Vehicle Inspections performed in the State of North Carolina shall adhere to North Carolina General Statute and Administrative Code. This booklet is prepared for use by all stakeholders seeking guidance regarding vehicle inspections. Inspection Technicians shall adhere to the guidelines in this manual and G.S. 20-183.3 while inspecting vehicles in this state.
SUBCHAPTER 3D - ENFORCEMENT SECTION

SECTION .0500 - GENERAL INFORMATION REGARDING SAFETY INSPECTION OF MOTOR VEHICLES

19A NCAC 03D .0501  GENERAL INFORMATION

History Note: Authority G.S. 20-1; 20-117.1(a); 20-122; 20-122.1; 20-123.1; 20-124; 20-125; 20-125.1; 20-126; 20-127; 20-128; 20-128.1; 20-129; 20-129.1; 20-130; 20-130.1; 20-130.2; 20-130.3; 20-131 through 20-134; 20-183.2; 20-183.3; 20-183.4; 20-183.5; 20-183.6; 20-183.7; 20-183.8;
Eff. July 1, 1978;
Amended Eff. March 1, 1982;

19A NCAC 03D .0502  COLLECTION OF ASSESSMENTS
19A NCAC 03D .0503  WEIGHING VEHICLES WITH PORTABLE SCALES
19A NCAC 03D .0504  RECIPROCITY AGREEMENTS
19A NCAC 03D .0505  FORMS

History Note: Authority G.S. 20-1; 20-4.1 through 20-4.12; 20-49; 20-84.2; 20-91.1; 20-99; 20-118.1;
Eff. July 1, 1978;
Amended Eff. April 11, 1980;
Repealed Eff. February 1, 1982.

19A NCAC 03D .0506  REQUIREMENTS FOR LICENSE
19A NCAC 03D .0507  LICENSES ISSUED
19A NCAC 03D .0508  DENIAL: SUSPENSION OR REVOCATION OF LICENSE
19A NCAC 03D .0509  OPERATION OF SAFETY EQUIPMENT INSPECTION STATIONS
19A NCAC 03D .0510  INSPECTION PROCEDURES
19A NCAC 03D .0511  INSPECTION OF MOTORCYCLES: MOTOR SCOOTERS AND MOTOR BIKES
19A NCAC 03D .0512  PROCEDURE FOLLOWING VEHICLE INSPECTION
19A NCAC 03D .0513  INSPECTION CERTIFICATES ISSUED BY OTHER JURISDICTIONS
19A NCAC 03D .0514  FORMS

History Note: Authority G.S. 20-1; 20-103.8; 20-117.1(a); 20-122; 20-122.1; 20-123.1; 20-124; 20-125; 20-125.1; 20-126; 20-127; 20-128; 20-128.1; 20-129; 20-129.1; 20-130; 20-130.1; 20-130.2; 20-130.3; 20-131 through 20-134; 20-183.2; 20-183.3; 20-183.4; 20-183.5; 20-183.6; 20-183.6(b); 20-183.7; 20-183.8; 20-183.8(a); 20-183.8(b); 200-83.8(b);
Eff. March 1, 1982;

19A NCAC 03D .0515  SAFETY INSPECTION LICENSING AND PROCEDURES

History Note: Authority G.S. 20-1; 20-117.1(a); 20-122; 20-122.1; 20-123.1; 20-124; 20-125; 20-125.1; 20-126; 20-127; 20-128; 20-128.1; 20-129; 20-129.1; 20-130; 20-130.1; 20-130.2; 20-130.3; 20-131 through 20-134; 20-183.2; 20-183.3; 20-183.4; 20-183.5; 20-183.6; 20-183.7; 20-183.8;
Eff. January 1, 1983;
Amended Eff. July 1, 1992; October 1, 1991; October 1, 1989; November 1, 1988;
Repealed Eff. January 1, 1994 pursuant to 1991 S.L., c. 477, s. 3.

19A NCAC 03D .0516  SAFETY INSPECTION LICENSING AND PROCEDURES

History Note: Filed as a Temporary Adoption Eff. April 25, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 20-2; 20-39; 20-183.8;
Codifier of Rules Objected to the Findings of Need for the Temporary Rule Eff. April 25, 1994;
Temporary Adoption Expired October 22, 1994.
For purposes of this Section, these words and phrases shall have the following meanings, except in those instances where the context clearly indicates a different meaning:

1. **Abbreviations**: Abbreviations used in these Rules shall have the following meanings:
   - CO - Carbon Monoxide,
   - G.V.W.R. - Gross Vehicle Weight Rating,
   - HC - Hydrocarbons,
   - PSI - Pounds Per Square Inch,
   - NOx - Nitrogen Oxides,
   - PPM - Parts Per Million,

2. **Ambient Air**: That portion of the atmosphere surrounding human, animal and plant life.

3. **Authorized Station**: An established place of business licensed by the North Carolina Division of Motor Vehicles to conduct inspection of safety equipment, emissions, and air pollution control devices as required by the inspection laws.

4. **Base**: The place where a vehicle is most frequently dispatched from, garaged, serviced, maintained, operated or otherwise controlled. If any vehicle is located in or operated from a county participating in the safety emission program continuously for a period of 30 days, said vehicle shall be considered based within said county.

5. **Certified Inspection Mechanic**: A person who has completed the course(s) required by G.S. 183.4(c) and 183.4A(c), who has passed a written examination approved by the North Carolina Division of Motor Vehicles, and who has been issued an inspection mechanic license by the Division of Motor Vehicles.

6. **Crankcase Emissions**: Air contaminants emitted into the atmosphere from any portion of the engine crankcase ventilation or lubrication system.

7. **Current Year Model**: The production period of new motor vehicles as designated by the manufacturer in the calendar year in which the period ends. If the manufacturer does not designate a production period, the model year shall mean the 12-month period beginning January of the year in which production began.

8. **Diagnostic Equipment**: Tools or machines used to diagnose engine performance.

9. **Emission**: The act of a motor vehicle emitting into the atmosphere any air contaminants which may include carbon monoxide, hydrocarbons, or nitrogen oxides.

10. **Emissions Analyzer**: An approved device used to fully evaluate the vehicle emission control system for proper operation and electronically record and transmit emissions and safety inspection data to the state. An approved device is considered a device that meets the certification requirements as defined by the Environmental Management Commission Specifications for the North Carolina Analyzer System.

11. **Established Place of Business for Safety/Emissions Inspection**: A permanent structure owned either in fee or leased by a licensee, which has sufficient space to test and inspect one or more motor vehicles for which an inspection is being sought and to accommodate the office or offices of an authorized station to provide a safe place for maintaining the records of such authorized station, and at which location the business shall be open during normal business hours to conduct safety inspections and emissions tests and make available to authorized agents of the Division of Motor Vehicles all records and required equipment for examination and testing.

12. **Exhaust Emissions**: Air contaminants emitted into the atmosphere from any opening downstream from the exhaust parts of a motor vehicle engine.

13. **Heavy Duty Motor Vehicle**: A motor vehicle which is designed primarily for:
   - (a) The transportation of property and which is rated at more than 8,500 GVWR.
   - (b) The transportation of persons and which has a capacity of more than 12 persons.
   - (c) Use as a recreational motor vehicle which is rated at more than 8,500 GVWR.
   - (d) Use as an off-road utility vehicle.

14. **Inspection**: The safety equipment or emissions inspection of motor vehicles required by G.S. 20, Part 2, Article 3A.


16. **Inspection/Maintenance (I/M)**: A strategy to reduce emissions from in-use motor vehicles by identifying vehicles that need emission related maintenance and requiring that such maintenance be performed.

17. **Inspection Period**: The period of time a motor vehicle is required to be inspected. To be a current inspection, a motor vehicle may be inspected up to ninety days prior to the last day of the month in which the registration on the vehicle expires pursuant to G.S. 20-183.4C. For motor vehicles not previously registered in this State, the inspection period shall be a period of 12 months prior to the application for registration pursuant to G.S. 20, Part 3, Article 3 and G.S. 20-183.4C.

18. **License**: Notwithstanding G.S. 20-4.01(17), the license issued by the Commissioner of Motor Vehicles which is required for a person to operate a safety equipment emission inspection station.

19. **Light Duty Motor Vehicle**: A motor vehicle which is designed primarily for:
   - (a) Transportation of property and which is rated at or less than 8,500 GVWR by the manufacturer; or
(b) Use in the transportation of persons and which has a capacity of 12 persons or fewer.

(20) Light Transmittance Measuring Device or Light Meter or Unit or Device: A photometer capable of measuring the net transmittance of a window or windshield for light at 560 nm with a variance of no more than 20 nm.

(21) Motorcycle: A motor vehicle as defined under G.S. 20-4.01(22).

(22) Multipiece Photometer: A photometer in which the light source and light detector are mechanically separate units that can be positioned on opposite sides of a fixed window or windshield.

(23) Net Transmittance: The luminous transmittance over the 560 nm with a variance of 20 nm wavelength range, including the effects of Fresnel (surface) reflections.

(24) Recreational Motor Vehicle: A vehicle which is designed primarily to provide temporary or permanent living quarters for travel, camping, or other recreational use.

(25) Registered Owner of a Vehicle: The individual, group of individuals, partnership, firm, company, corporation, association, trust, estate, political subdivision, administrative agency, public or quasi-public corporation, or any other legal entity in whose name the license has been issued and whose name appears on the registration for such vehicle.

(26) Revocation: Notwithstanding G.S. 20-4.01(36), the termination of a license issued by the Division of Motor Vehicles to a safety equipment emission inspection station.

(27) Safety Inspection Analyzer: An approved device used to evaluate and electronically record and transmit safety inspection data to the state. An approved device is considered a device that meets the certification requirements as defined by the Environmental Management Commission Specifications for the North Carolina Analyzer System.

(28) Section: The License and Theft Bureau of the Division of Motor Vehicles.

(29) Self-Inspector: A person, firm or corporation so designated by the Commissioner for the purpose of inspecting only those vehicles owned or operated by such person, firm or corporation.


