

MAINE STATE LEGISLATURE

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MAINE MOTOR VEHICLE



INSPECTION MANUAL

Revised 2001
Maine State Police
Traffic Division
20 State House Station
Augusta, Maine 04333-0020
Tel: (207) 624-8939

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MAINE STATE INSPECTION MANUAL

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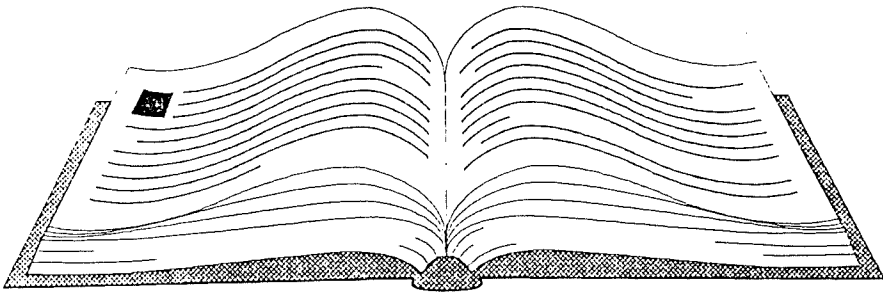
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Unit 1



Administrative

UNIT 1 ADMINISTRATION

§1 RESPONSIBILITIES OF INSPECTION STATION LICENSE HOLDER

§1.1 **General**

§1.1.1 The owner, hereinafter referred to as the licensee, obligates himself or herself and the station which he or she owns to comply with the rules, regulations, and laws of the state of Maine.

§1.1.2 The licensee shall be solely responsible for maintaining in good condition all equipment and supplies issued by the Maine State Police.

§1.1.3 The licensee shall have available during business hours for inspection by a member of the Maine State Police all materials concerning inspections that are required or issued.

§1.1.4 The licensee shall conspicuously display, so as to be visible from the highway, the inspection station sign furnished by the Maine State Police. Stations licensed to perform fleet inspections shall not display the sign.

§1.1.5 The licensee shall display the inspection station license, all mechanic's licenses, and the inspection procedure chart in an area to which the public has access during the time of the inspection.

§1.1.6 The licensee shall display a notice showing the station's hourly rate in an area to which the public has access during the time of the inspection. Stations licensed to perform fleet inspections need not display the notice.

§1.1.7 Inspection station licenses are valid for two years

§1.2 **Fleet Stations**

§1.2.1 An inspection station may be designated a fleet station if there are at least 10 vehicles registered in the name of the fleet inspection station owner.

§1.2.2 A fleet inspection station may be under contract to the owner of a fleet of vehicles for exclusive maintenance.

§1.2.3 Fleet inspections are limited exclusively to fleet vehicles.

§1.2.4 Fleet stations must employ a sufficient number of certified inspection mechanics to inspect every vehicle in the fleet annually.

§1.2.5 Fleet stations are subject to the same rules and requirements as non-fleet inspection stations.

§1.3 Inspection Stickers

§1.3.1 The licensee shall ensure that all inspection stickers and order forms assigned to the station are secured under lock and key or by some other secure locking mechanism. Inspection stickers and order forms shall not be accessible to non-employees entering into the general area where inspection stickers are kept.

§1.3.2 The licensee shall notify the Maine State Police Traffic Division immediately upon the discovery of any loss or theft of inspection stickers. The licensee shall record information about the loss or theft as provided by this manual.

§1.4 Inspection Mechanics

§1.4.1 The licensee shall inform the Licensing office whenever an inspection mechanic leaves the employ of the licensee and whenever a new inspection mechanic becomes an employee of the licensee.

§1.4.2 The licensee shall ensure that the inspection mechanics do not require unnecessary replacement parts and shall ensure that the inspection mechanics do not assess excessive labor charges.

§1.4.3 The licensee shall ensure that only certified inspection mechanics do the actual inspection of vehicles. The licensee shall ensure that the inspection mechanics inspect only the type(s) of vehicles that they are certified to inspect

§1.5 Business and Premises

§1.5.1 The licensee shall permit inspections only on the licensed premises and in the building described in the station license application. This restriction does not apply to fire apparatus, special mobile equipment, trailers, semi-trailers, converter dollies or off-highway use vehicles as described in 29-A MRSA §501 (10).

§1.5.2 If a licensed inspection station moves to a new location, the owner must inform Licensing of the change by filing a new station application containing the new information. The new premises must be inspected before any inspection stickers can be issued from the new location. Licenses are not transferable.

§1.5.3 If the licensed inspection station is sold or conveyed to a new owner, the inspection station license becomes void. The new owner must complete the application process and the station must be relicensed as a new station. The old inspection station materials, such as stickers, license certificate and signs must be returned to the Maine State Police. Licenses are not transferable.

- §1.5.4 If a licensed inspection station goes out of business, the inspection station license becomes void. The licensee is required to inform the Licensing office that the station is out of business. The licensee must return all inspection materials to the Maine State Police.
- §1.5.5 Inspection stations shall be heated; reasonably free of debris, hazards and unrelated materials; and completely enclosed by floor to ceiling construction. (Tar paper, sheathing paper, or cardboard are not allowed as construction material.) Inspection stations licensed after January 1, 2002 shall have an inspection/repair area that contains at least 400 square feet of level, workable floor space which is free of benches and permanently mounted equipment.
- §1.5.6 Every inspection station is required to have a sufficient number and type of tools necessary to conduct an inspection on any vehicle the station is licensed to inspect. Such tools include at a minimum:
- ball joint gauge, dial type, with frame attaching device
 - brake drum micrometer or caliper
 - gauges suitable for measuring brake linings and pads
 - headlight aim testing device
 - jack or lift
 - portable lights
 - tire tread depth gauge
 - tire pressure gauge
 - Class E: approved gas cap pressure tester
 - approved OBD-II Scan Tool
 - Class D: measuring device capable of measuring the larger diameter of Class D brake drums
 - A 20 ton bottle jack
- §1.5.7 Every inspection station is required to have a sufficient number and type of repair manuals and reference guides necessary to conduct an inspection on any vehicle the station is licensed to inspect. Such manuals include:
- professional edition repair manual for domestic, imported and truck up to date to the current year such as Motors, Chiltons, Mitchells or an electronic equivalent
 - tire guide listing standard and optional tire sizes
 - an undercar service guide
 - Class D: a copy of the federal motor carrier safety regulations pertaining to equipment contained in 49 Code of Federal Regulations Part 393 or an electronic equivalent. A current copy downloaded from the US Government web site is acceptable.

§1.6 Suspension or Revocation of Privileges

- §1.6.1 If in the opinion of the inspection officer, a flagrant violation of the law or regulations pertaining to state inspections has been committed by an employee of a licensed inspection station or has been allowed to occur by the licensee, the officer may suspend the mechanic's license and /or the station license for a period of up to six months for the first offense. A second flagrant violation will be grounds for a suspension of up to one year or complete revocation of license.
- §1.6.2 An inspection officer may issue warnings to inspection stations for lesser violations of the laws and regulations relating to state inspections. Documented warnings may become the basis for a license suspension.
- §1.6.3 If an inspection station licensee wishes to contest a suspension or revocation, he/she must request a hearing before the Chief of the Maine State Police or his/her designee. Such request must be made in writing within 30 days of the date of the suspension or revocation and shall be sent to the Chief of the Maine State Police. The suspension or revocation shall remain in effect pending hearing or appeal.
- §1.6.4 An inspection station licensee may waive the right to a hearing as described in 5 MRSA Chapter 375, by voluntarily surrendering the license.
- §1.6.5 If a license expires during the period of suspension, the licensee must follow the normal procedure in applying for a license renewal.

§2 INSPECTION MECHANICS

§2.1 **Application Requirements**

- §2.1.1 An inspection mechanic must be at least 18 years of age.
- §2.1.2 An inspection mechanic must have a valid, active Maine driver's license. Inspection mechanics who work at an inspection station in Maine and who live in Canada or New Hampshire must have a valid, active Canadian or New Hampshire license that is active in Maine.

§2.2 **Application Process**

- §2.2.1 Applications for an inspection mechanic certificate (hereinafter called a mechanic's license) may obtain an application from the State Trooper serving the inspection stations in the area; calling 624-8724 or 624-8773, or by writing to:

Maine State Police
Traffic Division Licensing
164 State House Station
Augusta, Maine 04333-0164

- §2.2.2 The completed application and a fee of \$1.00 shall be sent to the licensing address above. The fee shall be paid by check or money order.
- §2.2.3 False written statements on the application will be grounds to deny the applicant the opportunity to take the written examination or will result in a license suspension if a mechanic's license has been issued. Such false written statements may also be punishable by law.
- §2.2.4 An inspection mechanic must take a written examination, and must pass with a score of at least 70%.
- §2.2.5 Oral examinations are not permitted.
- §2.2.6 A person who fails the written examination may be required to wait 90 days before retesting.
- §2.2.7 A person who is employed at a licensed inspection station will be issued a license upon successful completion of the application and testing process.
- §2.2.8 A person who is not currently employed at a licensed inspection station will not be issued a mechanic's license paper certificate upon successful completion of the application and testing process. Such certificate shall be retained at the Licensing office until the licensee is employed by a licensed inspection station. The paper certificate will be mailed to the licensed inspection station when the inspection station license holder notifies the Licensing office that the mechanic is employed by the licensed inspection station and the name, address and station number of the licensed inspection station.
- §2.2.9 Applicants for a Class E mechanic's license must already have a Class A mechanic's license. An applicant may test for both classes at the same time
- §2.2.10 Applicants for a Class D mechanic's license must already have a Class A mechanic's license. An applicant may test for both classes at the same time
- §2.2.11 Applicants for a Class B mechanic's license must already have both Class A and Class D mechanic's licenses. An applicant may test for all three classes at the same time.
- §2.3 Responsibilities of Inspection Mechanics**
- §2.3.1 Every inspection mechanic must have his/her own copy of the current inspection manual. The cost of the inspection manual is \$5.00.
- §2.3.2 An inspection mechanic's license is valid for five years from the date of issue. An inspection mechanic shall file a new application in order to be renewed.

- §2.3.3 Prior to inspecting vehicles for a new employer, the inspection mechanic shall notify the Licensing office of the change of place of employment.
- §2.3.4 If the inspection mechanic no longer performs inspections, the mechanic's license certificate must be returned to the Licensing office.
- §2.3.5 If an inspection mechanic's driver's license is suspended or revoked for any reason, the inspection mechanic must inform the Licensing office of the reason and the dates of the suspension or revocation and must return his or her inspection mechanic's license certificate to the Licensing office.
- §2.3.6 An inspection mechanic shall not refuse to issue an inspection sticker if the vehicle meets all requirements. If a certified inspection mechanic, based on his or her expertise, believes that the vehicle is not mechanically safe or that it poses a hazard to the occupants of the vehicle or to the general public under 29-A MRSA §1756, he or she may refuse to issue an inspection sticker to that vehicle, but is required to complete a refusal card.
- §2.3.7 Class D inspection mechanics should remember that many Class D vehicles are subject to the Federal Motor Carrier Safety Regulations and therefore, they should be familiar with those regulations.
- §2.4 Suspension or Revocation of Privileges**
- §2.4.1 If in the opinion of the inspection officer, a flagrant violation of the law or regulations pertaining to state inspections has been committed by an inspection mechanic, the officer may suspend the mechanic's license for a period of up to six months for the first offense. A second flagrant violation will be grounds for a suspension of up to one year or a complete revocation of license.
- §2.4.2 An inspection officer may warn inspection mechanics for lesser violations of the laws and regulations relating to state inspections. Repeated warnings may become the basis for a license suspension.
- §2.4.3 If the inspection mechanic wishes to contest a suspension or revocation, he/she must request a hearing before the Chief of the Maine State Police or his/her designee. This request must be made in writing within 30 days of the date of the suspension or revocation and should be sent to the Chief of the Maine State Police. The suspension or revocation shall remain in effect pending hearing or appeal.
- §2.4.4 An inspection mechanic may waive the right to a hearing as described in 5 MRSA Chapter 375, by voluntarily surrendering the license.

§2.4.5 If an inspection mechanic's license expires during the period of suspension, the inspection mechanic must follow the normal procedure in applying for a license renewal.

§3 **STICKER REPLACEMENT STATIONS AND REPLACEMENT AGENTS**

§3.1 **General**

§3.1.1 A business engaged in glass replacement as the primary source of income may apply to the Maine State Police for a license as a Sticker Replacement Station. Sticker Replacement Station applications are available from Licensing. The fee for the application is \$1.00.

§3.1.2 The Director of the Maine State Police Traffic Division shall decide whether a business may issue replacement stickers.

§3.1.3 The owner or authorized person of a corporation (hereinafter referred to as the agent) obligates himself or herself and the station which he or she owns or represents to comply with the rules, regulations, and laws of the state of Maine.

§3.1.4 The agent shall be solely responsible for maintaining in good condition all equipment and supplies issued by the Maine State Police.

§3.1.5 The agent shall have available during business hours for inspection by a member of the Maine State Police all materials concerning inspection stickers that are required or issued.

§3.2 **Responsibilities of Agents**

§3.2.1 The agent shall issue a replacement sticker for a replacement windshield only when the original sticker is destroyed or damaged to the point where it cannot be transferred to the replacement windshield.

§3.2.2 Agents shall clearly write the word "replacement" on the back of the replacement sticker.

§3.2.3 Agents shall cut out the same month block as was cut out on the original sticker.

§3.2.4 Agents may charge the customer the cost of the sticker which is \$1.50.

§3.2.5 Agents shall copy all the information from the old sticker onto the back of the replacement sticker. In the station number space, agents shall write both the station number of the original station and station number of the replacement station on the sticker.

- §3.2.6 Agents shall write the original station number and the serial number of the original sticker on the stub sheet of the replacement sticker. The original sticker shall be attached to the back of the stub sheet of the replacement sticker.
- §3.2.7 The provisions of the Inspection Sticker section of the Inspection Manual shall apply to Sticker Replacement Stations.
- §3.2.8 A sticker replacement station with a mobile glass replacement service must ensure the security of inspection stickers by establishing procedures for stickers that travel with the mobile service.
- §3.2.9 Agents shall inform Licensing of the names of those employees who are authorized to issue replacement stickers.
- §3.2.10 Agents shall inform Licensing when a person authorized to issue stickers leaves the employ of the agent and when a new employee is authorized to issue replacement stickers.
- §3.2.11 Agents shall ensure that replacement stickers are issued only to a vehicle that had a valid, current inspection sticker attached at the time of replacement.
- §3.2.12 Agents shall ensure that replacement stickers are only issued to vehicles whose windshields were replaced by his/her replacement station.
- §3.2.13 Agents shall ensure that all employees are familiar with the rules and regulations of the Maine State Police about the replacement of inspection stickers.
- §3.2.14 Agents shall not conduct a safety inspection on any vehicle when issuing a replacement sticker. Agents are only attesting to the fact that valid sticker was displayed on the original windshield.

§3.3 Suspension or Revocation of Privileges

- §3.3.1 If in the opinion of the inspection officer, a flagrant violation of the law or regulations pertaining to state inspections has been committed by an employee of a sticker replacement station or has been allowed to occur by the agent, the officer may suspend the station license for a period of up to six months for the first offense. A second flagrant violation will be grounds for a suspension of up to one year or a complete revocation of license.
- §3.3.2 An inspection officer may warn an agent for a replacement sticker station for lesser violations of the laws and regulations relating to state inspections. Repeated warnings may become the basis for a license suspension.

- §3.3.3 If the agent wishes to contest a suspension or revocation, he/she must request a hearing before the Chief of the Maine State Police or his/her designee. Such request must be made in writing within 30 days of the date of the suspension or revocation and shall be sent to the Chief of the Maine State Police. The suspension or revocation shall remain in effect pending hearing or appeal.
- §3.3.4 An agent may waive the right to a hearing as described in 5 MRSA Chapter 375, by voluntarily surrendering the license.
- §3.3.5 If a license expires during the period of suspension, the agent must follow the normal procedure in applying for a license renewal.

§4 CERTIFICATES OF INSPECTION (“INSPECTION STICKERS”)

§4.1 Ordering Stickers

- §4.1.1 The inspection station licensee shall use the sticker order form to order stickers. The order forms are available upon request from Licensing.
- §4.1.2 Do not send cash when ordering stickers. Only checks or money orders will be accepted.
- §4.1.3 Any check or money order that does not have a completed order form with it will be returned.
- §4.1.4 No additional stickers will be issued unless Licensing records indicate that the inspection station licensee has returned or is returning at the time of reorder, the stub sheets of previously issued stickers.
- §4.1.5 Inspection station licensees should order at least a three month supply of stickers per order.
- §4.1.6 Stickers will only be mailed to the inspection station’s business address.
- §4.1.7 Stickers are to be ordered through the mail. Walk-in customers may purchase stickers at Licensing, but these transactions are to be reserved for emergencies only. Walk-in customers must pay for the stickers with a business check that includes the name of the business or have stub sheets that are being returned. Verification of the identity of the purchasing agent may be required. Walk-in customers will be limited to the issuance of two sheets of stickers.

§4.2 Maintenance of Inspection Stickers

- §4.2.1 Inspection stickers shall be secured under lock and key or by similar secure means. Employee access to stickers should be limited to inspection mechanics and those

employees responsible for the ordering and maintenance of the stickers. The State Police strongly encourages an in-house system to track and account for inspection stickers. Members of the public shall not have access to the stickers.

§4.2.2 Sheets of inspection stickers and stub sheets shall be kept intact, with individual stickers removed from the sheet as needed. Stickers shall be removed from the sheets in numerical order.

§4.3 Issuance of Inspection Stickers.

§4.3.1 After a vehicle has passed an inspection, the inspection mechanic shall completely and legibly fill out the information on the sticker and stub sheet.

§4.3.2 The inspection mechanic shall write in the complete Vehicle Identification Number.

§4.3.3 The inspection mechanic shall sign his/her name as he/she usually signs it.

§4.3.4 The inspection mechanic shall not add anything to the sticker or alter the sticker by cutting additional holes or notches. The inspection mechanic shall remove the numerical block indicating the month during which the sticker expires. The entire block shall be removed. Do not use a hole punch to punch out the expiration month.

§4.3.5 The sticker shall be applied to the windshield of the vehicle, either in the lower left corner or in the center of the windshield behind the rear view mirror. If the vehicle does not normally come with a windshield, the inspection sticker must be kept with the registration.

§4.3.6 If the inspected vehicle is a limited use vehicle subject only to a partial inspection, write the word "partial" in the margin of the corresponding sticker stub.

§4.3.7 An inspection station may not refuse to issue an inspection sticker if the vehicle passes inspection.

§4.4 Return of Stub Sheets

§4.4.1 Completed stub sheets must be returned to Licensing within 30 days after the issuance of the last sticker. The issuance of new stickers may be delayed if stub sheets are not returned.

§4.5 Expiration of Stickers

§4.5.1 Inspection stickers shall expire one year from the last day of the month in which it was issued. For example, any sticker issued any time during the month of June, 1999 will expire at midnight on June 30, 2000.

§4.5.2 Issuance after December 31 of stickers provided for use during the prior calendar year is a violation of the rules and regulations by the inspection station to which the stickers were sold, as well as the inspection mechanic who issued the sticker.

§4.6 Voided Stickers

§4.6.1 If an inspection mechanic voids an inspection sticker, he/she shall write the reason for voiding on the stub sheet and shall attach the voided sticker to the stub sheet.

§4.7 Stolen Stickers

§4.7.1 An inspection mechanic who discovers the theft or loss of inspection stickers shall report that loss or theft to the station licensee immediately. The inspection station licensee shall immediately report the loss or theft of inspection stickers to the Maine State Police Traffic Division at 624-8939. If the inspection station licensee is not immediately available, the inspection mechanic who discovered the loss or theft shall notify the Traffic Division.

§4.7.2 The inspection station licensee shall write a statement that includes the facts surrounding the loss or theft. This statement shall include the number of stickers missing, the serial numbers of the missing stickers, and who had access to the stickers at the time of the loss. This statement shall be mailed to the Traffic Division of the Maine State Police at State House Station #20, Augusta, Maine 04333. A copy of the report shall be maintained by the inspection station.

§4.8 School bus stickers

§4.8. School bus stickers shall be ordered as described above. All school buses must be inspected during February and August of each year. Stickers issued during February shall have block 8 removed and shall expire in August. Stickers issued during August shall have block 2 removed and expire in February. A school bus that is inspected other than in February or August shall expire during the following February or August, whichever comes sooner.

§4.8.2 Stub sheets are not provided with school bus stickers.

§4.8.3 Two copies of the "Report of School Bus Inspection" form will be provided with each school bus inspection sticker. The Report of School Inspection shall be completed by the inspection mechanic who inspects the school bus. The Report of School Bus Inspection shall be kept inside the bus and shall be presented at the time the bus is inspected by the Maine State Police.

§4.9 Trailer Stickers

§4.9.1 Trailer inspection stickers are bound in sheets with an attached, corresponding stub sheet. Trailer inspection stickers have an adhesive backing. The completed sticker shall be placed on the lower left lateral side of the trailer. It should be readily visible to a person standing upright next to the trailer.

§5 **CLASSES OF VEHICLE INSPECTIONS**

§5.1 **General**

§5.1.1 Every license issued to an inspection station or to an inspection mechanic shall designate the type of vehicles which may be inspected by that inspection station or inspection mechanic.

§5.1.2 Inspecting a vehicle or issuing a sticker to a vehicle that is not of the class listed on the inspection station's or inspection mechanic's license is a violation of the inspection regulations.

§5.2 **Classes**

§5.2.1 Class A

- a- Motor vehicles not exceeding a gross weight rating of 10,000 lbs.
- b- Homemade farm tractors
- c- Woods tractors

§5.2.2 Class B

- a- School Buses

§5.2.3 Class C

- a- Motorcycles, motor driven cycles and mopeds

§5.2.4 Class D

- a- Motor vehicles with a gross vehicle weight or gross vehicle weight rating of 10,000 lbs. or more.
- b- vehicles designed to transport more than 15 passengers.
- c- vehicles used to transport hazardous materials in quantities required to be placarded.

d- commercial vehicles with a gross combination weight rating of 10,001 lbs or more, except school buses.

e- farm registered trucks operated interstate.

f- intrastate farm registered trucks (non-limited use).

Such vehicles are subject to a full inspection according to Unit 5 of this manual. The fee for such inspection is \$6.50, and \$9.50 for gasoline powered vehicles in Cumberland County.

g- motor vehicles with a gross vehicle weight or gross vehicle weight rating of 10,000 lbs. or more that do not operate in commerce such as public works trucks and motor homes. Such vehicles are subject to a full inspection according to Unit 5 of this manual. The fee for such inspection is \$6.50, or \$9.50 or \$12.50 for gasoline powered vehicles in Cumberland County.

§5.2.5 Class E

a- Any gasoline-powered vehicle required to be registered in Cumberland County which is subject to the enhanced inspection described in 29-A MRSA §1751 (2-A), otherwise known as emissions inspection.

b- This does not include farm tractors, antique autos, island vehicles, limited use farm trucks and fish trucks subject to a partial inspection, motorcycle, motorized bicycle or tricycle, homemade woods tractor, farm tractor or special mobile equipment.

§6 INSPECTION OF CLASS E VEHICLES (ENHANCED INSPECTIONS)

§6.1 General

§6.1.1 An enhanced inspection means testing of additional components of gasoline powered vehicles. Depending on the year of manufacture, a vehicle may be subjected to a gas cap pressure test, or to an On-Board Diagnostic test, or to both.

§6.1.2 The age of a vehicle is determined by the year of the chassis. Installing an older engine in a vehicle is a violation of the federal Clean Air Act.

§6.2 Applicability

§6.2.1 Every gasoline powered vehicle that is required to be registered in Cumberland County shall have the applicable enhanced inspection in addition to the applicable motor vehicle safety inspection.

- §6.2.2 Vehicles manufactured before 1974 are not subject to the enhanced inspection requirements. These vehicles, if registered or inspected in Cumberland County shall receive a Class E inspection sticker. The fee for the inspection is \$6.50.
- §6.2.3 Gasoline powered vehicles manufactured during or after 1974 and registered in Cumberland County shall be subject to a gas cap pressure test. These vehicles shall receive a Class E sticker. The fee for the inspection is \$9.50.
- §6.2.4 Gasoline powered vehicles manufactured during or after 1996 and registered in Cumberland County are subject to both the gas cap pressure test and the on-board diagnostic test. These vehicles shall receive a Class E sticker. The fee for the inspection is \$12.50.
- §6.2.5 Vehicles not registered in Cumberland County may receive a Class E enhanced inspection and receive a Class E sticker. Vehicles not registered in Cumberland County must receive a Class E sticker if they are inspected at an inspection station located in Cumberland County.

§6.3 Licensing

- §6.3.1 All Class A and Class D official inspection stations in Cumberland County shall also be licensed as Class E stations.
- §6.3.2 All licensed Class A inspection mechanics who inspect vehicles in Cumberland County shall also be licensed as Class E mechanics. All licensed Class D inspection mechanics who inspect gasoline powered vehicles in Cumberland County shall also be licensed as Class E mechanics.
- §6.3.3 Any official inspection station may become a Class E station.

§6.4 Class E Stickers

- §6.4.1 Class E inspection stations in Cumberland County shall issue only Class E inspection stickers for automobiles and trucks.
- §6.4.2 Class E stickers shall be printed with a large E in the center of the sticker. Class E inspection stickers shall be printed as either "MOTOR VEHICLE" for Class A vehicles or "COMMERCIAL" for Class D vehicles.
- §6.4.3 Motorcycles registered in Cumberland County shall be issued "MOTOR CYCLE" stickers.
- §6.4.4 School buses registered in Cumberland County shall be issued "SCHOOL BUS" stickers.

§6.5 Equipment

§6.5.1 All Class E inspection stations must have an approved gas cap pressure tester and an approved OBD-II scan tool.

§6.5.2 Class E inspection mechanics shall use a gas cap pressure tester that has been approved by the Commissioner of the Maine Department of Environmental Protection.

§6.5.3 Class E inspection mechanics shall use an approved scan tool for the on-board diagnostics test. An approved scan tool is one which complies with the Society of Automotive Engineers (SAE) Recommended Practice J1978 and J1979, or has been approved by the Commissioner of the Maine Department of Environmental Protection.

§6.6 Gas Cap Pressure Test Procedure

§6.6.1 The inspecting mechanic shall follow the manufacturer's instructions when using the gas cap pressure testing device.

§6.6.2 Reject the vehicle if it does not pass the gas cap pressure test.

§6.7 On-Board Diagnostic Test Procedure

§6.7.1 The inspecting mechanic shall conduct a visual and electronic examination of the on-board diagnostic system.

a. Test Sequence

1. Connect an acceptable scan tool to the vehicle's data link connector.

2. Visually examine the instrument panel to determine if the Malfunction Indicator Light (MIL) illuminates when the ignition key is turned to the "key on, engine off" position.

3. Start the vehicle's engine, and following the scan tool manufacturer's instructions, determine:

a) the vehicle's readiness status.

b) if diagnostic trouble codes (DTCs) are present, and

c) MIL status (on or off)

4. Turn off vehicle ignition and disconnect scan tool.

- §6.7.2 Reject the vehicle if the data link connector is missing, has been tampered with, or is otherwise inoperable.
- §6.7.3 Reject the vehicle if the MIL does not illuminate when the ignition key is turned to the “key on, engine off” position. It is acceptable for the MIL to go out within a few seconds after the key is turned to the “key on, engine off” position, but if it does not come on at all, the vehicle must be rejected.
- §6.7.4 Reject the vehicle if the DTCs are present and the MIL status, as indicated by the scan tool, is on. Do not fail the vehicle if DTCs are present and the MIL status, as indicated by the scan tool, is off. MIL status must be determined with the engine running.
- §6.7.5 A vehicle shall be considered “not ready” for testing if no DTCs are present, the MIL is not commanded to be illuminated, and for 1996 to 2000 vehicles 3 or more monitors are incomplete and for 2001 or newer model year vehicles 2 or more monitors are incomplete.

All new vehicles with less than 1000 miles on the odometer are exempt from the readiness status. Some makes of vehicles are also exempt from the readiness status because of manufacturer’s problems. A list of exempted vehicles may be obtained from the Maine Department of Environmental Protection.

The station shall provide information to the vehicle owner on how to make the vehicle ready for testing. The vehicle shall return after self correction. An additional inspection fee may be charged for a retest.

§6.8 Reporting Requirements

- §6.8.1 Inspection mechanics performing an OBD-II Class E inspection on any gasoline powered vehicle must fill out and return the OBD form provided by the Maine Department of Environmental Protection. The forms may be returned to the Licensing office with stub sheets or may be returned directly to the Maine Department of Environmental Protection.

§7 SEQUENCE OF INSPECTION

§7.1 Sequence of Inspection for Motor Vehicles

- §7.1.1 Verify the vehicle documentation.
 - Examine both registration plates. (May be inspected with either transit or temporary plates. Out-of-state vehicles may only have one.)
 - Examine the vehicle registration.

If the information as to the vehicle description is not accurate, do not inspect the vehicle. If the registration is not current or is not valid, do not inspect the vehicle.

Compare the vehicle identification number to that on the registration.

If there is a mistake in the VIN on the registration, complete form MV-141 and mail to the Bureau of Motor Vehicles, 29 State House Station, Augusta, ME 04333-0029.

Check the mylar door sticker on pick-up trucks to determine the gross vehicle weight rating of the vehicle to determine what class inspection it requires.

Determine if the vehicle is registered in Cumberland County to determine if a Class E inspection is required. If the station or the mechanic are not licensed for Class E, do not inspect. Refer the vehicle to an appropriate station. No fee will be collected for a terminated inspection.

§7.1.2 Check the sufficiency of the service and emergency brakes before beginning the inspection.

§7.1.3 Proceed with the inspection appropriate for the class of vehicle. See below.

§7.1.4 If the vehicle passes inspection, legibly complete the sticker and stub sheet information.

Record the inspection station number.

Complete the full date of the inspection: month, day, year.

Complete the full vehicle identification number.

Complete the full current odometer reading.

Record the registration number.

Sign the sticker and stub sheet.

§7.1.5 Remove the old inspection sticker and affix the new sticker.

