. c. 159A.

(i) The Registrar, in their discretion, may issue a waiver for any of the requirements of 540 CMR 4.00 if, after investigation, they determine that such waiver is in the best interest of the public good.

### 4.04: Procedures for Inspection of Non-commercial Motor Vehicles

(1) Prior to beginning inspection, a visual check of the vehicle shall be made to determine that ice and snow accumulation or the condition of the suspension system will not impede or interfere with the proper aiming of headlamps, or that any space saver temporary spare tire is mounted on any axle.

(a) The Certificate of Registration or the online renewal confirmation receipt shall be inspected and the information contained thereon, including license plate, vehicle description, and vehicle identification number, shall be verified by observation of the subject vehicle. The information contained on the Certificate of Registration shall also be matched with the vehicle information accessible to the workstation. The data appearing on the Registration Certificate, the data accessible on the Workstation, the data appearing on the vehicle license plate, and the vehicle identification number and description must match in order for the inspection to proceed. As per M.G.L. c. 90, § 11, online renewals do not require a valid plate decal. No fee shall be assessed for an inspection which does not proceed due to a data match failure.

(b) No Certificate of Registration need be produced for a vehicle having a general registration issued in accordance with the provisions of M.G.L. c. 90, § 5. Either a photocopy of the original Certificate of Registration or the original Certificate of Registration may be produced for all other motor vehicles.

(c) A licensed inspector shall refuse to conduct an inspection if the motor vehicle's registration is determined to be invalid.

(2) Inspection of the Vehicle. All inspections must be performed in accordance with the applicable provisions of 540 CMR 4.00 and 310 CMR 60.02: *Massachusetts Motor Vehicle Emissions Inspection and Maintenance Program* by licensed inspectors in the inspection bay or area approved for inspections by the Registrar.

(a) Inspectors must first collect the proper fee for the inspection.

(b) The inspector shall drive the motor vehicle into the inspection bay or area approved for inspections.

(c) License plate(s), shall be undamaged, securely mounted, clean and clearly visible. No bumper, trailer hitch or other accessory may interfere with a clear view of the license plates. The license plate must be mounted in the proper location on the rear of the vehicle if the vehicle has been issued one plate. Both license plates must be mounted in the proper location on the rear and front of the vehicle, if the vehicle has been issued two plates. Any decorative license plate or license plate replica not issued by the Registry of Motor Vehicles on which any jurisdiction name appears must be removed from the vehicle.

(d) General Registration Holders, every motor vehicle in possession of a general registration shall be checked for the proper display of the compliance decal issued pursuant to 540 CMR 18.03: *Compliance Decals*. The Vehicle Identification Number (VIN) and Registration Number indicated on the decal shall correspond with such numbers as observed by the inspector on the vehicle inspected.

(e) Upon the successful completion of the inspection and a determination by the inspector that the vehicle meets all inspection requirements, the inspector shall remove the old Certificate of Inspection from the windshield and affix the new Certificate of Inspection and provide the motorist with all inspection documentation and program literature as required.

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(f) Except as provided in 540 CMR 4.10, a vehicle which is determined not to meet all inspection requirements shall be issued a Certificate of Rejection. The inspector shall provide the motorist with all inspection documentation and program literature as required by the Registry of Motor Vehicles or Department of Environmental Protection.

(3) Perform Emissions Testing Requirements and Procedures.

(a) Exemptions. The following motor vehicles are exempt from emissions testing: Any vehicle exempted pursuant to 310 CMR 60.02(3)(b) and in accordance with M.G.L. c. 111, § 142M.

(b) Conformance with Environmental Standards. All Emissions Inspections shall be performed in accordance with the applicable provisions of 310 CMR 60.02: *Massachusetts Motor Vehicle Emissions Inspection and Maintenance Program* and 540 CMR 4.00, and any written policies or procedures provided by the Registrar or the Commissioner.

(4) Brakes. (Non-commercial Vehicles)

(a) The inspector shall operate the vehicle to test the parking and service brake. The parking brake on all vehicles will be tested by accelerating the motor to approximately 1,200 to 1,300 RPMs with the vehicle in the lowest forward gear against the brake in the applied position. The vehicle will be rejected if the parking brake will not hold. The service brakes will be tested at a speed of between four and eight MPH. Service brakes must be reasonably equalized so that the vehicle does not pull to either side when applied. A test with the brake meter shall be made at a speed of 15 to 25 MPH in all questionable cases.

(b) Brakes shall be adequate to stop the vehicle from a speed of 20 MPH in not more than the following distances:

Service (foot) Brake	Pleasure Vehicles	30 feet
	Trucks and Buses	40 feet
Parking (hand) Brake	All Vehicles	80 feet

(c) Additional Requirements for Types of Brake Systems.

1. Hydraulic Brake Systems. While the vehicle is stopped, apply approximately 125 lbs. foot-force to the brake pedal and hold for ten seconds. Reject the vehicle if the brake pedal height cannot be maintained or if less than 20% of the total available brake pedal travel remains or if the brake failure warning light on vehicles so equipped illuminates.

2. Power Brake Systems. Stop the vehicle engine and depress the brake pedal several times to eliminate all vacuum in the system. Depress pedal with a light force, approximately 25 lbs. foot-force and while maintaining this force on pedal, start the vehicle engine and observe if pedal moves slightly with engine running. The vehicle will be rejected if the pedal does not move slightly as the engine is started while pressure on the brake pedal is maintained. During the inspection of the vehicle, the condition of visible hydraulic components should be checked. The vehicle shall be rejected if evidence of fluid leaks or chafing, cracking, swelling, restriction or other damage exists on hydraulic tubing or hoses or if they are not securely fastened or improperly retained.

(5) Muffler and Exhaust System. Accelerate motor to test for prevention of unnecessary noise and emission of any unreasonable amount of smoke. The exhaust system, exhaust manifold(s), exhaust pipe(s), muffler(s), and tailpipe(s), if designed to be so equipped, shall be tight and free of leaks. System components shall be securely fastened with fasteners in place and undamaged. All motor vehicle exhaust systems shall discharge the exhaust beyond operator, passenger, and/or trunk compartment. Unnecessary noise is herein defined as any noise which is louder than that emitted by the vehicle when equipped with the original manufacturer's equipment. A gas or diesel vehicle will be rejected if, at normal operating temperature, when at idle or any constant speed, visible black or blue exhaust emissions are evident.

(6) Steering and Suspension.

(a) Check for free steering by turning the steering wheel through a full right and left turn. Reject a vehicle if binding or interference occurs during the procedure. With the front wheels in the straight ahead position (and the engine running on vehicles equipped with power steering) measure lash or lost movement at the steering wheel rim.

NON-TEXT PAGE



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(b) Lash or lost movement on passenger cars and station wagons, as measured at the steering wheel rim, should not exceed two inches if the vehicle is equipped with manual steering. Lash or lost movement on antique motor vehicles will be measured by steering wheel diameter in accordance with the following schedule:

<u>Steering Wheel Diameter</u>	<u>Lash (shall not exceed)</u>
16 inches	2 inches
18 inches	2¼ inches
20 inches	2½ inches
22 inches	2¾ inches
Antique Motor Vehicles	Over ⅙ turn

(c) The front end (each side) of all vehicles will be raised by jacking and visually examined. Vehicles equipped with ball joints will be raised and checked in accordance with the applicable manufacturer's specifications.

(d) Reject a vehicle with excessive wear or play in any part of the steering mechanism, suspension or drive train of the vehicle that would affect proper and safe operation.

(e) Reject a vehicle with broken, bent or missing shock absorbers or suspension springs.

(7) Horn. Sound horn to test for adequate signal. The horn must be securely fastened to the vehicle and operate as originally designed.

(8) Glazing, Mirrors and Windshield Wiper(s).

(a) All glazing originally equipped on the vehicle must be in place and operate as originally designed.

(b) Windshield Critical Viewing Area is the area covered by the sweep of the wiper(s) exclusive of the outer two inches within the perimeter of the wiper(s) sweep, provided by the vehicle manufacturer.

(c) Windshields having any of the following defects will be rejected:

1. Any broken glass with sharp or jagged edges inside or outside.
2. Any stone bruise, star break, or bulls eye, damage in excess of one inch in diameter within the critical viewing area or larger than two inches outside the critical viewing area, or multiple such damage.
3. Single line cracks which extend more than three inches into the critical viewing area.
4. Multiple cracks, having one or more which extends into the critical viewing area.
5. Wiper scrape(s) in excess of ¼ inch wide within the critical viewing area.
6. Clouding extending more than three inches within the perimeter of the exposed glass.
7. No poster, sticker decal or any other item shall be attached to the windshield in such a manner so as to obstruct the vision of the operator.
8. Any tinting or reflective material applied by brush, spray, or adhesive which is below the uppermost six inches of the windshield or which may encroach upon the drivers direct forward viewing area. (All such tinting provided by the original manufacturer in compliance with applicable Federal Motor Vehicle Safety Standards is acceptable.)

(d) Rear Windows. Rear windows, if originally equipped, must allow an unobstructed view to the rear, unless the vehicle is equipped with two outside rear view mirrors.

(e) Windshield Wiper(s) - Test for Proper Operation. Windshield wipers must work as originally designed. If the vehicle was equipped with two wipers, as furnished by the manufacturer, both must be maintained in good working order. Wiper blades must properly contact the windshield and, be of the same length as those furnished as original equipment. The rubber elements shall be free from damage or tears.

(f) Windshield Cleaner. If the vehicle was equipped with windshield cleaner equipment as furnished by the manufacturer, units must be maintained in good working order and operate as originally designed.

(g) Window Tinting. Aftermarket tinting or alterations that do not change the transparency beyond that of the standards set forth in 49 CFR Part 571.205 is acceptable on windows immediately adjacent to the operator and front passenger seat, the windows immediately to the rear of the operator and front passenger seat and the rear window. If the rear window has any aftermarket tinting or alterations, the vehicle must be equipped with two outside rear view mirrors. The windshield may only be tinted down to the AS-1 line usually located in the uppermost six inches of the windshield. 540 CMR 4.04(8)(g) shall not apply to the following:

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1. All window tinting as provided by the original manufacturer that is in compliance with applicable Federal Motor Vehicle Safety Standards.
  2. Authorized vehicles used to transport K-9 teams.
  3. Vehicles registered out of state.
  4. Vehicles for which a medical exemption has been issued by the Registry of Motor Vehicles.
  5. All windows to the rear of the operator's seat on vehicles used for public livery, except taxicabs.
  6. Any vehicle registered to the federal, state or local law enforcement agencies.
  7. Vehicles registered to watch guard or patrol agencies licensed under the provisions of M.G.L. c. 147, § 20 or M.G.L. c. 122, § 63.
- (h) The use of advertising wrap or vehicle wrap material on any window is prohibited.
- (9) Rearview Mirrors. Each motor vehicle shall be equipped with at least one mirror so placed and adjusted as to afford the operator a clear, reflected view of the highway to the rear and left side of the motor vehicle. All mirrors as furnished by the manufacturer must be in place and operate as originally designed. Check mirror(s) and reject if:
- (a) Mirror is cracked, broken, tarnished or reflective surface is peeled.
  - (b) Mirror will not hold adjustment or is not mounted securely to prevent excessive vibration.
  - (c) Mirror contains sharp edges, projections or irregular indents capable of producing injury.
- (10) Lighting Devices.
- (a) Tail Lights. Every motor vehicle, except a two-wheeled motorcycle, an antique motor car, and a farm tractor, shall be equipped with two red lights (tail lamps) mounted one at each side of the rear of the vehicle so as to show two red lights from behind and equipped with two stop lights (stop lamps) mounted and displayed in a like manner. A single lamp may combine both of the above functions. Every motor vehicle shall be equipped with a white light so arranged as to illuminate the rear number plate so that it is plainly visible at 60 feet.
  - (b) Directional. Front and rear directional signals will be operable on every vehicle originally equipped with such signals. Every motor vehicle registered in the Commonwealth, which was manufactured for the model year 1967 and for subsequent model years, shall be equipped with a device to permit the front and rear directional signals to flash simultaneously.
  - (c) Headlamps. Headlamp aim shall be checked in accordance with the specifications as most recently provided by the Registrar.
  - (d) Lighting Devices and Reflectors. All lighting devices and reflectors originally equipped on the vehicle at the time of manufacture shall be operable and operate as they were originally designed. Lenses must be intact, clean, unobstructed, and free from cracks. The use of adhesive tape to repair lenses is prohibited.
  - (e) Aftermarket Lighting. Any aftermarket lighting inconsistent with FMVSS 108 or M.G.L. c. 90 shall be removed or the vehicle shall be rejected. All approved aftermarket lighting shall be operable and capable of performing their design function or must be removed from the vehicle.
- (11) Tires.
- (a) A Certificate of Rejection shall be issued to any vehicle submitted for inspection with a tire which exhibits any of the following conditions:
    1. Fabric break or cut in excess of one inch; bump or knot evidencing deterioration of the tire structure; or any ply or cord structure visible.
    2. For tires without tread wear indicators: Measurement taken with tread depth gauge reveals less than  $\frac{2}{32}$  inch of tread depth is present in any original tread groove.
    3. For tires with tread depth indicators: Tire is worn so that any tread wear indicator contacts the road.
    4. Studded tires between May 1<sup>st</sup> and November 1<sup>st</sup> unless approved by the Registrar.
    5. Restricted markings indicating usage limited to any condition other than permanent highway use.

