COMMONWEALTH of VIRGINIA
Office of the Governor

PROCLAMATION

The successful administration of the Virginia traffic safety program is dependent to a large extent upon the proper mechanical maintenance of motor vehicles, trailers or semi-trailers which operate over the streets and highways of Virginia.

Motor vehicles, trailers or semi-trailers inspected under this Proclamation which continue to be registered in and operated upon the highways of this Commonwealth shall be reinspected within twelve months from each month of inspection thereafter. Any motor vehicle, trailer or semi-trailer presently being operated in Virginia which bears a current inspection sticker as of the date of this proclamation shall not be required to be reinspected pursuant to this Proclamation until the current twelve-month period has expired.

The owner or operator of a motor vehicle, trailer, or semi-trailer subject to this Proclamation shall submit the same to an official inspection station for inspection before operating such motor vehicle, trailer or semi-trailer upon the highways of Virginia, except as follows:

1. Four-wheel vehicles weighing less than 500 pounds and having less than 6 horsepower;
2. Trailers not equipped with brakes;
3. Motor vehicles defined under Section 46.2-100 of the Code of Virginia as an antique motor vehicle and licensed as an antique motor vehicle pursuant to the provisions of Section 46.2-730 of the Code;
4. Any motor vehicle, trailer or semi-trailer which is outside of the Commonwealth of Virginia at the time its inspection expires may be returned to the owner's or operator's place of residence or the owner's legal place of business in the State before it will be required to be submitted for a reinspection;

In addition, any truck, tractor truck, trailer or semi-trailer which is outside of the Commonwealth of Virginia at the time its inspection expires may be operated (i) from a point outside the Commonwealth to the place where such
Motor vehicles, trailers or semi-trailers purchased from auto auctions within the Commonwealth also may be operated upon the highways from such auction to the purchaser's place of residence or business without being inspected;

12. Motor vehicles, trailers or semi-trailers, after the expiration of a period fixed for the inspection thereof, may be operated over the most direct route between the place where such vehicle is kept or garaged and an official inspection station for the purpose of having the same inspected pursuant to a prior appointment with such station for such inspection as provided in Section 46.2-1157 of the Code of Virginia;

13. Vehicles transporting well drilling machinery and mobile equipment as defined in Section 46.2-700 of the Code of Virginia;

14. Motor vehicles being towed in a legal manner as exempted by Section 46.2-1150 of the Code of Virginia;

15. Log trailers as exempted by Section 46.1-1159 of the Code of Virginia;

16. Motor vehicles designed or altered and used exclusively for racing or other exhibition purposes, as exempted by Section 46.2-1160 of the Code of Virginia;

17. Any tow dolly or converter gear as defined in Section 46.2-1119 of the Code of Virginia;

18. Any Commercial Motor Vehicle subject to the Federal Motor Carrier Safety Regulations which is registered in the Commonwealth, but domiciled or garaged outside of the State, found to meet the Federal requirements for annual inspection through a self-inspection, a third party inspection, a Commercial Vehicle Safety Alliance inspection or a periodic inspection performed in any State with a program determined by the Federal Motor Carrier Safety Administration to be comparable to, or as effective as, the requirements of Title 49, Code of Federal Regulations, Part 396, provided documentation is available for inspection by law enforcement officials which verifies the inspection is current. Upon return to the Commonwealth, such vehicle shall be subject to a re-inspection in accordance with the provisions of Section 46.2-1157 of the Code of Virginia and this Proclamation;
19. Semi-trailers and trailers as defined in Section 46.2-100, Code of Virginia, having a gross vehicle weight rating of 26,001 pounds or more, and operated in interstate commerce, shall be deemed to comply with Section 46.2-1157 of the Code of Virginia and this Proclamation, if documentation is on the vehicle and available for inspection by law enforcement officials which verifies an inspection done pursuant to 49 CFR, Part 396 is current and valid.

Motor vehicles, trailers or semi-trailers not registered in Virginia are not subject to this Proclamation. Accordingly, mopeds as defined in Section 46.2-100 and vehicles exempted from licensing under Sections 46.2-662 through 46.2-683, are not required to be inspected.

NOW, THEREFORE, I, Timothy M. Kaine, Governor of the Commonwealth of Virginia, do hereby proclaim that, with the exception of those vehicles specifically exempted heretofore in this document, all motor vehicles, trailers or semi-trailers bearing a Virginia registration plate or plates, or registered as a motor vehicle, trailer or semi-trailer under any provision of Virginia law and operated upon the highways of this Commonwealth shall be submitted for inspection at an official inspection station and shall have corrected all defects thus found to exist.

Given under my hand and under the lesser seal of the Commonwealth, at Richmond, this _____day of July in the year of Our Lord, two thousand and six, and in the two hundred thirty-first year of the Commonwealth.

[Signature]
Governor

By the Governor:

[Signature]
Secretary of the Commonwealth
DIRECT INQUIRIES OR COMMENTS
TO THE ADDRESS BELOW

USED WHITE RECEIPTS AND PINK
REJECTION RECEIPTS SHALL BE
MAILED TO:

SAFETY DIVISION
DEPARTMENT OF STATE POLICE
P. O. BOX 85607
RICHMOND, VIRGINIA 23285-5607

ALL OTHER CORRESPONDENCE
SHALL BE MAILED TO:

SAFETY DIVISION
DEPARTMENT OF STATE POLICE
7700 MIDLOTHIAN TURNPIKE
RICHMOND, VIRGINIA 23235

THE FOLLOWING TELEPHONE NUMBERS ARE LISTED AS SPECIFIED:

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ALL OTHER INQUIRIES & INFORMATION

804-674-6774
or e-mail
safety@vsp.state.va.us

LOCAL AREA OFFICES

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<td>(540) 829-7414</td>
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<tr>
<td>LYNCHBURG</td>
<td>(434) 582-5141</td>
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<tr>
<td>WYTHEVILLE</td>
<td>(276) 228-6220</td>
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<tr>
<td>SUFFOLK</td>
<td>(757) 925-2432</td>
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<tr>
<td>SALEM</td>
<td>(540) 387-5437</td>
</tr>
<tr>
<td>FAIRFAX</td>
<td>(703) 323-4549</td>
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View the inspection regulations at www.vsp.state.va.us

Revised 01-23-08
### MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS

#### Chapter 70

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CHAPTER 70
MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS

Part I
Guidelines for the Administration of Virginia's Annual Motor Vehicle Inspection Program

19VAC30-70-1. Purpose and authority.

The Virginia Annual Motor Vehicle Inspection Program was developed and adopted to promote highway safety. Its aim is to assure that all Virginia registered vehicles are mechanically safe to operate over the highways of the Commonwealth.

The rules and regulations governing the Annual Motor Vehicle Inspection Program are contained in the Official Annual Motor Vehicle Inspection Manual. These rules and regulations are promulgated under the authority of Chapter 10 (§46.2-1000 et seq.) of Title 46.2 of the Code of Virginia. All official inspection stations shall comply with these rules and regulations, issuing approval certificates only to those vehicles which the inspections shall determine to be in compliance with those rules and regulations.

These guidelines are intended to ensure a uniform system of corrective action for those who violate the rules and regulations of the Annual Motor Vehicle Inspection Program.

The Official Annual Motor Vehicle Inspection Manual covers administrative procedure as well as numerous vehicular safety items of varying importance. It is, therefore, necessary that the various sections of the manual be divided into categories of seriousness. This will provide a uniform system of corrective action for the certified inspector mechanics and the inspection stations.

19VAC30-70-2. Corrective action procedures.

These procedures are intended to establish an equitable and effective process for recognizing and correcting unacceptable work performances. When multiple offenses arise out of the same act or inspection, disciplinary action will be taken on the most serious offense. All classes of offenses will apply uniformly to the inspectors involved in the offenses and management alike, where it is revealed that management was involved in the matter or had knowledge of its occurrence.

Unacceptable work performance shall be divided into four groups of offenses based on the seriousness as they pertain to vehicle safety.

Specified disciplinary action for each class offense shall not be exceeded. However, if strong mitigating circumstances exist, the appropriate corrective action will be taken.

19VAC30-70-3. Class I offenses.

Class I offenses are unacceptable work performances less serious in nature, but which require correction in order to maintain an efficient and effective annual motor vehicle inspection program. A violation of any paragraph of the following sections of the Official Annual Motor Vehicle Inspection Manual and rules and agreements not covered in the Annual Motor Vehicle Inspection Manual or those disseminated by other means shall constitute a Class I offense, unless designated otherwise:

19VAC30-70-10 A through D
19VAC30-70-10 F through I
19VAC30-70-10 K through O
19VAC30-70-20 in its entirety
19VAC30-70-30 in its entirety
19VAC30-70-40 in its entirety
19VAC30-70-50 in its entirety
19VAC30-70-60 in its entirety
19VAC30-70-70 in its entirety

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19VAC30-70-80 B 3
19VAC30-70-160 in its entirety (except subdivisions I 10 and 11 g (2))
19VAC30-70-170 in its entirety
19VAC30-70-200 in its entirety
19VAC30-70-290 in its entirety
19VAC30-70-310 in its entirety
19VAC30-70-330 in its entirety
19VAC30-70-360 D 4 c and f
19VAC30-70-410 in its entirety
19VAC30-70-440 B
19VAC30-70-530 in its entirety (except subdivisions H 10 i and 11 g (2))
19VAC30-70-540 in its entirety
19VAC30-70-570 in its entirety
19VAC30-70-660 in its entirety

Disciplinary action for Class I offenses shall be:

1st offense - Oral reprimand - Recorded on S.P. 164.
2nd offense - Oral reprimand by a supervisor - Recorded on S.P. 164.
3rd offense - Written reprimand from the Safety Officer or his designee.
4th offense - Suspension of not less than 15 nor more than 30 days.

Offenses shall be cumulative in nature and shall remain active for 24 months from date of offense.

19VAC30-70-4. Class II offenses.

Class II offenses shall be violations of any section of the Annual Motor Vehicle Inspection Manual considered very serious but the consequence of such violation or omission is not likely to be an imminent cause or contributing factor to a traffic crash or other vehicle related injury. A violation of the following sections of the Annual Motor Vehicle Inspection Manual shall constitute a Class II offense unless designated otherwise:

19VAC30-70-150 in its entirety
19VAC30-70-180 in its entirety
19VAC30-70-210 in its entirety
19VAC30-70-230 in its entirety
19VAC30-70-240 in its entirety
19VAC30-70-250 in its entirety
19VAC30-70-260 in its entirety
19VAC30-70-270 in its entirety
19VAC30-70-280 in its entirety
19VAC30-70-300 in its entirety
19VAC30-70-320 in its entirety
19VAC30-70-360 A 7 and C 1 through C 13
19VAC30-70-380 in its entirety

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19VAC30-70-390 in its entirety
19VAC30-70-420 in its entirety
19VAC30-70-520 in its entirety
19VAC30-70-550 in its entirety
19VAC30-70-580 in its entirety
19VAC30-70-600 in its entirety
19VAC30-70-610 in its entirety
19VAC30-70-620 in its entirety
19VAC30-70-630 in its entirety
19VAC30-70-640 in its entirety
19VAC30-70-650 in its entirety
19VAC30-70-670 in its entirety
19VAC30-70-680 in its entirety

Disciplinary action for a Class II offense shall be:
1st Offense - Oral reprimand - Recorded on S.P. 164 and confirmed by a supervisor.
2nd Offense - Written reprimand from the Safety Officer or his designee.
3rd Offense - Suspension of not less than 30 nor more than 60 days.

Offenses are cumulative in nature and shall remain active for a period of 24 months from date of offense.

A Class II offense in combination with three Class I offenses shall be grounds for no less than a 30-day nor more than a 60-day suspension.

19VAC30-70-5. Class III offenses.

Class III offenses shall be violations of those sections of the Annual Motor Vehicle Inspection Manual considered most critical from a safety viewpoint. They would consist of the omission of checking or improper approval of an item so critical to the safe operation of a motor vehicle as to have the potential of being the imminent cause or factor of a motor vehicle crash. A violation of the following sections of the Annual Motor Vehicle Inspection Manual shall constitute a Class III offense unless designated otherwise:

19VAC30-70-10 J
19VAC30-70-10 P, P1, P2
19VAC30-70-80 in its entirety (except subdivision B 3)
19VAC30-70-90 in its entirety
19VAC30-70-100 in its entirety
19VAC30-70-110 in its entirety
19VAC30-70-120 in its entirety
19VAC30-70-130 in its entirety
19VAC30-70-140 in its entirety
19VAC30-70-160 I 10 h and 11 f
19VAC30-70-160 I 10 g and 11 g (2)
19VAC30-70-190 in its entirety
19VAC30-70-220 in its entirety

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19VAC30-70-340 in its entirety
19VAC30-70-350 in its entirety
19VAC30-70-360 A and B
19VAC30-70-360 D 15 through D 22
19VAC30-70-370 in its entirety
19VAC30-70-400 in its entirety
19VAC30-70-440 in its entirety (except subdivision B 2)
19VAC30-70-450 in its entirety
19VAC30-70-460 in its entirety
19VAC30-70-470 in its entirety
19VAC30-70-480 in its entirety
19VAC30-70-490 in its entirety
19VAC30-70-500 in its entirety
19VAC30-70-510 in its entirety
19VAC30-70-530 H 10 i and 11 g (2)
19VAC30-70-560 in its entirety
19VAC30-70-590 in its entirety

Disciplinary action for a Class III offense shall be:

1st offense—Written reprimand from the Safety Officer or his designee.
2nd offense—Suspension for not less than 45 nor more than 90 days.

Offenses are cumulative in nature and will remain active for a period of 24 months from date of offense.

A Class III offense in combination with two Class II offenses or three Class I offenses shall be grounds for no less than a 60-day nor more than a 90-day suspension.

19VAC30-70-6. Class IV offenses.

Class IV offenses are those violations considered so critically important to the integrity and credibility of the Official Annual Motor Vehicle Inspection Program as to require immediate and severe disciplinary action. The following violations and actions shall be considered a Class IV offense:

1. Loss of driver's license, with the exception of an administrative court-ordered suspension that does not exceed seven days.
2. Obvious usage of either alcohol and/or drugs by an employee associated with the Annual Motor Vehicle Inspection Program.
3. Loss of inspection stickers through neglect.
4. Improper use of inspection supplies such as placement on a vehicle that has not been inspected or failure to affix the inspection sticker to the vehicle in its proper location, after inspection.
5. Falsifying inspection receipts or inspection records.
6. Giving false information during an inspection complaint investigation.
7. Performing either an inspection or inspections at a station without authority from the safety officer.
8. The arrest of any person associated with the inspection program for a criminal offense or the institution of civil action of a nature that would tend to immediately reflect upon the integrity and reputation of the Department of

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State Police shall be grounds for an immediate suspension upon final court disposition. The conviction for such a criminal offense or a civil judgment or bankruptcy may result in a revocation of the station appointment.

9. The use of profanity or verbal abuse directed at customers presenting their vehicles for inspection by inspectors, managers or business owners.

10. Illegal use of inspection supplies such as stealing, selling, mailing or giving away, shall be grounds for revocation.

11. Nonpayment of inspection fees.

12. Conduct displayed by station owners and/or state inspectors that may be rude or discourteous, or use of profanity and/or verbal abuse directed at or towards Safety Division Personnel may be grounds for revocation.

Disciplinary action for a Class IV offense shall be immediate suspension or revocation. A suspension shall not be less than 90 days nor more than six months. A revocation shall not be less than one year nor more than three years. Offenses are cumulative in nature and will remain active for a period of 24 months from the date of the offense. For a subsequent violation within 24 months, the suspension shall not be less than six months nor more than one year.

In the case of the loss of the driver's license, the suspension shall remain in effect until the driver's license is reinstated and consideration for reinstatement of inspection privileges will be made at that time.

In cases concerning nonpayment of fees when the inspection station has been given 15 days to reply to their final notice, the suspension of the affected inspection station shall remain in effect until all inspection fees are paid. Consideration for reinstatement of inspection privileges will be made when all fees are paid. Furthermore, stations that have not paid their processing fee after the 15-day period will not be issued any additional inspection supplies. Supply orders may resume when the inspection fee is paid and the station has been reinstated to an active status.

A Class IV offense in combination with three Class I offenses, two Class II offenses, or one Class III offense shall be grounds for no less than a 90-day nor more than a six-month suspension.


Any violation under any class of offenses requiring a third suspension within a 24-month period shall be grounds for a revocation. The suspension or revocation period for a subsequent violation requiring suspension or revocation under any class of offenses within a 24-month period shall be twice that of a previous suspension or revocation.

For suspension periods of less than six months, inspection stations and safety inspectors will not be required to file application for reinstatement.

For suspension periods of six months or more, or revocation periods of one to three years, inspection stations must complete the process as set forth for original appointment. Reapplications may be made 60 days prior to the suspension expiration. Suspended inspectors shall contact the nearest safety office or supervising trooper to request reinstatement.

Inspection stations who have their privilege to perform inspections revoked must complete the application process as set forth for original appointments after the expiration of the period of revocation. Safety inspectors who have their privilege to perform inspections revoked must complete the application process for initial certification, after the expiration of the period of revocation.

If during the course of an official investigation, station management voluntarily surrenders the station's inspection supplies, particularly after being cautioned not to do so, the station shall not be eligible for reinstatement for a period of 90 days. This voluntary action shall not be the subject of an appeal.


"Suspension" means that the privilege or appointment has been temporarily withdrawn, but may be reinstated following the period of suspension unless it has expired prior to the end of the period of suspension.

"Revocation" means that the privilege or appointment is not subject to renewal or restoration except through reapplication after the expiration of the period of revocation. A period of revocation if from one to three years depending on the severity of the case.

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19VAC30-70. Examinations for inspector’s license.

A. Effective March 31, 2003, the Department of State Police went back to administering the written examination for original certification for all inspectors. With few exceptions, recertifications are done at the normal testing sites along with original certification tests.

B. In order for an individual to become a certified safety inspector, the following actions shall be followed:

1. The person shall contact his assigned Safety Division trooper or the local safety office to obtain the following:
   a. Mechanics Certification Application (SP-170B);
   b. Criminal History Record Request (SP-167); and
   c. Mechanics Application Worksheet.

2. The trooper or office personnel should ask some preliminary questions to ensure the applicant is qualified to apply.

3. The person shall complete the SP-170B in its entirety and have it notarized on the back; complete Section 1A of SP-167 and have it notarized; and complete the worksheet with two character and two mechanical references and places of employment.

4. The applicant shall then take the completed application forms to the State Police testing site and present it to the trooper for the written examination.

5. The trooper will verify the notarizations and check the driver's license for validity and identification of the applicant. The trooper will administer the test. If the applicant's driver's license is found to be expired, suspended or revoked, the applicant will be advised and the application will be destroyed. The applicant may reapply once the driver’s license has been reissued or reinstated.

6. If the applicant successfully completes the test, the trooper will note at the end of Section 1 on the SP-170B form the word "Passed" and the date. The trooper will initial the test and send it to Safety Division Headquarters, Mechanics File Section, for further processing and investigation.

7. The examination will consist of five sections (brakes, suspensions, glass, lights and general) containing 20 questions each. A minimum score of 75% must be attained for each section.

8. If the applicant fails the test, it will be noted at the end of Section 1 on the SP-170B form the words "Disqualified - Failed Test."

9. If the applicant desires to test again, he may do so after 30 days. If the applicant is again unsuccessful in passing the examination, the trooper shall take the application forms and destroy them. The applicant may contact his assigned Safety Division trooper or the local safety office after six months to reapply.

C. Recertification.

1. Safety inspectors desiring to renew their inspector's license must participate in the recertification process.

2. All safety inspectors will be required to satisfactorily pass the appropriate examination for the license the inspector holds.

3. A safety inspector will not be permitted to perform inspections after the expiration date of his inspector's license.

4. A safety inspector's license shall be valid for a period of three years.

5. All safety inspectors' licenses will display an inspector's number and will no longer display the social security number. The inspector's number will be written on the inspection sticker receipt.

6. Safety inspector's testing sites will no longer be included on an inspection bulletin. Testing site information will be updated in the computer system, so that the usual letters going to inspectors to remind them of this upcoming recertification will contain the updated information. All State Police safety area offices will also have the updated information.

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7. If the safety inspector has any questions about the testing sites, the safety inspector should contact the area safety office closest to him. The office numbers are:

Richmond 804-743-2217
Culpeper 540-829-7414
Lynchburg 434-582-5141
Wytheville 276-228-6220

Suffolk 757-925-2432
Salem 540-387-5437
Fairfax 703-323-4549

D. Reinstatement of safety inspector's licenses following a period of suspension or revocation.

1. Once a safety inspector's license has been suspended, regardless of the cause for suspension, no application form (SP-170B) is required for reinstatement.

2. If the inspector is suspended for less than six months, the safety inspector's license will be held at the local area office and returned upon the expiration of the suspension period. A check will be made with DMV prior to reinstatement.

3. If the inspector's license has been suspended for six months or more, he may request reinstatement 60 days prior to the suspension expiration by contacting the supervising trooper, whereas a check will be made with DMV and Central Criminal Records Exchange prior to reinstatement. The inspector's license will be returned after the suspension expiration if still valid.

4. If the suspended inspector's license expires during the suspension period, the inspector may complete the process for inspector recertification as outlined in this section. The trooper administering the test will retain all documentation. The inspector's license will be returned at the end of the suspension period and the appropriate documents forwarded to the Safety Division.

5. Inspectors whose safety inspector's licenses have been revoked must complete the application process for initial certification as set forth in this section.

E. Vo-Tech students who successfully complete the Vocational Automotive Mechanics Course and who are expected to graduate from the program with the required 1,080 hours, and meet the requirements of the Department of State Police, will be certified as safety inspectors.

1. The Vo-Tech instructor will contact their assigned Safety Division trooper or the local safety office in their area by March 15 of each year. The written examination will be scheduled for students who are at least 18 years of age or who will be at least 18 years of age by May 31 of that year.

2. The Safety Division troopers responsible for administering the written examinations at the Vo-Tech Center will forward sufficient SP-170B forms for each student to complete prior to the testing date. A Criminal History Record Request, Form SP-167, if the student is at least 18 years of age, must also be completed. The Safety Division trooper will indicate at the top of the SP-170B form the Vo-Tech school, area where the examination was given, and the trooper's name who administered the examination.

3. The trooper will verify the notarizations and check the driver's license for validity and identification of the applicant. The trooper will administer the written examination. If the applicant's driver's license is found to be expired, suspended or revoked, the applicant will be advised and the application will be destroyed. The applicant may re-apply once the driver's license has been reissued or reinstated.

4. If the applicant successfully completes the written examination, the trooper will note at the head of Section 1 on the SP-170B form the word "Passed" and the date. The trooper will initial the test and forward it to the Safety Division, Mechanics File Section for further processing and investigation. Due to the age of these students, this should be done in a minimal amount of time.

5. If the applicant fails the test, it will be noted at the end of Section 1 on the SP-170B form the words "Disqualified - Failed Test."

a. The Safety Division trooper will only administer one written examination at the Vo-Tech Center. Those students who fail the first written examination may retest, but not sooner than 30 days from the date of the last written examination. Those students who fail the first written examination will keep the SP-170B form in their possession and present it to the Safety Division trooper at the test site prior to taking the second written examination.
b. The second written examination will not be administered to the students prior to June 15 of that year. Prior to taking the second written examination, the student shall have completed the Vocational Automotive Mechanics Course and must be employed at an Official Inspection Station. These students will not be required to have completed the one year of practical experience as an automotive mechanic.

c. Students who do not pass the initial examination should visit a testing site in their area to take a second written examination.

d. For those students who pass the second written examination, the Safety Division trooper will forward the student's form SP-170B to the Safety Division for further processing and investigation. Those students who successfully pass all phases for original certification will then be issued a temporary inspector's license by the Safety Division trooper.

e. Students failing the second written examination will not be allowed to test again for six months and must complete the application process as set forth for original certification.

6. The written examination will consist of five sections (general, brakes, suspensions, glass and lights) containing 20 questions each. A minimum score of 75% must be attained for each section.

7. Those students who successfully complete all phases of the written examination and background checks will then be administered a practical examination. The Vo-Tech instructor who holds a valid Class-A Safety Inspector's License will administer the practical "Class A" examination to each student who is expected to graduate from the program. The Safety Division trooper should be on hand to observe at least some of the practical examinations administered by the Vo-Tech instructor to ensure that testing is administered according to Safety Division regulations.

8. Those students who successfully complete all phases for original certification by May 31 will be issued a temporary inspectors license by the Safety Division trooper. The Safety Division trooper will then forward the completed SP-170B form to the Safety Division and a permanent license will then be mailed to the student, provided he is at least 18 years of age.

   a. The Safety Division will mail a permanent inspector's license to the student after June 15 of that year.

   b. The Vo-Tech instructor will be required to contact the Safety Division trooper prior to June 15 of that year if any student fails to complete the Vocational Automotive Mechanics Course.

   c. Any student who fails to complete the Vocational Automotive Mechanics Course will not be licensed as a certified safety inspector and will be required to complete the application process as set forth for original certification.

9. Those students who will be at least 18 years of age after May 31 of that year and have successfully completed the Vocational Automotive Mechanics Course must contact the Safety Division trooper assigned to the inspection station where they are employed and complete the application process as set forth for original certification. These students will not be required to have completed the one year of practical experience as an automotive mechanic.

Part II
Inspection Requirements

19VAC30-70-10. Official inspection station requirements.

A. Official inspection stations, except private appointments, shall be open at least eight hours of each normal business day, and shall be able to perform inspections 12 months throughout the year, except during illness of limited duration or normal vacation.

1. Normal business hours, Monday through Friday, are defined as an eight-hour period of time between 8 a.m. and 6 p.m.

2. Stations are not prohibited from performing inspections at times other than during normal business hours.

3. A station that advertises inspections beyond normal business hours shall be able to perform such inspections.

4. If a station desires to maintain business hours that are different from those defined in this section, written permission must be obtained from the safety officer and a sign setting forth the inspection hours must be posted conspicuously at the station where it can be observed by a person desiring to have a vehicle inspected.

Updated through March 1, 2008
B. At least one safety inspector to perform inspections and one inspection lane meeting the minimum requirements shall be available for inspection at all times during the normal business day. All inspections must be made only at the locations and in the inspection lane approved by the Department of State Police.

The designated inspection areas, including any location where customers are permitted to enter when submitting vehicles for inspection, must be kept clean, and free from excessive dirt, grease, and loose materials.

C. Inspection station facilities must be properly maintained and must present a businesslike appearance to the general public. Property adjacent to the inspection station that is owned or controlled by the station must be free of debris, litter, used parts and junk vehicles. Vehicles properly contained within fenced storage areas shall be deemed to comply with this requirement.

D. Inspections shall be performed on a first-come, first-served basis. Motorists shall not be required to make an appointment to obtain an inspection, except that appointments required by paragraph 12 of the Governor's Proclamation, which appears at the end of this chapter, shall be made. Businesses that take in motorists' vehicles for inspection at the beginning of the work day shall not be required to stop the work already taken in to provide an inspection for a drive-in motorist, provided inspections are actually being performed at the time and will continue through the day.

Effective October 15, 2001, the safety officer initiated a pilot program whereas if the station's existing physical plant meets certain requirements, then the station may apply to accept safety inspections by appointment. If the requirements are met, then the official inspection station may in addition to having one lane for the first-come, first-served customers, also have a second inspection lane designated for customers who have made appointments for a designated time slot. If interested, businesses should first contact their supervising trooper for specific requirements and guidelines.

E. Safety inspectors, managers who supervise inspection activities and business owners through participation in the inspection program are representatives of the Department of State Police and should conduct themselves in a manner to avoid controversy in dealing with customers presenting vehicles for inspection. The use of profanity or verbal abuse directed at customers presenting their vehicles for inspection will be grounds for suspension from participation in the inspection program and will be considered a Class IV offense as set forth in 19VAC30-70-6 of the Guidelines for Administration of Virginia's Annual Motor Vehicle Inspection Program.

Controversy that cannot be calmly resolved by the safety inspector, managers, and owners should be referred to the supervising trooper for handling.

F. The "Certificate of Appointment" must be framed under glass or clear plastic and posted in the service counter/lounge/waiting area where it can be observed and read by a person submitting a vehicle for inspection.

Inspection stations must have garage liability insurance in the amount of at least $500,000 with an approved surplus lines carrier or insurance company licensed to write such insurance in this Commonwealth. This requirement shall not apply to inspection stations that inspect only their company-owned or leased or government-owned or leased vehicles.

G. The required "Official Inspection Procedure" sheet and the "Direct Inquiries" sheet furnished each station must both be framed under glass and posted conspicuously in the service counter/lounge/waiting area where they can be observed and read by a person submitting a vehicle for inspection.

H. The poster designating the station as an official inspection station shall be posted in a prominent location, outside or visible outside the station to alert passersby that inspection services are available. Private inspection stations need not comply with this section.

I. Each official inspection station shall display a list with the name(s) and license expiration date of all employees licensed to inspect at that station adjacent to the appointment certificate, where it can be observed by a person submitting a vehicle for inspection.

The official inspection manual will be kept at or near the point of inspection for ready reference.

J. Important -- Any change in name, ownership or location of any official inspection station cancels the appointment of that station and the Department of State Police must be notified immediately. The department shall be notified when an official inspection station discontinues operation.

K. All inspection supplies, inspection binders and manual, unused stickers, duplicates of certificates issued, bulletins and other forms are the property of the Department of State Police and must be safeguarded against loss.

*Updated through March 1, 2008*
1. Inspection supplies issued to an inspection station can be used only by that station and are not to be loaned or reissued to any other station with the exception of inserts.

1. Stations must maintain a sufficient supply of approval stickers, T/M decals, rejection stickers and inserts. When reordering supplies, station owners/managers shall request sufficient supplies to sustain their business for at least six months. However, we do realize that a few stations will not be able to comply with the six-month requirement since there is a maximum of 100 books per order limit. Also when ordering supplies, the following information should be considered so that the station does not over order. Each book of Approvals and Trailer/Motorcycle contains 25 stickers/decals and the Rejections contain 50 stickers. Monthly inserts are packaged in strips of 50 each and T/M's are five per strip. In December of each year, a supply of yearly inserts will be shipped to each station based on their previous year's usage. In November, each station shall check its stock of monthly inserts and order what is needed for the months of January through June. In May, the same should be done for the months of July through December.

2. Inspection stations that exhaust their supply of approval stickers, rejection stickers or T/M decals, shall immediately stop performing new inspections and contact their supervising trooper or the nearest Safety Division office.

M. All losses of stickers must be reported orally at once to the nearest State Police area safety office or supervising inspection trooper.

N. Every precaution against the loss of stickers must be taken. If the loss occurs through carelessness or neglect, a suspension of the station may result.

O. Manuals, bulletins, other regulations and lists of approved equipment must be available at all times for reference. Revisions to the inspection manual must be inserted in the manual at the proper location promptly after being received by the inspection station. Bulletins of temporary interest and pages of bulletins containing the synopsis of manual revisions will be retained in the front of each station's inspection manual for 24 months. Each safety inspector shall review the material contained in each inspection bulletin and manual revision within 15 days of its receipt. The safety inspector shall certify that the revisions have been reviewed by signing his name and placing the date reviewed by the signature on the bottom or reverse side of the bulletin or manual revision cover sheet. Station management shall be responsible to see that each safety inspector is familiar with all bulletins and manual revisions and shall be required to furnish evidence to the department that all bulletins and manual revisions have been reviewed by each licensed inspector.

A copy of the diagram drawn by the investigating trooper, showing the approved inspection lane or lanes will be inserted in a plastic page protector and inserted as the last page of the official inspection manual at each official inspection station. The name of the station and the date will be inserted in the top right corner.

P. Private appointment may be made of company stations or government stations that own and operate a minimum of 20 vehicles and they may inspect only company-owned or government-owned vehicles respectively. When authorized by the department, they may inspect vehicles of a wholly owned subsidiary or leased vehicles.

1. A private station may perform inspections during each month of the year or may elect to inspect only during certain designated months.

2. A private station not electing to inspect vehicles every month of the year that finds it necessary to inspect a vehicle during a month other than those selected for inspection may issue a sticker to the vehicle from the nearest past inspection month.

Q. All official inspection station owners, operators and certified safety inspectors shall comply with the Virginia inspection laws and the inspection rules and regulations. Reports of violations will be investigated and if found to be valid may result in the suspension of the station, suspension of the mechanic, possible court action or other appropriate action. Repeated violations or serious violations may result in a revocation of the station appointment by the Superintendent.

R. The arrest of any person associated with the inspection program for a criminal offense of a nature that would tend to immediately reflect upon the integrity and reputation of the Department of State Police shall be grounds for an immediate suspension and the conviction for such an offense may result in a revocation of the station appointment.

Updated through March 1, 2008
S. When a station has been suspended or revoked, it must release to an employee of the Department of State Police all inspection supplies, posters, and papers including the certificate of appointment. Failure to do so is a violation of §46.2-1172 of the Code of Virginia.

T. The authority of the Superintendent to suspend the designation or appointment of an official inspection station as provided in §46.2-1163 of the Code of Virginia, or to suspend the certification of a mechanic designated to perform inspections at an official inspection station in keeping with the provisions of §46.2-1166 of the Code of Virginia, is hereby delegated to any of the following supervisory ranks of the Department of State Police: Lieutenant Colonel, Major, Captain, Lieutenant, First Sergeant and Sergeant.

U. Each station must purchase and keep in proper operating condition the following equipment: paper hole punch, black ball point pen(s), sticker scraper with replacement razor blades, tire tread depth gauge, headlight and auxiliary lamp adjustment tools, 12" ruler, 25' measuring tape, torque wrench or torque sticks, brake pads/shoes/disc/drum measuring device, dial indicator, micrometer, pry bars, roller jack (at least 4-ton) and an approved type optical headlight aiming device. Each station that requests an additional inspection lane that is not in close proximity to the originally approved inspection lane must purchase an additional approved headlight machine for each lane that meets the minimum requirements. Stations that have not done so are encouraged to upgrade to one of the following headlight aiming devices when their budget allows: the Hopkins Vision1, Hopkins Vision 100, or the Symtech (former L.E.T.) HBA-5, PL-11, and PL-12.