§7.1.6 Class A (Motor Vehicle) Inspection Sequence

Brakes

Windshield

Horn

Rearview Mirror

Window Glass

Seat Belts

Steering Mechanism

Suspension System

Wheels and Axles (including alignment)

Exhaust System

Tires

Headlights, including aim specifications

- Taillights
- Registration Plates and Rear Plate Lighting
- Directional Lights
- Rear Reflector
- Body elements and Sheet Metal Hazards
- Splash Guards
- Catalytic Converter on 1983 and subsequent models
- Fuel Pipe Restrictor on 1983 and Subsequent Models
- Gas Cap Pressure (if applicable)
- On-Board Diagnostic (if applicable)

§7.1.7 Class D (Commercial) Inspection Sequence

- Service Brakes
- Emergency and/or Parking Brakes
- Brake Hoses and Tubing
- Low Air Pressure Warning Device
- Tractor Protection Valve
- Air Compressor
- Vacuum Systems
- Coupling Devices
- Exhaust System
- Fuel System
- Lighting Devices
- Turn Signal System
- Wiring and Switches
- Rear Lamps and Lighting Devices
- Reflectors
- Steering System
- Suspension
- Frame
- Tires
- Wheels and Rims
- Window Glazing
- windshield Wipers
- Rearview Mirrors
- Sunvisor
- Gas Cap Pressure (if applicable)
- On Board Diagnostics (if applicable)

§7.1.8 Class C (Motorcycle) Inspection Sequence

- Service Brake
- Horn
- Rearview Mirror
- Steering Mechanism
- Suspension System and Drive Shaft or Chain

Wheels and Axles (including alignment)
Exhaust System
Tires
Headlights
Taillights
Registration Plate and Rear Plate Lighting
Directional Lights
Rear Reflector
Body Elements and Sheet Metal Hazards

§8 **DEFINITIONS**

Altered Vehicle. "Altered vehicle" means a motor vehicle with a gross vehicle weight rating of 10,000 pounds or less which is modified so that the distance from the ground to the lowermost point on any part of the frame or body is different from the manufacturer's specifications, unless that difference is caused by the use of tires which are no more than 2 sizes larger than the manufacturer's recommended size, the installation of a heavy duty suspension including shock absorbers and overload springs or normal wear of the suspension system which does not affect control of the vehicle.

Center Stand. The center stand and side stand are retractable parking devices designed to provide support for an unattended motorcycle. A motorcycle may be equipped with a center stand or side stand or both.

Commercial Vehicle. "Commercial Vehicle" means any self-propelled or towed vehicle used on public highways in interstate or intrastate commerce to transport passengers or property when:

- (a) The vehicle has a gross vehicle weight rating or gross combination weight rating or gross weight of 10,001 or more pounds; 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 material in a quantity requiring placarding under regulations issued by the Secretary of Transportation under the Hazardous Materials Transportation Act (49 U.S.C. App 1801-1813).

"Commercial vehicle" includes trucks, buses, trailers, semi-trailers, and converter dollies that meet the above description.

Critical Vision Area. The "critical vision area" is that area of the windshield covered by the normal sweep of all except the lower 4 inches of properly adjusted wiper blades, utilizing factory installed blades or equivalent replacements.

Floor Pan. The floor pan of a motor vehicle means the area from the fire wall to and including the trunk compartment.

Muffler. "Muffler" means a device consisting of a series of chambers or baffle plates or another mechanical design for receiving exhaust gas from an internal combustion engine and reducing noise. The muffler may not be louder than that which was originally installed on the vehicle by the manufacturer. See 29-A MRSA §1912.

Original Equipment. "Original equipment" means any item of motor vehicle equipment, including tires, which were installed in or on a motor vehicle or available by option for the particular vehicle from the original manufacturer at the time of its delivery to the first purchaser.

Parking Brake System.

- A. For motor vehicles, a "Parking Brake System" is a brake system used to hold and maintain a vehicle in a stationary position. (A positive mechanical means is employed to hold the brake applied when the vehicle is unattended.) A micro-lock, so called, is not considered an adequate parking brake.
- B. For 3-wheeled vehicles and autocycles, a "Parking Brake System" is a brake system used to hold and maintain a vehicle in a stationary position. A positive mechanical means is employed to hold the brake applied when the vehicle is unattended. A motorcycle with a sidecar attached is not considered a 3-wheel vehicle for the purpose of this section.

Passenger Compartment. "Passenger Compartment" means an enclosed interior area of a vehicle that is designed or used for the seating or carrying of the driver and/or passengers and is separated from the engine and trunk compartments.

Pedal Reserve. "Pedal reserve," as applied to hydraulic, mechanical, or power assisted hydraulic brakes, is the amount of total pedal travel left in reserve when the pedal is depressed to the brake-applied position.

Private School. "Private school" has the same meaning as in 20-A MRSA §1(22).

Private School Activity Bus. "Private school activity bus" means a privately owned motor vehicle with a carrying capacity of 10 to 15 passengers that is not operated with public funds and that is used by a private school to transport students other than to and from home and school.

Rake Angle. (on motorcycles) The acute angle measured in the longitudinal plane of symmetry between the fork assembly axis or kingpin axis and the vertical. Also called the castor angle.

School. "School," means an institution or facility for the teaching of children or for the custodial care of children, whether public or private, which is regularly attended by such children.

School Bus. "School bus" means a motor vehicle with a carrying capacity of 10 or more passengers used to transport children as approved by school authorities to and from school,

school activities, municipally operated activities or activities of a nonprofit corporation or association. It does not include a private motor vehicle used to transport members of the owner's household, or a private school activity bus.

School-age Person. "School-age persons" means all children up to the age of 18 years and person 18 years and older who are enrolled in a state-approved program of primary or secondary education, as defined in 20-A MRSA.

Service Brake System.

- A. Motor Vehicles: A brake system used for retarding, stopping and controlling the vehicle under normal operating conditions.
- B. Motor Cycle: A split brake system or two independently actuated brake systems which is the primary system for retarding, stopping and controlling the vehicle.

Side Stand. See center stand, above.

Special Mobile Equipment. "Special mobile equipment" means a self-propelled device operated over the highways that is not designed or used primarily for the transportation of persons or property, including, but not limited to, road construction or maintenance machinery, ditch-digging apparatus, stone crushers, air compressors, power shovels, cranes, graders, rollers, trucks used only to plow snow and carry sand as ballast, well drillers and wood-sawing equipment used for hire or similar types of equipment. special mobile equipment that makes frequent movement over public ways, including but not limited to, well drillers or air compressors, is considered class a equipment. all other special mobile equipment may be considered class a or class b equipment at the option of the registrant. See 29-A MRSA §101(70). Special mobile equipment must be registered in accordance with 29-A MRSA §513.

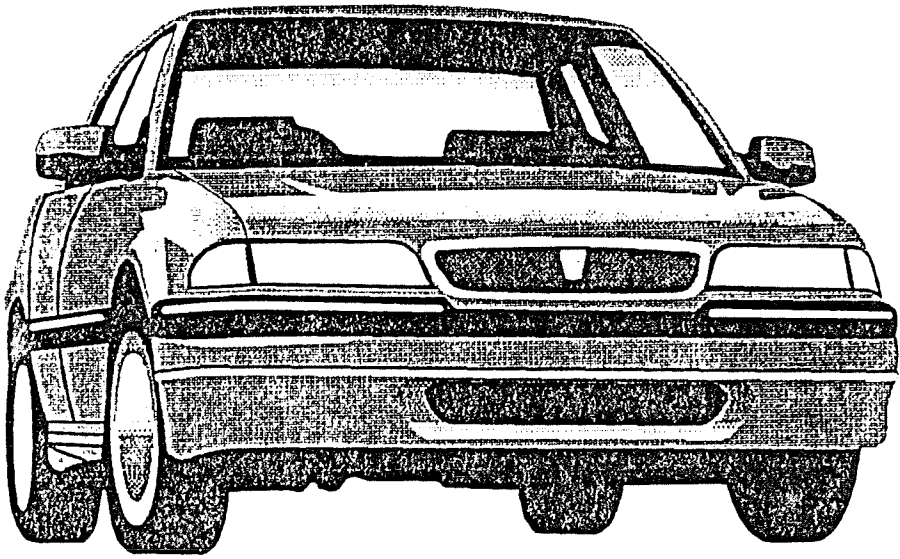
Steering Linkage. "Steering linkage" includes the following components: Steering wheel and shaft, rack and pinion, steering box, pitman arm, idler-arm, center link, tie rods and steering knuckle.

Suspension System. The "suspension system" includes the following: solid, tandem or I-beam axles, upper and lower control arms, ball joints or king pins, leaf, coil, air or torsion bar springs, spring hangers and shackles, U-bolts, radius arms, caster struts, trailing arms, equalizer beam assemblies, beam assemblies, torque rods, stabilizer bars, tracking bars and all related bushings, shock absorbers, washers and attaching components including the frame and cross members.

Trail. (on motorcycles) Generally, the horizontal distance from the point where the steer axis intersects the roadway and the tire contact point.

Trunk Compartment. The "trunk compartment" of a motor vehicle means an enclosed area separated from the passenger compartment by a solid barrier and not designed or used for the conveyance of passengers.

Unit 2



Motor Vehicle Inspection

UNIT 2: CLASS A INSPECTION
MOTOR VEHICLE

§1 BRAKES

§1.1 Vehicle Tests

§1.1.1 Brake Hydraulic System: Test the vehicle in a standing position. The inspection mechanic should be able to apply a moderate foot force and maintain the pedal height. A moderate force is 40 to 60 pounds in a non-power system and 15-20 pounds in a power-assist system.

§1.1.2 Pedal Reserve: Test the vehicle in a standing position. With the brake pedal depressed under moderate foot force, there should be a minimum of approximately 1/3 of the available pedal travel remaining. A moderate force is 40 to 60 pounds in a non-power system and 15-20 pounds in a power-assist system. Check power-assist systems with the engine running.

- a. Reject vehicle if less than 1/3 of the total available pedal travel remains when the pedal is depressed under moderate foot pressure.

§1.1.3 Service Brake and Transmission Test: Test vehicle by driving it into the service area. Observe whether the vehicle comes to a smooth stop without pulling to the left or right. Test the vehicle's transmission forward and reverse gears as well as the park position in automatic transmissions to ensure proper working order.

- a. Reject vehicle if it does not stop smoothly or if it pulls to the left or right.
- b. Reject vehicle if it not equipped with brakes on all axles.
- c. Reject vehicle if the forward or reverse gears are inoperative.
- d. Reject vehicle if the park position is inoperative.
- e. Reject vehicle if any warning light of the on-board diagnostics indicates a malfunction with any equipment required to be inspected, such as brakes or supplemental restraint systems.
- f. Reject vehicle if any on-board diagnostics malfunction light for any equipment required to be inspected fails to illuminate properly. The lights should illuminate when the ignition key is in the on position with the engine not running and should go out when the engine is started.

§1.1.4 Anti-Lock Braking Systems: If the vehicle is equipped with an ABS brake system, visually and manually inspect the warning light.

- a. Reject vehicle if the warning light fails to illuminate during the cycle or self-check, or a self-diagnostic error is indicated.

- b. Reject vehicle if the ABS braking systems is disconnected or disabled or removed.

§1.1.5 Wheels and drums are not required to be removed from the vehicle being inspected to determine the condition of the drums and linings unless after driving the vehicle, the inspection mechanic feels that something is definitely wrong with the brakes and advises the customer that the vehicle cannot be passed.

At the customer's request, and with the clear understanding by the customer that pulling the wheel or drum is not part of the inspection and will be considered as labor at the hourly rate, the inspection mechanic may remove the wheel(s) and/or drum(s) to show the customer why the vehicle will not pass inspection.

§1.2 Parking Brake Performance

§1.2.1 Reject vehicle if the parking brake does not hold the vehicle upon testing.

§1.2.2 Reject vehicle if the actuator stroke has a reserve of less than 1/3 of the actuator stroke.

§1.2.3 Set the parking brake firmly to determine the reserve travel of the hand lever or foot pedal. Inspect the band type parking brake on the propeller (drive) shaft for the presence of oil or grease, the condition of the lining , and tightness.

- a. Reject vehicle if there is no reserve travel in the lever or pedal.
- b. Reject vehicle if there is oil or grease on the drum or lining.
- c. Reject vehicle if the lining is worn through to the steel band.
- d. Reject vehicle if the lining does not make proper contact with the drum when the brake is applied.

§1.3 Visual Inspection of Braking Mechanisms - Brake Linings and Disc Brake Pads

§1.3.1 If in the inspection mechanic's judgment it is necessary, and with the customer's consent, the inspection mechanic may remove at least one front and one rear wheel drum.

§1.3.2 Reject vehicle if, on a bonded lining, the thinnest point is less than 1/32 inch.

§1.3.3 Reject vehicle if, on a wire-backed lining, the wire backing is visible on the friction surface.

§1.3.4 Reject vehicle if, on a riveted lining, the lining is worn to within 1/32 inch of any rivet head.

- §1.3.5 Reject vehicle if, on a riveted lining, any rivets are loose or missing.
- §1.3.6 Reject vehicle if the lining is broken or not firmly and completely attached to the shoe.
- §1.3.7 Reject vehicle if the lining is cracked to a depth in excess of 50% of the lining thickness.
- §1.3.8 Reject vehicle if the lining friction surface is contaminated with oil, brake fluid, or grease.
- §1.3.9 Reject vehicle if the lining wear is extremely uneven.
- §1.4 Visual Inspection of Braking Mechanisms - Brake Drums and Brake Discs**
- §1.4.1 Reject vehicle if there are substantial cracks on the friction surface extending to the open edge.
- §1.4.2 Reject vehicle if there are external cracks.
- §1.4.3 Reject vehicle if there is evidence of mechanical damage other than wear.
- §1.4.4 Reject vehicle if the friction surface is contaminated with oil, grease, or brake fluid.
- §1.4.5 Reject vehicle if the inside diameter is greater than the maximum diameter stamped on the drum. For unmarked drums, the maximum diameter is usually .09011 (2.3 mm) greater than standard drum diameter.
- §1.4.6 Reject vehicle if the thickness of a disc is less than the minimum thickness stamped on the disc.
- §1.5 Visual Inspection of the Hydraulic System**
- §1.5.1 Reject vehicle if the master cylinder leaks.
- §1.5.2 Reject vehicle if the master cylinder is less than ½ full or below the manufacturer's specifications.
- §1.5.3 Reject vehicle if the gasket is torn or missing.
- §1.5.4 Reject vehicle if the wheel cylinders leak.
- §1.5.5 Reject vehicle if the hoses or tubings leak, or are cracked, chafed, flattened, restricted, or are insecurely fastened or supported.

- §1.5.6 Reject vehicle if there is any evidence of contaminated brake fluid.
- §1.5.7 Reject vehicle if the brake tubing is rusted to the point where failure is likely.
- §1.5.8 Reject vehicle if any replacement hydraulic brake lines are made with material other than automotive rated tubing that meets SAE standards or if the safety tubing is not joined with a double-lap flared fitting to ensure of leakproof joint.
- §1.6 Visual Inspection for Hydraulic Brakes
(Including Power Assist Over Hydraulic and Engine Drive Hydraulic Booster)**
- §1.6.1 Reject vehicle if there is no pedal reserve with the engine running except by pumping the pedal.
- §1.6.2 Reject vehicle if the power assist unit fails to operate.
- §1.6.3 Reject vehicle if the brake hose(s) seep or swell under application of pressure.
- §1.6.4 Reject vehicle if the check valve is missing or inoperative.
- §1.6.5 Reject vehicle if there is any visually observed leaking hydraulic fluid in the brake system.
- §1.6.6 Reject vehicle if the hydraulic hose(s) are abraded (chafed) through the outer cover-to-fabric layer.
- §1.6.7 Reject vehicle if the fluid lines or connections are leaking, restricted, crimped, cracked, or broken.
- §1.6.8 Reject vehicle if the brake failure light or low fluid warning light are on or are inoperative.
- §1.6.9 Reject vehicle if the hydraulic pump drive belt is loose, cracked, slipping, or missing.
- §1.7 Visual Inspection for Power-Braked Vehicles**
- §1.7.1 Reject vehicle if the hoses or tubes are leaking or collapsed, broken, excessively rusted, badly chafed, improperly supported, or loose because of broken clamps.
- §1.7.2 Reject vehicle if there is insufficient vacuum reserve to permit one full brake application after the engine is shut off.

§1.7.3 Reject vehicle if the vacuum hose(s) or line(s) are restricted, abraded, or chafed through the outer cover to the cord ply, crimped cracked, broken or if the vacuum hoses(s) collapse when vacuum is applied.

§1.7.4 Reject vehicle if the air cleaners are clogged, preventing the proper intake of air.

§1.8 Visual Inspection of the Mechanical Linkage

§1.8.1 Reject vehicle if pins are worn or missing or if there are defective cotter pins.

§1.8.2 Reject vehicle if there are weak, broken or missing springs or worn cables, clevises, coupling rods, or anchor pins.

§1.8.3 Reject vehicle if there are frozen, rusted, or inoperative connections.

§1.8.4 Reject vehicle if the pedal shaft and bearings are worn from high friction or are misaligned.

§1.8.5 Reject vehicle if the shoe movement is restricted at the backing plate or if there is binding between the brake shoes and the anchor pins.

§1.8.6 Reject vehicle if mechanical parts are missing, broken, or badly worn.

§1.8.7 Reject vehicle if there is high friction in pedal and linkage or in brake components.

§1.8.8 Reject vehicle if the brake operating levers are improperly positioned or misaligned.

§2 BODY COMPONENTS

§2.1 Vehicle Exterior

§2.1.1 Reject vehicle if body exterior components and/or sheet metal parts protrude from the vehicle so as to present a safety hazard to occupants, pedestrians, cyclists or other vehicles.

§2.1.2 Reject vehicle if exterior sheet metal directly surrounding and leading to the trunk and passenger compartment has holes caused by damage or rust. Surface rust is not a cause for rejection.

§2.1.3 Reject vehicle if other exterior sheet metal components, including fenders, quarter panels, and side panels, are loose or not securely attached to the body as a result of damage, rust, or missing parts.

§2.1.4 Reject vehicle if a door has an inoperable latch, broken or worn hinges, broken or missing parts, or is wired shut or secured.

- §2.1.5 Reject vehicle if the rocker panels or floor pan have any holes or are rusted through so as to permit passage of fumes or gases into the trunk or passenger compartments.
- §2.1.6 Reject vehicle if holes in the floor pan were not repaired with materials of equal strength or if the repair was not securely fastened or if repair was not sealed to prevent the passage of fumes and gases.
- §2.1.7 Reject vehicle if replacement repairs on any motor vehicle are not made with materials of the same strength as the original and/or are not welded, riveted and sealed, or bonded in the case of a composite body, so as to prevent the passage of fumes or gases into the trunk or passenger compartments.
- §2.1.8 Reject vehicle if, on a vehicle with unit construction, the body is rusted to the extent that there is a danger of a vital part failure.
- §2.1.9 Reject vehicle if the chassis frame is broken or rusted to a degree where structural weakness is probable.
- §2.1.10 Reject vehicle if the trunk compartment is not properly sealed and secured so as to prevent suction of exhaust fumes or gases into the trunk.
- §2.1.11 Reject vehicle if the hood latch mechanism fails to operate properly. Procedure: manually attempt to open the fully closed hood without disengaging the catch. Open the hood to the safety catch and inspect for full and proper engagement. Close the hood with the minimum force necessary to give apparent full closure determined visually, then manually check again to determine whether the hood can be opened without disengaging the catch.
- §2.2 Fenders and Bumpers**
- §2.2.1 Reject vehicle if, on a vehicle originally equipped with bumpers, the bumpers are missing, not securely attached, or if the area originally protected by the bumper has been reduced by shortening the bumper.
- §2.2.2 Reject vehicle if a metal replacement bumper is not of the same apparent strength or not of the same width as the original, or if it is not located in the same place as the original bumper.
- §2.2.3 Reject vehicle if a replacement wooden bumper is not securely fastened to the vehicle, if it is not of hardwood, is less than 1 ½ inch thick, is less than 5 ½ inches wide, or does not cover the same area as protected by the original bumper.
- §2.2.4 Reject vehicle if the front or rear fenders have been removed. If the replacement of a fender removed a required lighting device, reinstallation or replacement of such devices must be provided.

§2.2.5 Reject vehicle if the fender does not cover the tire tread.

§2.3 Fuel Tank and Delivery System

§2.3.1 Reject vehicle if the gas tank is not properly or securely attached to the vehicle body or chassis.

§2.3.2 Reject vehicle if the fuel cap is missing or broken.

§2.3.3 Reject vehicle if the fuel evaporation hoses are broken or not connected.

§2.3.4 Reject vehicle if the gas tank is not of the type originally manufactured as such for motor vehicles.

§2.3.5 Reject vehicle if there is any fuel or gas leak anywhere in the fuel delivery system.

§2.3.6 Reject vehicle if the fuel line is rusted to the point that failure is likely.

§2.3.7 Reject vehicle if the fuel tank or fuel tank filler, vent, or drain openings are not located outside the passenger or trunk areas.

§2.3.8 Reject vehicle if it is not equipped with a fuel pipe restrictor on vehicles manufactured during or after 1983 model years.

§2.4 Seats and Passenger Restraint Systems

§2.4.1 Reject vehicle if the seats are not properly and securely attached to the floor.

§2.4.2 Reject vehicle if the seat adjusting mechanism slips out of the set position or fails to function properly.

§2.4.3 Reject vehicle if seat has springs or parts protruding.

§2.4.4 Reject vehicle if replacement seats were not originally designed for motor vehicles.

§2.4.5 Reject vehicle if seat belts are not installed in 1966 and subsequent models and retractable seat belts are not installed and functioning in 1980 and subsequent models.

§2.4.6 Reject vehicle if seat belts are not completely functional and free from cuts and excessive fraying.

§2.4.7 Reject vehicle if the air bag restraint system has not been replaced on a vehicle where the air bag had deployed.

§2.5 Other Vehicle Components

- §2.5.1 Reject vehicle if automotive batteries are installed in the passenger compartment, other than those originally installed by the manufacturer.
- §2.5.2 Reject vehicle if the battery is not secured by a hold down.
- §2.5.3 Reject vehicle if the battery tray is rusted to the point where it no longer securely supports the battery.
- §2.5.4 Reject vehicle if automotive batteries originally installed by the manufacturer in the passenger compartment are not secured and equipped with a protective covering to prevent injury to or contact with any person.
- §2.5.5 Reject vehicle if it leaks oil to such an extent or in such a location as to constitute a fire hazard.
- §2.5.6 Reject vehicle if it is registered for over 6,000 pounds and does not have splash guards. The following vehicles are exempt from this regulation: dump trucks while working on construction projects; truck tractors when not hauling a trailer or semi-trailer; fire department vehicles; vehicles equipped with fenders; motor vehicles with stake bodies which extend not less than six feet beyond the rear axle and which are registered as farm trucks.

§2.6 Number Plates

- §2.6.1 Reject vehicle if it does not have a number plate attached to the front and the rear that are clearly visible and legible. Exception: only one dealer plate or transit plate is required.
- §2.6.2 Reject vehicle if the number plates are not displayed horizontally.
- §2.6.3 Reject vehicle if any covering or discoloration affects the original color or reduces the visibility of the registration plates.
- §2.6.4 A vehicle that is missing a plate because the original was lost, mutilated, or illegible may be inspected if it has a temporary number plate bearing the registration number that is displayed as nearly as possible in the position occupied by the original plate and if the vehicle owner has a receipt from the Bureau of Motor Vehicles showing that a replacement registration plate has been ordered.

§3 EXHAUST SYSTEM

§3.1 Exhaust System Examination

§3.1.1 The exhaust system includes the exhaust manifold, the piping leading from the flange at the exhaust manifold to and including the mufflers, the tail piping, and the catalytic converter.

§3.1.2 The exhaust system shall be examined by listening for exhaust leaks and shall be examined visually after the vehicle has been lifted on a hoist, or is jacked up sufficiently to allow a proper examination or is over a pit. Rusted or corroded areas must be examined carefully.

§3.2 Rejection Standards

§3.2.1 Reject vehicle if there are loose or leaking joints or seams in the exhaust system.

§3.2.2 Reject vehicle if there are holes in the exhaust system, other than small holes obviously made by the manufacturer to provide drainage

§3.2.3 Reject vehicle if there are loose interior baffles.

§3.2.4 Reject vehicle if the exhaust system has been repaired with a jacket, patch, or in any other manner.

§3.2.5 Reject vehicle if the exhaust system elements are not fastened securely by use of hangers or clamps.

§3.2.6 Reject vehicle if any part of the exhaust system passes through the passenger compartment.

§3.2.7 Reject vehicle if flexible tubing has been used to replace any part of the exhaust system, unless such seamless bendable tubing was factory installed as original equipment.

§3.2.8 Reject vehicle if the exhaust system or a modified exhaust system does not discharge completely to the side or rear of the enclosed passenger portion of the body of the vehicle.

§3.2.9 Reject vehicle if it is not equipped with a muffler or mufflers that are effective in reducing noise. The muffler(s) may not be louder than that which was originally installed on the vehicle by the manufacturer.

§3.2.10 Reject vehicle if it was manufactured during the 1983 or subsequent model years and is not equipped with a catalytic converter.

§4 VEHICLE GLAZING

§4.1 General

- §4.1.1 Inspect all glazing on the vehicle to ensure that all glazing is marked by a manufacturer's trademark and the words "American Standard" or the letters "AS" followed by a number indicating the position in the vehicle where that glass may be used. AS-1 glass must be used in the windshield. AS-1 or AS-2 glass may be used in the side and rear windows. Reference: The American Standard Safety Code Z26.1 - 1969 "Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways"
- §4.1.2 Reject vehicle if it is not equipped with approved safety glass wherever glass is used in doors, windows, and windshields, if the vehicle was manufactured after December 31, 1937.
- §4.1.3 Reject vehicle if replacements of glass partitions, doors, windows or windshields on any vehicle is not made with safety glass.
- §4.1.4 Reject vehicle if any glass has been removed, if the vehicle was originally manufactured with a glass windshield or glass windows.
- §4.1.5 Reject vehicle if cloudiness extends more than 1 inch from the top or sides or more than 4 inches from the bottom edge of the windshield.
- §4.1.6 Reject vehicle if cloudiness on a divided windshield extends more than ½ inch on either side of the divider strip.
- §4.1.7 Reject vehicle if, in the critical vision area of the windshield, there are any unrepaired bull's eye fractures, star fractures, stone bruises, cracks or chips that measure more than ½ inch at the extreme edges.
- §4.1.8 Reject vehicle if there is a crack more than 4 inches long in the windshield.
- §4.1.9 Reject vehicle if there is a windshield wiper scratch, mar or marks more than 4 inches long and 1/8 inch wide on the windshield.
- §4.1.10 Reject vehicle if it does not have a windshield if it was originally equipped with one by the manufacturer. Limited use farm vehicles, fish vehicles, homemade tractors and woods tractors are exempt from this requirement.
- §4.1.11 Reject vehicle if any window has cloudiness or a defect that would constitute an obstruction to the driver's vision.
- §4.1.12 Reject vehicle if either the left or right front window mechanism is not in working order.
- §4.1.13 Reject vehicle if any glass is broken or shattered so as to obstruct the vision of the operator or endanger the occupants of the vehicle.

§4.2 Glazing Repairs

§4.2.1 Reject vehicle if repairs made to a windshield impair the vision in the critical vision area.

§4.2.2 Reject vehicle if repairs to the windshield are not clear, are not refracting light in the same manner as the windshield, or are not free of cosmetic blemishes that extend more than ½ inch.

Cosmetic blemishes are visible dirt, visible air bubbles which appear as silver or black spots, visible cracks with a discernible thickness which appears as a black or silver line, or cloudiness of the laminate.

§4.2.3 Reject vehicle if there are any repaired cracks in the windshield that have the appearance of being unrepaired, unless it is in an area of the windshield where cloudiness is permitted.

§4.3 Window Tinting, Treatments, or Coverings

§4.3.1 Reject vehicle if there are items hanging in the windshield, front side windows or rear window which obstruct or obscure the driver's view.

§4.3.2 Reject vehicle if any window is composed of, covered with or treated with any material which is reflective.

§4.3.3 Reject vehicle if the windshield has any tint that is not part of a factory installed original equipment windshield installed in accordance with FMVSS §205.

A tinted sunshield strip which extends no more than 4 inches from the top of the windshield is permissible.

§4.3.4 Reject vehicle if the side or rear windows is composed of, treated with, or covered by any material which has a light transmission of less than 50%.

§4.3.5 Reject vehicle if the owner of the vehicle cannot provide the inspecting mechanic with a certificate of compliance approved by the Bureau of State Police that states that the window tinting material meets the minimum standards for light transmittance (50% of visible light.)

Any window tinting treatment or covering must be removed if it fails to meet the inspection standard.

Multi-purpose vehicles such as sport utility vehicles, pick-up trucks, and vans equipped with tinted glass on the rear side windows and rear window are exempt from this requirement.

§5 OTHER VEHICLE EQUIPMENT

§5.1 Windshield Wipers

§5.1.1 Reject vehicle if it is not equipped with an adequate wiper or wipers. The wipers shall be the original equipment length or one size smaller for a winter blade. The path of the blade should be approximately 75% of the windshield. If the vehicle was equipped with two windshield wipers both must be in working order.

Rear window wipers, if present, must be in working order.

§5.1.2 Reject vehicle if any wiper does not operate freely or at a reasonable speed.

§5.1.3 Reject vehicle if any wiper blade has dead or worn rubber or if the metal makes contact with the windshield.

§5.1.4 Reject vehicle if the driver cannot reach and operate freely a hand wiper, if the vehicle is not equipped with automatic wipers.

§5.2 Rear View Mirrors

§5.2.1 Reject vehicle if it does not have all the factory original rear view mirrors or their equivalent replacement.

§5.2.2 Reject vehicle if the mirrors are not mounted securely to prevent swinging and excessive vibration.

§5.2.3 Reject vehicle if the mirror does not give the driver a view of the road 200 feet to the rear.

§5.2.4 Reject vehicle if the reflecting surface is peeled, tarnished, or broken.

§5.3 Sunvisor

§5.3.1 Reject vehicle if it is not equipped with a sunvisor on the driver's side.

§5.3.2 Reject vehicle if the sunvisor cannot be maintained in the proper positions.

§5.4 Horn

§5.4.1 Reject vehicle if it is not equipped with a horn properly wired to an actuating device which is in good working order.

§5.4.2 Reject vehicle if the horn actuating device is not easily accessible to the driver.

§5.4.3 Reject vehicle if the horn is not securely fastened to the vehicle.

§6 **LIGHTS AND ELECTRICAL**

§6.1 **General Lamp Inspection Limits**

- §6.1.1 General lamp inspection includes reflex reflectors and the following types of lamps: head, tail, stop, license clearance, signal, marker, side marker and fog/driving lights. Any original equipment light or its equivalent replacement must be present and working.
- §6.1.2 Reject vehicle if any bulb in any lamp required by law or regulation fails to function properly. Any auxiliary lights, not prohibited by law or regulation, added to the vehicle must work properly or be removed.
- §6.1.3 Reject vehicle if an improperly connected circuit fails to light the proper filament for the different switch positions.
- §6.1.4 Reject vehicle if any lens is missing or broken.
- §6.1.5 Reject vehicle if any repaired lens, using Novus or similar technology, permits moisture or dirt to enter the assembly.
- §6.1.6 Reject vehicle if a headlamp has dirt or moisture inside, any obvious discoloration, contamination or reflector deterioration.
- §6.1.7 Reject vehicle if a lamp is not securely fastened to the vehicle.
- §6.1.8 Reject vehicle if a lamp shows a beam of color contrary to law.
- §6.1.9 Reject vehicle if any lens or lamp required by law or regulation is covered by any device which reduces the amount of light transmitted or reduces the area of illumination of a lens or lamp by any amount. This includes such things as tints, baskets, louvers, mesh covers, etc..
- §6.1.10 Reject vehicle if the beam indicator lamps do not indicate the correct beam to the driver. Both high and low beams must be working properly.
- §6.1.11 Reject vehicle if any lamp or lens is turned or inclined so that its light is not properly directed.
- §6.1.12 Reject vehicle if any lens or reflex reflector is missing or broken.
- §6.1.13 Reject vehicle if a headlamp, measured from its center, is located less than 22 or more than 54 inches above the level surface upon which the vehicle stands. This restriction does not apply to snow plows.