(31) Station: A place of business licensed by the Commissioner of Motor Vehicles to conduct inspections of motor vehicles as required by the inspection laws.

(32) Suspension of Safety/Emission License: The temporary withdrawal of a license issued by the Division of Motor Vehicles to a safety equipment emission inspection station for a definite period of time.

(33) Tampering: Rendering inoperative, or the intentional maladjustment of any device installed on a motor vehicle designed or intended to control the amount of emissions from a vehicle.

(34) Waiver: A document issued by the Commissioner of Motor Vehicles or his designated agent exempting a particular motor vehicle from the requirements of the emission inspection.

History Note: Authority G.S. 20-2; 20-39; 20-127; 20-183.2; 20-183.6(a); 20-183.7(a);
Temporary Adoption Eff. November 1, 1995 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Eff. October 1, 1994;
Amended Eff. July 1, 2010; February 1, 1996.

19A NCAC 03D .0518 LICENSING OF SAFETY OR EMISSIONS INSPECTION STATIONS
(a) An application for licensing as a Safety Equipment or Safety Equipment Emissions Inspection Station shall be made on forms furnished by the Division of Motor Vehicles and filed with the License and Theft Bureau.
(b) An applicant for licensing for a Safety Equipment or Safety Equipment Emissions Inspection Station shall have:
   (1) A specified area used primarily for repair of motor vehicles.
   (2) At least 45 lineal feet of approximately level floor surface at least 10 feet wide when using a light chart for testing lights, or at least 25 lineal feet of approximately level floor surface at least 10 feet wide when using a light testing machine. Dirt floors are not acceptable.
   (3) Sufficient area enclosed to permit an inspection at all times regardless of weather conditions. Trailers may be inspected outside of the enclosed area as long as attached to prime mover.
   (4) If a light chart is used to check lights, parallel lines at least 3 feet long painted on floor surface 25 feet from the chart.
(c) An applicant for licensing for a Safety Equipment Inspection Station inspecting only motorcycles shall have:
   (1) A specified area used primarily for repair of motorcycles.
   (2) Sufficient area enclosed to permit an inspection at all times regardless of weather conditions. Dirt floors are not acceptable.
   (3) If a light chart is used to check lights, parallel lines at least 3 feet long painted on floor surface 25 feet from the chart.

History Note: Authority G.S. 20-2; 20-39; 20-183.4;
Eff. October 1, 1994;
19A NCAC 03D .0519 STATIONS
(a) Licensed stations shall keep the area where vehicles are inspected and the area where inspection records are kept as required by G.S. 20-183.6A(b) free of spills, debris, hazardous materials or obstructions that inhibit proper inspection of vehicles or present a safety hazard for auditors or inspectors of the Division. All vehicles shall remain in the inspection area during the entire inspection.
(b) Stations with only a 25 foot lineal inspection lane shall not inspect trucks or other vehicles exceeding that length.
(c) Stations with mechanical aimers shall not inspect vehicles with headlamps that were not manufactured to be aimed with this device. These headlamps were manufactured to be aimed with photoelectric eyes, wall charts, computerized headlight test equipment, or on-board headlight aiming devices.
(d) Stations not equipped with an emission analyzer shall not inspect vehicles which are 1996 or newer gasoline powered motor vehicles registered or based in counties designated as non-attainment for air quality standards by either the North Carolina Department of Environment & Natural Resources or U.S. Environmental Protection Agency. However, they are permitted to perform the original safety equipment inspections on vehicles 1995 model year or older, diesel powered vehicles, motorcycles, trailers, and new vehicles.
(e) Each station shall have equipment and tools for carrying out inspections, which include but are not limited to the following:
   (1) 1 jack or lift with minimum capacity of 2 tons,
   (2) 1 headlight tester, wall chart, or aiming kit adapters to fit all headlights,
   (3) 1 workbench,
   (4) 1 creeper,
   (5) 1 tire tread depth gauge (calibrated in 32nds of an inch),
   (7) 1 Emission Analyzer with approved software or 1 Safety Inspection Analyzer with approved software,
   (8) 1 Active telephone line with jack.
(f) Each station inspecting only motorcycles shall have equipment and tools for carrying out inspections, which include but are not limited to the following:
   (1) 1 jack or lift with minimum capacity of 2 tons,
   (2) 1 headlight tester or aiming kit adapters to fit all headlights,
   (3) 1 workbench,
   (4) 1 tire tread depth gauge (calibrated in 32nds of an inch),
   (5) 1 Safety Inspection Analyzer with approved software,
   (6) Active telephone line with jack.


19A NCAC 03D .0520 MECHANIC REQUIREMENTS
(a) An applicant and licensee shall certify that each mechanic meets the requirements as set out in G.S. 20-183.4(c).
(b) At reasonable times, a certified inspection mechanic may be required by authorized law enforcement officers of the Division to demonstrate proficiency and knowledge pertaining to the Safety Equipment or Safety Equipment Exhaust Emission inspection requirements which include completion of an actual or simulated Safety Equipment or Safety Equipment Exhaust Emission Inspection in the presence of any such authorized officer.

History Note: Authority G.S. 20-2; 20-39; 20-183.4; 20-183.6A; Eff. October 1, 1994.
(a) No application for appointment as a safety equipment or safety equipment exhaust emissions inspection station or self-inspector shall be approved unless the requirements are met as set out in this Section.

(b) To become a North Carolina Safety Inspector, an individual must attend and pass an eight-hour Safety Inspection Course offered by a North Carolina Community College. An individual must pass a written examination with a score of no less than 80% correct answers. An additional eight-hour Emissions Inspection course is required if the individual desires to be licensed as an Emissions Inspector. This certification process requires that a person have the ability to read and write. No oral exams shall be given as allowed in CFR 51 Part 40.

(c) Based upon the application and the results of investigations made, each applicant shall be approved or disapproved for licensing. Each applicant approved shall be notified by mail and furnished without charge the appropriate station license or inspection mechanic license. Inspection station licenses shall be valid only for the place of business set forth in the application. Each inspection station shall notify the Division of the name and inspection license number of each inspection mechanic the station employs prior to allowing the inspection mechanic to perform any inspections at that station. The notice shall be on a form supplied by the Division and shall be endorsed by the station owner and the inspection mechanic. The notice shall be submitted to the Division by personal delivery to the local Division inspector or by registered or certified mail addressed to the Division's district office for the district in which the station is located. If any licensed inspection mechanic leaves the employment of a safety equipment station the inspection station shall notify the local Division inspector of that fact in writing within three days after the inspection mechanic's employment is terminated. An inspection mechanic license shall be valid only for the person in whose name it is issued. Upon request, the inspection mechanic shall present his license to any Division inspector who is conducting an audit of the mechanic or the station at which the mechanic is employed.

(d) No Safety Inspection Station shall inspect any gasoline powered vehicle of a 1975 model year or newer excluding the initial year model if the vehicle is registered or based in a county participating in the exhaust emission inspection program unless the station has an exhaust emission analyzer to conduct exhaust emissions inspections. Owners of vehicles registered in a county participating in the exhaust emission program but based and operated outside the county may request in writing on forms furnished by the Division an exemption from the exhaust emission inspection. The forms requesting an exemption shall contain a certification to the effect that the vehicle for which the exemption is requested is registered in an emission inspection county but is permanently based and operated exclusively outside of the county in which it is registered. The Division shall approve and issue a written exemption for the vehicle upon receipt of an exemption request form that is signed by the vehicle owner. A new exemption shall be requested and approved in accordance with this Rule for each inspection period. Safety Inspections stations may conduct the safety equipment inspection in the regular manner. Vehicles exempted from exhaust emission inspection because they are based outside of the county participating in the exhaust emission program must have a copy of the approved exemption form in the vehicle at all times.

History Note:  Authority G.S. 20-2; 20-39; 20-183.3; 20-183.4; Eff. October 1, 1994.
19A NCAC 03D .0522  DENIAL, SUSPENSION OR REVOCATION OF LICENSES

(a) Denial of License:  The Commissioner shall deny the application of any applicant for a Safety Equipment or Safety Equipment Exhaust Emissions Inspection Station License who fails to meet the qualifications set out in G.S. 20, Part 2, Article 3A or the rules in this Section. Applicants disapproved for licensing shall be notified by mail as soon as is practicable. An application received with fraudulent or fictitious information shall be denied. Persons who are denied a license shall be allowed a hearing in accordance with G.S. 20-183.8E.

(b) Suspension or Revocation of License:
   (1) The license of any inspection station violating the Rules in this Section or G.S. 20, Part 2, Article 3A shall be subject to suspension or revocation. The license of any inspection station shall be subject to suspension or revocation at any time when any of its personnel conducting inspections do not meet the rules in this Section. Any person, firm, or corporation whose license is suspended or revoked shall immediately surrender all unused inspection stickers to the Division of Motor Vehicles and no such licensee shall inspect vehicles while its license is suspended or revoked. Every licensee whose license is suspended or revoked who is assessed a civil penalty or who receives a warning letter from the Division shall be allowed a hearing in accordance with G.S. 20-183.8E.

   (2) Prior to the reinstatement of license of any Safety Equipment or Safety Equipment Exhaust Emissions Inspection Station License which has, by order of the Commissioner, been revoked or suspended, the applicant shall demonstrate to the satisfaction of the Commissioner or his duly authorized agent that its employees have adequate knowledge of the safety equipment or safety equipment exhaust emission inspection procedures and requirements described in these rules in this Section and that the location is mechanically equipped to carry out proper inspections. Prior to the reinstatement of any Inspection Mechanic License which has, by order of the Commissioner, been revoked or suspended, the applicant shall attend a training session in Safety Equipment or Safety Equipment Exhaust Emission Inspection. Proof of course attendance and passing a written test must be presented to a Division of Motor Vehicles representative.

   (3) Motorists assessed civil penalties or fines shall be allowed a hearing in accordance with G.S. 20-183.8E. Motorists requesting a hearing shall mail a written hearing request to the Commissioner of Motor Vehicles, 1100 New Bern Avenue, Raleigh, NC 27697.

History Note:  Authority G.S. 20-2; 20-39; 20-183.8D; 20-183.8E; Eff. October 1, 1994.