V. The following checklist has been designed to help with the monthly submission of inspection receipts. While its use is not required, its use is encouraged for a more orderly and accurate submission of inspection receipts.

MONTHLY INSPECTION RECEIPT SUBMISSION FOR ____________________
(Month/Year)

Processing Checklist:

_______ White copies have been removed from books (yellow copies remain in the books and are on file at the station).

_______ Receipts are in numerical order.

_______ Either rubber bands or paper clips are used to secure receipts during mailing.

_______ Voided receipts have matching sticker and pink receipt attached.

_______ Receipts are postmarked no later than the fifth of the month.

Accountability Checklist:

_______ All receipts are completely filled out, including date, station number, tag number, complete ID#, odometer reading, etc.

_______ All receipts are legible.

_______ All receipts are signed by the inspector.

_______ Repair costs are included in inspection-related charges. If no charge, no charge is indicated by "NA."

_______ Inspection charges for motorcycles are no more than $12.

_______ All approval and rejection receipts indicate which tires were pulled on vehicles to check brakes.

_______ Receipts are written in ink; no pencil or white-out on receipts.

_______ A block is checked for every segment of the vehicle that has actually been inspected.

Receipts processed by ____________________
(Name) ____________________
(Date)

Updated through March 1, 2008
19VAC30-70-20. General inspection requirements.

A. Each Official Inspection Station must inspect every vehicle presented for inspection as prescribed by Department regulations, either rejecting or approving it. Inspections will not be performed unless requested.

1. Dealers' vehicles shall be inspected according to these standards. The dealer's name rather than the license number shall be shown on the inspection receipt.

2. Out-of-state vehicles may be inspected, but shall not be approved unless they meet the requirements of this Manual.

3. When a vehicle is presented for inspection the entire approval sticker, if any, on the vehicle must be removed before any inspection is begun (except a rejection sticker). After removing the inspection sticker, the safety inspector who is to perform the inspection must drive the vehicle into the inspection lane unless the safety inspector is not qualified to operate the vehicle. During the operation of the vehicle, the safety inspector must make application of the service and parking brakes and check for conditions as set forth in Brake Sections of the inspection manual applicable to the vehicle being inspected.

WARNING: No razor blades or similar devices should be used to remove stickers from "Securiflex", "Anti-Lacerative" or "Inner Shield" type windshield. These windshields are identified as AS-14. Any questions concerning removal should be directed to the nearest Safety Office.

B. Each inspection shall be a complete inspection and shall include a check of all applicable items in this Manual.

All repair tools and testing equipment required prior to a station’s appointment shall be properly maintained and available for use during each inspection.

C. The term "inspection" as herein used shall not include repairs or adjustments. Repairs or adjustments necessary to bring the vehicle in conformity with these regulations may be made by agreement between the owner and such station or whatever repair shop the owner may select.

When requested to do so by the person submitting a vehicle for inspection, any repairs or adjustments necessary to bring the vehicle into compliance with the inspection program rules and regulations shall be made by the inspection station performing the inspection. The inspection station management may utilize the option of subcontracting the repairs or adjustments provided the application filed for the station appointment reflected that such repairs or adjustments will be subcontracted.

D. Each vehicle that meets the requirements as set forth in these regulations shall be issued an approval sticker. Those vehicles that do not meet the inspection requirements shall be issued a rejection sticker.

Any trailer required to be inspected under the provisions of the Code of Virginia may, only if the size or configuration of the trailer and the size and configuration of the facilities of the inspection station prevent the trailer from being inspected inside the inspection station, be inspected outside the inspection station. The location on the outside of an inspection station where trailers may be inspected shall be approved by the Department of State Police.

E. Inspections may be made when it is raining or snowing. Care must be exercised when making inspections in inclement weather.

Vehicles covered with ice, snow, mud or other debris to the extent that required parts cannot be inspected, may be refused inspection until the operator removes such debris.

19VAC30-70-30. Inspector requirements.

A. The inspection of motor vehicles required by these rules and regulations shall be made only by those individuals who are certified and licensed as inspectors by the Department of State Police.

B. All certified inspectors shall:

1. Be at least 18 years of age; and

2. Have a minimum of one year's practical experience as an automotive mechanic, or have satisfactorily completed a training program in the field of automotive mechanics approved by the Superintendent of State Police.

*Updated through March 1, 2008*
A person who has a minimum of one year's practical experience in repairing motorcycles may be certified to inspect motorcycles only and a person who has one year's practical experience in repairing trailers may be certified to inspect trailers only.

C. All mechanics entering the inspection program will be required to satisfactorily pass a written and practical examination exhibiting his knowledge of the inspection procedures.

D. Each certified inspector shall possess a valid Virginia driver's license with the following exceptions:

1. An inspector who is a resident of an adjoining state holding a valid driver's license in that state and who commutes regularly to work in Virginia; or

2. A member of the armed forces of the United States on active duty who holds a driver's license from his home state.

E. An inspector whose driver's license is suspended or revoked must immediately notify the station's supervising trooper or local Safety Division office of the suspension or revocation.

The suspension or revocation of an inspector's driver's license shall automatically act as a suspension of his privilege to inspect motor vehicles until such suspension or revocation is terminated and the reinstatement has been made by the Superintendent of State Police.

F. Each licensed safety inspector must have a valid safety inspector's license in his possession at all times while conducting inspections.

G. Each safety inspector with a valid safety inspector's license need only present such valid license to his new employer to commence participation in the program at his new place of employment. Management of the inspection station is required to notify the Safety Division when a safety inspector begins or ends employment. This may be handled by postal letter, e-mail or telephone to the Safety Division in Richmond.

H. An inspector must promptly notify the Safety Division in writing of any change in his home address as shown on the safety inspector's license. In the event the license becomes mutilated, lost or stolen, the inspector must notify the Department of State Police immediately in writing, requesting a duplicate. The Safety Inspector Notification Form shall be used and all requested information should be printed plainly and completely. For those inspectors who are not employed, write "Inactive" in the station name block. In those cases where notification is being made due to an address change, it will be necessary to: (i) fill out the form completely, (ii) attach the old Inspector license to the bottom of the notification form, (iii) make a copy of the license and form, and (iv) retain a copy of the form and license until a permanent (new) license is received. In those cases where the license has been lost, stolen or mutilated, complete steps (i), (ii) and (iv) as outlined above. The notification form may be duplicated as necessary.

19VAC30-70-40. Fees.

A. Before the inspection of a vehicle begins, the vehicle owner or operator must be informed that a charge is to be made.

B. A charge of $51 may be made for inspection of tractor trucks, trucks that have a gross vehicle weight rating of 26,000 pounds or more, and buses that seat more than 15 passengers, including the driver. A charge of $16 may be made for each inspection performed on any other vehicle except for the inspection of a motorcycle to include recreational motor homes. A charge of $12 may be charged for each motorcycle inspection.

C. If a rejected vehicle is not submitted to the same station within the validity period of the rejection sticker or is submitted to another official inspection station, a complete inspection must be performed and a charge of $51 may be made for inspection of tractor trucks, trucks that have a gross vehicle weight rating of 26,000 pounds or more, and buses that seat more than 15 passengers, including the driver. A charge of $16 may be made for each inspection performed on any other vehicle except for the inspection of a motorcycle to include recreational motor homes. A charge of $12 may be charged for each motorcycle inspection.

NOTE: The truck inspection fee does not pertain to any trailer nor does it affect the $1.00 reinspection fee.

D. A charge of $1.00 may be made for reinspection of a vehicle rejected by the same station during the 15-day validity of the rejection sticker.

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E. Inspection stations shall not charge an additional fee to those customers who drop off their vehicles for a state inspection. This is a violation of §46.2-1167 of the Code of Virginia unless the station charges a "storage fee" for all services and repairs and not just for inspections.

F. The maximum inspection fees effective July 1, 2006, are as follows:

$51 for each inspection of any (i) tractor truck, (ii) truck that has a gross vehicle weight rating of 26,000 pounds or more, or (iii) motor vehicle that is used to transport passengers and has a seating capacity of more than 15 passengers, including the driver.

$12 for each inspection of any motorcycle.

$16 for each inspection of any other vehicle, including trailers and recreation vehicles.

1. Beginning July 1, 2006, inspection fees will result in inspection stations retaining an additional $.50 and forwarding $.50 to the Department of State Police to support the department's costs in administering the motor vehicle inspection program. Collection of these fees will begin on May 15 of every year.

2. Effective January 1, 2006, $10 of the $12 inspection fee for motorcycles shall be retained by the inspection station, and the other $2.00 shall be transmitted to the Department of State Police. Collection of these fees will begin May 15 of every year.

3. After the appropriate fee has been determined for each station, a letter from the Safety Division will be mailed to the station requiring that a check for that amount be mailed in the enclosed envelope to: Department of State Police, Safety Division, 7700 Midlothian Turnpike, Richmond, VA 23235. The check must be made out to the Department of State Police.

The letter will include the following notice:

"Do Not Send The Processing Fee To The P.O. Box Or Include With The Monthly Inspection Receipts. All Fees Are To Be Sent To The Safety Division Street Address."

4. The station will have 30 days in which to mail in the processing fee. In the event a check does not clear the bank for any reason, a $15 fee will be assessed the station. Also, under the Administrative Rules and Regulations, 19VAC30-70-5, a returned check will be a Class III offense and administrative actions may be held against the record of the station. Once the station has been contacted by the Virginia State Police regarding a returned check, it will have 15 days to respond. If the returned check dispute is not settled in this period of time, administrative and/or legal sanctions may be taken against the station and, in addition, any requests for supplies will not be honored until the dispute has been settled.

19VAC30-70-50. Approval stickers and decals.

A. If the vehicle meets all inspection requirements, the inspection sticker receipt shall be legibly filled out with a ball point pen in its entirety and signed by the authorized mechanic making the inspection. The inspection fee (if no charge then indicate N/A), the cost of the repairs relating to the inspection and the complete vehicle identification number, tag number or car dealer name if a dealer tag is attached, mileage, year, make, and model must be filled out on the receipt. A circle to indicate which wheels were pulled to check for brakes, and an individual mark in each block of the approval receipt that was pertinent to it being issued shall be made (straight or zig-zag lines are not acceptable), are also to be written on the receipt.

The inspection sticker is not valid unless the rear portion is completed with the vehicle make, year built, license plate number (dealer name if a dealer tag is displayed), body type, and the complete vehicle identification number (VIN). The VIN should be entered using indelible ink.
19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

B. Approval stickers and decals shall be issued according to the following schedule:

ANNUAL PROGRAM

Vehicles inspected in January are issued stickers bearing the Number "1"
Vehicles inspected in February are issued stickers bearing the Number "2"
Vehicles inspected in March are issued stickers bearing the Number "3"
Vehicles inspected in April are issued stickers bearing the Number "4"
Vehicles inspected in May are issued stickers bearing the Number "5"
Vehicles inspected in June are issued stickers bearing the Number "6"
Vehicles inspected in July are issued stickers bearing the Number "7"
Vehicles inspected in August are issued stickers bearing the Number "8"
Vehicles inspected in September are issued stickers bearing the Number "9"
Vehicles inspected in October are issued stickers bearing the Number "10"
Vehicles inspected in November are issued stickers bearing the Number "11"
Vehicles inspected in December are issued stickers bearing the Number "12"

All February annual inspection stickers for trailer and motorcycle decals (#2) due to expire at midnight, February 28 automatically will be valid through midnight February 29 each leap year.

C. The numeral decal indicating the month of expiration shall be inserted in the box identified as month and the numeral decal indicating the year of expiration shall be inserted in the box identified as year of the approval sticker and the trailer/cycle decal. Extreme care should be used by inspectors in applying these inserts. On all windshields, except school buses, the sticker is to be placed at the bottom of the windshield so that the inside or left edge of the sticker is one inch to the right of the vertical center of the windshield when looking through the windshield from inside the vehicle. (If the vehicle is normally operated from the right side, the sticker must be placed one inch to the left of the vertical center of the windshield.)

On passenger vehicles not equipped with a windshield, the sticker shall be placed on or under the dash and protected in some manner from the weather.

The approval sticker on official yellow school buses is to be placed at the bottom and in the right corner of the windshield when looking through the windshield from inside the vehicle.

EXCEPTIONS: The approval sticker shall be placed one inch to the right of the vertical center of the windshield when looking through the windshield from inside all new flat-face cowl yellow school buses. On vehicles equipped with heating and grid elements on the inside of the windshield, the sticker shall be placed one inch above the top of the grid element and the inside left edge of the sticker shall be one inch to the right of the vertical center when looking through the windshield from the inside.

Stickers or decals used by counties, cities and towns in lieu of license plates affixed adjacent to the old approval sticker and which are affixed in the location where the new approval sticker is required to be placed will not be removed. In these cases, the approval sticker will be placed as close to one inch to the right of the vertical center of the windshield as it can be placed without removing or overlapping the county, city or town decal.

D. The Virginia statutes require that the inspection sticker be displayed on the windshield or at other designated places at all times. The inspection sticker cannot be transferred from one vehicle to another.

EXCEPTION: If the windshield in a vehicle is replaced, a valid sticker may be removed from the old windshield and placed on the new windshield.

E. The decal issued to a motorcycle shall be affixed to the left front side of the cycle where it will be most visible after mounting. The decal may be placed on a plate on the left side where it will be most visible and securely fastened to the motorcycle for the purpose of displaying the decal.

F. Trailer decals will be issued to all trailers and semitrailers required to be inspected. (No boat, utility, or travel trailer that is not equipped with brakes shall be required to be inspected.)

G. All trailers must display a trailer decal on that particular vehicle. These decals are to be placed on the left side of the trailer near the front corner. The decal must be affixed to the trailer body or frame. In those instances where a metal back container with a removable transparent cover has been permanently affixed to the trailer body, the decal...
may be glued to it. The container must be permanently mounted in such a manner that the decal must be destroyed to remove it.

H. In all other cases involving unusually designed trailers such as pole trailers, the inspecting mechanic is to exercise his own good judgment in placing the decal at a point where it will be as prominent as possible and visible for examination.

I. Effective January 1, 2006, motorcycles will have a separate decal that will be orange and issued with the prefix M. The current trailer/motorcycle decal will continue to be utilized for trailers only until depletion. Decals for trailers will eventually have the prefix T and will remain blue.

The receipts are completed in the same manner as other inspection receipts.

J. Appointed stations will keep sufficient inspection supplies on hand to meet their needs. Requests for additional supplies may be made to the Safety Division by telephone, in writing or via e-mail. Requests for supplies that are to be picked up at the Safety Division headquarters must be made at least 24 hours prior to pick up. If e-mail is used, then the subject should be the station number and station name. If written request is preferred or if there is a need to return inspection receipts to the Safety Division via United Parcel Service then it shall be addressed to: Safety Division, Department of State Police, P.O. Box 85607, Richmond, VA 23285-5607.

1. Do not make requests for stickers on inventory forms or slips of paper enclosed with returned supplies.

2. Packing slips mailed with inspection supplies will be kept on file at the station for at least 24 months.

K. All unused center inserts used to indicate the month that a sticker or decal expires, in possession of the inspection station at the end of each month shall be retained by the inspection station, properly safeguarded, and used in the inspection of vehicles for the particular month in the following year or be disposed of as directed by the Department of State Police.

All inspection supplies that are voided, damaged, disfigured or become unserviceable in any manner, will be returned to the Safety Division, Department of State Police and replacement supplies will be furnished the station. Expired stickers will be picked up by the station's supervising trooper.

L. The white receipts for all approval stickers including trailer/motorcycle stickers and pink copies for rejection stickers will be removed from the sticker books and placed in numerical order for submission to the Safety Division by the fifth of the month following the month of inspection. (Staples or tape are not to be used to secure these receipts.) All voided approval/rejection stickers and decals, along with the white and pink receipts, shall be marked void and returned to the Safety Division. The yellow receipt shall also be marked void and retained in the book.

M. The pink receipt copies of the approval stickers and decals shall be given to the owner or operator of the vehicle.

N. All yellow receipt copies of approval stickers and decals will be retained in the books and shall be kept on file at the station for at least 24 months. They may be inspected by any law-enforcement officer during normal business hours.

O. Safety Division troopers may replace inspection stickers that have separated from the windshield of motor vehicles and become lost or damaged without conducting an inspection of the safety components of the vehicle. Such replacement of inspection stickers shall be made only in accordance with the following provisions:

1. A vehicle owner or operator complaining of the loss or damage to the inspection sticker on the windshield of their vehicle due to separation of the sticker from the windshield shall be directed to the nearest Safety Division office or Safety Division trooper.

2. Safety Division troopers, upon receipt of a complaint from a vehicle owner or operator that their inspection sticker has been stolen, lost or become damaged due to separation from the windshield, will make arrangements to meet the person to effect the replacement of the sticker. A vehicle owner or operator alleging theft of the inspection sticker will furnish proof to the Safety Division trooper that such theft has been reported to proper law-enforcement authority.

3. The vehicle owner or operator must produce the original pink inspection receipt indicating a valid approval inspection sticker was issued to the vehicle within the past 11 months. (The vehicle must be reinspected if the expiration of the original inspection sticker is in the month the request is being made.)

*Updated through March 1, 2008*
4. The Safety Division trooper will verify by the inspection receipt that the vehicle was issued an approval inspection sticker within the past 11 months and issue a replacement inspection sticker to the vehicle.

5. The Safety Division trooper will complete the inspection sticker receipt for the approval sticker from information contained on the original receipt. The date the replacement sticker is issued will be used in the date space. In the space for Inspection Related Charges, the trooper will insert the word "REPLACEMENT" and the sticker number from the original pink inspection receipt.

6. The Safety Division trooper will sign the receipt vertically in the O.K. column in the "Equipment Inspected" blocks. These blocks will not otherwise be completed.

7. The Safety Division trooper shall place month and year inserts on the inspection sticker to reflect the expiration as shown on the original approval inspection sticker and place the inspection sticker on the windshield in accordance with the requirements of subsection C of this section.

8. The Safety Division trooper will staple the original pink inspection receipt to the new white receipt. At the end of each week, the Safety Division trooper will forward all inspection receipts for replacement stickers issued by him to the Safety Division. The yellow receipts will be submitted to the area office and maintained on file for 24 months.

P. New vehicle safety inspections.

1. Section 46.2-1157 of the Code of Virginia allows an employee who customarily performs the inspection requirement of a manufacturer or distributor of new motor vehicles to place an inspection sticker furnished by the Department of State Police on the vehicle once it has met the requirements of that manufacturer or distributor. This employee does not have to be a certified state inspector.

2. With the addition of other personnel using State Police inspection supplies, a system should be developed at each inspection station to afford accountability of all supplies. The system should include proper safeguards to prevent the loss of supplies through carelessness, neglect, theft or unauthorized use.

3. Inspection stations should not mix annual state inspections with predelivery inspections (PDI) in the same book.

4. All employees should be reminded that anyone who performs inspections, whether it be for the annual inspection or the PDI inspection, are subject to criminal prosecution if inspection supplies are used illegally or used in some other unauthorized way.

5. Station management and licensed inspectors are subject to administrative sanctions for any misuse of inspection supplies.

6. The inspection receipts should be completed as usual with the following exceptions. On the "inspector" line, the initials "PDI" (for predelivery inspection) before the inspector's name should be entered. On the "inspector's license number" line, the letters "N/A" should be entered. In the equipment inspected section, the words "New Vehicle" should be entered in the "adjust" column. The PDI inspector should sign his name in the "O.K." column.

19VAC30-70-60. Rejection stickers.

A. Only one rejection sticker shall be issued to any one vehicle. A rejection sticker shall not be issued to any vehicle already bearing such a sticker or to one which bears evidence of previously being issued a rejection sticker. When a vehicle is bearing a valid or expired rejection sticker, it is not to be removed unless the vehicle meets all of the inspection requirements.

B. A vehicle rejected by one station may be reinspected by another station if the owner desires to have this done; however, that station shall perform a complete inspection of the vehicle.

C. Reinspection of a rejected vehicle by the same station during the 15-day validity of the rejection sticker need include only a check of the items previously found defective, unless there is an obvious defect that would warrant further rejection of the vehicle. Such reinspe ction will not constitute a complete inspection and a $1.00 fee may be charged. Furthermore, if a vehicle returns for reinspection within the 15-day period, the rejecting station will reinspect the vehicle without delay or at conclusion of the current inspection being performed.

1. If additional defects are detected during reinspection of a vehicle previously rejected, the vehicle will not be issued an approval sticker.

Updated through March 1, 2008
2. No vehicle bearing a valid rejection sticker shall be entitled to receive more than two reinspections by the rejecting station during the validity period of the rejection sticker.

3. The validity period of the rejection sticker shall be 15 days in addition to the day of inspection.

4. Any vehicle that is presented for inspection at another inspection station after the 15-day validity period, if the vehicle was rejected for brakes, and the inspector cannot determine which wheels were removed, then all four wheels will be removed to ensure that all repairs or defects have been corrected.

D. If repairs are to be made to a rejected vehicle that would necessitate removing the vehicle from the inspection lane, no rejection sticker need be issued; however, the vehicle must be returned to an approved lane for a recheck of the rejected items and the installation of the approval sticker.

E. If the vehicle does not meet all the requirements and the owner does not authorize immediate repairs, and if a rejection sticker has not already been issued, a rejection sticker will be legibly filled out with a ball point pen. The complete vehicle identification number, tag number or car dealer name if a dealer tag is attached, mileage, year, make, and model shall be included. Circle which wheels were pulled to check for brakes and place an individual mark in each block of the rejection sticker that was pertinent to it being issued. In addition, information may be written on any blank area as to the exact nature of the rejection (i.e., front brakes vs. rear brakes). The date of issue shall be punched, and the sticker affixed to the same location as indicated in 19VAC30-70-50 C, E and G. (When affixed to a trailer, the face of the rejection sticker shall be glued to the trailer in order to allow the rejection data on the back side to be read.)

F. The operator of the rejected vehicle shall be informed of the following:

1. The rejection sticker is valid for 15 days in addition to the date of inspection.

2. The rejection sticker places no travel restriction on operation of the vehicle and is issued in lieu of an approval sticker.

3. The vehicle operator is legally responsible for any defect if operated on the highway and may be subject to traffic summons for any existing equipment violation.

G. Duplicate copies (pink) of rejection stickers shall be forwarded, in numerical order, to the Safety Division by the fifth of the month following the month of inspection. The yellow copy shall be retained, in numerical order, by the station for at least 24 months.

19VAC30-70-70. Inventory.

A. Each inspection station at the end of each quarter shall fill in the applicable portion of an inspection sticker inventory report (Form SP-221) in duplicate on stickers, trailer/motorcycle decals and rejection stickers used. This report shall be completed by the fifth of April, July, October and January for the preceding quarter and shall be kept on file at the station.

1. At the end of the quarter, the monthly totals will be combined into a quarterly total reflecting total number of stickers, trailer/motorcycle decals, rejection stickers and voided stickers used during the quarter. All approval stickers, trailer/motorcycle decals and rejection stickers unused and on hand at the end of the quarter shall be listed in the space provided on the inventory report (Form SP-221).

2. The inventory report after its completion shall be retained at the inspection station until it is reviewed and picked up by the station's supervising trooper during his supervisory visit. The other copy of the inventory report shall be retained by the station for at least 24 months.

B. The quarterly inventory reports shall be completed according to the following schedule:

<table>
<thead>
<tr>
<th>Quarter of Year</th>
<th>Months of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>January, February, March</td>
</tr>
<tr>
<td>2nd</td>
<td>April, May, June</td>
</tr>
<tr>
<td>3rd</td>
<td>July, August, September</td>
</tr>
<tr>
<td>4th</td>
<td>October, November, December</td>
</tr>
</tbody>
</table>

*Updated through March 1, 2008*
19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

Part III
Inspection Requirements for Passenger Vehicles and Vehicles Up to 10,000 Pounds

19VAC30-70-80. Service brakes.

A. The inspector, as a minimum, must drive all vehicles into the inspection lane and test both service and parking brakes.

B. A minimum of two wheels or two wheels and drums, one front and one rear, must be removed from each passenger and multipurpose vehicle with a gross vehicle weight rating of 10,000 pounds or less at the time of inspection, except those listed in subdivisions 1, 2 and 3 of this subsection. Two front wheels or two front wheels and drums must be removed from vehicles listed in subdivision 3 of this subsection.

1. Motorcycles.

2. A new model vehicle is defined as a vehicle that has not been titled or leased and is less than one year old, measured from October 1 as of each year; if such motor vehicle does not have a model year, such measurement shall be made from the date of manufacture.

3. Trucks with floating axles that require seal replacement upon removal of rear wheels. The inspection receipt (approval and rejection) shall be marked to reflect which wheels were pulled.

Warning: Lug nuts must be torqued to the manufacturer’s specifications to prevent damage to disc rotors. The use of an impact wrench may exceed the manufacturer’s specifications and damage disc rotors.

C. If any braking problem is detected, the inspector may test drive or require a test drive of the vehicle.

D. Inspect for and reject if:

1. Vehicle is not equipped with brakes or any brake has been disconnected, rendered inoperative, or improperly installed. Trailers having an actual gross weight of less than 3,000 pounds are not required to be equipped with brakes; however, if brakes are installed, these vehicles must be inspected.

Brake System Failure Indicator Lamp

2. Passenger vehicles manufactured after January 1, 1968, are not equipped with a red brake failure warning lamp or warning lamp does not light with parking brake applied when ignition key is turned to the start position, except for anti-lock system. The red brake failure warning lamp should light when the ignition key is turned to the start position; on some imports it may be checked when the emergency brake is applied or other factory installed test button. (DO NOT reject if only the amber ABS/anti-lock brake lamp is on.) With the engine running and parking brake released, the red brake failure warning lamp should go off, except for vehicles equipped with anti-lock system. If so, apply service brake for 10 seconds and if the red brake failure warning lamp lights again the system is defective. Also, if the warning lamp light does not come on when there is a leak or the warning lamp light is not functioning properly, the system is defective and shall be rejected. NOTE: This paragraph does not apply to vehicles registered as street rods nor does it imply that the red brake failure warning lamp needs to light when the emergency brake is set. There are many vehicles that are not factory equipped with an emergency brake indicator light.

Brake Linings and Disc Pads

3. Riveted linings or disc pads are worn to less than 2/32 of an inch over the rivet head(s).

4. Bonded or molded linings or disc pads are worn to less than 2/32 of an inch in thickness.

5. Wire in wire-backed lining is visible in friction surface.

6. Snap-on brake linings are loose.

7. Any lining is broken or cracked so that lining or parts of lining are not firmly attached to the shoe or has cracks on the friction surface extending to the open edge.

8. Grease or other contamination cannot be satisfactorily removed from the lining, drums, or rotors.

9. Rivets in riveted linings are loose or missing.

10. Any lining or pad is misaligned or does not make full contact with the drum or rotor.

Updated through March 1, 2008
Brake Drums and Discs

11. Brake drums or brake discs (rotors) are worn or scored to the extent that their remachining would result in a failure to meet manufacturer's specifications.

NOTE: A number of vehicles on the market are equipped with a lock nut to hold the rear brake drum in place. Manufacturers recommend replacement of these lock nuts after each removal to prevent failure of the component. If the customer is advised up front, then the wholesale cost of the replacement nut may be charged to the customer.

NOTE: The proper method to remove the rear brake assembly on the 2000 Ford Focus is to remove the four bolts from the opposite side of the assembly. Removal otherwise may damage the outside grease cap and incur a cost to replace.

12. Brake drums or discs have any external crack or cracks more than one half the width of the friction surface of the drum or disc. NOTE: Do not confuse short hairline heat cracks with flexural cracks.

Mechanical Linkage

13. Cables are frayed or frozen.

14. Mechanical parts missing, broken, badly worn, or misaligned.

E. Hydraulic

NOTE: Some motor vehicles, beginning with 1976 models, have a hydraulic power system that serves both the power assisted brakes and power assisted steering system. Some vehicles, beginning with 1985 models, have an integrated hydraulic actuation and anti-lock brake unit using only brake fluid.

1. Brake hydraulic system. Inspector should check the brake hydraulic system in the following manner: test vehicle in a standing position; apply moderate pressure to the brake pedal for 10 seconds. Brake pedal height must be maintained. On vehicles equipped with power assisted systems, the engine should be running.

2. Hydraulic system operation. Stop engine, then depress brake pedal several times to eliminate all pressure. Depress pedal with a light foot-force (30 pounds). While maintaining this force on the pedal, start engine and observe if pedal moves slightly when engine starts.

Reject vehicle if pedal does not move slightly as engine is started while force is on brake pedal.

3. Condition of hydraulic booster power brake system. Inspect system for fluid level and leaks.

Reject vehicle if there is insufficient fluid in the reservoir, if there are broken, kinked or restricted fluid lines or hoses; if there is any leakage of fluid at the pump, steering gear or brake booster, or any of the lines or hoses in the system; or if belts are frayed, cracked or excessively worn.

4. Integrated hydraulic booster/anti-lock system operation. With the ignition key in the off position, depress brake pedal a minimum of 25 times to deplete all residual stored pressure in the accumulator. Depress pedal with a light foot-force (25 pounds). Place ignition key in the on position and allow 60 seconds for the brake warning light to go out and the electric pump to shut off.

Reject vehicle if the brake pedal does not move down slightly as the pump builds pressure or if the brake and anti-lock warning lights remain on longer than 60 seconds.

Updated through March 1, 2008
NOTE: The inspection of the ABS light is only for an integrated system that is the older system. The new system that has the nonintegrated systems does not need to be checked. If the ABS system malfunctions on the new system, the brake systems are still functional.

5. Condition of integrated hydraulic booster/anti-lock system with electronic pump. With the system fully charged, inspect system for fluid level and leaks.

Reject vehicle if there is insufficient fluid in the reservoir; if there are broken, kinked or restricted fluid lines or hoses; or if there is any leakage of fluid at the pump or brake booster, or any of the lines or hoses in the system.

6. Vacuum system operation. Stop engine then depress brake pedal several times to eliminate all vacuum in the system. Depress pedal with a light foot-force (25 pounds). While maintaining this force on the pedal, start engine and observe if pedal moves down slightly when engine starts.

Reject vehicle if pedal does not move down slightly as engine is started while force is on the brake pedal. In full vacuum-equipped vehicles, there is insufficient vacuum reserve for one full service brake application after engine is stopped.

7. Condition of vacuum booster power brake system. Reject vehicle if there are collapsed, cracked, broken, badly chafed or improperly supported hoses and tubes, loose or broken hose clamps.

F. Inspect for and reject if:

General Specifications - Hydraulic Brakes

1. There is any leakage in the master cylinder, wheel cylinders, or brake calipers. When checking for leakage in rear wheel cylinders, do not disturb the dust boot.

NOTE: Do not reject for the common dust ball formed on wheel cylinders or for wetness that may have spread to the backing plate unless it has contaminated the lining or drums as specified in subdivision D 8 of this section. Consumers should be advised of this wear so that they will be aware that repair may be needed before their next inspection. This may not warrant an immediate repair considering the dual valve master cylinder.

2. Fluid level in master cylinder is below the proper level for the particular vehicle.

3. There is any evidence of a caliper sticking or binding.
Electric Brake System

4. Trailers show an amperage value more than 20% above or 30% below the brake manufacturer's maximum current rating for each brake.

5. Ammeter shows no reading or indicator is not steady on application and release of brake controller.

6. Any terminal connections are loose or dirty; wires are broken, frayed, or unsupported; any single conductor nonstranded wire or wires below the size recommended by the brake manufacturers are installed.

7. Electrical trailer brakes do not apply automatically when the breakaway safety switch is operated.

General Specifications

8. There is any leakage in any hydraulic, air, or vacuum lines; hoses have any cracks, crimps, restrictions, or are abraded exposing fabric; tubing or connections leak, are crimped, restricted, cracked or broken; any valves leak or are inoperative.

Reject the vehicle if the brake hoses or tubing are stretched or extended and do not allow for suspension movement.

Brake tubing and hose must:

a. Be long and flexible enough to accommodate without damage all normal motions of the parts to which it is attached;

b. Be secured against chafing, kinking, or other mechanical damage; and

c. Be installed in a manner that prevents it from contacting the vehicle's exhaust system or any other source of high temperatures.

9. Brakes are not equalized so as to stop the vehicle on a straight line.

10. There is less than 1/5 reserve in actuator travel of the service brake when fully applied on all hydraulic, mechanical, or power-assisted hydraulic braking systems.

11. When tested on dry, hard, approximately level road free from loose material, at a speed of 20 miles per hour without leaving a 12-foot wide lane, results in excess of the following distances are obtained: (When in doubt about a vehicle's stopping ability, the inspector shall conduct a road test.)

a. Any motor vehicle (except motorcycles, trucks, and tractor-trucks with semitrailers attached) four wheel brakes - 25 feet.

b. Any motor vehicle (except motorcycles, trucks, and tractor-trucks with semitrailers attached) two wheel brakes - 45 feet.

c. All combinations of vehicles - 40 feet.

19VAC30-70-90. Brakes: emergency, parking, or holding.

A. Some vehicles are equipped with an actual emergency brake, while others have only a parking or holding brake. Some types may be actuated by a foot or hand lever, while others may incorporate a switch or valve to actuate the brake. Air and vacuum brake systems may employ spring activating parking brakes.

B. Inspect for and reject if:

1. Vehicle or combination of vehicles is not equipped with a parking, holding, or emergency brake in good working order of the type installed as original standard factory equipment for the vehicle on which it is installed.

2. The parking brake actuating mechanism does not fully release when the control is operated to the off position or if the parking brake lamp light remains on.

NOTE: The light does not apply to vehicles that are not equipped with a parking (emergency) brake indicator light.

3. Any mechanical parts are missing, broken, badly worn, or are inoperative.

4. Cables are stretched, worn, or frayed or not operating freely.

Updated through March 1, 2008
5. Parking brake will not hold the vehicle stationary with the engine running at slightly accelerated speed with shift lever in drive position for automatic transmission or shift lever in low gear with clutch engaged for standard shift transmission.

6. Holding brake will not disengage when engine is started and vehicle is placed in drive. Holding brake will not hold vehicle stationary with foot on holding brake and vehicle in drive.