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6. Radial ply tire(s) on the same axle with non-radial tire(s); Radial tire(s) on the front axle with non-radial tire(s) on the rear axle (Exception: Vehicles equipped with dual rear wheels may have radial and non-radial tires on any axle provided they are not intermixed on the same axle).
  7. Tire size shall be the same on each side of the front and/or rear axle. Tire size may be different between front and rear axles as determined by vehicle manufacturer.
  - (b) Wheels, Wheel Bolts, Nuts or Lugs. A Certificate of Rejection shall be issued to any vehicle submitted for inspection which exhibits any of the following conditions:
    1. Any part of any mounted wheel is bent, cracked, rewelded, damaged or has elongated bolt holes which may affect safe operation of the vehicle.
    2. Wheel bolts, nuts, studs or lugs are loose, missing, damaged or are not compatible for use with wheel design.
- (12) Bumpers, Fenders, External Sheet Metal and Fuel Tank. A Certificate of Rejection shall be issued if any of the following conditions are evident:
- (a) Bumpers. Broken or bent bumpers, fenders, exterior sheet metal or moldings, having sharp edges or abnormal protrusions extending beyond normal vehicle extremities so as to constitute a danger to pedestrians and other motor vehicle traffic. If bumper face plates are removed, bumper brackets must also be removed. On vehicles equipped with air bags, the front bumpers may not be removed. The vehicle hood, door(s), luggage compartment lid, and battery or engine compartment doors or lids, if so equipped, must operate as originally designed.
  - (b) Latches and Lids. The vehicle hood, door(s), luggage compartment lid, and battery or engine compartment doors or lids, if so equipped, must operate as originally designed.
  - (c) Fenders. Front and rear fenders must be in place on all vehicles manufactured after model year 1949 if such vehicles were designed and manufactured to be operated with front and rear fenders. Every motor vehicle under 10,000 lbs. (GVWR), which is equipped with tires which extend beyond the fenders or body of such vehicle shall be equipped with flaps or suitable guards to reduce such spray or splash to the rear and side.
  - (d) Floor Pans. Holes or cracks, due to rust or otherwise, in the floor pans or other body panels which would permit the passage of exhaust gases into the passenger or trunk compartments.
  - (e) Fuel Tanks. Fuel tanks and all fuel system components, including fuel caps, which are not securely attached to the vehicles body or chassis, or that are leaking.
  - (f) Frame or Unibody. Broken, cracked, modified or rusted structural parts of the undercarriage or unibody so as to cause a hazard or structural weakness.
- (13) Altered Vehicle Heights. The original manufacturers specified height of motor vehicles with an original manufacturers gross vehicle weight rating of 10,000 lbs. or less shall not be altered by elevating or lowering the chassis or body by more than two inches, except that four-wheel drive motor vehicles with a original manufacturer's gross vehicle weight rating of 10,000 lbs. or less may be altered in accordance with the provisions of 540 CMR 6.00: *Alteration of Motor Vehicle Height*. Any motor vehicle altered, modified, or changed beyond the aforementioned two inches, or the Registrar's approved altered height specifications, shall be rejected.
- (14) Safety Belts, Lap Belts and Shoulder Restraints. Safety belts, lap belts and shoulder restraints originally installed in motor vehicles manufactured after July 1, 1966 shall be inspected to assure that all are maintained in good order. It shall be the responsibility of the motorist that the safety belts are readily accessible for inspection.
- (15) Air Bags. All vehicles ten or less model years old so equipped must comply with 49 CFR, Parts 571 through 595. The inspector shall check for proper operation of the airbag malfunction indicator lamp, and if the lamp indicates a malfunction in the airbag system, or if any airbag originally equipped in the vehicle is deployed or is missing the vehicle shall be rejected.
- (16) Fuel Tank Cap Visual Check. The vehicle shall fail the gas cap visual check if the cap is missing, defective, or does not properly fit the vehicle.

4.05: Procedures for Inspection of Commercial Motor Vehicles

(1) Prior to beginning inspection, a visual check of the vehicle shall be made to determine that ice and snow accumulation or the condition of the suspension system will not impede or interfere with the proper aiming of headlamps.

(a) The Certificate of Registration or the online renewal confirmation receipt shall be inspected and the information contained thereon, including license plate, vehicle description, and vehicle identification number, shall be verified by observation of the subject vehicle. The information contained on the Certificate of Registration shall also be matched with the vehicle information accessible to the workstation. The data appearing on the Registration Certificate, the data accessible to the Workstation, the data appearing on the vehicle license plate, and the vehicle identification number and description must match in order for the inspection to proceed. No fee shall be assessed for an inspection which does not proceed due to a data match failure.

(b) No Certificate of Registration need be produced for any vehicle having a general registration issued in accordance with the provisions of M.G.L. c. 90, § 5. Either a photocopy of the original Certificate of Registration or the original Certificate of Registration may be produced for other motor vehicles.

(c) A licensed inspector shall refuse to conduct an inspection if the motor vehicle's registration is determined to be invalid.

(2) Inspection of the Vehicle. All inspections must be performed in accordance with the applicable provisions of 540 CMR 4.00 and 310 CMR 60.02 by licensed inspectors in the inspection bay or area approved for inspections by the Registrar.

(a) Inspectors must first collect the proper fee.

(b) The inspector shall drive the motor vehicle into the inspection bay or area approved for inspections.

(c) License plate(s), shall be undamaged, securely mounted, clean and clearly visible. No bumper, trailer hitch or other accessory may interfere with a clear view of the license plates. The license plate must be mounted in the proper location on the rear of the vehicle if the vehicle has been issued one plate. Both license plates must be mounted in the proper location on the rear and front of the vehicle if the vehicle has been issued two plates. Any decorative license plate or license plate replica not issued by the Registry of Motor Vehicles on which any jurisdiction name appears must be removed from the vehicle.

(d) General Registration Holders. Every motor vehicle in possession of a general registration holder shall be checked for the proper display of the compliance decal issued pursuant to 540 CMR 18.03. The Vehicle Identification Number (VIN) and Registration Number indicated on the decal shall correspond with said numbers of the vehicle inspected.

(e) Upon the completion of the inspection, the inspector will remove the old Certificate of Inspection from the windshield, and affix the new Certificate of Inspection and provide the motorist with all inspection documentation and program literature as required.

(f) A vehicle which is determined not to meet all inspection requirements shall be issued a Certificate of Rejection.

(3) Perform Emissions Testing Requirements and Procedures. The following motor vehicles are exempt from emissions testing: Any vehicle exempted pursuant to 310 CMR 60.02(3)(b) and in accordance with M.G.L. c. 111, § 142M.

(4) Reflectors. Every commercial motor vehicle or trailer weighing, with its load, more than 12,000 lbs. shall be equipped with a red reflector at the rear.

(5) Chock Blocks. Every bus having a seating capacity of more than seven passengers, every truck weighing, unloaded, more than 4,000 lbs. and every tractor, trailer, semi-trailer or combination which is not equipped with positive spring loaded, air parking brakes, shall be equipped with one pair of adequate safety chock blocks.

(6) Splash Guards. Every motor vehicle or trailer, except passenger motor vehicles, shall be equipped with suitable guards which will effectively reduce the spray or splash, to the rear, of mud, water, or slush, caused by the rear wheels.

## 4.05: continued

(7) Marker Light. Commercial motor vehicles and trailers, having a registered carrying capacity of three tons or over, shall have an amber light attached to the extreme left of the front of the vehicle, so attached and adjusted as to indicate the extreme left lateral extension of the vehicle or load.

(8) Horn. Sound horn to test for adequate signal. The horn must be securely fastened to the vehicle and operate as originally designed.

(9) Warning Devices. Every commercial motor vehicle or trailer that is required to have a backup warning device shall be checked for proper operation of said device. Every commercial motor vehicle equipped with a dump body shall be equipped with an adequate audible warning system to alert the operator when the dump body is in an upright and elevated position.

(10) Bumpers. The existence of broken or bent bumpers, fenders, exterior sheet metal or moldings having sharp edges or abnormal protrusions extending beyond normal vehicle extremities so as to constitute a danger to pedestrians and other motor vehicle traffic shall be reason for rejection. If bumper face plates are removed, bumper brackets must also be removed. On vehicles equipped with air bags the front bumper may not be removed. The vehicle hood, door(s), luggage compartment lid, and battery or engine compartment doors or lids, if so equipped, must be capable of being firmly latched.

(11) Fenders. Front and rear fenders must be in place. Every commercial motor vehicle which is equipped with tires which extend beyond the fenders or body of such vehicle shall be equipped with flaps or suitable guards to reduce such spray or splash to the rear and side.

(12) Floor Pans. Vehicles with holes or cracks, due to rust or otherwise, in the floor pans or other body panels which would permit the passage of exhaust gases into the passenger compartments shall fail.

(13) Seat Belts. Shall be inspected to assure that all are maintained in good order. The Requirements of 49 CFR, Part 393.93 shall apply.

(14) Air Bags. All vehicles ten or less model years old must comply with 49 CFR, Parts 571 through 595. The inspector shall check for proper operation of the airbag malfunction indicator lamp. If not operating as designed, or if the lamp indicates a malfunction in the airbag system, or if any airbag originally equipped in the vehicle is deployed or is missing the vehicle shall be rejected.

(15) Procedures for Inspecting Certain Commercial Motor Vehicles and Trailers Pursuant to Federal Regulation. 49 CFR Parts 390 through 397, including Appendix G to Sub-chapter B, as appearing or as may be revised in the Code of Federal Regulations, as related to the inspection of Commercial Motor Vehicles or any activity related thereto, are hereby adopted as the Regulations of the Registry of Motor Vehicles. Said regulations are applicable to trucks with a gross vehicle weight rating of over 10,000 lbs., buses transporting more than 15 passengers including the driver or any motor vehicle transporting hazardous materials in a quantity requiring placarding in accordance with the Hazardous Material Regulations of the United States Department of Transportation, 49 CFR Parts 171 through 180. In the event of any conflict between 540 CMR 4.00 and any other regulations or law of the Commonwealth of Massachusetts, the stricter more stringent standard shall apply. A Certificate of Rejection shall be issued to any vehicle or trailer submitted for inspection if any of the following conditions exist:

(a) Air Brake Systems.

1. Leakage Test. Start the vehicle engine and run at fast idle until air pressure on gauge reaches cut-off point. Cut-off must occur at 90 lbs. per square inch (PSI) or more, or manufacturer specifications. Stop engine and observe pressure gauge. With service brakes in released position, if drop in pressure exceeds 2 PSI in one minute for a single vehicle or 3 PSI for a combination vehicle or if audible leakage is evident, the vehicle will be rejected. Start engine and allow system to reach maximum pressure. Stop engine

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and apply service brakes, at which time a pressure drop of 5 PSI to 15 PSI will occur and system will be stabilized. With brakes in applied position, if drop in pressure exceeds 3 PSI in one minute for a single vehicle, or 4 PSI per minute for a combination vehicle, or of audible leakage is evident, the vehicle will be rejected.

2. Low Pressure Warning Device Test. Apply service brakes repeatedly until the audible and visual low pressure indicator comes on. Reject vehicle if indicator comes on above 70 PSI or below 50 PSI or if the indicator is inoperable. A gauge indicating pressure is not deemed to be an adequate low pressure indicator.

3. Condition of Air Brake Components. During the inspection of the vehicle, the conditions of visible air brake components should be checked. The vehicle shall be rejected if tubing or hoses are cracked, chafed, or restricted or are insecurely fastened or improperly retained.

(b) Brake System.

1. Service Brakes.

a. All brake systems are to be inspected in accordance with the manufacturer(s) recommended procedures. Absence of braking action of any axle required to have brakes upon application of the service brakes (such as missing brakes or brake shoe(s) failing to move upon application of a wedge, S-cam, cam, or disc brake).

b. Missing or broken mechanical components including shoes, lining, pads, springs, anchor pins, spiders, cam rollers, push rods, and air chamber mounting bolts.

c. Loose brake components including air chamber spiders, and cam shaft support brackets.

d. Audible air leak at brake chamber (example-ruptured diaphragm, loose chamber clamp, *etc.*).

e. Readjustment Limits. The maximum stroke at which brakes should be readjusted is given below. Any brake  $\frac{1}{4}$  inch or more past the readjustment limit or any two brakes at the readjustment limit or less than  $\frac{1}{4}$  inch beyond the readjustment limit shall be cause for rejection. Stroke shall be measured with the engine off and reservoir pressure of 80 to 90 PSI with brakes fully applied.