19A NCAC 03D .0523  OPERATION OF SAFETY OR EXHAUST EMISSIONS INSPECTION STATIONS

(a) Posting information:
   (1) Each station shall display in a conspicuous place the following:
      (A) Official Safety Equipment or Safety Equipment Exhaust Emissions Inspection Procedure Poster;
      (B) Safety Equipment or Safety Equipment Exhaust Emissions Inspection Station License;
      (C) All inspection mechanic licenses issued by North Carolina Division of Motor Vehicles;
      (D) On the outside of its building or immediately adjacent thereto a sign in block letters at least four inches in height bearing the words: OFFICIAL INSPECTION STATION.

   (2) Station licenses shall be posted in a frame under glass.

(b) Periodic Requirements for Licensed Inspection Mechanic. At reasonable times, licensed inspection mechanics may be periodically required by authorized law enforcement officers of the Division to demonstrate knowledge pertaining to the Safety Equipment or Safety Equipment Exhaust Emissions inspections in the presence of any such authorized officer.

(c) Location. Inspections shall be conducted only at the location shown on the inspection station's license and only in the designated inspection area. Trailers may be inspected outside of inspection area as long as they are attached to the engine unit.

(d) Vehicle presented to be inspected. Each station shall inspect any vehicle presented for inspection according to the year model, and type of engine except as provided in this section or when exempted from the emissions inspection by a waiver issued by the Commissioner of Motor Vehicles or his designated agent.

(e) Repairs. Inspection stations shall not in any manner attempt to require owners or operators of disapproved vehicles to have the vehicles repaired at the inspection station. The repairs necessary for approval may be made at any place chosen by the owner or operator of the vehicle. Permission must be obtained before making any repairs or adjustments. Requiring unnecessary repairs is prohibited.

(f) Hours of operation. Each licensed public station must be open for at least eight normal business hours, five days per week. Official State holidays are excepted. A licensed inspection mechanic shall be on duty to conduct inspections during the hours specified.

History Note: Authority G.S. 20-2; 20-39; 20-183.4; Eff. October 1, 1994.
19A NCAC 03D .0524 INSPECTION STICKERS

(a) Acquisition:

1. Licensed safety equipment or safety equipment exhaust emission inspection stations and self-inspectors shall procure stickers from the Division of Motor Vehicles and from no other source.

2. Orders for stickers shall be placed with a local agent of the Enforcement Section. Requests for stickers shall be accompanied by proper remittance. For safety equipment inspection stickers the amount of one dollar ($1.00) per sticker shall be required. For safety equipment exhaust emission stickers, two dollars and forty cents ($2.40) per sticker shall be required. Orders for windshield stickers shall be placed in units of 50. Orders for motorcycles/trailers and non-windshield safety equipment exhaust emission inspection stickers shall be placed in units of ten. Safety Equipment or Safety Equipment Exhaust Emission Windshield Inspection Stickers shall be issued in books of 50.

3. Orders placed in person at the local office of the Enforcement Section shall be accompanied by written authorization from the station to which the stickers are to be issued, upon forms furnished by the Division, if the order is placed by other than the person in whose name the station is licensed.

4. All licensed stations shall keep inspection stickers and numeral inserts on hand at all times.

5. Licensed inspection stations and self-inspectors shall, upon request, be furnished forms required to be used by the rules in this Section. DMV Enforcement shall furnish forms to licensed inspection stations and self-inspectors.

(b) Application:

1. The inspection sticker shall be affixed only to vehicles inspected and approved in accordance with these Rules and G.S. 20, Article 3A, Part 2. Stickers must be affixed to approved vehicles within the inspection area of the inspection station by the person conducting the inspection. The number of the sticker shall be recorded on the receipt and statement. No person shall furnish, give, lend, or sell to any owner or operator of a motor vehicle or to any other person, or place in or on any vehicle an inspection sticker unless such vehicle has been inspected and approved in accordance with these Rules and G.S. 20, Article 3A, Part 2.

2. When any motor vehicle to be inspected under the Safety Equipment Act bears a prior inspection sticker, such prior inspection sticker may not be removed from the vehicle until such vehicle has passed inspection, is approved, and is ready to have the new sticker affixed. If the vehicle being inspected is rejected, the old sticker is to remain affixed until the defects causing rejection have been corrected and the vehicle has been reinspected and approved. Every licensed inspection mechanic upon approving any motor vehicle shall remove the prior inspection sticker before affixing the new inspection sticker.

3. An inspection sticker shall be placed upon the approved vehicle on the inside of the windshield at the bottom of the left side so that the left edge of the sticker is no more than one inch from the left edge of the windshield. For vehicles without windshields the motorcycle/trailer or non-windshield safety equipment or safety equipment exhaust emission sticker shall be used. The sticker shall be placed on the left side of the vehicle as near as possible to the front. Prior to affixing the windshield type inspection mechanic shall attach to the sticker the appropriate numeral inserts indicating the month and year of expiration. The inspection mechanic shall enter on the sticker in the appropriate spaces the date of inspection, the odometer mileage as taken from the vehicle at the time inspection is performed, the inspection mechanic's name, and the inspection station's license number. This information shall be entered on the windshield type inspection sticker with a ball point pen or a laundry marking pen. Glass/plastic windshields require a platform to prevent damage to the windshield. The inspection sticker shall be affixed to the platform; when the sticker is removed from the windshield it shall no longer be valid. Prior to affixing the motorcycle/trailer or non-windshield safety/emission sticker the inspection mechanic must punch the inspection sticker with a 1/4 inch punch indicating the month inspection performed and year of expiration.

4. All safety equipment or safety equipment exhaust emission inspection stations shall be issued two types of stickers. The stickers shall be of different color and shall be affixed to the proper vehicle according to the type of inspection required.

5. The following tables indicate month and year of inspection:

<table>
<thead>
<tr>
<th>Month Number Inserts</th>
<th>Year Number Inserts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>vehicle inspected in January</td>
</tr>
<tr>
<td>2</td>
<td>vehicle inspected in February</td>
</tr>
<tr>
<td>3</td>
<td>vehicle inspected in March</td>
</tr>
<tr>
<td>4</td>
<td>vehicle inspected in April</td>
</tr>
<tr>
<td>5</td>
<td>vehicle inspected in May</td>
</tr>
<tr>
<td>6</td>
<td>vehicle inspected in June</td>
</tr>
<tr>
<td>7</td>
<td>vehicle inspected in July</td>
</tr>
<tr>
<td>8</td>
<td>vehicle inspected in August</td>
</tr>
<tr>
<td>9</td>
<td>vehicle inspected in September</td>
</tr>
<tr>
<td>95</td>
<td>vehicle inspected in 1994</td>
</tr>
<tr>
<td>96</td>
<td>vehicle inspected in 1995</td>
</tr>
<tr>
<td>97</td>
<td>vehicle inspected in 1996</td>
</tr>
<tr>
<td>98</td>
<td>vehicle inspected in 1997</td>
</tr>
<tr>
<td>99</td>
<td>vehicle inspected in 1998</td>
</tr>
<tr>
<td>00</td>
<td>vehicle inspected in 1999</td>
</tr>
<tr>
<td>01</td>
<td>vehicle inspected in 2000</td>
</tr>
<tr>
<td>02</td>
<td>vehicle inspected in 2001</td>
</tr>
<tr>
<td>03</td>
<td>vehicle inspected in 2002</td>
</tr>
</tbody>
</table>
(c) Control:

(1) Licensed inspection stations and self-inspectors are strictly accountable for inspection stickers in their possession. Any licensed inspection station losing or not accounting for any inspection sticker shall be subject to revocation or suspension of inspection station license as provided by these Rules. Stickers shall be locked in a safe place to guard against loss or theft.

(2) Upon discovery of a loss or theft of any inspection stickers, station owners and self-inspectors must as soon as practicable report such loss or theft to the Enforcement Section, Motor Vehicles Building, 1100 New Bern Avenue, Raleigh, North Carolina, 27697. Oral reports shall be made upon discovery of loss or theft by the quickest means available to the local Enforcement Section Inspector.

(3) Inspection stations and self-inspectors shall not furnish, give, loan or sell inspection stickers to any other licensed inspection station or self-inspector.

(4) Inspection stickers shall not be transferred or reissued. They shall only be affixed to the vehicle as designated on the receipt and statement, and only when a complete inspection of the vehicle confirms it meets requirements for approval.

(5) Each inspection station and self-inspector shall protect stickers from larceny or damage. No refund shall be allowed for stolen, soiled, lost, or torn stickers and the count of the Division for returned stickers shall be accepted as final. All unused stickers must be accounted for. A refund shall be made for expired motorcycle/trailer stickers. A request for refund along with unused stickers must be mailed to the Enforcement Section, Division of Motor Vehicles, 1100 New Bern Avenue, Raleigh, North Carolina, 27697, between January 1st and January 31st of the following year. Refunds shall not be permitted for expired stickers postmarked after January 31st. Unused stickers for which a refund is not requested must be retained in a safe place until audited and destroyed by an agent of the Enforcement Section.

(6) All inspection supplies, unused stickers, copies of receipts and statements pertaining to the issuance of stickers, all bulletins and all forms issued by the Division of Motor Vehicles pursuant to the carrying out of the Motor Vehicle Inspection Program are the property of the Division of Motor Vehicles and shall be treated as such by any inspection station. Upon suspension or revocation of any safety equipment or safety equipment exhaust emission inspection station license or whenever any licensee voluntarily surrenders such license or ceases to do business, all items held by such licensee in carrying out the inspection shall be surrendered to the Division of Motor Vehicles. Such items shall be inventoried by the designated agent of the Division of Motor Vehicles and shall be receipted upon surrender. Refunds for unused stickers shall be made by check from the Division of Motor Vehicles in Raleigh.