7. On vehicles equipped with automatic transmissions, the vehicle will start in any gear other than (P) park and (N) neutral. If the gearshift indicator does not identify the park (P) and neutral (N) positions, then the vehicle shall be rejected.

8. On vehicles equipped with manual transmissions, the vehicle will start in any gear if the clutch is not depressed or disengaged.

NOTE: This will not apply to older vehicles, which were not originally equipped with a neutral-safety switch, clutch disengagement system or clutch pedal position sensor by the manufacturer.

9. The accelerator does not disengage after being depressed, allowing the engine to return to a normal idle speed.

10. The storage battery is not attached to a fixed part of the motor vehicle or protected by a removable cover or enclosure if the battery is installed in a location other than the engine compartment. This includes all brackets, hardware, bolts, and bushings used for securely mounting the storage battery to the vehicle.

a. Removable covers or enclosures shall be substantial and shall be securely latched or fastened.

b. The storage battery compartment shall have openings to provide ample battery ventilation and drainage.

c. Whenever the cable to the starting motor passes through a metal compartment, the cable shall be protected against grounding by an acid and waterproof insulating bushing.

d. Whenever a battery and a fuel tank are both placed under the driver's seat, they shall be partitioned from each other, and each compartment shall be provided with an independent cover, ventilation, and drainage.

19VAC30-70-100. Brakes: trailer (GVWR less than 10,000 pounds).

Inspect for and reject if:

1. Trailer brakes do not comply with 19VAC30-70-80 and 19VAC30-70-90.

2. Operator does not have full control over brakes. For the purpose of this subdivision, surge brakes are considered to be in control of the operator.

3. All trailers, manufactured or assembled after January 1, 1964, registered for an actual gross weight of 3,000 pounds or more are not equipped with emergency breakaway brakes designed to:

   a. Apply automatically upon breakaway from towing vehicle.

   b. Remain fully applied for at least 15 minutes.

   c. Apply and release by operation of the manual emergency control.

4. A minimum of one wheel must be removed from each axle equipped with brakes to inspect the brake components.

NOTE: Trailers registered for or having an actual gross weight of 3,000 pounds or more, but with a manufacturer's gross weight rating of less than 10,000 pounds, need not be equipped with brakes on all wheels.

   a. Exception: Wheels on trailers equipped with open brake mechanisms are not required to be removed.

   b. The inspection receipt approval and rejection shall be marked to reflect on which side the wheel or wheels were pulled.

19VAC30-70-110. Steering and suspension.

A. The steering and suspension systems installed and utilized on motor vehicles have evolved to where many different suspension systems are being designed, developed, and employed on vehicles. To properly inspect the
steering and suspension on vehicles, it may be necessary for the inspection to be made in accordance with manufacturer's recommended procedures in addition to meeting any requirements outlined in this regulation.

B. Inspect for and reject if:

1. Any modification has been made that affects normal functioning of the shock absorbers. The inspector should operate the vehicle when in doubt. (If there is no evidence of the convolutions (coils) of the spring hitting one another, one pair (2) of nonmetallic coil spring stabilizers may be present in each of a vehicle's front coil springs, provided the installation of the stabilizers does not cause the springs to be higher than their original height.) Shock absorbers in fully extended or compressed positions when the vehicle is stationary will not function normally.

2. The front end suspension has been modified by the use of lift blocks. (A lift block is defined as any solid piece of wood, metal, or other material placed between and separating the vehicle's front axle and the springs.) This does not prohibit the use of shims that may be necessary to correct front end alignment.

3. Any modification has been made to the front end suspension which reduces turning radius, bypasses safety components of original steering mechanism or if there is any lateral movement between the axle and frame.

4. Any modification has been made to the suspension to cause the vehicle body or chassis to come in contact with the ground or expose the fuel tank to damage from collision.

Reject the vehicle if it has been modified by any means so as to raise its body more than three inches above the manufacturer's attachment points or the frame rail (exclude original manufacturer's spacers, washers or bushings when measuring).

5. Any modification has been made to cause the wheels to come in contact with the body or frame under normal operating conditions.

6. A motor vehicle has a repair kit or preventive maintenance kit installed on a tie rod end, idler arm, ball joint, or any other part of the vehicle's steering gear.

NOTE: The repair kit or preventive maintenance kit usually consists of a small coil spring and a plastic cap that is placed over the bolt stud of the component and held in place by a retaining nut. There is nothing in this paragraph that prohibits the replacement of parts or components of a motor vehicle's steering gear in order to correct deficiencies in the steering gear.

7. When checked visually, the wheels appear to be out of line or an axle is bent.

8. Any vehicle that shimmies or wanders at normal operating speeds.

9. Rack and pinion steering bellows (boot) is defective or missing. Do not inspect CV boots, CV joints, or universal joints on rear wheel drive vehicles.

10. Power steering is defective and affects adequate steering of the vehicle or power steering fluid in reservoir is below operating level, or if there is an obvious leak of power steering fluid. Do not reject for dampness.

NOTE: If the vehicle is equipped with power steering, the engine must be operating during testing.

11. Power steering belts do not have sufficient tension or are frayed or missing. The serpentine v-ribbed belt is more common versus the old v-drive belt and should only be rejected if a chunk of the ribbing is missing or a deep cut or crack exposes the inner fabric of the belt. (Do not reject for the many little surface cracks that appear in the ribs or back.)

12. Any modification has been made to any part of the steering or suspension system that affects proper steering or suspension or any part of the original suspension system has been disconnected.

NOTE: "All thread rod material" shall not be used as U-bolts in the suspension system.

Vehicles registered as street rods may substitute any part of the original suspension system provided the components are installed in accordance with the component manufacturers' specifications.

13. Any modification or replacement has been made to the steering wheel that affects proper steering. The steering wheel shall be rejected if the outside diameter is less than 13 inches unless original factory equipment.

*Updated through March 1, 2008*
14. Steering column has any absence or looseness of bolts or positioning parts, resulting in motion of the steering column from its normal position.

15. A spring is broken, sagging or misaligned, shackles are worn or loose, or if air springs are collapsed or the air suspension system leaks or is deflated.

CAUTION: Underneath inspection of a vehicle equipped with air suspension with excessive leak down could result in serious personal injury.

16. Vehicles designed for shock absorbers or cross stabilizer links if any are disconnected or broken, bent, loose or do not function properly.

17. Any front or rear axle or suspension positioning parts are cracked, broken, loose, worn, bent or missing, resulting in shifting of an axle from the normal position. Any control arm or suspension positioning part using bushings for control, support and normal functioning is deteriorated, damaged or missing.

NOTE: All rear suspension parts including but not limited to control arms (upper and lower ball joints, radius or torque arms, stabilizer bars, and trailing arms) shall not have any damage or noticeable play when checked with hand pressure.

18. A MacPherson strut installed on a motor vehicle is broken, bent, loose or does not function properly.

NOTE: Do not reject a shock absorber or MacPherson strut unless there is evidence of leakage that causes the device not to function properly.

19. If vehicles measured movement at top or bottom of tire is greater than:

<table>
<thead>
<tr>
<th>Wheel Size</th>
<th>Movement At Top Or Bottom Of Tire</th>
<th>Maximum Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 17 inches</td>
<td>1/4 inch</td>
<td></td>
</tr>
<tr>
<td>17 to 18 inches</td>
<td>3/8 inch</td>
<td></td>
</tr>
<tr>
<td>over 18 inches</td>
<td>1/2 inch</td>
<td></td>
</tr>
</tbody>
</table>

Proper lifting for wheel bearing, steering linkage looseness, and king pin play action

FIGURE A

NOTE: King pin play. If vehicle is equipped with king pins, first eliminate all wheel bearing movement by applying service brake. With front end lifted as illustrated for inspecting wheel bearings (Figure C), grasp the tire at the top and bottom and attempt to move in and out to detect looseness. Measure the movement at the top or bottom of the tire at the outer circumference.

C. Wheel bearing/steering linkage.

Reject vehicle if any wheel bearing is excessively worn or not properly adjusted; any cotter key or other locking device is missing or inoperative.

NOTE: Lifting techniques vary for measuring wheel bearing movement. On vehicles with coil spring or torsion bar on lower support arm-hoist at frame (Figure A). On vehicles with coil spring on upper support arm-hoist at lower support arm (Figure B). On front wheel drive vehicles, the inspector must consult manufacturer's lifting information.
NOTE: Front wheel bearings on rear wheel drive vehicles or rear wheel bearings on front wheel drive vehicles. With vehicle lifted properly, grasp tire at top and bottom, rock in and out and record movement. Wheel bearing looseness is detected by the relative movement between the brake drum or disc and the braking plate or splash shield. CAUTION: If air suspension vehicles are hoisted via body support area, air spring damage may occur if the air suspension switch is not turned off. Reject vehicle if relative movement between drum and backing plate (disc and splash shield) is more than 1/8 inch measured at the outer circumference of the tire.

D. Steering linkage play.

1. Reject vehicle if measured movement at front or rear of tire is greater than:

<table>
<thead>
<tr>
<th>Wheel Size</th>
<th>Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 inches or less</td>
<td>1/4 inch (6.5mm)</td>
</tr>
<tr>
<td>17 to 18 inches</td>
<td>3/8 inch (9.5mm)</td>
</tr>
<tr>
<td>over 18 inches</td>
<td>1/2 inch (13mm)</td>
</tr>
</tbody>
</table>

NOTE: First eliminate all wheel-bearing movement by applying service brake. With vehicle lifted as shown in diagram and wheels in straight-ahead position, grasp front and rear of tire and attempt to move assembly right and left without moving the steering gear.

2. Reject vehicle if there is noticeable play at any point in the steering mechanism except General Motors products. On General Motors products, reject vehicle if play exceeds factory specifications.

3. Reject vehicle if the steering mechanism is unusually tight or binding when turning the steering wheel completely to the left or right or the steering mechanism will not turn in both directions stop to stop.

4. Reject vehicle if the steering stops have been removed or adjusted in so that steering radius is reduced.

E. Steering lash/travel.

Reject vehicle if inspection reveals excessive wear and/or looseness in any ball stud, end assembly, pivot point, mechanical linkage and/or if steering gear box has any loose or missing bolts, or excessive wear, and/or looseness is found at any other location in the steering that adversely affects the steering of the vehicle.

NOTE: For vehicles equipped with power steering, the engine must be running and the fluid level, belt tension and condition must be adequate before testing.

With road wheels in straight ahead position, turn steering wheel until motion can be detected at the front road wheels. Align a reference mark on the steering wheel with a mark on a ruler and slowly turn steering wheel in the opposite direction until motion can again be detected at the front road wheel (see diagram). Measure lash at steering wheel. Special lash-checking instruments may be used to measure free play in inches or degrees. Such instruments should always be mounted and used according to the manufacturer’s instructions. Reject vehicle if steering wheel movement exceeds:

- Power - 2 inches
- Manual - 3 inches
- Rack & Pinion - (Power or Manual) - 0.4 inch - see note
NOTE: No play is permissible for Volkswagen and Audi vehicles - consult respective manufacturer's specifications.

F. Steering lash/travel; trucks.

NOTE: Before inspection the vehicle must be placed on a smooth, dry, level surface. For vehicles equipped with power steering, the engine must be running and the fluid level, belt tension and condition must be adequate before testing. With road wheels in straight ahead position, turn steering wheel until motion can be detected at the front road wheels. Align a reference mark on steering wheel with a mark on a ruler and slowly turn steering wheel in the opposite direction until motion can be detected at the front road wheel. Measure lash at steering wheel. Special lash-checking instruments are also available, measuring free play in inches or degrees. Such instruments should always be mounted and used according to the manufacturer's instructions. With vehicle raised, visually inspect steering linkage, ball studs, tie rod end socket assemblies and all pivot points.

NOTE: On vehicles with power steering, engine must be running.

Reject vehicle if steering wheel movement exceeds:

<table>
<thead>
<tr>
<th>Steering wheel diameter</th>
<th>Manual steering system</th>
<th>Power steering system</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 inches or less</td>
<td>2 inches (51 mm)</td>
<td>4-1/4 inches (108 mm)</td>
</tr>
<tr>
<td>18 inches</td>
<td>2-1/4 inches (57 mm)</td>
<td>4-3/4 inches (121 mm)</td>
</tr>
<tr>
<td>19 inches</td>
<td>2-3/8 inches (60 mm)</td>
<td>5 inches (127 mm)</td>
</tr>
<tr>
<td>20 inches</td>
<td>2-1/2 inches (64 mm)</td>
<td>5-1/4 inches (133 mm)</td>
</tr>
<tr>
<td>21 inches</td>
<td>2-5/8 inches (67 mm)</td>
<td>5-1/2 inches (140 mm)</td>
</tr>
<tr>
<td>22 inches</td>
<td>2-3/4 inches (70 mm)</td>
<td>5-3/4 inches (146 mm)</td>
</tr>
</tbody>
</table>

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G. Ball joint wear (front and rear). There is a trend among U.S. automobile manufacturers toward the use of "wear-indicating" ball joints. Many vehicles on the road, however, do not have wear-indicating ball joints. The inspection of both types will be discussed. With the broadening use of rear suspension ball joints, their inspection shall be made in accordance with manufacturer's recommended procedures. Figures 1, 2, 3, and 4 illustrate the proper hoisting for checking most ball joints. On late model vehicles, it may be necessary to check for both horizontal and vertical movement. Figures 1, 2, 3, and 4 illustrate the proper hoisting for checking ball joints.

NOTE: To check ball joint wear on vehicles when the spring is supported on the upper control arm or when the spring is a part of a MacPherson strut or wear in any other type suspension not using ball joints when the front wheels are suspended on a solid axle, the vehicle must be hoisted as shown in Figure 1 or 2.

NOTE: Upper control arm must be stabilized in normal load carrying position by means of an upper control or other support tool to insure ball joint is in unloaded position.

NOTE: To check ball joint wear on vehicles not listed in above referred to section and diagram or tables when the spring is supported on the lower control arm; and to check the king pin wear in any other type suspension not previously described when the wheels are independently suspended, the vehicle must be hoisted as shown in Figure 3 or 4.

H. Ball joints without wear indicators (front and rear).

1. If play is detected in any ball joint without "wear-indicating" ball joints, it will be necessary for the inspection to be made in accordance with the manufacturer's recommended procedures and specifications prior to rejecting the vehicle.

2. If there are no manufacturer's recommended procedures and specifications, the lower ball joints will be checked when hoisted as in Figures 1 or 2 of subsection G of this section, or in the upper ball joints when hoisted as in Figures 3 or 4 of subsection G of this section. There should be no noticeable play detected in the ball joints when checked in this manner.

3. Reject vehicle if play exceeds the manufacturer's specifications. It is recommended that Inspectors use a dial indicator or ball joint checking gauge when checking for play of a ball joint, when procedures and specifications are provided by the manufacturer.

Updated through March 1, 2008
I. Ball joints with wear indicators. Support vehicle with ball joints loaded (in normal driving attitude). Wipe grease fitting and checking surface free of dirt and grease. Determine if checking surface extends beyond the surface of the ball joint cover.

Reject vehicle if checking surface is flush with or inside the cover surface.

J. American Motors Pacer (only). Position vehicle on level surface. Remove lubrication plug from lower ball joint. Check lower ball joint clearance by inserting stiff wire or thin rod into lubrication plug hole until it contacts ball stud. Accurately mark rod with knife or scribe where it aligned with outer edge of plug hole. Distance from ball stud to outer edge of plug hole is ball joint clearance. Measure distance from mark to end of rod. (Anything less than 7/16 inch is acceptable.)

Reject vehicle if distance measured is 7/16 inch or more.

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K. Chrysler front-wheel drive vehicles (lower only). With the weight of the vehicle resting on the road wheels, grasp the grease fitting as shown below and attempt to move fitting. No mechanical assistance or added force is necessary.

Reject vehicle if grease fitting shows any movement.

CHRYSLER FRONT WHEEL DRIVE - LOWER BALL JOINT

19VAC30-70-120. Frame, engine mounts, coupling devices and emergency chains.

Inspect and reject if:

1. Frame or unitized body of any motor vehicle, trailer or semitrailer is broken, cracked, bent or damaged at any location, including any welded joint and/or is rusted or corroded to the point the frame is weakened as to constitute a hazard during the operation of the vehicle.

2. Engine or transmission mounts and hardware is broken or missing. This includes all hardware bolts and bushings used for mounting to the vehicle's frame, engine, or transmission. The more common fluid-filled mounts or those with rubber bushings should be rejected if they allow the power train to come in contact with the firewall or other body parts.

3. Trailer hitch or pintle hook is not securely attached. Reject if the pintle eye or trailer drawbar has any cracks or if any welding repairs have been made to the pintle eye.

4. Chains, cables, etc., used to attach a towed vehicle are not securely attached or are broken, worn or abraded.

5. Fifth wheel does not lock in position or have a locking mechanism in proper working order.

6. Fifth wheel assembly system has any leak of fluid or air.

7. Fifth wheel has any broken, missing, or damaged parts; or is not securely attached to the frame.

8. Trailer king pin is not secure, or is broken or worn so as to prevent secure fit in fifth wheel.

9. Any movement is detected at any location where any device has been placed between the body and the chassis.

10. Trailer is not equipped with an emergency chain or steel cable.

NOTE: Fifth wheel assembly system does not require an emergency chain or cable. A fifth wheel is defined as a device which interfaces with and couples to the upper coupler assembly of a semitrailer. The upper coupler assembly is a structure consisting of an upper coupler plate, king pin and supporting framework which interfaces with and couples to a fifth wheel. Ball and socket connections also referred to as hitch and coupling connections are not fifth wheel assemblies and do require an emergency chain or steel cable.

19VAC30-70-130. Tires; wheels; rims.

Inspect and reject if:

1. Any tire is marked specifically for use other than on the highway, such as "For Farm Use Only," or "For Off-Highway Use Only," or "Mobile Home Use Only."

2. A radial tire is mismatched on the same axle with a bias ply tire or a bias belted tire.

3. Bias ply or bias belted tires are used on the rear axle when radial ply tires are used on the front axle.

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EXCEPTION: On a two-axle vehicle equipped with truck tires with 20-inch rim diameter and larger, bias or radial tires may be used on either axle if the vehicle has dual rear wheels or is equipped with wide-base single tires.

4. A vehicle has installed on one of its axles a space saver emergency spare tire that is intended for temporary use.

5. Any motor vehicle, trailer or semitrailer, except the dual wheels installed on motor vehicles having seats for more than seven passengers (i) operated wholly within a municipality or (ii) operated by urban and suburban bus lines, which are defined as bus lines operating over regularly scheduled routes and the majority of whose passengers use the buses for traveling a distance not exceeding 40 miles, measured one way, on the same day between their place of abode and their place of work, shopping areas, or schools, is equipped with a tire that has a tread depth measuring less than 2/32 of an inch when measured as follows:

NOTE: The exemptions provided in (i) and (ii) of this paragraph do not apply to buses owned or operated by any public school district, private school or contract operator of buses.

NOTE: Measure in two adjacent tread grooves where tread is thinnest. Refer to Figure 1. If either of the grooves measure 2/32 of an inch or more, no further measurements are necessary and tread depth is satisfactory. Do not take measurements from the tread wear indicators.

6. If both adjacent grooves measure less than 2/32 of an inch, the tire tread depth must be measured again at two additional equally spaced intervals around the circumference of the tire in a like manner as the first measurement. Refer to Figure 1. If the tread depth is less than 2/32 of an inch in two adjacent tread grooves at each of the equally spaced intervals, the tire must be rejected.

MEASURE WHERE THE TREAD IS THINNEST IN TWO ADJACENT TREAD GROOVES

FIGURE 1

IF THE DEPTH IS LESS THAN 2/32-INCH IN BOTH GROOVES, MEASURE AT TWO ADDITIONAL EQUALLY SPACED INTERVALS
7. A tire equipped with tread wear indicators if found to have such indicators in contact with the pavement in any two adjacent grooves at three equally spaced intervals around the circumference of the tire. Refer to Figure 2.

![Figure 2](image)

**FIGURE 2**

*REJECT IF THE TREAD WEAR INDICATORS ARE IN CONTACT WITH THE PAVEMENT IN ANY TWO ADJACENT GROOVES AT THREE EQUALLY SPACED LOCATIONS*

8. Any tire has a cut or puncture into the fabric. This does not include a plug or patch that may be used as a manner of repair.

NOTE: Plugs/patches shall be in the tread area only. Plugs/patches are not permitted in the sidewall of the tire.

9. Any tire is worn so that the fabric or steel cord is visible.

10. Any tire has knots or bulges in its sidewalls or if there is evidence of a broken belt under the tread, or if the tread is separating from the fabric.

11. Any tire that has been recut or regrooved except commercial tires so designed and constructed to provide for acceptable and safe recutting and regrooving. (Regrooved tires must be identified on each sidewall as a regrooved tire.)

12. Any bolts, nuts or lugs are loose, missing or damaged.

13. Wheels are installed on the vehicle in a reversed position, except the wheels on vehicles that are reversed to perform part of a dual wheel combination.

14. Directional tires and/or wheels designed and manufactured to travel in one direction of rotation are not properly installed.

15. Rims or wheels are bent, cracked or damaged so as to affect safe operation of the vehicle.

NOTE: Refer to subdivision 1 of 19VAC30-70-180 (Clearance lamps and reflectors) for tires that exceed more than four inches from the body.

**19VAC30-70-140. Headlamps; except motorcycles.**

A. Inspect for and reject if:

1. Any motor vehicle is not equipped with headlamps of an approved type. The approval designation letter that must appear is DOT or SAE-H, HG, HH or HR.

2. Headlights are not of the same approved type except sealed beam headlamps. At least two headlamps are required.

*Updated through March 1, 2008*
3. In any headlamp the lens is cracked, broken, discolored, or rotated away from the proper position, or the reflector is not clean and bright.

NOTE: A clear plastic headlight assembly lens with a crack may be repaired by procedures similar to that required of a windshield repair. The inside reflector surface must be in satisfactory condition and the repair cannot affect the headlight aiming pattern. This repair does not apply to headlamps and the headlamp assembly lenses that are designed where the aiming pattern is part of the lens.

4. Moisture or water buildup in headlamp is such that it affects the aiming pattern.

5. Lens is other than clear.

6. Bulbs are not of an approved type (must have DOT stamp and the manufacturer's name) or are over 32 candlepower. (Sealed beam lamps including the ones which permit the use of a replacement halogen bulb are the only lamps approved with over 32 candlepower.) Ordinary lenses and reflectors were not designed for over 32 candlepower bulbs.

NOTE: The Sylvania 9003 (HB2), 9004 (HB1), 9005 (HB3) and 9006 (HB4) Cool Blue xenon bulbs were found to comply with FMVSS 108. There is a noticeable blue tint around the outside of the lamp pattern but the concentrated light is white. Only the Sylvania has approval and is marked with DOT.

7. Any filament or bulb in headlamps fails to burn properly or headlamps are not at the same location or configuration as designed by manufacturer. (Location and type of headlamps can be found in subsection F of this section.)

8. Wiring is dangling or connections are loose; or if proper filaments do not burn at different switch positions; or if switches, including foot or hand dimmer, do not function properly and are not convenient to the driver.

9. Foreign material is placed on or in front of the headlamp lens or interferes with the beam from the lamp. No glazing may be placed over or in front of the headlamps unless it is a part of an approved headlamp assembly.

   a. Reject if vehicle has wire, unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of the headlamps.

   b. Vehicles registered as street rods may have clear, rigid plastic or glass headlamp lens covers in front of sealed beam units to replace original manufacturer's equipment.

   c. EXCEPTION: A clean impact film known as Headlight Savers produced by Grand Prix Motoring Accessories may be applied to the headlight lens to absorb impact of rocks, etc.

10. Lamps can be moved easily by hand due to a broken fender or loose support, or if a good ground is not made by the mounting.

11. Headlamps, auxiliary driving lamps and front fog lamps are not mounted so that the beams are aimable and the mounting does not prevent the aim of the lighting device from being disturbed while the vehicle is operating on public roads. All lamps shall be securely mounted on a rigid part of the vehicle.

12. A headlamp visor is over two inches long unless part of the original body design.

13. The high beam indicator in the driver's compartment does not burn when the high or "country" beam is on or does not go off when the low beam is on. (Vehicles not originally equipped with an indicator are not required to comply unless sealed beam headlamps have been installed.)

B. Aiming the headlamps.

1. Headlamps shall be checked for proper aim by using either an optical or a mechanical headlamp aimer on every motor vehicle inspected, except vehicles with on-board aimers.

Headlamp aim on vehicles with on-board aimers shall be checked by visually examining the leveling device mounted either on or adjacent to the headlamp. Reject the vehicle if the leveling device shows the headlamp adjustment to exceed indicated specifications.

NOTE: Driving lamp and fog lamps must be aimed using the optical aimer, according to instructions in 19VAC30-70-160 I 10 i and 11 g (2).
2. Headlamps are not aimed within the following tolerances using the optical aimer.
   a. The center of the hot spot of all single element high beam lamps is set more than four inches up or down from
      the horizontal centerline or more than four inches to the left or right from the vertical centerline.
   b. The left edge of the lamp pattern of any low beam lamp or any combination or multi-element lamp is more
      than four inches to the left or right of the vertical centerline or the top edge of the lamp pattern is more than four
      inches above or below the horizontal centerline when checked on low beam.

C. Optical aimer.

1. Approved optical headlamp machines may be used to properly aim any of the headlamps. Optical aimers must
   be properly calibrated and used in the manner recommended by the manufacturer.

   The optical headlamp machine must be aligned to the vehicle in accordance with the manufacturer's
   specifications.

2. When aiming headlamps, first look for the type of lamp, which will be found embossed on the lens. The type
   determines which aiming requirements must be followed for the optical aimer.

3. All low beam or combination/multi-element headlamps must be set by aiming the lamp pattern with the lamps
   set on low beam.

NOTE: If attempting to align a composite or sealed beam lamp with a high and low beam within the same
housing, align only the low beam. If aligning a four-lamp system with high and low beams in separate housings, it
may be necessary to cover the low beam while aligning the high beam, if all four lamps are on at the same time.

4. Pattern should be aimed so that the left edge does not extend to the left or right of straight ahead, and the top of
   the pattern should be even with the horizontal.

Pattern "A" represents the light pattern as it should appear on the view screen of the approved aimer when
checking the low-beam pattern on a single element headlamp or a combination multielement headlamp.

5. All VOL and VOR headlamps will be aimed as follows:

   To properly aim a combination multi-element or low-beam VOL or VOR headlamp assembly, the headlamp
   pattern should be aimed on low beam only.

   Letters marked on the headlamp cover should properly identify VOL and VOR headlamps.

   NOTE: VOL and VOR headlamps will normally have only one adjustment, which will be for the vertical aim
   only. The horizontal aim should be disregarded, as the horizontal aim is preset at the factory.

6. All single element high beam headlamps shall be set by aiming the center of the hot spot with the lamps set on
   high beam.
7. Aim straight ahead-center of the hot spot should be centered with the vertical and horizontal centerlines. Pattern "B" represents the light pattern as it should appear on the view screen of the approved aimers.

![Pattern B - Single Element High Beam Lamp](image)

8. When lamp pairs are mounted horizontally, the low beam lamp must be on the outer side and when mounted vertically, the low beam lamp must be at the higher position in the pair.

9. The four headlamp system must be wired so that only the lower beam lamp will burn when the light beams are depressed. When switched to high beams, both high beam and low beam may burn. The "F" type halogen headlamp 1986 (LF-UF) of the four headlamp system will function in the following manner: system must be used so the low beam does not burn with the high beam.

D. Mechanical aimers.

1. Mechanical aimers can be used to aim only those headlamps that have "aiming" pads molded into the lens.

2. Mechanical aimers must be properly calibrated and used with the proper adapter recommended by the manufacturer. (The adapter setting will be embossed on the face of some lamps.)

3. Turn on headlamps and check all filaments—both high and low beam. Turn off headlamps before checking for adjustments. Do not turn on headlamps while mechanical aimers are attached to the headlamp.

4. All headlamps that are found not to be within the four-inch tolerance shall be adjusted to zero inches up or down and zero inches to the right or left.

E. Headlamps on vehicles used for snow removal. Approved auxiliary headlamps may be mounted above the conventional headlamps. (These lamps must be in compliance with this section in its entirety, subdivision 7 of 19VAC30-70-150, and subdivision 1 of 19VAC30-70-170.)

F. Inspect for and reject if:

1. Lamps are not approved type headlamps (DOT or SAE-H or HH).

2. Lamps are not mounted in a manner that will permit proper aiming.

3. Lamps are mounted so as to obstruct the driver’s vision.

4. The auxiliary headlamp circuit does not contain a switch that will deactivate the primary headlamp system when the auxiliary headlamps are in use.

5. Auxiliary headlamps are not aimed in accordance with the provisions of subdivision B 2 of this section.

6. Headlamps are not wired in accordance with the provisions of subdivision C 8 of this section.

NOTE: Light patterns shown in the following diagram will be displayed on the most recently approved light machines produced by Hopkins and Symtech Corporations.

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HEADLAMP PATTERNS

US Low Beam

High Beam

US Low Beam
VOL

US Low Beam
VOR

Fog / Driving Lamp

Updated through March 1, 2008
NOTE: Always inspect the following sealed beam and replaceable bulb and integral beam headlamps on LOW BEAM only:

- 5-3/4 inch, marked 2, 2C, or 2C1
- 7 inch, marked 2, 2D, or 2D1
- 100 X 165mm rectangular, marked 2A, 2A1, or 2E1, 2G1 or 2H1
- 200 X 142mm rectangular, marked 2B or 2B1
- Replaceable bulb headlamp, marked LF with 9004 (HB1)
- 92 X 160mm rectangular, marked LF
- Replaceable bulb headlamps with 9006 (HB4) alone or in combination with 9005 (HB3)
- 55 X 135mm rectangular, marked L
- Integral beam headlamp when high and low beam reflectors move together.
19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

19VAC30-70-150. Rear lamps: tail lamp; license plate lamps and rear lamp combinations.

Inspect for and reject if:

1. Vehicle is not equipped with a rear (tail lamp) or rear lamp combination of an approved type or light assembly does not work as designed by the manufacturer. The approval designation letters that must appear are DOT or SAE-A-I-S-T-P for single lamps, DOT or SAE-A-I-S-T-P-P with a backup light, DOT or SAE-A-I-S-T-P-P2-R with a wrap around side-marker lamp and backup light.

2. The vehicle is equipped with more than one rear lamp, if all are not in operating condition.

3. The vehicle is not equipped with a license plate lamp of an approved type (DOT or SAE-L) that emits a white light. The license plate lamp may be a separate lamp or part of a combination rear lamp.

4. License plate lamp is not illuminated by an approved license plate lamp that admits a white light.

5. Lens on rear lamps, or lens area in combination rear lamps (tail lamps) are not red or contain a dot of another color. LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

NOTE: Replacement tail lamps, commonly sold as "clear" tail lamps or "Euro-Tail" lamps will not pass inspection if the red lamps and reflectors are replaced with clear ones or the tail lamps are missing the side red marker lamps or reflectors.

6. Lens has piece broken from it or does not fit properly. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

NOTE: Taping or gluing cracks or pieces is not allowed.

7. Filament in all rear (tail) lamps does not burn when headlamp switch is turned on to any position, or if lamps do not provide a red light visible to the rear through an approved red lens as annotated in subdivision 1 of this section. If it is a rear lamp combination incorporated with a wrap around side-marker light, then the side-marker lens must be red and not a clear lens with a red bulb. If the bulb, socket and wiring are removed from a side-marker lamps, then they will not be considered during the inspection.

8. Rear (tail) lamp is not mounted near extreme rear of vehicle. Dump trucks and other specially constructed vehicles may mount the rear lamp at a point other than on the extreme rear, provided such rear lamp is clearly visible from the rear, and further provided that a red reflector of an approved type is mounted on the extreme rear. In unusual cases, the rear lamp may be mounted on the cab. Reject if the lamp is hidden by a bolster or other part of the body or frame, is not mounted securely, or if the lamp does not make a good electrical contact.

9. The vehicle has unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of rear lamps, license plate lamps and rear lamp combinations.

10. Wiring or electrical connections are defective or filaments do not burn.

NOTE: Every trailer shall carry at the rear two red lights of a type approved by the Superintendent.

19VAC30-70-160. Auxiliary lamps: backup; cornering; driving; fog; spot and warning.

A. Auxiliary lamps on a vehicle consist of seven general types: backup lamps (SAE-R), cornering lamps (SAE-K), driving lamps (SAE-Y), front fog lamps with an amber or clear lens (SAE-F and rear fog lamps with red lens (SAE-F2), spot lamps (SAE-O), warning lamps (SAE-W, W2, W3), and daytime running lamps (DRLs) (SAE-Y2).

B. School buses may be equipped with an eight-lamp warning system of two red and two amber warning lamps of an approved type (SAE-W2) on the front and rear of such vehicle.

1. School buses may also be equipped with roof mounted flashing white or amber warning lamps of an approved type (SAE-W2).

2. In addition to required warning lamps, school buses may be equipped with a stop signal arm consisting of an octagonal sign which meets FMVSS specifications (Federal Motor Vehicle Safety Standards, 49 CFR Part 571). The stop signal arm shall be reflectorized or be equipped with two red warning lamps of an approved type.

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C. There is no limit on the number of backup lamps that a vehicle may have so long as they are of an approved type (SAE-R).

D. No more than four lamps, including two headlamps, may be lighted at any time to provide general illumination ahead of the vehicle.

E. Approved type (DOT or SAE-W) blue or blue and red lights are permitted on Department of Corrections vehicles designated by the Director of the Department of Corrections and any law-enforcement vehicle.

1. Approved type secondary warning lights installed only on the four corners, on law-enforcement vehicles, Department of Corrections, fire apparatus, government-owned vehicle operated on official business by a local fire chief or other local fire official, rescue squad vehicle, ambulance, or any other emergency medical vehicles. These lights shall also have primary warning lights installed.

2. The hide-away or undercover strobe lights shall be installed in the side marker lights, tail lights or parking lights. The strobe itself must be clear and the lens color must continue to be the same type and color as originally approved. It will not be permissible to install the hide-away lights in the headlights or in the backup lights.

