North Carolina Technician Safety Equipment Inspection Program



Safety Equipment
Certification Course
Inspection Procedures

Opening Statement

There are approximately 38,000 certified Inspection Mechanics performing state safety inspections at over 6,200 Official Inspection Stations in North Carolina. These inspections, when performed properly, help ensure the safety of vehicles traveling upon our highways by removing unsafe motor vehicles. These unsafe vehicles may not renew their registration until the identified deficiencies are corrected. If these inspections were not required, drivers could be operating vehicles upon the roads and highways of our state with potential hazards that could jeopardize the safety of themselves and fellow motorists. To prevent this, the State of North Carolina enacted legislation in 1964 requiring motor vehicles registered in this state to be inspected for safety equipment compliance on an annual basis.

Course Objective

At the end of this block of instruction, the student will be able to achieve the following objectives in accordance with the information received during the instructional period.

- 1. List the eleven inspection areas inspector mechanics must check during a safety inspection.
- 2. Identify safety items required for a NC Safety Inspection.
- 3. Determine what emissions control devices are required on a vehicle during a safety test by using the Emission Control System Applications Manual.
- 4. Calibrate and utilize a headlight aimer.
- 5. Test and utilize a window tint meter.
- 6. Achieve a score of 80% or higher on a Division approved written exam.

.0519 Station Qualifications

An inspection station is a place of business legally licensed by the DMV Commissioner to conduct inspections of motor vehicles as required by North Carolina General Statute. Each Inspection Station must be equipped with the proper equipment and tools to perform inspections, which includes the following.

- (1) One jack or lift with a minimum capacity of two tons.
- (2) One headlight tester to fit all headlights. (Mechanical, optical, or wall chart)
- (3) One workbench.
- (4) One creeper.
- (5) One tire tread depth gauge (calibrated in 32nds of inch).



.0519 Station Qualifications

- (6) Emissions Control Systems Application Manual or current computerized electronic software.
- (7) One approved Analyzer with current software or <u>approved</u> <u>computer</u> for Web Safety access.
- (8) One active dedicated telephone line (Broadband Connection) with internet access for Web Safety.

Note: Each licensed inspection station should display the Official Safety and OBD Procedure Posters, station license and fee chart in the waiting room or at the cash register where customers can see them.

Additional Equipment

Inspection stations are not required to conduct inspections on vehicles equipped with after factory window tint. However, if inspections are conducted on these vehicles, the inspection station must have the following optional equipment.

One Approved Window Tint Tester (with undamaged reference glass sample)





Inspection-Mechanic

To obtain certification to perform North Carolina Safety Inspections the prospective technician <u>must</u> meet all of the following requirements for <u>initial</u> and <u>continued</u> certification:

- Attend and pass an eight-hour Approved Safety Inspection Course offered by a North Carolina Community College and pass a written examination with a score of no less than 80 percent correct answers. **No oral exams shall be allowed**.
- Have a driver's license that is Valid In North Carolina.
- Be of good character and have a reputation for honesty be able to successfully pass a background check as required by the Division.

(Applicants who are denied licensing because of prior criminal history will be contacted and have the opportunity to submit documentation to the Licensing Review Board before final determination is made. The applicant will be notified in writing of the outcome of the review board.)

The license of a Safety Inspector-Mechanic expires every 4 years.

An Out of State driver's license is acceptable if the mechanic lives in another state.

Inspection Fees

• The fee for performing an inspection of a vehicle applies when an inspection is performed, regardless of whether the vehicle passes the inspection. The fee for an electronic inspection authorization applies when an electronic inspection authorization is issued to a vehicle. No taxes or shop fees can be added to the inspection cost.

•	<u>Type</u>	<u>Inspection</u>	<u>Authorization</u>	<u>Total</u>
•	S/I	\$12.75	\$.85	\$13.60

- The fee for inspecting after-factory tinted windows shall be ten dollars (\$10.00), and the fee applies only to an inspection performed with a light meter after a safety inspection mechanic determined that the window had after-factory tint.
- A safety inspection mechanic <u>shall not</u> inspect an after-factory tinted window of a vehicle for which the Division has issued a medical exception permit pursuant to G.S. 20-127(f).