(d) Requirement of records:

(1) Monthly report forms. Each licensed safety equipment inspection station and each licensed safety equipment self-inspector shall maintain at the station a monthly inspection report sheet listing the beginning and ending numbers for each series of stickers issued for vehicles inspected upon forms furnished by the Division. A total of all defects and repairs and charges listed on the receipt and statements shall be recorded in the appropriate column of the monthly inspection report. This report shall be completed in duplicate and the original forwarded to the Enforcement Section, North Carolina Division of Motor Vehicles, monthly on or before the 10th of the month following the month for which it was completed. The second copy shall be retained by the station for a period of at least 18 months.

(2) Receipt and statement. Licensed Safety Equipment or Safety Equipment Exhaust Emission inspection stations shall furnish the operator of each vehicle inspected the original copy of the "Receipt and Statement" indicating that the vehicle has been inspected and indicating thereon the items approved or disapproved. The second copy shall be retained by the inspection station for at least 18 months following the inspection.

(3) Records available. Each safety equipment or safety equipment exhaust emission inspection station shall maintain records required and such records shall be made available for inspection by any law enforcement officer, upon demand, during normal business hours.

History Note: Authority G.S. 20-2; 20-39; 20-183.6A; Eff. October 1, 1994.
19A NCAC 03D .0525  PRE-INSPECTION REQUIREMENTS

Prior to performing an inspection, the inspection mechanic shall:

(1) Have all occupants leave the vehicle.
(2) Require the operator to produce the current registration card to the vehicle.
(3) Print or write legibly, use a ball point pen, and list the license plate number, serial number, mileage, number of cylinders, make, year and other required information for the vehicle on the Receipt and Statement (Form No. SI-15) if the inspection is performed by the safety equipment inspection mechanic. If the vehicle does not have a license plate, "none" shall be indicated. If inspected for a dealership, the dealer sticker number shall be indicated.
(4) Enter all information if the inspection is performed by the safety equipment exhaust emission inspection mechanic as requested by the analyzer. All vehicle identification numbers entered into the NCAS-90 analyzer shall be entered through a "one-dimensional" (ID) bar-code scanner capable of reading vehicle identification numbers and information printed on vehicle registration cards. A station's failure to maintain an operating bar-code scanner shall result in DMV suspending a station's inspection operations until the station has a properly functioning bar-code scanner. In the event the vehicle identification number is not readable by the bar-code scanner or is not printed on the registration card, the station shall enter the information by scanning the public vehicle identification number through the vehicle windshield or off of the driver side door or door post. If the vehicle identification number cannot be scanned through any of the methods listed in this rule, it may be manually entered by entering the vehicle identification number correctly twice through manual keyboard entry. Stations must achieve a match rate to the registration data base of 95% or greater. Failure to maintain a 95% match rate for more than three months of a calendar year shall result in a Type II penalty.

History Note: Authority G.S. 20-2; 20-39; 20-183.2; 20-183.6A; Eff. October 1, 1994;
Codifier determined that agency did not meet criteria for temporary rule Eff. September 24, 1997;
Temporary Amendment Eff. November 1, 1997;

19A NCAC 03D .0526  SAFETY EQUIPMENT GRADING ITEMS

The authorized safety equipment inspection mechanic shall approve or disapprove each inspected item. The following requirements shall apply:

(1) If the item inspected is approved, a check shall be placed in the appropriate block as indicated on the SI-15 form.
(2) If the item inspected is not approved, an "X" shall be placed in the appropriate block as indicated on the SI-15 form.
(3) If the disapproved item is corrected during inspection, the appropriate block in "corrected during inspection" shall be checked as indicated on the SI-15 form.

History Note: Authority G.S. 20-2; 20-39; 20-183.2; 20-183.4D; 20-183.6A; Eff. October 1, 1994.

19A NCAC 03D .0527  EXHAUST EMISSION CONTROLS TAMPERING CHECK

The authorized safety equipment exhaust emission inspection mechanic must approve or disapprove each inspected item. The following requirements as listed on the SI-15, which is the receipt and statement form, shall apply:

(1) Not applicable - This block shall be checked if the vehicle inspected was not originally equipped with the emission control devices as listed.
(2) Connected - This block shall be checked if the vehicle is equipped with the item and it is connected and in an operable condition.
(3) Disconnected - This block shall be checked if the required emission equipment has been disconnected, removed or made inoperable.
(4) Corrected - This block shall be checked if the emission equipment which was disconnected or inoperable is repaired or replaced.

History Note: Authority G.S. 20-2; 20-39; 20-183.4D; 20-183.5; Eff. October 1, 1994.
19A NCAC 03D .0528  SAFETY EQUIPMENT EXHAUST EMISSION INSPECTIONS
Safety equipment exhaust emission inspection mechanic shall enter the following information into the analyzer:

(1) For those items which are inspected and approved, the letter "P" for passed shall be entered.
(2) For those items which are inspected and disapproved, the letter "F" for failed shall be entered.
(3) For those items which were disapproved and corrected, the letter "C" for corrected shall be entered.
(4) For those items which do not apply to the vehicle inspected, the letter "N" for not applicable shall be entered.

History Note: Authority G.S. 20-2; 20-39; 20-183.2; 20-183.4D; 20-183.6A;

19A NCAC 03D .0529  CERTIFICATION
When the vehicle has been approved, the Inspection mechanic shall:
(1) Prepare the appropriate sticker (safety equipment or safety equipment/exhaust emission) for affixing to the vehicle.
(2) Remove the old inspection sticker from the windshield.
(3) Follow the instructions on the "Inspection Sticker."
(4) Place the "Inspection Sticker" on the inside of windshield at the bottom of the left side so that the edge of the sticker is no more than one inch from the left side of the windshield. Platforms are required for glass-plastic windshields.
(5) For vehicles without windshields, issue motorcycle/trailer stickers or non-windshield safety/emission stickers. The sticker shall be placed on the left side of vehicle as near the front as possible.
(6) List the total inspection repair charges made, if any, on the "Receipt and Statement" form along with the serial number of the inspection sticker which was attached to the inspected vehicle. A Safety Equipment Exhaust Emission inspection mechanic must enter all required information into the analyzer.
(7) Collect fees as described in G.S. 20-183.7.
(8) Sign and give the original of the "Receipt and Statement" form to the operator or owner.

History Note: Authority G.S. 20-2; 20-39; 20-183.4D; 20-183.7;

19A NCAC 03D .0530  DISAPPROVAL
If a vehicle inspected is disapproved, the inspection mechanic at the end of the total inspection shall advise the owner or operator of the defect or defects found during the inspection. Repairs may only be made at the request of the owner/operator. Upon completion of authorized repairs, the inspection mechanic shall follow the certification process. If the owner or operator requests the repairs to be made at some other location, then the inspection mechanic conducting the inspection shall:

(1) Complete the "Receipt and Statement" showing the vehicle was "disapproved" and signed by the inspection mechanic.
(2) Collect fees as prescribed in G.S. 20-183.7.
(3) After giving the owner or operator the original copy of the "Receipt and Statement" explain to the owner/operator he has 30 days to bring the vehicle back to the inspection station for reinspection at no charge when the vehicle was disapproved for either safety or emissions defects.

History Note: Authority G.S. 20-2; 20-39; 20-183.4D; 20-183.5;

19A NCAC 03D .0531  REINSPECTION
(a) Payment of the inspection fee at the time of the original inspection by the owner or operator of a "disapproved" vehicle entitles the vehicle to reinspection, free of charge, by the initial inspection station.
(b) If the vehicle is approved following reinspection, the inspection mechanic shall check the appropriate block in the "Reinspected and Approved" column on the SI-15 (Receipt and Statement form), and indicate the date of reinspection. The inspection mechanic shall issue the correct "Inspection Sticker" and collect the sticker fee as prescribed in G.S. 20-183.7.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(c); 20-183.7;
19A NCAC 03D .0532  BRAKES
No vehicle brakes shall be approved for an inspection sticker unless the items indicated in this Rule are inspected and found to meet the minimum requirements established in G.S. 20-124 and this Rule.

(1) Footbrakes shall not be approved if:
   (a) When applying brakes to moving vehicle, braking force is not distributed evenly to all wheels originally equipped with brakes by the manufacturer. (The inspection mechanic must drive vehicle to make this test. The inspector may check the brakes while driving vehicle forward into the inspection area.)
   (b) There is audible indication (metal on metal) that the brake lining is worn to the extent that it is no longer serviceable. (The wheel must be pulled and the brake lining examined when this occurs.)
   (c) Pedal reserve is less than 1/3 of the total possible travel when the brakes are fully applied, or does not meet the manufacturer's specification for power brakes or air brakes.
   (d) The reservoir of the master cylinder is not full. (Only brake fluid meeting SAE specifications for heavy duty hydraulic brake fluid shall be used when adding or changing brake fluid.)
   (e) There is a visible leakage or audible seepage in hydraulic, vacuum or air lines and cylinders, or visible cracked, chafed, worn, or weakened hoses.
   (f) The vehicle has any part of the brake system removed or disconnected.
   (g) The brake pedal moves slowly toward the toeboard (indicating fluid leakage) while pedal pressure is maintained for one minute.

(2) Inspection mechanics are not expected to remove wheels in order to inspect the brakes. (Except as provided in Sub-item (1)(b) of this Rule.) Inspection mechanic must raise vehicle to get beneath to check underside.

(3) Handbrakes (auxiliary, parking or holding) shall not be approved if:
   (a) There is no lever reserve when the brake is fully applied.
   (b) Cables are visibly frayed or frozen, or there are missing or defective cotter pins or broken or missing retracting springs or worn rods or couplings.
   (c) The operating mechanism, when fully applied, fails to hold the brakes in the applied position without manual effort.
   (d) When emergency or handbrakes are applied they fail to hold vehicle.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(1); Eff. October 1, 1994.

19A NCAC 03D .0533  LIGHTS
(a) Headlights shall conform to the requirements of G.S. 20-129(b) and (c). Headlights shall not be approved if:
   (1) There are not at least two headlamps (at least four on dual headlamp systems which require four units) on all self-propelled vehicles except that motorcycles and motor driven cycles need only one.
   (2) The lens produces other than a white or yellow light.
   (3) Any lens is cracked, broken, discolored, missing, or rotated away from the proper position, or any reflector is not clean and bright.
   (4) The high beam-low beam dimmer switch does not operate properly or the high beam indicator light does not burn on vehicles manufactured after January 1, 1956.
   (5) Lights 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.
   (6) Foreign materials (such as shields, half of lens painted) are placed on the headlamp lens that interferes with light beam of lamp.
   (7) Lights are improperly aimed. (A light testing machine or light testing chart shall be used to determine this.)
   (8) Lights project a dazzling or glaring light when on low beam.