3. Approved type (SAE-W) red warning lights or red and white lights showing to the front are permitted on fire department vehicles, including publicly owned state forest warden vehicles, ambulances, any rescue vehicle used for emergency calls, local departments of emergency management, animal warden vehicles, school buses and vehicles used by security personnel at the Newport News Shipbuilding and Drydock Company, Bassett-Walker, Incorporated, the Tultex Corporation, the Winchester Medical Center, or the National Aeronautics and Space Administration’s Wallops Flight Facility.

4. No more than two flashing or steady-burning red lights or red and white combination lights of an approved type (SAE-W) may be installed on one vehicle owned by any member of a fire company, volunteer fire company or volunteer rescue squad, any ambulance driver employed by a privately owned ambulance service, and any police chaplain.

F. Vehicles mentioned in subsection E of this section permitted to be equipped with flashing, blinking or alternating red, red and white, blue, or blue and red emergency lights (except vehicles owned by any member of a fire company, volunteer fire company, volunteer rescue squad or any ambulance driver employed by a privately owned ambulance service) may be equipped with the means to flash their headlamps when their emergency warning lamps are activated provided:

1. The headlamps are wired to allow either the upper beam or lower beam to flash but not both.

2. The headlamp system includes a switch or device which prevents flashing of headlamps when headlamps are required to be lighted pursuant to current statute.

3. Emergency vehicles in Chesapeake, Poquoson, and York County may be equipped with flashing headlamps that will function whenever their warning lights are activated.

G. Any fire vehicle used exclusively for fire fighting, any ambulance or rescue or lifesaving vehicle used for the principal purpose of emergency relief or any wrecker used for the principal purpose of towing disabled vehicles may be equipped with clear auxiliary lamps which shall be used exclusively for lighting emergency scenes. Such lamps shall be of a type permitted by the superintendent. Any government-owned police vehicle may be equipped with clear auxiliary lamps of a type approved by the superintendent.

H. Approved type (SAE-W) amber flashing, blinking or alternating lights are permitted on vehicles used for the principal purpose of towing or servicing disabled vehicles or in constructing, maintaining and repairing highways or utilities on or along public highways and vehicles used for the principal purpose of removing hazardous or polluting substances from the state waters or drainage areas on or along public highways. Such lamps are permitted on vehicles used for servicing automatic teller machines, refuse collection vehicles, hi-rail vehicles and on vehicles used for towing or escorting over-dimensional materials, equipment, boats, or manufactured housing units by authority of highway hauling permit.

1. Approved type (SAE-W) amber flashing, blinking or alternating lights are permitted on fire apparatus, government-owned vehicles operated on official business by a local fire chief or other local fire official, rescue squad vehicles, ambulances, and any other emergency medical vehicles to be equipped with alternating blinking or flashing red, or red and white secondary lights mounted inside the vehicle’s tail lights or marker lights.

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2. Approved type (SAE-W) amber flashing, blinking or alternating lights are permitted on vehicles owned and used by municipal safety officers in the performance of their official duties, businesses providing security services and vehicles used to collect and deliver the United States mail, vehicles used by law-enforcement personnel in the enforcement of laws governing motor vehicle parking, government owned law-enforcement vehicles provided the lights are used for giving directional warning and vehicles used to provide escort for funeral processions.

3. Approved type (SAE-W) amber flashing, blinking or alternating lights are permitted on vehicles used as pace cars, security vehicles, or fire-fighting vehicles by any speedway or motor vehicle race track.

4. An approved type (SAE-W) amber flashing, blinking or alternating light may be mounted on the rear of any vehicle used to transport petroleum products. The light must be wired through the reverse gear circuit and activate in conjunction with the back-up lights and audible alarm.

5. An approved type (SAE-W) green warning light is permitted on vehicles used by police, fire-fighting, or rescue personnel as command centers at the scene of incidents. Such lights shall not be activated while the vehicle is operating upon the highway.

I. Inspect for and reject if:

1. Vehicle has an auxiliary lamp being used for a purpose other than for which it was approved.

   EXCEPTION: Any lighting device that is both covered and not illuminated, other than lamps required, shall not be considered for inspection. Fog and driving lamps mounted below the level of the regular headlamps must be checked for aim as outlined in subdivisions 110 i and 11 g of this section if not covered.

   NOTE: The covers shall be a type that would be installed as original equipment and not tape, paper bags, aluminum foil or similar materials per subdivision 111g (2).

2. A vehicle has installed on it a warning lamp (DOT or SAE-W) that is not of an approved type or has been altered.

   Reject if the vehicle has wire, unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of any auxiliary lamps: backup, cornering, driving, fog, spot, or warning lamps.

3. Vehicle is equipped with a combination of auxiliary lamps that include more than two fog lamps, or more than two spot lamps, or more than two driving lamps. Motor vehicles may be equipped with more than two fog or auxiliary lights; however, only two of these types of lights can be illuminated at any time. Reject a vehicle equipped with a headlamp mounted or used as an auxiliary lamp.

   NOTE: Vehicles equipped, from the factory, with two driving lamps should not be rejected.

4. Vehicle is equipped with an auxiliary lamp that does not function properly. (If an auxiliary lamp has been modified by removing the wiring, bulb and socket, the unit will be considered an ornament and not a lamp and will not be considered in inspection.)

5. Vehicle is equipped with a lighted advertising sign, except commercial motor vehicles, buses operated as public carriers, taxicabs, and privately owned passenger cars used for home delivery of commercially prepared food. Commercial motor vehicles, buses operated as public carriers, and taxicabs may be equipped with vacant and destination signs and one steady burning white light for illumination of external advertising. Privately owned passenger cars used for home delivery of commercially prepared food may be equipped with one steady burning white light for the nighttime illumination of a sign identifying the business delivering the food. Do not reject approved identification lights.

6. Any lamp is not of an approved type or if lamps to be burned together as a pair do not emit the same color light.

7. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

Updated through March 1, 2008
8. Backup lamps are not required. However, if installed they must operate and be inspected.
Inspect for and reject if:
   a. Lamps are not of an approved type (DOT or SAE-R) or a lamp has been altered;
   b. Wiring or electrical connections are defective or filaments do not burn;
   c. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks;
   d. Lens is other than clear. LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning;
   e. Lamps are not wired into the reverse gear or an independent circuit.

9. Cornering lamps are not required. However, if installed they must operate and be inspected.
Inspect for and reject if:
   a. Lamps are not of an approved type (DOT or SAE-K) or a lamp has been altered;
   b. Wiring or electrical connections are defective or filaments do not burn;
   c. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks;
   d. The color of the light is other than clear or amber;
   e. The lamps do not burn in conjunction with the turn signals.

10. Driving lamps are not required. However, if installed they must operate and be inspected.
Inspect for and reject if:
   a. Driving lamps are installed on vehicles equipped with the four-headlamp system, except the "F" type headlamp system;
   b. A vehicle is equipped with more than two driving lamps;
   c. Driving lamps are not of an approved type or have been altered;
   d. The color of the lamp is other than white;
   e. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or crack;
   f. Wiring or electrical connections are defective;
   g. Any driving lamp is mounted above the level of the regular headlamps, or is not mounted firmly to prevent excessive vibration;
   h. Driving lamps are not wired so that they will burn only when the high beams of the regular headlamps are activated;
   i. Driving lamps are not aimed so that the center of the hot spot drops three inches in 25 feet so that the hot spot is directly ahead of the lamp;

   NOTE: Driving lamps must be aimed using the optical headlight aimer. A tolerance of four inches in 25 feet is allowed in both the horizontal and the vertical adjustment.

11. Fog lamps are not required. However, if installed they must operate and be inspected.
Inspect for and reject if:
   a. A vehicle is equipped with more than two fog lamps;
   b. Lamps are not of an approved type (DOT or SAE-F on front or F2 on rear plus two-digit year and manufacturer) or a lamp has been altered;

Updated through March 1, 2008
c. The lens is other than clear or amber. Fog lamps may have black-end bulbs or small metal caps over the end of the bulb;

d. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or crack;

e. Wiring or electrical connections are defective or filaments do not burn;

f. Any fog lamp is mounted above the level of the regular headlamps, or is not mounted firmly;

g. Lamps are not wired and aimed according to the following instructions:

(1) Fog lamps are general illumination lamps as covered in subsection A of this section. They must burn through the tail light circuit even if on a separate switch. If installed on a vehicle with a four-headlamp system, or a vehicle equipped with driving lamps, they must be wired into the low beam circuit.

(2) Fog lamps must be aimed so that the top edge of the high intensity zone is set at the horizontal centerline and the left edge of the high intensity zone is set at the vertical centerline. (Same as low beam headlights.)

NOTE: Fog lamps must be aimed using the optical headlight aimer. A tolerance of four inches in 25 feet is allowed in both the horizontal and the vertical adjustment.

12. Spot lamps are not required; however, if installed they must operate and be inspected.

Inspect for and reject if:

a. Vehicle is equipped with more than two spot lamps;

b. Lamps are not of an approved type (DOT or SAE-O) or a lamp has been altered;

c. The lens in any spot lamp is other than clear;

d. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or crack;

e. Wiring or electrical connections are defective or filaments do not burn.

13. Daytime Running Lamps (DRLs) are not required. However, if installed they must operate and be inspected. DRLs must be installed in pairs.

NOTE: DRLs may or may not be wired into the tail light circuit.

Inspect for and reject if:

a. Any lamp, except headlamps, used as DRLs if not an approved type (SAE-Y2) and is not marked "DRL";

b. Fog lamps or parking lamps are used as DRLs;

c. More than one pair of lamps is used and/or designated as DRLs;

d. A DRL is mounted higher than 34 inches measured to the center of the lamp;

e. The color is other than white to amber;

f. DRLs do not deactivate when the headlamps are in any "on" position.

Any DRL optically combined with a turn signal or hazard lamp must deactivate when the turn signal or hazard lamp is activated and then reactivate when the turn signal or hazard lamp deactivates.

19VAC30-70-170. Parking lamps.

A. Parking lamps are not required; however, if installed they must operate and be inspected. Parking lamps may burn in conjunction with the headlamps.

B. Inspect for and reject if:

1. Lamps are not of an approved type (DOT or SAE-P) or a lamp has been altered;

NOTE: The clear lens lights between the headlamps and the red lens lights between tail lamps on various vehicles are approved parking lamps and must work if not rendered inoperative by removing the bulb, socket and wiring from each individual lamp.

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2. Parking lamps have other than white or amber lenses showing to the front. If the lens is clear, then the bulb shall be amber;

3. Parking lamps do not burn with the rear lamps;

4. If lens has a piece broken from it. Lens may have one or more cracks provided no off-color light projects through the crack or cracks;

5. Reject if the vehicle has unapproved lens or plastic covers, any other materials which are not original equipment or any colored material placed on or in front of the parking lamps;

6. Wiring or electrical connections are defective or filaments do not burn.

7. LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

19VAC30-70-180. Clearance lamps and reflectors.

Inspect for and reject if:

1. Any motor vehicle, trailer, semitrailer or other vehicle is not equipped with clearance lamps if the vehicle is over seven feet wide or if any portion extends four inches or more outside the front fender line.

NOTE: See 19VAC30-70-550 for vehicles exceeding 10,000 GVWR.

When a motor vehicle with a trailer attached is presented, the combination may be considered as one unit in meeting this requirement. If presented separately, the individual unit must meet these requirements.

2. Lamps (DOT or SAE-P2, P3 or PC) or reflectors (DOT or SAE-A or B) are not of an approved type or a lamp has been altered.

If the lamps or reflectors have unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of lamps or reflectors.

3. Lenses on lamps on the front are not amber and lenses on lamps on the rear are not red or if a lens has a piece broken from it. A lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

NOTE: LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

4. Wiring or electrical connections are defective, all filaments do not burn.

5. Two amber lamps are not mounted on the front and two red lamps on the rear, so as to indicate the extreme width of the body, and as high on the permanent body as practical, except that approved 180 degree lamps with yellow or amber lens may be mounted on the side of the vehicle at or as near the front as possible, or if the front is not the widest portion, the lamps may be installed on the side and as near that point as possible. And with the further exception that 180 degree lamps with red lens may be mounted on the side of the vehicle at or as near the rear as possible or if the rear is not the widest portion of the vehicle, the lamps may be installed on the side as near that point as possible.

6. Any vehicle equipped with three red identification lamps with the lamp centers spaced not less than six inches or more than 12 inches apart and installed as close as practicable to the top of the vehicle and as close as practicable to the vertical centerline of the vehicle may have the rear dimension or marker lamps required by subdivision 5 of this section, mounted at any height but indicate as nearly as practicable the extreme width of the vehicle.

NOTE: Other specially constructed vehicles may be equipped with the required clearance lamps not mounted on the extreme rear, provided such red lamps are clearly visible from the rear and provided further that two red reflectors of an approved type are mounted on the extreme rear. In unusual cases the rear lamp may be mounted on the cab and another red reflex reflector placed on the extreme rear.

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NOTE: In addition to the required clearance lamps showing to the front and to the rear, a vehicle may be equipped with clearance lamps on the side of the vehicle. When such an installation is used, all of the clearance lamps on the side except the one at or near the rear must have an amber lens. The clearance lamps on the side at or near the rear must have a red lens.

7. Any vehicle covered by subdivision 1 of this section, except school buses, is not equipped with amber reflectors on the sides as near the front as practical, and red reflectors on the rear. The reflectors must be at least 15 inches and not more than 60 inches from the ground. No reflector can have a piece broken from its reflective surface, but may have one or more cracks.

8. Any combination of vehicles whose actual length exceeds 35 feet if the vehicles are not wide enough to have clearance lights, if the vehicle is not equipped with reflex reflectors of a type approved by the superintendent and mounted on the widest part of the towed vehicle so as to be visible from the front and sides of the vehicle. No reflector can have a piece broken from its reflective surface, but may have one or more cracks.

9. Any passenger vehicle is equipped with clearance lamps, unless such lamps are used to mark the extreme width of the vehicle or used as taxicab identification, or used as supplemental turn signals. (See 19VAC30-70-190 B.)

10. Vehicles so constructed as to make compliance with the requirements of subdivisions 1, 5, 7, 9 and 10 of this section impractical will be equipped with clearance lamps and reflectors at the most practical location to provide maximum visibility.

If equipped with three red identification lamps, the required clearance lamps may be mounted at any height so long as they indicate, as nearly as practicable, the extreme width of the vehicle.

NOTE: Must be equipped with three red identification lamps

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ILLUSTRATIONS FOR PROPER INSTALLATION OF REFLECTORS

At least 15 inches and not more than 60 inches from the ground.

Amber Reflector

Red Reflectors: At least 15 inches and not more than 60 inches from the ground.

19VAC30-70-190. Signal device (intention to stop or turn), hazard lights, stop lamp.

A. Any motor vehicle may be equipped with a switch that will permit all turn signal lamps to flash simultaneously.

B. Supplemental turn signals, properly wired into the turn signal circuit, may be installed. These may be either approved type turn signals or clearance lamps.

C. Single face lamps are permissible on the front, except tractor units shall be equipped with two-faced lamps mounted on the front fenders or on or near the front of the vehicle.

D. Inspect for and reject if:

1. Motor vehicle, or trailer, except an antique vehicle not originally equipped with a stop lamp, is not equipped with at least one stop lamp of an approved type (DOT or SAE-S) that automatically exhibits a red or amber lens to the rear when the brake pedal is actuated;

2. Every passenger car manufactured for the 1986 or subsequent model year and multipurpose passenger vehicle, truck, or bus whose overall width is less than 80 inches, manufactured September 1, 1993, and subsequent model year is not equipped with a supplemental center high mount stop lamp of an approved type (DOT or SAE-U, U1 or U2) mounted at the vertical centerline of the vehicle which functions only in cooperation with the vehicle's stop lamps brake lights and hazard lights. Any other vehicle on which a supplemental center high mount stop lamp is mounted shall have the lamp mounted at the vertical center line of the vehicle. The lamps shall be of an approved type and shall function only in conjunction with the stop lamps. The high mount stop lamp must be steady burning and not wired to flash with turn signals or other wig-wag device.

"Multipurpose passenger vehicle" means any motor vehicle that is (i) designed to carry no more than 10 persons and (ii) constructed either on a truck chassis or with special features for occasional off-road use.

NOTE: Camper shells and/or other items that may be temporarily carried on or attached to multipurpose vehicles will not be considered during inspection of the center high mount stop lamp, provided the lamp continues to function as designed.

NOTE: Multipurpose passenger vehicles with an overall width of 80 or more inches or GVWR of 10,000 pounds or more are not required to be equipped with a center high mount stop light;

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No sticker or other foreign material shall be affixed to the vehicle in such a manner so as to obscure the center high mount stop lamp;

3. Proper signals do not go on with each throw of the switch or if stop signals do not go on with slightest pressure on the brake pedal. Turn signals may flash-stop signals may not flash except when the vehicle is equipped with a brake warning system or device which will cause the brake lights to flash when the vehicle is in motion but committed to an emergency or panic stop;

4. Motor vehicle was manufactured after January 1, 1955, and is not equipped with approved signaling devices (SAE-I);

5. Vehicle is not equipped with a turn signal if such signal is not working properly or does not continue to function in the same manner as when it was originally manufactured. (The turn signal switch shall lock in place when positioned for a left turn or a right turn, and the turn signal indicators must function. Do not reject a vehicle if the self-cancelling mechanism in the switch does not function when the steering wheel is rotated.);

6. Switch is not convenient to the driver and not of an approved type;

7. Any vehicle so constructed so as to prevent the operator from making a hand and arm signal, if such vehicle is not equipped with an approved type signaling device;

8. Turn signal lens is not clear or amber to the front, or red or amber to the rear. Lens or bulb color has been altered or modified. If the turn signal lens is clear, then the bulb shall be amber.

NOTE: The pink color lens found on 1998 and 1999 Honda Accords emit the proper color light (amber) when the lamp is activated. There may be other manufacturers using the same configuration and are not in violation of the Federal Motor Vehicle Safety Standards;

9. Wiring or electrical connections are defective or filaments do not burn.

NOTE: LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if 50% of the diode lights are burning;

10. Lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack(s).

NOTE: No repairs shall be effected like taping or gluing cracks or pieces.

11. The hazard warning signal operating unit does not operate independently of the ignition or equivalent switch and when activated cause all turn signals to flash simultaneously.

NOTE: They are deemed not to be installed if none of the lights burn or flash when the switch is activated and the hazard warning signal flasher unit has been removed;

12. Device is not mounted near the rear for rear signals or near the front for front signals (except supplemental turn signals) or if the signal is hidden by a bolster or other part of body chassis;

13. All "Class A" signals are not mounted at least three feet apart. (This does not apply to the combination rear signal device.) However, signal lamps that are mounted as far apart as practical inside and at the rear of the frame so as to be properly visible will meet inspection requirements;

14. Any vehicle has unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of the signal device (intention to stop or turn), hazard lights or stop lamp.

19VAC30-70-200. Permissible lighting equipment.

A. Any vehicle may be equipped with:

1. Running board or courtesy lamps, of not over six candlepower.

2. Vacant or destination signs, if a taxicab or bus.

3. Identification lamps of approved type (SAE -P2 or P-3).

4. Interior lights, not more than 15 candlepower.

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COMMONWEALTH OF VIRGINIA
DEPARTMENT OF STATE POLICE
RICHMOND, VIRGINIA

September 24, 2008

INSPECTION BULLETIN # 332

TO: All Official Inspection Stations
All Sworn Employees (Except B.C.I.)

FROM: Captain Ronald B. Saunders

SUBJECT: Virginia State University Parking Decals

The Superintendent has permitted under his authority in Section 46.2-1052 of the Code of Virginia for parking decals issued to employees and students attending Virginia State University to be placed in the lower left corner of the front windshield. Parking decals may be placed in this location between August 1, 2008 and August 31, 2009. After August 31, 2009, Virginia State University parking decals must be placed behind the rearview mirror on the windshield as required under current inspection regulations.

Please be guided accordingly.

This exception to the inspection manual has not undergone the Administrative Process Act as required § 2.2-4000 of the Code of Virginia. This inspection bulletin is to serve as guidance concerning these specific circumstances and if necessary will be included in future official revisions to the inspection manual.

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Exception: This does not apply to alternating, blinking or flashing colored emergency lights mounted inside law enforcement vehicles or flashing shielded red or red and white lights, mounted inside vehicles owned by members of volunteer fire companies, volunteer rescue squads or owned or used by professional firefighters, or police chaplains. Also, this does not apply to fire-fighting vehicles equipped with map lights.

5. Hood ornament light if of an approved type or permitted by the Superintendent.

6. Any approved lamp in good working order when used for the purpose for which it was approved.

B. Side marker lamps are not required. If installed they must operate and be inspected. If the bulb, socket and wiring are removed from an individual lamp unit, the unit will not be considered during inspection. This does not include wraparound tail/marker lamp assembly/lens, which is intended to perform multiple functions.

C. Inspect for and reject if:

1. Lamps are not of an approved type (DOT or SAE-P2 or P3), or do not comply with subdivision 1 of this section;

2. Lamps are not installed on the permanent structure of the vehicle with one as far to the rear and one as far forward as practicable and at a location which is not less than 15 inches above the road surface when measured from the center of the lamp;

3. Lamps installed on the side to the rear do not have a red approved lens (SAE-P2). Lamps installed on the side of the front do not a clear or amber approved lens (SAE-P2) so as to project an amber light. If the approved lens on the front side is clear, then the bulb shall be a DOT-approved amber bulb;

4. Lens has a piece broken from it. The lens may have one or more cracks provided no off-color light projects through the crack(s);

5. Any vehicle has unapproved lens or plastic covers, any other materials which are not original equipment or any colored material placed on or in front of permissible lighting equipment;

6. Wiring or electrical connections are defective or filaments do not burn.

7. LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.


A. Motor vehicles may be inspected without windshields, side glasses, or any kind of glazing, except that any motor vehicle other than a motorcycle that was manufactured, assembled, or reconstructed after July 1, 1970, must be equipped with a windshield. If glass or other glazing is installed, it must be inspected. If no windshield is installed, see 19VAC30-70-50 C for location of the sticker.

B. Inspect for and reject if:

1. Any motor vehicle manufactured or assembled after January 1, 1936, or any bus, taxicab or school bus manufactured or assembled after January 1, 1935, is not equipped throughout with safety glass, or other safety glazing material. (This requirement includes slide-in campers used on pickups or trucks, caps, or covers used on pickup trucks, motor homes, and vans.)

2. Any safety glass or glazing used in a motor vehicle is not of an approved type and properly identified (DOT and AS-1, AS-2, or AS-3). (Replacement safety glass installed in any part of a vehicle other than the windshield need not bear a trademark or name, provided the glass consists of two or more sheets of glass separated by a glazing material, and provided the glass is cut from a piece of approved safety glass, and provided the edge of the glass can be observed.)

NOTE: A number of 1998 and 1999 model year Ford Contour/Mystique, Econoline and Ranger vehicles were produced without the AS-1 windshield marking as required by FMVSS #205. Ford has certified that these vehicles' windshields meet all performance standards and will not be rejected.

3. Any glass at any location where glass is used is cracked or broken so that it is likely to cut or injure a person in the vehicle.
4. Windshield has any cloudiness more than three inches above the bottom, one inch inward from the outer borders, one inch down from the top, or one inch inward from the center strip. The bottom of the windshield shall be defined as the point where the top of the dash contacts the windshield.

5. Any distortion or obstruction that interferes with a driver's vision; any alteration that has been made to a vehicle that obstructs the driver's clear view through the windshield. This may include but is not limited to large objects hanging from the inside mirror, CB radios or tachometers on the dash, hood scoops and other ornamentation on or in front of the hood that is not transparent.

   a. Any hood scoop installed on any motor vehicle manufactured for the year 1990 or earlier model year cannot exceed 2-1/4 inches high at its highest point measured from the junction of the dashboard and the windshield.

   b. Any hood scoop installed on any motor vehicle manufactured for the 1991 or subsequent model year cannot exceed 1-1/8 inches high at its highest point measured from the junction of the dashboard and the windshield.

6. Windshield glass, on the driver's side, has any scratch more than 1/4 inch in width and six inches long within the area covered by the windshield wiper blade, excluding the three inches above the bottom of the windshield. A windshield wiper that remains parked within the driver's side windshield wiper area shall be rejected.

EXCEPTION: Do not reject safety grooves designed to clean wiper blades if the grooves do not extend upward from the bottom of the windshield more than six inches at the highest point.

7. There is a pit, chip, or star crack larger than 1-1/2 inches in diameter at any location in the windshield above the three-inch line at the bottom.

8. At any location in the windshield above the three-inch line at the bottom (as measured from the junction of the dash board and the windshield) there is more than one crack from the same point if at least one of the cracks is more than 1-1/2 inches in length. There is any crack that weakens the windshield so that one piece may be moved in relation to the other. (If there is more than one crack running from a star crack that extends above the three-inch line, the windshield shall be rejected.)

EXCEPTION: Windshield repair is a viable option to windshield replacement. A windshield that has been repaired will pass inspection unless:

   a. It is likely to cut or injure a person.

   b. There is any distortion that interferes with a driver's vision.

   c. The windshield remains weakened so that one piece may be moved in relation to the other.

   d. The integrity of the windshield has obviously been compromised by the damage or the repair.

9. Any sticker is on the windshield other than an official one required by law or permitted by the Superintendent. Authorization is hereby granted for stickers measuring not more than 2-1/2 inches in width and four inches in length to be placed in the blind spot behind the rear view mirror. Department of Defense decals measuring no more than three inches in width and eight inches in length may be affixed to the upper edge of the center of the windshield. At the option of the motor vehicle's owner, the decal may be affixed at the lower left corner of the windshield so that the inside or left edge of the sticker or decal is within one inch of the extreme left edge of the windshield when looking through the windshield from inside the vehicle. When placed at this location, the bottom edge of the sticker or decal must be affixed within three inches of the bottom of the windshield. This location can only be used if the owner of the vehicle has chosen not to place any required county, town or city decal there. The normal location for any required county, town, or city decal is adjacent to the official inspection sticker and must not extend upward more than three inches from the bottom of the windshield. Commercial Vehicle Safety Alliance (CVSA) inspection decals may be placed at the bottom or sides of the windshield provided such decals do not extend more than 4-1/2 inches from the bottom of the windshield and are located outside the area swept by the windshield wipers and outside the driver's sight line.

Any sticker required by the laws of any other state or the District of Columbia and displayed upon the windshield of a vehicle submitted for inspection in this state is permitted by the Superintendent, provided the vehicle is currently registered in that jurisdiction and the sticker is displayed in a manner designated by the issuing authority and has not expired. This includes vehicles with dual registration; i.e., Virginia and the District of Columbia.

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NOTE: Fastoll Transponder devices may be affixed to the inside center of the windshield at the roof line just above the rear view mirror. If space does not allow, then it may be affixed to the immediate right of the mirror at the roof line.

NOTE: Volvo placed a warning sticker on the windshield of their cars equipped with side impact air bags. In accordance with this paragraph the sticker shall be removed. If the sticker can be removed intact then it may be placed on the left rear window in the lower front corner. Customers should be referred to the nearest Safety Division area office for replacement if it could not be removed intact.

EXCEPTION: Stickers or decals used by counties, cities and towns in lieu of license plates may be placed on the windshield without further authority. Except on privately owned yellow school buses, the sticker or decal shall be placed on the windshield adjacent to the right side of the official inspection sticker or the optional placement to the extreme lower left side of the windshield. The top edge of the sticker or decal shall not extend upward more than three inches from the bottom of the windshield. The left side edge adjacent to the official inspection sticker shall not be more than 1/4 inch from the right edge of the official inspection sticker when looking through the windshield from inside the vehicle. At the option of the motor vehicle owner, the sticker or decal may be affixed at the lower left corner of the windshield so that the inside or left edge of the sticker or decal is within one inch of the extreme left edge of the windshield when looking through the windshield from inside the vehicle. When placed at this location, the bottom edge of the sticker or decal must be affixed within three inches of the bottom of the windshield. Any expired sticker or decal, excluding a rejection sticker that is present on the windshield at the time of inspection, shall not be issued an approval sticker unless the owner/operator "authorizes" its removal. A rejection sticker will be issued versus an involuntary removal. On privately owned yellow school buses, the sticker or decal shall be placed on the windshield adjacent to the left side of the official inspection sticker, and not more than 1/4 inch from the left edge of the official inspection sticker when looking through the windshield from inside the vehicle. The top edge of the sticker shall not extend upward more than three inches from the bottom of the windshield.

10. Sunshading material attached to the windshield extends more than three inches downward from the top of the windshield, unless authorized by the Virginia Department of Motor Vehicles and indicated on the vehicle registration.

NOTE: Sunshading material on windshield displaying words, lettering, numbers or pictures that does not extend below the AS-1 line is permitted.

NOTE: Vehicles with logos made into the glass at the factory that meet federal standards will pass state inspection.

11. Any sunscreening material is scratched, distorted, wrinkled or obscures or distorts clear vision through the glazing.

12. Front side windows have cloudiness above three inches from the bottom of the glass or other defects that affect the driver's vision or one or more cracks which permit one part of the glass to be moved in relation to another part. Wind silencers, breezes or other ventilator adaptors are not made of clear transparent material.

EXCEPTION: Colored or tinted ventvisors that do not exceed more than two inches from the forward door post into the driver's viewing area are permitted.

13. Glass in the left front door cannot be raised or lowered easily so a hand signal can be given. (This does not apply to vehicles that were not designed and/or manufactured for the left front glass to be lowered, provided the vehicle is equipped with approved turn signals.) If either front door has the glass removed and material inserted in place of the glass that could obstruct the driver's vision.

EXCEPTION: Sunscreening material is permissible if the vehicle is equipped with a mirror on each side.

14. Any sticker or other obstruction is on either front side window, rear side windows, or rear windows. (The price label, fuel economy label and the buyer's guide required by federal statute and regulations to be affixed to new and used vehicles by the manufacturer shall normally be affixed to one of the rear side windows.) If a vehicle only has two door windows, the labels may be affixed to one of these windows. If a vehicle does not have any door or side windows the labels may be temporarily affixed to the right side of the windshield until the vehicle is sold to the first purchaser.
NOTE: A single sticker no larger than 20 square inches in area, if such sticker is totally contained within the lower five inches of the glass in the rear window or a single sticker or decal no larger than 10 square inches located in an area not more than three inches above the bottom and not more than eight inches from the rearmost edge of either front side window, is permissible and should not be rejected.

A single sticker issued by the Department of Transportation to identify a physically challenged driver, no larger than two inches X two inches, located not more than one inch to the rear of the front door post, or one inch to the rear of the front ventilator glass, if equipped with a ventilator glass, and no higher than one inch from the bottom of the window opening, is permitted on the front driver's side window on a vehicle specially equipped for the physically challenged.

15. Rear window is clouded or distorted so that the driver does not have a view 200 feet to the rear.

EXCEPTIONS: The following are permissible if the vehicle is equipped with a mirror on each side:

a. There is attached to one rear window of such motor vehicle one optically grooved clear plastic right angle rear view lens, not exceeding 18 inches in diameter in the case of a circular lens or not exceeding 11 inches by
14 inches in the case of a rectangular lens, which enables the operator of the motor vehicle to view below the line of sight as viewed through the rear window.

b. There is affixed to the rear side windows, rear window or windows of such motor vehicle any sticker or stickers, regardless of size.

c. There is affixed to the rear side windows, rear window or windows of such motor vehicle a single layer of sunshading material.

d. Rear side windows, rear window or windows is clouded or distorted.

19VAC30-70-220. Mirrors.

Inspect for and reject if:

1. Any motor vehicle is not equipped with at least one mirror.

2. Any 1969 and subsequent model motor vehicle, designed and licensed primarily for passenger vehicular transportation, is not equipped with at least one outside and one inside rear view mirror.

NOTE: The inside mirror cannot be removed on these vehicles even if it has an outside on each side.

Vehicles equipped with only one outside mirror must have the mirror on the driver's side.

EXCEPTION: No motor vehicle shall be required to be equipped with an inside rear view mirror if it does not have a rear window or if the rear window is so obstructed as to prevent rearward vision by means of an inside rear view mirror, if the motor vehicle has horizontally and vertically adjustable outside rear view mirrors installed on both sides of such motor vehicle in such a manner as to provide the driver of such motor vehicle a clear view along both sides of such motor vehicle for a distance of not less than 200 feet.

3. Reflecting surface of mirror is cracked, broken, peeled, pitted, clouded, tarnished, has sharp edges, reflects more than one image or a distorted image, or is not mounted securely.

4. Mirror does not give the driver a clear view of the road 200 feet to the rear.

5. Interior rear view mirror.

a. Mirror is loose enough that rear view is impaired.

b. Mirror cannot be adjusted or will not maintain a set adjustment.


a. Mirror is loose enough that rear view is impaired.

b. Left mirror is obscured by an unwiped portion of windshield or mirror is mounted so it cannot be adjusted from driver's seat. (Applies to 1969 and subsequent model vehicles.)

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c. A right side mirror is not required if the reflecting surface of the mirror has been completely removed from the mirror housing; however, a vehicle will be required to have two outside mirrors if there is a sticker or stickers, regardless of size, sunshading or tinting film on the rear side windows or rear window.

NOTE: A single sticker no larger than 20 square inches, if such sticker is totally contained within the lower five inches of the glass of the rear window and does not obstruct the center high mount brake light, is allowed and will pass inspection.

19VAC30-70-230. Windshield wiper; defroster.

Windshield wiper.

INSPECT FOR AND REJECT IF:

1. Vehicle is equipped with a windshield and is not equipped with a windshield wiper;

2. Vehicle was manufactured before January 1, 1943, and is not equipped with at least one wiper on the driver's side. This wiper may be hand operated;

3. Vehicle was manufactured after January 1, 1943, and is not equipped with a windshield wiper or wipers that clear both sides of the windshield. Vehicles converted from dual wipers to a single wiper are acceptable provided it continues to clear both sides of the windshield. These wipers must be mechanically operated by electric, vacuum, or air, but not by hand. A switch in good working order must be present to turn the wipers on and off. Any wiper that parks within the area covered by the driver's windshield wiper blade, excluding the three inches above the bottom of the windshield shall be rejected. (See 19VAC30-70-210 B 6);

4. Blade has brittle worn, torn or ripped rubber or if metal comes in contact with the windshield;

5. Wiper does not operate freely; or if it is an electrically or mechanically operated wiper which must be operated by hand.