§6.1.14 Reject vehicle if the back-up lights fail to function when the vehicle is placed in reverse gear.

§6.1.15 Reject vehicle if the back-up lights remain on when the vehicle is in any gear other than reverse.

§6.2 Headlight Aiming

§6.2.1 Some new vehicles are equipped with headlights that do not have aiming pads or are so designed that traditional headlight aiming equipment cannot be used. If the station's equipment is not capable of testing the headlight aim of a customer's vehicle, the inspection mechanic is incapable of performing an inspection on that vehicle. Failure to check for proper headlight aim is a violation of the inspection regulations.

§6.2.2 Screen Test: Type 1 Sealed Beam Headlamps

a. Beam Setting

Type 1 headlamps are inspected and aimed on the upper beam

b. Aim Inspection Limits

Vertical Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches above or below the center line

Horizontal Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches right or at all to the left of straight ahead

§6.2.3 Screen Test: Type 2 Sealed Beam Headlamps

a. Beam Setting

Type 2 headlamps are inspected on the lower beam

b. Aim Inspection Limits

Vertical Aim: Reject vehicle if the center of the high intensity zone is above the horizontal line or more than 4 inches below the horizontal line

Horizontal Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches right or at all to the left of the vertical line

§6.2.4 Mechanical Method: Type 1 or Type 2 Sealed Beam Headlamps

a. Aim Inspection Limits

Vertical Aim: Reject vehicle if the graduation is higher than $\frac{1}{2}^\circ$ down or lower than $3\frac{1}{2}^\circ$ down. Mechanical aimer should be set at 2° down when re-aiming.

Horizontal Aim: Reject vehicle if the graduation is more than 4 ° to the right or at all left of straight ahead. Mechanical aimer should be set at 0 (straight ahead) when re-aiming.

§6.3 Turn Signal System and Stop Lamps

- §6.3.1 Reject vehicle if the standard factory equipment turn signals are not in operating condition.
- §6.3.2 Reject vehicle if the lens is not white to amber to the front or red to amber in the rear.
- §6.3.3 Reject vehicle if a lens is broken.
- §6.3.4 Reject vehicle if the wiring is shoddy or the electrical connections are poor.
- §6.3.5 Reject vehicle if the lamp housing is not securely fastened.
- §6.3.6 Reject vehicle if the proper signals do not go on with each throw of the switch.
- §6.3.7 Reject vehicle if it is so constructed or loaded so as to prevent the operator from making a hand or arm signal if such vehicle is not equipped with an approved type of signaling device.
- §6.3.8 Reject vehicle if the operating unit is not functioning properly.
- §6.3.9 Reject vehicle if the self-canceling mechanism is not functioning properly.
- §6.3.10 Reject vehicle if the stop lamps do not go on a with slight pressure on the brake pedal.
- §6.3.11 Reject vehicle if the stop lamps do not emit a steady, red light.
- §6.3.12 Reject vehicle if the turn signals or stop lamps are repaired with colored tape.
- §6.3.13 If, at the time of inspection, a tail light or stop lamp lens is broken, the vehicle owner shall either replace the defective part or place an order through a selling agent. If the part is on order, the owner shall show proof at the request of the inspection mechanic, or any police officer, that the part is on order and that the full price has been paid before an inspection sticker may be issued.

§6.4 Wiring and Switches

- §6.4.1 Reject vehicle if the switches are not in good condition and not functioning properly.

§6.4.2 Reject vehicle if the wiring is in poor condition, improperly installed, or so located as to incur damage.

§6.4.3 Reject vehicle if any connection is not tight or show signs of excessive corrosion.

§6.5 Rear Lamps, License Plate Lamps and Rear Lamp Combinations

§6.5.1 Reject vehicle if the tail light bulbs do not produce sufficient light so as to be visible from a distance of 100 feet to the rear.

§6.5.2 Reject vehicle if all tail lights do not produce a red light.

§6.5.3 Reject vehicle if any tail lights are broken, missing, discolored or do not fit properly.

§6.5.4 Reject vehicle if the turn signals or stop lamps are repaired with colored tape.

§6.5.5 If, at the time of inspection, a tail light or stop lamp lens is broken, the vehicle owner shall either replace the defective part or place an order through a selling agent. If the part is on order, the owner shall show proof at the request of the inspection mechanic, or any police officer, that the part is on order and that the full price has been paid before an inspection sticker may be issued.

§6.5.6 Reject vehicle if the lamps are not securely mounted in the center or to the left of the axis.

§6.5.7 Reject vehicle if the tail lights do not produce a steady light to the rear.

§6.5.8 Reject vehicle if any lamp housing is not securely fastened.

§6.5.9 Reject vehicle if all the tail and rear plate light do not operate properly in all switch positions.

§6.5.10 Reject vehicle if the license plate light bulbs do not produce sufficient steady white light to illuminate the entire rear license plate from a distance of 30 feet to the rear.

§6.5.11 Reject vehicle if any after-market lighting device is installed around or near the license plate. This includes such things as illuminated license plate frames, neon lights, blinking lights, etc., other than the factory original license plate light or its equivalent replacement.

§6.6 Reflectors

§6.6.1 Reject vehicle if it is not equipped with at least one adequate reflector securely attached to the rear. The reflector(s) may be part of the rear lamp.

- §6.6.2 Reject vehicle if the side marker reflectors on vehicles originally so equipped are missing.
- §6.6.3 Reject vehicle if the reflectors do not have red lenses.
- §6.6.4 Reject vehicle if the lenses are broken.
- §6.6.5 Reject vehicle if the reflector(s) are not adequate to be seen at night on an unlighted highway for at least 200 feet from the lawful highbeamed headlight of a vehicle approaching from the rear.

§7 STEERING, ALIGNMENT, AND SUSPENSION

§7.1 Testing Methods

- §7.1.1 All items listed under the definitions of steering linkage and suspension systems shall be examined and/ or tested.
- §7.1.2 When specific technical measurements or tolerances are not listed in the inspection manual, the inspection mechanic shall refer to and follow the manufacturer's technical guides or to repair and service manuals for the vehicle being inspected.

§7.2 Tie Rods

- §7.2.1 Testing: Tie rods should be tested by the "dry park" method. Leave the weight of the vehicle on its suspension. Have a helper rock the steering wheel back and forth while the inspecting mechanics watches for any play or movement in the steering linkage. One-person shops may still use this method by having the owner rock the steering wheel. Leaving the weight on the wheels and suspension creates resistance that makes the play in the linkage more visible.

Idler arms and pitman arms can also be inspected by the dry park method.

Tie rods shall not be tested by squeezing them with pliers or by other mechanical means. Use hand pressure only to test for looseness in an up and down direction. Excessive force can cause the pre-loaded spring inside the tie rod socket to compress, giving a false impression of looseness.

- §7.2.2 Reject vehicle if there is any looseness or play in the tie rod end.
- §7.2.3 Reject vehicle if the rubber boots on a tie rod end are torn.
- §7.2.4 Reject vehicle if the tie rod adjusting sleeve is bent, cracked, or stripped.

- §7.2.5 Reject vehicle if there is power steering fluid inside the boots of an inner rack and pinion tie rod end.
- §7.2.6 Reject vehicle if the tie rod ends bind or do not rotate normally through the proper range.
- §7.2.7 Reject vehicle if the movement of any steering component is in excess of the manufacturer's specifications.

§7.3 Steering Lash

- §7.3.1 Testing: The vehicle must be on a smooth, dry, and level surface. On vehicles equipped with power steering, the engine must be running and the fluid level, belt tension, and belt condition must be adequate before testing.

With the wheel in a straight ahead position, turn the steering wheel until the turning motion can be observed at the road wheels. Align a reference mark on the steering wheel with a mark on a ruler and slowly turn in the opposite direction until the front wheel motion is again detected. Measure the last at the steering wheel.

- §7.3.2 Reject vehicle if the rack and pinion boots are torn.
- §7.3.3 Reject vehicle if the power steering fluid is leaking from the rack and pinion.
- §7.3.4 Reject vehicle if any binding in the steering linkage is detected.
- §7.3.5 Reject vehicle if the total movement greater than shown in the following table is encountered at the steering wheel rim before the front road wheels indicate movement.

Steering Lash Free Play Values

Steering Wheel Diameter in inches	Lash in inches
15 or less	1 ¾
16	2
18	2 ¼
20	2 ½
22	2 ¾

§7.4 Linkage Play

§7.4.1 Testing: When the front end is supported on the lower control arm, hoist the vehicle from the cross member or frame. When the front spring is supported by the upper control arm, hoist the vehicle at the lower control arm.

With the front end lifted properly and the wheels in the straight ahead position, grasp the front and rear of a front tire and attempt to turn the assembly right and left. Record the movement of the extreme front or rear of tire.

On power steering equipped vehicles, the engine must be running while checking steering linkage play. Eliminate all wheel bearing movement by applying the service brake either with assistance from another person or by a mechanical brake holder.

§7.4.2 Reject vehicle if the measurement or movement is in excess of the manufacturer's specifications.

§7.5 King Pins

§7.5.1 Testing: With the front end lifted from the axle, measure the movement at the top or bottom of the tire at the outer circumference. Eliminate all wheel bearing movement by applying the service brake either with assistance from another person or with a mechanical brake holder.

§7.5.2 Reject vehicle if the measured movement at the top or bottom of the tire is greater than the manufacturer's specifications.

§7.6 Ball Joints

§7.6.1 Inspection of ball joints on models prior to 1973 must be conducted with the joints unloaded. Starting in 1973, manufacturers started using ball joints with wear indicators. Ball joints with wear indicators must be inspected with the joints loaded. Before inspecting the ball joints, check to see whether the joints need to be loaded or unloaded.

§7.6.2 Reject vehicle if ball joint kits have been installed on any vehicle.

§7.6.3 Testing of Vehicles without Wear Indicators: Hoist the vehicle by the lower control arm when the spring is supported by the lower control arm, or by the frame when the spring is supported by the upper control arm.

To test the vertical movement, position a pry bar under the tire and with a lifting motion sufficient to overcome the weight of the wheel assembly, move the wheel up and down and observe the movement shown on the dial indicator.

To test the horizontal movement, grasp the tire and wheel assembly at the top and bottom. Move it in and out to detect looseness.

- §7.6.4 Reject vehicle if the movement of the load carrying and/or non-load carrying ball joints exceed the manufacturer's specifications.
- §7.6.5 Testing of Vehicles with Wear Indicators: Support the vehicle with the ball joints in a loaded condition. Wipe the grease fitting and boss free of dirt and grease.
- §7.6.6 Reject vehicle if the fitting boss is flush or inside the cover surface.
- §7.6.7 Reject if the ball joint is severely rusted.
- §7.7 Springs, Torsion Bar, Shocks, Bushings, and Axles**
- §7.7.1 Reject vehicle if the leaf springs have loose or broken leaves.
- §7.7.2 Reject vehicle if the coil springs or spring perches are broken, insecurely mounted or are extended by spacers or blocks.
- §7.7.3 Reject vehicle if there are loose, missing, broken, severely rusted, or worn spring shackles, spring perches, hangars, u-bolts, or spring clips.
- §7.7.4 Reject vehicle if the stabilizer bar, caster struts or trailing arms are loose, bent, broken, or severely rusted.
- §7.7.5 Reject vehicle if the control arms, radius rods, equalizer beam assemblies, beam assemblies, torque rods, struts, track bar or steering arm are loose, broken or bent.
- §7.7.6 Reject vehicle if any rubber bushings are missing, split, badly deteriorated, or badly extruded from the suspension joints.
- §7.7.7 Reject vehicle if the shock absorbers or struts leak or have loose or broken mountings, or worn, missing, or defective bushings. Shock absorbers in satisfactory condition should not have more than two cycles of free rocking motion.
- §7.7.8 Reject vehicle if the suspension mounting brackets on the vehicle frame are crooked or broken.
- §7.7.9 Reject vehicle if the torsion bars, on vehicles so equipped, are broken or improperly adjusted.
- §7.7.10 Reject vehicle if the rear axle is bent or not in proper alignment with the longitudinal axis, as determined by a visual inspection.

- §7.7.11 Reject vehicle if any part of the steering linkage or components have been modified so as to affect the proper steering of the vehicle.
- §7.7.12 Reject vehicle if the drive shaft universal joints, constant velocity joints, or center bearings show excessive wear or play.
- §7.7.13 Reject vehicle if the constant velocity boots are torn or cracked to the extent that the CV joints are contaminated with dirt, salt, or water.
- §7.7.14 Reject vehicle if the front or rear suspension has been altered or modified to raise or lower the front end or rear end by the use of blocks, spring shackle extensions, or the improper use of air shocks, spacers, or other similar means.

§7.8 Steering Column

- §7.8.1 Examine the energy absorbing steering column carefully if there is any evidence of a front end collision or if a force has been exerted on the steering wheel, steering column, or its components.
- §7.8.2 Reject vehicle if there is damage to the steering column or components.
- §7.8.3 Reject vehicle if there is a separation of the mounting capsule from the bracket.
- §7.8.4 Reject vehicle if there are bulges or bends in the mesh section of the column.
- §7.8.5 Reject vehicle if the latching mechanism on a tilt steering wheel fails to lock or if there is any play in the tilt mechanism.

§7.9 Air Bags

- §7.9.1 Reject vehicle if, with the engine running, any diagnostic light or malfunction code indicates the air bag is not functioning properly.
- §7.9.2 Reject vehicle if any diagnostic light fails to illuminate with the ignition key in the on position when the engine is not running.
- §7.9.3 Reject vehicle if a deployed air bag has not been properly replaced with a functioning air bag system.
- §7.9.4 Reject vehicle if the air bag has been disconnected.
- §7.9.5 Reject vehicle if a non-factory disconnect switch has been installed, unless the vehicle owner has a letter of authorization from the National Highway Traffic Safety Administration. Upon sale or trade, such vehicles must be restored to its original configuration.

§8 **TIRES AND WHEELS**

§8.1 **Tires**

§8.1.1 Tire tread depth shall be measured by with a tread depth gauge calibrated in 1/32 inch. Readings shall be taken 2 adjacent major tread grooves at two points in each of the grooves not closer than 15 inches. Readings for a tire which has the tread running across the tire or for a siped tire, where such tread design is permitted, shall be taken at or near the center of the tire at 2 points on the circumference not closer than 15 inches.

§8.1.2 Reject vehicle if any tire is worn to the point where less than 2/32 inch tread design remains at all four points where readings are obtained or where any part of the ply or cord is exposed.

§8.1.3 Reject vehicle if any tire has any bump, bulge, or knot, or a shifted or broken belt. Do not reject a slight bulge in the sidewall that is the result of the manufacturing process.

§8.1.4 Reject vehicle if any tire has tread cuts or snags in excess of 1 inch in any direction or a cut deep enough to expose the body cords.

§8.1.5 Reject vehicle if any tire has sidewalls damaged to the extent that the body cords are damaged.

§8.1.6 Reject vehicle if a tire has been repaired using a tire plug only. A tire puncture may be repaired by the use of a plug and a vulcanizing patch applied to the inside of the tire. The tire must be removed from the rim for repair and the casing must be inspected for damage.

§8.1.7 Reject vehicle if there is a mismatch in nominal size, construction, and profile between tires on the same axle, or if there is a major deviation from the size as recommended by the manufacturer. Recommended tire sizes are indicated on the glove box placard on 1968 and later passenger cars.

Any vehicle with an anti-lock brake system may only be equipped with tire sizes recommended by the manufacturer. Serious handling problems are likely to occur if tires of different speed ratings are mixed on a vehicle. It is not recommended that radials and bias ply tires be mixed on a vehicle. If they must be mixed, the radials should go on the rear.

§8.1.8 Reject vehicle if any tire has tread that extends beyond the fender , unless the vehicle is equipped with fender flares.

§8.1.9 Reject vehicle if it is equipped with studded tires in violation of law. Studded tires may not be used from May 1 to October 1.

§8.1.10 Reject vehicle if it is a front wheel drive vehicle with studded tires only on the front. Front wheel drive vehicle must have four studded snow tires.

§8.1.11 Reject vehicle if any tire is marked “off highway use only” or “for racing only.”

§8.2 Wheels

§8.2.1 Reject vehicle if the wheels are loose or if there are missing or defective bolts, nuts, or lugs.

§8.2.2 Reject vehicle if the wheel is bent, loose, cracked, damaged, or has defective rim or wheel flanges.

§8.2.3 Reject vehicle if the parts are designed or installed so that the nuts are not fully engaged.

§9 COUPLING DEVICES

§9.1 Reject vehicle if any attaching bolts, bushings, mounts, or jaw assemblies have any crack, excessive wear points, looseness, or any other condition that may render the fifth wheel assembly or other coupling device unsafe.

§9.2 Reject vehicle if any fifth wheel or other coupling device has replacement parts not recommended by the manufacturer or not equivalent to factory original.

§10 CUSTOM OR MODIFIED VEHICLES

§10.1 General

§10.1.1 For the purposes of this manual, custom or modified vehicles are vehicles that are not as originally manufactured and equipped. This includes, but is not limited to, street rods, dune buggies, salvage vehicles, reconstructed vehicles, reassembled vehicles, and altered vehicles.

§10.1.2 All parts of all vehicles must comply with all laws and regulations, other than the exceptions noted below in this section.

§10.1.3 Inspection mechanics must examine custom or modified vehicles as to the quality of workmanship, the integrity of the vehicle components, and the vehicle geometry. If the inspection mechanic has any doubt or question about the strength or safety of any component of a custom or modified vehicle, no inspection sticker may be issued.

§10.2 Regulations and Exceptions for Custom or Modified Vehicles

§10.2.1 Glazing:

The windshield must be of sufficient height and width to afford ample protection to the operator and passengers of the custom or modified vehicle.

The windshield must be of approved safety glass.

The glazing must allow a clear and undistorted view directly ahead and to the right and left of the axis of the vehicle.

If the body of the custom or modified vehicle was originally constructed without rear windows, then rear windows are not required.

§10.2.2 Exhaust System - The exhaust system of the custom or modified vehicle must be equivalent to the original equipment standards for that engine. Installing an older engine in a vehicle is a violation of the federal Clean Air Act.

§10.2.3 Bumpers - Motor vehicles originally manufactured with a bumper must have a bumper. Replacement bumpers shall be constructed of material of equal strength as the original and must give the same protection afforded by the original equipment.

Street rods are exempt from this subsection.

§10.2.4 Fenders - Custom or modified vehicles must be equipped with fenders or fender and extensions to provide coverage of the exposed tire tread.

Street rods are exempt from this subsection.

§10.2.5 Floor Pan - A floor pan must be in sound condition and completely free of cracks, holes, open seams, or other openings that would allow exhaust fumes to enter the passenger or operator compartments.

§10.2.6 Gas Tank - Gas tanks must be of the type originally manufactured as a motor vehicle gas tank.

§10.2.7 Rear Engine Driven Vehicles - Rear engine driven vehicles must have metal or fiberglass shrouds covering exposed exhaust pipes and drive belts.

§10.3 Street Rods

§10.3.1 A street rod body must have been manufactured prior to 1949 or be a replica of a pre-1949 vehicle.

§10.3.2 A street rod engine must be front mounted, unless the vehicle was originally manufactured with a rear engine.

§10.3.3 Street rods must display specially marked registration plates and must have available for examination by an inspection mechanic or law enforcement officer the certificate of verification issued by the Maine State Police or proof of successful completion of a safety inspection approved by the National Street Rod Association

§10.4 Dune Buggies

§10.4.1 Dune buggies may not be constructed by placing a shell on an all-terrain vehicle (ATV.) All-terrain vehicles are defined in 12 MRSA §7851. All-terrain vehicles may not be registered as motor vehicles or motorcycles.

§10.5 Vehicle Heights

§10.5.1 Frame height limits are based on the gross vehicle weight rating of the vehicle or the gross vehicle weight rating of the vehicle providing the majority of the running gear. Heavy duty springs will not be considered to increase the gross vehicle weight rating over the manufacturer's original rating.

§10.5.2 Door height limits will be based on the door height as the vehicle was originally manufactured or based on the standards for the door height as manufactured for the vehicle providing the majority of the running gear.

§10.5.3 All measurements for the bottom of the driver's door will be made on a level surface with the vehicle unladen. All tires must be inflated to the manufacturer's recommended tire pressure. The doors must be in the original manufactured location. Vehicles manufactured without doors shall be measured from the lowest point on the floor panel directly below the operator's position.

§10.5.4 Frame end measurement shall be taken when the vehicle is parked on a level surface with the vehicle unladen. All tires must be inflated to the manufacturer's recommended tire pressure. Measurements shall be to the bottom edge of the original manufacturer's frame rail, at the end where the bumper brackets attach. Any frame component or sub-frames added to the vehicle after original manufacture shall be disregarded for frame height requirements.

§10.5.5 Maximum frame end heights are established by 29-A MRSA §1920 and are restated below.

Type of Vehicle	Front	Rear
Automobile	22 inches	22 inches
Vehicles up to and including 4,500 lbs GVWR	24 inches	26 inches
Vehicles from 4,501 lbs. to 7,501 lbs. GVWR	27 inches	29 inches
Vehicles from 7,501 lbs. to 10,000 lbs. GVWR	28 inches	30 inches

- §10.5.6 The minimum frame end height is 10 inches or the frame end height as the vehicle was originally manufactured.
Street rods are exempt from this section.
- §10.5.7 Vehicles equipped with an anti-lock brake system may not be altered.
- §10.5.8 Any vehicle where the vehicle height has been altered in any way shall be closely inspected as to any part that may be stressed by the alteration. In particular, the following items shall be examined:
- | | |
|------------------------|-----------------------|
| tie rod ends | spring ends |
| drag links | idler arms |
| emergency brake cables | brake lines and hoses |
| wheel bearings | brakes |
| shock absorbers | |
- §10.5.9 Any tire on any vehicle not equipped with an anti-lock braking system must be within 2 tire sizes of the original manufacturer's recommendations.
Reject vehicle if it is equipped with tires more than 2 sizes larger or smaller than manufacturer's specifications.

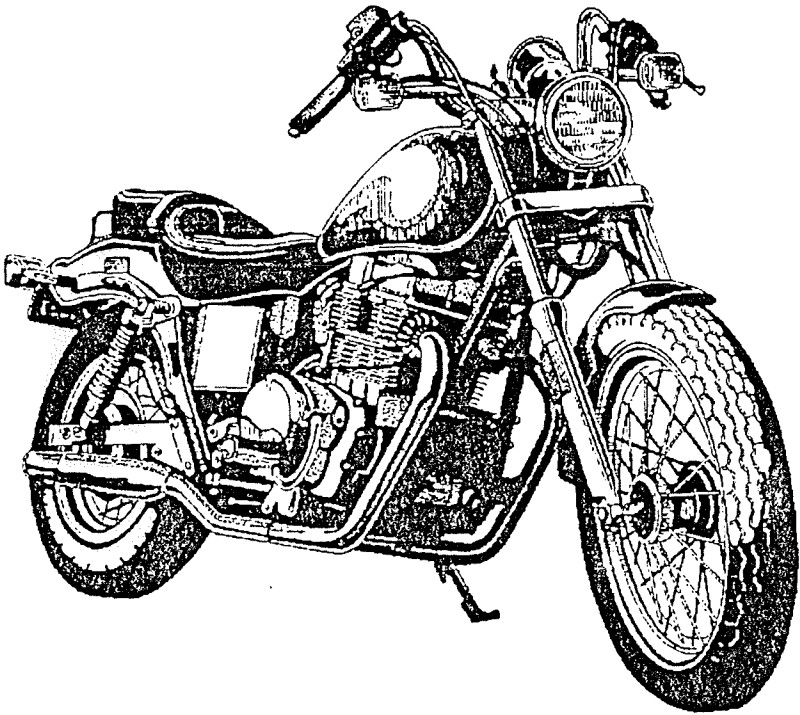
Reject vehicle if any tire contacts any portion of the body, the steering components or the frame during normal vehicle operation.
- §10.5.10 If the rim size has been altered, the overall diameter of the wheel with the tire must be within the manufacturer's specifications. If, in the opinion of the inspection mechanic, there is insufficient tire sidewall to permit safe operation of the vehicle, no sticker may be issued.
- §10.5.11 Suspension lifts are permitted provided that they are manufactured by an after market manufacturer, are designed for the make and model vehicle on which it is installed, is installed according to the manufacturer's recommendations, and as long as the entire kit is used.
- §10.5.12 No lift kit which utilizes lift blocks between the leaf springs and the axles or which uses spring shackle extensions may be installed on a vehicle. Only original equipment blocks are permitted.
- §10.5.13 If a vehicle was originally manufactured with the leaf springs mounted beneath the axles, the springs may not be mounted above the axles.

§10.5.14 Body lifts are permitted provided that they are manufactured by an after market manufacturer, are designed for the make and model vehicle on which it is installed, and is installed according to the manufacturer's recommendations.

Body lifts may not use more than a three inch spacer and may not raise the body more than four inches above the frame when all components are installed.

Motorcycle Inspection

Unit 3



UNIT 3: CLASS C INSPECTION

MOTOR CYCLE

§1 BRAKES

§1.1 **General**

§1.1.1 Wheels and drums are not required to be removed from the vehicle being inspected to determine the condition of the drums and linings unless after driving the vehicle, the inspection mechanic feels that something is definitely wrong with the brakes and advises the customer that the vehicle cannot be passed.

At the customer's request, and with the clear understanding by the customer that pulling the wheel or drum is not part of the inspection and will be considered as labor at the hourly rate, the inspection mechanic may remove the wheel(s) and/or drum(s) to show the customer why the vehicle will not pass inspection.

§1.1.2 Autocycles shall be equipped with brakes on the two main wheels.

§1.1.3 Whenever an inspection mechanic feels that a road test of the motor cycle is necessary to ascertain braking efficiency or safe handling characteristics, a road test may be completed before an inspection sticker is issued.

§1.1.4 Motor cycles equipped with self-proportioning or anti-lock brakes may have a single brake control operated by the right hand or foot.

§1.1.5 Anti-lock braking systems may not be disconnected.

§1.2 **Vehicle Tests**

§1.2.1 Brake Hydraulic System Test: Test vehicle in a standing position. The inspection mechanic should be able to maintain brake pedal or hand lever reserve under moderate pressure (40- 60 lbs.) for one minute.

Reject vehicle if the brake reserve cannot be maintained for one minute.

§1.2.2 Pedal Reserve - Hydraulic System Test: Test vehicle in a standing position with the brake pedal or hand lever depressed under moderate force (40- 60 lbs.) There should be a minimum of approximately 1/3 of the total available pedal or hand lever travel remaining.

Reject vehicle if less than approximately 1/3 of the total available pedal or brake lever travel remains when the pedal is depressed under moderate force.

§1.2.3 Service Brake Test: Test vehicle on a substantially level, dry. Smooth, hard surfaced road or area that is free from loose materials, oil, or grease. Using the service brake only, test the stopping ability of the vehicle. Brake tests on the open highways must be at a speed of 20 mph with the cycle stopping safely within a distance of 30 feet.

Reject vehicle if it does not stop safely within 30 feet at 20 mph.

§2 VISUAL INSPECTION OF INTERNAL MECHANISM

§2.1 Brake Linings and Disc Brake Pads

§2.1.1 Reject vehicle if the thickness of bonded brake linings, when measured at the thinnest point, is less than 2/32 inch.

§2.1.2 Reject vehicle if the wire in a wire-backed lining is visible in the friction surface.

§2.1.3 Reject vehicle if the riveted linings are worn to within 2/32 inch of the rivet head.

§2.1.4 Reject vehicle if the rivets are loose or missing or if the lining is not securely fastened.

§2.1.5 Reject vehicle if the lining is broken, cracked or loose.

§2.1.6 Reject vehicle if the lining is contaminated with oil, grease, or brake fluid.

§2.1.7 Reject vehicle if the linings are worn beyond the replacement indicators.

§2.2 Brake Drums and Brake Discs

§2.2.1 Reject vehicle if the brake drums or discs are contaminated.

§2.2.2 Reject vehicle if the brake drums or discs have cracks extending to the edge of the drum or disc or mechanical damage to the friction surface other than wear.

§2.2.3 Reject vehicle if the brake drums are re-machined beyond the manufacturer's specifications.

§2.2.4 Reject vehicle if there are any cracks extending to the edge of the drum or disc.

§2.2.5 Reject vehicle if the thickness of any disc is less than the minimum thickness recommended by the manufacturer.

§2.3 Hydraulic System

§2.3.1 Reject vehicle if the fluid level in the master cylinder reservoir is below $\frac{3}{4}$ full.

§2.3.2 Reject vehicle if there are leaks at the master cylinder or wheel cylinders.

§2.3.3 Reject vehicle if the hydraulic hoses, tubing or connections are leaking, chafed, restricted, crimped, cracked, or broken.

§2.4 Mechanical Linkage

§2.4.1 Reject vehicle if any mechanical parts are missing, broken, or badly worn.

§2.4.2 Reject vehicle if there is high friction in the pedal, lever and/or linkage in the brake components.

§2.4.3 Reject vehicle if the brake operating levers or pedals are improperly positioned or are misaligned.

§2.4.4 Reject vehicle if any brake cable has more than one strand of the cable broken, cut or missing.

§2.4.5 Reject vehicle if any portion of the hand brake lever is broken or missing.

§2.4.6 Reject vehicle if any cam operating lever has been repositioned on the shaft as a means of avoiding replacement of a worn cam, shoe, or lining.

§2.4.7 Reject vehicle if the brake adjuster is not equipped with a locking mechanism.

§2.4.8 Reject vehicle if the brake cables are so routed as to become pinched between the fork and the frame.

§2.4.9 Reject vehicle if the brake control/lever has no free play or if less than $\frac{1}{5}$ of the total available control travel remains when the brake is fully applied.

§2.4.10 Reject vehicle if there is any modification which makes the brake pedal or lever inaccessible for adequate leverage or safe operation.

§2.4.11 Reject vehicle if any replacement or modification to the brake assembly is not equal to the manufacturer's specifications for the specific motorcycle on which it has been installed.

§2.5 Parking Brake System

§2.5.1 Reject vehicle if a three wheeled motorcycle or autocyte is not equipped with a parking brake in working condition.

§3 **BODY COMPONENTS**

§3.1 **Chain/Belt, Sprocket, and Guards**

- §3.1.1 Reject vehicle if the chain links or rollers are damaged or the pins are loose.
- §3.1.2 Reject vehicle if the rear chain adjustment is not in accordance with the manufacturer's specifications.
- §3.1.3 Reject vehicle if the sprocket belt is frayed or if the teeth are stripped.
- §3.1.4 Reject vehicle if the sprocket teeth are bent or missing.
- §3.1.5 Reject vehicle if the rear sprocket is loose, missing bolts, or is cracked.
- §3.1.6 Reject vehicle if the chain guard is broken or missing.
- §3.1.7 Reject vehicle if the chain guard is not securely mounted or is not mounted in such a way that provides shielding from the chain.

§3.2 **Drive Shaft**

- §3.2.1 Reject vehicle if the drive shaft is leaking fluid.