(b) Rear Lights shall conform to the requirements of G.S. 20-129(d). Taillights shall not be approved if:
   (1) All original equipped rear lamps or the equivalent are not in working order.
   (2) The lens is cracked, discolored, or of a color other than red.
   (3) They do not operate properly and project white light on the license plate.
   (4) They are not securely mounted.

(c) Stoplights shall conform to the requirements of G.S. 20-129(g). A stoplight shall not be approved if:
   (1) The lens is cracked, discolored or of a color other than red or amber. Minor cracks on lenses shall not lead to disapproval unless water is likely to short out the bulb.
   (2) It does not come on when pressure is applied to foot brake.
   (3) It is not securely mounted so as to project a light to the rear.

(d) Vehicles shall have the lights as required by G.S. 20-129.1.
(e) Parking lights shall conform to the requirements of G.S. 20-134. A vehicle shall not be approved if parking lights are not working.

(f) Back-Up Lamps. Any motor vehicle may be equipped with not more than two back-up lamps either separately or in combination with other lamps but any such back-up lamp shall not be lighted when the motor vehicle is in a forward motion nor shall the back-up lamp emit any color other than white. A back-up lamp is not a mandatory requirement.

History Note: Authority G.S. 20-2; 20-39; 20-183.3;

19A NCAC 03D .0534 HORN
(a) The horn shall not be approved if:

1. It will not emit a sound audible for a distance of at least 200 feet, or it emits an unusually loud or harsh sound. Original equipment in working order will meet these requirements.
2. It has frayed, broken, or missing wiring; if wiring harnesses are broken or missing; if horn button is not mounted securely and in a position which is easily accessible to the driver; or if the horn is not securely mounted to the motor vehicle.
3. Operation of the horn interferes with the operation of any other mechanism.

(b) Vehicles equipped with sirens shall not be approved unless they are within the class listed in G.S. 20-125(b) as being authorized to carry a siren.

History Note: Authority G.S. 20-2; 20-39; 20-183.3;

19A NCAC 03D .0535 STEERING MECHANISM
(a) The inspection mechanic must raise vehicle to get beneath to check steering mechanism.

(b) The steering mechanism shall not be approved if:

1. With front wheels in straight ahead position there is more than three inches of free play in steering wheels up to 18 inches in diameter or more than four inches of free play in steering wheels over 18 inches in diameter. If vehicle is equipped with power steering, the engine must be operating.
2. Either front or rear springs are noticeably sagging or broken.
3. The front wheels or front end assembly is bent or twisted or bolts, nuts or rivets are loose or missing.
4. Power steering system shows visible leaks or the power steering belt is loose or worn.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(4);

19A NCAC 03D .0536 WINDSHIELD WIPER
Windshield wipers shall not be approved if:

1. The vehicle is not equipped with a windshield wiper or wipers, provided the vehicle has a windshield.
2. The wiper or wipers do not operate freely.
3. The wiper controls are not so constructed and located that the driver may operate them.
4. The wiper or wipers are not adequate to clean rain, snow and other matter from the windshield.
5. Parts of blades or arms are missing or show evidence of damage.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(5);
19A NCAC 03D .0537  DIRECTIONAL SIGNALS
(a) G.S. 20-125.1 requires all vehicles except motorcycles beginning with the 1954 models to be equipped with turn signals.
(b) Vehicles required to have signals shall be inspected and disapproved if:
   (1) Signals are not present and of a type approved by the Commissioner as specified in G.S. 20-125.1. Original directional signals on vehicles manufactured after July 1, 1953, are considered to be of a type approved by the Commissioner. Such signals shall be those which will allow the operator of the vehicle to clearly show another operator approaching from a distance of 200 feet from the front or rear his intention to turn the vehicle.
   (2) All lights do not operate properly, or if any lenses are broken, missing, or do not fit properly.
   (3) Signal lens color is other than red or amber on the rear and other than white or amber on the front.
   (4) Lamps are not securely mounted or wiring and connections are not in good condition.
   (5) Signals are not visible from front or back due to faulty or damaged mounting or due to manner in which mounted.
   (6) Switch is not so located as to be convenient for the driver to operate and so that its operation does not interfere with operation of other mechanisms.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(6); Eff. October 1, 1994.

19A NCAC 03D .0538  TIRES
(a) A vehicle shall be disapproved if:
   (1) Any tire has cuts or snags that expose the cords.
   (2) Any tire has a visible bump, bulge, or knot apparently related to tread or sidewall separation or partial failure of the tire structure including bead area.
(b) Tire depth shall be measured by a tread depth gauge which shall be of a type calibrated in thirty-seconds of an inch. Readings shall be taken in two adjacent tread grooves of the tire around the circumference of the tire. Readings for a tire with a tread design that does not have two adjacent grooves near the center shall be taken at the center of the tire around the circumference of the tire. Each tire must be completely lifted from the ground for an inspection to be performed.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(7); Eff. October 1, 1994.

19A NCAC 03D .0539  TIRES - DEFINITIONS
As used in this and the preceding Rule, these terms have the following meaning:
   (1) Rim is a metal support for the tire or tire and tube assembly on the wheel. Tire beads are seated on the rim.
   (2) Bead is that part of the tire which is shaped to fit the rim. The bead is made of high tensile steel wires wrapped and reinforced by the plies.
   (3) Sidewall is that portion of the tire between tread and bead.
   (4) Cord is made from textile, steel wire strands forming the plies or other structure of the tires.
   (5) Ply is layers of rubber coated parallel cords forming the tire body.
   (6) Rib is the tread section running circumferentially around the tire.
   (7) Groove is the space between two tread ribs. A tire shall not be approved if there is less than 2/32 inch tread at two or more locations around the circumference of the tire in two adjacent major tread grooves or if the tread wear indicators are in contact with the roadway at two or more locations around the circumference of the tire in two adjacent major tread grooves.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(7); Eff. October 1, 1994.
Rear view mirrors shall not be approved if:

1. Loosely mounted.
2. Forward vision of the device is obstructed by mirror assembly.
3. They do not provide a clear view of the highway to the rear.
4. Cracked, broken, have sharp edges or cannot be cleaned such that rear vision is not obscured.
5. Very difficult to adjust or they will not maintain a set adjustment.
6. Bus, truck or truck-tractor with a GVWR of 10,001 pounds or more is not equipped with a rear view mirror on each side.
7. Vehicles manufactured, assembled, or first sold after January 1, 1966 are not equipped with outside rear view mirrors on the driver's side.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(8); Eff. October 1, 1994.

An exhaust emission shall not be approved if the vehicle is a 1968 year model or newer and any of the visible emission control devices placed thereon by the manufacturer are missing, disconnected, made inoperative or have been altered without approval of the Department of Environment, Health, and Natural Resources.

(a) An exhaust emission shall not be approved if the vehicle is a 1968 year model or newer and any of the visible emission control devices placed thereon by the manufacturer are missing, disconnected, made inoperative or have been altered without approval of the Department of Environment, Health, and Natural Resources.

(b) If the unleaded gas restrictor on a vehicle manufactured after model year 1967 has been altered or removed a new or reconditioned catalytic converter and unleaded gas restrictor must be replaced before the vehicle passes inspection.

(c) An exhaust system shall not be approved if:

1. The vehicle has no muffler.
2. The muffler, exhaust or tail pipes have leaking joints.
3. The exhaust or tail pipes have holes, leaking seams or leaking patches on muffler.
4. The tail pipe end is pinched.
5. The exhaust system is equipped with muffler cut-out or muffler by-pass.
6. Any part of the system passes through the passenger compartment.

History Note: Authority G.S. 20-2; 20-39; 20-183.3(9); Eff. October 1, 1994.

Pursuant to G.S. 20-183.8A(2), a civil penalty shall be assessed against individuals who instruct or allow a person to remove, disconnect, tamper with, or render inoperable any emissions control device equipped by the manufacturer of any motor vehicle as described in G.S. 20-183.3. These devices include:

1. Catalytic converter,
2. Unleaded gas restrictor,
3. Air pump system,
4. EGR valve,
5. PCV valve,
6. Thermostatic air cleaner,
7. Evaporative emission system,
8. Oxygen sensor.

History Note: Authority G.S. 20-2; 20-39; 20-183.8A; Eff. October 1, 1994.
19A NCAC 03D .0543 INSPECTION PROCEDURE FOR EMISSIONS EQUIPMENT

(a) In addition to the required safety inspection, all gasoline-powered motor vehicles which are registered or based in an exhaust emission county and which are 1975 model year or newer shall have an exhaust emission test. This exhaust emission test is in addition to the safety inspection required in the rules in this Section and shall be administered as a part of the regular inspection only. The exhaust emission readings resulting from the test must be at or below the standards as set forth in Paragraph (e) of this Rule or a waiver must be issued by the Commissioner of Motor Vehicles or his designated agent as specified in 19A NCAC 3D .0551. The current year model vehicle shall be subject to the exhaust emissions inspection if presented for reinspection at anytime after the original inspection.

(b) Vehicles which are purchased in a non-exhaust emission county and which are to be based in an exhaust emission county, shall, within 10 days of purchase, be reinspected in compliance with the Safety Equipment Exhaust Emission requirements.