*NOTE: Inspect only wipers found on the front windshield.

B.1 Windshield defroster. Vehicles manufactured after January 1, 1969, must be equipped with windshield defroster systems.

INSPECT FOR AND REJECT IF:

1. Any 1969 or subsequent model is not equipped with a windshield defroster system;

2. Defroster fan fails to function;

3. Fan functions, but a warm stream of air cannot be felt blowing against the windshield. Engine must be warm and all elements of the defroster system must be in the on position.

19VAC30-70-240. Horns and other warning devices.

INSPECT FOR AND REJECT IF:

1. Vehicle is not equipped with a horn in good working order, capable of emitting a sound audible under normal conditions over a distance of not less than 200 feet and is not firmly mounted.

2. A horn operating mechanism installed at a location readily accessible to the vehicle operator is not provided. Electrically operated horn, wiring, or electrical connections are defective.

19VAC30-70-250. Doors.

Inspect for and reject if:

1. If each door located at the left and right side of the driver's seat is not equipped with an opening device similar to that installed by vehicle manufacturers that will permit the opening of the door from the outside and inside of the vehicle.

NOTE: A door opening device on customized vehicles may be converted to either a remote, push button or other similar opening switch.
2. If each door located to the left and right side of the driver's seat is not equipped with a latching system similar to that installed by vehicle manufacturers which will hold the door in its proper closed position.

19VAC30-70-260. Hood latch system.

A. "Hood" means any exterior movable body panel forward of the windshield that is used to cover an engine, luggage, storage or battery compartment.

B. INSPECT FOR AND REJECT IF:

1. Each hood is not provided with a hood latch system that will securely hold the hood in its proper fully-closed position.

2. The latch release mechanism or its parts are broken, missing or badly adjusted so that the hood cannot be opened and closed properly.

NOTE: The hood latch release inside the passenger compartment is only for security and shall not be rejected under this section. If the hood latch cable can be accessed from either the inside or outside of the vehicle and opened by pliers or similar method, then it will pass.

3. Latching system on a vehicle equipped with a tilt cab is defective, broken, missing, or not properly adjusted so that the tilt cab is held securely when it is in its latched position.

19VAC30-70-270. Floor pan.

INSPECT FOR AND REJECT IF:

1. The floor pan or inner side panels, front or rear, are rusted out or have any holes other than normal drain holes that allow exhaust gases to enter the occupant compartment or trunk.

2. The floor pan is rusted through or is in such condition to create a hazard to the occupants. A hole in the floor pan which has been properly repaired by welding, or through the utilization of a metal patch riveted, screwed or welded to its surface is not prohibited. If the floor pan was initially constructed from wood, it may be patched with wood.


INSPECT FOR AND REJECT IF:

1. Any motor vehicle is not equipped with a seat to accommodate the operator.

2. The seat is not securely anchored.

3. Seat adjusting mechanism slips out of set position or the seat back will not lock in the proper upright position. Do not reject if it will not adjust as long as it does not violate subdivision 4 of this section.

4. The seat is not located to permit the operator to have adequate control of the steering and braking mechanisms and other instruments necessary for the safe operation of the motor vehicle.

19VAC30-70-290. Seat belts; definitions.

"Bus" means a motor vehicle with motive power designed to carry more than 10 persons.

"Designated seating position" means any plan view (looking down from the top) location intended by the manufacturer to provide seating accommodations while the vehicle is in motion, except auxiliary seating accommodations as temporary or folding jump seats.

"Front outboard designated seating positions" means those designated seating positions for the driver and outside front seat passenger (except for trucks which have the passenger seat nearest the passenger side door separated from the door by a passageway used to access the cargo area).

"GVWR" means Gross Vehicle Weight Rating as specified by the manufacturer (loaded weight of a single vehicle).

"Multi-purpose passenger vehicle" means any motor vehicle that is (i) designed to carry no more than 10 persons and (ii) constructed either on a truck chassis or with special features for occasional off-road use. This shall include a mini-van.

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"Open-body type vehicle" means a vehicle having no occupant compartment top or an occupant compartment top that can be installed or removed by the user at his convenience.

"Passenger car" means a motor vehicle with motive power except a multipurpose passenger vehicle or motorcycle designed for carrying 10 persons or less.

"Rear outboard front facing designated seating positions" means those designated seating positions for passengers in outside front facing seats behind the driver and front passenger seat, except any designated seating position adjacent to a walk-way, that is located between the seat and the near side of the vehicle and is designated to allow access to more rearward seating positions.

"Truck" means a motor vehicle with motive power designed primarily for the transportation of property or special purpose equipment.

Passive Restraint System

A. Inflatable occupant restraint (commonly known as air bags).

B. Passive belt system (automatic deployment around the occupant after the occupant enters the vehicle and closes the door).

C. Inspect for and reject if:
   1. Not of an approved type;
   2. Installation not in compliance as follows:
      a. All motor vehicle seat belt anchorages and attachment hardware must meet the standards and specifications set forth by the Society of Automotive Engineers, Inc., and Federal Motor Vehicle Safety Standard No. 209 (49 CFR 571.209), for such anchorages and attachment hardware;
      b. Any questions concerning the proper installation of seat belt assemblies should be directed to the nearest Safety Division office.
   3. Any 1963 and subsequent model vehicle, designed and licensed primarily for private passenger use, is not equipped with adult safety lap belts for at least two front seats or a combination of lap belts and shoulder straps or harnesses.
   4. Any passenger car manufactured on or after January 1, 1968, is not equipped with lap/shoulder or harness seat belt assemblies located at the front outboard designated seating positions (except in convertibles) and lap seat belt assemblies located at all other designated seating positions.
   5. Any convertible passenger car manufactured on or after January 1, 1968, does not have a lap seat belt assembly for each designated seating position.
   6. Any passenger car manufactured on or after December 11, 1989, (except convertibles) not equipped with lap/shoulder seat belt assemblies located at all forward facing rear outboard designated seating positions.
      a. Any passenger car manufactured on or after September 1, 1991, (including convertibles) is not equipped with a lap/shoulder seatbelt assembly located at all forward facing rear outboard designated seating positions.
      b. Any truck, multipurpose vehicle, or bus (except school buses and motor homes) with a gross vehicle weight rating (GVWR) of 10,000 pounds or less, manufactured on or after September 1, 1991, is not equipped with a lap/shoulder seatbelt assembly at all forward facing rear outboard designated seating positions.
      c. Any of the heretofore described vehicles manufactured on or after September 1, 1992, are not equipped with lap/shoulder seatbelt assembly located at all forward facing rear outboard designated seating positions on a readily removable seat.
   7. Any of the following motor vehicles manufactured on or after July 1, 1971, do not have a lap seat belt assembly for each designated seating position:
      a. Open-body type vehicles;
      b. Walk-in van type trucks;
      c. Trucks (GVWR in excess of 10,000 pounds);

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d. Multipurpose passenger vehicles (GVWR in excess of 10,000 pounds).

8. Any buses manufactured on or after July 1, 1971, do not have a lap seat belt assembly for the driver's seating position.

9. All other motor vehicles manufactured on or after January 1, 1976, except those for which requirements are specified in subdivisions 3 and 4 of this subsection, do not have lap/shoulder or harness seat belt assemblies installed for each front outboard designated seating position. Those vehicles originally equipped and sold by the manufacturer with only a lap belt installed for each designated seating position in compliance with Federal Motor Vehicle Safety Standards (49 CFR Part 571) will be deemed to be in compliance with this section.

10. Any seat belt buckle, webbing, or mounting is cut, torn, frayed or no longer operates properly.

11. Any seat belt anchorage is loose, badly corroded, missing or not fastened to belt.

D. Safety belts (motorized). Enter the vehicle and close the door. Insert the key into the ignition and turn to the on position. A motor causes the shoulder belt to slide along a track (Figure 1) starting at the front body "A" pillar and moving rearward to its locked position at the "B" pillar. The seat belt warning indicator lamp should illuminate with the lap belt unbuckled. When the ignition is turned to the off position and the door is opened, the shoulder belt moves forward to the "A" pillar.

NOTE: Do not reject if the motor is inoperative and the shoulder belt is permanently "locked" at pillar "B."

![Figure 1: Motorized Safety Belt System](image)

E. Air bag and air bag readiness light.

Inspect for and reject if:

1. Any defects in the air bag system are noted by the air bag readiness light or otherwise indicated;

2. The air bag has been deployed and has not been replaced (and is not deactivated because of a medical or other exemption and a notice is posted to indicate that it has been deactivated);

3. Any part of the air bag system has been removed from the vehicle; or

4. If the air bag indicator fails to light or stays on continuously.

NOTE: Checking the air bag readiness light. Turn the ignition key to the on position; the air bag readiness light will indicate normal operation by lighting for six to eight seconds, then turning off. A system malfunction is indicated by the flashing or continuous illumination of the readiness light or failure of the light to turn on.

19VAC30-70-300. Muffler, exhaust system and trailer venting.

A. Flexible tubing may be used anywhere in the exhaust system.

B. Inspection of exhaust system does not concern noise level.

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C. Inspect for and reject if:

1. There is any leakage of exhaust gases at any point in the system. Do not reject "built-in" drain holes in muffler or tailpipe.

2. A muffler or catalytic converter has been repaired in any manner. The exhaust pipe may be welded to the muffler or catalytic converter. Holes or cracks in the exhaust line have been repaired with a patch or caulking.

NOTE: If a vehicle is inspected that does not have a muffler, the inspector should explain to the customer that although the vehicle will pass inspection without a muffler, it is a violation of state law for the vehicle to be operated on the highway without it.

NOTE: Nissan has designed an exhaust repair for leak/noise at the front tube for the 2002-03 Nissan Pathfinders. The repair may require the application of a specially designed caulk to the front tube of the exhaust system. Since Nissan has designed the repair for their vehicles and trained Nissan technicians would perform the repair, this would be acceptable and should not be rejected. This exception would not preclude the rejection of exhaust systems repaired in a manner that is not designed or approved by the manufacturer and not performed by trained persons.

3. Tailpipe opening is mashed or pinched.

4. Brackets are loose, broken, or missing.

5. The exhaust system fails to discharge the exhaust to the rear or sides of that part of a property-carrying-vehicle that is designed for and normally used for the driver and passengers and to the rear or sides of the passenger and trunk compartment of passenger vehicles.

D. Trailers and semitrailer venting. Inspection of trailers and semitrailers will include a visual inspection of the venting of cooking or heating appliances to the outside of the trailer or semitrailer to determine if the heating and cooking appliances are adequately vented to the outside to prevent the asphyxiation of occupants of any trailer or semitrailer by the operation of the heating or cooking appliances.

1. Reject the trailer or semitrailer if not equipped with a vent or venting system to the outside.

2. Reject the trailer or semitrailer if there is any complete or partial obstruction of the vent or venting system.

19VAC30-70-310. Air pollution control system or device.

A. No motor vehicle registered in this Commonwealth and manufactured for the model year 1973 or for subsequent model years shall be operated on the highways of this Commonwealth unless it is equipped with an air pollution control system or device, or combination of such systems or devices installed in accordance with federal laws and regulations.

B. The provisions of this section shall not prohibit or prevent shop adjustments or replacements of equipment for maintenance or repair or the conversion of engines to low polluting fuels, such as, but not limited to, natural gas or propane, so long as such action does not degrade in any manner or to any degree the anti-pollution capabilities of the vehicle power system.

C. INSPECT FOR AND REJECT IF:

1. The air pollution control system or device on motor vehicles registered in this Commonwealth and manufactured for the model year 1973 or for subsequent model years has been removed or otherwise rendered inoperable. The conversion of an engine to utilize low polluting fuels such as natural gas or propane may result in the removal of some part of the pollution control system; however, if the engine is converted to utilize both low polluting fuels and/or gasoline no part of the pollution control system or device can be removed or otherwise rendered inoperable.

2. Any of the essential parts of the pollution control system or devices on vehicles registered in this Commonwealth and manufactured for the model year 1973 or for subsequent model years have been removed, rendered inoperative or disconnected. This includes any belt, valve, pump, hose line, cap, cannister, catalytic converter and the restrictor in the gasoline tank filler neck on vehicles required to use unleaded fuel.

NOTE: In order to determine if a motor vehicle was originally equipped with emissions control equipment, refer to the vehicle's emissions control information label which is usually located in the engine compartment.

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3. The emission control system or device on motor vehicles registered in this Commonwealth and manufactured for the model year 1973 or for subsequent model years is not comparable to that designed for use upon the particular vehicle as standard factory equipment.

Any new or used after market catalytic converter installed on a vehicle after December 31, 1987, shall meet and be installed in accordance with specifications established by the Environmental Protection Agency. A catalytic converter so installed shall be identified with a visible, permanent, non-destroctible label or stamp which will identify the manufacturer, vehicle application and month and year of manufacture. The label shall be in accordance with the following format:

a. New converters - N/XX/YYYY/ZZZZ
b. Used converters - U/XX/YYYY/ZZZZ

N - New converter designation
U - Used converter designation
XX - Manufacturer code issued by EPA
YYYY - Numerical designation of vehicle application
ZZZZ - Month and year of manufacture (i.e. - 0188 for January, 1988)

19VAC30-70-320. Fuel system.

INSPECT FOR AND REJECT IF:

1. Any part of the fuel system is not securely fastened.
2. There is fuel leakage at any point in the fuel system.
3. The fuel tank filler cap is missing.
4. The fuel tank crossover lines are not protected.
5. Any part of the fuel system comes in contact with the exhaust system.


All motorcycles shall be inspected according to the following sections. In cities, towns and counties having a motorcycle repair shop or shops appointed as an official inspection station, motorcycle inspections may be performed at these places. In localities where no motorcycle inspection station is located, such inspections shall be made by any official inspection station provided a certified inspector observes a satisfactory brake test and completes the remainder of the inspection according to regulations.


A. The inspector, if qualified to operate a motorcycle, must drive it into the inspection lane and test the service brakes. If not qualified to operate motorcycles, the inspector must observe the operator operate the brakes. The inspector is required to observe and inspect the braking system on both wheels if so equipped or required to be equipped.

B. Inspect for and reject if:

1. Any motorcycle is not equipped with a brake, or which has a disconnected brake.
2. Any motorcycle which was originally equipped with a service brake system on both the front or rear wheel(s) if the service brake system has been altered by removing or disconnecting any of the brake system components from any of the wheels.
3. Any motorcycle manufactured after July 1, 1974, is not equipped with either a split service brake system or two independently actuated service brake systems which shall act on the front as well as the rear wheel or wheels.
4. Bonded linings or disc pads are worn to less than 2/32 of an inch in thickness or riveted linings or disc pads are worn to less than 2/32 of an inch over the rivet head(s).

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5. Any lining is broken or cracked so that the lining or parts of the lining are not firmly attached to the shoe or disc pad.
6. Grease or any other contamination cannot be satisfactorily removed from the lining or disc pad.
7. Rivets in riveted linings or disc pads are loose or missing.
8. A brake drum or brake disc (rotor) is scored to the extent that it impairs the braking system.
9. A brake drum or brake disc is worn beyond the manufacturer's recommended limit. (A brake drum or brake disc shall under no circumstances be re-machined beyond the manufacturer's specifications.)
10. Rods are bent, cotter keys or lock nuts are missing, cables frayed or broken or parts misaligned.
11. When operated at 20 miles per hour on a dry, level, hard surface free from loose material, the brakes will not stop the motorcycle within 30 feet.
12. Levers (foot and hand) do not have at least 1/3 of their travel as reserve after brakes are fully applied.
13. Any leaks in master cylinder, wheel cylinders, or any brake hoses or lines.
14. A motorcycle that is equipped with a front and rear master cylinder, if one or both are not displaying the recommended manufacturer fluid level.
15. Any line or hose not installed so as to prevent damage or abrasion by contact with the frame or other components. There is any leakage in any hydraulic, air, or vacuum lines; hoses have any cracks, crimps, restrictions, or are abraded exposing fabric; tubing or connections leak, are crimped, restricted, cracked or broken; any valves leak or are inoperative. Reject the vehicle if the brake hoses or tubing are stretched or extended and do not allow for suspension movement. Brake tubing and hoses must:
   a. Be long and flexible enough to accommodate without damage all normal motions of the parts to which it is attached;
   b. Be secured against chaffing, kinking, or other mechanical damage; and
   c. Be installed in a manner that prevents it from contacting the vehicle’s exhaust system or any other source of high temperatures.

19VAC30-70-350. Motorcycle seat, steering and suspension.

Inspect for and reject if:
1. Frame is bent or damaged so as to constitute a hazard in proper operation.
2. Wheels are out of line to a degree steering and control is affected.
3. Steering-head bearing is loose, broken, defective or out of adjustment.
4. Handlebars are loose, bent, broken or damaged in such a manner as to affect proper steering.
5. Shock absorbers are broken, worn, missing, defective, disconnected or do not function properly.
6. Any spring in the suspension system is broken or sagging.
7. If motorcycle seat or seats are not securely fastened.
8. Any motorcycle designed to carry more than one person is not equipped with a footrest for each passenger.
9. The storage battery is not attached to a fixed part of the motorcycle or protected by a removable cover or enclosure if the battery is installed in a location other than the engine compartment. This includes all brackets, hardware, bolts, and bushings used for securely mounting the storage battery to the motorcycle.
   a. Removable covers or enclosures shall be substantial and shall be securely latched or fastened.
   b. The storage battery compartment shall have openings to provide ample battery ventilation and drainage.
   c. Whenever the cable to the starting motor passes through a metal compartment, the cable shall be protected against grounding by an acid and waterproof insulating bushing.

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d. Whenever a battery and a fuel tank are both placed under the driver's seat, they shall be partitioned from each other and each compartment shall be provided with an independent cover, ventilation, and drainage.

Part IV
Inspection Requirements for Motorcycles

19VAC30-70-360. Motorcycle lights: headlamp, rear, signal, warning.

A. Inspect for and reject if:

1. Motorcycle is not equipped with at least one motorcycle headlamp.

2. Any motorcycle headlamp is not of an approved type (SAE-M). A motorcycle may have one or more headlamps. In addition to the headlamp(s), a motorcycle may be equipped with not more than two auxiliary headlamps of a type approved (SAE-C) by the superintendent and identified as "auxiliary front lamps."

3. Lens and reflector do not match except in scaled units, or if the lens is cracked, broken or rotated, or if the lens and reflector are not clean or bright.

4. Any motorcycle lights-headlamp, rear lamp, signal or warning lamp has any wire, unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of lamp or lens.

5. Lamp is not focused or any filament or bulb fails to burn.

6. Lamp is not mounted securely or if switch does not operate properly.

NOTE: Motorcycles may be equipped with means of modulating the high beam of their headlights between high and low beam at a rate of 200 to 280 flashes per minute, provided they are equipped with a switch or device that prevents flashing of headlights when headlights are required to be lighted.

NOTE: The center of the hot spot is set more than four inches up or down from the horizontal centerline or more than four inches to the left or right from the vertical centerline.

NOTE: Inspection is to be performed with lamp on high beam.

NOTE: The use of strobe lights being placed inside the headlamps of police motorcycles is permitted. The strobe light system developed by Harley-Davidson for use in police motorcycle headlamps has been tested and does meet the current standard; therefore, strobe light systems of this type and similar types may be used in police motorcycle headlamp systems.

B. Aiming the headlamp. All headlamps that do not comply with subdivision A 7 of this section shall be aimed straight ahead. (Zero inches up or down and zero inches to the right or left.)

C. Rear lamp.

Inspect for and reject if:

1. The high beam indicator does not burn when the high or "country" beam is on or does not go off when the low beam is on.

2. Motorcycle is not equipped with a rear lamp of approved type SAE-T-S-P-A).

3. Lamp is not mounted near rear of vehicle, or is not mounted securely, or if lamp does not make a good electrical connection.

4. Lenses are not red to the rear and clear or amber to the front or any lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack(s).

NOTE: LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

5. Filaments in all lamps do not burn when headlamp switch is turned on to any position.

6. The rear license plate is not illuminated by an approved license plate lamp.
D. Signal device.(intention to stop or turn).

1. Signal devices are not required on motorcycles; however, if installed, they must operate and be inspected.

2. Signal lamp lenses installed on the front of the motorcycle shall be amber and be located on each side of the vertical centerline of the motorcycle and as far apart as practicable and not closer than nine inches, measured from the optical centerline of the lamps, and to be located on the same level and not less than 20 inches above the ground plate. The optical centerline of the lamp shall not be less than four inches from the retaining ring of the headlamp unit.

3. Signal lamps installed on the rear of the motorcycle shall be red or amber and shall be located on each side of the vertical centerline of the motorcycle as far apart as practicable but not closer than nine inches, measured from the optical centerline of the lens, and shall be located on the same level and not less than 20 inches above the ground level.

4. Inspect for and reject if:
   a. Motorcycle, except an antique vehicle not originally equipped with a stop lamp, is not equipped with at least one stop lamp of an approved type that automatically exhibits a red or amber light to the rear when the brake control foot pedal or hand grip brake control device is activated. (On motorcycles manufactured prior to January 1, 1972, the activation of the front wheel brake control device is not required to activate the stop lamp.)
   b. The signal lamp is not of an approved type (SAE-D) or does not flash.
   c. Lens in brake lamp or signal lamp has a piece broken from it. (Lense in brake lamp or signal lamp may have one or more cracks provided an off-color light does not project through the crack or cracks.)
   d. Wiring or electrical connections are defective or any filaments do not burn.
   e. Switch is not convenient to the driver and not of an approved type.
   f. Signal devices are not installed as provided in subdivisions D 1 and 2 of this section.

E. Warning lights.
   Inspect for and reject if:
   1. Warning lamps are not of an approved type or have been altered.
   2. Any lighted advertising sign is present.

19VAC30-70-370. Motorcycle mirror.
   Inspect for and reject if:
   1. Motorcycle is not equipped with a mirror.
   2. Reflecting surface of mirror is cracked, broken, peeled, pitted, clouded, tarnished, has sharp edges, or reflects more than one image or a distorted image.
   3. Mirror is not mounted securely.
   4. Operator does not have a view of the road 200 feet to the rear.

19VAC30-70-380. Motorcycle horn.
   INSPECT FOR AND REJECT IF:
   1. Motorcycle is not equipped with a horn in good working order capable of emitting sound audible under normal conditions for a distance no less than 200 feet.
   2. Horn is not mounted securely, wiring is defective, control button is not operating properly, or is not installed at a location readily accessible to the operator.

19VAC30-70-390. Motorcycle muffler and exhaust system.
   INSPECT FOR AND REJECT IF:
   1. Vehicle has no exhaust line or tailpipe if the system is designed for same.

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2. A muffler has been repaired with a jacket, a patch or in any other manner.
3. Vehicle has installed a muffler cutout or bypass.
4. Any components of the exhaust system are not properly secured.
5. Leakage of gases is noted at manifold gaskets, muffler and muffler connections, or at any point in the exhaust line.
6. Tailpipe opening is pinched or mashed.

19VAC30-70-400. Motorcycle tires, wheels, rims.

Inspect for and reject if:
1. Any tire has a cut or puncture, not to include a plug or patch that may be used as a manner of repair, or is worn so that the fabric is visible.
   NOTE: Plugs/patches shall be in the tread area only. Plugs/patches are not permitted in the side wall of the tire.
2. Any tire has knots or bulges in any side wall or if there is evidence of a broken belt under the tread or of the tread separating from the fabric.
3. Any bolts, nuts, lugs or spokes are bent, loose or missing. Rims or wheels are bent, cracked or damaged so as to affect the safe operation of the motorcycle.
4. Wheel bearings are excessively worn or out of adjustment.
5. Any motorcycle is equipped with a tire that has a tread depth measuring less than 2/32 of an inch when measured in accordance with the instructions set forth in subdivisions 6, 7, and 8 of 19VAC30-70-130.
6. Any tire is marked specifically for use other than on the highway such as "For Farm Use Only," "For Off-Highway Use Only" or "For Mobile Home Use Only."
7. Any motorcycle tire has been recut or regrooved.
8. Directional tires and/or wheels designed and manufactured to go in a certain direction or rotation are not installed in the proper direction of rotation.

19VAC30-70-410. Motorcycle windscreen and glazing.

INSPECT FOR AND REJECT IF:
1. Any windscreen is not of an approved type.
2. Any windscreen obstructs the driver's vision.
3. Any support or installation component interferes with the driver's vision.

19VAC30-70-420. Motorcycle fuel system.

INSPECT FOR AND REJECT IF:
1. Any part of the fuel system is not securely fastened.
2. There is fuel leakage at any point in the fuel system.
3. The fuel tank filler cap is missing.
19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

19VAC30-70-430. Inspection procedure — heavy vehicles.

Inspection procedure — heavy vehicles:

1. Remove existing inspection sticker (all vehicles).

2. While in right front, inspect right side glass and right side lug nuts, windshield, seat belts, and door latches.

3. Drive vehicle into inspection lane.

4. While in driver’s seat, check left side glass and window crank, windshield, driver’s seat, seat belts, door latches and parking or holding brake. Check service brake, high beam indicator, turn signal switch, air brake low air warning, air pressure loss, (single/combination) horn, windshield wiper, defroster, mirrors, steering lash and floor pan.

5. Check exhaust system and fuel tank.

6. Check right side marker and clearance reflectors.

7. Check all rear lights (including brake and turn signal). Check all rear reflectors.

8. Check left side marker, clearance lights and reflectors.

9. Check all wheels for brakes, push rod travel, tires, rims and suspension.

10. Check headlights, fog, driving, turn signals, other lights and reflectors.

11. Check steering system, ball joints/king pin, shocks, springs.

12. Open hood and check latching mechanism, master cylinder, engine mounts, and compressor belts.

13. Check frame (all vehicles) and coupling device.

14. Check air lines and couplings. Disconnect emergency air line (red) (left) and check for automatic operation of trailer breakaway brakes. Check tractor air protection valve. (Combination vehicle only).

15. Issue approval or rejection sticker.

Required lamps and reflectors on commercial vehicles.

Lamps and reflex reflectors. Table 1 specifies the requirements for lamps, reflective devices and associated equipment by the type of commercial motor vehicle. The diagrams in this section illustrate the position of the lamps, reflective devices and associated equipment specified in Table 1. All commercial motor vehicles manufactured on or after December 25, 1968, must, at a minimum, meet the applicable requirements.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Lamps and Reflectors on Commercial Motor Vehicles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item on the vehicle</th>
<th>Quantity</th>
<th>Color</th>
<th>Location</th>
<th>Position</th>
<th>Height above the road surface in millimeters (mm) (with English units in parenthesis) measured from the center of the lamp at curb weight</th>
<th>Vehicles for which the devices are required</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Headlamps</th>
<th>2</th>
<th>White</th>
<th>Front</th>
<th>On the front at the same height, with an equal number at each side of the vertical center line as far apart as practicable.</th>
<th>Not less than 559 mm (22 inches) nor more than 1,372 mm (54 inches)</th>
<th>A, B, C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn signal (front)</td>
<td>2</td>
<td>Amber</td>
<td>At or near the front</td>
<td>One on each side of the vertical centerline at the same height and as far apart as practicable.</td>
<td>Not less than 381 mm (15 inches) nor more than 2,108 mm (83 inches.)</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Identification lamps (front)</td>
<td>3</td>
<td>Amber</td>
<td>Front</td>
<td>As close as practicable to the top of the vehicle, at the same height, and as close as practicable to the vertical centerline of the vehicle (or the vertical centerline of the cab where different from the centerline of the vehicle) with lamp centers spaced not less than 152 mm (6 inches) or more than 305 mm (12 inches) apart. Alternatively, the front lamps may be located as close as practicable to the top of the cab.</td>
<td>All three on the same level as close as practicable to the top of the motor vehicle.</td>
<td>B, C</td>
</tr>
<tr>
<td>Tail lamps</td>
<td>2</td>
<td>Red</td>
<td>Rear</td>
<td>One lamp on each side of the vertical centerline at the same height and as far apart as practicable.</td>
<td>Both on the same level between 381 mm (15 inches) and 1,829 mm (72 inches).</td>
<td>A, B, C, D, E, F, G, H</td>
</tr>
<tr>
<td>Stop lamps</td>
<td>2</td>
<td>Red</td>
<td>Rear</td>
<td>One lamp on each side of the vertical centerline at the same height and as far apart as practicable</td>
<td>Both on the same level between 381 mm (15 inches) and 1,829 mm (72 inches).</td>
<td>A, B, C, D, E, F, G</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
<td>-----</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Amber</td>
<td>One on each side of the front of the vehicle.</td>
<td>One on each side of the vertical centerline to indicate overall width.</td>
<td>Both on the same level as high as practicable.</td>
<td>B, C, D, G, H</td>
</tr>
<tr>
<td>Clearance lamps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Red</td>
<td>One on each side of the rear of the vehicle.</td>
<td>One on each side of the vertical centerline to indicate overall width.</td>
<td>Both on the same level as high as practicable.</td>
<td>B, D, G, H</td>
</tr>
<tr>
<td>Reflex reflector</td>
<td>2</td>
<td>Amber</td>
<td>One on each side</td>
<td>At or near the midpoint between the front and rear side marker lamps, if the length of the vehicle is more than 9,144 mm (30 feet)</td>
<td>Between 381 mm (15 inches) and 1,524 (60 inches).</td>
<td>A, B, D, F, G</td>
</tr>
<tr>
<td>(side)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflex reflector</td>
<td>2</td>
<td>Red</td>
<td>Rear</td>
<td>One on each side of the vertical centerline, as far apart as practicable and at the same height.</td>
<td>Both on the same level, between 381 mm (15 inches) and 1,524 mm (60 inches).</td>
<td>A, B, C, D, E, F, G</td>
</tr>
<tr>
<td>(rear)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflex reflector</td>
<td>2</td>
<td>Red</td>
<td>One on each side (rear).</td>
<td>As far to the rear as practicable.</td>
<td>Both on the same level, between 381 mm (15 inches) and 1,524 mm (60 inches).</td>
<td>A, B, D, F, G</td>
</tr>
<tr>
<td>(rear side)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflex reflector</td>
<td>2</td>
<td>Amber</td>
<td>One on each side (front).</td>
<td>As far to the front as practicable</td>
<td>Between 381 mm (15 inches) and 1,524 mm (60 inches).</td>
<td>A, B, C, D, F, G</td>
</tr>
<tr>
<td>(front side)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>License plate</td>
<td>1</td>
<td>White</td>
<td>At rear license plate to illuminate the plate from the top or sides.</td>
<td>As far to the front as practicable</td>
<td>No requirements</td>
<td>A, B, C, D, F, G</td>
</tr>
<tr>
<td>lamp (rear)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Side marker lamp</td>
<td>2</td>
<td>Amber</td>
<td>One on each side</td>
<td>Not less than 381 mm (15 inches).</td>
<td>A, B, C, D, F</td>
<td></td>
</tr>
<tr>
<td>(front)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Side marker lamp</td>
<td>2</td>
<td>Amber</td>
<td>One on each side</td>
<td>At or near the midpoint between the front and rear side marker lamps, if the length of the vehicle is more than 9,144 mm (30 feet)</td>
<td>Not less than 381 mm (15 inches).</td>
<td>A, B, D, F, G</td>
</tr>
<tr>
<td>intermediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Updated through March 1, 2008*
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Side marker lamp (rear)</strong>&lt;sup&gt;4, 8&lt;/sup&gt;</td>
<td>2</td>
<td>Red</td>
<td>One on each side.</td>
<td>As far to the rear as practicable.</td>
<td>Not less than 381 mm (15 inches), and on the rear or trailers not more than 1,524 mm (60 inches).</td>
<td>A, B, D, G</td>
</tr>
<tr>
<td><strong>Turn signal (rear)</strong>&lt;sup&gt;3, 12&lt;/sup&gt;</td>
<td>2</td>
<td>Amber or red</td>
<td>Rear</td>
<td>One lamp on each side of the vertical centerline as far apart as practicable.</td>
<td>Both on the same level, between 381 mm (15 inches) and 2,108 mm (83 inches).</td>
<td>A, B, C, D, E, F, G</td>
</tr>
<tr>
<td><strong>Identification lamp (rear)</strong>&lt;sup&gt;3, 7, 15&lt;/sup&gt;</td>
<td>3</td>
<td>Red</td>
<td>Rear</td>
<td>One as close as practicable to the vertical centerline. One on each side with lamp centers spaced not less than 152 mm (6 inches) or more than 305 mm (12 inches) apart.</td>
<td>All three on the same level as close as practicable to the top of the vehicle.</td>
<td>B, D, G</td>
</tr>
<tr>
<td><strong>Vehicular hazard warning signal flasher lamps</strong>&lt;sup&gt;3, 12&lt;/sup&gt;</td>
<td>2</td>
<td>Amber</td>
<td>Front</td>
<td>One lamp on each side of the vertical centerline, as far apart as practicable.</td>
<td>Both on the same level, between 381 mm (15 inches) and 2,108 mm (83 inches).</td>
<td>A, B, C</td>
</tr>
<tr>
<td></td>
<td>1 or 2</td>
<td>Amber or red</td>
<td>Rear</td>
<td>One lamp on each side of the vertical centerline, as far apart as practicable.</td>
<td>Both on the same level, between 381 mm (15 inches) and 2,108 mm (83 inches).</td>
<td>A, B, C, D, E, F, G</td>
</tr>
<tr>
<td><strong>Backup lamp</strong>&lt;sup&gt;14&lt;/sup&gt;</td>
<td>1 or 2</td>
<td>White</td>
<td>Rear</td>
<td>Rear</td>
<td>No requirement</td>
<td>A, B, C</td>
</tr>
<tr>
<td><strong>Parking lamp</strong></td>
<td>2</td>
<td>Amber or white</td>
<td>Front</td>
<td>One lamp on each side of the vertical centerline, as far apart as practicable.</td>
<td>Both on the same level, between 381 mm (15 inches) and 2,108 mm (83 inches).</td>
<td>A</td>
</tr>
</tbody>
</table>

Legend: Types of commercial motor vehicles shown in the last column of Table 1:

A. Buses and trucks less than 2,032 mm (80 inches) in overall width.
B. Buses and trucks 2,032 mm (80 inches) or more in overall width.
C. Truck tractors.
D. Semi-trailers and full trailers 2,032 mm (80 inches) or more in overall width except converter dollies.
E. Converter dolly.
F. Semi-trailers and full trailers less than 2,032 mm (80 inches) in overall width.