BOLT TYPE BRAKE CHAMBER DATA

Type	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be readjusted
A	12	$6\frac{15}{16}$	$1\frac{3}{8}$
B	24	$9\frac{3}{16}$	$1\frac{3}{4}$
C	16	$8\frac{1}{16}$	$1\frac{3}{4}$
D	6	$5\frac{1}{4}$	$1\frac{1}{4}$
E	9	$6\frac{3}{16}$	$1\frac{3}{8}$
F	36	11	$2\frac{1}{4}$
G	30	$9\frac{7}{8}$	2

ROTOCHAMBER DATA

Type	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be readjusted
9	9	$4\frac{9}{32}$	$1\frac{1}{2}$
12	12	$4\frac{13}{16}$	$1\frac{1}{2}$
16	16	$5\frac{13}{32}$	2
20	20	$5\frac{13}{16}$	2
24	24	$6\frac{13}{32}$	2
30	30	$7\frac{1}{16}$	$2\frac{1}{4}$
36	36	$7\frac{5}{8}$	$2\frac{3}{4}$
50	50	$8\frac{7}{8}$	3

4.05: continued

CLAMP TYPE BRAKE CHAMBER DATA

540 CMR: REGISTRY OF MOTOR VEHICLES

Type	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be re-adjusted
6	6	4½	1¼
9	9	5¼	1⅜
12	12	5 <sup>11</sup> / <sub>16</sub>	1⅜
16	16	6 <sup>3</sup> / <sub>8</sub>	1¾
20	20	6 <sup>24</sup> / <sub>32</sub>	1¾
24	24	7 <sup>7</sup> / <sub>32</sub>	1¾ <sup>1</sup>
30	30	8 <sup>3</sup> / <sub>32</sub>	2
36	36	9	2¼

<sup>1</sup> Note (2 inches for long stroke design)

Wedge Brake Data. Movement of the scribe mark on the lining shall not exceed 1/16 inch.

- f. Brake linings or pads.
    - i. Lining or pad is not firmly attached to the shoe;
    - ii. Saturated with oil, grease, or brake fluid; or
    - iii. Non-steering Axles: Lining with a thickness less than ¼ inch at the shoe center for air drum brakes, 1/16 inch or less at the shoe center for hydraulic and electric drum brakes, and less than 1/8 inch for air disc brakes.
    - iv. Steering Axles: Lining with a thickness less than 3/16 inch at the shoe center for drum brakes, less than 1/8 inch for air disc brakes and 1/16 inch or less for hydraulic disc and electric brakes.
  - g. Missing brake on any axle required to have brakes.
  - h. Mismatch across any power unit steering axle of:
    - i. Air chamber sizes.
    - ii. Slack adjuster length.
2. Parking Brake System. No brakes on the vehicle or combination are applied upon actuation of the parking brake control, including driveline hand controlled parking brakes. The inspector shall operate the vehicle to test the parking and service brake. The parking brake on all vehicles shall be tested by sufficiently accelerating the motor with the vehicle in the lowest forward gear against the brake in the applied position. The vehicle will be rejected if the parking brake will not hold. The service brakes will be tested at a speed of between four and eight MPH. Service brakes must be reasonably equalized so that the vehicle does not pull noticeably to either side when applied. A test with the brake meter shall be made at a speed of 15 to 25 MPH in all questionable cases. Service and parking brakes shall be adequate to stop the vehicle from a speed of 20 MPH in not more than the following distances

Service (foot) Brake	Pleasure Vehicles	30 feet
	Trucks and Buses	40 feet
Parking (hand) Brake	All Vehicles	80 feet

- 3. Brake Drums or Rotors.
  - a. With any external crack or cracks that open upon brake application (do not confuse short hairline heat check cracks with flexural cracks).
  - b. Any portion of the drum or rotor missing or in danger of falling away.
- 4. Brake Hose.
  - a. Hose with any damage extending through the outer reinforcement ply. (Rubber impregnated fabric cover is not a reinforcement ply.)  
(Thermoplastic nylon may have braid reinforcement or color difference between cover and inner tube. Exposure of second color is cause for rejection.)
  - b. Bulge or swelling when air pressure is applied.

## 4.05: continued

- c. Any audible leaks.
  - d. Two hoses improperly joined (such as a splice made by sliding the hose ends over a piece of tubing and clamping the hose to the tube).
  - e. Air hose cracked, broken or crimped.
  - 5. Brake Tubing.
    - a. Any audible leak.
    - b. Tubing cracked, damaged by heat, broken or crimped.
  - 6. Low Pressure Warning Device missing, inoperative, or does not operate at 55 PSI and below, or ½ the governor cutout pressure, whichever is less.
  - 7. Tractor Protection Valve. Inoperative or missing tractor protection valve(s) on power unit.
  - 8. Air Compressor.
    - a. Compressor drive belts in condition of impending or probable failure.
    - b. Loose compressor mounting bolts.
    - c. Cracked, broken or loose pulley.
    - d. Cracked or broken mounting brackets, braces or adapters.
  - 9. Electric Brakes.
    - a. Absence of braking action on any wheel required to have brakes.
    - b. Missing or inoperative breakaway braking device.
  - 10. Hydraulic Brakes. (Including Power Assist Over Hydraulic and Engine Drive Hydraulic Booster).
    - a. Master cylinder less than ¼ full.
    - b. No pedal reserve with engine running except by pumping pedal.
    - c. Power assist unit fails to operate.
    - d. Seeping or swelling brake hose(s) under application of pressure.
    - e. Missing or inoperative check valve.
    - f. Has any visually observed leaking hydraulic fluid in the brake system.
    - g. Has hydraulic hose(s) abraded (chafed) through outer cover to fabric layer.
    - h. Fluid lines or connections leaking, restricted, crimped, cracked or broken.
    - i. Brake failure or low fluid warning light on and/or inoperative.
  - 11. Vacuum Systems. Any vacuum system which:
    - a. Has insufficient vacuum reserve to permit one full brake application after engine is shut off.
    - b. Has vacuum hose(s) or line(s) restricted, abraded (chafed) through outer cover to cord ply, crimped, cracked, broken or has collapse of vacuum hose(s) when vacuum is applied.
    - c. Lacks an operative low-vacuum warning device as required.
- (c) Coupling Devices.
- 1. Fifth Wheels.
    - a. Mounting to Frame.
      - i. Any fasteners missing or ineffective.
      - ii. Any movement between mounting components.
      - iii. Any mounting angle iron cracked or broken.
    - b. Mounting Plates and Pivot Brackets.
      - i. Any fasteners missing or effective.
      - ii. Any welds or parent metal cracked.
      - iii. More than ⅜ inch horizontal movement between pivot bracket pin and bracket.
      - iv. Pivot bracket pin missing or not secured.
    - c. Sliders.
      - i. Any latching fasteners missing or ineffective.
      - ii. Any fore or aft stop missing or not securely attached.
      - iii. Movement more than ⅜ inch between slider bracket and slider base.
      - iv. Any slider component cracked in parent metal or weld.
    - d. Lower Coupler.
      - i. Horizontal movement between the upper and lower fifth wheel halves exceeds ½ inch.
      - ii. Operating handle not in closed or locked position.
      - iii. Kingpin not properly engaged.



## 4.05: continued

- iv. Separation between upper and lower coupler allowing light to show through from side to side.
  - v. Cracks in the fifth wheel plate, excepting cracks in fifth wheel approach ramps and casting shrinkage cracks in the ribs of the body of a cast fifth wheel.
  - vi. Locking mechanism parts missing, broken, or deformed to the extent the kingpin is not securely held.
2. Pintle Hooks.
    - a. Mounting to Frame.
      - i. Any missing or ineffective fasteners (a fastener is not considered missing if there is an empty hole in the device but no corresponding hole in the frame or vice versa).
      - ii. Mounting surface cracks extending from point of attachment (*e.g.*, cracks in the frame at mounting bolt holes).
      - iii. Loose mounting.
      - iv. Frame cross member providing pintle hook attachment cracked.
    - b. Integrity.
      - i. Cracks anywhere in pintle hook assembly.
      - ii. Any welded repairs to the pintle hook.
      - iii. Any part of the horn section reduced by more than 20%.
      - iv. Latch insecure.
  3. Drawbar/Towbar Eye.
    - a. Mounting.
      - i. Any cracks in attachment welds.
      - ii. Any missing or ineffective fasteners.
    - b. Integrity.
      - i. Any cracks.
      - ii. Any part of the eye reduced by more than 20%.
  4. Drawbar/Towbar Tongue.
    - a. Slider (power or manual).
      - i. Ineffective latching mechanism.
      - ii. Missing or ineffective stop.
      - iii. Movement of more than ¼ inch between slider and housing.
      - iv. Any leaking, air or hydraulic cylinders, hoses, or chambers (other than slight oil weeping normal with hydraulic seals).
    - b. Integrity.
      - i. Any cracks.
      - ii. Movement of ¼ inch between subframe and drawbar at point of attachment.
  5. Safety Devices.
    - a. Safety devices missing.
    - b. Unattached or incapable of secure attachment.
    - c. Chains and hooks.
      - i. Worn to the extent of a measurable reduction in link cross section.
      - ii. Improper repairs including welding, wire, small bolts, rope and tape.
    - d. Cable.
      - i. Kinked or broken cable strands.
      - ii. Improper clamps or clamping.
  6. Saddle-mounts.
    - a. Method of Attachment.
      - i. Any missing or ineffective fasteners.
      - ii. Loose mountings.
      - iii. Any cracks or breaks in a stress or load bearing member.
      - iv. Horizontal movement between upper and lower saddle-mount halves exceeds ¼ inch.
- (d) Exhaust System.
1. Any exhaust system determined to be leaking at a point forward of or directly below the driver/sleeper compartment.
  2. A bus exhaust system leaking or discharging to the atmosphere:
    - a. Gasoline Powered. In excess of six inches forward of the rearmost part of the bus. *See 540 CMR 7.00: Minimum Standards for Construction and Equipment of School Buses.*

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- b. Other than Gasoline Powered. In excess of 15 inches forward of the rear most part of the bus. *See 540 CMR 7.00: Minimum Standards for Construction and Equipment of School Buses.*
- c. Other than gasoline powered forward of a door or window designed to be opened, excepting emergency exits.
- 3. No part of the exhaust system of any motor vehicle shall be so located as would be likely to result in burning, charring, or damaging the electrical wiring, the fuel supply, or any combustible part of the motor vehicle.
- 4. The exhaust system, exhaust manifold(s), exhaust pipe(s), muffler(s), and tailpipe(s), if designed to be so equipped, shall be tight and free of leaks. System components shall be securely fastened with fasteners in place and undamaged.
- 5. A gas or diesel vehicle will be rejected if, at normal operating temperature, and at any constant speed over 15 MPH (approximately 1,000 to 1200 RPM's), visible black or blue exhaust emissions are evident.
- (e) Fuel System and Fluid Leaks.
  - 1. A fuel system with a visible leak at any point.
  - 2. A fuel tank filler cap that is missing, defective or does not properly fit the vehicle.
  - 3. A fuel tank not securely attached to the motor vehicle by reason of loose, broken or missing mounting bolts or brackets (some fuel tanks use springs or rubber bushings to permit movement).
  - 4. Any fluid leaks on the engine or driveline that would affect the safe operation of the vehicle, or constitute a fire hazard.
- (f) Lighting Devices. All lighting devices and reflectors required by Section 393 shall be operable (*see Part 393 in Reference Section*).
- (g) Safe Loading.
  - 1. Part(s) of vehicle or condition of loading such that the spare tire or any part of the load or dunnage can fall into the roadway.
  - 2. Protection against Shifting Cargo. Any vehicle without a front-end structure or equivalent device as required.
- (h) Steering Mechanism.
  - 1. Steering Wheel Free Play. The engine must be running on vehicles equipped with power steering.

Steering Wheel Diameter	Manual Steering System	Power Steering System
16 inches	2 inches	4½ inches
18 inches	2¼ inches	4¾ inches
20 inches	2½ inches	5¼ inches
22 inches	2¾ inches	5¾ inches

- 2. Steering Column.
  - a. Any absence or looseness of U-bolt(s) or positioning part(s).
  - b. Worn, faulty or obviously repair welded universal joint(s).
  - c. Steering wheel not properly secured.
- 3. Front Axle Beam and All Steering Components Other than Steering Column.
  - a. Any crack(s) in gear box or mounting brackets.
  - b. Any obvious weld or repair(s).
- 4. Steering Gear Box.
  - a. Any mounting bolts lose or missing.
  - b. Any crack(s) in gear box or mounting brackets.
- 5. Pitman Arm. Any looseness of the pitman arm on the steering gear output shaft.
- 6. Power Steering. Auxiliary power assist cylinder loose.
- 7. Ball and Socket Joints.
  - a. Any movement under steering load of a stud nut.
  - b. Any motion, other than rotational between any linkage member and its attachment point of more than 1/8 inch.

4.05: continued

8. Tie Rods and Drag Links.
  - a. Loose clamp(s) or clamp bolt(s) on tie rods or drag links.
  - b. Any looseness in any threaded joint.
9. Nuts. Nut(s) loose or missing on tie rods, pitman arm, drag link, steering arm or tie rod arm.
10. Steering System. Any modification or other condition that interferes with free movement of any steering component.
11. Kingpin. Reject vehicle if measured movement at top or bottom of tire is greater than:
 

Wheel Size:	16 inches or less.....	¼ inch (6.5mm)
	17 to 18 inches.....	⅜ inch (9.5mm)
	Over 18 inches.....	½ inch (13mm)

KINGPIN PLAY PROCEDURE: Relative to vehicles equipped with Kingpins.

MVMA recommended procedures as noted in 540 CMR 4.05(13)(h)11.

Be sure wheel bearing movement is eliminated by applying service brake during checking procedure.

Procedure: First eliminate all wheel bearing movement by applying service brake.

With front end lifted, as illustrated for inspecting wheel bearings, grasp the tire at the top and bottom and attempt to move in and out to detect looseness. A pry bar may be necessary on heavy wheels.