(c) The following requirements shall be adhered to by the license inspection station for calibration of the exhaust emission analyzer(s) used for state inspections. The requirements are:

1. Inspections shall be performed only with an analyzer and software which has been certified by N.C. DEHNR.
2. All certified analyzers shall automatically require the inspection mechanic to perform a self-calibration and leak test every three days. If the analyzer does not require a gas calibration/leak test every three days, no additional inspections shall be performed and the DMV Inspector shall be notified.
3. All analyzers must be equipped with two tanks of span gases in the following concentrations:
   (A) 1.0% carbon monoxide, 6.0% carbon dioxide and 300 PPM Propane;
   (B) 4.0% carbon monoxide, 12.0% carbon dioxide and 1200 PPM Propane.
4. All analyzer maintenance shall be performed according to the manufacturer's specifications and reported on a maintenance log which shall be maintained at each station. Items to be recorded include:
   (A) all filter replacements;
   (B) water trap service; and
   (C) any replacement or repair of the probe or sample line.
5. Multi Point Calibration Requirements.
   (A) In high-volume stations (those performing 5000 or more tests per year), analyzers shall undergo two point calibrations each operating day and shall continually compensate for changes in barometric pressure. Calibration shall be checked at least every four hours and the analyzer adjusted if the reading is more than 2% different from the span gas value. Each time the analyzer electronic or optical systems are repaired or replaced, a gas calibration shall be performed prior to returning the unit to service.
   (B) In high-volume stations, monthly multi-point calibrations shall be performed. Low-volume stations shall perform multi-point calibrations every six months. The calibration curve shall be checked at 20%, 40%, 60%, and 80% of full scale and adjusted or repaired to meet specifications listed in 40 CFR Part 51, Appendix D(I)(b)(1) which is hereby incorporated by reference, including all subsequent editions. This publication is available upon request at no cost from DMV Enforcement, 1100 New Bern Avenue, Raleigh, NC 27697, telephone (919) 733-7872. The necessary additional calibration gas bottles need not be a permanent part of the analyzer, but the analyzer software must require the periodic multi-point calibration and the analyzer hardware must accept the calibration gas from an external source.
   (C) Gas calibration shall be accomplished by introducing National Bureau of Standards traceable gases into the analyzer either through the calibration port or through the probe. Span gases utilized for calibration shall be within two percent of the required span points.
6. Requirements for keeping and submitting records are as follows:
   (A) Copies of the "Receipt and Statement" shall be removed from the analyzer at the time of download and filed with other business records and kept in sequence for review by the DMV Inspector during his audit. These copies of the "Receipt and Statement" must be retained for 18 months.
   (B) A monthly report shall be submitted electronically by the analyzer on the date and time specified by the Division. It is the station's responsibility to connect the analyzer to the proper telephone line and leave the machine properly powered for the telephone transmittal of records on the specified date and time each and every month. Failure to comply with this requirement may result in the suspension of the station license.
   (C) Station owner(s) shall maintain the printer in a condition so that all copies of the Vehicle Inspection Receipt/Statement are clear and legible.

(d) The procedures for inspection shall be as follows:

1. The vehicle's engine must be at normal operating temperature, and all accessories must be off.
2. The exhaust system from the engine manifold to the rear most portion of the tailpipe shall be examined to determine that the exhaust system is free from cracks, holes or dents which would restrict, reduce, allow
leakage or any way prohibit the free flow of exhaust from the engine to the rear most portion of the
tailpipe. The Exhaust Emissions Test requires one analyzer probe to be inserted 10” to 16” in the end of
tailpipe. If the exhaust system is defective (leaking joints, holes, leaking seams, or leaking patches) this
could interfere with an accurate exhaust emissions reading. A defective exhaust system is a failure item
under the safety inspection requirements.

(3) The inspection mechanic shall conduct the emission test with the use of an exhaust emission analyzer
which has met N.C. DEHNR certification and has been approved by the North Carolina Commissioner of
Motor Vehicles or his designated agent. Standards for inspection are found in the publication,
"Specification for the North Carolina Analyzer System" which is hereby incorporated by reference,
including all subsequent amendments and editions. This publication is available at no cost from the North
Carolina Department of Environment, Health, and Natural Resources, Division of Environmental
Management Air Quality Section, Mobile Sources, 15 North West Street, Raleigh, NC 27626, telephone
919-733-1481.

(4) The emission's test shall be conducted using the following procedures: (All instructions provided by the
analyzer must be followed):

(A) Idle Mode Emission Test:
(i) Analyzer must be warmed-up.
(ii) The analyzer shall prompt the inspector to test the vehicle in as-received condition with
the transmission in neutral or park. All accessories shall be turned off and the engine
running at normal operating temperature.
(iii) The inspector shall deploy a tachometer, insert the sample probe into the tailpipe, then
the test sequence shall begin.
(iv) Pre-condition mode shall initiate when engine speed is between 2200 and 2800 RPM
and continue for 30 seconds.
(v) Idle mode test shall start when the vehicle engine speed is between 350 and 1100 RPM.
The mode shall last a minimum of 30 seconds and a maximum of 90 seconds.
(vi) If the vehicle passes, the reported scores shall be the passing readings. If the vehicle
fails, the inspector shall proceed to the second chance test.
(vii) Second chance pre-condition mode shall initiate when engine speed is between 2200 and
2800 RPM and continue for 180 seconds.
(viii) Second chance idle test shall start when the vehicle engine speed is between 350 and
1100 RPM. The mode shall last for a maximum of 90 seconds. NOTE: The engine shall
be shut off and restarted for 1981-1986 Ford Motor Company products and 1984-1985
Honda Preludes, as instructed by the analyzer.
(ix) The pass/fail analysis shall begin after an initial time delay of 10 seconds.
(x) The pass/fail determination is made based on a comparison of the HC and CO readings
against the idle emission standards for that particular vehicle.

(B) The analyzer shall test and disapprove a vehicle when the Carbon Monoxide (CO) or
Hydrocarbon (HC) reading of the inspected vehicle is higher than the standards set forth in
Paragraph (e) of this Rule.

(e) The following chart indicates the maximum allowed Emission Standards which became effective April 1,1991:

<table>
<thead>
<tr>
<th>VEHICLE CLASS</th>
<th>MODEL YEAR</th>
<th>CARBON MONOXIDE (CO) STANDARD</th>
<th>HYDROCARBON (HC) STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light-duty vehicles</td>
<td>1975-1977</td>
<td>4.5</td>
<td>450</td>
</tr>
<tr>
<td></td>
<td>1978-1979</td>
<td>3.5</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>2.0</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>1981 &amp; later</td>
<td>1.2</td>
<td>220</td>
</tr>
<tr>
<td>Heavy-duty vehicles</td>
<td>1975-78</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>1979 &amp; later</td>
<td>4.0</td>
<td>400</td>
</tr>
</tbody>
</table>

(f) A challenge waiver may be issued by the Commissioner of Motor Vehicles or his designated agent. If the owner/operator
of the vehicle suspects the analyzer is incorrect, he may petition the Division of Motor Vehicles to test the vehicle in question
to determine the analyzer's accuracy. If the test determines the vehicle to be in compliance with the Emission Standards, a
challenge waiver shall be issued and the Division shall immediately require an examination of the station analyzer in question
and take corrective action.

History Note: Authority G.S. 20-2; 20-39; 20-183.3;
Motorcycle brakes shall fail safety inspection if:
(a) When applying brakes to moving vehicle, there is insufficient force to stop the vehicle.
(b) Brakes are worn in such a manner that there is an uneven braking force.
(c) There is an audible or visual indication that the brake lining is worn to the extent it is no longer serviceable.
(d) There is less than one-third reserve in either footbrake or handbrake total possible travel when the brakes are fully applied.
(e) Reservoirs of braking cylinders are not full.
(f) There is a visible leakage of fluid from any brake line or brake component.
(g) Handbrake cables are frayed, broken, or frozen or linkage is defective.

Motorcycle headlamps shall fail safety inspection if:
(a) Headlamp does not operate properly.
(b) There are more than two headlamps connected on a single switch.
(c) Headlamp is cracked or has holes which allow entry of water.
(d) There is standing water in the headlamp.
(e) Headlamp is out of proper aim.

Motorcycle rear lamps shall fail safety inspection if:
(a) They do not operate.
(b) Light is a color other than red.
(c) Light is cracked or broken and allows entry of water.
(d) There is standing water in the lens.
(e) Lamp is not securely mounted.
(f) Wiring is broken or frayed.

A motorcycle stop lamp shall fail safety inspection if:
(a) Lamp does not operate when brakes are applied.
(b) Light is a color other than red or amber.
(c) Light is cracked or broken or allows entry of water.
(d) There is standing water in the lens.
(e) Lamp is not securely mounted.
(f) Wiring is broken or frayed.

A motorcycle license plate light shall fail safety inspection if:
(a) Light does not operate.
(b) Light does not illuminate the license plate.
(c) Light is a color other than white.

A motorcycle horn shall fail safety inspection if:
(a) The horn does not operate.
(b) The sound emitted is not audible at 200 feet.
(c) The horn is not securely mounted.
(d) The button is mounted so that it can not be easily operated by the driver.

Motorcycle tires shall fail safety inspection if:
(a) There is less than two thirty-seconds of an inch of tread at two or more locations around the circumference of the tire in two adjacent major tread grooves, or if the tread wear indicators are in contact with the roadway at two or more locations around the circumference of the tire.
(b) Cords are exposed at any location on the tire.
(c) Sidewall is cut, bulging, damaged or is severely cracked due to dry rotting.

Motorcycle rear view mirrors shall fail safety inspection if:
(a) The mirrors are missing, broken, or cracked.
(b) The mirrors are not securely mounted.
(c) The mirrors will not hold a setting while vehicle is in operation.

A motorcycle exhaust system shall fail safety inspection if:
(a) The motorcycle has no muffler.
(b) The muffler, exhaust or tailpipe have holes, leaking joints, seams, or patches.
(c) The tailpipe end is pinched.
(d) The exhaust system is equipped with a muffler cut out or bypass.
(e) The muffler baffles have been removed or damaged to create a straight pipe.

A motorcycle steering mechanism shall fail safety inspection if:
(a) Front shocks are sagging or broken.
(b) Front end assembly is bent or there are damaged or twisted bolts.
(c) Front end nuts, bolts, or rivets are loose or missing.