*Updated through March 1, 2008*
G. Pole trailers.
H. Projecting loads.

Note: Lamps and reflectors may be combined as permitted by equipment combinations.

NOTES:

1 Identification lamps and reflectors may be mounted on the vertical centerline of the cab where different from the centerline of the vehicle, except where the cab is not more than 42 inches wide at the front roofline, then a single lamp at the center of the cab shall be deemed to comply with the requirements for identification lamps. No part of the identification lamps or their mountings may extend below the top of the vehicle windshield.

2 Unless the turn signals on the front are so constructed (doubled-faced) and located as to be visible to passing drivers, two turn signals are required on the rear of the truck tractor, one at each side as far apart as practicable.

3 The identification lamps need not be visible or lighted if obscured by a vehicle in the same combination.

4 Any semitrailer or full trailer manufactured on or after March 1, 1979, shall be equipped with rear side-marker lamps at a height of not less than 381 mm (15 inches), and on the rear of the trailers not more than 1,524 mm (60 inches) above the road surface, as measured from the center of the lamp on the vehicle at curb weight.

5 Each converter dolly, when towed singly by another vehicle and not as part of a full trailer, shall be equipped with one stop lamp, one tail lamp, and two reflectors (one on each side of the vertical centerline, as far apart as practicable) on the rear. Each converter dolly shall be equipped with rear turn signals and vehicular hazard warning signal flasher lamps when towed singly by another vehicle and not as part of a full trailer, if the converter dolly obscures the turn signals at the rear of the towing vehicle.

6 Pole trailers shall be equipped with two reflex reflectors on the rear, one on each side of the vertical centerline as far as practicable, to indicate the extreme width of the trailer.

7 Pole trailers, when towed by motor vehicles with rear identification lamps and mounted at a height greater than the load being transported on the pole trailer, are not required to have rear identification lamps.

8 Pole trailers shall have on the rearmost support for the load: (1) two front clearance lamps, one on each side of the vehicle, both on the same level and as high as practicable to indicate the overall width of the pole trailer; (2) two rear clearance lamps, one on each side of the vehicle, both at the same level and as high as practicable to indicate the overall width of the pole trailer; (3) two rear side marker lamps, one on each side of the vehicle, both on the same level, not less than 375 mm (15 inches) above the road surface; (4) two rear reflex reflectors, one on each side, both on the same level, not less than 375 mm (15 inches) above the road surface to indicate maximum width of the pole trailer; and (5) one red reflector on each side of the rearmost support for the load. Lamps and reflectors may be combined.

9 Any motor vehicle transporting a load that extends more than 102 mm (4 inches) beyond the overall width of the motor vehicle shall be equipped with the following lamps in addition to other required lamps when operated during the hours when headlamps are required to be used.

   (1) The foremost edge of that portion of the load that projects beyond the side of the vehicle shall be marked (at its outermost extremity) with an amber lamp visible from the front and side.

   (2) The rearmost edge of that portion of the load that projects beyond the side of the vehicle shall be marked (at its outermost extremity) with a red lamp visible from the rear and side.

   (3) If the projecting load does not measure more than 914 mm (3 feet) from front to rear, it shall be marked with an amber lamp visible from the front, both sides, and rear, except that if the projection is located at or near the rear it shall be marked by a red lamp visible from front, side, and rear.

10 Projections beyond rear of motor vehicles. Motor vehicles transporting loads that extend more than 1,219 mm (4 feet) beyond the rear of the motor vehicle, or that have tailboards or tailgates extending more than 1,219 mm (4 feet) beyond the body, shall have these projections marked as follows when the vehicle is operated during the hours when headlamps are required to be used:

   (1) On each side of the projecting load, one red side marker lamp, visible from the side, located so as to indicate maximum overhang.
(2) On the rear of the projecting load, two red lamps, visible from the rear, one at each side; and two red reflectors visible from the rear, one at each side, located so as to indicate maximum width.

11To be illuminated when tractor headlamps are illuminated.

12Every bus, truck, and truck tractor shall be equipped with a signaling system that, in addition to signaling turning movements, shall have a switch or combination of switches that will cause the two front turn signals and the two rear signals to flash simultaneously as a vehicular traffic signal warning. The system shall be capable of flashing simultaneously with the ignition of the vehicle on or off.

13To be actuated upon application of service brakes.

14Backup lamp required to operate when bus, truck, or truck tractor is in reverse.

15(1) For the purposes, the term “overall width” refers to the nominal design dimension of the widest part of the vehicle, exclusive of the signal lamps, marker lamps, outside rearview mirrors, flexible fender extensions, and mud flaps.

(2) Clearance lamps may be mounted at a location other than on the front and rear if necessary to indicate the overall width of a vehicle, or for protection from damage during normal operation of the vehicle.

(3) On a trailer, the front clearance lamps may be mounted at a height below the extreme height if mounting at the extreme height results in the lamps failing to mark the overall width of the trailer.

(4) On a truck tractor, clearance lamps mounted on the cab may be located to indicate the width of the cab, rather than the width of the vehicle.

(5) When the rear identification lamps are mounted at the extreme height of a vehicle, rear clearance lamps are not required to be located as close as practicable to the top of the vehicle.

16A trailer subject to this part that is less than 1,829 mm (6 feet) in overall length, including the trailer tongue, need not be equipped with front side marker lamps and front side reflex reflectors.

17A boat trailer subject to this part whose overall width is 2,032 mm (80 inches) or more need not be equipped with both front and rear clearance lamps provided an amber (front) and red (rear) clearance lamp is located at or near the midpoint on each side so as to indicate its extreme width.

19VAC30-70-440. Service brakes.

A. The inspector, at a minimum, must drive all vehicles into the inspection lane and test both service and parking brakes, except vehicles the inspector is not qualified to drive. In these cases, the inspector will ride in the vehicle and observe the application of the brakes.

B. A minimum of one wheel or one wheel and drum or dust cover must be removed from each vehicle at the time of inspection except vehicles having open brake mechanisms that will permit the inspection of the brake lining, or discs and disc pads, without removing the wheel and rim.

WARNING: Failure to properly torque lug nuts may cause severe damage to the wheel.

The inspection receipt (approval and rejection) shall be marked to reflect which wheel and drum or dust cover was removed or inspected.

C. If any braking problem is detected, the inspector may test drive or require a test drive of the vehicle.

D. Inspect for and reject if:

1. Any commercial motor vehicle manufactured on or after October 20, 1994, is equipped with an air brake system but is not equipped with the proper and functioning automatic brake adjuster system and brake adjuster indicator.

2. Vehicles equipped with air brakes: when the air brake adjustment on vehicles is equal to or exceeds values in the following tables for cam brakes or brake shoe travel is greater than 1/16" on wedge brakes when measured according to Illustrations #1 and #2. (See procedure in addition to illustrations.)

Updated through March 1, 2008
TABLE 1
MINIMUM CRITERIA FOR BRAKE ADJUSTMENT
COMMERCIAL VEHICLE SAFETY ALLIANCE NORTH AMERICAN
STANDARD OUT-OF-SERVICE CRITERIA
Brake adjustment shall not exceed those specifications contained hereunder relating to "Brake adjustment limit." (Dimensions are in inches.)

<table>
<thead>
<tr>
<th>CLAMP TYPE BRAKE CHAMBER DATA</th>
<th>Outside Diameter</th>
<th>Brakes Exceeding the Maximum Brake Adjustment Limit Shall be Readjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 6</td>
<td>4-1/2 (114mm)</td>
<td>1-1/4 (32mm)</td>
</tr>
<tr>
<td>Type 9</td>
<td>5-1/4 (133mm)</td>
<td>1-3/8 (35mm)</td>
</tr>
<tr>
<td>Type 12</td>
<td>5-11/16 (145mm)</td>
<td>1-3/8 (35mm)</td>
</tr>
<tr>
<td>Type 16</td>
<td>6-3/8 (162mm)</td>
<td>1-3/4 (45mm)</td>
</tr>
<tr>
<td>Type 20</td>
<td>6-25/32 (172mm)</td>
<td>1-3/4 (45mm)</td>
</tr>
<tr>
<td>Type 24</td>
<td>7-7/32 (184mm)</td>
<td>1-3/4 (45mm)</td>
</tr>
<tr>
<td>Type 30</td>
<td>8-3/32 (206mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>Type 36</td>
<td>9.0 (229mm)</td>
<td>2-1/4 (57mm)</td>
</tr>
</tbody>
</table>

NOTE: A brake found at the adjustment limit is not to be rejected.

<table>
<thead>
<tr>
<th>LONG STROKE CLAMP TYPE BRAKE CHAMBER DATA</th>
<th>Outside Diameter</th>
<th>Brakes Exceeding the Maximum Brake Adjustment Limit Shall be Readjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 12</td>
<td>5-11/16 (14.5mm)</td>
<td>1-3/4 (45mm)</td>
</tr>
<tr>
<td>Type 16</td>
<td>6-3/8 (162mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>Type 20</td>
<td>6-25/32 (172mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>Type 24</td>
<td>7-7/32 (184mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>Type 24*</td>
<td>7-7/32 (184mm)</td>
<td>2.5 (64mm)</td>
</tr>
<tr>
<td>Type 30</td>
<td>8-3/32 (206mm)</td>
<td>2.5 (64mm)</td>
</tr>
</tbody>
</table>

*For 3" maximum stroke type 24 chambers

NOTE: A brake found at the adjustment limit is not to be rejected.
NOTE: 3" long stroke brake chambers are identified by square air line ports and a trapezoidal tag attached to the chamber.

<table>
<thead>
<tr>
<th>BOLT TYPE BRAKE CHAMBER DATA</th>
<th>Outside Diameter</th>
<th>Brakes Exceeding the Maximum Brake Adjustment Limit Shall be Readjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A (12)</td>
<td>6-15/16 (176mm)</td>
<td>1-3/8 (35mm)</td>
</tr>
<tr>
<td>Type B (24)</td>
<td>-3/16 (234mm)</td>
<td>1-3/4 (45mm)</td>
</tr>
</tbody>
</table>

*Updated through March 1, 2008*
### 19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

<table>
<thead>
<tr>
<th>C (16)</th>
<th>8-1/16 (205mm)</th>
<th>1-3/4 (45mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D (6)</td>
<td>5-1/4 (133mm)</td>
<td>1-1/4 (32mm)</td>
</tr>
<tr>
<td>E (9)</td>
<td>6-3/16 (157mm)</td>
<td>1-3/8 (35mm)</td>
</tr>
<tr>
<td>F (36)</td>
<td>11.0 (279mm)</td>
<td>2-1/4 (57mm)</td>
</tr>
<tr>
<td>G (30)</td>
<td>9-7/8 (251mm)</td>
<td>2.0 (51mm)</td>
</tr>
</tbody>
</table>

**NOTE:** A brake found at the adjustment limit is not to be rejected.

### ROTOCHAMBER DATA

<table>
<thead>
<tr>
<th>Type</th>
<th>Outside Diameter</th>
<th>Brakes Exceeding the Maximum Brake Adjustment Limit Shall be Readjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>4-9/32 (109mm)</td>
<td>1-1/2 (38mm)</td>
</tr>
<tr>
<td>12</td>
<td>4-13/16 (122mm)</td>
<td>1-1/2 (38mm)</td>
</tr>
<tr>
<td>16</td>
<td>5-13/32 (138mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>20</td>
<td>5-15/16 (151mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>24</td>
<td>6-13/32 (163mm)</td>
<td>2.0 (51mm)</td>
</tr>
<tr>
<td>30</td>
<td>7-1/16 (180mm)</td>
<td>2-1/4 (57mm)</td>
</tr>
<tr>
<td>36</td>
<td>7-5/8 (194mm)</td>
<td>2-3/4 (70mm)</td>
</tr>
<tr>
<td>50</td>
<td>8-7/8 (226mm)</td>
<td>3.0 (76mm)</td>
</tr>
</tbody>
</table>

**NOTE:** A brake found at the adjustment limit is not to be rejected.

### DD-3 BRAKE CHAMBER DATA

<table>
<thead>
<tr>
<th>Type</th>
<th>Outside Diameter</th>
<th>Brakes Exceeding the Maximum Brake Adjustment Limit Shall be Readjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>8-1/8 (206mm)</td>
<td>2-1/4 (57mm)</td>
</tr>
</tbody>
</table>

**NOTE:** This chamber has three air lines and is found on motor coaches.

**NOTE:** A brake found at the adjustment limit is not to be rejected.

### WEDGE BRAKE DATA

The combined movement of both brake shoe lining scribe marks shall not exceed 1/8 inch (3.18mm).

**PROCEDURE FOR MEASURING CAM AND WEDGE BRAKES AND HOW TO PROPERLY IDENTIFY 3" LONG STROKE CHAMBERS**

On vehicles equipped with cam brakes, mark each brake chamber push rod at the face of the brake chamber with the brakes released. Apply the air brakes fully, minimum air pressure of 90 to 100 psi, and measure the distance the push rod travels from the face of the chamber to the mark previously made when the brakes were released. This measurement is the push-rod stroke (see illustration).

On vehicles equipped with wedge brakes, remove the inspection hole cover at each dust shield and with the brakes released, scribe a line on the edge of the brake lining. Apply the air brakes fully and measure the distance the brake lining travels.

*Updated through March 1, 2008*
MARK PUSH-ROD HERE TO MEASURE STROKE

RELEASED POSITION

APPLIED POSITION

MEASURING THE CAM BRAKE ADJUSTMENT

LIVING SCREW MARK

FEELER GUAGE WITH SCRIBED LINES

DUSTSHEILD

DUST SHEILD SLOT

BRAKE SHOE TABLE

BRAKE Lining

BRAKE DRUM

MEASURING THE WEDGE BRAKE ADJUSTMENT

3" Long Stroke Chamber Identification
Service Chambers
3. Brake hose and tubing. There is any leakage in any hydraulic, air or vacuum lines; hoses have any cracks, crimps, restrictions, or are abraded exposing fabric into second ply of fabric; tubing or connections leak, are crimped, restricted, cracked, or broken.

   a. Hose with any damage extending through the reinforcement ply. Rubber impregnated fabric cover is not a reinforcement ply. Thermoplastic nylon may have braid reinforcement or color difference between cover and inner tube. Exposure of second color is cause for rejection.

   b. Bulge or swelling when air pressure is applied.

   c. Two hoses improperly joined (such as a splice made by sliding the hose ends over a piece of tubing and clamping the hose to the tube).

   d. Brake tubing and hose must:

      (1) Be long and flexible enough to accommodate without damage all normal motions of the parts to which it is attached;

      (2) Be secured against chaffing, kinking, or other mechanical damage; and

      (3) Be installed in a manner that prevents it from contacting the vehicle’s exhaust system or any other source of high temperatures.

4. Service brakes.

   a. There is less than 1/5 reserve in pedal travel of the service brake when fully applied on all hydraulic, mechanical, or power-assisted hydraulic braking systems.

   b. When tested on dry, hard, approximately level road free from loose material at a speed of 20 miles per hour without leaving a 12-foot wide lane, a distance in excess of the following stopping distance is obtained:

   Any bus, truck or tractor - 40 feet;

   All combinations of vehicles - 40 feet.

   c. Every motor vehicle, trailer or semitrailer is not equipped with operational brakes on all wheels (except as shown in subdivision a below) or any brake has been disconnected or rendered inoperative or improperly installed.

   (1) Road tractors, tractor trucks, or trucks if manufactured prior to July 25, 1980, having three or more axles are not required to have brakes on the steering axle; however, if installed must be inspected and meet all requirements of this section.

   (2) Missing, bent or broken mechanical components including: shoes, lining pads, spring, anchor pin, spiders, cam rollers, push rods and air chamber mounting bolts, air reservoirs not securely mounted or leaks.

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(3) Absence of braking action on any axle required to have brakes, upon application of the service brakes (such as missing brakes or brake shoes, failing to move upon application of a wedge, S-cam or disc brake).

(4) Loose brake components including air chambers, spiders and cam shaft support brackets.

(5) Audible air leak at brake chamber (example: ruptured diaphragm, loose chamber clamp, etc.)

d. Linings or pads are broken or cracked so that brake pad is not firmly attached to the shoe or improperly installed or cracks on the friction surface extends to the open edge.

(1) Rivets or bolts are loose or missing.

(2) Lining or pad friction surface is saturated with oil, grease or brake fluid.

c. Nonsteering axles. Lining has a thickness less than 1/4 inch at the shoe center for air drum brakes, 1/16 inch or less at the shoe center for hydraulic and electric drum brakes and less than 1/8 inch for air disc brakes, lining with a thickness less than 3/16 inch for a shoe with a continuous strip of lining or to wear indicators if so equipped.

(1) Steering axles. Lining has thickness less than 1/4 inch at the shoe center from drum brakes, less than 1/8 inch for air disc brakes and 1/16 inch or less for hydraulic disc and electric brakes, lining with a thickness less than 3/16 inch for a shoe with a continuous strip of lining or to wear indicators if so equipped.

(2) Mismatch across any power unit steering axle of:

(a) Air chamber sizes.

(b) Slack adjuster length.

f. Thickness of riveted or bolted lining is less than 2/32 of an inch above the rivet or bolt head(s).

g. Any lining or pad is misaligned or does not make full contact with the drum or rotor.

5. Brake Drums and Discs.

a. Brake drums or brake discs (rotors) are worn or scored to the extent that their remachining would result in a failure to meet manufacturer's specifications.

b. Brake drums or discs with any external crack or cracks that open upon brake application.

NOTE: Do not confuse short hairline heat cracks with flexural cracks.

6. Mechanical linkage.

Any portion of the drum or rotor missing or in danger of falling away.


NOTE: Some motor vehicles, beginning with 1976 models, have a hydraulic power system that serves both the power assisted brakes and power assisted steering system. Some vehicles, beginning with 1985 models, have an integrated hydraulic actuation and anti-lock brake unit using only brake fluid.

Stop engine, then depress brake pedal several times to eliminate all pressure. Depress pedal with a light foot-force (30 pounds). While maintaining this force on the pedal, start engine and observe if pedal moves slightly when engine starts.

Reject vehicle if pedal does not move slightly as engine is started while force is on brake pedal.

9. Condition of hydraulic booster power brake system.

Inspect system for fluid level and leaks. Reject vehicle if there is insufficient fluid in the power steering pump reservoir; if there are broken, kinked or restricted fluid lines or hoses; if there is any leakage of fluid at the pump, steering gear or brake booster, or any of the lines or hoses in the system; or if belts are frayed, cracked or excessively worn.

10. Integrated hydraulic booster/anti-lock system operation.

With the ignition key in the off position, depress brake pedal a minimum of 25 times to deplete all residual stored pressure in the accumulator. Depress pedal with a light foot-force (25 lbs.). Place ignition key in the on position and allow 60 seconds for the brake warning light to go out and the electric pump to shut off.

Reject vehicle if the brake pedal does not move down slightly as the pump builds pressure or if the brake and anti-lock warning lights remain on longer than 60 seconds.

11. Condition of integrated hydraulic booster/anti-lock system with electronic pump.

With the system fully charged, inspect system for fluid level and leaks.

Reject vehicle if there is insufficient fluid in the reservoir; if there are broken, kinked or restricted fluid lines or hoses; or if there is any leakage of fluid at the pump or brake booster, or any of the lines or hoses in the system.

12. Vacuum system operation.

Stop engine then depress brake pedal several times to eliminate all vacuum in the system. Depress pedal with a light foot-force (25 lbs.). While maintaining this force on the pedal, start engine and observe if pedal moves down slightly when engine starts.

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Reject vehicle if pedal does not move down slightly as engine is started while force is on the brake pedal. In full vacuum-equipped vehicles, there is insufficient vacuum reserve for one full service brake application after engine is stopped.

a. Has insufficient vacuum reserve to permit one full brake application after engine is shut off.

b. Lacks an operative low-vacuum warning device as required.

13. Condition of vacuum booster power brake system.

a. Visual inspection. Reject vehicle if there are collapsed, cracked, broken, badly chafed or improperly supported hoses and tubes, loose or broken hose clamps.

b. There is any leakage in the hydraulic system. (Do not disturb the dust boot when checking for leaking wheel cylinders.)

c. Fluid level in master cylinder is below the proper level for the particular vehicle.

d. There is any evidence of a caliper sticking or binding.


a. Motor vehicle is equipped with air brakes and does not have an operating air pressure gauge.

b. Any bus, truck, road tractor and tractor truck manufactured after March 15, 1975, must have a visible low air warning device. Those manufactured on or before March 15, 1975, may have either an audible or visible low air warning device.

Low pressure warning device is missing, inoperative or does not operate at 55 psi and below or 1/2 the governor cut out pressure, whichever is less.

c. Compressed air reserve is not sufficient to make one full service brake application after engine is stopped, or with system fully charged, the reservoir pressure is lowered more than 30% by one full brake application.

Brake chamber push rods do not follow application of service brake pedal, or do not reach full released position (example: defective return spring).

d. Any bus, truck, road tractor, or tractor truck manufactured after February 28, 1975, if equipped with a manually operated device to reduce or remove the braking effort upon its front wheels.

15. Electric brakes.

a. Trailers show an amperage value more than 20% above or 30% below the brake manufacturer’s maximum current rating for each brake.

b. Ammeter shows no reading or indicator is not steady on application and release of brake controller.

c. Any terminal connections are loose or dirty; wires are broken, frayed or unsupported; any single conductor or nonstranded wire or wires below size recommended by brake manufacturers are installed.

d. Electrical trailer brakes do not apply automatically when breakaway safety switch is operated.

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e. Absence of braking action on any wheel required to have brakes.

f. Missing or inoperative breakaway braking device(s).

16. Air compressor.
   a. Compressor drive belts are in condition of impending or probable failure.
   b. Loose compressor mounting bolts or compressor leaks.
   c. Cracked, broken or loose pulley.
   d. Tractor protection valve(s) is defective or inoperative.
   e. Air safety relief valve is defective or inoperative.

19VAC30-70-450. Brakes: emergency parking or holding.

A. Some vehicles are equipped with an actual emergency brake, while others have only a parking or holding brake. Some types may be actuated by a foot or hand lever, while others may incorporate a switch or valve to actuate the brake. Air and vacuum brake systems may employ spring activating parking brakes.

B. Inspect for and reject if:

1. Vehicle or combination of vehicles is not equipped with a parking, holding, or emergency brake in good working order of the type installed as original standard factory equipment for the vehicle on which it is installed.

2. The brake actuating mechanism does not fully release when the control is operated to the off position.

3. Any mechanical parts are missing, broken, badly worn, or are inoperative.

4. Cables are stretched, worn, or frayed or not operating freely.

5. Parking brake will not hold the vehicle stationary with the engine running at slightly accelerated speed with shift lever in drive position for automatic transmission or shift lever in low gear with clutch engaged for standard shift transmission.

6. On vehicles equipped with automatic transmissions, the vehicle will start in any gear other than (P) park or (N) neutral. If the gearshift indicator does not identify the park (P) and neutral (N) positions, then the vehicle shall be rejected.

7. On vehicles equipped with manual transmissions, the vehicle will start in any gear if the clutch is not depressed or disengaged.

NOTE: This will not apply to older vehicles, which were not originally equipped with a neutral-safety switch, clutch disengagement system or clutch pedal position sensor by the manufacturer.

8. Any nonmanufactured hole(s) in the spring brake housing section of a parking brake.

NOTE: All commercial motor vehicles manufactured after March 7, 1990, shall be equipped with a parking brake system adequate to hold the vehicle or combination under any condition of loading except agricultural commodity trailers, converter dollies, heavy haulers and pulpwood trailers.

C. Battery mounting and storage.

NOTE: The storage battery shall be attached to a fixed part of the motor vehicle or protected by a removable cover or enclosure if the battery is installed in a location other than the engine compartment. This includes all brackets, hardware, bolts, and bushings used for securely mounting the storage battery to the vehicle.

1. Removable covers or enclosures shall be substantial and shall be securely latched or fastened.

2. The storage battery compartment shall have openings to provide ample battery ventilation and drainage.

3. Whenever the cable to the starting motor passes through a metal compartment, the cable shall be protected against grounding by an acid and waterproof insulating bushing.

4. Whenever a battery and a fuel tank are both placed under the driver’s seat, they shall be partitioned from each other, and each compartment shall be provided with an independent cover, ventilation, and drainage.

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19VAC30-70-460. Brakes: trailer (GVWR 10,000 pounds or more).

A. All trailers and semitrailers registered for or having an actual gross weight of 10,000 pounds or more shall be equipped with operational brakes acting on all wheels.

B. Inspect for and reject if:
   1. Trailer brakes do not comply with provisions of 19VAC30-70-430, 19VAC30-70-440 and 19VAC30-70-450.
   2. Operator does not have full control over brakes.
   3. Combination will not stop as required in 19VAC30-70-440 D 5.
   4. Trailers are not equipped with emergency breakaway brakes designed to:
      a. Apply automatically upon breakaway from towing vehicle.
      b. Remain fully applied for at least 15 minutes.
      c. Apply and release by operation of the manual emergency control.
      d. Apply automatically when the pressure in the towing vehicle reservoir is reduced to a point between 45 and 20 PSI by a series of foot applications, when equipped with air brakes.

NOTE: A minimum of one wheel must be removed from each axle equipped with brakes to inspect the brake components.

Exceptions:
   a. Wheels on trailers equipped with open brake mechanisms are not required to be removed.
   b. The inspection receipt (approval and rejection) shall be marked to reflect which wheel, drum or dust cover was removed or inspected.

19VAC30-70-470. Steering.

Inspect for and reject if:

1. Play at any point in the steering mechanism is excessive. The steering mechanism is unusually tight and binding when turning the steering wheel completely to the right and left. The steering mechanism will not turn in both directions, stop to stop, or steering stops have been removed. On certain model passenger buses, it may be necessary to open the inspection access door to allow visual inspection of the steering shaft universal joints.

2. Power steering is defective and affects adequate steering of the vehicle or fluid level in reservoir is below operating level or if there is an obvious leak of power steering fluid. Do not reject for dampness. Belts or the serpentine belt does not have sufficient tension or are worn, frayed, or missing. Damage to hoses or leaks in hoses or fittings.

3. Any modification has been made to any part of the steering system that affects proper steering. A repair kit or preventive maintenance kit has been installed on a tie rod end, idler arm, ball joint, or any other part of the vehicle's steering gear.

NOTE: This system requires moving components to be checked for steering wheel lash, loose parts or binding. To properly inspect the power steering components, the engine must be running.

NOTE: The repair kit or preventive maintenance kit usually consists of a small spring and a plastic cap that is placed over the bolt stud of the component and held in place by a retaining nut. There is nothing in this paragraph that prohibits the replacement of parts or components of a motor vehicle's steering gear in order to correct deficiencies in the steering gear.

4. Steering Lash/Travel-Trucks.

Before inspection the vehicle must be placed on a smooth, dry, level surface. For vehicles equipped with power steering, the engine must be running and the fluid level, belt tension and condition must be adequate before testing.

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With road wheels in straight ahead position, turn steering wheel until motion can be detected at the front road wheels. Align a reference mark on steering wheel with a mark on a ruler and slowly turn steering wheel in the opposite direction until motion can be detected at the front road wheel. Measure lash at steering wheel. Special lash-checking instruments are also available, measuring free play in inches or degrees. Such instruments should always be mounted and used according to the manufacturer's instructions. With vehicle raised, visually inspect steering linkage, ball studs, tie rod end socket assemblies and all pivot points. On vehicles with power steering, engine must be running.

Reject vehicle if steering wheel movement exceeds:

**Steering Wheel Size and Lash**

<table>
<thead>
<tr>
<th>Steering wheel diameter</th>
<th>Manual steering system</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 inches or less</td>
<td>2 inches (51 mm)</td>
</tr>
<tr>
<td>18 inches</td>
<td>2 1/4 inches (57 mm)</td>
</tr>
<tr>
<td>19 inches</td>
<td>2 3/8 inches (60 mm)</td>
</tr>
<tr>
<td>20 inches</td>
<td>2 1/2 inches (64 mm)</td>
</tr>
</tbody>
</table>

Reject vehicle if visual inspection reveals excessive wear and/or looseness in any ball stud, end assembly, pivot point or mechanical linkage.

5. Any modification or replacement has been made to the steering wheel which affects proper steering. It shall be rejected if it is of a smaller size than the original factory equipment.

6. Steering column has any missing or loose bolts or positioning parts, resulting in motion of the steering column from its normal position. Steering shaft universal joints are loose or exhibit any abnormal movement when shaft is rotated. Any welded repairs are made to the steering system, steering column, steering gear box, pitman arm or universal joints. Any movement of a steering nut under steering load.

7. Any missing or loose bolts or other parts resulting in motion of the steering gear box at the point of attachment to the vehicle's frame.

8. Any looseness of the pitman arm on the steering gear box, output shaft or gear box.

9. Any control arm bushing is missing.

10. Any vehicle equipped with an idler arm shows excessive looseness.

11. Any motion, other than rotational, between any linkage member and its attachment point of more than 1/8 inch measured with hand pressure only.

12. Loose clamps, clamp bolts on tie rod ends or drag links.

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13. Any looseness in any threaded joint.

14. Loose or missing nut on tie rods, pitman arm, drag ink, steering arm or tie rod ends.

15. Wheel bearings/steering linkage.

   a. With the front end of vehicle lifted properly, push pads away from rotor on disc brakes, and grab front tire at top and bottom, rock vigorously in and out and record movement. Wheel bearing looseness is detected by the relative movement between the brake drum or disc and the backing plate or splash shield.

      (1) Reject vehicle if relative movement between drum and backing plate (disc and splash shield) is more than 1/4 inch measured at the outer circumference of the tire for vehicles more than 10,000 pounds GVWR.

      (2) Reject vehicle if any wheel bearing is excessively worn or not properly adjusted; any cotter key or other locking device is missing or inoperative.

   b. Steering linkage play. First eliminate all wheel bearing movement by applying service brake. With vehicle lifted as shown below and wheels in straight ahead position, grasp front and rear of tire and attempt to move assembly right and left without moving the steering gear.

      Reject vehicle if measured movement at front or rear of tire is greater than:

      Wheel size:  
      17 to 18 inches - 3/8 inch (9.5mm)  
      over 18 inches - 1/2 inch (13mm)  

   c. King pin. If vehicle is equipped with king pins, first eliminate all wheel bearing movement by applying service brake. With front end lifted as illustrated for inspecting wheel bearings, (Figure C) grasp the tire at the top and bottom and attempt to move in and out to detect looseness. Measure the movement at the top or bottom of the tire at the outer circumference.

      Reject vehicle if measured movement at top or bottom of tire is greater than:

      Wheel size:  
      16 inches or less - 1/4 inch  
      17 to 18 inches - 3/8 inch  
      over 18 inches - 1/2 inch
Proper lifting for wheel bearing, steering linkage looseness, and king play action

FIGURE A  FIGURE B  FIGURE C

NOTE: Ball joint wear: There is a trend among U.S. automobile manufacturers toward the use of "wear-indicating" ball joints on light trucks. Many vehicles on the road, however, do not have wear-indicating ball joints. The inspection of both types will be discussed.

Figures 1, 2, 3 and 4 below illustrate the proper hoisting for checking ball joints.

FIGURE 1

a. NOTE: To check ball joint wear on vehicles when the spring is supported on the upper control arm or when the spring is a part of a MacPherson strut or wear in any other type suspension not using ball joints when the front wheels are suspended on a solid axle, the vehicle must be hoisted as shown in Figure 1 or 2.

b. NOTE: Upper control arm must be stabilized in normal load carrying position by means of an upper control or other support tool to insure ball joint is in unloaded position.

c. NOTE: To check ball joint wear on vehicles not listed in above referred to section and diagram or tables when the spring is supported on the lower control arm; and to check the kingpin wear in any other type suspension not previously described when the wheels are independently suspended, the vehicle must be hoisted as shown in Figure 3 or 4.
16. Vehicles without wear indicator ball joint.

a. If play is detected in any ball joint without “wear-indicating” ball joints, it will be necessary for the inspection to be made in accordance with the manufacturer’s recommended procedures and specifications prior to rejecting the vehicle.

b. If there are no manufacturer’s recommended procedures and specifications, the lower ball joints will be checked when hoisted as in Figures 1 or 2, or in the upper ball joints when hoisted as in Figures 3 or 4. There should be no noticeable play detected in the ball joints when checked in this manner.

c. Reject vehicle if play exceeds the manufacturer’s specifications. It is recommended that inspectors use a dial indicator or ball joint checking gauge when checking for play of a ball joint when procedures and specifications are provided by the manufacturer.

17. Ball joints with wear indicators (trucks). Support vehicle with ball joints loaded (in normal driving attitude). Wipe grease fitting and checking surface free of dirt and grease. Determine if checking surface extends beyond the surface of the ball joint cover.

Reject vehicle if checking surface is flush with or inside the cover surface.

18. Any vehicle inspected in accordance with the recommendation of the manufacturer of such vehicle and found to be within the specification shall be deemed to meet inspection regulations.

19VAC30-70-480. Suspension.

Inspect for and reject if:

1. Any positioning parts are cracked, broken, loose, or missing resulting in shifting of an axle from its normal position.

2. Any part of the torsion bar assembly or torque arm or any part used for attaching the same to the vehicle frame or axle is cracked, broken or missing.

NOTE: This does not apply to loose bushing(s) in torque or track arms.

3. Vehicles designed for shock absorbers or cross stabilizer links, if any are missing, disconnected, broken, bent, loose or do not function properly.

4. Any leaf spring is broken, sagging, misaligned, or if spring hangar(s) are worn or loose.

5. Any deflated air suspension system or leaks.

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CAUTION: Underneath inspection of a vehicle equipped with air suspension with excessive leakdown could result in serious personal injury.