§3.3 **Fenders**

- §3.3.1 Reject vehicle a fender is missing from any wheel.
- §3.3.2 Reject vehicle if the fenders are not mounted securely.
- §3.3.3 Reject vehicle if the fenders, exterior fiberglass or sheet metal parts, or moldings have sharp or broken edges, or if it has an abnormal protrusion extending beyond the normal vehicle extremities that would be hazardous to driver, passenger, or pedestrian or other vehicles. Do not reject for crash bars without sharp protrusions.
- §3.3.4 Reject vehicle if the fender fails to cover the width of the tire and a minimum of ¼ of the wheel circumference positioned as to protect the operator and passenger.
- §3.3.5 Reject vehicle if a replacement fender has not been refitted with a required lighting device.

§3.4 **Stands**

- §3.4.1 Reject vehicle if the center and side stands do not operate properly.

§3.4.2 Reject vehicle if the motor cycle does not remain on the stand when the front wheel is turned from stop to stop.

§3.4.3 Reject vehicle if either stand is cracked or broken.

§3.4.4 Reject vehicle if the stand will not retract or remain in the fully retracted or stored position.

§3.5 Seats

§3.5.1 Reject vehicle if it is not equipped with seats.

§3.5.2 Reject vehicle if the seat is not securely attached.

§3.5.3 Reject vehicle if the seat has springs or other parts protruding which might constitute a hazard to the operator or passenger.

§3.5.4 Reject vehicle if the seat latching or securing device does not function properly.

§3.6 Footrests

§3.6.1 Reject vehicle if foot rests are not provided for each designated seating position.

§3.6.2 Reject vehicle if the footrests are not in an accessible position for the passenger's feet.

§3.6.3 Reject vehicle if the footrests are not securely attached.

§3.6.4 Reject vehicle if the footrests do not fold upward or rearward when not in use.

§3.7 Other Accessories

§3.7.1 Other accessories include, but are not limited to, such items as fairings, windshields, luggage racks and carriers, backrests, highway bars, engine case guards, passenger seats, speedometers/odometers, and trailer hitches.

§3.7.2 Reject vehicle if any accessory interferes with, obstruct or prevents the proper use of any control, component or system required for the operation of the vehicle.

§3.7.3 Reject vehicle if the accessory items cover, interfere with, or obstruct any required lighting device, reflector, or registration plate.

§3.7.4 Reject vehicle if any accessory has sharp edges, points, or breaks that may present a hazard to the driver, a passenger, or a pedestrian.

- §3.7.5 Reject vehicle if the passenger handhold, if vehicle is so equipped, is not securely attached.
- §3.7.6 Reject vehicle if windscreen, if installed, is cracked, discolored or scratched so as to obstruct the driver's forward vision.
- §3.7.7 Reject vehicle if the glazing in a windscreen, if installed, is not of an approved type.
- §3.7.8 Reject vehicle if the windscreen, if installed, obstructs or obscures the driver's view of the road surface directly ahead of the front wheel.
- §3.7.9 Reject vehicle if any attaching bracket, clamps, bolt, brace or other similar fastening device anywhere on the motor body is loose, broken, or other than in safe condition.

§4 FRAME

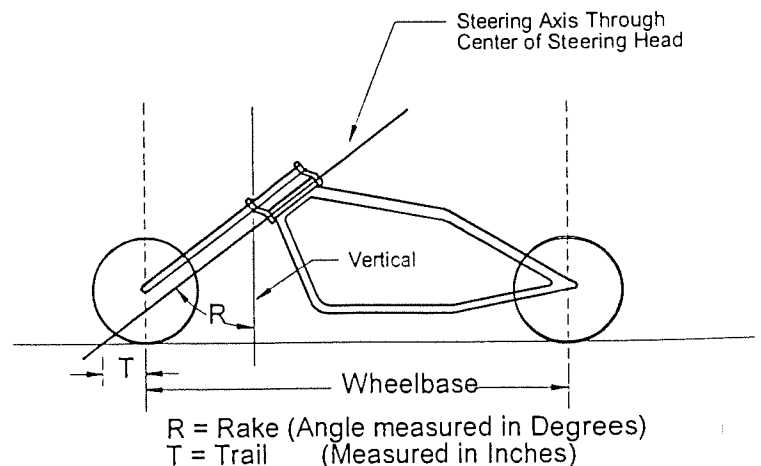
§4.1 General

- §4.1.1 Reject vehicle if any part of the frame has been removed so as to weaken the original structure.
- §4.1.2 Reject vehicle if the frame is cracked, broken, or twisted, or if there is evidence of structural damage.
- §4.1.3 Reject vehicle if any weld or joint shows cracks or fatigue breaks.
- §4.1.4 Reject vehicle if the frame is out of alignment.
- §4.1.5 Reject vehicle if it fails to meet the following specifications in relationship to the front wheel geometry:

Motorcycle Front End Geometry

Maximum rake: 45 degrees
 Maximum trail: 14 inches
 positive

Minimum rake: 20 degrees
 Minimum trail: 2 inches
 positive (2 wheeled cycles only)



§5 STEERING AND SUSPENSION

§5.1 Front Fork

- §5.1.1 Reject vehicle if any fork component is loose or shows any perceptible wear.
- §5.1.2 Reject vehicle if “fork slugs” have been installed.
- §5.1.3 Reject vehicle if the length of the original fork has been extended by replacing the original tubes with tubes longer than 16 inches or if the vehicle exceeds the rake and trail limits.
- §5.1.4 Reject vehicle if springer type front forks exceed the original design by 18 inches or more.
- §5.1.5 Reject any motor cycle, including custom made motor cycles, if it does not conform in all respects to the requirements set forth in this manual.

§5.2 Swing Arm

- §5.2.1 Reject vehicle if the swing arm, if vehicle is so equipped, is bent, cracked, broken or loose, or is excessively worn so as to affect safe handling of the vehicle.
- §5.2.2 Reject vehicle if the wheels won't track properly and adversely affects the control of the motor cycle.

§5.3 Steering Head, Steering Head Bearings and Wheel Bearings

- §5.3.1 Reject vehicle if there is noticeable play or roughness within the steering head bearings or if the front fork binds when turned left or right.
- §5.3.2 Reject vehicle if the wheel bearings have perceptible play, roughness, or binding during wheel rotation.
- §5.3.3 Reject vehicle if the steering head has cracks in or adjacent to any weld.

§5.4 Shock Absorbers and Suspension

- §5.4.1 Reject vehicle if the shock absorbers are not securely attached or are missing.
- §5.4.2 Reject vehicle if the shock absorbers have been removed and replaced with a solid connection.
- §5.4.3 Reject vehicle if the shock absorbers are worn, leaking, bent, or have damaged parts.

- §5.4.4 Reject vehicle if the suspension springs are broken, worn, or loose.
- §5.4.5 Reject vehicle if a hard tail frame is not of a type manufactured completely as a hard tail. Bolt on - weld on type is not acceptable. (Inapplicable to 3-wheeled vehicles.)

§5.5 Handlebars

- §5.5.1 Reject vehicle if the handlebars are cracked, broken, or misaligned.
- §5.5.2 Reject vehicle if the handlebars are positioned so that the handgrips are at a level above the operator's shoulder height when the operator is sitting astride the seat, or the rise is more than 15 inches above the operator's seat, whichever is less.
- §5.5.3 Reject vehicle if the handlebar width measures less than 18 inches or more than 36 inches from grip end to grip end.
- §5.5.4 Reject vehicle if the handlebars are loose, bent, or cracked in any welds or bends, or that have been broken and then welded or brazed.
- §5.5.5 Reject vehicle if a replacement handlebar is not of the same gauge steel and strength as the original handlebars.
- §5.5.6 Reject vehicle if the handlebars can be moved up or down by applying manual force other than movement in the shock absorbing mounts of the handlebar supports.
- §5.5.7 Reject vehicle if the handlebars are not equipped with handgrips.

§5.6 Handlebar Controls

- §5.6.1 Reject vehicle if the throttle does not automatically close to an idle when it is released from the full open position on motorcycles manufactured after September 1, 1974. (Some throttles have an intermediate resistance point for idle adjustment.)
- §5.6.2 Reject vehicle if the throttle or control lever are loose on the handlebars.
- §5.6.3 Reject vehicle if the control levers are broken or do not operate freely.
- §5.6.4 Reject vehicle if the outer cable housing is pinched or kinked.
- §5.6.5 Reject vehicle if there are loose cable ends, severe bends, kinks, or broken strands on the exposed portion of the inner cables.

- §5.6.6 Reject vehicle if the brake control lever has no free play and less than 1/5 of the total available control travel remains when the brake force is applied.
- §5.6.7 Reject vehicle if the clutch control lever has no free play and the clutch lever travel bottoms prior to full clutch engagement.
- §5.6.8 Reject vehicle if it is not equipped with an operable engine stop control.
- §5.6.9 Reject vehicle if any cables are excessively slack.

§5.7 Steering Alignment

- §5.7.1 Reject vehicle if the wheel planes do not align with the longitudinal axis of the frame, causing tracking between the front and rear wheel to misalign by 1 inch or more.
- §5.7.2 Reject vehicle if there is more than 3/8 inch run-out in wheel alignment.

§6 EXHAUST SYSTEM

§6.1 General

- §6.1.1 Reject vehicle if it does not have a muffler.
- §6.1.2 Reject vehicle if the muffler internals have been removed.
- §6.1.3 Reject vehicle if any mounting or connection is loose, broken, or missing.
- §6.1.4 Reject vehicle if there are loose or leaking joints, holes, leaking seams or loose interior baffles. Repairs may be made with a jacket or patch that is welded or brazed securely in place. Small holes obviously made by the manufacturer to provide drainage are not cause for rejection.
- §6.1.5 Reject vehicle if the exhaust system is equipped with any bypass or cutout device.
- §6.1.6 Reject vehicle if the exhaust system is not comparable to the original equipment.
- §6.1.7 Reject vehicle if flexible tubing has been used to replace any part of the exhaust system unless such tubing was factory installed as original equipment.
- §6.1.8 Reject vehicle if the muffler shield has been removed.
- §6.1.9 Reject vehicle if any unshielded portion of the exhaust system protrudes in a manner that might burn the rider or passenger when seated in a normal position.

- §6.1.10 Reject vehicle if any unshielded portion of the exhaust system is mounted higher than the lowest portion of the passenger seat pan.
- §6.1.11 Reject vehicle if the vehicle is equipped with drag or straight pipes.
- §6.1.12 Reject vehicle if baffles are inserted into the exhaust pipe in place of a muffler. This does not constitute a muffler. The muffler and the exhaust pipe may be welded together.

§7 FUEL SYSTEM

§7.1 General

- §7.1.1 Reject vehicle if any portion of the fuel system is not securely attached.
- §7.1.2 Reject vehicle if fuel is leaking from any point in the system.
- §7.1.3 reject vehicle if the tank cap is missing, damaged, or fails to latch.
- §7.1.4 Reject vehicle if any gas line is in direct contact with the engine.
- §7.1.5 Reject vehicle if the fuel system vents and evaporative control systems, as originally equipped, are not present and operational.

§8 LIGHTING AND ELECTRICAL SYSTEMS

§8.1 General

- §8.1.1 Reject vehicle if any lamp, bulb, lens, or reflective device is broken, severely discolored, inoperable, or shows a color contrary to law or regulation.
- §8.1.2 Reject vehicle if any lens, bulb, or filament is missing or fails to light as designed.
- §8.1.3 Reject vehicle if an improperly connected circuit does not light the proper filaments for the different switch positions.
- §8.1.4 Reject vehicle if any lens is missing, or is rotated, upside down, wrong side out or otherwise improperly installed.
- §8.1.5 Reject vehicle if any lamp, lens or reflective device is improperly located or is not securely fastened to the vehicle.
- §8.1.6 Reject vehicle if any lamp or lens required by law or regulation is covered by any device which reduces the amount of light transmitted or reduces the area of

illumination of a lamp or lens by any amount. This includes, but is not limited to, tinted louvered or mesh covers.

§8.1.7 Reject vehicle if any lamp or lens is turned or inclined so that the light does not function properly.

§8.1.8 Reject vehicle if it is rated at over 5 horsepower and is not equipped with a multiple-beam headlamp.

§8.1.9 Reject vehicle if it not equipped with an electrical energy storage source to provide lighting of a constant intensity if originally manufactured with such a source.

§8.2 Signal Lamps

§8.2.1 Reject vehicle if the lens is not white or amber to the front and mounted on each side of the vertical centerline at the same height

§8.2.2 Reject vehicle if not red to amber to the rear and mounted on each side of the vertical centerline at the same height.

§8.2.3 Reject vehicle if the proper signals do not go on with each throw of the switch.

§8.2.4 Reject vehicle if the turn signal operating unit is not functioning properly.

§8.2.5 Reject vehicle if the turn signals cannot be operated without moving the hand from the handlebars.

§8.3 Stop Lamps

§8.3.1 Reject vehicle if the lamps do not go on with slight pressure on the brake pedal or front brake lever.

§8.3.2 Reject if the lens is not red.

§8.3.3 Reject vehicle if the lamp is not mounted on the vertical centerline, or symmetrically positioned about the vertical centerline if two lamps are used.

§8.3.4 Reject vehicle if the lamps are mounted less than 15 inches or more than 72 inches above the road surface.

§8.4 Rear Lamps, License Plate Lamps, and Rear Lamp Combinations

§8.4.1 Reject vehicle if the tail light does not produce sufficient light so as to be visible from a distance of 100 feet to the rear.

- §8.4.2 Reject vehicle if the tail light lens is not red.
- §8.4.3 Reject vehicle if the taillamps are not mounted securely in the center or to the left of the axis.
- §8.4.4 Reject vehicle if the tail lamps do not produce a steady light to the rear with the brakes applied.
- §8.4.5 Reject vehicle if the license plate light bulb(s) does not produce sufficient steady white light to illuminate the entire rear license plate from a distance of 50 feet.
- §8.4.6 Reject vehicle if any after market lighting device is installed around or near the license plate, including illuminated license plate frames, neon lights, blinking lights or any light other than the factory original or its equivalent replacement.
- §8.4.7 Reject vehicle if the rear plate is not mounted horizontally on the rear-most portion of the rear fender.
- §8.4.8 Reject vehicle if the light assemblies are not mounted on the rear-most part of the rear fender.
- §8.4.9 Reject vehicle if a frame mounted tail lamp assembly extends beyond the outer extremities of the body components. In no event may the lighting devices or components extend beyond the crash bars (if installed.)
- §8.4.10 Reject vehicle if the lamp assembly is mounted less than 15 inches or more than 72 inches above the road surface.

§8.5 Head Lamps

- §8.5.1 Reject vehicle if the headlight is mounted more than 54 inches or less than 22 inches from the level surface on which the vehicle it stands.
- §8.5.2 Reject vehicle if the headlamp beam pattern is out of limits and cannot be re-aimed during the inspection. See appendix

§8.6 Reflectors

- §8.6.1 Reject vehicle if the vehicle is not equipped with at least one adequate reflector securely attached to the rear of the vehicle. The reflector may be part of the rear lamp assembly.
- §8.6.2 Reject vehicle if the rear reflectors are not red or are not mounted on the vertical centerline or about the vertical centerline if two reflectors are used.

§8.6.3 Reject vehicle if the reflectors are not adequate to reflect at night on an unlighted highway for at least 200 feet the high beamed headlight of a vehicle approaching from the rear.

§8.6.4 Reject vehicle if there is not a red reflector mounted on each side of the vehicle as far as practical to the rear, and an amber reflector mounted on each side of the vehicle as far as practical to the front. This section does not apply to motorcycles manufactured before January 1, 1968.

§8.6.5 Reject vehicle if the reflector(s) is mounted less than 15 inches or more than 60 inches above the road surface.

§8.7 Wiring and Switches

§8.7.1 Reject vehicle if the switches are not in good condition or are not functioning properly.

§8.7.2 Reject vehicle if the wiring is in poor condition, improperly installed, bare or uninsulated, or so located so as to incur damage.

§8.7.3 Reject vehicle if there are loose connections, evidence of a loose circuit, or if there are signs of excessive corrosion.

§8.8 Horn

§8.8.1 Reject vehicle if it is not equipped with a horn.

§8.8.2 Reject vehicle if the horn is not securely mounted or is not audible.

§8.8.3 Reject vehicle if the horn actuating device is not in good working order or is not accessible to the operator without moving the hand from the handlebar. This section does not apply to a 3 wheeled cycle equipped with a steering wheel.

§9 TIRES, WHEELS, RIMS, AND SPOKES

§9.1 Tires

§9.1.1 Reject vehicle if any tire is worn to the level of the tread-wear indicators.

§9.1.2 Reject vehicle if any tire is worn to the point where less than 2/32 inch of tread design remains at all four points at which gauge readings are obtained or if the tread is less than the manufacturer's specifications for safe operation. (Readings shall be taken in 2 adjacent tread grooves not closer than 15 inches.)

§9.1.3 Reject vehicle if any part of the cord is exposed.

- §9.1.4 Reject vehicle if there are any bumps, bulges or knots.
- §9.1.5 Reject vehicle if there is any tread separation.
- §9.1.6 Reject vehicle if any tire has been regrooved or recut.
- §9.1.7 Reject vehicle if any tire has tread cuts or snags in excess of one inch or a cut deep enough to expose the body cords.

§9.2 Wheels, Rims and Spokes

- §9.2.1 Reject vehicle if any spokes or braces are broken or missing.
- §9.2.2 Reject vehicle if any spokes are visibly loose.
- §9.2.3 Reject vehicle if any part of the wheel rim is cracked or broken.
- §9.2.4 Reject vehicle if any brace, disc, strut, or spider is cracked or broken.

§10 MIRRORS

§10.1 General

- §10.1.1 Reject vehicle if it is not equipped with at least one rearview mirror.
- §10.1.2 Reject vehicle if a mirror is not mounted securely to prevent swinging and excessive vibration.
- §10.1.3 Reject vehicle if a mirror is broken or has exposed sharp edges.
- §10.1.4 Reject vehicle if the reflecting surface is tarnished or peeling.
- §10.1.5 Reject vehicle if a mirror does not have a minimum of 10 square inches of reflective surface for convex construction or 12.5 square inches of reflective surface for unit magnification construction.
- §10.1.6 Reject vehicle if the mirror cannot be adjusted or cannot maintain adjustment.
- §10.1.7 Reject vehicle if the mirror location does not provide the operator with an unobstructed view 200 feet to the rear.
- §10.1.8 Reject vehicle if the mirror design other than round, square, oval or rectangular.

§11 **SPECIALLY CONSTRUCTED MOTORCYCLE**

§11.1 **General**

§11.1.1 A specially constructed motorcycle is a vehicle assembled from new or used parts by other than a recognized manufacturer of motorcycles; or a vehicle that is modified to the extent that the original identity of make, model or type is obscured by material changes in appearance; or is modified by the removal, addition, alteration or substitution of parts other than original replacement essential parts.

§11.1.2 Specially constructed motorcycles must be inspected carefully as to the quality of workmanship, the integrity of the vehicle components, and the vehicle geometry. If the inspection mechanic has any doubt or question about the strength or safety of any component of a specially constructed motorcycle, no inspection sticker may be issued.

§11.1.3 Specially constructed motorcycles must comply with the laws and regulations.

§12 **AUTOCYCLES**

§12.1 **General**

§12.1.1 An autocycle is an enclosed motorcycle, originally manufactured as such. It is designed to have no more than three wheels in contact with the ground at any time. An autocycle shall meet the provisions of a motorcycle, except where the components are of similar manufacture to an automobile.

§12.1.2 An autocycle must be equipped with safety belts for all passengers, a roll bar, a windshield equipped with a wiper, and a steering wheel or tiller.

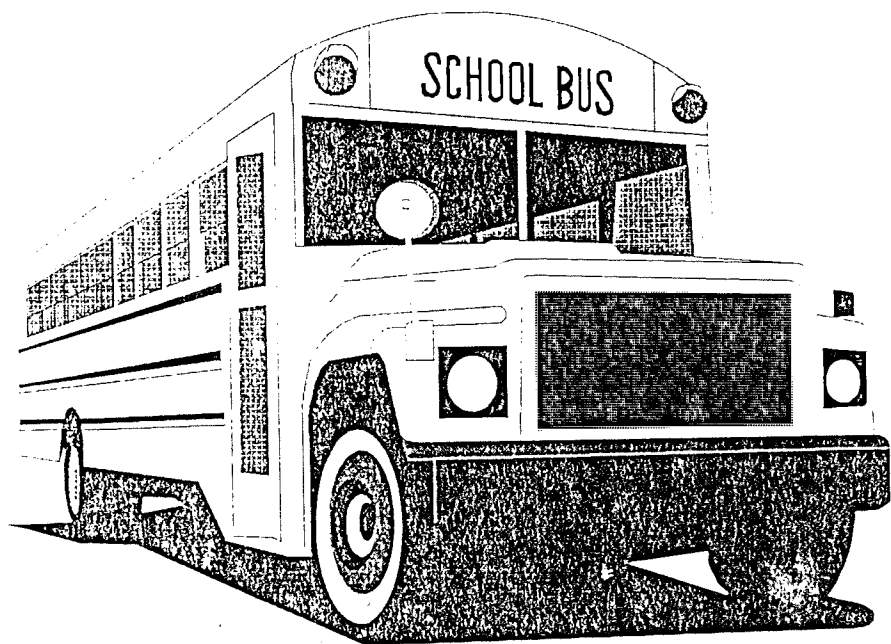
§12.1.3 Reject vehicle if seat belts are not present and functioning for each seat.

§12.1.4 Reject vehicle if it is not equipped with a roll bar.

§12.1.5 Reject vehicle if it is not equipped with a steering wheel or steering tiller.

§12.1.6 Reject vehicle if it is not equipped with a windshield with at least one properly operating wiper.

Unit 4



School Bus Inspection

UNIT 4: CLASS B INSPECTION
SCHOOL BUS

§1 **GENERAL**

§1.1 **Automotive Inspection and School Bus Specific Inspection**

§1.1.1 All school buses must undergo a complete Class D inspection as to all parts and accessories necessary for safe operation of the school bus. Exceptions or exemptions to the Class D requirements are noted in the following sections.

§1.1.2 All school buses must be inspected for School Bus specific inspection items which are noted In the following sections.

§2 **SCHOOL BUS BODY AND EXTERIOR**

§2.1 **School Bus Exhaust System**

§2.1.1 Reject vehicle if the exhaust pipe expels exhaust under the body of the bus.

§2.1.2 Reject vehicle if the exhaust pipe terminates more than 2 inches of the outside perimeter of the body or rear bumper.

§2.1.3 Reject vehicle if, on a commercially operated school bus, the exhaust pipe terminates anywhere other than to the rear of the bus.

§2.1.4 Reject vehicle if, on a non-commercially operated school bus, the exhaust pipe terminates other than to the rear or to the left side of the bus.

§2.1.5 Reject vehicle if, on a non-commercially operated school bus, the exhaust pipe terminates of the left side of the bus more than 18 inches forward of the front edge of the rear wheel well.

§2.1.6 Reject vehicle if the exhaust pipe terminates on the right side of the bus.

§2.2 **Hood or Rear Mounted Engine Compartment Door**

§2.2.1 Reject vehicle if the hood or engine cover is missing.

§2.2.2 Reject vehicle if the latches are broken, missing, seized, insecurely mounted, or inoperable.

§2.2.3 Reject vehicle if the support rods are missing, broken, or bent.

- §2.2.4 Reject vehicle if the hinge mount area of the body is severely corroded.
- §2.2.5 Reject vehicle if the safety cables (if originally equipped) are broken, missing, or insecurely attached.
- §2.2.6 Reject vehicle if the hinges are cracked, missing, broken, or are excessively worn.
- §2.2.7 Reject vehicle if the secondary latches (if applicable) are broken, missing, or inoperable.

§2.3 Body

- §2.3.1 Reject vehicle if torn metal protrudes so as to be hazardous to passengers, pedestrians, or cyclists.
- §2.3.2 Reject vehicle if the molding is loose or protrudes so as to be hazardous to passengers, pedestrians, or cyclists.
- §2.3.3 Reject vehicle if the side panels are perforated, any rivets are missing or loose, or corrosion is so bad as to weaken the panel.
- §2.3.4 Reject vehicle if the fenders are missing.
- §2.3.5 Reject vehicle if the exterior rub rails are missing or broken.
- §2.3.6 Reject vehicle if the rub rails are loose or if any rivet is missing.
- §2.3.7 Reject vehicle if one rub rail is not approximately at seat cushion height.

§2.4 Front and Rear Bumpers

- §2.4.1 Reject vehicle if the bumpers are loose, missing, or broken.
- §2.4.2 Reject vehicle if any torn portion protrudes so as to be hazardous to passengers, pedestrians, or cyclists.
- §2.4.3 Reject vehicle if the bumper design is other than the design provided by the original vehicle or body manufacturer.
- §2.4.4 Reject vehicle if any mounts are loose, missing, or broken.
- §2.4.5 Reject vehicle if there are any holes cut into the bumper. (Example: to provide a step.)

§2.5 Floor

§2.5.1 Reject vehicle if the floor is buckled or it is rusted or rotted sufficiently to cause a hazard or allow exhaust gases to enter the occupant compartment.

§2.5.2 Reject vehicle if the floor covering is cracked, curled, worn so as not to be waterproof at the seams, or presents a tripping hazard.

§2.5.3 Reject vehicle if the sub-floor is not at least 5/8 inch plywood.

§2.6 Body Colors

§2.6.1 Reject vehicle if the body is not painted national school bus glossy yellow. The hood may be a lusterless black.

§2.6.2 Reject vehicle if the bumpers are not a glossy black, unless painting is impracticable through use of rubber, reflective material or other devices.

§2.7 School Bus Signs and Lettering

§2.7.1 Reject vehicle if the School Bus sign is not displayed on the front and rear.

§2.7.2 Reject vehicle if the School Bus sign is not black on a yellow background.

§2.7.3 Reject vehicle if the School Bus sign is not as high as practical on a vertical plane.

§2.7.4 Reject vehicle if the School Bus sign lettering is not at least 8 inches high and 1.25 inches in width.

§2.7.5 Reject vehicle if lettering on the bus body is not black on a yellow background or white on a black background where a black background is permitted.

§2.7.6 Reject vehicle if the Emergency Door sign is not inscribed on the upper part of the door.

§2.7.7 Reject vehicle if the Emergency Door sign is not inscribed on both the inside and the outside in black or red letters at least 2 inches high.

§3 MIRRORS

§3.1 Interior Rear View Mirrors

§3.1.1 Reject vehicle if the rearview mirror is missing.

§3.1.2 Reject vehicle if the rearview mirror is cracked, broken or obscured.

§3.1.3 Reject vehicle if the rearview mirror will not maintain adjustment.

§3.2 Exterior Rear View Mirrors

§3.2.1 Reject vehicle if either the right or left mirror is missing.

§3.2.2 Reject vehicle if the mirrors are obstructed, do not provide a clear view of the highway to the rear, or do not provide a clear view of the front hood line to the ground and the bus sides in the front wheel and loading areas.

§3.2.3 Reject vehicle if the mirror mounts are insecure, loose, or protrude excessively.

§3.2.4 Reject vehicle if the glass is cracked, pitted, or clouded so as to obscure vision.

§3.2.5 Reject vehicle if the size of the mirror is less than 24 square inches on vehicles 81 inches wide or less.

§3.2.6 Reject vehicle if the rearview mirror cannot be adjusted or maintained in a set position.

§4 STOP LAMPS, ARMS, AND WARNINGS

§4.1 School Bus Stop and Warning Lamps

§4.1.1 School bus running lights must pass the Class D inspection.

§4.1.2 Reject vehicle if the lamps do not operate or do not alternate.

§4.1.3 Reject vehicle if the stop lamps are not red and the warning lamps are not amber. Roof mounted strobe lights may be red or white.

§4.1.4 Reject vehicle if the lamps are less than 5 inches in diameter.

§4.1.5 Reject vehicle if the lamps are not sealed beam type lamps.

§4.1.6 Reject vehicle if the manual switch is inoperable.

§4.1.7 Reject vehicle if the back-up alarm does not work, if the bus is so equipped.

§4.2 School Bus Stop Arms

§4.2.1 Reject vehicle if the stop arm fails to operate.

§4.2.2 Reject vehicle if the stop arm lamps fail to operate or fail to flash alternately.

§4.2.3 Reject vehicle if the stop arm lamps are not red.

§5 DOORS, WINDOWS AND EXITS

§5.1 Step Well (Entrance and Exit Steps)

§5.1.1 Reject vehicle if the step well is unsafe due to corrosion or is cluttered or blocked.

§5.1.2 Reject vehicle if the risers are loose.

§5.1.3 Reject vehicle if the anti-slip material is missing, loose, or is worn smooth.

§5.2 Service Door and Exit Door

§5.2.1 Reject vehicle if binding is evident, jamming occurs, or the remote control door malfunctions.

§5.2.2 Reject vehicle if the override device on a power-operated door does not operate or the control is not accessible to the driver.

§5.2.3 Reject vehicle if the door edge material is other than a flexible type.

§5.2.4 Reject vehicle if the strip seal along the bottom edge of the door is missing or torn.

§5.2.5 Reject vehicle if the door edge material is other than a flexible type.

§5.2.6 Reject vehicle if the sensitive edge does not operate.

§5.2.7 Reject vehicle if glass is missing or broken in any door panel.

§5.2.8 Reject vehicle if the glass in the door is not double paned.

§5.2.9 Reject vehicle if there is moisture inside the double paned glass.

§5.3 Emergency Door or Exit

§5.3.1 Reject vehicle if the passage is blocked or restricted.

§5.3.2 Reject vehicle if the aisle is less than 12 inches wide.

§5.3.3 Reject vehicle if the aisle is less than 32 inches wide on a handicapped bus.

§5.3.4 Reject vehicle if the release mechanism fails to function from both inside and outside, has an improper latch, or latches insecurely when closed.

- §5.3.5 Reject vehicle if the warning device fails to operate.
- §5.3.6 Reject vehicle if two methods of escape are not present; one of which is to be on the left side of the bus or to the rear of the vehicle.
- §5.3.7 Reject vehicle if the alternate exits are not marked, or the exit is not at least 32 inches wide.
- §5.3.8 Reject vehicle if the roof hatch is missing or inoperable on school buses manufactured after January 1998, or if an older vehicle is so equipped, if the roof hatch is inoperable.
- §5.3.9 Reject vehicle if the doors or exits are not as prescribed in the Maine Department of Education Uniform School Bus Standards.

§5.4 Side Windows

- §5.4.1 Reject the vehicle if the emergency and driver's window cannot be opened or closed readily.
- §5.4.2 Reject vehicle if the driver's side window and the first passenger's window on the right side of the bus is not made of double paned glass.
- §5.4.3 Reject vehicle if there is moisture inside the double paned glass.
- §5.4.4 Reject vehicle if a side window will not open with the catch released.
- §5.4.5 Reject vehicle if the side windows are other than safety glass AS-1, AS-2, AS-3, AS-10 and AS-11.
- §5.4.6 Reject vehicle if the side windows are broken, have exposed sharp edges, or if exposed edges are not banded.
- §5.4.7 Reject vehicle if the side or rear windows are tinted.

§6 SEATS AND INTERIOR

§6.1 Driver's Seat and Safety Belt

- §6.1.1 Reject vehicle if the driver's seat is loose, the frame is broken, the springs are exposed or broken, or if the cover material is removed.
- §6.1.2 Reject vehicle if the driver's seat adjusting mechanism does not operate or will not lock in position.