Measure the movement at the top or bottom of the tire at the outer circumference.

Reject vehicle if measured movement at top or bottom of tire is greater than the distances described below:

Wheel size:	16 inches or less.....	¼ inch (6.5mm)
	17 to 18 inches.....	⅜ inch (9.5mm)
	Over 18 inches.....	½ inch (13mm)

- (i) Suspension System.
  1. Any U-bolt(s), spring hanger(s), or other axle positioning part(s) cracked, broken, loose or missing resulting in shifting of an axle from its normal position. (After a turn, lateral axle displacement is normal with some suspensions. Forward or rearward operation in a straight line will cause the axle to return to alignment.)
  2. Spring Assembly.
    - a. Any leaves in a leaf spring assembly broken or missing.
    - b. Any broken main leaf in a leaf spring assembly, (include assembly with more than one main spring).
    - c. Coil spring broken.
    - d. Rubber spring missing.
    - e. One or more leaves displaced in a manner that could result in contact with a tire, rim, brake drum or frame.
    - f. Broken torsion bar spring in a torsion bar suspension.
    - g. Deflated air suspension, *i.e.*, system failure, leak, *etc.*
  3. Torque, Radius, or Tracking Components. Any part of a torque, radius or tracking component assembly or any part used for attaching the same to the vehicle frame or axle that is cracked, loose, broken or missing. (Does not apply to loose bushings in torque or track rods.)
  4. Shocks. Any broken, bent, missing shock absorbers or suspension springs.
- (j) Frame.
  1. Frame Members.
    - a. Any cracked, broken, loose, or sagging frame member.
    - b. Any loose or missing fasteners including fasteners attaching functional component such as engine, transmission, steering gear, suspension, body parts, and fifth wheel.
  2. Tire and Wheel Clearance. Any condition, including loading, that causes the body or frame to be in contact with a tire or any part of the wheel assemblies.
  3. Adjustable Axle Assemblies (Sliding Subframes). Adjustable axle assembly with locking pins missing or not engaged.

## 4.05: continued

(k) Tires.

1. Any tire on any steering axle of a power unit.
  - a. With less than  $\frac{4}{32}$  inch tread when measured at any point on a major tread groove.
  - b. Has body ply or belt material exposed through the tread or sidewall.
  - c. Has any tread or sidewall separation.
  - d. Has a cut where the ply or belt material is exposed.
  - e. Is labeled "Not For Highway Use" or displaying other marking which would exclude use on steering axle (except for farm vehicles, implements of husbandry, and off-road equipment is used on highway at restricted speeds).
  - f. A tube-type radial tire without radial tube stem markings. These markings include a red band around the tube stem, the word "radial" embossed in metal stems, or the word "radial" molded in rubber stems.
  - g. Mixing bias and radial tires on the same axle
  - h. Tire flap protrudes through valve slot in rim and touches stem.
  - i. regrooved tires on buses, trucks and truck tractors, except for trucks and truck tractors equipped with front tires with a load carrying capacity of less than that of 8.25-20 eight ply-rating tires.
  - j. Boot, blowout patch or other ply repair.
  - k. Weight carried exceeds tire load limit. This includes overloading tire resulting from low air pressure.
  - l. Tire is flat or has noticeable (*e.g.*, can be heard or felt) leak.
  - m. Any bus equipped with recapped or retreaded tire(s).
  - n. So mounted or inflated that it comes in contact with any part of the vehicle.
  - o. Tire size shall be the same on each side of the front and/or rear axle. Tire size may be different between front and rear axles as determined by vehicle manufacturer.
2. All tires other than those found on the steering axle of a power unit:
  - a. Weight carried exceeds tire load limit. This includes overloaded tire resulting from low pressure.
  - b. Tire flat or has noticeable (*e.g.*, can be heard or felt) leak.
  - c. Has body ply or belt material exposed through the tread or sidewall.
  - d. Has any tread or sidewall separation.
  - e. Has a cut where ply or belt material is exposed.
  - f. So mounted or inflated that it comes in contact with any part of the vehicle. (This includes a tire that contacts its mate.)
  - g. Is labeled "Not For Highway Use" or displaying other marking which would exclude use on steering axle (except for farm vehicles, implements of husbandry, and if off-road equipment is used on highway at restricted speeds).
  - h. With less than  $\frac{2}{32}$  inch tread when measured at any point on a major tread groove.
  - i. Tire size shall be the same on each side of the front and/or rear axle. Tire size may be different between front and rear axles as determined by vehicle manufacturer.

(l) Wheels and Rims.

1. Lock or Side Ring. Bent, broken, cracked, improperly seated, sprung or mismatched ring(s).
2. Wheels and Rims. Cracked or broken or has elongated bolt holes.
3. Fasteners (both Spoke and Disc Wheels). Any loose, missing, broken, cracked, stripped or otherwise ineffective fasteners.
4. Welds.
  - a. Any cracks in welds attaching disc wheel disc to rim.
  - b. Any cracks in welds attaching tubeless demountable rim to adapter.
  - c. Any welded repair on aluminum wheel(s) on a steering axle.
  - d. Any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.

(m) Glazing, Mirrors and Windshield Wiper(s).

1. All glazing originally equipped on the vehicle must be in place operate as originally designed.
2. Windshield Critical Viewing Area is the area covered by the sweep of the wiper(s) exclusive of the outer two inches within the perimeter of the wiper(s) sweep, provided by the vehicle manufacturer.

## 4.05: continued

3. Windshields having any of the following defects will be rejected:
  - a. Any broken glass with sharp or jagged edges inside or outside.
  - b. Any stone bruise, star break, or bulls eye, damage in excess of one inch in diameter within the critical viewing area or larger than two inches outside the critical viewing areas, or multiple such damage.
  - c. Single line cracks which extend more than three inches into the critical viewing area.
  - d. Multiple cracks, having one or more which extends into the critical viewing area.
  - e. Wiper scrape(s) in excess of ¼ inch wide within the critical viewing area.
  - f. Clouding extending more than three inches within the perimeter of the exposed glass.
  - g. No poster, sticker decal, *etc.* shall be attached to the windshield in such a manner so as to obstruct the vision of the operator.
  - h. Window Tinting.
    - i. Any tinting or reflective material applied by brush, spray, or adhesive which is below the uppermost six inches of the windshield or which may encroach upon the driver's direct forward viewing area. (All such tinting provided by the original manufacturer in compliance with applicable Federal Motor Vehicle Safety Standards is acceptable.)
    - ii. Aftermarket tinting or alterations that do not change the transparency beyond that of the standards set forth in 49 CFR Part 571.205 is acceptable on windows immediately adjacent to the operator and front passenger seat and the windows immediately to the rear of the operator and front passenger seat. The rear window may also be so tinted provided the vehicle is equipped with two outside rear view mirrors. The windshield may only be tinted down to the AS-1 line usually located in the uppermost six inches of the windshield.
    - iii. The use of advertising wrap or vehicle wrap material on any window is prohibited.
4. 540 CMR 4.05(14)(m)2.h. shall not apply to the following:
  - a. All window tinting as provided by the original manufacturer that is in compliance with applicable Federal Motor Vehicle Safety Standards.
  - b. Authorized vehicles used to transport K-9 teams.
  - c. Vehicles registered out of state.
  - d. Vehicles for which a medical exemption has been issued by the Registry of Motor Vehicles.
  - e. All windows to the rear of the operator's seat on vehicles used for public livery, except taxicabs.
- (n) Windshield Wipers.
  1. Any power unit that has an inoperative wiper, or missing or damaged parts that render it ineffective.
  2. Test for Proper Operation. If the vehicle was equipped with two wipers as furnished by the manufacturer, both must be maintained in good working order. Wiper blades must properly contact the windshield, be of the same length as those furnished as original equipment and the rubber elements must be free from damage or tears.
  3. If the vehicle was equipped with windshield cleaner equipment as furnished by the manufacturer, units must be maintained in good working order.
  4. Rearview Mirrors. Each motor vehicle shall be equipped with at least two mirrors so placed and adjusted as to afford the operator a clear, reflected view of the highway to the rear and both sides of the vehicle. All mirrors as furnished by the manufacturer must be in place and maintained in good working order. Check mirror(s) and reject if:
    - a. Mirror is cracked, broken, tarnished or reflective surface is peeled.
    - b. Mirror will not hold adjustment or is not mounted securely to prevent excessive vibration.
    - c. The mirror contains sharp edges or projections capable of producing injury.
- (o) Fuel Tank Cap Visual Check. The vehicle shall fail the gas cap visual check if the cap is missing, defective or does not properly fit the vehicle.

4.06: Procedures for Inspection of Motorcycles

(1) Prior to Beginning Inspection. A visual check of the motorcycle shall be made to determine that under-inflated tires, condition of suspension and other conditions visible to the inspector will not impede or interfere with the proper aiming of headlamps. In order to proceed with inspection, a properly functioning side stand or center stand must be able to support the weight of the motorcycle while wheels, front end and swing arm are examined. Passenger foot rests should be put in an upright stored position, if possible, to prevent interference with the inspection.

(2) Inspection of the Motorcycle. 540 CMR 4.06 shall apply to two wheeled motorcycles or two wheeled motorcycles with a side car. All inspections must be performed in accordance with the applicable provisions of 540 CMR 4.00 by certified inspectors in the approved inspection area only. Inspectors must first collect the proper fee and secure the proper Certificate of Registration or the on-line renewal confirmation receipt. The Certificate of Registration shall be inspected and the information contained thereon, including license plate, vehicle description, and vehicle identification number, shall be verified by observation of the subject motorcycle. The information contained on the Certificate of Registration shall also be matched with the vehicle information accessible to the workstation. The data appearing on the Certificate of Registration, the data accessible on the Workstation, the data appearing on the vehicle license plate, and the vehicle identification number and motorcycle description must match in order for the inspection to proceed. As per M.G.L. c. 90, § 11 online renewals do not require a valid plate decal. No fee shall be assessed for an inspection which does not proceed due to a data match failure. The following inspection shall then be completed:

(a) The number plate must be undamaged, securely horizontally mounted on the rear of the motorcycle, clean and clearly visible. No accessory mounted on the motorcycle may interfere with a clear view of the number plate. Any decorative number plate or number plate replica not issued by the Registry of Motor Vehicles for the motorcycle being inspected on which appears any jurisdictional name must be removed from the motorcycle.

(b) Upon the completion of the inspection and a determination by the inspector that the motorcycle meets all inspection requirements, the inspector shall affix a new Certificate of Inspection to the license plate and provide the operator with all inspection documentation and program literature as required.

(c) A motorcycle which is determined by the Inspector not to meet all inspection requirements shall be issued a Certificate of Rejection document in accordance with any regulations, policies or procedures of the Registrar.

(3) Brakes.

(a) Brakes must be adequate to stop a motorcycle from a speed of 20 MPH in not more than 19 feet. Each motorcycle shall have either a split service brake system or two independently actuated service brake systems which, upon application, act on front and rear wheels. Any motorcycle which has a number plate issued under the provisions M.G.L. c. 90, § 6A (Plates for Antique Motor Cars) which was not manufactured with either a split service brake system or two independently actuated service brake systems shall be required to have one brake system adequate to stop said motorcycle within the aforementioned distances. For more recent model motorcycles observe whether the motorcycle utilizes a brake anti-lock equalizer system which proportionately controls braking pressure to the front and rear wheels.

(b) Mechanical Brake System. Inspect the linkage, cables, pivots and bearings for high friction, wear and broken or missing parts. Reject motorcycle if:

1. Brake adjustment changes under any steering or loading.
2. Cotter pins are missing.
3. Pins or clevises are worn more than 25% of the original diameter.
4. The cam operating lever has been repositioned on the shaft as a means of avoiding replacement of worn cam, shoes or lining.
5. Any cables are frayed (two or more broken strands).
6. Any brake adjustment mechanism which will not maintain an adjusted position or is adjusted to its maximum extent.
7. Front brake cable is routed so as to be pinched between fork and frame.
8. There is any roughness, binding, or jamming in levers or pedals.
9. Less than 1/3 reserve remains in hand or foot brake when brakes are applied.

## 4.06: continued

10. Modifications make the pedal or lever inaccessible for adequate leverage or operation.
  11. Any portion of the brake hand lever is broken or missing.
  - (c) Hydraulic Brake System. Visually inspect the condition of the hydraulic system. Note: Do Not Remove Wheels. Reject the motorcycle if:
    1. Hoses or tubing leaks or they are cracked, chafed, flattened, restricted or are improperly fastened.
    2. Master cylinder leaks or the reservoir capacity is less than the manufacturer's recommended safe level if known or less than  $\frac{1}{2}$  total capacity.
    3. There is any leakage in the brake system.
    4. The push rod is improperly adjusted.
    5. Wheel cylinder or caliper leaks or fails to function.
  - (d) Hydraulic System Tests. Test motorcycle in a standing position. The inspector should be able to maintain brake or hand lever reserve under moderate force (40-60 lbs.) for 15 seconds. Reject the motorcycle if brake reserve cannot be maintained for 15 seconds or if there is less than approximately  $\frac{1}{3}$  of the total available pedal or brake lever travel remains. The brake lever and pedal should exhibit smooth, firm and responsive action.
 