6. Any suspension system defect or any condition of loading that permits the body or frame to come in contact with a tire or any part of the wheel assemblies.

NOTE: "All thread rod" material shall not be used as U-bolts in the suspension system.

7. Sliding trailer tandem or multi-axle assemblies do not lock in place or have broken or missing parts.

8. Any coil spring is broken.

9. Vehicles with composite springs on either the power unit or trailer, if a crack, regardless of length, is visible on either side, top or bottom.

NOTE: A crack is a separation in any axis that passes completely through the spring.

Part V

Inspection Requirements for Vehicles Over 10,000 Pounds

19VAC30-70-490. Frame, engine mounts, coupling devices and emergency chains.

Inspect for and reject if:

1. Frame of any bus, truck, tractor truck is cracked, loose, broken or sagging. Frame of any trailer or semi-trailer has any broken cracked, loose, or sagging top or bottom frame rails or frame is cracked or broken.

2. Engine, transmission or cab mounts, to include all hardware, bolts, and bushings used to connect the mount to the vehicle, frame, engine, or transmission are broken or missing. Cab mounts should be rejected if they do not properly secure the body to the frame.

3. Trailer hitch or pintle hook is not securely attached. Reject if the pintle eye or trailer drawbar has any cracks or if any welding repairs have been made to the pintle eye.

4. Chains, cables, etc., used to attach a towed vehicle are not securely attached, or are broken, worn or abraded.

5. Fifth wheel does not lock in position or have a locking mechanism that is in proper working order.

NOTE: Reject if horizontal movement exceeds 1/2 inch between upper and lower fifth wheel halves.

6. Fifth wheel assembly system has any leak of fluid or air.

7. Fifth wheel has any broken, missing, or damaged parts; or is not securely attached to the frame. This includes fore and aft stops.

8. Trailer king pin is not secure, or is broken, or worn so as to prevent secure fit in fifth wheel. The upper coupler device is not securely attached.

9. Any cracks, breaks or damaged parts in the stress or load bearing areas of a coupling device.

10. Trailer is not equipped with emergency chain(s) or steel cable(s).

NOTE: Fifth wheel assembly does not require emergency chain or steel cable. A fifth wheel is defined as a device that interfaces with and couples to the upper coupler assembly of a semitrailer. The upper coupler assembly is a structure consisting of an upper coupler plate, king pin and supporting framework which interfaces with and couples to a fifth wheel. Ball and socket connections also referred to as hitch and coupling connections are not fifth wheel assemblies and do require an emergency chain or steel cable.

11. Sliding trailer tandem or multi-axle assemblies do not lock in place or have worn, broken or missing parts.

19VAC30-70-500. Tires, wheels, rims.

Inspect for and reject if:

1. Any tire is marked specifically for use other than on the highway, such as "For Farm Use Only," or "For Off-Highway Use Only," or any tire marked "Not for Steering Axle" or "For Mobile Home use only."

2. A radial tire is mismatched on the same axle with a bias ply tire or a bias belted tire.

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3. Bias ply or bias belted tires are used on the rear axle when radial ply tires are used on the front axle. Except:
   a. On a two-axle vehicle equipped with truck tires with 20-inch rim diameter and larger. Bias or radial tires may be used on either axle if the vehicle has dual rear wheels or is equipped with wide-base single tires.
   b. Either bias or radial tires may be used on the steering axle of vehicles with three or more axles.

4. Bias tires and radial tires are mixed in a tandem-drive axle combination on a vehicle equipped with truck tires with 20-inch rim diameter and larger.

5. Any tire on the front wheel of a bus, truck or any tractor truck has a tread groove pattern of 4/32 inch or less when measured at any point on a major tread groove.

6. Any bus has regrooved, recapped or retreaded tires on the front wheels.

7. Any motor vehicle, trailer or semitrailer, except the dual wheels installed on motor vehicles having seats for more than seven passengers: (i) operated wholly within a municipality, or (ii) operated by urban and suburban bus lines, which are defined as bus lines operating over regularly scheduled routes and the majority of whose passengers use the buses for traveling a distance of not exceeding 40 miles, measured one way, on the same day between their place of abode and their place of work, shopping areas, or schools, is equipped with a tire that has a tread depth measuring less than 2/32 of an inch when measured as follows: NOTE: The exemptions provided in clauses (i) and (ii) of this paragraph do not apply to buses owned or operated by any public school district, private school or contract operator of buses.

NOTE: Measure in two adjacent tread grooves where tread is thinnest. If either of the grooves measure 2/32 of an inch or more, no further measurements are necessary and tread depth is satisfactory. Do not measure on tread wear indicators.

If both adjacent grooves measure less than 2/32 of an inch, the tire tread depth must be measured again at two additional equally spaced intervals around the circumference of the tire in a like manner as the first measurement. If the tread depth is less than 2/32 of an inch in two adjacent tread grooves at each of the equally spaced intervals, the tire must be rejected.

NOTE: Refer to Figures 1, 2, 3, and 4 in this section for illustrations of how to measure tire tread.

MEASURE WHERE THE TREAD IS THINNEST IN TWO ADJACENT TREAD GROOVES

FIGURE 1

IF THE DEPTH IS LESS THAN 2/32-INCH IN BOTH GROOVES MEASURE AT TWO ADDITIONAL EQUALLY SPACED INTERVALS

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8. A tire equipped with tread wear indicators if found to have such indicators in contact with the pavement in any two adjacent grooves at three equally spaced intervals around the circumference of the tire. Refer to Figure 2.

REJECT IF THE TREAD WEAR INDICATORS ARE IN CONTACT WITH THE PAVEMENT IN ANY TWO ADJACENT GROOVES AT THREE EQUALLY SPACED LOCATIONS

FIGURE 2

9. Any tire has a cut to the extent a ply or belt material is exposed or puncture, not to include a plug or patch that may be used as a manner of repair.

NOTE: Plugs/patches shall be in the tread area only. Plugs/patches are not permitted in the sidewall of the tire.

10. Any tire is worn so that the fabric or steel cord is visible.

11. Any tire has knots or bulges in its sidewalls or if there is evidence of a broken belt under the tread, or if the tread is separating from the fabric.

12. Any tire that has been recut or regrooved except commercial tires so designed and constructed to provide for acceptable and safe recutting and regrooving. Each tire that has been regrooved must be labeled with the word "Regroovable" molded on or into the tire on both sidewalls in raised or recessed letters.

13. Any tire is flat or has an audible air leak.

14. Any tire so mounted or inflated that it comes into contact with its mate or any parts of the vehicle.

15. Rims, or lock rings or wheels are bent, cracked or damaged so as to affect safe operation of the vehicle. Reject if lug nut holes are elongated (out of round).

16. Any bolts, nuts, lugs or other fasteners (both spoke and disc wheels) are loose, broken, cracked, stripped, missing or damaged or otherwise ineffective.

17. Any welded repair on aluminum wheel(s) on a steering axle or any welded repair (other than disc to rim attachment) on steel drive wheel(s) mounted on the steering axle.

18. Directional tires and/or wheels, designed and manufactured to go in a certain direction of rotation not installed in the proper direction of rotation.

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HOW TO MEASURE TIRE TREAD

When measuring tread depth, a gauge calibrated in 32nds of an inch should be used. The gauge should be placed at the point in one of the treads indicated by an arrow. Depth reading should not be taken in treads marked with a circle, since these are classified as "minor" treads.

Persons taking measurements will have to use discretion in measuring tread depths not pictured here. However, measurements should not be made in treads which are obviously of a "minor" nature.

This guide merely depicts a number of the most common treads.

MAJOR TREAD GROOVE
Grooves in the tread design molded through the complete thickness of the tread rubber running around and/or across the tire surface.

MINOR TREAD GROOVE
Remaining tire tread design other than major tread grooves.

TIE-BAR
Molded rubber located in major tread grooves for the purpose of connecting and supporting the tire treads.

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19VAC30-70-510. Headlamps.

A. Inspect for and reject if:

1. Any motor vehicle is not equipped with headlamps of an approved type. The approval designation letter that must appear is DOT or SAE-H, HG, HH or HR.

2. Headlights are not of the same approved type except sealed beam headlamps. At least two headlamps are required.

3. In any headlamp the lens is cracked, broken, discolored, or rotated away from the proper position, or the reflector is not clean and bright. A clear plastic headlight assembly lens with a crack may be repaired by procedures similar to that required of a windshield repair. The inside reflector surface must be in satisfactory condition and the repair cannot affect the headlight aim pattern when checked with an approved headlight aiming machine. This repair does not apply to headlamps and headlamp assembly lenses that are designed where the aiming pattern is part of the lens.

4. Moisture or water buildup in headlamp is such that it affects the aiming pattern.

5. Lens is other than clear.

6. Bulbs are not of an approved type (must have DOT stamp and the manufacturer’s name) or are over 32 candlepower. (Sealed beam lamps including the ones that permit the use of a replacement halogen bulb are the only lamps approved with over 32 candlepower.) Ordinary lenses and reflectors were not designed for over 32 candlepower bulbs.

NOTE: The Sylvania 9003 (HB2), 9004 (HB1), 9005 (HB3) and 9006 (HB4) Cool Blue xenon bulbs were found to comply with FMVSS 108. There is a noticeable blue tint around the outside of the lamp pattern but the concentrated light is white. Only the Sylvania has approval and is marked with DOT.

7. Any filament or bulb in headlamps fails to burn properly or headlamps are not at the same location or configuration as designed by the manufacturer. (Location and type of headlamps can be found in subsection B of this section.)

8. Wiring is dangling or connections are loose, or if proper filaments do not burn at different circuit positions, or if switches -- including foot or hand dimmer -- do not function properly, and are not convenient to the driver.

9. Foreign material is placed on or in front of the headlamp lens or interferes with the beam from the lamp. No glazing may be placed over or in front of the headlamps unless it is a part of an approved headlamp assembly.

   a. Reject if the vehicle has wire, unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of the headlamps.

   b. EXCEPTION: A clear impact film known as Headlight Savers produced by Grand Prix Motoring Accessories may be applied to the headlight lens to absorb impact of rocks, etc.

NOTE: Headlamps, auxiliary driving lamps and front fog lamps shall be mounted so that the beams are aimable and the mounting shall prevent the aim of the lighting device from being disturbed while the vehicle is operating on public roads. All lamps shall be securely mounted on a rigid part of the vehicle.

10. Lamps can be moved easily by hand due to a broken fender or loose support, or if a good ground is not made by the mounting.

   Headlamps, auxiliary driving lamps and front fog lamps shall be mounted so that the beams are aimable and the mounting shall prevent the aim of the lighting device from being disturbed while the vehicle is operating on public roads. All lamps shall be securely mounted on a rigid part of the vehicle.

11. A headlamp visor is over two inches long unless part of the original body design.

12. The beam indicator in the driver's compartment does not burn when the high or "country" beam is on. (Vehicles not originally equipped with an indicator are not required to comply unless sealed beam headlamps have been installed.)

13. Headlamps are not aimed within the following tolerances using optical aimer:

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a. The center of the hot spot of all Type 1 lamps, all single element high beam lamps, and all lamps that do not have Type 2 embossed in the lens, is set more than four inches up or down from the horizontal centerline or more than four inches to the left or right from the vertical centerline.

b. The left edge of the lamp pattern of any low beam lamp or any combination or multielement lamp or Type 2 lamp is more than four inches to the left or right of the vertical centerline or the top edge of the lamp pattern is more than four inches above or below the horizontal centerline.

Aiming the Headlamps:

NOTE: Headlamps shall be checked for proper aim by using either an optical or a mechanical headlamp aimer on every motor vehicle inspected.

Optical Aimer:

NOTE: Approved optical headlamp machines may be used to properly aim any of the headlamps. Optical aimers must be properly calibrated and used in the manner recommended by the manufacturer.

NOTE: When aiming headlamps, first look for the type of lamp, which will be found embossed on the lens. The type determines which aiming requirements must be followed for the optical aimer.

NOTE: All Type 2 headlamps and all low beam or multielement headlamps must be set by aiming the lamp pattern with the lamps set on low beam.

NOTE: If attempting to align a composite or sealed beam lamp with a high and low beam within the same housing, align only the low beam. If aligning a four-lamp system with high and low beams in separate housings, it may be necessary to cover the low beam while aligning the high beam, if all four lamps are on at the same time.

NOTE: Pattern should be aimed so that the left edge does not extend to the left or right of straight ahead, and the top of the pattern should be even with the horizontal.

NOTE: All VOL and VOR headlamps will be aimed as follows:

To properly aim a combination multielement or low beam VOL or VOR headlamp assembly, the headlamp pattern should be aimed on low beam only.

Letters marked on the headlamp cover should properly identify VOL and VOR headlamps.

NOTE: VOL and VOR headlamps will normally have only one adjustment, which will be for the vertical aim only. The horizontal aim should be disregarded, as the horizontal aim is preset at the factory.

Pattern "A" represents the light pattern, as it should appear on the view screen of the approved aimer when checking the low beam pattern on a single element headlamp or a combination multi-element headlamp.

```
<table>
<thead>
<tr>
<th>Vertical Centerline</th>
<th>Horizontal Centerline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp Pattern Hot Spot cannot be Located. Consider whole pattern</td>
<td></td>
</tr>
</tbody>
</table>
```

PATTERN A - TYPE 2 LAMP

NOTE: All Type 1 headlamps and all headlamps that do not have Type 2 embossed in the lens shall be set by aiming the center of the hot spot with the lamps set on high beam.

NOTE: Aim straight ahead-center of the hot spot should be centered with the vertical and horizontal centerlines.

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Pattern "B" represents the light pattern as it should appear on the view screen of the approved aimer.

![Pattern B - Type 1 Lamp](image)

**NOTE:** The four headlamp system combines four 5-3/4-inch lamps in pairs.

**NOTE:** One lamp embossed at the top as Type "1" and one embossed on the top as a Type "2" are arranged as a pair on each side.

**NOTE:** When lamp pairs are mounted horizontally, the Type "2" lamp must be on the outer side.

**NOTE:** The four headlamp system must be wired so that only the lower beam in the Type "2" lamps will burn when the light beams are depressed. When switched to high beams, both the Type "1" and Type "2" will burn.

**NOTE:** Light patterns shown on the following page will be displayed on the most recently approved light machines produced by Hopkins and Symtech Corporations.

**Mechanical Aimers:**

**NOTE:** Mechanical aimers can be used to aim only those headlamps that have "aiming" pads molded into the lens.

**NOTE:** Mechanical aimers must be properly calibrated and used in the manner recommended by the manufacturer.

**NOTE:** Turn on headlamps and check all filaments—both high and low beam. Turn off headlamps before checking for adjustments. Do not turn on headlamps while mechanical aimers are attached to the headlamp.

**Aiming the Headlamps (Mechanical Aimer):**

**NOTE:** All headlamps that are found not to be within the 4 inch tolerance shall be adjusted to zero inches up or down and zero inches to the right or left.

**Headlamps on Vehicles used for Snow Removal:**

**NOTE:** Approved auxiliary headlamps (SAE-Z) may be mounted above the conventional headlamps. (These lamps must be in compliance with 19VAC30-70-140, in its entirety, 19VAC30-70-150, subdivision 7, and 19VAC30-70-170, subsection A, of this manual.)

**B. Inspect for and reject if:**

1. Lamps are not approved type headlamps.
2. Lamps are not mounted in a manner that will permit proper aiming.
3. Lamps are mounted so as to obstruct the driver's vision.
4. The auxiliary headlamp circuit does not contain a switch that will deactivate the primary headlamp system when the auxiliary headlamps are in use.
5. Auxiliary headlamps are not aimed in accordance with the provisions of this section.

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HEADLAMP PATTERNS

US Low Beam

High Beam

US Low Beam VOL

US Low Beam VOR

Fog / Driving Lamp
NOTE: ALWAYS inspect the following sealed beam and replacement bulb headlamps on LOW BEAM only:

- 5-3/4 inch, marked Type 2 or 2C1
- 7 inch, marked Type 2 or 2D1
- 6-1/2 X 4-1/4 inch rectangular, marked Type 2QA or 2A1
- 2000 X 142mm rectangular, marked Type 2B or 2B1
19VAC30-70. MOTOR VEHICLE SAFETY INSPECTION RULES AND REGULATIONS.

19VAC30-70-520. Rear lamps: tail lamp; license plate lamps; and rear lamp combinations.

A. Inspect for and reject if:

1. Vehicle is not equipped with a rear (tail lamp) or rear lamp combination of an approved type and the light or light assembly does not work as approved. The approval designation letters that must appear are DOT or SAE-A-I-S-T-P for single lamps and DOT or SAE-A-I-S-T-P-R if a backup light is incorporated.

2. The vehicle is equipped with more than one rear lamp, if all are not in operating condition.

3. The vehicle is not equipped with a license plate lamp of an approved type (DOT or SAE-L) which emits a white light. The license plate lamp may be a separate lamp or part of a combination rear lamp. (A road tractor or tractor-truck that does not have a rear license plate is not required to have a license plate lamp.)

4. Lens for license plate lamp is not illuminated by an approved license plate lamp that admits a white light.

5. Lens on rear lamps, or lens area in combination rear lamps (tail lamps) are not red or contain a DOT of another color. LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

6. Lens has piece broken from it or does not fit properly. The lens may have one or more cracks provided an off-color light does not project through the crack(s).

NOTE: Taping or gluing cracks or pieces is not allowed.

7. Filament in all rear (tail) lamps does not burn when headlamp switch is turned on to any position, or if lamps do not provide a red light visible to the rear through an approved red lens as annotated in subdivision 1 of this subsection.

8. Rear (tail) lamp is not mounted near extreme rear of vehicle. Dump trucks and other specially constructed vehicles may mount the rear lamp at a point other than on the extreme rear, provided such rear lamp is clearly visible from the rear, and further provided that a red reflector of an approved type is mounted on the extreme rear. In unusual cases, the rear lamp may be mounted on the cab. Reject if the lamp is hidden by a bolster or other part of the body or frame, is not mounted securely, or if the lamp does not make a good electrical contact.

9. Wiring or electrical connections are defective or filaments do not burn.

10. Any vehicle has unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of rear lamps, tail lamps, license plate lamps or rear lamp combinations.

19VAC30-70-530. Auxiliary lamps: backup; cornering; driving; fog; spot and warning.

A. Auxiliary lamps on a vehicle consist of seven general types: backup lamps (SAE-R), cornering lamps (SAE-K), driving lamps (SAE-Y), front fog lamps with an amber or clear lens (SAE-F) and rear fog lamps with red lens (SAE-F2), spot lamps (SAE-O), warning lamps (SAE-W), and daytime running lamps (DRLs) (SAE-Y2).

1. School buses may be equipped with an eight-lamp warning system of two red and two amber warning lamps of an approved type (SAE-W2) on the front and rear of such vehicle.

a. In addition to required warning lamps, school buses may be equipped with a stop signal arm consisting of an octagonal sign that meets FMVSS specifications (Federal Motor Vehicle Safety Standards, 49 CFR Part 571). The stop signal arm shall be reflectorized or be equipped with two red warning lamps of an approved type.

b. School buses may also be equipped with roof mounted flashing white or amber warning lamps of an approved type (SAE-W2).

2. Reject if the vehicle has wire, unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of any auxiliary lamps-backup, cornering, driving, fog, spot or warning lamps.

EXCEPTION: Any lighting device that is both covered and not illuminated, other than lamps required or permitted by this manual, shall not be considered for inspection. Fog and driving lamps mounted below the level of the regular headlights must be checked for aim as outlined in subdivisions K 10 and K 11 of this section, if not covered.

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NOTE: The covers shall be a type that would be installed as original equipment and not tape, paper bags, aluminum foil or similar materials.

B. There is no limit on the number of backup lamps that a vehicle may have so long as they are of an approved type (SAE-R).

C. No more than four lamps, including two headlamps may be lighted at any time to provide general illumination ahead of the vehicle.

D. Approved type (DOT or SAE-W) blue or blue and red lights are permitted on Department of Corrections vehicles designated by the Director of the Department of Corrections and any law-enforcement vehicle.

E. Approved type blue or blue and red lights as well as approved type hide-away or undercover strobe warning lights are permissible for use on Department of Corrections and any law-enforcement vehicles.

1. Approved type secondary warning lights installed only on the four corners, on Department of Corrections and any law-enforcement vehicles, fire apparatus, government-owned vehicle operated on official business by a local fire chief or other local fire official, rescue squad vehicle, ambulance, or any other emergency medical vehicles. These lights shall also have primary warning lights installed.

2. The hide-away or undercover strobe lights shall be installed in the side marker lights, tail lights or parking lights. The strobe itself must be clear and the lens color must continue to be the same type and color as originally approved. It will not be permissible to install the hide-away lights in the headlights or in the backup lights.

F. Approved type (SAE-W) red warning lights or red and white lights showing to the front are permitted on fire department vehicles, including publicly owned state forest warden vehicles, ambulances, any rescue vehicle used for emergency calls, local Departments of Emergency Management, animal warden vehicles, school buses and vehicles used by security personnel at the Newport News Shipbuilding and Drydock Company, Bassett-Walker, Incorporated, the Tultex Corporation, the Winchester Medical Center, or the National Aeronautics and Space Administration's Wallops Flight Facility.

G. No more than two flashing or steady-burning red or combination red and white lights of an approved type may be installed on one vehicle owned by any member of a fire company, volunteer fire company, volunteer rescue squad or any ambulance driver employed by a publicly owned ambulance service.

H. Vehicles mentioned in subsections D, E and F permitted to be equipped with flashing, blinking or alternating red, red and white, blue, or blue and red emergency lights (except vehicles owned by any member of a fire company, volunteer fire company, volunteer rescue squad or an ambulance driver employed by a privately owned ambulance service) may be equipped with the means to flash their headlamps when their emergency warning lamps are activated provided:

1. The headlamps are wired to allow either the upper beam or lower beam to flash but not both and;

2. The headlamp system includes a sensor that prevents flashing of headlamps when headlamps are required to be lighted pursuant to current statute.

Emergency vehicles in Chesapeake, Poquoson, and York County may be equipped with flashing headlights that will function whenever their warning lights are activated.

I. Any fire vehicle used exclusively for fire fighting, any ambulance or rescue or lifesaving vehicle used for the principal purpose of emergency relief or any wrecker used for the principal purpose of towing disabled vehicles may be equipped with clear auxiliary lamps that shall be used exclusively for lighting emergency scenes. Such lamps shall be of a type permitted by the Superintendent. Any government-owned police vehicle may be equipped with clear auxiliary lamps of a type approved by the Superintendent.

J. Approved type (SAE-W) amber flashing, blinking or alternating lights are permitted on vehicles used for the principal purpose of towing or servicing disabled vehicles or in constructing, maintaining and repairing highways or utilities on or along public highways and vehicles used for the principal purpose of removing hazardous or polluting substances from the state waters or drainage areas on or along public highways. Such lamps are permitted on vehicles used for servicing automatic teller machines, refuse collection vehicles, hi-rail vehicles and on vehicles used for towing or escorting oversized or over-dimensional materials, equipment, boats, or manufactured housing units by authority of highway hauling permit.

Updated through March 1, 2008
1. Approved type (DOT or SAE-W) amber, red, and red and white flashing, blinking or alternating warning lights are permitted on fire apparatus, ambulances, and rescue and life-saving vehicles, provided the lights are mounted or installed as to be visible from behind the vehicle.

2. Approved type (DOT or SAE-W) amber flashing, blinking or alternating lights are permitted on vehicles owned and used by municipal safety officers in the performance of their official duties, by businesses providing security services and vehicles used to collect and deliver the United States mail, vehicles used by law-enforcement personnel in the enforcement of laws governing motor vehicle parking, and government-owned law-enforcement vehicles provided the lights are used for giving directional warning and vehicles used to provide escort for funeral processions.

3. An approved type amber flashing, blinking or alternating lights are permitted on vehicles used as pace cars, security vehicles, or fire-fighting vehicles by any speedway or motor vehicle race track.

4. An approved type (DOT or SAE-W) amber flashing, blinking or alternating light may be mounted on the rear of any vehicle used to transport petroleum products. The light must be wired through the reverse gear circuit and activate in conjunction with the backup lights and audible alarm.

5. An approved type (SAE-W) green warning light is permitted on vehicles used by police, fire-fighting, or rescue personnel as command centers at the scene of incidents. Such lights shall not be activated while the vehicle is operating upon the highway.

K. Inspect for and reject if:

1. Vehicle has an auxiliary lamp being used for a purpose other than that for which it was approved.

Do not reject tractor trucks equipped with cargo lights of an approved type (SAE-G) that are mounted on the rear of the tractor cab and wired through an independent switch used to illuminate brake connectors and fifth-wheels for nighttime hookups.

2. A vehicle has installed on it a warning lamp that is not of an approved type or has been altered.

3. Vehicle is equipped with a combination of auxiliary lamps which include more than two fog lamps, or more than two spot lamps, or more than two driving lamps. Motor vehicles may be equipped with more than two fog or auxiliary lights; however, only two of these types of lights can be illuminated at any time. Reject a vehicle equipped with a headlamp mounted or used as an auxiliary lamp.

NOTE: Vehicles equipped from the factory, with two driving lamps should not be rejected.

4. Vehicle is equipped with an auxiliary lamp that does not function properly. (If an auxiliary lamp has been modified by removing the wiring, bulb and socket, the unit will be considered an ornament and not a lamp and will not be considered for inspection.)

5. Vehicle is equipped with a lighted advertising sign, except commercial motor vehicles and buses operated as public carriers. These vehicles may be equipped with vacant and destination signs and one steadily burning white light for illumination of external advertising. Do not reject approved identification lights.

6. Any lamp is not of an approved type or if lamps to be burned together as a pair do not emit the same color light.

7. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

8. Backup lamps are not required. However, if installed they must operate and be inspected.

Inspect for and reject if:

a. Lamps are not of an approved type (DOT or SAE-R) or a lamp has been altered.

b. Wiring or electrical connections are defective or filaments do not burn.

c. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.
d. Lens is other than clear. LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

e. Lamps are not wired into the reverse gear or an independent circuit.

9. Cornering lamps are not required. However, if installed they must operate and be inspected.

Inspect for and reject if:

a. Lamps are not of an approved type (DOT or SAE-K) or a lamp has been altered.

b. Wiring or electrical connections are defective or filaments do not burn.

c. The lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

d. The color of the light is other than clear or amber.

e. The lamps do not burn in conjunction with the turn signals.

10. Driving lamps are not required. However, if installed they must operate and be inspected.

Inspect for and reject if:

a. Driving lamps are installed on vehicles equipped with the four-headlamp system, except the "F" type headlamp system.

b. A vehicle is equipped with more than two driving lamps.

c. Driving lamps are not of an approved type (DOT or SAE-Y) or have been altered.

d. The color of the lamp is other than white.

e. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

f. Wiring or electrical connections are defective or filaments do not burn.

g. Any driving lamp is mounted above the level of the regular headlamps, or is not mounted firmly to prevent excessive vibration.

h. Driving lamps are not wired so that they will burn only when the high beams of the regular headlamps are activated.

i. Driving lamps are not aimed so that the center of the hot spot drops three inches in 25 feet so that the hot spot is directly ahead of the lamp.

NOTE: Driving lamps must be aimed using the optical headlight aimer. A tolerance of four inches in 25 feet is allowed in both the horizontal and the vertical adjustment.

11. Fog lamps are not required. However, if installed they must operate and be inspected.

Inspect for and reject if:

a. A vehicle may be equipped with more than two fog lamps; however, not more than two lamps can be illuminated at any time.

b. Lamps are not of an approved type (SAE or DOT-F or F2) or a lamp has been altered.

c. The lens is other than clear or amber. (Fog lamps may have black end bulbs or small metal caps over the end of the bulb.)

d. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

e. Wiring or electrical connections are defective or filaments do not burn.

f. Any fog lamp is mounted above the level of the regular headlamps, or is not mounted firmly.

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g. Lamps are not wired and aimed according to the following instructions:

(1) Fog lamps are general illumination lamps as covered in 19VAC30-70-160 D. They must burn through the tail light circuit even if on a separate switch. If installed on a vehicle with a four-headlamp system or a vehicle equipped with driving lamps, they must be wired into the low beam circuit.

(2) Fog lamps must be aimed so that the top edge of the high intensity zone is set at the horizontal centerline and the left edge of the high intensity zone is set at the vertical centerline. (Same as low beam headlights.)

NOTE: Fog lamps must be aimed using the optical headlight aimer.

(3) A tolerance of four inches in 25 feet is allowed in both the horizontal and the vertical adjustment.

12. Spot lamps are not required. However, if installed they must operate and be inspected.

Inspect for and reject if:

a. Vehicle is equipped with more than two spot lamps.

b. Lamps are not of an approved type (DOT or SAE-O) or a lamp has been altered.

c. The lens in any spot lamp is other than clear.

d. The lens has a piece broken from it or is rotated away from its proper position. The lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

e. Wiring or electrical connections are defective or filaments do not burn.

13. Daytime running lamps (DRLs) are not required. However, if installed they must operate and be inspected. DRLs must be installed in pairs.

NOTE: DRLs may or may not be wired into the tail light circuit.

Inspect for and reject if:

a. Any lamp, except headlamps, used as DRLs is not an approved type (SAE-Y2) and is not marked "DRL."

b. Fog lamps or parking lamps are used as DRLs.

c. More than one pair of lamps are used and or designated as DRLs.

d. A DRL is mounted higher than 34 inches measured to the center of the lamp.

e. The color is other than white or amber.

f. DRLs do not deactivate when the headlamps are in any "on" position.

Any DRL optically combined with a turn signal or hazard lamp must deactivate when the turn signal or hazard lamp is activated and then reactivate when the turn signal or hazard lamp deactivates.


Parking lamps are not required. However, if installed they must operate and be inspected. Parking lamps may burn in conjunction with the headlamps.

Inspect for and reject if:

1. Lamps are not of an approved type (DOT or SAE-P) or a lamp has been altered.

2. Parking lamps have other than clear or amber lenses showing to the front. If the lens is clear, then the bulb shall be amber.

3. Parking lamps do not burn with the rear lamps.

4. If lens has a piece broken from it. Lenses may have one or more cracks provided no off-color light projects through the crack or cracks.

5. Wiring or electrical connections are defective or filaments do not burn.

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6. Any vehicle has unapproved lens or plastic covers, any other materials which are not original equipment or any colored material placed on or in front of parking lamps.

NOTE. LED (light emitting diode) lights with a clear lens are acceptable if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.


Inspect for and reject if:

1. Any motor vehicle, trailer, semitrailer or other vehicle is not equipped with clearance lamps if the vehicle is over seven feet wide or if any portion extends four inches or more outside the front fender line.

Trailers of 80 inches or more overall width, and with a GVWR over 10,000 pounds, manufactured on or after December 1, 1993, except pole trailers and trailers designed exclusively for living or office use, shall be equipped with either retroreflective sheeting, reflex reflectors, or a combination of retroreflective sheeting and reflex reflectors.

When a motor vehicle with a trailer attached is presented, the combination may be considered as one unit in meeting this requirement. If presented separately, the individual unit must meet these requirements except that any tractor-truck need not be equipped with rear red dimension or marker lamps.

2. Lamps (DOT or SAE-P2, P3, PC or PC2) or reflectors (DOT or SAE-A or B) are not of an approved type or a lamp has been altered.

Reject if the lamps or reflectors have unapproved plastic covers, any other materials that are not original equipment or any colored material placed on or in front of lamps or reflectors.

Retro-reflective surfaces. Retro-reflective surfaces other than required reflectors may be used, provided (see diagram):

a. Designs do not resemble traffic control signs, lights, or devices, except that straight edge striping resembling a barricade pattern may be used.

b. Designs do not tend to distort the length and/or width of the motor vehicle.

c. Such surfaces shall be at least three inches from any required lamp or reflector unless of the same color as such lamp or reflector.

d. No red color shall be used on the front of any motor vehicle, except for display of markings or placards required by law.

3. Lenses on lamps on the front are not amber and lenses on lamps on the rear are not red or if a lens has a piece broken from it. A lens may have one or more cracks provided an off-color light does not project through the crack or cracks.

4. Wiring or electrical connections are defective or all filaments do not burn.

NOTE: LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

5. Two amber lamps are not mounted on the front and two red lamps on the rear, so as to indicate the extreme width of the body, and as high on the permanent body as practical, except that approved 180 degree lamps with yellow or amber lens may be mounted on the side of the vehicle at or as near the front as possible, or if the front is not the widest portion, the lamps may be installed on the side and as near that point as possible.

And with the further exception that 180 degree lamps with red lens may be mounted on the side of the vehicle at or as near the rear as possible or if the rear is not the widest portion of the vehicle, the lamps may be installed on the side as near that point as possible.

NOTE: Any vehicle equipped with three identification lamps with the lamp centers spaced not less than six inches or more than 12 inches apart and installed as close as practicable to the top of the vehicle and as close as practicable to the vertical centerline of the vehicle may have the rear dimension or marker lamps required by

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subdivision 5 of this section mounted at any height but indicate as nearly as practicable the extreme width of the vehicle.

NOTE: Dump trucks with a high lift body, concrete mixer trucks and other specially constructed vehicles may be equipped with the required clearance lamps not mounted on the extreme rear, provided such red lamps are clearly visible from the rear and provided further that two red reflectors of an approved type are mounted on the extreme rear. In unusual cases the rear lamp may be mounted on the cab and another red reflex reflector placed on the extreme rear.

NOTE: In addition to the required clearance lamps showing to the front and to the rear, a vehicle may be equipped with clearance lamps on the side of the vehicle. When such an installation is used, all of the clearance lamps on the side except the one at or near the rear must have an amber lens. The clearance lamps on the side at or near the rear must have a red lens.

6. Any vehicle covered by subdivision 1 of this section, except school buses, is not equipped with amber reflectors on the sides as near the front as practical, and red reflectors on the rear. The reflectors must be at least 15 inches and not more than 60 inches from the ground. No reflector can have a piece broken from its reflective surface, but may have one or more cracks.

7. Any combination of vehicles whose actual length exceeds 35 feet if the vehicles are not wide enough to have clearance lights, if the vehicle is not equipped with reflex reflectors of a type approved by the Superintendent and mounted on the widest part of the towed vehicle so as to be visible from the front and sides of the vehicle. No reflector can have a piece broken from its reflective surface, but may have one or more cracks.