- §6.1.3 Reject vehicle if the safety belt is not present for the driver as originally manufactured.
- §6.1.4 Reject vehicle if the safety belt has torn webbing, is insecurely mounted or the buckle is inoperable.
- §6.1.5 Reject vehicle if the retractors fail to retract and or allow the safety belt to extend to its maximum length, or if they are inoperable or damaged.

§6.2 Passenger Seats

- §6.2.1 Reject vehicle if a seat frame is loose or broken.
- §6.2.2 Reject vehicle if a seat frame does not face the front or rear.
- §6.2.3 Reject vehicle if the seat covering is torn so that the seat base or springs are exposed or if they are torn more than 3 inches.
- §6.2.4 Reject vehicle if the seat backs are missing or loose.
- §6.2.5 Reject vehicle if the energy absorbing material on the seat backs is missing in an area more than 3 inches square and more than ¼ inch deep.
- §6.2.6 Reject vehicle if the safety belts (if originally equipped) are missing, have torn webbing, are insecurely mounted or if the buckle is inoperable.

§6.3 Interior

- §6.3.1 Reject vehicle if the stanchions are loose or support bolts are missing.
- §6.3.2 Reject vehicle if the guard rails are loose or support bolts are missing.
- §6.3.3 Reject vehicle if the service entrance handrail is missing or loose, or if it fails the nut-drawstring test or if the handrail is not in compliance with a manufacturer's recall.
- §6.3.4 Reject vehicle if any interior metal is torn and or corroded so as to create a hazard.
- §6.3.5 Reject vehicle if the retaining barrier is missing or not placed forward of any front seat.

§7 INTERIOR EQUIPMENT

- §7.1 Windshield Defroster**

§7.1.1 Reject vehicle if the fan fails to operate.

§7.1.2 Reject vehicle if there is no airflow.

§7.2 Interior Heaters

§7.2.1 Reject vehicle if the fan fails to operate.

§7.2.2 Reject vehicle if the interior heater is damaged.

§7.2.3 Reject vehicle if the interior heater does not produce heat, or if there is an insufficient volume of air.

§7.3 Dash Instruments and Indicators

§7.3.1 Reject vehicle if the horn activating device is not readily accessible to the driver, the button position is not identified, or the device does not function as intended.

§7.3.2 Reject vehicle if the horn is not clearly audible or does not operate.

§7.3.3 Reject vehicle if the speedometer fails to operate.

§7.3.4 Reject vehicle if the brake warning indicator, high beam indicator, turn signal indicator or hazard indicator lamps fail to operate.

§7.3.5 Reject vehicle if the following gauges or indicators, if present, fail to operate: water temperature gauge, oil pressure gauge, ammeter, fuel gauge, vacuum gauge and air pressure gauge.

§8 ACCESSORIES

§8.1 Fire Extinguisher

§8.1.1 Reject vehicle if the fire extinguisher is missing or badly damaged.

§8.1.2 Reject vehicle if accessibility is obstructed.

§8.1.3 Reject vehicle if the rating is less than 2A10 B:C and at least 5 pounds.

§8.1.4 Reject vehicle if the mount is insecure or if the extinguisher is not in a quick release holder in view of the driver.

§8.1.5 Reject vehicle if the seal (if not equipped with a gauge) is broken or not in place.

- §8.1.6 Reject vehicle if the charge reading is less than the minimum.
- §8.1.7 Reject vehicle if the extinguisher is not Fire Marshall (FM) or Underwriters Lab (UL) approved and labeled, if it has no nameplate or instructions, or does not have a current inspection tag showing the date of inspection and the inspector's initials.
- §8.1.8 Reject vehicle if the gauge has moved to recharge or out of the "normal" range.
- §8.1.9 Reject vehicle if the powder cannot be felt shifting.
- §8.1.10 Reject vehicle if the nozzle is deteriorated, clogged or corroded through.

§8.2 Hazard Warning Kit

- §8.2.1 Reject vehicle if the kit is missing or the container is not secure.
- §8.2.2 Reject vehicle if the reflectors are missing or the kit does not contain three reflectors.
- §8.2.3 Reject vehicle if the kit does not have advanced warning triangles with stands that are at least 7 inches high, with sides 17 to 22 inches long, and reflectors or electric lanterns.
- §8.2.4 Reject vehicle if it does not have 2 chockblocks.

§8.3 First Aid and BioHazard Kits

- §8.3.1 Reject vehicle if either kit is missing
- §8.3.2 Reject vehicle if the mount is not secure or not in view of the driver.

§9 MISCELLANEOUS PROVISIONS

§9.1 Auxiliary Compartments

- §9.1.1 Reject vehicle if access doors, such as for air conditioning, spare tires, etc., will not open or close, a latch will not hold, or if the hinges are damaged.
- §9.1.2 Reject vehicle if the baggage doors will not open or close, the latch will not hold, or if the hinges are damaged.
- §9.1.3 Reject vehicle if the counter-balance cables on baggage doors are frayed.

§9.1.4 Reject vehicle if the overhead shelf is insecurely mounted, the retaining components are missing, broken or mounted insecurely, or if the energy absorbing material on the shelves is missing.

§9.2 Passenger Vehicles for the Physically Disabled

§9.2.1 Reject vehicle if the ramp (if equipped) is insecurely attached or if the fasteners are missing, broken, or inoperable.

§9.2.2 Reject vehicle if the power lift (if equipped) is inoperable or insecurely attached.

§9.2.3 Reject vehicle if the power controls are inoperable or the lift does not respond to the controls.

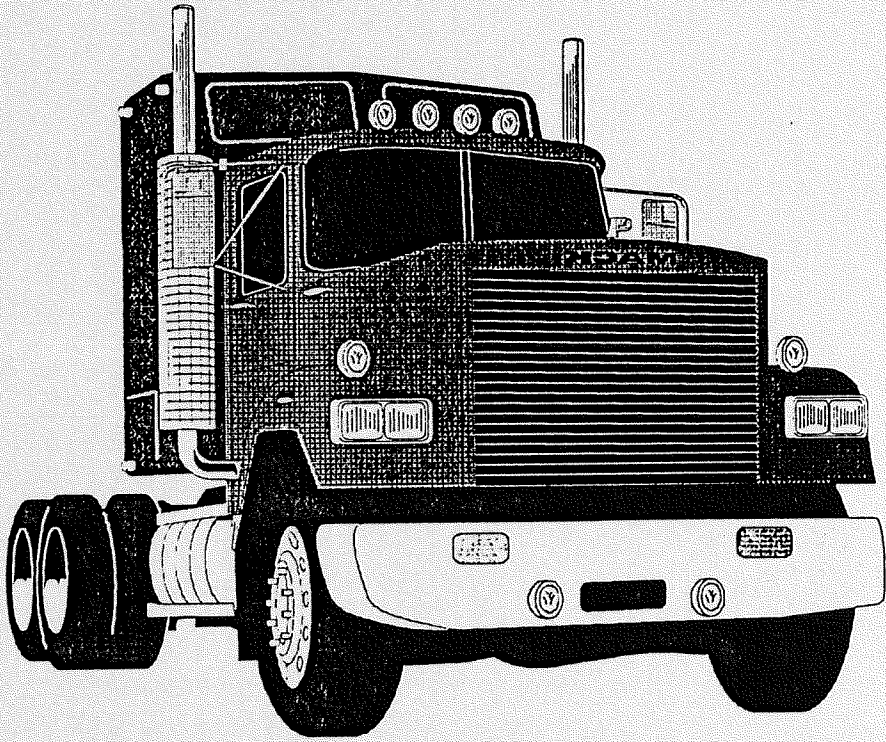
§9.2.4 Reject vehicle if the wheelchair holddowns are inoperable, the pins are worn, or if the cables are broken or frayed.

§9.2.5 Reject vehicle if the safety belts are missing for each seat position or buckles are inoperable or frayed.

§9.2.5 Reject vehicle if the lift is not operable manually if there is a loss of power.

Commercial Vehicle Inspection

Unit 5



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent data collection practices and the use of advanced analytical techniques to derive meaningful insights from the data.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and analysis processes, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that the organization's data remains reliable and secure.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that the data management processes remain effective and aligned with the organization's goals.

UNIT 5: CLASS D INSPECTION
COMMERCIAL VEHICLE

§1 BRAKES - GENERAL

§1.1 Anti-Lock Braking Systems

§1.1.1 Reject vehicle if the warning light fails to illuminate during the cycle or self-check, or a self-diagnostic error is indicated.

§1.1.2 Reject vehicle if the ABS braking system is disconnected or disabled.

§1.2 General For All Brake Systems

§1.2.1 Reject vehicle if there is an absence of braking action on any axle required to have brakes (such as missing brakes; brake shoes failing to move upon application of a wedge, S-cam, or disc brake.)

§1.2.2 Reject vehicle if there are missing, loose or broken mechanical components including but not limited to: shoes, lining, pads, springs, anchor pins, spiders, cam rollers, clevis pins and clevises, push-rods, and air chamber mounting bolts.

§1.2.3 Reject vehicle if there are loose brake components including air chambers, spiders, s cam bushings, and cam shaft support brackets.

§1.2.4 Reject vehicle if there are any audible air leaks at the brake chamber, air lines, or connections.

§1.2.5 Reject vehicle if any brake is past the readjustment limit. Stroke shall be measured with engine off and reservoir pressure of 90 to 100 psi with brakes fully applied. The maximum strokes at which brakes should be readjusted are given below.

§1.2.6 Reject vehicle if there is a missing brake on any axle required to have brakes.

§1.2.7 Reject vehicle if there is a mismatch across any axle of air chamber size or slack adjuster length

CLAMP-TYPE BRAKE CHAMBER DATA
(dimensions in inches)

Type	Outside Diameter	Rated Stroke	Maximum Stroke at Which Brakes Must Be Adjusted
6	4 ½	1.75	1 ¼
9	5 ¼	1.75	1 3/8
12	5 11/16	1.75	1 3/8
16	6 3/8	2.25	1 ¾
20	6 25/32	2.25	1 ¾
24	7 7/32	2.25	1 ¾
30	8 3/32	2.50	2
36	9	3.00	2 ¼

“LONG STROKE” CLAMP-TYPE BRAKE CHAMBER DATA
(Dimensions in inches)

Type	Outside Diameter	Rated Stroke	Maximum Stroke at Which Brakes Must be Adjusted
16	6 3/8	2.50	2.0 ID Tags
20	6 25/32	2.50	2.0 ID Tags
24	7 7/32	2.50	2.0 ID Tags
24	7 7/32	3.00	2.5 ID Tags
30	8 3/32	3.00	2.5 ID Tags

TIE ROD STYLE PISTON BRAKE CHAMBER DATA
(Dimensions in inches)

Size	Outside Diameter	Maximum Stroke at Which Brakes Must be Adjusted
30	6 ½	2 ½

BOLT TYPE BRAKE CHAMBER DATA
(Dimensions in inches)

Type	Outside Diameter	Maximum Stroke at Which Brakes Must be Adjusted
A	6 15/16	1 3/8
B	9 3/16	1 3/4
C	8 1/16	1 3/4
D	5 1/4	1 1/4
E	6 3/16	1 3/8
F	11	2 1/4
G	9 7/8	2

ROTOCHAMBER DATA
(dimensions in inches)

Type	Outside Diameter	Maximum Stroke at Which Brakes Must be Adjusted
9	4 9/32	1 1/2
12	4 13/16	1 1/2
16	5 13/32	2
20	5 15/16	2
24	6 13/32	2
30	7 1/16	2 1/4
36	7 5/8	2 3/4
50	8 7/8	3

§1.3 Wedge Brakes

§1.3.1 Reject vehicle if the wheel rotates with the service brake applied.

§1.3.2 Reject vehicle if the shoe travel exceeds 1/16 inch.

§1.3.3 Reject vehicle if the shoe fails to move on application of the service brakes.

§1.4 Brake Linings or Pads

§1.4.1 Reject vehicle if the lining or pad is not firmly attached to the shoe.

- §1.4.2 Reject vehicle if the linings or pads are contaminated with oil, grease, or brake fluid.
- §1.4.3 Reject vehicle if, on a non-steering axle, the lining thickness is less than ¼ inch at the shoe center for air drum brakes; 1/16 or less at the shoe center for hydraulic and electric drum brakes; and less than 1/8 inch for air disc brakes.
- §1.4.4 Reject vehicle if, on a steering axle, the lining thickness is less than ¼ 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 or electric brakes.
- §1.5 Brake Drums and Rotors**
- §1.5.1 Reject vehicle if there are any external cracks or if there are cracks that open upon brake application. Do not confuse short hairline heat cracks with flexural cracks.
- §1.5.2 Reject vehicle if any portion of the drum or rotor is missing or in danger of falling away.
- §1.5.3 Reject vehicle if any drum or rotor is worn beyond the manufacturer's specifications.
- §1.6 Emergency/Parking Brake System**
- §1.6.1 Reject vehicle if any spring operated brake(s) on a vehicle or combination is not applied upon actuation of the emergency/parking brake control, including a drive line hand controlled parking brakes.
- §1.6.2 Reject vehicle if the brake fails to hold.
- §1.6.3 Reject vehicle if the brake fails to fully apply or release.
- §1.6.4 Reject vehicle if the primary emergency/parking brake system is inoperative or if it is not as originally equipped. The system must be held in the applied position by energy other than fluid pressure, air pressure or electric energy.
- §1.6.5 Reject vehicle if the indicator lamp (if so equipped) fails to illuminate.
- §1.6.6 Reject vehicle if the mechanism binds or is inoperable.
- §1.6.7 Reject vehicle if the cables are frayed, broken, or inoperable.
- §1.6.8 Reject vehicle if the lining (if equipped) is less than 1/16 inch above the shoe on an external clamping type.

§2 HYDRAULIC BRAKES

§2.1 General

- §2.1.1 Reject vehicle if the master cylinder is leaking, loose, or the fluid level is below ½ inch from the top or below the add or fill line.
- §2.1.2 Reject vehicle if the cap is missing or loose, if the vent holes are plugged, or if the gasket is missing or damaged.
- §2.1.3 Reject vehicle if the pedal travel from its free height to its depressed height is more than 65% of this total or does not meet the manufacturer's specifications.
- §2.1.4 Reject vehicle if the power assist unit fails to operate.
- §2.1.5 Reject vehicle if the brake hose(s) seep or swell under application of pressure.
- §2.1.6 Reject vehicle if the check valve is missing or inoperative.
- §2.1.7 Reject vehicle if there is any visually observed leaking hydraulic fluid in the brake system.
- §2.1.8 Reject vehicle if the hydraulic hose(s) are abraded (chafed) through the outer cover-to-fabric layer.
- §2.1.9 Reject vehicle if the fluid lines or connections are leaking, restricted, crimped, cracked, or broken.
- §2.1.10 Reject vehicle if the brake failure light or low fluid warning light are on or are inoperative.
- §2.1.11 Reject vehicle if the hydraulic pump drive belt is loose, cracked, slipping, or missing.

§2.2 Hydraulic System Hoses and Tubing

- §2.2.1 Reject vehicle if any line or hose are leaking, welded, cracked, flattened, insecurely mounted, or have restricted sections.
- §2.2.2 Reject vehicle if repairs to lines or hoses have been made with anything other than steel tubing.
- §2.2.3 Reject vehicle if the connections are anything other than double flared.

- §2.2.4 Reject vehicle if there is a hose with any damage extending through the outer reinforcement ply.
- §2.2.5 Reject vehicle if a hose is severely chafed. If there is minor chafing, the hose should be re-routed so as to prevent further damage.
- §2.2.6 Reject vehicle if any hose is routed in such a manner as to cause damage.
- §2.2.7 Reject vehicle if hoses, lines, and fittings do not conform to manufacturer's original equipment standards.

§2.3 Vacuum Systems

- §2.3.1 Reject vehicle if the vacuum system has insufficient vacuum reserve to permit two full brake application after the engine is shut off.
- §2.3.2 Reject vehicle if a required low vacuum warning device is missing or inoperative.
- §2.3.3 Reject vehicle if the lines or hoses are collapsed, broken, chafed, insecurely mounted, or less than 1.5 inches from any part of the exhaust system.
- §2.3.4 Reject vehicle if the system is leaking.
- §2.3.5 Reject vehicle if the clamps are missing, loose, or broken.
- §2.3.6 Reject vehicle if any tank is missing, loose, damaged or leaking.
- §2.3.7 Reject vehicle if the vacuum pump is loose.
- §2.3.8 Reject vehicle if the vacuum pump drive belt is loose, cracked, excessively worn, or contaminated with oil.
- §2.3.9 Reject vehicle if the vacuum pump is unable to achieve and maintain 18 inches of vacuum.

§2.4 Hydraulic System with Hydraulic Assist

- §2.4.1 Reject vehicle if no movement in the pedal is detected.
- §2.4.2 Reject vehicle if the warning indicator lamp is inoperable when the power steering pump is stopped.
- §2.4.3 Reject vehicle if the pump reservoir is below the indicated "ADD" mark.
- §2.4.4 Reject vehicle if any lines or hoses are leaking.

- §2.4.5 Reject vehicle if the belt is loose, cracked, or excessively worn.
- §2.4.6 Reject vehicle if the electric motor fails to operate when the engine is not running.

§2.5 Air Assist Hydraulic Brake System

- §2.5.1 Air assist components of air assist hydraulic brake system are inspected as in air brake section of this manual.

§3 ELECTRIC BRAKES

§3.1 General

- §3.1.1 Reject vehicle if there is an absence of braking action on any wheel required to have brakes.
- §3.1.2 Reject vehicle if the breakaway braking device is missing or inoperable.

§4 AIR SYSTEMS

§4.1 Compressed Air Reserve

- §4.1.1 Reject vehicle if the reservoir pressure is lowered more than 18 psi after one full brake application after the engine is shut down.

§4.2 Air Reservoir and Valves

- §4.2.1 Reject vehicle if the check valve(s) are inoperable or missing.
- §4.2.2 Reject vehicle if the check valves do not close.
- §4.2.3 Reject vehicle if the air is not quickly exhausted through the exhaust port of the quick-release valve when the brakes are released.
- §4.2.4 Reject vehicle if any valve mounting is insecure or if the bracket is broken or loose.
- §4.2.5 Reject vehicle if the air is not quickly exhausted through the exhaust port of the relay valve when the brakes are released.
- §4.2.6 Reject vehicle if the tractor-protection control valve does not pop out or close at or above 20 psi, retaining 20 psi or greater of air in the power unit system.
- §4.2.7 Reject vehicle if air leakage is still noticeable at the emergency glad hand after the control valve has operated.

§4.3 Air Compressor

§4.3.1 Reject vehicle if the air compressor mounting has loose, cracked, broken, or missing bolts, brackets, braces, or adapters.

§4.3.2 Reject vehicle if compressor air intake cleaner is clogged enough to prevent proper air intake.

§4.3.3 Reject vehicle if the air compressor drive belts are worn frayed, or loose.

§4.3.4 Reject vehicle if the air compressor pulleys are cracked, broken, or loose, or are bent or damaged so as to cause belt loss.

§4.3.5 Reject vehicle if any air tank mounting device such as straps, brackets or other hardware, is broken, missing, or loose.

§4.4 Air Pressure Build Up Time

§4.4.1 Test: With the trailer uncoupled and tires chocked, fully charge the system to the governor cut-out pressure. Make one full brake application and note the air pressure reading on the gauge. Continue to reduce the air pressure by moderate brake applications to at least 10 PSI below the governor cut-in pressure. Release the brake and run the engine at the manufacturer's recommended rpm and determine the time required to increase the air pressure from the level achieved after one brake application to the governor cut-out pressure.

§4.4.2 Reject vehicle if the time required to build pressure from the level after one brake application to governor cut-out pressure is more than 30 seconds.

§4.5 Air Pressure Governor

§4.5.1 Test: With the trailer line uncoupled and tires chocked, fully charge the system to its maximum capacity. Observe the gauge pressure and determine if the governor has a cut-out. With the engine running, make a series of brake applications and observe the gauge pressure to determine when the governor cuts in and out.

§4.5.2 Reject vehicle if the governor cut-out pressure is not between 115 and 135 psi.

§4.5.3 Reject vehicle if the governor cut-in pressure is below 80 psi.

§4.6 Air Pressure Warning Device

- §4.6.1 Test: With the air system fully charged, reduce the air pressure by moderate brake applications or by opening the drain cocks on the system. Observe the pressure at which the visual or audible warning device comes on.
- §4.6.2 Reject vehicle if the air pressure gauge does not function properly. If vehicle was originally equipped with dual gauges, both must work.
- §4.6.3 Reject vehicle if the air pressure warning device does not activate before pressure is lowered to 55 PSI or ½ of the governor cut-out pressure, whichever is less.
- §4.6.4 Reject vehicle if the air pressure warning device does not continuously operate below activation pressure.
- §4.6.5 Reject vehicle if either the visual or audible warning device fails to operate, if vehicle was originally equipped with both visual and audible devices.
- §4.7 Air Pressure Leakage**
- §4.7 Test: With the air system fully charged and the trailer lines disconnected, stop the engine. With the brakes released, observe the pressure drop in one minute. After determining the pressure loss with the brakes released, make a full brake application and observe the pressure drop for one minute while the brakes are fully applied and the engine is off.
- §4.7.1 Reject vehicle if the leakage rate with the brakes released in one minute exceeds 2 psi for single vehicles.
- §4.7.2 Reject vehicle if the leakage rate with full brake application in one minute exceeds 3 psi for single vehicles.
- §4.8 Air Pressure Reserve**
- §4.8.1 Test: With the air system fully charged, stop the engine and note the air pressure. Make one full brake application and then observe the pressure drop.
- §4.8.2 Reject vehicle if the pressure drop is more than 20% of the first reading before the brakes are applied.
- §4.9 Air Brake Components**
- §4.9.1 Reject vehicle if the glad hands are damaged, cracked, corroded, insecurely mounted, or if the seal are broken.

- §4.9.2 Reject vehicle if the air lines are abraded to the first body ply cord, or if they are insecure, flattened, damaged by heat, cracked, broken, kinked, or leaking.
- §4.9.3 Reject vehicle if the air lines are within 2 inches of the exhaust and there is not a heat shield.
- §4.9.4 Reject vehicle if the air lines do not meet OEM design standards.
- §4.9.5 Reject vehicle if the braid is exposed at the first layer on a braided line.
- §4.9.6 Reject vehicle if the air line connectors do not meet OEM design standards.
- §4.9.7 Reject vehicle if air tanks are missing, leaking, loose, or damaged so as to cause possible failure.
- §4.9.8 Reject vehicle if air tank brackets and straps are missing, cracked, broken, , or if an inferior substitute has been used.
- §4.9.9 Reject vehicle if drain cocks are missing, loose, leaking, inoperable, or do not meet OEM design standards.
- §4.9.10 Reject vehicle if the moisture ejectors (manual or automatic) are inoperable or not present on each tank.
- §4.9.11 Reject vehicle if hoses are improperly repaired. (i.e. a splice made by sliding two hose ends over a piece of tubing and clamping the hose to the tube.)
- §4.9.12 Reject vehicle if brake tubing (plastic, copper or steel) is used in a frame-to-axle connection, unless it is factory original.
- §4.9.13 Reject vehicle if the brake tubing is not securely attached to the frame and routed in such a way as to prevent damage to the line.
- §4.10 Brake Mechanical Components**
- §4.10.1 Reject vehicle if the clevis pins are excessively worn, a cotter pin is missing, or an inferior substitute, such as a nut and bolt, has been used.
- §4.10.2 Reject vehicle if the clevis yokes are excessively worn, cracked, broken, or bent.
- §4.10.3 Reject vehicle if the pushrods are bent, broken, or misaligned.
- §4.10.4 Reject vehicle if the slack adjusters are bent, broken, excessively worn, seized, or function improperly.

- §4.10.5 Reject vehicle if the slack adjuster nut self-locking sleeve is seized or inoperable.
- §4.10.6 Reject vehicle if the pushrod clevis pin hole setting is not the same hole on the same axle, and the distance from the center of the cam to the hole is not the same on the same axle.
- §4.10.7 Reject vehicle if the return springs are missing, stretched, or do not hold the lower roller to the cam.
- §4.10.8 Reject vehicle if the rollers are missing, have flat spots, or are the wrong size.
- §4.10.9 Reject vehicle if the spiders are bent, loose, or if bolts are missing.
- §4.11 Self-Adjusting Slack Adjusters**
- §4.11.1 Reject vehicle if the automatic brake adjusters and brake adjustment indicators are missing or inoperative.
- §4.11.2 Reject vehicle if the indicators are not clearly visible.
- §4.11.3 Reject vehicle if the adjustment is not within the manufacturer's specifications.
- §4.12 Brake Camshafts**
- §4.12.1 Reject vehicle if the bushings on the camshaft are worn more than 0.085 inch. (2.1 mm)
- §4.13 Disc Air Brakes**
- §4.13.1 Reject vehicle if cracks on the surface extend to the outer edges of the rotor.
- §4.13.2 Reject vehicle if the rotor is damaged or two or more grooves are worn beyond .090 inch (2.25 mm.)
- §4.13.3 Reject vehicle if the calipers are loose or seized.
- §4.13.4 Reject vehicle if the anchor plates are loose or the bolts are missing.
- §4.13.5 Reject vehicle if the pads are damaged, contaminated or are worn.
- §4.13.6 Reject vehicle if the adjustment cannot be made to meet the manufacturer's specifications.
- §4.13.7 Reject vehicle if the wheel seals are leaking. Slight seepage is not a cause for rejection.

§4.13.8 Reject vehicle if the wheel rotates when the brakes are applied.

§5 **COUPLING DEVICES**

§5.1 **Fifth Wheels**

§5.1.1 Mounting to Frame

Reject vehicle if

- a. any fasteners are missing or ineffective. (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.)
- b. there is any movement between mounting components.
- c. any mounting angle iron is cracked or broken.

§5.1.2 Mounting Plates and Pivot Brackets

Reject vehicle if

- a. any fasteners are missing or ineffective.
- b. any welds or parent metal are cracked.
- c. there is more than 3/8 inch horizontal movement between pivot bracket pin and bracket.
- d. pivot bracket pin is missing or not secured.

§5.1.3 Sliders

Reject vehicle if

- a. any latching fasteners are missing or ineffective.
- b. any fore or aft stops are missing or ineffective.
- c. there is more than 3/8 inch movement between the slider bracket and the slider base.
- d. any slider component is cracked in the parent metal or a weld.

§5.1.4 Lower Coupler

Reject vehicle if

- a. the horizontal movement between the upper and lower fifth wheel halves exceeds 1/2 inch when coupled.
- b. the operating handle is not in the closed or locked position when coupled.
- c. the kingpin is not properly engaged when coupled.

- d. there is separation between the upper and lower coupler, allowing light to show through from side to side when coupled.
- e. there are any cracks in the fifth wheel plate.
- f. the locking mechanism parts are missing, broken or deformed to the extent that the kingpin is not securely held.
- g. the locking mechanism is severely rusted and not properly lubricated.

§5.2. Pintle Hooks

§5.2.1 Mounting to Frame

Reject vehicle if

- a. there are any missing or ineffective fasteners.
- b. mounting surface cracks extend from the point of attachment. (For example, cracks in the frame at the mounting bolt holes.)
- c. the mounting is loose.
- d. the frame cross member providing the pintle hook attachment is cracked.

§5.2.2 Integrity

Reject vehicle if

- a. there are cracks anywhere in the pintle hook assembly.
- b. there are any welded repairs to the pintle hook.
- c. any part of the horn section is reduced by more than 20%.
- d. the latch is insecure.

§5.3 Drawbar/Towbar Eye

§5.3.1 Mounting

Reject vehicle if

- a. there are any cracks in the attachment welds.
- b. there are any missing or ineffective fasteners.

§5.3.2 Integrity

Reject vehicle if

- a. there are any cracks.

- b. any part of the eye is reduced by more than 20%.

§5.4 Drawbar/Towbar Tongue

§5.4.1 Slider (power or manual)

Reject vehicle if

- a. the latching mechanism is ineffective.
- b. the stop is missing or ineffective.
- c. there is movement of more than ¼ inch between the slider and housing.
- d. any air or hydraulic cylinders, hoses or chambers are leaking.

§5.4.2 Integrity

Reject vehicle if

- a. there are any cracks.
- b. there is movement of ¼ inch or more between the subframe and the drawbar at the point of attachment.

§5.5 Safety Devices

§5.5.1 Reject vehicle if the safety devices are missing.

§5.5.2 Reject vehicle if the safety devices are unattached or incapable of secure attachment.

§5.5.3 Chains and hooks

Reject vehicle if

- a. there is wear to the extent of a measurable reduction in link cross section.
- b. there are improper repairs, including welding, wire, small bolts, rope, tape.
- c. the links are bent, stretched, twisted, cut, or in any way distorted.

§5.5.4 Cable

Reject vehicle if

- a. cable is kinked or there are broken cable strands.
- b. there are improper clamps or clamping. The saddle clamp should always be on the live side of the cable.

§5.6 Saddle Mounts

§5.6.1 Method of Attachment

Reject vehicle if

- a. any fasteners are missing or ineffective.
- b. any mountings are loose.
- c. there are any cracks or breaks in a stress or load bearing member.
- d. the horizontal movement between upper and lower saddle mount halves exceeds ¼ inch.

§6 EXHAUST SYSTEM

§6.1 Muffler

§6.1.1 Reject vehicle if it does not have a muffler. Do not reject if the vehicle was manufactured without a muffler, but in accordance with the Federal Motor Vehicle Safety Standards.

§6.2 Exhaust System Leaks

§6.2.1 Reject vehicle if there are any exhaust system leaks at any point forward of or directly below the driver/sleeper compartment.

§6.2.2 Bus Exhaust Systems

Reject a gasoline powered bus exhaust system that leaks or discharges to the atmosphere forward of a point 6 inches forward of the rearmost part of the bus.

Reject a non-gasoline powered bus exhaust system that leaks or discharges to the atmosphere forward of a point in excess of 15 inches forward of the rearmost part of the bus or forward of a door or window designed to be opened, except for emergency exits.

§6.2.3 Reject vehicle if any part of the exhaust system of any motor vehicle is 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, including but not limited to, excessive oil leaking from the engine, transmission, or rear end.

§7 FUEL SYSTEM

§7.1 Reject vehicle if the fuel system has a visible leak at any point.

§7.2 Reject vehicle if the fuel tank filler cap is missing.

§7.3 Reject vehicle if the fuel tank is not securely attached to the motor vehicle because of loose, broken, or missing mounting bolts or brackets. (Some fuel tanks use springs or rubber bushings that permit movement.)

§8 LIGHTING DEVICES

§8.1 General Lamp Inspection Requirements

§8.1.1 Reject vehicle if any of the lighting devices required by law are inoperable or missing. These include reflex reflectors, headlamps, taillamps, backing lights, plate lights, signal lights, marker lights, side marker lights and fog or driving lights.

§8.1.2 Reject vehicle if any bulb in any lamp required by law or regulation fails to function properly.

§8.1.3 Reject vehicle if any circuit fails to light the proper filaments for the different switch positions.

§8.1.4 Reject vehicle if any lens is broken or missing.