Allow wheels to turn freely when not in the braking mode. Reject the motorcycle if binding occurs and wheels do not turn freely.
  - (e) Visual Inspection of Brake Pads and Discs. Where pads and discs are visible check and reject if:
    1. There is any substantial crack extending to the edge of the disc or pad.
    2. There is evidence of mechanical damage other than wear.
    3. Friction surface of disc or pad is contaminated with oil, grease or brake fluid.
    4. There is excessive roughness to the disc.
    5. The disc is warped or bent.
    6. Pad is broken, loose or worn beyond replacement indicators.
- (4) Muffler and Exhaust System.
- (a) The motorcycle shall be equipped with a muffler to prevent excessive and unnecessary noise which is in good working order and in constant operation. Accelerate motor to  $\frac{1}{2}$  throttle position to test for unnecessary noise and emission of any unreasonable amount of smoke. Reject a motorcycle which has a muffler cutout or bypass of the baffle plates, screens or other original internal parts have been removed and not replaced. Unnecessary noise is herein defined as any noise which is louder than that emitted by the motorcycle with original manufacturers muffler and exhaust system equipment.
  - (b) The exhaust system includes the exhaust manifold, the piping leading from the flange at the exhaust manifold to and including the muffler and tail piping. Visually and audibly inspect the exhaust system and reject the motorcycle if:
    1. Tail pipe end is pinched or obstructed.
    2. System components are not securely fastened with proper clamps or hangers.
    3. The exhaust system is not shielded to prevent riders from being burnt while riding in normal seated position.
- (5) Steering, Alignment, and Suspension of Front End.
- (a) Wheel Axle Bearings. Place motorcycle on motorcycle accessory lift or center stand and slowly spin the wheels. Reject the motorcycle if:
    1. There is noticeable play or roughness when wheel is rotated or a growl is heard when wheel is rotated.
    2. Wheel bearing seals are cracked, torn, cut or are discolored a reddish-brown color.
  - (b) Wheel Run Out and Alignment. Inspect front to rear wheel alignment, front wheel to fork tube alignment and wheel run out. Reject motorcycle if:
    1. Front to rear wheel misalignment exceeds one inch.
    2. Front wheel is not vertical and parallel to front fork tubes.
    3. Front fork tubes are bent or damaged preventing full travel and free action of front forks.
    4. Wheel (rim) run out is greater than manufacturer's suggested serviceable limit or, if unavailable, greater than .060 inch.

## 4.06: continued

- (c) Steering Head Bearing or Bushings. With front wheel slightly off the ground, turn handlebars side to side. Reject motorcycle if front fork binds.
- (d) Front Fork Tube Suspension. Inspect and reject if:
1. Front fork suspension has been removed and replace with a solid connection.
  2. There is severe leakage (not slight dampness) of front fork tube seal.
  3. Dampening effect is diminished indicating loss of shock absorber function.
- (e) Handlebars. Inspect handlebars and reject if:
1. Handlebars or grips are higher than operator's shoulder level when properly seated upon motorcycle.
  2. Handlebars are not of sturdy construction or if of lightweight bicycle quality.
  3. Handlebars do not provide a minimum of 18 inches between grip ends.
  4. Handlebars are not equipped with grips of nonslip design and material.
  5. Handlebars prevent front fork from rotating from stop to stop.
  6. Handlebars are cracked or deformed.
  7. Handlebars are improperly aligned with front wheel.
  8. Handlebars are not securely fixed, however, rubber mounted handlebars may have slight movement.
  9. Handlebars that have been modified or repaired in an unsafe manner.
- (6) Horn. Sound horn and test for adequate signal. The horn must be securely fastened to the motorcycle and shall not require removal of the operator's hand from the handlebar for use. The horn shall be distinctly audible at a distance of 200 feet under normal atmospheric conditions. The horn shall have a steady, nonoscillating tone which shall sound only during the time the activating switch is manually applied. The horn shall not be unreasonably loud or harsh.
- (7) Windshield or Windscreen. Windshield or windscreen are not required, but if installed, they shall be free of cracks, discoloration or scratches which would create any vision obstruction and they shall have no sharp edges. Only approved plexiglass is permitted. No sign, poster, decal, other nontransparent material or mounting hardware shall be allowed on a windshield or windscreen which would obstruct the vision of the operator.
- (8) Tires. Only pneumatic rubber tires shall be permitted. Inspect tires and reject motorcycle if:
- (a) There is a fabric break or cut, bulge, bump or knot related to the deterioration of the tire structure.
  - (b) There is any ply or cord structure visible.
  - (c) There is less than  $\frac{2}{32}$  inch of tread depth-measured in a major tread groove nearest the tire center using a tire tread depth gauge.
  - (d) Tire is worn so that a tread wear indicator contacts the road surface in any two adjacent grooves.
  - (e) Tire has been repaired with a sidewall plug or patch. Tire tube, if known, has been patched.
  - (f) There is any combination of radial ply tire with non-radial tire, unless approved by tire or motorcycle manufacturer.
  - (g) Tires designated as front or rear only are improperly mounted or tires with directional arrow indication are mounted with arrow in improper rotating direction.
  - (h) Tire is not type approved by the Department of Transportation and/or does not have a "D.O.T." designation on the sidewall, or is labeled "Not For Highway Use," "For Racing Purposes Only" or displays other similar marking (except for farm vehicles, implements of husbandry, and if off-road equipment is used on highway at restricted speeds).
  - (i) Tire is obviously under or overinflated.
  - (j) Tire is smaller than manufacturer's specified minimum or a size that causes tire to contact with the body or chassis.
  - (k) There are rusted or rotted valve stems.
  - (l) A tube type tire is used in a tubeless application.
- (9) Wheels. Inspect wheels and reject motorcycle if:
- (a) Wheel bolts, nuts or lugs are loose, missing or damaged.



## 4.06: continued

- (b) Any part of wheel is bent, cracked, welded or damaged so as to affect safe operation of the motorcycle.
- (c) There is more than one missing, bent or broken spoke on spoke style wheels.
- (d) Any wheel is not at least the minimum size recommended by the manufacturer.
- (e) There is not enough thread engagement fork leg clamps or threads are stripped.

(10) Alignment and Suspension of the Rear End.

(a) Swing Arm Bushing, Bearing, or Rubber Mount. Place motorcycle on motorcycle accessory lift or center stand with rear wheel raised and inspect for wear and looseness. Check for lateral movement of swing arm by applying side to side force against rear wheel. Reject motorcycle if there is more than slight side to side movement of the swing arm or if rubber mounts are cracked, broken or torn.

(b) Shock Absorbers. If originally equipped with rear shock absorbers inspect and reject motorcycle if:

1. Shock absorber is missing.
2. Shock absorber mounting bolts or mounts are missing, broken or loose.
3. There is severe leakage of shock absorber or associated hydraulic hoses if so equipped.
4. Dampening effect is diminished indicating loss of shock absorber function.

(11) Lighting Devices and Reflectors.

(a) In General. All lighting devices and reflectors required by applicable Federal Motor Vehicle Safety Standards when the particular motorcycle was originally manufactured and such devices required by Massachusetts General Law or Rules and Regulations applicable to the particular motorcycle inspected shall be securely attached to the vehicle and capable of performing their design functions. Lenses must be intact, clean, unobstructed and free from cracks. All lenses on stop lamps, tail lamps, turn signal lamps and reflectors must be approved by the Society of Automotive Engineers (SAE) and as evidence of such approval indicate the symbol "SAE" on the lens. All replacement lighting devices and reflectors shall meet applicable Federal Motor Vehicle Safety Standard at the time they were installed. No additional lamp, reflective device or other motor vehicle equipment shall be installed that impairs the effectiveness of lighting equipment required under 540 CMR 4.00. Two or more lamps, reflectors or items of associated equipment may be combined if the requirements for each lamp, reflector or item of associated equipment are met.

(b) Headlamps. Each motorcycle shall be equipped with at least one and not more than two white headlamps whose beam shall be checked in accordance with the specifications provided by the Registrar. The motorcycle headlamp shall be mounted on the front of the motorcycle on the vertical centerline, except that if two headlamps are used, they shall be symmetrically distant from the vertical centerline and equal in height. The height of the headlamps measured from the road surface to the center of the lamp shall be not less than 22 inches nor more than 54 inches. Headlamps on motorcycles manufactured in 1986 or later shall throw sufficient light ahead to make clearly visible all vehicles, persons or substantial objects upon the roadway within a distance of 350 feet on a straight highway of uniform grade under normal atmospheric conditions. Headlamps on motorcycles manufactured before 1986 shall throw sufficient light ahead to make clearly visible all vehicles, persons or substantial objects upon the roadway within a distance of 115 feet under the same conditions.

(c) Tail Lamps and Stop Lamps. Each motorcycle shall be equipped with at least one red tail light and at least one red stop lamp. The motorcycle tail lamp and stop lamp shall be mounted on the rear of the motorcycle on the vertical centerline, except that if two are used, they shall be symmetrically distant from the vertical centerline and of equal height. The height of the tail lamps and stop lamps measured from the road surface to the center of the lamp shall be not less than 15 inches nor more than 72 inches. Stop lamps shall be activated with the application of front or rear brakes. Tail lamps shall be activated when the headlamps are activated. Tail lamps and stop lamps shall be visible under normal night time conditions at a distance of 500 feet and stop lamps shall be visible in normal sunlight at a distance of 200 feet.

## 4.06: continued

(d) Plate Light. Each motorcycle shall be equipped with a white light so arranged as to illuminate the rear number plate so that it is plainly visible at a distance of 60 feet. Such light shall not emit a tailing glare.

(e) Reflectors. Each motorcycle shall have at least one rear red reflector mounted on the vertical center line except that, if two are used, they shall be symmetrically distant from the vertical center line and of equal height. The reflector height above the road surface measured to the center of the reflector shall not be less than 15 inches, nor more than 60 inches. Note: reflector(s) may be combined with other rear lamps. Motorcycles manufactured on or after January 1, 1968 shall be equipped with two red side reflectors mounted on each side at or near the rear of the motorcycle and shall be equipped with two amber side reflectors mounted on each side at or near the front of the motorcycle. The side reflector height above the road surface measured to the center of the reflector shall not be less than 15 inches, nor more than 60 inches.

(f) Turn Signals. Each motorcycle manufactured on or after January 1, 1973 shall be equipped with front and rear turn signal lamps. Front turn signal lamps shall be amber mounted at or near the front of the motorcycle on each side of the vertical center line at the same height and shall have a minimum horizontal separation distance (measured from center of lamps) of 16 inches. Minimum edge to edge separation distance between turn signal lamp and head lamp shall be four inches. Rear turn signals shall be red or amber mounted on each side of the vertical center line at the same height and having a minimum horizontal separation distance (measured from center of lamps) of nine inches. All turn signal lamps shall be mounted at a height from the road surface of not less than 15 inches nor more than 83 inches. Turn signal lamps shall flash at a rate of 60 to 120 flashes per minute. The turn signal lamp activating control shall be positioned so as to be operated without removing the hand from the handlebar and shall properly indicate right and left when so switched. Turn signal lamps shall be visible at a distance of 200 feet under normal daylight conditions. Every motorcycle shall be equipped with a device to permit the front and rear directional signals to flash simultaneously if originally equipped by the manufacturer.

(g) Auxiliary Driving Lamps and Fog Lamps. These lamps are not required, however, if so equipped shall be aimed in accordance with specifications provided by the Registrar. Reject motorcycle if:

1. Auxiliary equipment is placed in front of or obstructs any required lamp or reflector.
2. Fog lamps operate with high beam of headlamp.
3. Auxiliary driving lamps operate with high beam of headlamp or alone.
4. Equipped with more than two fog lamps or more than two auxiliary driving lamps.
5. Auxiliary driving lamps or fog lamps are not mounted at a height above the road surface between 12 inches and 42 inches.

(12) Body Components.

(a) Fenders. Front and rear fenders shall be mounted over both wheels to adequately protect rider from road debris and water. All fenders shall cover the width of the tire and a minimum of  $\frac{1}{4}$  of a wheel circumference. Reject the motorcycle if fenders come in contact with tires or if fenders have sharp edges.

(b) Exterior Sheet Metal, Moldings and Body Panels. Reject motorcycle if there are sharp edges or abnormal protrusions extending beyond normal vehicle extremities so as to constitute a danger to pedestrians, rider, passenger or other vehicular traffic. Safety bars or highway bars without sharp protrusions and which do not extend beyond the widest portion of the motorcycle and which are not further than 15 inches from the foot controls are permitted.

(c) Seats. Each rider shall have a firmly secured seating area. Reject motorcycle if:

1. Seats are not properly secured or have springs or parts protruding which constitute a hazard.
2. Foot rests for each designated seating position are not provided.

(d) Chain Driven Motorcycle. Rotate chain to locate tightest position. Inspect chain under simulated road condition and reject if:

1. Not Adjusted to Manufacturers Specifications. If specifications are unavailable the following shall apply:

Rigid frame models: minimum  $\frac{1}{2}$  inch to maximum one inch total up and down movement measured on the lower section of the chain midway between the sprockets.

## 4.06: continued

Swing arm models: minimum ½ inch to maximum two inches total up and down movement measured on the lower section of the chain midway between the sprockets.