History Note: Authority G.S. 20-2; 20-39; 20-183.3;
19A NCAC 03D .0545 INVESTIGATION/AUDITS/ SAFETY OR EXHAUST EMISSIONS INSPECTION STATIONS

(a) Gas Audit Inspection: A DMV Inspector shall make a check of each station's calibration gas four times a year. This check is accomplished by measuring the concentration of the certified audit gas on the station's analyzer after calibration with the station's gas. If an analyzer fails it shall be placed in a lockout position until brought into compliance by the manufacturer and certified by retesting.

(b) Complaints To Be Investigated: All bona fide complaints received by the Commissioner about any inspection station shall be investigated for the purpose of determining whether there has been a violation of the inspection laws.

(c) Appropriate Action To Be Taken: When it appears from any investigation that the inspection law, has been violated by an inspection station or its agents or employees, or by a Self-inspector, the Commissioner shall take the appropriate action which may include but is not limited to suspension or revocation of the station's license and inspector certifications. When any such license is suspended or revoked, the owner of the station shall return the license, all unused inspection stickers, required records and reports and forms and supplies on hand to the Commissioner.

(d) Report of Undercover Investigation: Periodic checks shall be made by undercover officers of the Division of Motor Vehicles routinely and upon receipt of complaints to determine compliance with inspection laws. If violations are detected, administrative action shall be taken by the Division of Motor Vehicles against the licensed station and the inspection mechanic.

(e) Revocation, Suspension or Denial: Any safety equipment or safety equipment exhaust emission inspection station whose license has been revoked or suspended may, prior to such revocation or suspension order being served, request a hearing before the Commissioner and in such cases the hearing shall be held as soon as practicable. To ensure such an opportunity to the licensee, an agent of the Commissioner shall offer in writing said hearing prior to serving a suspension or revocation order. If the licensee requests a hearing prior to the revocation or suspension order being served, the licensee shall be allowed to continue conducting inspections. The Commissioner, following such hearing, may rescind, amend or affirm the revocation or suspension order.

(f) When an authorized agent of the Division of Motor Vehicles Enforcement Section detects a violation, he shall immediately advise the owner/operator to discontinue all inspections/operations until he is in compliance and approved by the Division of Motor Vehicles Enforcement Section Inspector.

History Note: Authority G.S. 20-2; 20-39; 20-183.6A; 20-183.8D; 20-183.8E; Eff. October 1, 1994.

19A NCAC 03D .0546 LICENSING TO REPLACE WINDSHIELD INSPECTION STICKERS

Application for authority to replace windshield inspection stickers shall be made on forms furnished by the Enforcement Section of the North Carolina Division of Motor Vehicles and filed at the Motor Vehicle Building, 1100 New Bern Avenue, Raleigh, North Carolina, 27697. The applicant shall be engaged in the business of replacing windshields.

History Note: Authority G.S. 20-2; 20-39; 20-183.6; Eff. October 1, 1994.

19A NCAC 03D .0547 DENIAL/SUSP.OR REVOC/REGISTRATION TO REPLACE WINDSHIELD INSPE. STICKER

(a) The Commissioner shall deny the application of any applicant for Replacement of Inspection Stickers Upon Replacement of Windshield for Station Registration who fails to meet the following qualifications:

   (1) Permanent established place of business accessible to the Division of Motor Vehicles for audit of records;
   (2) In the business of replacing windshields;
   (3) Not currently under suspension or revocation as either a safety, safety/emissions, or windshield replacement station.

(b) The registration of any business authorized to replace windshield inspection stickers shall be subject to suspension or revocation for failure to comply with the North Carolina General Statutes or these Rules governing the issuing of replacement inspection stickers and the required reporting procedure.

(c) Upon suspension or revocation of a registration such business shall surrender all unused inspection stickers to the Division of Motor Vehicles.

History Note: Authority G.S. 20-2; 20-39; 20-183.6; Eff. October 1, 1994.
19A NCAC 03D .0548  OPERATION TO REPLACE WINDSHIELD INSPECTION STICKERS

(a) The business may include a charge to its customer for a replaced windshield sticker of the actual amount paid to the Motor Vehicle Division for such sticker.

(b) Inspection stickers:

(1) Acquisition.

(A) Orders for inspection stickers may be placed with a local agent of the Enforcement Section. Requests for safety inspection stickers must be accompanied by remittance in the amounts required in G.S. 20-183.7. Orders for stickers shall be placed in units of 50.

(B) Orders placed for inspection stickers shall be on forms prepared by the Division and shall bear the signature of the owner, partner, officer of the corporation or an authorized representative. Such forms shall upon request be furnished by the Division. The stickers shall be delivered in a manner determined by the Division.

(C) All businesses authorized to replace windshield inspection stickers shall keep a supply of inspection stickers and numeral inserts on hand at all times.

(2) Application of Sticker: The inspection sticker shall be placed on the new windshield at the bottom of the left side so that the left edge of the sticker is no more than one inch from the left side of the windshield. Prior to affixing the inspection sticker the appropriate numeral inserts indicating the month and year the vehicle was previously inspected shall be attached. The person placing this sticker on the new windshield shall enter on such sticker in the appropriate spaces the same date of inspection, odometer mileage and inspection station's registration number as that shown on the sticker attached to the windshield removed. At the space marked "Inspected By" the registration number assigned to the business replacing the windshield and the initials of the person affixing the sticker shall be entered. This information shall be entered on the sticker with a ball point pen or a laundry marking pen. Glass/plastic windshields require a platform to prevent damage to the windshield. The inspection sticker shall be affixed to the platform. When the sticker is removed it shall be self voiding.

(3) Control:

(A) All businesses authorized to replace windshield inspection stickers shall be held strictly accountable for inspection stickers in their possession. Any such business losing or not accounting for any inspection stickers shall be subject to revocation or suspension of their registration to replace windshield inspection stickers. Stickers shall be locked in a safe place to guard against loss or theft.

(B) Upon discovery of a loss or theft of any inspection stickers the person registered must as soon as practicable report such loss or theft to the Enforcement Section, Motor Vehicles Building, 1100 New Bern Avenue, Raleigh, North Carolina, 27697. Oral reports shall be made upon discovery of loss or theft by the quickest means available to the local Enforcement Inspector.

(C) Businesses registered to replace windshield inspection stickers shall not furnish, give, loan or sell inspection stickers to any other registered business, inspection station, self-inspector or any other person.

(D) Inspection stickers shall not be transferred or reissued. They may only be affixed to the vehicle as designated on the inspection report sheet and only when the windshield has been replaced by the person registered.

(E) Each registered business shall protect stickers from larceny or damage and no refund shall be allowed for stolen, lost or torn stickers and the count of the Division for returned stickers shall be accepted as final. An account must be made for all unused stickers. Refund shall be made for unused stickers upon termination of registration of such place of business.

(F) All inspection supplies, unused stickers, copies of receipts and statements pertaining to the issuance of stickers, all bulletins and all forms issued by the Division of Motor Vehicles pursuant to the carrying out of this program are the property of the Division of Motor Vehicles and must be treated as such by the person registered. Upon suspension or revocation of any registration issued to a business to replace windshield inspection stickers or whenever any person registered voluntarily surrenders such registration or ceases to do business, all items held by such person registered in carrying out this program shall be surrendered to the Division of Motor Vehicles. Such items shall be inventoried by the designated agent of the Division of Motor Vehicles and shall be receipted upon surrender.

(4) Requirements and Records:

(A) Monthly report forms. Each registered windshield replacement station shall maintain at the station a monthly report sheet listing the beginning and ending numbers for each series of stickers placed on windshields upon forms furnished by the Division. This report shall be completed in duplicate and the original forwarded to the Enforcement Section, North Carolina Division of Motor Vehicles, 1100 New Bern Avenue, Raleigh, North Carolina 27697, monthly on or before the 10th of the month following the month for which it was completed. The second copy shall be retained by the station for a period of at least 18 months.
(B) Registered business which replace windshield inspection stickers shall furnish the operator of each vehicle in which they have replaced a windshield and affixed an inspection sticker an authorized "Receipt and Statement". This form shall be made in duplicate, upon forms furnished by the Division of Motor Vehicles and a copy shall be retained by the person registered for a period of at least 18 months following the date the sticker is placed on the windshield.

(C) Records available. Each windshield replacement station shall maintain records required and such records shall be made available for inspection by any law enforcement officer, upon demand, during normal business hours.

History Note: Authority G.S. 20-2; 20-39; 20-183.6; Eff. October 1, 1994.

19A NCAC 03D .0549 APPROVAL AND DISAPPROVAL OF VEHICLES

Vehicles shall not be disapproved for any reason other than those specified in 19A NCAC 03D .0533 through 03D .0553.

History Note: Filed as a Temporary Adoption Eff. November 1, 1995 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner; Authority G.S. 20-2; 20-39; 20-127; 20-183.2; 20-183.3; 20-183.6(a); 20-183.7(a); Eff. October 1, 1994; Amended Eff. February 1, 1996.

19A NCAC 03D .0550 WAIVERS FROM EXHAUST EMISSIONS TEST REQUIREMENTS

(a) The Commissioner, or Enforcement Section employees who are designated by the Commissioner, may issue a written waiver from the applicable exhaust emissions test standards for any vehicle, except vehicles listed in Paragraph (g) of this Rule, if the waiver issuance criteria have been met.

(b) A written waiver shall be issued in accordance with this rule upon request when all of the following criteria have been met to the satisfaction of the Commissioner or the designated Enforcement Section employee:

1. The vehicle passed the safety portion of the inspection as shown by the vehicle inspection receipt completed by the licensed self-inspector or inspection station that performed the inspection.
2. The vehicle failed the exhaust emissions portion of the inspection as shown by the vehicle inspection receipt completed by the licensed self-inspector or inspection station that performed the inspection.
3. The vehicle is equipped with each exhaust emissions control device listed in Rule .0543 of this Section, if such device was equipped on the vehicle by the manufacturer. If the unleaded gas restrictor has been removed or rendered inoperable, the catalytic converter must be replaced.
4. Qualifying repairs have been completed on the vehicle within 45 days following the initial failed exhaust emissions inspection. Proof of repairs must be shown by itemized and dated receipts from the person or business that provided the repair service or parts. Receipts for parts shall name the part and not just the stock number. Qualifying repairs means repairs performed on a vehicle for the purpose of repairing the cause of the exhaust emissions inspection failure. The repairs must be appropriate to the cause of the test failure. A visual inspection of the vehicle shall be made by the designated Enforcement Section employee to determine if repairs were actually performed if, given the nature of the repair, this can be visually confirmed.