§8.1.5 Reject vehicle if any lamp is not securely fastened to the vehicle.

§8.1.6 Reject vehicle if any lamp shows a beam of color contrary to law or regulation.

§8.1.7 Reject vehicle if any lamp or lens is turned or inclined so that its light is not properly directed.

§8.1.8 Reject vehicle if any lens or reflex reflector is broken or missing.

§8.2 Headlamps

§8.2.1 Reject vehicle if the headlamp has dirt or moisture inside, or has obvious discoloration, contamination, or reflector deterioration.

§8.2.2 Reject vehicle if any headlamp lens is partially covered by any material which reduces the light output of the lamp.

§8.2.3 Reject vehicle if the beam indicator lamps do not indicate the proper beam to the driver.

§8.2.4 Reject vehicle if the headlamps are located less than 22 or more than 54 inches above the level surface upon which the vehicle stands. Vehicle with snowplows attached are exempt from this requirement.

§8.2.5 Reject vehicle if the headlamps exceed 150,000 candlepower. Quartz halogen lamps that are within the power limits will be marked "DOT" or "SAE."

§8.3 Headlamp Aiming by Visual Screen Method

§8.3.1 Headlamp aiming by the screen method requires a level area in a darkened location, sufficient for the vehicle and an additional 25 feet from the lamps to the screen. See Appendix 1 for additional information.

§8.3.2 Type 1 Sealed Beam Headlamps

a. Beam Setting

Type 1 headlamps are inspected and aimed on the upper beam

b. Aim Inspection Limits

Vertical Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches above or below the center line

Horizontal Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches left or 4 inches right of straight ahead

§8.3.3 Type 2 Sealed Beam Headlamps

a. Beam Setting

Type 2 headlamps are inspected on the lower beam

b. Aim Inspection Limits

Vertical Aim: Reject vehicle if the center of the high intensity zone is above the horizontal line or more than 4 inches below the horizontal line

Horizontal Aim: Reject vehicle if the center of the high intensity zone is more than 4 inches right or left of the vertical line

§8.4 Headlamp Aiming by Mechanical Method

§8.4.1 Type 1 Sealed Beam Headlamps

a. Beam Setting

Type 1 headlamps are inspected and aimed on the upper beam

b. Aim Inspection Limits

Vertical Aim: Reject vehicle if the graduation is higher than $\frac{1}{2}^\circ$ down or lower than $3\frac{1}{2}^\circ$ down. Mechanical aimer should be set at 2° down when re-aiming.

Horizontal Aim: Reject vehicle if the graduation is more than 4 ° to the right or left of straight ahead. Mechanical aimer should be set at 0 (straight ahead) when re-aiming.

§8.4.2 **Type 2 Sealed Beam Headlamps**

a. **Beam Setting**

Type 2 headlamps are inspected on the lower beam

b. **Aim Inspection Limits**

Vertical Aim: Reject vehicle if the graduation is higher than ½ ° down or lower than 3 ½ ° down when re-aiming.

Horizontal Aim: Reject vehicle if the graduation is more than 4 ° to the right or at all to the left.

§8.4.3 Some new vehicles are equipped with headlights that do not have aiming pads or are so designed that traditional headlight aiming equipment cannot be used. If the station's equipment is not capable of testing the headlight aim of a customer's vehicle, the inspection mechanic is incapable of performing an inspection on that vehicle. Failure to check for proper headlight aim is a violation of the inspection regulations.

§8.5 **Turn Signal System**

§8.5.1 Reject vehicle if the signals are missing or fail to operate in any vehicle that is provided with turn signals as factory equipment.

§8.5.2 Reject vehicle if the signal lamp lens is broken or missing.

§8.5.3 Reject vehicle if the signal lamp lens is not white or amber to the front and red to amber to the rear. Amber rear turn signals may not be co-joined with parking or marker lights so as to be steadily illuminated.

§8.5.4 Reject vehicle if the signal lamp wiring is broken, rubbed bare, or shows evidence of burning or short circuiting.

§8.5.5 Reject vehicle if the electrical connections are not tight and secure, or show signs of excessive corrosion, or if bare wires are exposed on the connection terminals.

§8.5.6 Reject vehicle if the signal lamp housing is not securely fastened.

§8.5.7 Reject vehicle if the proper signal lamps fail to operate with each throw of the switch.

§8.5.8 Reject vehicle if the vehicle is so constructed or loaded so as to prevent the operator from making a hand or arm signal if such vehicle is not equipped with an approved type of signaling device.

§8.5.9 Reject vehicle if the signal lamp operating unit is not functioning properly.

§8.5.10 Reject vehicle if the signal lamp self-canceling mechanism fails to function properly.

§8.6 Stop Lamps

§8.6.1 Reject vehicle if the lamps do not go on with slight pressure on the brake.

§8.6.2 Reject vehicle if the lamps do not emit a red light.

§8.6.3 Reject vehicle if a lens is broken or is not red.

§8.6.4 Reject vehicle if the lamp housing is not securely fastened.

§8.7 Wiring and Switches

§8.7.1 Reject vehicle if the switches are not in good condition or are not functioning properly.

§8.7.2 Reject vehicle if the wiring is in poor condition, is improperly installed, or is so located as to incur damage.

§8.7.3 Reject vehicle if any connection is loose or shows signs of excessive corrosion.

§8.8 Rear Lamps, License Plate Lamps, and Rear Lamp Combinations

§8.8.1 Reject vehicle if the tail light bulbs do not produce sufficient light so as to be visible from a distance of 100 feet to the rear.

§8.8.2 Reject vehicle if all the tail lights do not produce a red light.

§8.8.3 Reject vehicle if the tail lights are broken, missing, discolored, or do not fit properly.

§8.8.4 Reject vehicle if the lamps are not securely mounted in the center or to the left of the axis.

§8.8.5 Reject vehicle if the lamps do not produce a steady light to the rear with the brakes applied.

- §8.8.6 Reject vehicle if the license plate light bulbs do not produce sufficient steady white light to illuminate the entire rear license plate from a distance of 50 feet to the rear.
- §8.8.7 Reject vehicle if the lamp housing is not securely fastened.
- §8.8.8 Reject vehicle if all tail and rear plate lights do not operate properly in all switch positions.
- §8.8.9 Reject vehicle if temporary repairs are made with colored tape.

§8.9 Reflectors

- §8.9.1 Reject vehicle if the vehicle is not equipped with at least one adequate reflector securely attached to the rear thereof. The reflector may be part of the rear lamp. Class D vehicles in commerce must meet the requirements of FMCSR §393.11. All other Class D vehicles must have all the originally manufactured equipment.
- §8.9.2 Reject vehicle if the reflectors do not have red lenses.
- §8.9.3 Reject vehicle if any lens is broken.
- §8.9.4 Reject vehicle if the reflectors are inadequate to reflect at night on an unlighted highway for at least 200 feet from the lawful high beamed headlight of a vehicle approaching from the rear.
- §8.9.5 Retroreflective sheeting may be used in place of an array of reflectors.

§9 SAFE LOADING

- §9.1 Reject vehicle if a part(s) of the vehicle or the condition of loading is such that the spare tire or any part of the load or dunnage can fall onto the roadway.
- §9.2 Reject vehicle if it does not have a front-end structure or equivalent device as required to protect against shifting cargo.

§10 STEERING MECHANISM

§10.1 Welds

- §10.1.1 Reject vehicle if any steering component has been repaired by welding.

§10.2 Steering Wheel Free Play

- §10.2.1 Reject vehicle if the play exceeds the following. On vehicles with power steering, the engine must be running.

Steering Wheel Diameter	Manual Steering System	Power Steering System
16"	2"	4 1/2"
18"	2 1/4"	4 3/4"
20"	2 1/2"	5 1/4"
22"	2 3/4"	5 3/4"

§10.3 Steering Column

§10.3.1 Reject vehicle if the U-bolt(s) or positioning part(s) are loose or missing.

§10.3.2 Reject vehicle if the universal joint(s) are worn, faulty, or obviously repaired by welding.

§10.3.3 Reject vehicle if the steering wheel is not properly secured.

§10.4 King Pins

§10.4.1 Test: With the front end lifted from the axle, measure the movement at the top or bottom of the tire at the outer circumference. Eliminate all wheel bearing movement by applying the service brake either with assistance from another person or with a mechanical brake holder.

§10.4.2 Reject vehicle if the measured movement at the top or bottom of the tire is greater than the manufacturer's specifications.

§10.5 Ball Joints

§10.5.1 Inspection of ball joints on models prior to 1973 must be conducted with the joints unloaded. Starting in 1973, manufacturers started using ball joints with wear indicators. Ball joints with wear indicators must be inspected with the joints loaded. Before inspecting the ball joints, check to see whether the joints need to be loaded or unloaded.

§10.5.2 Reject vehicle if ball joint kits have been installed on any vehicle.

§10.5.3 Test of Vehicles without Wear Indicators: Hoist the vehicle by the lower control arm when the spring is supported by the lower control arm, or by the frame when the spring is supported by the upper control arm.

To test the vertical movement, position a pry bar under the tire and with a lifting motion sufficient to overcome the weight of the wheel assembly, move the wheel up and down and observe the movement shown on the dial indicator.

To test the horizontal movement, grasp the tire and wheel assembly at the top and bottom. Move it in and out to detect looseness.

- §10.5.4 Reject vehicle if the movement of the load carrying and/or non-load carrying ball joints exceed the manufacturer's specifications.
- §10.5.5 Testing of Vehicles with Wear Indicators: Support the vehicle with the ball joints in a loaded condition. Wipe the grease fitting and boss free of dirt and grease.
- §10.5.6 Reject vehicle if the fitting boss is flush or inside the cover surface.
- §10.6 Front Axle Beam and Steering Components other than the Steering Column**
- §10.6.1 Reject vehicle if the components are cracked.
- §10.6.2 Reject vehicle if there are any obvious welded repairs.
- §10.7 Steering Gear Box**
- §10.7.1 Reject vehicle if any mounting bolt(s) are loose or missing.
- §10.7.2 Reject vehicle if there are cracks in the gear box or mounting brackets.
- §10.7.3 Reject vehicle if there are any welds.
- §10.8 Pitman Arm**
- §10.8.1 Reject vehicle if there is any looseness of the pitman arm or the steering gear output shaft.
- §10.8.2 Reject vehicle if there are any welds.
- §10.9 Steering Systems**
- §10.9.1 Reject vehicle if there are any leaks in the system.
- §10.9.2 Reject vehicle if the auxiliary power assist cylinder is loose.
- §10.10 Ball and Socket Joints**
- §10.10.1 Reject vehicle if there is any movement under the steering load of a stud nut.

§10.10.2 Reject vehicle if there is any motion, other than rotational, between any linkage member and its attachment point under hand pressure. Vehicles with steering assist control valves must be checked with the engine on.

§10.11 Tie Rods and Drag Links

§10.11.1 Reject vehicle if the clamp(s) or clamp bolt(s) on the tie rods or drag links are loose.

§10.11.2 Reject vehicle if there is any looseness in any threaded joint.

§10.11.3 Reject vehicle if there are any welds.

§10.12 Nuts

§10.12.1 Reject vehicle if any nut(s) on the tie rods, pitman arm, drag link, steering arm or tie rod arm is loose or missing.

§10.13 Front Wheel Bearings

§10.13.1 Reject vehicle if the movement measured at the circumference of the tire exceeds 3/16 inch.

§10.13.2 Reject vehicle if the lubrication is insufficient.

§10.13.3 Reject vehicle if roughness or noise is evident during wheel rotation.

§10.13.4 Reject vehicle if the races or rollers are chipped, burred, pitted, or show evidence of overheating, if visible through the inspection hole.

§10.13.5 Reject vehicle if the bearing end play exceeds the manufacturer's specifications.

§10.13.6 Reject vehicle if binding or roughness is detected while rotating bearing.

§10.13.7 Reject vehicle if the bearing adjustment locking device is missing, not engaged, or not functioning.

§10.13.8 Reject vehicle if the oil hub cap is missing, damaged, leaking, or if the filler plug is missing.

§10.14 Steering System Modifications

§10.14.1 Reject vehicle if there is any modification or other condition that interferes with the free movement of any steering component.

§11 **SUSPENSION**

§11.1 **General**

§11.1.1 Reject vehicle if any U-bolt(s), spring hanger(s), or other axle positioning part(s) are cracked, broken, loose, or missing.

§11.2 **Spring Assembly**

§11.2.1 Reject vehicle if any leaves in a leaf spring assembly are broken, cracked, or missing.

§11.2.2 Reject vehicle if a coil spring is broken or cracked.

§11.2.3 Reject vehicle if a rubber spring is missing.

§11.2.4 Reject vehicle if any leaf is displaced in a manner that could result in contact with a tire, rim, brake drum or frame.

§11.2.5 Reject vehicle if a torsion bar spring in a torsion bar suspension is broken.

§11.2.6 Reject vehicle if an air suspension is deflated, such as a leak, system failure, etc.

§11.3 **Torque, Radius, or Tracking Components**

§11.3.1 Reject vehicle if any part of a torque, radius, or tracking component assembly or any part used for attaching these to the vehicle frame or axle is cracked, loose, broken, or missing.

§12 **FRAME**

§12.1 **Frame Members**

§12.1.1 Reject vehicle if any frame member is cracked, broken, loose, or sagging.

§12.1.2 Reject vehicle if any fasteners, including fasteners attaching functional components such as engine, transmission, steering gear, suspension, body parts, or fifth wheel, are cracked, loose, or missing.

§12.2 **Tire and Wheel Clearance**

§12.2.1 Reject vehicle if any condition exists, including loading, that causes the body or frame to be in contact with a tire or any part of a wheel assembly.

§12.3 **Adjustable Axle Assemblies (Sliding Subframes)**

- §12.3.1 Reject vehicle if any locking pins are missing, worn, or not engaged.
- §12.3.2 Reject vehicle if any pin guide holes are cracked or excessively elongated.
- §12.3.3 Reject vehicle if the pin release handle is missing any locking device.

§12.4 Rear End Protection

- §12.4.1 Reject vehicle if rear end protection is absent or is not structurally sound, if the vehicle is required to have such rear end protection. (For additional information, refer to §393.86 of the FMCSR.)

§13 TIRES

§13.1 Tires on a Steering Axle of a Power Unit

- §13.1.1 Reject vehicle if any tire has less than 4/32 inch tread when measured at any point on a major tread groove.
- §13.1.2 Reject vehicle if body ply or belt material is exposed through the tread or sidewall.
- §13.1.3 Reject vehicle if there is any tread or sidewall separation.
- §13.1.4 Reject vehicle if there is any cut that exposes ply or belt material.
- §13.1.5 Reject vehicle if any tire is labeled "Not for Highway Use" or displays other markings which would exclude use on a steering axle.
- §13.1.6 Reject vehicle if there is 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.
- §13.1.7 Reject vehicle if the vehicle has bias and radial tires on the same axle.
- §13.1.8 Reject vehicle if a tire flap protrudes through a valve slot in the rim and touches a stem.
- §13.1.9 Reject vehicle if it has a regrooved tire. Vehicles that are operated solely in urban or suburban service are exempt from this requirement. (See 393.75(e) of the FMCSR) No truck or truck tractor shall be operated with regrooved tires on the front wheels which have a load carrying capacity equal to or greater than that of 8.25-20 8 ply.
- §13.1.10 Reject vehicle if it has a boot, blowout patch or other ply repair.

- §13.1.11 Reject vehicle if the weight carried exceeds the tire load limit. This includes overloaded tires resulting from low air pressure.
- §13.1.12 Reject vehicle if a tire is flat or has a noticeable leak. (Leak can be heard or felt.)
- §13.1.13 Reject any bus equipped with recapped or retreaded tires.
- §13.1.14 Reject a vehicle if any tires are so mounted or inflated that it comes in contact with any part of the vehicle
- §13.2 Tires Other than those Found on the Steering Axle of a Power Unit**
- §13.2.1 Reject vehicle if the weight carried exceeds the tire limit. This includes overloaded tires resulting from low air pressure.
- §13.2.2 Reject vehicle if a tire is flat or has a noticeable air leak. (Leak can be heard or felt.)
- §13.2.3 Reject vehicle if body ply or belt material is exposed through the tread or sidewall.
- §13.2.4 Reject vehicle if there is any tread or sidewall separation.
- §13.2.5 Reject vehicle if there is a cut that exposes ply or belt material.
- §13.2.6 Reject vehicle if a tire is so mounted or inflated that it comes in contact with any part of the vehicle. This includes a tire that contacts its mate.
- §13.2.7 Reject vehicle if it is marked "Not for Highway Use" or is otherwise marked and having a like meaning.
- §13.2.8 Reject vehicle if a tire has less than 2/32 inch tread when measured at any point on a major tread groove.
- §14 WHEELS AND RIMS**
- §14.1 Lock or Slide Ring**
- §14.1.1 Reject vehicle if a lock or slide ring is bent, broken, cracked, improperly seated, or sprung, or has mismatched rings.
- §14.2 Wheels and Rims**
- §14.2.1 Reject vehicle if a wheel or rim is cracked, broken, or has elongated bolt holes.
- §14.3 Fasteners (Spoke or Disc Wheels)**

§14.3.1 Reject vehicle if any fastener is loose, missing, broken, cracked, stripped, or is otherwise ineffective. Parts shall be so designed and installed that nuts shall be fully engaged.

§14.3.2 Reject vehicle if the rim design is not compatible with the hub design.

§14.4 Welds

§14.4.1 Reject vehicle if any weld attaching the disc wheel disc to rim is cracked.

§14.4.2 Reject vehicle if any weld attaching a tubeless demountable rim to adapter is cracked.

§14.4.3 Reject vehicle if there is any weld on an aluminum wheel on a steering axle.

§14.4.4 Reject vehicle if there are any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.

§15 VEHICLE GLAZING: WINDSHIELD, SIDE AND REAR WINDOWS

§15.1 General

§15.1.1 Reject vehicle if it is not equipped with approved safety glass wherever glass is used in doors, windows, and windshields, if the vehicle is one manufactured after December 31, 1937.

§15.1.2 Reject vehicle if a replacement of glass partitions, doors, windows, or windshields was made using non-approved safety glass.

§15.1.3 Reject vehicle if glass has been removed, if the vehicle was manufactured with glass windshield or windows.

§15.1.4 Reject vehicle if the glass used in the windshield is other than AS1 rated glass.

§15.1.5 Reject vehicle if the glass used in the side or rear windows is other than AS1 or AS2 rated glass.

§15.1.6 Reject vehicle if a windshield repair impairs the vision in the critical vision area.

§15.2 Cloudiness

§15.2.1 Reject vehicle if cloudiness or discoloration extends more than 1 inch from the top or sides or more than 4 inches from the bottom edge of the windshield.

§15.2.2 Reject vehicle if, on a divided windshield, the cloudiness or discoloration extends more than ½ inch on either side of the divider strip.

§15.3 Cracks, Scratches and Marks

§15.3.1 Reject vehicle if any bull's eye fracture, star fracture, stone bruise, crack or chip within the critical vision area measures more than ½ inch at its extreme edge.

§15.3.2 Reject vehicle if any crack is more than 4 inches long if it is in a location other than the area in which cloudiness is permitted.

§15.3.3 Reject vehicle if a windshield wiper scratch, mar, or mark is more than 4 inches long and 1/8 inch wide.

§15.3.4 Reject vehicle if it does not have a windshield if the vehicle was originally equipped with a windshield at the time of manufacture, except limited use farm and fish vehicles, home made tractors, and woods tractors.

§15.4 Obscuring the Driver's View

§15.4.1 Reject vehicle if unauthorized material or conditions obscure the driver's view from the windshield or any window.

§15.4.2 Reject vehicle if the windshield or any window adjacent to a passenger seat is covered or coated with any material or substance which changes the clear color and/or impairs two way vision.

Exceptions:

a. Motor vehicles that are equipped with factory installed tinted glass (windshields and replacements marked AS1 or all other windows or replacements marked AS2 or AS3)

b. A colored transparent sunshield strip extending no more than 4 inches from the top of the windshield.

§15.5 Side Windows

§15.5.1 Reject vehicle if any cloudiness or defect obstructs the driver's view.

§15.5.2 Reject vehicle if either left or right front window mechanisms are not in working order.

§15.6 Rear Windows

§15.6.1 Reject vehicle if rear windows are covered or coated with any material or substance which changes the clear color or unless adequate vision (minimum of 200 feet) is

provided to the rear by proper outside mirrors located on the driver's side and passenger side.

§15.6.2 Reject vehicle if the glass is broken or shattered so as to obstruct the vision of the operator or endanger the occupants of the vehicle.

§16 OTHER ACCESSORIES

§16.1 Windshield Wipers

§16.1.1 Reject vehicle if it is not equipped with an adequate wiper or wipers. If the vehicle was provided with two wipers as standard factory equipment, both must be in working order.

§16.1.2 Reject vehicle if a wiper does not operate freely or at a reasonable speed.

§16.1.3 Reject vehicle if a wiper blade has dead or worn rubber or if metal makes contact with the windshield.

§16.1.4 Reject vehicle if the driver cannot reach and operate freely a hand wiper if the vehicle is not equipped with automatic wipers.

§16.1.5 Reject vehicle if the wiper blade is less than the original equipment length or one size smaller in the case of a winter blade. The wiper should cover approximately 75% of the area designed to be swept.

§16.2 Rear View Mirrors

§16.2.1 Reject vehicle if it is not equipped with at least two rear view mirrors. Vehicles which do not have a clear view out the rear window or which do not have a rear window must have both right and left outside mirrors.

§16.2.2 Reject vehicle if a mirror is not mounted securely to prevent swinging and excessive vibration.

§16.2.3 Reject vehicle if a mirror does not give the driver a view of the road 200 feet to the rear.

§16.2.4 Reject vehicle if a reflecting surface is peeled, cracked, tarnished, clouded or broken.

§16.2.5 Reject vehicle if the mirrors cannot be adjusted to or maintained in a set position.

§16.3 Sunvisor

- §16.3.1 Reject vehicle if it is not equipped with a sunvisor on the driver's side.
- §16.3.2 Reject vehicle if the sunvisor cannot be maintained in the proper positions.

§16.4 Horn

- §16.4.1 Reject vehicle if the activating device is not readily accessible to the driver or does not function as intended.
- §16.4.2 Reject vehicle if the horn is not clearly audible or does not operate.

§16.5 Seats and Safety Belts

- §16.5.1 Reject vehicle if any seat is loose or if the frame is broken.
- §16.5.2 Reject vehicle if the seat adjusting mechanism does not operate or will not lock into position.
- §16.5.3 Reject vehicle if the safety belts are not equipped as originally manufactured.
- §16.5.4 Reject vehicle if the safety belts are missing, frayed, or insecurely mounted, or if the webbing is torn.
- §16.5.5 Reject vehicle if the lap belts are not attached to the seat and a secondary belt from the seat to the floor if equipped with an air ride seat.
- §16.5.6 Reject vehicle if the retractors fail to retract and/or allow the belt to extend to the maximum length.

§17 TRAILERS

§17.1 Kingpin

- §17.1.1 Reject vehicle if the kingpin is loose, broken, deformed, cracked, has 1/8 inch wear or more, or is field welded, unless the kingpin has been remanufactured using a process certified by a professional engineer.
- §17.1.2 Reject vehicle if the upper fifth wheel plate is cracked, loose, warped, or worn so that an area less than 75% is in contact with the lower fifth wheel plate.
- §17.1.3 Reject vehicle if the fifth wheel's attaching members are rusted so that the fifth wheel plate may become detached.

§17.2 Rear End Protection

§17.2.1 Reject vehicle if rear end protection is absent or is not structurally sound, if the vehicle is required to have such rear end protection. (For additional information, refer to §393.86 of the FMCSR.)

§17.3 Retroreflective Sheeting and Reflex Reflectors

§17.3.1 Reject vehicle if the trailer is not equipped with retroreflective sheeting or an array of reflex reflectors as specified in §393.13 of the FMCSR.

§18 SPECIAL MOBILE EQUIPMENT

§18.1 Inspection

§18.1.1 Special mobile equipment must be inspected annually. Rollers, pavers, and bulldozers that operate on tracks are exempt from this requirement.

§18.1.2 Special mobile equipment is subject to a partial inspection. A partial inspection checks for the adequacy of the following:

- a. brakes
- b. lights
- c. steering
- d. drive lines
- e. tires and wheels
- f. engine and exhaust system
- g. hydraulic and cable controls
- h. any other mechanical parts or body components that may affect the safe operation of such equipment

§18.1.3 If a piece of special mobile equipment has passed inspection, a Class D inspection sticker shall be issued and shall be placed either in the lower left corner of the windshield or in the center of the windshield behind the rear view mirror. If the equipment is not normally equipped with a windshield, the inspection sticker shall be kept with the special mobile equipment registration.

§18.1.4 The inspection fee for a piece of special mobile equipment is \$6.50. This sum does not include labor or materials used in the correction of faults in the special mobile equipment.

§18.1.5 A commercial vehicle report, as described in §19 below, is not required for partial inspections of special mobile equipment.

§18.2 Special Mobile Equipment Owners' Options and Responsibilities

- §18.2.1 A special mobile equipment owner may inspect his own special mobile equipment if he owns a licensed fleet inspection station.
- §18.2.2 A special mobile equipment owner or a mechanic in his employ must be a certified inspection mechanic to conduct the inspection of special mobile equipment.
- §18.2.3 A special mobile equipment owner who does not own a licensed fleet inspection station may have his special mobile equipment inspected at any Class D inspection station by a certified Class D inspection mechanic.
- §18.2.4 A special mobile equipment owner may have a certified Class D inspection mechanic come to the owner's place of business or to the place where the special mobile equipment is located to conduct the inspection.

The special mobile equipment owner making the request shall be responsible for the reimbursement of any expenses incurred by the certified Class D inspection mechanic as a result of the time and travel involved.

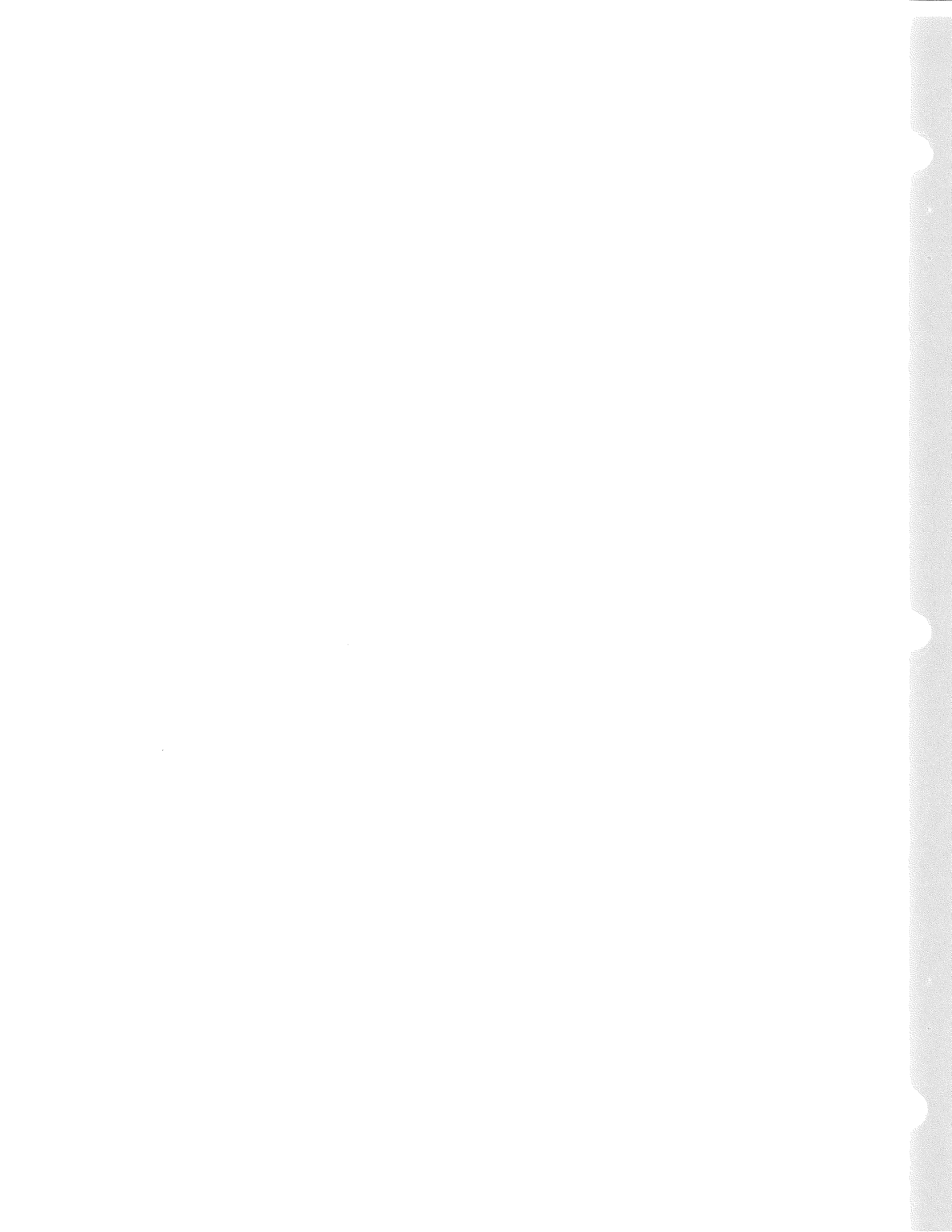
- §18.2.5 A special mobile equipment owner or a qualified employee of the owner may provide technical assistance to the inspection mechanic in such cases where an inspection mechanic is brought in to conduct the inspection.
- §18.2.6 Uninspected special mobile equipment may be driven to a Class D inspection station for inspection if the special mobile equipment owner first obtains a permit to allow operation of an uninspected motor vehicle as provided by 29-A MRSA §1759.
- §18.2.7 Equipment registered as Class A special mobile equipment that is over dimension for width, height, or length, or that is over its registered weight may be moved over ways and bridges if the special mobile equipment owner first obtains a permit in accordance with 29-A MRSA §2382.
- §18.2.8 Equipment registered as Class B special mobile equipment that is over dimension for width, height, or length, or that weighs over 20,000 pounds may be moved over ways and bridges if the special mobile equipment owner first obtains a permit in accordance with 29-A MRSA §2382.