2. The chain guard or other covering device is missing, broken, cracked or is not the original equipment or equivalent replacement.
  3. Chain or sprockets are excessively worn.
- (e) Side or Center Stand. Inspect and reject if:
1. The side or center stand will not remain in the stored position.
  2. The side or center stand is cracked, broken or apparent structural weakness is present which would not allow the stand to support the motorcycle.
- (13) Frame. Inspect the frame in all areas which would not require the disassembly of any components. Reject the motorcycle if:
- (a) Any part of the frame has been removed so as to weaken the original structure.
  - (b) Repairs are made in any temporary manner.
  - (c) Frame components are cracked, rotted, broken or are in deteriorated or dangerous condition.
  - (d) Frame is bent out of alignment causing front to rear wheel misalignment to exceed one inch.
  - (e) Front steering stops do not prevent the front end from contacting the fuel tank and the tire from rubbing against the frame or body panels.
- (14) Fuel System. Check fuel system and controls and reject motorcycle if:
- (a) There is fuel leakage at any point in the system.
  - (b) Any part of fuel hoses are not securely fastened or fuel tank is not securely mounted.
  - (c) Fuel tank cap is missing or can not be properly secured.
  - (d) Throttle does not return to idle position when activating force is removed, if so equipped.
  - (e) Fuel hoses are chafed, cracked, split or swollen or are not a fuel resistant type.
  - (f) Fuel hoses are routed in proximity to or in contact with high temperature engine parts.
- (15) Engine. Inspect and reject motorcycle if:
- (a) Motor mounts are broken.
  - (b) There is any leakage of oil or other fluids which create tire traction problems or contaminate brake pads or shoes.
- (16) Battery. Check battery and reject motorcycle if not securely fastened or if vent tube is not properly routed or fastened.
- (17) Rearview Mirror. Each motorcycle shall be equipped with at least one mirror so placed and adjusted as to afford the operator a clear, reflected view of the highway to the rear and left side of the motorcycle. Check mirror(s) and reject if:
- (a) Mirror is cracked, broken, tarnished or reflective surface is peeled.
  - (b) Mirror will not hold adjustment or is not mounted securely to prevent excessive vibration.
  - (c) The mirror contains sharp edges, projections or irregular indents capable of producing injury.
  - (d) Mirror does not provide a minimum of ten sq. inches of reflective surface for a convex mirror or 12 sq. inches for a flat mirror.
- (18) Controls.
- (a) Clutch. If equipped with a clutch, reject if any portion of the lever is broken or missing.
  - (b) Ignition Kill Switch. An ignition kill switch shall be mounted in a secure manner in a readily accessible position, if equipped.
  - (c) Ignition. Each motorcycle shall be equipped with a locking ignition to prevent the motorcycle from being used by unauthorized persons.
- (19) Sidecar. Check sidecar and reject motorcycle if:
- (a) Sidecar is not securely attached to motorcycle.

4.06: continued

- (b) There is a hole in the floorboard larger than ½ inch in diameter or the floorboard is rotted, rusted or deteriorated to a degree that creates a hazard to the rider or passenger.
- (c) Sidecar does not contain a seat which is securely fastened.
- (d) Sidecar not equipped with rear red tail lamp and stop lamp.
- (e) Sidecar fitted with brake which does not operate properly.
- (f) Mudguard not fitted over sidecar wheel.

4.07: Issuance of Certificates of Inspection, Rejection, and Waiver Procedure

(1) General Provisions.

- (a) A separate and distinct charge, as established by the Secretary of Administration and Finance, shall be made for each inspection required in accordance with the provisions of 540 CMR 4.00 and the provisions of M.G.L. c. 90.
- (b) All certificates of inspection or rejection shall be issued in sequential order from lowest to highest serial number.
- (c) All Certificates of Inspection or Rejection shall be issued and affixed to the motor vehicle in accordance with the regulations, policies or procedures established by the Registrar. All Certificates of Inspection or Rejection for Trailers will be issued in accordance with the Registrar's regulations, policies or procedures relating thereto.

(2) Certificate of Inspection. Any motor vehicle subject to Safety Inspection only, Combined Safety and Emissions Inspection, or Commercial Motor Vehicle Safety and Emissions Inspection, which, after inspection, is found to be in compliance with all Safety or Safety and Emissions Inspection requirements will be issued a Certificate of Inspection, valid for a period of time to be determined by the Registrar in accordance with regulations, policies or procedures established by the Registrar and Commissioner.

(3) Certificate of Rejection.

- (a) Any motor vehicle submitted for inspection that fails to meet all applicable inspection requirements shall be issued a Certificate of Rejection, in accordance with the Registrar and Commissioner's policy relating thereto.
- (b) A Certificate of Rejection authorizes the operation of a motor vehicle for a period of 60 calendar days after inspection, 20 days for motorcycles, provided that all safety related equipment defect(s) have been corrected prior to continued operation. Safety related equipment defects are items of inspection exclusive of emissions inspection items. 7D vehicles must display a current 7D inspection sticker in order to transport pupils.
- (c) A Certificate of Rejection shall entitle the owner or operator to one free reinspection, provided that the vehicle is submitted for reinspection at the same inspection station which issued the Certificate of Rejection within 60 calendar days for motor vehicles and 20 days for motorcycles and 7D vehicles after the date of issue.

(4) Suspension of Registration. Failure to meet these requirements or obtain a waiver under 540 CMR 4.00 shall result in the suspension of the motor vehicle's registration pursuant to the authority provided in M.G.L. c. 90, § 2 and in accordance with the procedures set forth in M.G.L. c. 90, § 22.

(a) Commercial Motor Vehicle Certificate of Rejection Procedures.

- 1. Any commercial motor vehicle submitted for inspection that fails to meet the applicable Safety and Emissions inspection requirements shall be issued a Certificate of Rejection provided the safety defects are not identified and listed in the current North American Uniform Vehicle Out-of-service Criteria as being an out of service condition or restricted service condition.
- 2. Upon inspecting a Commercial Motor Vehicle, if any item is found to not comply with 540 CMR 4.00, except as provided in 540 CMR 4.10, the inspector shall nevertheless complete the inspection of all other required items. The inspector shall provide a list of the items for which the vehicle is being rejected and advise the vehicle owner, custodian and/or operator of the violation(s) noted.

## 4.07: continued

3. Copies of all rejection slips shall be kept at the place of inspection and/or stored electronically for one year from the date of inspection. Copies of all such rejection slips or data shall be made available for inspection by the Registrar or any of his or her authorized personnel. The rejection slip shall contain the following information:
    - a. Name of inspection station and station number.
    - b. Date of inspection and signature of the inspector.
    - c. Vehicle registration number, make, year and vehicle identification number.
    - d. Reason for rejection
  4. Out-of-service Commercial Motor Vehicle. If in the course of inspection of a Commercial Motor Vehicle or trailer, an inspector finds an unsafe vehicle that has a safety hazard as defined in the current North American Uniform Vehicle Out-of-service Criteria, said inspector shall issue the vehicle inspection report and affix the rejection sticker, "R" to the windshield and advise the motorist of the defects that were identified. The vehicle that was rejected by reasons of having safety defects of an out-of-service nature be notified that the said vehicle shall not be operated until all necessary repairs have been made. A Commercial Motor Vehicle placed out-of-service may be operated to the nearest repair facility in so far it is safe to do so. This operation is restricted to a five-day period from the date of rejection. No commercial motor vehicle may be operated with a rejection certificate with an out-of-service condition under any circumstances unless it is being moved for the purpose of repairs. Any person who operates or any owner or custodian, who permits a commercial motor vehicle to be operated in an out-of-service condition except for the movement of said vehicle for repairs, shall be punished by a fine as provided in M.G.L. c. 90, § 20.
  5. Procedure for Waiver. A motorist may apply for a waiver of emission inspection standards in accordance with the provisions of 310 CMR 60.02(11).
- (5) Inspection within Seven Days of Purchase (Lemon Aid Law).
- (a) A Certificate of Rejection must be issued to the new owner of a motor vehicle within seven days of the date of purchase in order to permit the new owner to void the sale of said vehicle or to require the seller to make repairs pursuant to the specified conditions enumerated in M.G.L. c. 90, § 7N.
  - (b) In order to invoke M.G.L. c. 90, § 7N, owner/operators who have submitted the motor vehicle for inspection within seven days of the date of purchase shall, upon request, be provided the vehicle inspection report issued by an authorized agent of the inspection station stating the reasons why the motor vehicle failed to pass the Safety or Combined Safety and Emissions Inspection and an estimate of the cost necessary for repairs in accordance with the provisions of M.G.L. c. 90, § 7N.

4.08: Licensure of Inspection Stations

- (1) General Provisions: Licensing Requirements.
  - (a) Applications. Application for a license to operate a Class A, B, C, D, E, F and M inspection station, with any endorsements as appropriate, or other inspection license as may be issued by the Registrar may be filed with the Registrar by a person engaged in the business of servicing, maintaining or repairing motor vehicles or their components.
    1. An applicant for a Class M inspection station license must be a Motorcycle Dealer licensed pursuant to M.G.L. c. 140, § 58 or a motorcycle repairman who possesses a license required by law to carry on a repair business and who has received factory training or equivalent training as required by the Registrar.
    2. An applicant for a Class B, C, D or E inspection station license must be a dealer, or in the repair business, of medium and/or heavy duty vehicles.
    3. Selection Criteria. Once the Inspection Station Network is at capacity, as determined by the Registrar, stations wishing to become licensed shall be placed on a waiting list established and maintained by the Registrar. Applicants shall be selected for licensure from any such list as established by the Registrar as Inspection Station Network capacity warrants. Applicants shall first be selected from the list for licensure in accordance with a determination of geographic need as determined by the Registrar in the exercise of the Registrar's sole discretion.

## 4.08: continued

Inspection Station Network geographic need shall be evaluated on the basis of criteria including, but not limited to, factors such as the density of the population of motor vehicle owners in a geographic area and the distance between existing Licensed Inspection Stations as measured by either or both miles and travel time. If Inspection Station Network geographic needs are determined to be adequately met by the Registrar, then Inspection Station Licenses shall be issued in accordance with placement on a waiting list of applicants for Inspection Station Licenses compiled in chronological order by date of submission of application for licensure.

(b) Information Required. Each application for licensure shall contain such information as the Registrar shall require on the application form and be accompanied by a business certificate issued to the applicant by the city or town in which the premises is located and any other documents so determined by the Registrar.

(c) Application and License Fees. A nonrefundable application fee of \$50.00 made payable by cash, certified check or money order to the Registry of Motor Vehicles shall accompany each application. When an application is approved by the Registrar, and upon the payment of an additional fee of \$100.00, the applicant shall be granted a license which shall be valid for a period of one year from the date of issuance. The annual renewal fee shall be determined by the Secretary of Administration and Finance. An applicant applying for a license at more than one location will be required to file a separate application for each location.

(d) Transactions.

1. Change of Location. A licensee may request a change of business location and such change may be authorized, provided it complies with all rules, regulations and policies of the Registrar. All change of location requests shall be approved at the discretion of the Registrar.

2. Ownership/Interest Change - Licenses Are Not Transferable. A licensee may request to change the ownership or interest of their current license, provided that the licensed business remain in its current location or is relocated to an underserved area and complies with all rules, regulations and policies of the Registrar. All ownership/interests change requests shall be approved at the discretion of the Registrar.

3. Name Change. A licensee may request a change in name, provided there is no change in corporate structure and provided it complies with all rules, regulations and policies of the Registrar. All name changes shall be approved at the discretion of the Registrar.

4. Inspection Bay Change. A licensee may request an inspection bay change or alteration of an existing inspection bay, provided the new or altered bay complies with all rules, regulations and policies of the Registrar. All inspection bay changes or alterations shall be approved at the discretion of the Registrar.

5. License Class Change. A licensee may request a license class change, provided the licensee complies with all rules, regulations and policies of the Registrar for the class of license to which the station is applying. All license class changes shall be approved at the discretion of the Registrar.

To request a change to any portion or function of the current approved licensed business which may include, but is not limited to, a change of location, change of ownership or interest in the business, change of name, or change in facility including the inspection bay(s), an application must be filed. The Registrar must be notified immediately by the licensee in the event that arrangements are made for the transfer of the business to another person. Upon the transfer of ownership or termination of the business, the station license, all unused Certificates of Inspection, Rejection, and records required to be kept in accordance with the provisions of 540 CMR 4.00 shall be surrendered and returned to the Registry of Motor Vehicles forthwith. Unused Certificates of Inspection will be rebated.

(e) Certificate of License and Display Requirements. The licensee shall conspicuously display the numbered Class license issued by the Registrar in an area that is reserved for inspection purposes. In case of loss, mutilation or destruction of the license, the Registrar shall issue a duplicate license upon proper proof thereof and payment of a fee of \$25.00.

4.08: continued

(f) Requirements to Purchase and Security of Certificates of Inspection. Each licensee shall maintain adequate security, acceptable to the Registrar, which will prevent the misappropriation of Certificates of Inspection or Rejection. Missing or stolen Certificates of Inspection or Rejection must be reported forthwith to the Registry of Motor Vehicles and local law enforcement.

(g) Supplies. Each licensee shall maintain, if required, an adequate supply of Certificates of Inspection, test authorizations, if required, and sticker stock to assure that motorists will not be denied inspections, or unnecessarily inconvenienced. Said documents shall be purchased from the Registry of Motor Vehicles or its designated agent in accordance with the applicable policies established by the Registrar and may not be sold or transferred from one station to another.