8. Any passenger vehicle is equipped with clearance lamps, unless such lamps are used to mark the extreme width of the vehicle or used as taxicab identification, or used as supplemental turn signals. (See 19VAC30-70-190 B.)

NOTE: Vehicles so constructed as to make compliance with the requirements of subdivisions 1, 5, 7, 9 and 10 of this section impractical, will be equipped with clearance lamps and reflectors at the most practical location to provide maximum visibility.

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If equipped with three red identification lamps, the required clearance lamps may be mounted at any height so long as they indicate, as nearly as practicable, the extreme width of the vehicle.
19VAC30-70-560. Signal device (intention to stop or turn), hazard lights, stop lamps.

A. Any motor vehicle may be equipped with a switch that will permit all turn signal lamps to flash simultaneously.

B. Supplemental turn signals, properly wired into the turn signal circuit may be installed. These may be either approved type turn signals or clearance lamps.

C. Single face lamps are permissible on the front except tractor units shall be equipped with two-faced lamps mounted on the front fenders or on or near the front of the vehicle.

D. Inspect for and reject if:

1. Motor vehicle or trailer, except an antique vehicle not originally equipped with a stop lamp, is not equipped with at least two stop lamps of an approved type (DOT or SAE-S) that automatically exhibit a light through a red or amber lens to the rear when the brake pedal is actuated.

2. Proper signals do not go on with each throw of the switch or if stop signals do not go on with slightest pressure on the brake pedal. Turn signals may flash; however, stop signals may not flash.

Every passenger car manufactured for the 1986 or subsequent model year and multipurpose passenger vehicle, truck, or bus whose overall width is less than 80 inches, manufactured September 1, 1993, and subsequent model year is not equipped with a supplemental center high mount stop lamp of an approved type (DOT or SAE-U, U1 or U2) mounted at the vertical centerline of the vehicle that functions only in cooperation with the vehicle's brake lights and hazard lights. Any other vehicle on which a supplemental center high mount stop lamp is mounted shall have the lamp mounted at the vertical center line of the vehicle. The lamps shall be of an approved type and shall
function only in conjunction with the stop lamps. The high mount stop lamp must be steady burning and not wired to flash with turn signals or other wig-wag device.

"Multipurpose passenger vehicle" means any motor vehicle that is (i) designed to carry no more than 10 persons and (ii) constructed either on a truck chassis or with special features for occasional off-road use.

NOTE: Camper shells and/or other items that may be temporarily carried on or attached to multipurpose vehicles will not be considered during inspection of the center high mount stop lamp, provided the lamp continues to function as designed.

NOTE: Multipurpose passenger vehicles with an overall width of 80 or more inches or GVWR of 10,000 pounds or more are not required to be equipped with a center high mount stop light.

No sticker or other foreign material shall be affixed to the vehicle in such a manner so as to obscure the center high mount stop lamp.

3. Motor vehicle was manufactured after January 1, 1955, and is not equipped with approved signaling devices.

4. Vehicle is not equipped with a turn signal if such signal is not working properly or does not continue to function in the same manner as when it was originally manufactured. (The turn signal switch shall lock in place when positioned for a left turn or a right turn, and the turn signal indicators must function. Do not reject a vehicle if the self-cancelling mechanism in the switch does not function when the steering wheel is rotated.)

5. Switch is not convenient to the driver and/or not of an approved type.

6. Any vehicle constructed so as to prevent the operator from making a hand and arm signal, if such vehicle is not equipped with an approved type signaling device.

7. Turn signal lens is not clear or amber to the front, or red or amber to the rear. Lens or bulb color has been altered or modified. If the lens is clear, then the bulb shall be amber.

NOTE: LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

8. Wiring or electrical connections are defective or filaments do not burn.

9. Lens has a piece broken from it. The lens may have one or more cracks provided an off-color light does not project through the crack(s).

NOTE: Taping or gluing cracks or pieces is not allowed.

NOTE: The hazard warning signal operating unit shall operate independently of the ignition or equivalent switch, and when activated, cause all turn signals to flash simultaneously.

NOTE: They are deemed not to be installed if none of the lights burn or flash when the switch is activated and the hazard warning signal flasher unit has been removed.

10. Device is not mounted near rear for rear signals, or near front for front signals (except supplemental turn signals) or if the signal is hidden by a bolster or other part of body chassis.

A tractor truck need not be equipped with mechanical or electrical signal devices on the rear if it is equipped with double-faced signal lamps mounted on the front fenders or on the sides near the front of the vehicle clearly visible to the rear.

11. All "Class A" signals are not mounted at least three feet apart. (This does not apply to the combination rear signal device.) However, signal lamps that are mounted as far apart as practical inside and at the rear of the frame so as to be properly visible will meet inspection requirements.

12. Any vehicle has unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of signal device (intention to stop or turn), hazard lights or stop lamp.
ILLUSTRATIONS FOR PROPER INSTALLATION AND TYPE OF SIGNAL LIGHTS

TRUCK: Front Permissible --
Class A Type I
Class A Type II
Must show to front - may use two faced

TRUCK: Rear Permissible --
Class A Type I Class A Type II
--or--
Combination Arrow Tail Stop & Signal

TRACTOR TRAILER: Front Permissible --
Class A Type I
Class A Type II
Two faced lamps - must show to both front and rear

TRAILER: Rear Permissible -- or -- Combination
Class A Type I Arrow Tail
Class A Type II Stop & Signal

Class A Type I - Are lamps which indicate a change in direction by giving flashing warning signal (clear lens - amber to front; amber to red on rear) on the side toward which the turn will be made.

Class A Type II - Are lamps which indicate a change in direction by means of illuminated arrow heads (flashing or steady) on the side toward which the turn will be made.

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19VAC30-70-570. Permissible lighting equipment.
A. Any vehicle may be equipped with:
   1. Running board or courtesy lamps, of not over six candlepower.
   2. Vacant or destination signs, if a taxicab or bus.
   3. Identification lamps of approved type (SAE-P2 or P3).
   4. Interior lights. (Not more than 15 candlepower.)

Exception: This does not apply to alternating, blinking or flashing colored emergency lights mounted inside law-enforcement vehicles or flashing shielded red or red and white lights, mounted inside vehicles owned or used by members of volunteer fire companies, volunteer rescue squads or owned or used by professional firefighters, or police chaplains. Also, this does not apply to firefighting vehicles equipped with map lights.

5. A motor vehicle having a GVWR of 10,001 pounds or more may be equipped with an illuminated bumper guide attached to each end of the front bumper, provided:
   a. The light thereon is amber in color and less than 6 candlepower.
   b. The light is wired to burn only in conjunction with the marker or clearance lamps on the vehicle.

6. Any approved lamp in good working order when used for the purpose for which it was approved.

B. Side marker lamps are not required if the vehicle(s) is over 30 feet in length. If installed they must operate and be inspected. If the bulb, socket and wiring are removed from an individual lamp unit, the unit will not be considered during inspection. This does not include a wraparound tail/marker lamp assembly/lens that are intended to perform multiple functions.

Inspect for and reject if:

1. Lamps are not of an approved type (DOT or SAE-P2, P3, PC), or do not comply with subsection A of this section.

2. Lamps are not installed on the permanent structure of the vehicle with one as far to the rear and one as far forward as practicable and at a location which is not less than 15 inches above the road surface when measured from the center of the lamp.

3. Lamps installed on the side to the rear do not project a red light and lamps installed on the front do not project an amber light.

4. Lens has a piece broken from it. The lens may have one or more cracks provided no off-color light projects through the crack(s).

5. Wiring or electrical connections are defective or filaments do not burn.

6. Any vehicle has unapproved lens or plastic covers, any other materials that are not original equipment or any colored material placed on or in front of permissible lighting equipment.

NOTE: LED (light emitting diode) lights with a clear lens are acceptable, if of an approved type. For those vehicles that are equipped with a multiple LED light (not filament burning bulbs), they will pass inspection if more than 50% of the diode lights are burning.

19VAC30-70-580. Glass and glazing.

A. Motor vehicles may be inspected without windshields, side glasses, or any kind of glazing except that any motor vehicle other than a motorcycle which was manufactured, assembled, or reconstructed after July 1, 1970, must be equipped with a windshield. If glass or other glazing is installed, it must be inspected. If no windshield is installed, see 19VAC30-70-50, C, for location of the sticker.

B. Inspect for and reject if:

1. Any motor vehicle manufactured or assembled after January 1, 1936, or any bus or school bus manufactured or assembled after January 1, 1935, is not equipped throughout with safety glass, or other safety glazing material.

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2. Any safety glass or glazing used in a motor vehicle is not of an approved type and properly identified (DOT and AS-1, AS-2, or AS-3). (Replacement safety glass installed in any part of a vehicle other than the windshield need not bear a trademark or name, provided the glass consists of two or more sheets of glass separated by a glazing material, and provided the glass is cut from a piece of approved safety glass, and provided the edge of the glass can be observed.)

3. Any glass at any location where glass is used is cracked or broken so that it is likely to cut or injure a person in the vehicle.

4. Windshield has any cloudiness more than three inches above the bottom, one inch inward from the outer borders, one inch down from the top, or one inch inward from the center strip. The bottom of the windshield shall be defined as the point where the top of the dash contacts the windshield.

5. Any distortion or obstruction that interferes with a driver's vision.

Any alteration has been made to a vehicle that obstructs the driver's clear view through the windshield. This may include but is not limited to large objects hanging from the inside mirror, CB radios or tachometers on the dash, hood scoops and other ornamentation on or in front of the hood that is not transparent.

a. Any hood scoop installed on any motor vehicle manufactured for 1990 or earlier model year cannot exceed 2-1/4 inches high at its highest point measured from the junction of the dashboard and the windshield.

b. Any hood scoop installed on any motor vehicle manufactured for the year 1991 or subsequent model year cannot exceed 1-1/8 inches high at its highest point measured from the junction of the dashboard and the windshield.

6. Windshield glass, on the driver's side, has any scratch more than 1/4 inch in width and six inches long within the area covered by the windshield wiper blade, excluding the three inches above the bottom of the windshield. A windshield wiper that remains parked within the driver's side windshield wiper area shall be rejected.

EXCEPTION: Do not reject safety grooves designed to clean wiper blades if the grooves do not extend upward from the bottom of the windshield more than six inches at the highest point.

7. There is a pit, chip, or star crack larger than 3/4 inch in diameter at any location in the windshield above the topmost portion of the steering wheel except the two-inch border at each side.

8. At any location above the topmost portion of the steering wheel excluding a two-inch border at the top and one-inch border at the sides there is:

a. Any crack over 1/4 inch in width.

b. Any crack 1/4 inch or less in width intersected by another crack.

c. Any damage area 3/4 inch or less in diameter if within three inches of any other damage area.

9. Any sticker is on the windshield other than an official one required by law, or permitted by the Superintendent. Authorization is hereby granted for stickers measuring not more than 2-1/2 inches in width and four inches in length to be placed in the blind spot behind the rearview mirror. Department of Defense decals measuring no more than three inches in width and eight inches in length may be affixed to the upper edge of the center of the windshield. At the option of the motor vehicle's owner, the decal may be affixed at the lower left corner of the windshield so that the inside or left edge of the sticker or decal is within one inch of the extreme left edge of the windshield when looking through the windshield from inside the vehicle. When placed at this location, the bottom edge of the sticker or decal must be affixed within three inches of the bottom of the windshield. This location can only be used if the owner of the vehicle has chosen not to place any required county, town or city decal there. The normal location for any required county, town, or city decal is adjacent to the official inspection sticker and must not extend upward more than three inches from the bottom of the windshield. Commercial Vehicle Safety Alliance (CVSA) inspection decals may be placed at the bottom or sides of the windshield provided such decals do not extend more than 4-1/2 inches from the bottom of the windshield and are located outside the area swept by the windshield wipers and outside of the driver's sight line.

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Fastoll transponder devices may be affixed to the inside center of the windshield at the roof line just above the rear view mirror. If space does not allow, then it may be affixed to the immediate right of the mirror at the roof line.

Any sticker required by the laws of any other state or District of Columbia and displayed upon the windshield of a vehicle submitted for inspection in this state is permitted by the superintendent, provided the vehicle is currently registered in that jurisdiction, the sticker is displayed in a manner designated by the issuing authority and has not expired. This includes vehicles with dual registration, i.e., Virginia and the District of Columbia.

NOTE: Stickers or decals used by counties, cities and towns in lieu of license plates may be placed on the windshield without further authority. Except on privately owned yellow school buses, the sticker or decal shall be placed on the windshield adjacent to the right side of the official inspection sticker or the optional placement to the extreme lower left side of the windshield. The top edge of the sticker or decal shall not extend upwards more than three inches from the bottom of the windshield. The left side edge adjacent to the official inspection sticker shall not be more than 1/4 inch from the right edge of the official inspection sticker when looking through the windshield from inside the vehicle. However, at the option of the motor vehicle owner, the sticker or decal may be affixed to the upper edge of the center of the windshield. (Any expired sticker or decal, excluding a rejection sticker, that is present on the windshield at the time of inspection shall not be issued an approval sticker unless the owner/operator “authorizes” its removal. A rejection sticker will be issued versus an involuntary removal.) On privately owned yellow school buses, the sticker or decal shall be placed on the windshield adjacent to the left side of the official inspection sticker, and not more than 1/4 inch from the official inspection sticker when looking through the windshield from inside the vehicle. The top edge of the sticker shall not extend upward more than three inches from the bottom of the windshield.

10. Sunshading material attached to the windshield extends more than three inches downward from the top of the windshield, unless authorized by the Virginia Department of Motor Vehicles and indicated on the vehicle registration.

NOTE: Sunshading material on the windshield displaying words, lettering, numbers or pictures that do not extend below the AS-1 line are permitted.

NOTE: Vehicles with logos made into the glass at the factory that meet federal standards will pass state inspection.

11. Any sunscreening material is scratched, distorted, wrinkled or obscures or distorts clear vision through the glazing.

12. Front side windows have cloudiness above three inches from the bottom of the glass, or other defects that affect the driver’s vision or one or more cracks which permit one part of the glass to be moved in relation to another part. Wind silencers, breezes or other ventilator adaptors are not made of clear transparent material.

13. Glass in the left front door cannot be raised or lowered easily so a hand signal can be given. (This does not apply to vehicle equipped with approved turn signals which were not designed and/or manufactured for left front glass to be lowered.) If either front door has the glass removed and material inserted in place of the glass which could obstruct the driver’s vision.

Exception: Sunscreening material is permissible if the vehicle is equipped with a mirror on each side.

14. Any sticker or other obstruction is on either front side window, rear side windows, or rear windows. (The price label, fuel economy label and the buyer’s guide required by federal statute and regulations to be affixed to new/used vehicles by the manufacturer shall normally be affixed to one of the rear side windows.) If a vehicle only has two door windows, the labels may be affixed to one of these windows. If a vehicle does not have any door or side windows the labels may be temporarily affixed to the right side of the windshield until the vehicle is sold to the first purchaser.

NOTE: A single sticker no larger than 20 square inches in area, if such sticker is totally contained within the lower five inches of the glass in the rear window or a single sticker or decal no larger than 10 square inches located in an area not more than three inches above the bottom and not more than eight inches from the rearmost edge of either front side window, is permissible and should not be rejected.

Do not reject a tractor truck having a gross vehicle weight rating of 26,001 pounds or more equipped with one optically grooved clear plastic wide angle lens affixed to the right front side window. Such wide angle lens shall

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not extend upward from the bottom of the window opening more than six inches or backward from the front of the window opening more than eight inches.

15. Rear window is clouded or distorted so that the driver does not have a view 200 feet to the rear.

EXCEPTIONS: The following are permissible if the vehicle is equipped with a mirror on each side:

a. There is attached to one rear window of such motor vehicle one optically grooved clear plastic right angle rear view lens, not exceeding 18 inches in diameter in the case of a circular lens or not exceeding 11 inches by 14 inches in the case of a rectangular lens, which enables the operator of the motor vehicle to view below the line of sight as viewed through the rear window.

b. There is affixed to the rear side windows, rear window or windows of such motor vehicle any sticker or stickers, regardless of size.

c. There is affixed to the rear side windows, rear window or windows of such motor vehicle a single layer of sunshading material.

d. Rear side windows, rear window or windows is clouded or distorted.

19VAC30-70-590. Mirrors.

Inspect for and reject if:

1. Any motor vehicle is not equipped with at least one mirror.

2. Any bus, truck, road tractor or tractor truck is not equipped with two outside rear view mirrors, one at each side, firmly attached.

EXCEPTION: Only one outside mirror shall be required, on the driver's side, on vehicles so constructed that the driver has a view to the rear by means of an inside mirror.

Vehicles equipped with only one outside mirror must have the mirror on the driver's side.

NOTE: No motor vehicle shall be required to be equipped with an inside rear view mirror if it does not have a rear window or if the rear window is so obstructed as to prevent rearward vision by means of an inside rear view mirror, if the motor vehicle has horizontally and vertically adjustable outside rear view mirrors installed on both sides of such motor vehicle in such a manner as to provide the driver of such motor vehicle a clear view along both sides of such motor vehicle for a distance of not less than 200 feet.

3. Reflecting surface of mirror is cracked, broken, peeled, pitted, clouded, tarnished, the image is distorted, has sharp edges, reflects more than one image, or is not mounted securely.

4. Mirror does not give the driver a clear view of the road 200 feet to the rear.

5. Interior rearview mirror;
   a. Mirror is loose enough that rear view is impaired.
   b. Mirror cannot be adjusted or will not maintain a set adjustment.

6. Exterior rearview mirror;
   a. Mirror is loose enough that rear view is impaired.
   b. Left mirror is obscured by an unwiped portion of windshield or mirror is mounted so it cannot be adjusted from driver's seat. (Applies to 1969 and subsequent model vehicles.)

NOTE: A right side mirror is not required if the reflecting surface of the mirror has been completely removed from the mirror housing. However, a vehicle will be required to have two outside mirrors if there is a sticker or stickers, regardless of size, sun-shading or tinting film, on the rear side window or rear window.

NOTE: A single sticker, no larger than 20 square inches, if such sticker is totally contained within the lower five inches of the glass of the rear window, and does not obstruct the center high mount brake light, is allowed and will pass inspection.

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19VAC30-70-600. Windshield wiper/defroster.

A. INSPECT FOR AND REJECT IF:

1. Vehicle is equipped with a windshield and is not equipped with a windshield wiper.

2. Vehicle was manufactured before January 1, 1943, and is not equipped with at least one wiper on the driver's side. This wiper may be hand operated.

3. Vehicle was manufactured after January 1, 1943, and is not equipped with a windshield wiper or wipers that clear both sides of the windshield; these wipers must be mechanically operated (electrical, vacuum, or air, but not by hand). A switch in good working order must be present to turn the wipers on and off. Any wiper that parks within the area covered by the driver's windshield wiper blade, excluding the three inches above the bottom of the windshield shall be rejected (19VAC30-70-580 B 6).

4. Blade has brittle, worn, torn or ripped rubber or if metal comes in contact with the windshield.

5. Wiper does not operate freely; or if it is an electrically or mechanically operated wiper that must be operated by hand.

NOTE: Inspect only wipers found on the front windshield.

B. Windshield Defroster: Vehicles manufactured after January 1, 1969, must be equipped with windshield defroster systems.

INSPECT FOR AND REJECT IF:

1. Any 1969 or subsequent model not equipped with a windshield defroster system.

2. Defroster fan fails to function.

3. Fan functions, but a warm stream of air cannot be felt blowing against the windshield. (Engine must be warm and all elements of the defroster system must be in the on position.)

19VAC30-70-610. Horns and other warning devices.

INSPECT FOR AND REJECT IF:

1. Vehicle is not equipped with a horn in good working order, capable of emitting a sound audible under normal conditions over a distance of not less than 200 feet and is not firmly mounted.

2. A horn operating mechanism installed at a location readily accessible to the vehicle operator is not provided. Electrically operated horn, wiring, or electrical connections are defective.

3. Vehicles used for garbage and refuse collection and disposal, or vehicles having a manufacturer's gross vehicle weight rating of 10,001 pounds or more and used primarily for highway repair or maintenance are not equipped with a device of an approved type wired through the reverse gear circuit, in good working order, which automatically emits an audible alarm signal when the vehicle is operated in reverse gear.

19VAC30-70-620. Doors.

INSPECT FOR AND REJECT IF:

1. If each door located at the left and right side of the driver's seat is not equipped with a handle or opening device similar to that installed by the vehicle manufacturer which will permit the opening of the door from the outside and inside of the vehicle.

2. If each door located to the left and right side of the driver's seat is not equipped with a latching system similar to that installed by the vehicle manufacturer which will hold the door in its proper closed position.

19VAC30-70-630. Hood latch system.

A. "Hood" means any exterior movable body panel forward of the windshield that is used to cover an engine, luggage, storage or battery compartment.
B. INSPECT FOR AND REJECT IF:

1. Each hood is not provided with a hood latch system that will securely hold the hood in its proper fully-closed position.

2. The latch release mechanism or its parts are broken, missing or badly adjusted so that the hood cannot be opened and closed properly.

3. Latching system on a vehicle equipped with a tilt cab is defective, broken, missing, or not properly adjusted so that the tilt cab is held securely when it is in its latched position.

19VAC30-70-640. Floor pan.

INSPECT FOR AND REJECT IF:

1. The floor pan or inner side panels, front or rear, are rusted out or have any holes other than normal drain holes which allow exhaust gases to enter the occupant compartment or trunk.

2. The floor pan is rusted through or is in such condition to create a hazard to the occupants. (A hole in the floor pan which has been properly repaired by welding, or through the utilization of a metal patch riveted, screwed or welded to its surface is not prohibited. If the floor pan was initially constructed from wood, it may be patched with wood.)

19VAC30-70-650. Seat.

INSPECT FOR AND REJECT IF:

1. Any motor vehicle is not equipped with a seat to accommodate the operator.

2. The seat is not securely anchored.

3. Seat adjusting mechanism slips out of set position or seat does not lock in normal upright position. Do not reject the seat if it will not adjust as long as it does not violate subdivision 4 of this section.

4. The seat is not located to permit the operator to have adequate control of the steering and braking mechanisms and other instruments necessary for the safe operation of the motor vehicle.

19VAC30-70-660. Seat belts.

A. Definitions:

"Bus" means a motor vehicle with motive power designed to carry more than 10 persons.

"Designated seating position" means any plan view (looking down from the top) location intended by the manufacturer to provide seating accommodations while the vehicle is in motion, except auxiliary seating accommodations as temporary or folding jump seats.

"Front outboard designated seating positions" means those designated seating positions for the driver and outside front seat passenger (except for trucks which have the passenger seat nearest the passenger side door separated from the door by a passageway used to access the cargo area.)

"GVWR" means gross vehicle weight rating as specified by the manufacturer (loaded weight of a single vehicle.)

"Multi-purpose passenger vehicle" means a motor vehicle with motive power designed to carry 10 persons or less which is constructed either on a truck chassis or with special features for occasional off-road operation. This shall also include a minivan.

"Open-body type vehicle" means a vehicle having no occupant compartment top or an occupant compartment top that can be installed or removed by the user at his convenience.

"Rear outboard front facing designated seating positions" means those designated seating positions for passengers in outside front facing seats behind the driver and front passenger seat, except any designated seating position adjacent to a walkway, that is located between the seat and the nearside of the vehicle and is designated to allow access to more rearward seating positions.

"Truck" means a motor vehicle with motive power designed primarily for the transportation of property or special purpose equipment.
B. Passive Restraint System:

Inflatable occupant restraint (commonly known as air bags).

Passive belt system (automatic deployment around the occupant after the occupant enters the vehicle and closes the door).

INSPECT FOR AND REJECT IF:

1. Not of an approved type.

2. Installation not in compliance as follows:

   a. All motor vehicle seat belt anchorages and attachment hardware must meet the standards and specifications set forth by the Society of Automotive Engineers, Inc., and Federal Motor Vehicle Safety Standard Number 209, for such anchorages and attachment hardware.

   b. Any questions concerning the proper installation of seat belt assemblies should be directed to the nearest Safety Division office.

3. Any of the following motor vehicles manufactured on or after July 1, 1971, not having a lap seat belt assembly for each designated seating position:

   a. Open-body type vehicles;

   b. Walk-in van type trucks;

   c. Trucks (GVWR in excess of 10,000 pounds);

   d. Multipurpose passenger vehicles (GVWR in excess of 10,000 pounds).

4. Any buses manufactured on or after July 1, 1971, not having a lap seat belt assembly for the driver's seating position.

5. All other motor vehicles manufactured on or after January 1, 1976, except those for which requirements are specified in subdivisions 3 and 4, not having lap/shoulder or harness seat belt assemblies installed for each front outboard designated seating position.

   Those vehicles originally equipped and sold by the manufacturer with only a lap belt installed for each designated seating position, in compliance with Federal Motor Vehicle Safety Standards, will be deemed to be in compliance with this section.

6. Any seat belt buckle, webbing, or mounting is cut, torn, frayed, or no longer operates properly.

7. Any seat belt anchorage is loose, badly corroded, missing or not fastened to belt.

8. Any truck, multi-purpose vehicle, or bus (except school buses and motor homes) with a GVWR of 10,000 pounds or less, manufactured on or after September 1, 1991, is not equipped with a lap/shoulder seatbelt assembly at all forward facing rear outboard designated seating positions.

9. Any of the heretofore described vehicles manufactured on or after September 1, 1992, are not equipped with lap/shoulder seatbelt assembly located at all forward facing rear outboard designated seating positions on a readily removable seat.

**19VAC30-70-670. Muffler, exhaust system, and trailer venting.**

A. Flexible tubing may be used anywhere in the exhaust system.

B. Inspection of exhaust system does not concern noise level.

C. INSPECT FOR AND REJECT IF:

1. There is any leakage of exhaust gases at any point in the system. Do not reject "built-in" drain holes in muffler or tailpipe.

2. A muffler or catalytic converter has been repaired in any manner. The exhaust pipe may be welded to the muffler or catalytic converter. Holes or cracks in the exhaust line have been repaired with a patch or caulking.

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3. Tailpipe opening is mashed or pinched.

4. Brackets are loose, broken, or missing.

5. Discharge of exhaust:
   a. The exhaust system fails to discharge the exhaust to the rear or sides of that part of a property-carrying vehicle which is designed for and normally used for the driver and passengers, and to the rear or sides of the passenger and trunk compartment of passenger vehicles.
   b. The exhaust system of a bus powered by a gasoline engine shall discharge to the atmosphere at or within six inches forward of the rearmost part of the bus.
   c. The exhaust system of a bus powered by other than a gasoline engine shall discharge to the atmosphere either:
      (1) At or within 15 inches forward of the rearmost part of the vehicle; or
      (2) To the rear of all doors or windows designed to open, except windows designed to be opened solely as emergency exits.

6. Inspection of trailers and semitrailers will include a visual inspection of the venting of cooking or heating appliances to the outside of the trailer or semitrailer to determine if the heating and cooking appliances are adequately vented to the outside to prevent the asphyxiation of occupants of any trailer or semitrailer by the operation of the heating or cooking appliances.
   a. Reject the trailer or semitrailer if not equipped with a vent or venting system to the outside.
   b. Reject the trailer or semitrailer if there is any complete or partial obstruction of the vent or venting system.

19VAC30-70.680. Fuel system.
Inspect for and reject if:
1. Any part of the fuel system is not securely fastened.
2. There is fuel leakage at any point in any fuel system.
3. Any fuel tank filler cap is missing.
4. Any fuel tank crossover lines are not protected if they extend more than two inches below the bottom of the tank or sump.
5. Any part of the fuel system comes in contact with the exhaust system.

APPENDIX A. GOVERNOR’S PROCLAMATION
The successful administration of the Virginia traffic safety program is dependent to a large extent upon the proper mechanical maintenance of motor vehicles, trailers or semi-trailers which operate over the streets and highways of Virginia.

Motor vehicles, trailers or semi-trailers inspected under this Proclamation which continue to be registered in and operated upon the highways of this Commonwealth shall be reinspected within twelve months from each month of inspection thereafter. Any motor vehicle, trailer or semi-trailer presently being operated in Virginia which bears a current inspection sticker as of the date of this proclamation shall not be required to be reinspected pursuant to this Proclamation until the current twelve-month period has expired.

The owner or operator of a motor vehicle, trailer, or semi-trailer subject to this Proclamation shall submit the same to an official inspection station for inspection before operating such motor vehicle, trailer or semi-trailer upon the highways of Virginia, except as follows:
1. Four-wheel vehicles weighing less than 500 pounds and having less than six horsepower;
2. Trailers not equipped with brakes;
3. Motor vehicles defined under §46.2-100 of the Code of Virginia as an antique motor vehicle and licensed as an antique motor vehicle pursuant to the provisions of §46.2-730 of the Code;

4. Any motor vehicle, trailer or semi-trailer which is outside of the Commonwealth of Virginia at the time its inspection expires may be returned to the owner's or operator's place of residence or the owner's legal place of business in the State before it will be required to be submitted for a reinspection;

In addition, any truck, tractor truck, trailer or semi-trailer which is outside of the Commonwealth of Virginia at the time its inspection expires may be operated (i) from a point outside the Commonwealth to the place where such vehicle is kept or garaged within the Commonwealth or (ii) to a destination within the Commonwealth where such vehicle will be (a) unloaded within twenty-four hours of entering the Commonwealth, (b) inspected within such twenty-four-hour period, and (c) after being unloaded, will be operated only to an inspection station or to the place where it is kept or garaged within the Commonwealth;

5. Motor vehicles owned and operated by persons on active duty with the United States Armed Forces, who are Virginia residents stationed outside of Virginia at the time its inspection expires, may operate such vehicle on the highways of the Commonwealth while on leave, provided such vehicle displays a valid inspection sticker issued by another state and not be in violation of §46.2-1157 of the Code of Virginia;

6. New motor vehicles, new trailers or new semi-trailers may be operated upon the highways of Virginia for the purpose of delivery from the place of manufacture to the dealer's or distributor's designated place of business, or between places of business if such manufacturer, dealer or distributor has more than one place of business, without being inspected; dealers or distributors may take delivery and operate upon the highways of Virginia new motor vehicles, new trailers or new semi-trailers from another dealer or distributor provided a motor vehicle, trailer or semi-trailer shall not be considered new if driven upon the highways for any purpose other than the delivery of the vehicle;

7. New motor vehicles, new trailers or new semi-trailers bearing a manufacturer's license may be operated for test purposes by the manufacturer without an inspection;

8. Motor vehicles, trailers or semi-trailers may be operated for test purposes by a certified inspector without an inspection during the performance of an official inspection;

9. New motor vehicles, new trailers or new semi-trailers may be operated upon the highways of Virginia over the most direct route to a location for installation of permanent body without being inspected;

10. Motor vehicles, trailers or semi-trailers purchased outside the Commonwealth of Virginia may be driven to the purchaser's place of residence or the dealer's or distributor's designated place of business without being inspected;

11. Prior to purchase from auto auctions within the Commonwealth, motor vehicles, trailers or semi-trailers may be operated upon the highways not to exceed a five-mile radius of such auction by prospective purchasers for the purpose of road testing only without being inspected;

Motor vehicles, trailers or semi-trailers purchased from auto auctions within the Commonwealth also may be operated upon the highways from such auction to the purchaser's place of residence or business without being inspected;

12. Motor vehicles, trailers or semi-trailers, after the expiration of a period fixed for the inspection thereof, may be operated over the most direct route between the place where such vehicle is kept or garaged and an official inspection station for the purpose of having the same inspected pursuant to a prior appointment with such station for such inspection as provided in §46.2-1157 of the Code of Virginia;

13. Vehicles transporting well drilling machinery and mobile equipment as defined in §46.2-700 of the Code of Virginia;

14. Motor vehicles being towed in a legal manner as exempted by §46.2-1150 of the Code of Virginia;

15. Log trailers as exempted by §46.2-1159 of the Code of Virginia;

16. Motor vehicles designed or altered and used exclusively for racing or other exhibition purposes, as exempted by §46.2-1160 of the Code of Virginia;

17. Any tow dolly or converter gear as defined in §46.2-1119 of the Code of Virginia;

*Updated through March 1, 2008*
18. Any Commercial Motor Vehicle subject to the Federal Motor Carrier Safety Regulations which is registered in the Commonwealth, but domiciled or garaged outside of the State, found to meet the federal requirements for annual inspection through a self-inspection, a third-party inspection, a Commercial Vehicle Safety Alliance inspection or a periodic inspection performed in any state with a program determined by the Federal Motor Carrier Safety Administration to be comparable to, or as effective as, the requirements of Title 49, Code of Federal Regulations, Part 396, provided documentation is available for inspection by law-enforcement officials which verifies the inspection is current. Upon return to the Commonwealth, such vehicle shall be subject to re-inspection in accordance with the provisions of §46.2-1157 of the Code of Virginia and this Proclamation.

Motor vehicles, trailers or semi-trailers not registered in Virginia are not subject to this Proclamation. Accordingly, mopeds as defined in §46.2-100 and vehicles exempted from licensing under §§46.2-662 through 46.2-683 are not required to be inspected.

NOW, THEREFORE, I, James S. Gilmore, III, Governor of the Commonwealth of Virginia, do hereby proclaim that, with the exception of those vehicles specifically exempted heretofore in this document, all motor vehicles, trailers or semi-trailers bearing a Virginia registration plate or plates, or registered as a motor vehicle, trailer or semi-trailer under any provision of Virginia law and operated upon the highways of this Commonwealth shall be submitted to inspection at an official inspection station and shall have corrected all defects thus found to exist.

Given under my hand and under the lesser seal of the Commonwealth, at Richmond, this 7th day of December, in the year of Our Lord, two thousand, and in the two hundred twenty-fifth year of the Commonwealth.

/s/ James S. Gilmore, III
Governor

FORMS

Inspection Sticker Inventory Report, Form SP-221 (8/1/94).

Safety Inspector Notification Form (rev. 11/98.)

Mechanics Certification Application, Form SP-170-B, (9/04).

Criminal History Record Name Search Request, Form SP-167 (9/04).