§19 PERIODIC INSPECTION RECORD KEEPING REQUIREMENTS

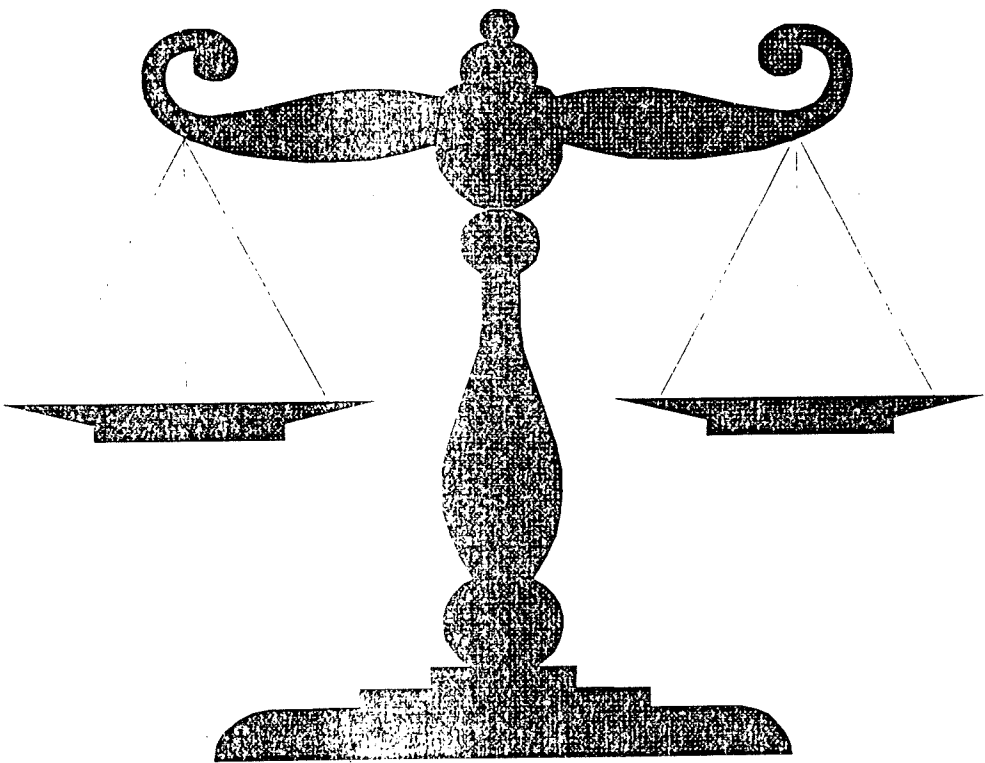
§19.1 Preparation of Reports

- §19.1.1 The qualified inspector performing the inspection shall prepare a report which includes the following items listed below. Vehicles not in commerce such as motor homes and municipal vehicles do not require this report.

- §19.1.2 Identifies the individual performing the inspection, including the individual's printed or typed name and signature.
- §19.1.3 Identifies the registered owner of the vehicle.
- §19.1.4 Identifies the motor carrier operating the vehicle, if other than the registered owner.
- §19.1.5 Identifies the date and location of the inspection.
- §19.1.6 Identifies the license plate number and vehicle identification number of the vehicle being inspected.
- §19.1.7 Identifies the vehicle components inspected and describes the results of the inspection, including the identification of those components not meeting the minimum standards set forth in this subchapter.
- §19.1.8 Certifies the accuracy and completeness of the inspection as complying with all the requirements of this section.
- §19.2 Handling of Report**
- §19.2.1 The original or a copy of the inspection report shall be retained by the motor carrier under whose control the vehicle operates for 30 consecutive days or more, for a period of 14 months. The inspection report shall be retained where the vehicle maintenance records are kept.
- §19.2.2 A copy of the inspection report shall be retained by the inspection station.
- §19.2.3 A third copy shall be provided by the inspection station which may be kept with the vehicle.



**Laws
Relating to
Motor Vehicle
Inspections**



Motor Vehicle Laws

**LAWS RELATING TO
MOTOR VEHICLE INSPECTION**

CHAPTER 15

MOTOR VEHICLE EXAMINATIONS AND INSPECTIONS

1751. Motor Vehicle Inspection.

1. **Inspection Required.** Except as provided in this chapter or section 2307, subsection 1, a motor vehicle required to be registered in this State must have an annual inspection. A person may have a motor vehicle inspected more frequently.
2. **Equipment Subject to Inspection.** The following equipment is subject to inspection:
 - A. Body components;
 - B. Brakes;
 - C. Exhaust system;
 - D. Glazing;
 - E. Horn;
 - F. Lights and directional signals;
 - G. Rearview mirrors;
 - H. Reflectors;
 - I. Running gear;
 - J. Safety seat belts in 1966 and subsequent models;
 - K. Steering mechanism;
 - L. Tires;
 - M. Windshield wipers;
 - N. Catalytic converters on 1983 and subsequent models;

- O. Filler neck restriction on 1983 and subsequent models.
- 2-A. **Enhanced Inspection.** Beginning January 1, 1999, a motor vehicle that is required to be registered in Cumberland County and that is subject to inspection pursuant to subsection 1, must have an annual enhanced inspection. The following equipment is subject to inspection:
- A. Equipment subject to inspection pursuant to subsection 2;
 - B. The fuel tank cap on 1974 and subsequent models of gasoline-powered vehicles; and
 - C. The on-board diagnostic system on 1996 and subsequent models.

A motor vehicle that is not required to be registered in Cumberland County may have an enhanced inspection under this subsection.

3. **Inspection fee.** The inspection fee is as follows:
- A. Before January 1, 1999, the fee is \$6;
 - B. Beginning January 1, 1999, the fee for an inspection under subsection 2 is \$6.50;
 - C. From January 1, 1999 to December 31, 1999, the fee for an enhanced inspection under subsection 2-A is \$9.50; and
 - D. Beginning January 1, 2000, the fee for an enhanced inspection under subsection 2-A is \$9.50 for each inspection performed on pre-1996 models and \$12.50 for each inspection performed on 1996 and subsequent models.

The inspection fee is payable whether the vehicle passes inspection or not.

4. **Implementation.** The enhanced inspection required by subsection 2-A must be implemented as follows.
- A. The fuel tank cap is subject to inspection beginning January 1, 1999.
 - B. The on-board diagnostic system is subject to inspection beginning January 1, 2000. A motor vehicle may not fail inspection for failure to meet the inspection standard for the on-board diagnostic system until January 1, 2001.

1752. **Motor Vehicles Exempt from Inspection**

The following are exempt from inspection:

1. **Registered in another state.** A motor vehicle owned and registered in another state and displaying a valid certificate of inspection from another state or a federally approved commercial vehicle inspection program;
2. **Farm tractors.** A farm tractor;
3. **Antique autos.** An antique auto registered under section 457;
4. **Farm truck.** A farm truck that:
 - A. Is operated within a 20-mile radius from the main entrance of the farm where the vehicle is customarily kept;
 - B. Has a partial annual inspection of the running gear, steering mechanism, brakes, exhaust system and lights; and tires under section 1917, subsection 3; and
 - C. Bears the name of the municipality in which the excise tax is paid in 4-inch letters on the left door of the cab;
5. **Island vehicles.** A motor vehicle that is:
 - A. Used for the conveyance of passengers;
 - B. Registered for a fee of \$2 under section 501, subsection 2; and
 - C. Operated exclusively on an island having no roads maintained or supported by the State;
6. **Motorized bicycle or tricycle.** A motorized bicycle or tricycle;
7. **Fish truck.** A fish truck that:
 - A. Is operated within a 20-mile radius of the municipality where excise tax on the truck is paid;
 - B. Has a partial annual inspection consisting of the running gear, steering mechanism, brakes, exhaust system and lights; and
 - C. Bears the name of the municipality in which the excise tax is paid in 4-inch letters on the left door of the cab;

8. **Woods tractor.** A converted motor vehicle used as a tractor solely for logging purposes that:
 - A. Is registered as a tractor pursuant to section 509 or exempt from registration pursuant to section 510;
 - B. Is operated only during daylight hours, only within a 10-mile radius of the premises where the tractor is customarily kept and only between those premises and:
 - (1) A wood lot used for logging purposes by the owner; and
 - (2) A filling station or garage for fuel or repairs; and
 - C. Has a partial annual inspection of running gear, steering mechanism, brakes and exhaust system and tires under section 1917, subsection 3; and
9. **Registered in this State.** A motor vehicle registered in this State displaying a valid certificate of inspection from another state or a federally approved commercial vehicle inspection program until its normal expiration.

1753. **Inspection of Commercial Vehicles, Trailers and Semi trailers**

1. **Inspection required.** Except as provided in subsection 4, a commercial motor vehicle that is required to be registered in this State, is used in intrastate or interstate commerce and that has a gross vehicle weight or gross vehicle weight rating greater than 10,000 pounds, including the gross vehicle weight rating or gross weight of any trailer or semi trailer, must be inspected annually. A trailer or semi trailer used with a commercial vehicle required to be inspected must also be inspected.
2. **Scope of inspection.** The Chief of the State Police shall adopt rules for the inspection required by subsection 1 that meet the requirements of 49 code of the Federal Regulations, Section 396.17.
3. **Fee.** The fee for an inspection under this section is based on the inspector's normal hourly labor charge and is due whether or not the vehicle passes inspection. A licensed inspection station shall post the hourly labor charge in a conspicuous place.
4. **Vehicles exempt from annual inspection.** The following vehicles are exempt from the requirements of this section:

- A. When used exclusively in intrastate commerce, a trailer or semi trailer with a gross vehicle weight, including any load, that does not exceed 3,000 pounds;
 - B. When used exclusively in intrastate commerce, a semi trailer designed and used exclusively for dispensing cable from reels attached to the semi trailer, commonly called a reel trailer, and any semi trailer designed and used exclusively to support the ends of poles being transported, commonly called a pole dolly, when the gross weight of the semi trailer and load does not exceed 12,000 pounds;
 - C. Any mobile home, empty storage trailer, or empty storage semi trailer displaying a trailer transit plate in accordance with section 954, subsections 4 and 5;
 - D. A farm truck or a fish truck exempted under section 1752; and
 - E. A trailer or semi trailer displaying a valid certificate of inspection from another state or a federally approved commercial vehicle inspection program until the normal expiration of its certificate of inspection.
5. **Proof of inspection.** Proof of inspection must be shown either by a report that certifies that the inspection satisfies the requirements of this section or by an inspection sticker placed on the vehicle. If proof is shown by a report, the report must be produced on the demand of a law enforcement officer.

1754. **Inspection by Dealers and Transporters**

1. **Inspection standards.** A holder of a dealer license or a transporter registration certificate may permit a vehicle to be operated on a public way only if the vehicle:
- A. Meets inspection standards;
 - B. Is owned by the dealer or holder of the transporter registration certificate and is operated by the owner or the owner's employee for the sole purpose of traveling to a body repair establishment and is mechanically safe but requires body repairs;
 - C. Is sold or transferred to another person, meets inspection standards and displays a valid certificate of inspection issued within 60 days of the sale or transfer; or
 - D. If operated by a dealer or holder of a transporter registration certificate, is operated only from a point of purchase to the licensee's place of business. For the purposes of this paragraph, "point of purchase" includes, but is not

limited to, an auto auction, distribution center or another licensed vehicle dealer.

This subsection does not allow the operation of an unsafe motor vehicle on a public way.

2. **Remove prior certificate.** If the vehicle bears a prior inspection certificate, that certificate must be removed.
3. **Violations.** The provisions of this subsection apply to violations of this section.
 - A. A violation of this section is a traffic infraction for which a penalty of not more than \$1,000 for each violation may be assessed.
 - B. A violation of this section is also a violation of the provisions governing unfair trade practice under Title 5, chapter 10.
 - C. It is not a defense to this section that the dealer or holder did not know that the vehicle did not meet inspection standards or required a certificate.

1755. **Inspection of Fire Trucks**

A fire chief, or a municipal official of a municipality without a fire chief, may contract with a licensed inspection station for a licensed inspection mechanic to perform an inspection at the location where fire trucks are customarily kept.

1756. **Inspection Standard.**

1. **Inspection standards.** Equipment subject to inspection must:
 - A. Be in good working order;
 - B. Be safely attached or secured to the chassis or body of the vehicle;
 - C. Be mechanically safe;
 - D. Not pose a hazard to the occupant of the vehicle or to the general public; and
 - E. Meet the standards set forth in rules adopted by the Chief of the State Police.
2. **Inspection standard for catalytic converter.** Notwithstanding the inspection standards of subsection 1, a catalytic converter subject to the inspection required

by section 1751, subsection 2, paragraph N must meet the rules promulgated by the Chief of the State Police and must be safely attached or secured to the chassis or body of the vehicle.

3. **Windows.** In addition to the standards set forth in subsection 1, windows must meet the standards of sections 1915 and 1916.
4. **Fenders.** Except as provided by section 1953, subsection 2, paragraph E, a motor vehicle other than a street rod must be equipped with fenders and extension. When a wheel and tire are installed that permit the tire tread to extend beyond the natural fender configuration, the fenders must be modified or extended to cover the exposed tire tread.
5. **Safety Seat Belts.** On 1980 and subsequent models, safety seat belts must be inspected to ensure that:
 - A. The motor vehicle has the proper number for that make and model; and
 - B. Each belt shall is fully functional.
6. **Inspection standard for fuel tank cap.** Notwithstanding the inspection standards of subsection 1, a fuel tank cap subject to the inspection required by section 1751, subsection 2-A, paragraph B must meet the standards in rules adopted by the Chief of the State Police. The Chief of the State Police shall adopt rules to establish procedures and standards for a fuel tank cap pressure test.
7. **Inspection standard for on-board diagnostic system.** Notwithstanding the inspection standards of subsection 1, an on-board diagnostic system subject to the inspection required by section 1751, subsection 2-A, paragraph C must meet the standards in rules adopted by the Chief of the State Police. The Chief of the State Police shall adopt rules that meet the requirements of 40 Code of Federal Regulations, Part 85 for on-board diagnostic test procedures, standards and equipment.

1757. Standard for Rejection for Nonfunctioning equipment

A motor vehicle must be rejected for violation of the inspection standard for equipment if any equipment described in section 1751, subsection 2 does not function sufficiently for the safety for the general public or is loose and not securely attached to the vehicle.

1758. Issuance of Sticker; Placement on Vehicle

1. **Windshield placement.** If a motor vehicle meets the inspection standard, an official inspection sticker must be placed in the lower left-hand corner of the windshield or in the center of the windshield in back of the rearview mirror.
2. **Without windshield.** If the vehicle is not normally equipped with a windshield, the certificate of inspection must be kept with the registration certificate of the vehicle.

1759. Temporary Permits and Warnings

1. **Issuance.** A law enforcement officer or employee of the Bureau of Motor Vehicles designated by the Secretary of State may issue a permit allowing operation of an uninspected vehicle to an inspection station for inspection.
2. **Reconstructable vehicle.** This section does not apply to reconstructable motor vehicles as defined in Title 10, 1471.
3. **Warning.** The owner or operator of a vehicle operated with an expired inspection sticker during the first month immediately after expiration may not be issued a summons to court but may only be issued a warning. This warning must state that the vehicle must be inspected within 2 business days. Failure to comply with a warning is a violation punishable in accordance with section 1768.

1760. Examination and Impoundment of Vehicles

1. **Examination for compliance.** A law enforcement officer in uniform may stop and examine a motor vehicle to determine whether the vehicle's equipment complies with the requirements of section 1756.
2. **Scope of inspection.** The officer may demand and inspect the driver's license, the certificate of registration, permits and the identification numbers of the motor vehicle.
3. **Probable cause for inspection.** A law enforcement officer may require the operator to proceed to an official inspection station and submit the vehicle to an inspection and tests as may be appropriate on reasonable grounds to believe that:
 - A. A vehicle is unsafe or not equipped as required by law; or
 - B. The vehicle's equipment does not conform to the inspection standard.

1761. Certified Inspection Mechanics

1. **Performance of inspection.** No person other than a holder of an inspection mechanic certificate may perform an inspection or issue or sign a certificate of inspection.
2. **Requirements for inspection mechanic certification.** To receive an inspection mechanic certificate, an applicant must:
 - A. Pass a written or oral examination that is designed to test knowledge of motor vehicle inspection and the method of inspecting and testing motor vehicle equipment; and
 - B. Be a person of honesty, integrity and reliability.
3. **Examination fee.** Applicants for inspection mechanic certification must pay to the Chief of the State Police a fee of \$1 for an application for examination or for renewal of a certificate.
4. **Term of certification.** An inspection mechanic certificate is valid for a period of 5 years from the date of issue.
5. **Renewal.** An examination is not required if application for a renewal is made within one year of expiration.
6. **Remission of certificate.** If the holder of an inspection mechanic certificate no longer performs inspections, the certificate must be remitted immediately to the Chief of the State Police.
7. **Notification of change in place of employment.** Prior to inspecting vehicles for a new employer, the holder of an inspection mechanic certificate shall notify the Chief of the State Police of a change of place of employment.
8. **Testing in parking area.** Notwithstanding sections 1251, 1252 and 1253, a certified inspection mechanic who has a valid operator's license of any class may operate a motor vehicle in a parking area adjacent to an official inspection station for the purpose of testing equipment as required by the rules adopted pursuant to this chapter.

1762. **Official Inspection Stations**

1. **Licensing of official inspection stations.** The Chief of the State Police may license garages as part-time or full-time official inspection stations.
2. **Requirements.** To qualify as an official inspection station, a garage must meet the following requirements and the rules adopted by the Chief of the State Police.

- A. The buildings must be structurally sound with a level floor and sufficient width and length for inspections.
 - B. Doors must be of sufficient size to accommodate the class of vehicle indicated in the station license.
 - C. The station must be equipped with a screen or chart and other equipment approved by the Chief of the State Police to test lights and other motor vehicle equipment subject to inspection.
 - D. The station must employ a certified inspection mechanic.
 - E. The station must perform vehicle inspections while it is open to the general public.
 - F. A full-time inspection station must be open to the general public for 35 hours or more per week. A part-time inspection station must be open to the general public for at least 16 but less than 35 hours per week.
3. **Examination of premises and operator of garage.** Before a license is granted, the premises must be examined and the operator of the garage investigated as to reliability and fitness.
 4. **Term of license.** The license is valid for 2 years from January 1st of the year of issue.
 5. **License not transferable.** A license may not be assigned or transferred or used at other than a designated location.
 6. **Posting of license on premises.** A license must be posted in a conspicuous place at the designated location.
 7. **Hearing; appeals.** If a person is aggrieved by the decision of the Chief of the State Police in refusing approval, that person may, within 30 days of notification of refusal to license, request a hearing before the Chief of the State Police. After the hearing, if an applicant is aggrieved by the final action of the chief, the applicant may appeal the decision in accordance with Title 5, Part 18.
 8. **Enhanced inspection station.** Beginning January 1, 1999, official inspection stations located in Cumberland County shall offer enhanced inspections pursuant to section 1751, subsection 2-A and may not offer inspections pursuant to section 1751, subsection 2. Official inspection stations located outside of Cumberland County may offer inspections under section 1751, subsections 2 and 2-A. An inspection station that offers enhanced inspections shall employ an inspection mechanic certified to perform enhanced inspections.

1763. Suspension or Revocation of License or Inspection Mechanic Certificate

Notwithstanding Title 5, section 10003, a State Police officer may immediately suspend or revoke the license issued to any official inspection station or the inspection mechanic certificate issued to any inspecting mechanic for a violation of this chapter or the rules promulgated pursuant to section 1769. The penalty for a first offense is a license suspension for a period of 6 months. The penalty for a 2nd or subsequent offense is a license suspension for a period of one year or license revocation.

Pursuant to Title 5, chapter 375, the Chief of the State Police or the chief's designee shall schedule a hearing, if requested by the owner of an official inspection station, an employee of that station or the inspection mechanic, to review the suspension or revocation. The suspension or revocation remains in effect pending the final agency decision and during any appeal of that decision.

As a prerequisite to reinstatement following a license suspension or revocation, the Chief of the State Police may require an inspection mechanic to satisfactorily complete the inspection mechanic examination provided for in section 1761, subsection 2.

1764. Fleet Inspection Stations

1. **License by Chief of the State Police.** The Chief of the State Police may license fleet inspection stations to inspect 10 or more vehicles registered in the name of a single owner.
2. **Requirements.** To qualify as a fleet inspection station, a station must:
 - A. Meet the standards of section 1762, subsection 2, paragraphs A, B and C; and
 - B. Have at least 10 vehicles registered in the name of the fleet inspection station owner or be under contract to the owner of the fleet of vehicles for exclusive maintenance.
3. **Limit to fleet vehicles.** Fleet station inspections are limited exclusively to fleet vehicles.
4. **Employment of certified inspection mechanics.** A fleet inspection station must employ a sufficient number of certified inspection mechanics to inspect every vehicle in the fleet annually.

A certified inspection mechanic may inspect fleets of vehicles at the fleet station, if proper inspection equipment is available.

Fleet vehicles must be inspected by a certified inspection mechanic who may issue and sign inspection certificates.

1765. **Out-of-Doors Inspections**

A certified inspection mechanic may inspect a vehicle out-of-doors if:

1. **Class of vehicles.** The vehicle conforms to the class of vehicle that the inspection station license authorized for inspection; and
2. **Altered vehicles.** Alterations or additions to the basic design or structure of the vehicle not produced by the original manufacturer prevent the vehicle from entering inside the inspection station.

1766. **Inspection Stickers**

1. Stickers remain property of State. Inspection stickers and materials issued to inspection station by the Chief of the State Police remain the property of the State.
2. **Stock of stickers.** An inspection station must stock a sufficient number of stickers to meet all demands. The stickers must be made of a material and quality of adhesive prescribed by the Chief of the State Police.
3. **Fee.** Stickers are furnished by the Chief of the State Police at \$1.50 each.
4. **Statement of intent to hire a certified mechanic.** If a station is disqualified by the loss of a certified mechanic, the owner shall, within 5 working days, return all stickers to the Chief of the State Police.

The owner may file a statement of intent to hire a certified inspection mechanic within 14 working days, in which case the Chief of the State Police shall hold the returned stickers for the licensee.

If a statement of intent is not filed, returned stickers may be reissued.

5. **Return or refund of unused stickers.** Within 20 working days of the calendar year or the suspension, revocation or termination of an inspection license, unused or expired stickers must be returned to the Chief of the State Police and the purchase price refunded or exchanged for current year stickers. Refunds or exchanges may only be made for full sheets of unused stickers.
6. **Return of inspection materials.** Upon suspension, revocation or termination of an inspection license, the station owner or manager shall return all inspection materials to the Chief of the State Police, who shall issue a receipt for the returned materials.

1767. **Disposition of Fees**

The revenues generated by this chapter must be credited to the General Highway Fund.

1768. **Unlawful Acts**

1. **Display of fictitious certificate.** A person commits a Class E crime if that person displays or permits to be displayed on a vehicle a certificate of inspection knowing the certificate to be fictitious or issued to another vehicle or issued without an inspection having been made.
2. **Use of counterfeit certificate of inspection.** A person commits a Class E crime if the person makes, possesses, issues or knowingly uses an imitation or counterfeit of an official certificate of inspection or a certificate of inspection that was not issued by an official inspection station in accordance with law.
3. **Misrepresentation of vehicle inspection station.** A person commits a Class E crime if that person represents a place as an official inspection station and the station is not operating under a valid license.
4. **Issuance of certificate for substandard vehicle.** A person commits a Class E crime if that person knowingly causes an official inspection sticker to be attached to a vehicle that does not conform to the inspection standard.
5. **Operation of defective vehicle.** A person commits a Class E crime if that person operates a vehicle on a public way with equipment on the vehicle that does not conform to the standards of this subchapter.
6. **Alteration after inspection.** A person commits a Class E crime if that person alters equipment after inspection so that the equipment does not conform to the standards of this subchapter.
7. **Operation of vehicle without certificate of inspection.** An owner or operator of a vehicle required to be inspected commits a traffic infraction if that person operates that vehicle or permits that vehicle to be operated without displaying a current and valid certificate of inspection or producing the certificate on demand of a police officer.

1769. **Rules**

1. **Scope.** The chief of the State Police may adopt rules:
 - A. For the administration and enforcement of this chapter;

- B. To designate periods of time during which owners of vehicles must display or produce a certificate of inspection; and
 - C. Concerning the inspection of registered special mobile equipment not ordinarily operated over the highway.
2. **Review of rules by Legislature.** The joint standing committee of the Legislature having jurisdiction over transportation matters shall review the rules prior to adoption.

1770. **Penalties**

- 1. **General penalty.** Notwithstanding Title 17-A, and unless otherwise specified, a violation of this chapter is a Class E crime, punishable by a fine of not less than \$25 nor more than \$500 or by imprisonment for not more than 30 days, or by both.
- 2. **Traffic infraction.** A violation of the rules adopted by the Chief of the State Police pertaining to this subchapter is a traffic infraction subject to a forfeiture of not less than \$25 nor more than \$250.

CHAPTER 17

EQUIPMENT

SUBCHAPTER I

GENERAL PROVISIONS

1901. **General Restriction**

A person may not use, sell or equip a vehicle with a lens, muffler, reflector, lighting device, window-tinting material or other after-market equipment contrary to this Title or contrary to the rules of the Chief of the State Police.

1902. **Brakes**

1. **General rule.** A motor vehicle must have adequate brakes in good working order that are sufficient to control the vehicle.
2. **Specific standards.** Brakes must be adjusted so as to stop:
 - A. A 2-wheel brake vehicle, within a distance of 45 feet, from a speed of 20 miles per hour;
 - B. A 4-wheel brake vehicle, within 30 feet, from a speed of 20 miles per hour; or
 - C. A motorcycle or motor-driven cycle, within 30 feet, from a speed of 20 miles per hour.
3. **Parking brakes.** A vehicle, except a 2-wheel motorcycle or 2 wheel motor-driven cycle, must be equipped with parking brakes adequate to hold the vehicle on any grade on which it is operated, under all conditions of loading, on a surface free from snow, ice or loose material. Parking brakes:
 - A. Must be capable of being applied by the driver's muscular effort, spring action or equivalent means;
 - B. May be operated with assistance of the service brakes or other source of power, provided that failure of the service brake actuation system or other power assisting mechanism does not prevent the parking brakes from being applied;

- C. Must be designed so that, once applied, they remain applied with the required effectiveness despite leakage or exhaustion of any source of energy;
 - D. May share the same brake drums, brake shoes and lining assemblies, brake shoe anchors and mechanical brake shoe actuation mechanisms associated with the wheel brake assemblies used for service brakes; and
 - E. If the means of applying the parking and service brakes are connected, must be constructed so that failure of one part does not leave the vehicle without operative brakes.
4. **Trucks; specific requirements.** A truck, truck tractor, trailer or semi trailer must be equipped with adequate brakes acting on all wheels of all axles, except that the following need not meet this requirement:
- A. A trailer or semi trailer not exceeding a gross weight of 3,000 pounds;
 - B. A vehicle towed by use of a wrecker;
 - C. A vehicle meeting braking requirements of the motor carrier safety regulations of the United States Department of Transportation;
 - D. A semi trailer with a gross weight of semi trailer and load not to exceed 12,000 pounds, designed and used exclusively:
 - (1) For the dispensing of cable from attached reels, commonly called reel trailers; or
 - (2) To support the end of poles while being transported, commonly called pole dollies; and
 - E. A dolly axle, so-called, on a farm truck transporting agricultural products and supplies.
- A dolly axle may not be considered in determining the gross weight or axle limits permitted on the vehicle.
- A 2-axle or 3-axle farm truck equipped with a dolly axle is considered a 2-axle or 3-axle vehicle.
5. **Multiple axles.** If equipped with 3 or more axles, a truck, tractor or truck tractor manufactured prior to August 1, 1980 need not have brakes on the front wheels; if the vehicle is equipped with 2 or more steerable axles, the wheels of one such axle need not have brakes.

6. **Rules.** The Chief of the State Police may adopt rules governing the sufficiency and adjustment of brakes.

1903. **Adequate Signaling Device**

A motor vehicle must have a suitable and adequate horn or other device for signaling. A signaling device or horn may not be unnecessarily sounded.

1904. **Headlights**

1. **General rule.** A motor vehicle must be equipped with headlights of sufficient power and so adjusted and operated as to enable the operator to proceed with safety under all ordinary conditions of highway and weather.
2. **Location of headlights.** On a motor vehicle, a headlight must be located at a height, measured from the center of the headlight, of not more than 54 inches nor less than 22 inches above the level surface on which the vehicle stands. Headlights on snow plows may be at a height greater than 54 inches.
3. **White light.** Headlights must be equipped with lenses or reflectors that emit only white light.
4. **Number of headlights.** A motor vehicle must have mounted on the front at least 2 headlights, one on each side. A motorcycle or motor-driven cycle must have one mounted headlight.
5. **Requirements.** The following requirements apply to a headlight.
 - A. If the vehicle is mechanically constructed so that it is limited to less than 15 miles per hour, it must have headlights capable of furnishing sufficient candlepower to render any substantial object clearly discernible on a level way at least 50 feet directly ahead and at the same time at least 7 feet to the right of the axis of the vehicle for a distance of at least 25 feet.
 - B. If the vehicle is mechanically constructed so that it can exceed 15 miles per hour, it must have headlights capable of furnishing sufficient candlepower to render any substantial object clearly discernible on a level way at least 200 feet directly ahead and at the same time at least 7 feet to the right of the axis of the vehicle for a distance of at least 100 feet.
 - C. A headlight capable of furnishing more than 4 candlepower, if equipped with a reflector, may not be used unless the headlight is designed, equipped or mounted so that no portion of the beam of light, when

projected 75 feet or more ahead, rises above a plane of 42 inches higher than and parallel with the level surface on which the vehicle stands.

- D. The top of a main beam of light may not be higher than the headlight center.
 - E. An electric bulb or other lighting device of a greater capacity than 32 candlepower may not be used, except for the standard equipment sealed beam unit.
 - F. A headlight may not project the top of a main beam, at a distance of 25 feet ahead of the vehicle, on an approximately level stretch of highway, onto the body of a person or an object, at a height greater than that of the center of the front light from the highway.
- 6. **Motorcycle.** A motorcycle or motor-driven cycle that does not have an adequate beam for headlights is restricted to daytime operation.
 - 7. **Exception for farm tractors.** This section does not apply to unregistered farm tractors.

1905. Rear Lights

- 1. **Requirement.** Except as provided in subsection 3, a motor vehicle with 3 or more wheels must have on the rear 2 lights, one on each side of the axis, each capable of displaying a red light visible for a distance of at least 100 feet behind the vehicle.
- 2. **Vehicles used in conjunction.** When a vehicle is used in conjunction with another vehicle, only the last must carry the lights.
- 3. **Vehicles manufactured with one rear light.** If a vehicle was manufactured with only a single rear light, that light is sufficient if the light complies with the visibility requirement and is in the center or to the left of the vehicle's axis.
- 4. **Exception for farm tractors.** This section does not apply to unregistered farm tractors.

1905-A. Turn Signal

- 1. **Requirement.** Except as provided in subsection 3, a motor vehicle, trailer or semi trailer must be equipped with electric flashing turn signal lamps. A motor vehicle must emit white or amber light from the turn signals to the front of the vehicle and a motor vehicle, trailer or semi trailer must emit amber or red light from the turn signals to the rear of the vehicle.

2. **Vehicles physically connected.** When a vehicle that is being operated is physically connected to another vehicle, only the last vehicle must carry turn signals to the rear.
3. **Vehicles manufactured without turn signals.** Automobiles and trucks less than 80 inches in width, manufactured or assembled prior to January 1, 1953 need not be equipped with electric turn signal lamps.
4. **Exception for farm tractors.** This section does not apply to unregistered farm tractors.

1906. **Clearance Lights**

A vehicle 7 feet or more in width must have a green or amber light attached to the extreme left of the front, adjusted to indicate the extreme left lateral extension of the vehicle or load and at least one red light on the extreme left lateral extension of the vehicle or load on the rear.

A vehicle with a closed body 8 feet or more in height must display 2 green or amber lights attached to the extreme left of the front of its body, one at the top and the other at the bottom. The vehicle must also display at least one red light on the extreme upper left lateral extension of its body.