(h) Requirements for Personnel Who Administer Inspections. Inspections must be performed by the licensee or permanent employees of the licensee who are in possession of a valid motor vehicle operator license. A person who performs vehicle inspections shall be licensed by the Registrar. That license shall be renewed annually. A permanent employee shall, for purposes of 540 CMR 4.00, be defined as a person regularly employed by the licensed inspection station. Persons performing inspections must be able to demonstrate their proficiency in inspecting motor vehicles and in operating, calibrating, and maintaining items or equipment required for the inspection of motor vehicles, to personnel authorized by the Registrar, the Massachusetts Commissioner of the Department of Environmental Protection assigned to program administration and enforcement and the Network Contractor. Any person conducting a Class M inspection must provide proof that he has received factory training and training approved by the Registrar. The inspector must have a valid motorcycle license.

(i) Requirements for Personnel Who Administer Noncommercial Motor Vehicle Inspections. It shall be the licensed vehicle inspection station's or the mobile commercial motor vehicle inspector's responsibility to ensure that the individual(s) performing an annual inspection as contained herein are qualified as follows:

1. Has successfully completed a state certified training program approved by the Registrar;
2. Understands the inspection criteria set forth in 540 CMR 4.00 and can identify defective components;
3. Is knowledgeable of and has mastered the methods, procedures, tools and equipment used when performing an inspection; and
4. All Motor Vehicle Inspectors shall participate in training and be subject to testing as determined by the Registrar. The license shall be renewed annually.

(j) Requirements for Personnel Who Administer Commercial Motor Vehicle Inspections. It shall be the licensed commercial motor vehicle inspection station's or the mobile Commercial Motor Vehicle Inspector's responsibility to ensure that the individual(s) performing an annual inspection as contained herein are qualified as follows:

1. Has successfully completed a state certified training program approved by the Registrar;
2. Understands the inspection criteria set forth in 540 CMR 4.00, 49 CFR Part 393 and Appendix G to Part 396 and can identify defective components;
3. Is knowledgeable of and has mastered the methods, procedures, tools and equipment used when performing an inspection; and
4. Is capable of performing an inspection by reason of experience, training, or both as follows:
  - a. Successfully completed a State or Federal sponsored training program or has a certificate from a State or Canadian Province which qualifies the person to perform commercial motor vehicle safety inspections, or
  - b. Have a combination of training and/or experience totaling at least one year. Such training and/or experience may consist of:
    - i. Participation in a truck manufacturer-sponsored training program or similar commercial training program designed to train students in truck operation and maintenance;
    - ii. Experience as a mechanic or inspector in a motor carrier commercial motor vehicle maintenance program;

4.08: continued

- iii. Experience as a mechanic or inspector in commercial motor vehicle maintenance at a commercial garage, fleet leasing company or similar facility; or
- iv. Experience as a Commercial Vehicle Inspector for a State, Provincial or Federal Government agency.

5. All Commercial Motor Vehicle Inspectors shall participate in training and subject to testing as determined by the Registrar. The license shall be renewed annually.

6. Availability of Premises and Records to Authorized Personnel. All licensees shall record and retain records pertaining to the inspection performed in accordance with the policies and procedures established by the Registrar. Facilities, records, and equipment shall, during normal business hours (defined as Monday through Friday 9:00 A.M. through 5:00 P.M. exclusive of holidays), be available at the address recorded on the Class A, B, C, D, E, F or M license (with any additional endorsements) to enforcement personnel of the Registry of Motor Vehicles, and/or Department of Environmental Protection and the Network Contractor.

7. Licensees will follow all applicable laws and all rules, regulations, policies and procedures of the Registrar. The Registrar retains the exclusive right to establish and amend all such rules, regulations, policies and procedures; and Licensees shall follow all applicable rules, regulations, policies and procedures of the Massachusetts Department of Revenue (DOR).

8. The Registrar may deny the application of any person for a license, if, in their discretion, they determine that:

- a. Such applicant has made a material false statement or concealed a material fact in connection with their application.
- b. Such applicant, any officer, director, stockholder or partner, or any other person directly or indirectly having an interest in the business was the former holder, or was an officer, director, stockholder or partner, in a corporation or partnership which was the former holder of an inspection station license which was revoked or suspended by the Registrar.
- c. Such applicant has failed to furnish satisfactory evidence of good character, reputation and fitness.
- d. Such applicant is not the true owner of the inspection facility.

(2) Facility, Equipment, and Inspection Station Requirements.

(a) Inspector on Premises. There shall be a licensed inspector on-site during all posted inspection times that is able to perform all inspections authorized within the station class.

(b) Promotions. No licensed inspection facility may advertise the Massachusetts vehicle safety and emissions inspection program in conjunction with any offer, promotion or discount of any product, service or commodity to any Customer. Nothing in the preceding sentence shall prohibit a licensed inspection facility from including in any advertisement that it is a licensed inspection facility.

(c) Hours of Operation. Inspection Stations shall be available to perform motor vehicle inspections for a minimum of six hours per day, five days per week. Inspections must be performed on a first come-first serve basis. Stations that use the approved inspection area for other purposes must make the area available for inspections within 15 minutes. Requests to alter posted hours of inspection must be submitted in writing to the Registrar and is reviewed and approved at the discretion of the Registrar. Inspections performed by appointment are prohibited during unposted hours of inspection. Inspection station licenses that have been inactive or locked-out due to an ownership change, location change, facility alteration or administrative action shall be granted six months in order to reopen and be available to perform inspections. At the conclusion of the six months, the inspection station shall be deemed out-of-business and the station license retired. However, the Registrar may grant extensions beyond the six months on a case by case basis. Such requests must be made in writing.

(d) Signs. The facilities of public station licensees should be available for the convenience of the public. Public station licensees shall conspicuously post and display identification as a "Massachusetts Inspection Station" on a sign not less than 24 inches by 36 inches, including the station's license number and the regular hours of inspection. Hours of inspection may be posted on a separate sign. All stations performing Commercial Motor



## 4.08: continued

Vehicle Inspections must post their commercial motor vehicle inspection labor rate. Such signs must be removed or covered whenever inspections cannot be performed during the posted hours.

(e) Facility.

1. Inspection facilities shall be located in a building appropriate for such activity, complies with local zoning laws with a suitable customer waiting area within the inspection business, and meets all relevant guidelines of the Registrar.
2. Licensees must maintain complete control of the entire physical location where the inspection facility is located. Multiple business interests in the same location of a licensed inspection facility is prohibited.
3. Licensees that lease or own space in a facility which physically adjoins another legally separate and distinct business must maintain a complete separation and entrance and be able to secure the premises from access by any personnel of the adjoining business.

(f) Inspection Area. A specific unobstructed area approved by the Registrar within which the complete motor vehicle inspection shall be performed, must be enclosed in a building in the primary service facility of the licensees' premises. The inspection area of all Classes of inspection stations except Class M, must be at least 30 feet in length and 12 feet in width, and said inspection area must exceed by five feet in width the width of the widest vehicle inspected. The inspection area for Class M inspections shall be 30 feet or less in length, or as determined by the Registrar. Exceptions to these standards may be provided by the Registrar or their designee in their sole discretion. All inspection stations first licensed on or after October 1, 2008 shall meet the new inspection bay size requirements. All inspection stations licensed before October 1, 2008 shall be required to meet the bay size requirements in effect at the time of licensure. Designated areas shall be suitably marked or otherwise outlined and include a smooth, level, substantial floor on which the wheels of the vehicle will stand evenly while being inspected and must be maintained in a neat manner. The Registrar, in their sole discretion, may also approve an additional specifically designated area on the licensees' premises convenient to the approved inspection bay to be used for the inspection of vehicles and/or trailers and converter dollies. Any modification of the inspection area or approved additional area must be approved by the Registrar. Any business operating at the same location that is not owned entirely by the licensee must be securely and permanently separated from the inspection bay.

(g) Equipment Required.

1. General Requirements. All inspection station licensees must possess the necessary tools and equipment, and shall maintain same in good working order, and shall possess facilities necessary for the ordinary repair and adjustment of motor vehicles or components on which inspection is required. In addition to the preceding, licensees must be equipped with the following equipment that has been approved by the Registrar, applicable to the particular Class license as noted.
  - a. Headlamp aiming screen or device as approved by the Registrar for Class A, B, C, D, E, F and M licenses.
  - b. Dial indicator gauge. All Classes except Class M.
  - c. Registry approved brake meter. All Classes except Class M.
  - d. Tire tread depth gauge, marked in 32<sup>nds</sup> of an inch. All Classes.
  - e. Jack of sufficient capacity to lift the front axle of the heaviest vehicle inspected. All Classes.
  - f. Two jack stands; with a minimum rated capacity capable of holding the vehicle to be inspected. All Classes except Class M.
  - g. Inspector workstation equipment. All Classes.
  - h. *Registry of Motor Vehicles Inspection Manual.* All Classes.
  - i. Registry approved 48-inch long headlamp aiming stick, unless approved mechanical headlamp aiming device is used.
  - j. Registry approved tint meter for glass. All Classes except Class M and fleet stations.
  - k. Air, power and phone lines or communication link to operate the inspection equipment properly.
  - l. A commercial motor vehicle inspection station is required to have a current copy of FMCSR Parts 390 to 397 and Appendix G available for inspector use.
2. Fleet Inspection Stations. Licensees are limited to the inspection of motor vehicles owned or maintained by the licensee or other fleets.

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3. Inspection Area. The licensed fleet inspection station must provide a specific area within which the complete inspection shall be performed except where additional testing is required for brakes. The area must be in a building, enclosing an area at least 30 feet in length and 12 feet in width and said inspection area must exceed by five feet in width the width of the widest vehicle inspected, except as otherwise approved on or after October 1, 2008 shall be required to meet the bay size requirements in effect at the time of licensure. The designated area shall be suitably marked or otherwise outlined and include a smooth, substantial level floor on which all the wheels of the longest vehicle inspected will stand evenly while being inspected. Additional adequate space must be available within the building for repairing and maintaining motor vehicles.

4. Public Commercial Motor Vehicle Inspection Facility. Class C, D and E and facilities utilizing services of Class F licensees using mobile equipment. A commercial motor vehicle inspection station shall have a specific area approved by the Registrar within which the complete inspection of all commercial motor vehicles so defined shall be performed. The area shall be a suitably marked, smooth, level, unobstructed concrete flooring. The dimensions of a public commercial motor vehicle inspection facility shall at a minimum be: a length ten feet longer than the longest single or combination commercial motor vehicle to be inspected, with a minimum of at least 45 feet in length and a minimum of at least 14 feet in width. All axles of any single or combination commercial motor vehicle inspected must be on the same flat, level flooring. The area shall be equipped to provide regulated air supply of sufficient pressure and electrical power to any non-self powered commercial motor vehicle which in combination cannot be accommodated in the designated area. The designated area shall be enclosed in a building having an entrance door of no less than 12 feet in width and 12 feet in height or as approved by the Registrar. All public commercial motor vehicle inspection facilities first licensed on or after October 1, 2008 shall meet the new inspection bay size requirements. All inspection stations licensed before October 1, 2008 shall be required to meet the bay size requirements in effect at the time of licensure.

(3) Revocation, Suspension or Denial of Licenses.

(a) The Registrar may, after the applicant, licensee or person licensed by the Registrar to perform safety inspections has been granted a hearing held at such time and place as the Registrar may prescribe and duly notice to the licensee, refuse to issue a license, suspend or revoke a license or refuse to issue the renewal of a license for any of the following causes:

1. Failure to comply with any of the rules and regulations or the written policies and procedures of the Registrar or Commissioner pertaining to license Class A, B, C, D, E, F and M inspection stations.
2. Failure to inspect vehicles during posted inspection hours.
3. Failure to have on hand at all times an adequate supply of Certificates of Inspection.
4. Failure to maintain that portion of premises utilized as an inspection area in a proper manner.
5. Failure to properly maintain equipment utilized in inspections procedures.
6. Engaging in fraudulent practices or conduct during the inspection of motor vehicles or related to the vehicle inspection license process.
7. The issuance of a Certificate of Inspection or Certificate of Rejection without performing the required emissions test, if applicable.
8. For any action deemed by the Registrar or Commissioner of the Department of Environmental Protection to violate the terms and public purpose of the vehicle inspection program.

(b) Mailing, by first class mail, postage prepaid, of a notice of a hearing to the last known address of a licensee or applicant, 14 days prior to the date of the hearing, shall be deemed proper notice.

(c) Second, third, and subsequent infractions shall be infractions committed within the three years immediately preceding the date of the infraction for which the Registrar orders another suspension or revocation. The total number of prior infractions, in any combination, shall determine if a second or subsequent offense exists.

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(d) If the licensee appeals the Registrar's decision to revoke or suspend a license, the Registrar, upon a timely request, may allow the suspension or revocation to be stayed pending a hearing before the Motor Vehicle Board of Appeal on Motor Vehicle Liability, Policies and Bonds if said suspension is not based upon activity which would constitute a threat to the public safety.

(e) The Registry shall suspend the license of an inspector or a station for a minimum of 180 days for intentionally improperly passing a motor vehicle for the emissions test required pursuant to 310 CMR 60.02. A second or subsequent violation within three years shall result in a license revocation.