(A) For pre-1981 model year vehicles, qualifying repairs may be performed by any person, including the vehicle owner.

(B) For 1981 and later model year vehicles, qualifying repairs must be performed by a person who is professionally engaged in vehicle repairs or who is employed by a business whose purpose is vehicle repair or who possesses a certification from the National Institute For Automotive Service Excellence for emission-related diagnosis and repair.

5. The minimum repair expenditure applicable to the vehicle has been met by having qualifying repairs performed on the vehicle.

(A) For 1975-1980 model year vehicles, the minimum repair expenditure is seventy-five dollars ($75.00). Only the costs of parts are applied toward the minimum repair expenditure on these vehicles if the repairs are performed by the vehicle owner or by a person who is not professionally engaged in vehicle repairs or who is not employed by a business whose purpose is vehicle repair or who does not possess a certification from the National Institute For Automotive Service Excellence for emission-related diagnosis and repair.

(B) For 1981 and later model year vehicles, the minimum repair expenditure is two hundred dollars ($200.00), including parts and labor costs.
(C) The cost of repairs to correct or replace emissions control devices that have been removed, disconnected or rendered inoperable shall not be applied toward the minimum repair expenditure for any vehicle, regardless of model year.

(D) The cost of diagnostic testing to determine whether the vehicle meets exhaust emissions standards shall not be applied toward the minimum repair expenditure.

(E) Any available warranty coverage on the vehicle must be used to obtain the needed repairs before expenditures may be applied to the minimum repair expenditure.

(6) The vehicle owner has received a written denial of warranty coverage from the vehicle manufacturer or authorized dealer if the vehicle is within the statutory age and mileage coverage under section 207(b) of the Federal Clean Air Act [42 U.S.C. 754l(b)].

(7) After qualifying repairs have been completed and within 45 days after failing the initial exhaust emissions inspection, the vehicle failed another exhaust emissions inspection as shown by the vehicle inspection receipt completed by the licensed self-inspector or inspection station that performed the inspection.

(c) The vehicle owner or person authorized by the owner must request the waiver and present the vehicle and current registration sticker at the Division Enforcement Section office that serves the county in which the vehicle is registered. The receipts and other documents required by Paragraph (b) of this Rule must be submitted to the designated Enforcement Section employee at the time of the request for a waiver.

(d) The designated Enforcement Section employee shall review the receipts and documents submitted in connection with the waiver request and shall make a visual inspection of the vehicle to verify that the criteria listed in Paragraph (b) of this Rule have been met. If the Enforcement Section employee is satisfied that the waiver criteria have been met, the Division must issue a written waiver for the vehicle on a form provided by the Division.

(e) The vehicle owner or person authorized by the owner must present the waiver to the licensed self-inspector or inspection station that performed the initial safety and exhaust emissions inspection. The self-inspector or inspection station shall reinspect the vehicle in accordance with the rules under this Section, except for the exhaust emissions portion of the inspection. The waiver authorization number shown on the written waiver must be entered into the exhaust emissions analyzer. If the vehicle meets all other requirements of the inspection, the self-inspector or inspection station shall affix a valid inspection sticker to the vehicle which shall expire at the same time it would if the vehicle had passed the exhaust emissions inspection.

(f) Each self-inspector and inspection station must maintain a copy of the written waivers for vehicles inspected and approved by the station for at least 18 months in the same manner and under the same conditions as other inspection records which are required to be maintained pursuant to G.S. 20-183.6A(b).

(g) Waivers shall not be issued for any of the following vehicles:

(1) Vehicles that are owned, operated or leased by a licensed self-inspector;

(2) Vehicles that are owned or being held for retail sale by a motor vehicle dealer, as defined in G.S. 20-286(11).

History Note: Authority G.S. 20-39; 20-183.5; Eff. October 1, 1994.

19A NCAC 03D .0551 WINDOW TINTING

(a) All stations performing window tinting inspections shall have a light meter or photometer which has been properly tested and approved by the Commissioner of Motor Vehicles. Stations which do not have an approved light meter shall not inspect vehicles with applications of after-factory window tinting. Stations are not required to maintain a light meter in order to perform safety inspections on vehicles without after-factory window tinting.

(1) The inspection mechanic shall determine if the vehicle has after-factory window tinting prior to beginning the inspection. The mechanic may use an automotive film check card or knowledge of window tinting techniques to determine if a vehicle has after-factory tint applied to any window of the vehicle.

(2) If a station determines a vehicle has after-factory window tinting but does not have an approved light meter, the mechanic must inform the customer he is unable to perform the inspection. The station may not charge for any portion of the inspection.

(b) All windows with applications of after-factory window tinting shall be inspected with an approved photometer which is properly calibrated and functioning.

(c) Prior to performing a test on a vehicle, the mechanic shall test the photometer for accuracy by checking the calibration against a reference sample of glass provided by the manufacturer. If the photometer indicates the device exceeds the net light transmission by + or - three percentage points, the unit shall be considered out of calibration and may not be used until properly calibrated. The unit's digital display must also be checked to ensure all digital display segments are lit and properly functioning.

(1) The reference glass sample must be clean and free of dirt prior to performing the calibration check.

(2) If a reference glass sample has been broken or is missing, the test shall not be performed and the mechanic shall inform the customer he is unable to perform the inspection.
(a) Multi-piece photometers shall be designed to be operated by one person on front windows, roll-down and non-roll-down side windows, and rear windows with up to 1/4-inch glass thickness. The multi-piece photometer shall have a three-digit digital readout capable of displaying from 00.0% to 99.9% transmittance with a resolution to the nearest 1/10 of 1%.

(b) The multi-piece photometer shall incorporate an automatic alignment feature or positive alignment indication such that the alignment of the transmitter and receiver are accomplished either automatically by respective devices or through an electronic noise indicating proper alignment, a light indicating proper alignment, or a feature which prevents readings being taken without the device being properly aligned. The automatic field of view of the transmitter and receiver shall be large enough to provide a stable and accurate reading of the true net transmittance of the measured window.

(c) All photometric devices shall maintain unit accuracy within + or - three percentage points of reference samples between ten and seventy percent net light transmission.

(d) All photometric devices shall have a repeatability of + or - one percentage point from reading to reading.

(e) If the unit's supply voltage falls below the usable operating range, the device shall produce a low battery indication or fail to perform testing. Accurate readings must not be affected by the unit's supply voltage. The unit's power supply shall be capable of producing a minimum of 200 readings before replacement or recharge.

(f) Photometric devices shall not be affected by light sources other than the unit's source light. In addition to physical light barriers such as felt covers, rubber gaskets, the photometer shall include some form of electronic filtration or cancellation of any stray or ambient light sources. Units with readings affected by outside stray or ambient light sources shall not be acceptable.

(g) Photometric devices shall not be affected by interference generated by electric equipment, tools, or lighting devices. Readings shall not fluctuate when close to operating electric motors or lighting sources.

(h) Operating humidity range shall be 0-100% non-condensing. Operating temperature range shall be zero to 110 degrees F.

(i) Photometric devices shall incorporate a means of compensating for temperature and humidity changes within the stated ranges of this Rule. Acceptable units shall be capable of demonstrating both accuracy and repeatability of transmittance readings throughout the operating temperature and humidity ranges under Paragraph (h) of this Rule.

(j) The multi-piece photometer's transmitter shall have a light source capable of providing a uniform intensity beam that can accommodate the alignment capabilities of the receiver. Multi-piece photometers shall incorporate a means of self-alignment or positive alignment indication that shall be accomplished when the source and detector units are placed on their respective surfaces of the glazing to be measured as described in Paragraph (a) of this Rule. The alignment shall be accurate enough to accommodate the alignment capabilities of the receiver. Multi-piece photometers shall incorporate a means of self-alignment or positive alignment indication that shall be accomplished when the source and detector units are placed on their respective surfaces of the glazing to be measured as described in Paragraph (a) of this Rule. The alignment shall be accurate enough to
position the detector unit well within the uniform beam of the source. The result of this alignment feature shall be data that meets the accuracy and repeatability requirements of this Rule.

(k) Reference samples shall be glass with a warranted transmittance stability of at least one year. Reference samples shall provide a uniform surface reading at four points with a variation not to exceed one percentage point as measured by a calibrated spectrophotometer over an indicated range within 560nm with a variance of no more than 20nm. Reference samples shall be permanently labeled or inscribed with the manufacturer's name, address, and date of calibration. Manufacturers shall ensure replacement reference samples are available to the consumer within two working days in the event of damage or breakage.

(l) Photometric devices shall include an all segments display option for testing the unit's LCD display segments. This test may be performed prior to each reading or through a separate test button.

(m) Photometric units shall incorporate devices which shall protect the light source and detector from direct contact with environmental elements, dust, grease, and other products commonly associated with automotive repair shops. These devices shall also prevent the user from directly touching either the light source or detector.

History Note: Filed as a Temporary Adoption Eff. November 1, 1995 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 20-2; 20-39; 20-127; 20-183.6(a); 20-183.7(a);
Eff. February 1, 1996.

19A NCAC 03D .0553 PHOTOMETER COMPLIANCE

(a) All devices used within the State of North Carolina to measure light transmittance through vehicle windshields or other windows shall as a minimum meet the requirements of Rule .0552 of this Section before being approved for use in enforcing state inspection laws and for law enforcement use throughout the state.

(b) Manufacturers must submit units for independent laboratory testing to the Commissioner.

(c) Fees for testing shall either be reimbursed to the Division of Motor Vehicles by the manufacturer or directly to the laboratory by the manufacturer as directed by the Commissioner.

History Note: Filed as a Temporary Adoption Eff. November 1, 1995 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 20-2; 20-39; 20-127; 20-183.6(a); 20-183.7(a);
Eff. February 1, 1996.