Body width lights and height lights must be visible not less than 200 feet in the direction towards which the vehicle is proceeding or facing.

In place of body width lights and height lights, a vehicle may be equipped with an adequate reflector conforming as to color and location to the requirements for the light.

This section does not apply to unregistered farm tractors.

1907. **Rear Reflectors**

A vehicle must be equipped with at least one adequate reflector securely attached to the rear. The reflector:

1. **Part of rear light.** May be a part of the rear light;
2. **Color.** Must be red; and
3. **Reflection.** Must be designed, located and maintained to reflect at night on an unlighted highway, from at least 200 feet, the lawful undimmed headlights of a vehicle approaching from the rear.

4. **Exception for unregistered farm tractors.** This section does not apply to unregistered farm tractors.

1908. **Location of Rear Lights, Reflectors and Signal Lamps**

On a vehicle 7 feet wide or wider, all rear lights, reflectors and signal lights must be within 12 inches of the extreme extension of the vehicle. On flat-body dump trucks, rear lights and signal lamps may be mounted on the rear of the frame. This section does not apply to unregistered farm tractors or to trailers with rear lights, reflectors and signal lights installed by the commercial manufacturer.

1909. **Registration Lamp**

A vehicle must have a white light capable of illuminating the rear registration plate so that the characters on the plate are visible for a distance of at least 50 feet. This section does not apply to unregistered farm tractors.

1910. **Rules Governing Lights on Vehicles**

The Chief of the State Police may adopt rules governing the adjustment, use and operation of lights on vehicles.

1911. **Hydraulic Brake Fluid**

1. **Definition.** "Hydraulic brake fluid" means the liquid medium through which force is transmitted to the brakes in the hydraulic brake system of a vehicle.
2. **Requirement.** Hydraulic brake fluid must be distributed and serviced with due regard for the safety of the occupants of the vehicle and the public.
3. **Rules.** The Commissioner of Public Safety may adopt rules establishing standards and specifications for hydraulic brake fluid that must correlate with and, so far as practicable, conform to current standards and specifications of the Society of Automotive Engineers applicable to the fluid.
4. **Prohibition.** A person may not distribute, have for sale, offer for sale, sell or service a vehicle with hydraulic brake fluid unless that fluid complies with the requirements of this section.

1912. **Mufflers**

1. **Mufflers required.** A person may not operate a motor vehicle unless that vehicle is equipped with an adequate muffler properly maintained to prevent excessive or unusual noise.

2. **Cutouts prohibited.** Except as provided in subsection 5, a muffler or exhaust system may not be equipped with a cutout, bypass or similar device.
3. **Amplification prohibited.** A person may not operate a motor vehicle with an exhaust system that has been modified to amplify or increase the noise emitted by the motor above that emitted by the muffler originally installed on the vehicle.
4. **Exhaust system fastened to engine.** The entire exhaust system must be complete, without leakage and securely fastened to the engine block and frame.
5. **Racing meets.** Notwithstanding subsection 2, an owner or operator of a motor vehicle used occasionally in racing meets may obtain a permit from the Secretary of State for installing a cutout, bypass, or similar device on the exhaust system of that motor vehicle.

The cutout, bypass or similar modification must be kept closed and inoperative while the vehicle is on a public way.

The permit must be in the vehicle at all times while on a public way.

The Secretary of State shall determine the eligibility of all applicants for a permit.

The permit fee is \$1 for the registration year.

1913. Mirrors

1. **Mirrors required.** A person may not operate on a public way a vehicle so constructed, equipped, loaded or used that the operator is prevented from having a constantly free and unobstructed view of the way immediately to the rear, unless there is attached a mirror or reflector placed and adjusted to afford the operator a clear, reflected view of the highway to the rear of the vehicle for a distance of at least 200 feet.
2. **Temporary mirrors.** When a vehicle is operated without a trailer or semi trailer, temporary outside rearview mirrors must be removed or otherwise adjusted so as not to extend beyond the width of the automobile.
3. **Motorcycles.** A motorcycle or motor-driven cycle must be equipped with a rear view mirror mounted and adjusted to afford the operator a clear, reflected view of the highway in the rear for a distance of at least 200 feet.

1914. Safety Seat Belts

1. **Safety seat belts required.** A person may not buy, sell, lease, trade or transfer from or to a resident at retail a model year 1966 or later motor vehicle, unless that

vehicle is equipped with safety seat belts installed for use in the left and right front seats.

1915. **Windows**

1. **Safety glass.** A motor vehicle must be equipped with safety glass wherever glass is used in partitions, doors, windows or windshields.

“Safety glass” means a product composed of glass or of other materials, manufactured, fabricated or treated to prevent shattering and flying of broken glass.

The Commissioner of Public Safety may maintain a list of the approved types of glass.

Replacements of glass partitions, doors, windows or windshields must be made with safety glass.

2. **Window repairs.** When a window, other than the windshield, is broken, the operator may repair the window by temporarily replacing it with an opaque substance until there is a reasonable opportunity for replacement.

1916. **Reflective and tinted glass**

1. **Windows to be unobscured.** A person may not operate a motor vehicle and an inspection mechanic may not issue a certificate of inspection for a motor vehicle, if:
 - A. Any window is composed of, covered by or treated with any material that is reflective;
 - B. The front windshield is composed of, covered by or treated with a material that reduces the light transmittance through the window more than the original installation window or an original replacement window;
 - C. A side window or rear window is composed of, covered by or treated with a material that has a light transmittance of less than 50%; or
 - D. A front windshield, front door window or window at either end of a rear passenger seat does not contain 2-way glass that provides the occupants with a clear view of the road and a person outside the vehicle with a clear view of the occupants and the interior of the vehicle.
2. **Exceptions.** The following exceptions apply.

- A. The provisions of subsection 1 do not apply to:
- (1) A certificate or other paper required or allowed by law to be displayed;
 - (2) The label attached to a window showing the price, estimated mileage and other federally mandated information commonly known as the manufacturer's suggested retail price label;
 - (3) Sun-screening or window tinting material along a 4-inch strip at the top of the windshield; or
 - (4) Motor vehicles for which the Chief of the State Police has granted an exception because the health of the owner or a person who usually occupies the vehicle is adversely affected by sunlight. The Chief of the State Police may, upon proper application, provide the owner of a motor vehicle with a certificate of exemption that must be displayed upon the request of a law enforcement officer.
- B. The provisions of subsection 1, paragraphs C and D, do not apply to side windows behind the operator's seat or the rear window of the following motor vehicles, provided that the vehicle is equipped with 2 outside rear view mirrors, one on each side, adjusted so that the operator has a clear view of the highway behind the vehicle;
- (1) A bus that transports passengers for hire
 - (2) A motor vehicle used to transport human remains by a funeral establishment, as described in Title 32, section 1501, or by a medical examiner, appointed pursuant to Title 22, sections 3022 or 3023;
 - (3) A limousine that regularly transports passengers for hire and has a carrying capacity of more than 6 passengers and whose owner is required to obtain an operating permit pursuant to section 552; and
 - (4) A multi-purpose vehicle.
- C. The provisions of subsection 1, paragraphs C and D, do not apply to side windows behind the operator's seat or the rear window of a motor vehicle that is equipped with original installation windows or original replacement windows, originally installed or replaced in conformance with Federal Motor Vehicle Safety Standard 205, except that any such window with a light transmittance of less than 70% may not be covered by or treated with any material that further reduces the light transmittance.

2-A. **Definition.** For the purposes of this section a “multi-purpose vehicle” means a motor vehicle designed to carry 10 or fewer persons that is constructed by the manufacturer on a truck chassis or that is constructed with special features for occasional off-road operation and allowed unlimited tinting by the manufacturer. “Multi-purpose vehicle” includes vans, pick-ups and recreational vehicles but does not include station wagons, passenger car sedans and those vehicles restricted by the Federal Motor Vehicle Safety Standards.

3. **Light Transmittance certificate.** The owner or operator of a motor vehicle with tinted windows that are not replaced in accordance with Federal Motor Vehicle Safety Standard 205 or windows covered by or treated with tinting material shall acquire a light transmittance certificate and shall show the certificate to the inspection mechanic at the time of inspection.

A person who, for compensation, installs tinted replacement windows or window tinting materials may issue a certificate for a motor vehicle that complies with the light transmittance standards and shall ensure compliance and issue a certificate for a vehicle on which that person has installed the tinted window or tinting material.

Upon request, the Bureau of State Police shall provide light transmittance certificates to persons who, for compensation, install tinted replacement windows or window-tinting materials. Light transmittance certificates provided by the Bureau of State Police to installers in accordance with this subsection remain the property of the State.

An installer who is adjudicated of a violation of this section or files an answer of “not contested” to a summons for a violation of this section shall return all unissued light transmittance certificates to the Bureau of State Police within 10 days of adjudication or of filing the answer. The Bureau of State Police may not provide that installer with light transmittance certificates for a period of 6 months after the date of adjudication or filing an answer of “not contested.”

4. **Violations.** A person may not:

- A. Install a replacement window in or window-tinting material on a motor vehicle that does not meet the standards of subsections 1 and 2;
- B. Fail to issue a certificate as required by subsection 3, after installing for compensation a tinted replacement window or window-tinting material;
- C. Alter the window-tinting materials after a certificate has been issued pursuant to subsection 3 and then display the certificate as proof that the windows meet the standards of subsection 1 or 2;

- D. Display or permit to be displayed any light transmittance certificate, knowing the certificate to be fictitious or issued to another vehicle or issued without the motor vehicle meeting the standards of subsections 1 and 2;
 - E. Knowingly cause a light transmittance certificate to be issued for a motor vehicle that does not meet the standards of subsection 1 or 2;
 - F. Operate or cause the operation of a motor vehicle that does not meet the requirements of this section; or
 - G. Fail to return all unissued light transmittance certificates to the Bureau of State Police in accordance with subsection 3.
5. **Presumption.** If the operator of a motor vehicle with a tinted replacement window or window-tinting material installed fails to produce a certificate as required by subsection 3 on the request of a law enforcement officer, it is presumed that the vehicle does not meet the requirements of this section.
6. **Penalty.** Any person who is adjudicated of a violation of this section commits a traffic infraction that must be punished by a forfeiture of not less than \$100.
7. **Rules.** The Chief of the State Police may adopt rules to implement and administer this section and to collect reasonable fees for that administration.

1917. Tires

1. **Definitions.** As used in this section, unless the context otherwise indicates, the following terms have the following meanings.
- A. “Tread depth” means the amount of tread design on the tire. “Tread depth” includes original, retread and recap tread design and, in respect to a special mileage commercial tire, recut, regrooved and siped tread design.
 - B. “Special mileage commercial tire” means a tire manufactured with an extra layer of rubber between the cord body and original tread design, which extra layer is designed for the purpose of recutting or regrooving, and which tire is specifically labeled as a “special mileage commercial tire.”
2. **Safe tires required.** A motor vehicle may not be operated on a public way unless it is equipped with tires in safe operating condition. A tire mounted on a motor vehicle is not considered to be in safe operating condition unless it meets the visual and tread depth requirements set forth in subsections 3 and 4.

3. **Visual requirements.** A tire is not in safe operating condition if that tire has:
 - A. A fabric break or a cut in excess of one inch in any direction as measured on the outside of the tire and deep enough to reach the body cords;
 - B. A temporary repair by the use of blowout patches or boots;
 - C. A bump, bulge or knot related to separation or partial failure of the tire structure;
 - D. A portion of the ply or cord structure exposed; or
 - E. Sidewalls damaged to the extent that the body cords are damaged.
4. **Tread depth.** A tire is not in safe operating condition if it is worn to the point where less than $\frac{2}{32}$ inch of tread design remains at all points at which gauge readings are required. Tread depth must be measured as follows.
 - A. Tire tread depth must be measured by a tread depth gauge that is calibrated in $\frac{1}{32}$ inch.
 - B. Readings must be taken in 2 adjacent major tread grooves at 2 points in each of the grooves not closer than 15 inches.
 - C. Readings for a tire that has the tread design running across the tire or for a siped tire must be taken at or near the center of the tire at 2 points of the circumference not closer than 15 inches.
5. **Exceptions.** A farm vehicle used exclusively for agricultural purposes, including, but not limited to, a self-propelled combine, self-propelled corn and hay harvesting machine or tractor used exclusively for agricultural purposes, is exempt from this section.

1918. **Regrooved Tires**

A person commits a traffic infraction if that person distributes, has for sale, offers for sale, sells or uses on a motor vehicle a pneumatic tire that has been regrooved below the original tread depth, unless that tire was originally manufactured with extra under tread material.

1919. **Studded Tires**

From the first day of May to the first day of October, a person may not operate a vehicle with tires having metal studs, wires, spikes or other metal protruding from the tire tread.

The Commissioner of Transportation may extend the use period or, in a special case, grant a permit covering stated periods of time for the use of studded tires for other periods. The fee for such permits may not be less than \$3 nor more than \$15, as determined by the commissioner. The permit must be carried in some easily accessible place in or about the vehicle.

This section does not apply to fire department vehicles or school buses during the months school is in regular session.

1920. **Vehicle Frame Height**

1. **Minimum and maximum frame end heights.** A motor vehicle may not be operated on a public way or receive a certificate of inspection with a frame end height of less than 10 inches or a maximum frame end height base on the manufacturer's gross vehicle weight rating that is greater than:
 - A. For an automobile, 22 inches in the front and rear;
 - B. For a vehicle of 4,500 pounds and less, 24 inches in the front and 26 inches in the rear;
 - C. For a vehicle of 4,501 pounds to 7,500, 27 inches in the front and 29 inches in the rear; and
 - D. For a vehicle 7,501 pounds to 10,000 pounds, 28 inches in the front and 30 inches in the rear.

Measurements must be taken from a level surface to the lowest point on the frame.

2. **Modification.** A vehicle may not be modified to cause, under normal operation, the vehicle body or chassis to come into contact with the ground, expose the fuel tank to damage from collision or cause the wheels to come in contact with the body.
3. **Suspension.** An original suspension system may not be disconnected. This section does not prohibit the installation of heavy duty equipment, including shock absorbers and overload springs, or prohibit a person from operating on a public way a motor vehicle with normal wear of the suspension system if normal wear does not affect control of the vehicle.

1921. **Television Prohibited from Vehicles**

A person may not operate a motor vehicle equipped with a television viewer, screen or other means of visually receiving a television broadcast that is visible to the operator. This section does not apply to a law enforcement officer using a video camera or other video equipment for law enforcement purposes.

1922. **Advertisements on Motor Vehicle**

1. **Prohibition.** Except as provided in this section, an owner or operator may not operate on a public way a motor vehicle to which is affixed an illuminated advertisement.
2. **Display rules.** For purposes of vehicle identification, in addition to the provisions of section 1951, a motor truck, truck tractor or semi trailer may display an illuminated sign in accordance with rules adopted by the Commissioner of Public Safety according to the Maine Administrative Procedure Act.
3. **Standards.** Among other standards determined by the Commissioner of Public Safety to be necessary to protect the welfare and safety of the general public, an illuminated sign:
 - A. Must bear the name of the owner of the vehicle, the lessee of the vehicle or the person for which the operator is transporting property or goods; and
 - B. May identify the cargo in transit.
4. **Location of sign.** An illuminated sign may only be displayed as follows:
 - A. On truck tractors, on the wind deflector on the roof of the truck tractor;
 - B. On a semi trailer, on the front portion of the semi trailer; and
 - C. On a truck, on the front portion of the storage compartment above and behind the cab.
5. **Lights prohibited.** An illuminated sign may not be lighted by a flashing, blinking or neon light.
6. **Form, size and light of sign.** An illuminated sign must be in a form, size and light so as not to distract or impair the vision of the operator of another motor vehicle.
7. **Exception.** This section does not apply to the illuminated name and telephone number identification affixed to vehicles for the conveyance of passengers.

SUBCHAPTER II

TRUCKS

1951. Name of Owner or Lessee Displayed

A truck tractor owner or operator shall display on both sides of the truck tractor the name of the owner or lessee in letters not less than 2 ½ inches in height.

1952. Flares; Emergency Signals

1. **Carry flares.** A truck or truck tractor with a registration for operation with gross vehicle weight in excess of 10,000 pounds must be equipped with 2 red flags, 3 flares and 3 red lanterns or red emergency reflectors. A vehicle transporting inflammable liquids or gas in bulk may not carry flares.
2. **Disabled vehicle.** When a truck or truck tractor with a registration for operation with gross vehicle weight in excess of 10,000 pounds is disabled on a public way, the operator shall, during the time that lights are required to be illuminated, place emergency signals as follows:
 - A. One flare or lantern or red emergency reflector in the center of the lane of traffic occupied by the disabled motor vehicle not less than 100 feet from the vehicle in the direction of traffic approaching in that lane;
 - B. One flare or lantern or red emergency reflector not less than 100 feet from the vehicle in the center of the same lane in the opposite direction; and
 - C. One flare or lantern or red emergency reflector at the traffic side of the vehicle not closer than 10 feet from the front or rear.

When lights are not required to be illuminated, red flags must be used, except that no flag is required to be placed at the side of the vehicle.

1953. Splash Guards

1. **Required.** A truck, truck tractor, trailer and semi trailer must be equipped with suitable guards that will effectively reduce the spray or splash of mud, water or slush caused by the rear wheels.
2. **Exception.** Splash guards are not required for:
 - A. A truck with registered gross vehicle weight of 6,000 pounds or less;
 - B. A dump truck:

- (1) While being operated on construction or reconstruction projects in a construction area established by the Department of Transportation; and
 - (2) On a public way between the project and a pit or quarry where materials are being obtained when the pit or quarry is within 7 miles of the construction area;
- C. A truck tractor when not hauling a trailer or semi trailer;
 - D. A fire department vehicle;
 - E. A motor vehicle equipped with fenders; or
 - F. A truck with a stake body that extends not less than 6 feet beyond the rear axle and that is registered under section 505.

2111. Air Pollution Control Systems

1. **Definition.** For the purpose of this section, "air pollution control system" means a device or element of design installed on or in a motor vehicle or engine to comply with pollutant emission restrictions established by federal law.
2. **Prohibition.** A person commits a Class E crime if that person operates a motor vehicle, except for an antique auto, a motor vehicle using liquefied petroleum gas as engine fuel or a farm tractor on a public way if any operational element of the air pollution control system of that vehicle has been removed, dismantled or otherwise rendered inoperative.
3. **Suspension.** If a person is convicted of violating this section, the clerk of the court shall furnish to the Secretary of State an attested copy of the judgment of conviction. On receipt of that copy, the Secretary of State shall suspend the registration of the vehicle in violation.

The suspension may be appealed as provided in section 2485.

Unless otherwise ordered by the Superior Court on appeal, the suspension remains in effect until the Secretary of State has received notice from an official inspection station that the air pollution control system of that vehicle is in good working order.

2113. Visible Emissions

1. **Prohibition.** A person may not operate a gasoline-powered motor vehicle on a public way if the motor vehicle emits visible smoke, other than water vapor, in the exhaust emissions for a period in excess of 5 consecutive seconds.
2. **Violation; penalty.** A violation of this section is a traffic infraction for which a forfeiture not to exceed \$100 may be adjudged. A person against whom enforcement action has been taken for a violation of subsection 1 may not be adjudicated to have committed a subsequent violation of subsection 1 unless 24 hours have elapsed between the date and time of the first violation indicated on the Violation and Summons Complaint and the subsequent violation.

2114. Diesel-Powered Motor Vehicle Emission Opacity Testing Program

1. **Program established.** The diesel-powered Motor Vehicle Emission Opacity Testing Program, referred to in this section as the “program,” is established within the Department of environmental Protection. The Department of Environmental Protection shall administer the program in cooperation with the Department of Public Safety.
2. **Diesel-Powered Motor Vehicle.** As used in this section, “diesel-powered motor vehicle” refers only to diesel-powered motor vehicles that have a gross vehicle weight rating of 26,001 or more pounds and that are used in commerce. “Diesel-powered motor vehicle” does not include a truck registered as a farm truck.
3. **Testing and repair requirement.** A person who causes operation of a diesel-powered motor vehicle shall comply with the requirements of the program, including emission opacity standards and testing and repair requirements.

Only diesel-powered motor vehicles identified by certified inspectors as potential violators of the program’s emission opacity standards are subject to testing under this section. Inspectors must be certified pursuant to the procedures for certification specified in 40 Code of Federal Regulations, Part 60, Appendix A, Method 9.

4. **Standards and procedures.** The Commissioner of Environmental Protection shall establish standards and procedures to implement the program. The standards and procedures must include the following:
 - A. Emission opacity standards for diesel-powered motor vehicles that are consistent with emission opacity standards for diesel-powered motor vehicles recommended by an interstate association of air quality control divisions in the northeast states;
 - B. Standards and procedures, including testing methods and standards for test equipment, for safe and effective roadside testing of diesel-powered motor

vehicles that operate on public ways of the State for the purpose of enforcing compliance with emission opacity standards;

- C. Standards and procedures for the administration and enforcement of the program. The rules may establish reciprocity agreements with other states that recognize enforcement actions related to diesel-powered motor vehicle testing programs in other states; and
 - D. Repair requirements and standards and procedures for certification of repairs; and
 - E. Standards and procedures for the enforcement of violations and the monitoring and certification of repairs made to bring a vehicle into compliance pursuant to this section.
5. **Educational program.** A person who causes operation of a diesel-powered motor vehicle that does not comply with the program's emission opacity standards must be given educational materials by the Department of Environmental Protection regarding the environmental and other benefits of a vehicle that is in compliance with the standards set forth in subsection 4.
6. **(Repealed)**
7. **Definition.** As used in this section, "opacity" means the degree of light-obscuring capability of emissions of visible air contaminants expressed as a percentage. Complete obscuration must be expressed as 100% opacity.

PARTIAL INSPECTIONS

1. **Partial inspection** means an inspection that consists of running gear, steering, brakes, exhaust system and lights. Running gear means the wheels, axles, springs, and frame of a vehicle. If a vehicle has no windshield, the inspection sticker shall be kept with the registration certificate.
2. **Limited use farm trucks** that bear the name of the municipality in which excise tax is paid and which are operated within a 20-mile radius from the main entrance of the farm where the vehicle is customarily kept are subject to the partial inspection listed above. In addition, limited use farm trucks are subject to a visual tire and wheel inspection as outlined in Unit 2 Class A Motor Vehicle Inspections §8.1.3 through §8.1.7.
3. **Fish trucks** that bear the name of the municipality in which excise tax is paid and which are operated within a 20-mile radius of the municipality in which excise tax is paid are subject to the partial inspection listed above. In addition, fish trucks are subject to a visual tire and wheel inspection as outlined in Unit 2 Class A Motor Vehicle Inspections §8.1.3 through §8.1.7.
4. **Woods tractors** that are registered pursuant to 29-A MRSA §509 or are exempt from registration and which are operated only during daylight hours, and only within a 10 mile radius of the premises where the tractor is customarily kept, and only between those premises and a woodlot used for the logging purposes by the owner and a filling station or garage for fuel or repairs, is subject to the partial inspection listed above. In addition, woods tractors are subject to a visual tire and wheel inspection as outlined in Unit 2 Class A Motor Vehicle Inspections §8.1.3 through §8.1.7. Woods tractors are exempt from the inspection of lights as listed in the partial inspection.
5. **Home-made farm tractors** which have a motor and chassis at least 10 years old and having a body capacity of not more than 1.5 cubic yards and used exclusively for agricultural purposes are subject to the partial inspection listed above.

VEHICLES REGISTERED IN A FOREIGN STATE

Any vehicle registered in a foreign state may, at the discretion of the owner or operator, may have a Maine safety inspection at any licensed inspection station for the purposes of obtaining a Maine inspection sticker. If the vehicle passes the inspection, a Maine inspection sticker may be issued and affixed to the vehicle.

ADDITIONAL INFORMATION HEADLAMP AIMING

All equipment for testing headlamps must comply with the Society of Automotive Engineers Recommended Practice for Headlamp Inspection Equipment.

Mechanical Aimer

If a mechanical aimer is used, it shall be in good repair and adjustment, and shall be used according to the manufacturer's instructions and must be calibrated to the slope of the floor on which the vehicle stands.

Headlamp Testing Machine

If a headlamp testing machine is used, it shall give results equivalent to those obtained using the screen procedure shown below. It shall be in good repair and adjustment, and shall be used in accordance with the manufacturer's instructions. The machine using a photo-electric cell or cells to determine aim should also have a visual screen upon which the beam pattern is projected proportional to its appearance and aim on a screen at 25 feet. Such visual screen shall be plainly visible to the operator and should have horizontal and vertical reference lines to permit visual appraisal of the lamp beam.

Headlamp Aiming by the Screen Method

First locate the vehicle so that it is square with the screen and with the front of the headlamps directly over a reference line which has been painted on the floor. Next locate the center line on the aiming screen so that it is in line with the center of the vehicle. This can be done as shown below by sighting through the center of the rear window of the vehicle and over the hood ornament - have vehicle moved until it is in alignment with these two points. If there is no center hood ornament, mark the center of the front and rear windows with narrow strips of masking tape. Use these "sights" to locate the center line of the aiming screen directly in line with the vertical axis.

Aiming Area Required

It is desirable to have a specific aiming area in a darkened location. This should be sufficient for the vehicle and an additional 25 feet measured from face of lamps to the front of the visual screen. The floor on which the car rests must be flat, and level with the bottom of the screen. If the floor is not level, compensate.

Aiming Screen

If a screen is used, it should be 5' high x 12' wide with a matte white surface well shaded from extraneous light, and properly adjusted to the floor on which the vehicle stands. Provisions may be made for moving the screen so that it can be aligned parallel with the rear axle and so that a

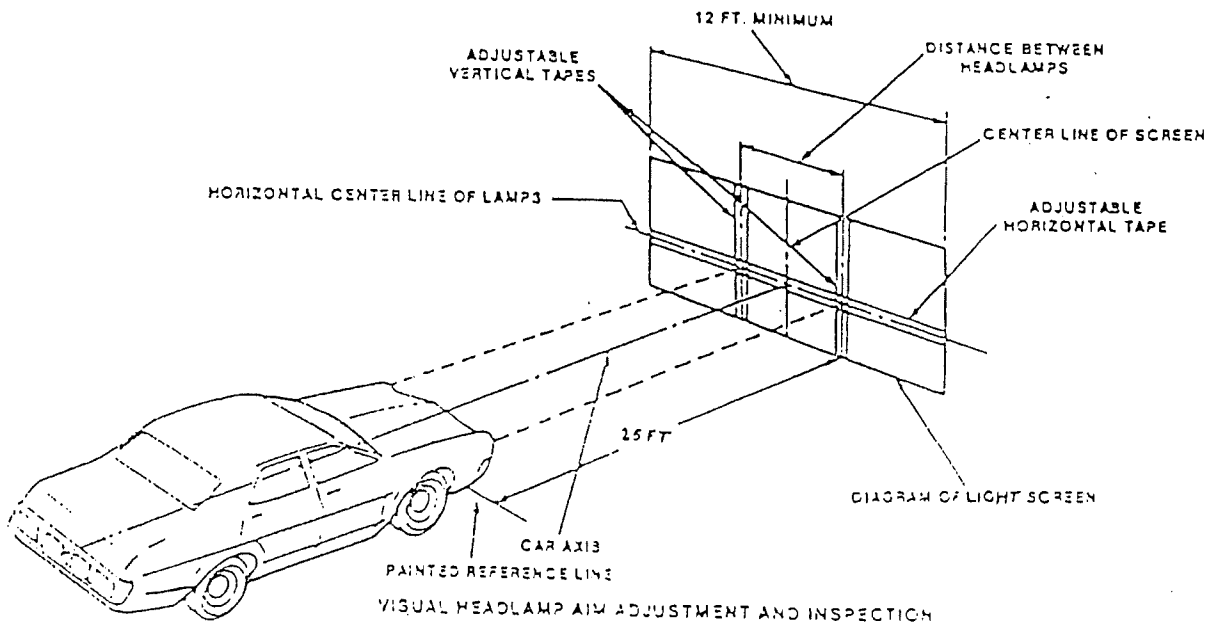
horizontal line drawn perpendicularly from the centerline of the screen will pass an equal distance midway between the two headlamps.

The screen shall be provided with a fixed vertical centerline, two laterally adjustable vertical tapes, and one vertically adjustable horizontal tape.

If a regular commercial aiming screen is not available, the screen may consist of a vertical wall having a clear uninterrupted area approximately 6 feet high and 12 feet wide.

The surface should be finished with a washable non-gloss white paint.

After the aiming screen has been set up in its permanent location, it is necessary to paint a reference line on the floor directly under the lens of the lamps to indicate the proper location of the headlamps when they are being aimed.



MOTORCYCLE HEADLIGHT AIMING 12.5 Foot Distance

Procedure: Tires must be inflated to the pressure recommended by the manufacturer. Conduct the test with the motorcycle in the upright position, with the rider seated in the normal riding position and the front wheel facing straight ahead. Inspect headlamps on the upper beam.

Vertical Aim: After measuring the height from the floor to the headlamp center, adjust the horizontal line on the chart to the corresponding height. Reject vehicle if the high intensity zone is higher than the horizontal line or more than 4 inches below it.

Lateral Aim: Reject vehicle if the high intensity zone is more than 6 inches right or left of the vertical line.

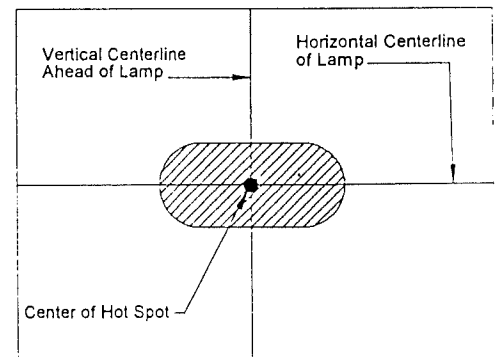
MOTORCYCLE HEADLIGHT AIMING 25 Foot Distance

Procedure: Tires must be inflated to the pressure recommended by the manufacturer. Conduct the test with the motorcycle in the upright position, with the rider seated in the normal riding position and the front wheel facing straight ahead.

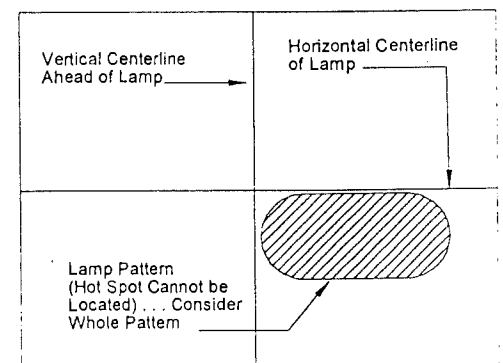
Composite type lamps incorporating both the high and low beam in the same housing should be checked for alignment on the low beam. Alignment tolerances must be within four inches of the horizontal and vertical center.

High beam is aligned with the “hot spot” or center of the high intensity zone centered on the horizontal/vertical axis that is located at the same height as the headlamp at a distance of 25 feet.

Low beam is aligned by locating the beam pattern so the upper edge of the high intensity zone is at the horizontal axis and the left edge of the high intensity zone is at the vertical axis. The low beam “hot spot” will be 2 to 4 inches down and 5 to 8 inches right of the horizontal/vertical axis.



Headlamp Aiming Procedure - High Beam



Headlamp Aiming Procedure - Low Beam

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