(f) Suspensions or revocations of the license of any Class A, B, C, D, E, F and M inspection station, in addition to that identified in 540 CMR 4.08(3)(e), shall be in accordance with the following chart:

SUSPENSION PERIODS FOR VIOLATIONS OF INSPECTION  
PROCEDURE REQUIREMENTS

(Certificates of Inspection, as used herein, includes Certificates of Rejection)

Type of Offense	1 <sup>st</sup> Infraction	2 <sup>nd</sup> Infraction	3rd or Subsequent Infraction	
1. Failure to maintain inspection bay in proper manner.				
2. Failure to maintain adequate supply of Certificates of Inspection or Rejection.				
3. Failure to maintain adequate security of Certificates of Inspection and test authorizations.				
4. Failure to properly keep required records or properly enter required data.	Up to 60 Days	Up to 120 Days	Up to 240 Days	Revoke
5. Failure to charge the established inspection fee.				
6. Failure to comply with any provisions of 540 CMR 4.00 or the Registrar's written policies or procedures relating thereto not otherwise specified herein.				
7. Unauthorized person performing inspection.				
8. Failure to adhere to the Registrar's written policies and procedures.				
1. Failure to apply Certificates of Inspection, or Rejection to vehicle as required.				
2. Issuing Certificates of Inspection without performing a complete inspection.	Up to 60 Days	Up to 120 Days	Up to 180 Days	Revoke
3. Failure to perform complete inspection in designated inspection bay.				
4. Failure to have on-hand required equipment in proper working condition.				
1. Suggesting or requiring that unnecessary repairs or adjustments be made in order for vehicle to pass inspection.	Up to 280 Days	Up to 360 Days	Up to 540 Days	Revoke
2. Falsification or alteration of recorded data pertaining to inspection.				
3. Fraudulent practices.				
1. Licensee or employee performing inspections while under the influence of liquor or drugs.	Revoke	Revoke	Revoke	Revoke

4.09: Licensure of Inspectors - License Application Procedures and Fees

- (1) To obtain a license to conduct motor vehicle inspections from the Registrar, a person must be trained and certified by the Registrar and DEP pursuant to 310 CMR 60.02: *Massachusetts Motor Vehicle Emissions Inspection and Maintenance Program* and 540 CMR 4.00.
- (2) The applicant must provide proof of certification and a valid driver license together with a nonrefundable fee which shall be established by the Secretary of Administration and Finance pursuant to M.G.L. c. 90, § 33 and 801 CMR 4.02: *Fees for Licenses, Permits, and Services to Be Charged by State Agencies*.
- (3) The fee is payable to the Registry of Motor Vehicles and shall accompany each application.
- (4) When the application is approved by the Registrar, the applicant shall be granted a license which shall be valid for a period of one year from the date of issuance. The license shall be renewable annually at a fee which shall be established by the Secretary of Administration and Finance pursuant to M.G.L. c. 90, § 33 and 801 CMR 4.02: *Fees for Licenses, Permits, and Services to Be Charged by State Agencies*.

4.10: Special Safety Requirements for Commonwealth Heavy Vehicles and Contractor Heavy Vehicles.

- (1) Unless a vehicle is exempt pursuant to 540 CMR 4.10(7), or a waiver has been issued pursuant to 540 CMR 4.12, a registered Commonwealth Heavy Vehicle or Contractor Heavy Vehicle shall be equipped with Lateral Protective Devices, Convex Mirrors, Cross Over Mirrors, and Back Up Cameras.
- (2) Aftermarket Modifications and accessories including bug deflectors, chrome visors, and bull bars that reduce the ability of the vehicle operator to directly see Vulnerable Users in the vicinity of the vehicle or that increase fatality and serious injury risk to Vulnerable Users in a collision with the vehicle are prohibited.
- (3) Lateral Protective Devices. In accordance with US Department of Transportation Volpe Side Guard Standard DOT-VNTSC-OSTR-16-05, as amended, lateral protective devices or side guards on vehicles that are subject to the provisions of 540 CMR 4.10(3) shall be installed, throughout their length, to offer effective protection to vulnerable users against the risk of falling under the sides of the vehicle and being caught under the wheels. Lateral Protective Devices shall meet the following requirements:
  - (a) Allow for a maximum 13.8 inch ground clearance;
  - (b) Allow for a maximum 13.8 inch top clearance;
  - (c) Allow for a maximum horizontal distance between the front tire (cabover trucks) and the lateral protective device of 11.8 inches, however, if the front tire is located next to a step or tank, the maximum horizontal distance from the front tire to the lateral protective device shall be 3.9 inches, and if the front tire is located next to landing gear (semi-trailer), the maximum horizontal distance from the front tire to the lateral protective device shall be 9.8";
  - (d) Be recessed a maximum of 1.2 inches from the face of the front and rear tires;
  - (e) Have a minimum impact strength of 450 pounds applied perpendicularly to any part of its surface by the center of a ram the face of which is circular and not more than 8.7 inches in diameter;
  - (f) Be capable of withstanding 450 pounds of force applied perpendicularly to any part of its surface by the center of a flat, circular plate of diameter not greater than 8.7 inches, such that the deflection of the loaded side guard measured at the center of the plate does not exceed (1) 5.9 inches anywhere, or (2) 1.2 inches in the rearmost 9.8 inches. A manufacturer may demonstrate compliance using a valid engineering calculation, such as finite element analysis;
  - (g) Achieve a smooth and continuous longitudinal impact surface flush with the vehicle or tire sidewall, whichever creates the outermost plane of the vehicle, and shall not be susceptible to loosening due to vibration in the normal use of the vehicle;
  - (h) May include rail type guards, provided that such rails shall not be less than four inches tall and not more than 11.8 inches apart; and
  - (i) Acceptable lateral protective device protection as an alternative means of compliance can be provided by any combination of vehicle body, fuel tanks, tag axles, tool boxes, or purpose-built side guards comprising a smooth surface flush with the vehicle sidewall, and meeting all of the dimensional and strength specifications set forth above.

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- (4) Convex Mirrors. Vehicles that are subject to the provisions of 540 CMR 4.10(4) shall be equipped with convex mirrors that are door mounted, wide-angle mirrors that enable an operator to see objects along the left and right sides of a motor vehicle, trailer, semi-trailer or semi-trailer unit.
- (5) Cross Over Mirror(s). Vehicles that are subject to the provisions of 540 CMR 4.10(5) shall be equipped with a mirror mounted on a hood or fender that enables the operator to see objects in the area immediately in front of a conventional cab hood; provided that a vehicle that has a cross over mirror installed shall have a label visible to the seated driver in accordance with Federal Motor Vehicle Safety Standard No. 111, 49 CFR 571.111.
- (6) Back Up Cameras. Vehicles that are subject to the provisions of 540 CMR 4.10(6) shall meet the requirements of Federal Motor Vehicle Safety Standard No. 111, 49 CFR 571.111(S6.2(b)) through (S6.2.7).
- (7) Exemptions. The provisions of 540 CMR 4.10 do not apply to the following vehicles:
- (a) Ambulances, and other emergency medical vehicles
  - (b) Firefighting vehicles;
  - (c) Low speed vehicle as defined in MGL c. 90, § 1;
  - (d) Agricultural tractors;
  - (e) Commonwealth owned vehicles leased or purchased before January 1, 2023;
  - (f) Heavy Vehicles operated in the Commonwealth of Massachusetts under an emergency contract with the Commonwealth or in service of a declared federal, state, or local emergency until such emergency contract lapses or a permanent contract is executed in its place;
  - (g) Heavy Vehicles operating under a municipal contract and grant program funded with state aid through Commonwealth Agencies, such as a Chapter 30 Program, Municipal Small Bridge, Complete Streets;
  - (h) The Highway Administrator may make a recommendation to the Secretary of the Massachusetts Department of Transportation, to exempt snow removal vehicles and tow operation vehicles under contract with the Commonwealth from the requirements for special safety equipment contained in 540 CMR 4.10. The Secretary, in consultation with the Registrar, may issue an exemption for these vehicles on such roadways that are deemed to be low risk for vulnerable user interaction; and
  - (i) Any other class or type of vehicle as determined by the Registrar.
- (8) Recordkeeping. The vehicle owner shall maintain detailed records of all vehicles subject to 540 CMR 4.10 and 4.11. A copy of the certification or waiver issued in accordance with 540 CMR 4.12 shall be kept in the vehicle at all times. Vehicle records shall be available for inspection by the Registry of Motor Vehicles or any contracting Commonwealth agency within five days of receiving a written request for such records.

### 4.11: Special Requirements for Commonwealth and Commonwealth Contractor Vehicles - Certification and Compliance

- (1) Certification Requirement. Starting December 31, 2025, the owner of a motor vehicle that is subject to the requirements contained in 540 CMR 4.10, shall certify to the Registry of Motor Vehicles, in a manner prescribed by the Registrar, that the motor vehicle is equipped with Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s), and Back Up Cameras in accordance with the requirements herein. The certification shall include the following:
- (a) The vehicle owner's name;
  - (b) The VIN and active registration number of the vehicle;
  - (c) The make, model, and year of the vehicle;
  - (d) Attestation that the vehicle has an active registration;
  - (e) Attestation that the Lateral protective devices comply with the requirements contained in 540 CMR 4.10 (3);
  - (f) Attestation that the Convex Mirrors comply with the requirements contained in 540 CMR 4.10 (4);
  - (g) Attestation that Cross Over Mirror(s) comply with the requirements contained in 540 CMR 4.10 (5);
  - (h) Attestation that the Back up camera complies with the requirements contained in 540 CMR 4.10 (6);

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- (i) Digital color pictures showing the vehicle, VIN, registration, and the lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s), and Back Up Cameras on the vehicle;
- (j) Attestation that the vehicle does not contain aftermarket modifications or accessories such as bug deflectors, chrome visors, and bull bars that reduce the ability of the vehicle operator to directly see Vulnerable Users in the vicinity of the vehicle or that increase fatality and serious injury risk to Vulnerable Users.
- (k) Attestation that the operator of the vehicle is proficient with the operation and use of Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s) and Back Up Cameras.

(2) Certification and Waiver Process by Vehicle Owner or Representative. An applicant seeking certification or who is requesting a waiver must complete and submit the certification or waiver application, and all required documentation in accordance with 540 CMR 4.11(1) and 540 CMR 4.12, in a form and manner prescribed by the Registrar. The vehicle owner or representative shall submit the completed certification to the Registry of Motor Vehicles in accordance with the process established by the Registry of Motor Vehicles. Once a vehicle is certified, that certification shall be valid for all future commonwealth contracts, provided the vehicle remains in compliance with the requirements of 540 CMR 4.11(2).

(3) Review by Contracting Commonwealth Agency. The contracting Commonwealth Agency shall review their contractor's submission to the Registry of Motor Vehicles for a request for certification or waiver and confirm, to the best of their knowledge, that their contractor has submitted the required documentation, in accordance with the process established by the Registry of Motor Vehicles.

(4) Certification and Alternative Means of Compliance. A vehicle's characteristics or component parts can be regarded as an alternative means of compliance, adequate replacement, or functional or safety equivalent substitute for the requirements, standards and specifications for Lateral Protective Devices, Convex Mirrors, or Cross Over Mirror(s) contained herein. Any request for an alternative means of compliance is subject to the approval of the Registrar and the certification requirements in 540 CMR 4.11(1)(2).

### 4.12: Waiver.

Owners of vehicles that are subject to the provisions of 540 CMR 4.10 and 4.11 may, on a form supplied by the Registry of Motor Vehicles, apply for a waiver from any or all of the requirements contained in 540 CMR 4.10 (2) through (6). The owner of the vehicle requesting the waiver must specify which of the requirements contained in 540 CMR 4.10(2) through (6) the owner is seeking a waiver, and a clear and concise statement of the reason for seeking a waiver. Upon submission of a certification or waiver by a contractor, the contracting Commonwealth Agency shall review the submission only for completeness of documentation and confirm that the contractor's has submitted the requested documentation to the Registrar regarding a contractor's request for a waiver. The required waiver documentation shall be submitted to the Registry of Motor Vehicles in accordance with the process established by the Registrar. Within 30 days of receipt of a complete waiver request, at the discretion of the Registrar, waivers may be granted for a vehicle that cannot comply with the requirements in 540 CMR 4.12 due to the design, operation or other safety considerations relating to the vehicle.

### 4.13: Enforcement.

Starting December 31, 2025, contractor's failure to comply with requirements contained in 540 CMR 4.10 may not result in a Certificate of Rejection under 540 CMR 4.07(3). Starting December 31, 2025, contracting Commonwealth agency that identifies noncompliance with respect to a vehicle that is subject to 540 CMR 4.13 may enforce these regulations using the following remedies:

- (1) Any contractual remedies available pursuant to the agreement between the contractor and the contracting Commonwealth agency up to and including termination of the contract by the Commonwealth Agency; or

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4.13: continued

- (2) Statutory fines established in M.G.L. c. 90, § 7
  - a. Not more than \$500 dollars for the first offense; and
  - b. Not more than \$1000 for the second or subsequent offense.

REGULATORY AUTHORITY

540 CMR 4.00: M.G.L. c. 90, §§ 7, 7A, 7V(a), (b) and (c), 7W and 31; 310 CMR 60.02.