Vehicles Currently Subject to a Safety Inspection Only

- All Vehicles that are within the three most recent model years <u>AND</u> have <u>LESS THAN 70,000</u> miles.
- All Vehicles newer than 30 years old (Date manufactured)
- All Vehicles with Farm Tags.
- Electric / Plug in Vehicles.(Does not have the ability to be propelled by gasoline or diesel fuel)
- Trailers with a gross weight of 4,000 pounds or more.
- Vehicles with a GVWR of more than 8,500 pounds.
- Low Speed Vehicles registered for highway use require a safety only inspection. A low-speed vehicle is a four wheeled vehicle that the top speed is greater than 20 mph but less than 25 mph. (Gas or Electric)
- Modified Utility Vehicle as defined in NC General Statute 20-4.01(27) requires a Safety Only Inspection and should be classified as an SUV.
- All Vehicles more than 20 years old of the current model year and less than 30 years old from the current model year in any county requires a safety only inspection.

SL 2023-134 Changes (Upon approval from the EPA)

REDUCE EMISSIONS INSPECTIONS REQUIREMENTS

SECTION 12.7.(a) G.S. 20-183.2(b) reads as rewritten:

- "(b) Emissions. A motor vehicle is subject to an emissions inspection in accordance with this Part if it meets all of the following requirements:
 - (3) It is (i) a vehicle with a model year within 20 years of the current year and older than the three most recent model years or (ii) a vehicle with a model year within 20 years of the current year and has 70,000 miles or more on its odometer.
 - (3a) It is a vehicle with a model year within 20 years of the current year and earlier than the 2017 model year.

SECTION 12.7.(b) G.S. 143-215.107A(c) reads as rewritten:

"(c) Counties Covered. – Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Buncombe, Cabarrus, Cumberland, Davidson, Durham, Forsyth, Franklin, Gaston, Guilford, Iredell, Johnston, Lincoln, Mecklenburg, New Hanover, Randolph, Rowan, Union, and Wake, Mecklenburg County."

.0525 PRE-INSPECTION REQUIREMENTS

Prior to performing an inspection, the inspection mechanic shall:

- (1) Have all occupants leave the vehicle
- (2) Request that the operator produce the current registration card for the vehicle. <u>IF a registration is provided confirm the VIN matches the vehicle being inspected, if no card continue with information from the vehicle.</u>
- (3) Enter applicable information in all data fields prompted by the analyzer. (If the vehicle does not have a license plate, "NONE" shall be indicated. If inspected for a dealership, the dealer license number shall be indicated. Enter Dealer # followed by "D")

Note: Vehicles may be inspected up to 90 days but not to exceed 90 days prior to the registration expiration.

Note: Low Speed Vehicles registered for highway use require a safety only inspection. A low-speed vehicle is a four wheeled vehicle that the top speed is greater than 20 mph but less than 25 mph. (Gas or Electric)

Inspection Procedure for Safety Equipment

Driving the vehicle forward into the inspection area is required by the Inspection Mechanic conducting the inspection for a complete and proper inspection to be performed.

Safety Equipment Items

- Brakes
- Lights
- Horn
- Steering Mechanism
- Windshield Wiper
- Directional Signals
- Tires
- Tire Definitions
- Mirrors
- Exhaust Emission Controls
- Emission Control Devices

No vehicle brakes shall be approved for an Inspection Authorization <u>unless</u> the items indicated in this Rule are inspected and found to meet the <u>minimum requirements</u> established in G.S. 20-124 and this Rule.

- (1) Footbrakes shall not be approved if:
- (a) When applying brakes to the moving vehicle, braking force is not distributed evenly to all wheels originally equipped with brakes by the manufacturer.



The Inspection Mechanic must drive the vehicle to make this test. The Inspection Mechanic may check the brakes while driving the vehicle forward into the inspection area.

Continued: Footbrakes shall not be approved if:

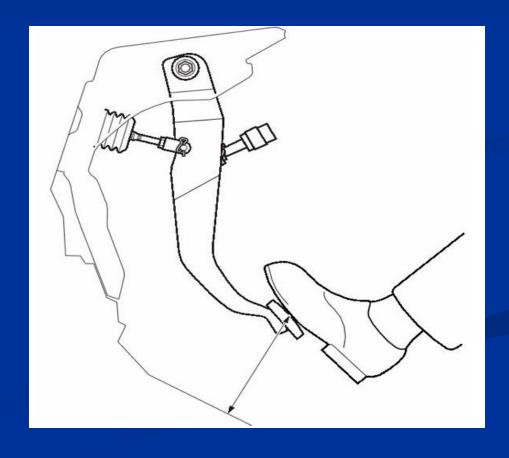
(b) There is audible indication (metal to metal) that the brake lining is no longer serviceable.

(The wheel must be removed, and the brake lining examined when this occurs.)



Continued: Footbrakes shall not be approved if:

(c) Pedal reserve is less than 1/3 of the total possible travel when the brakes are fully applied, or does not meet the manufacture's specifications for power brakes or air brakes.

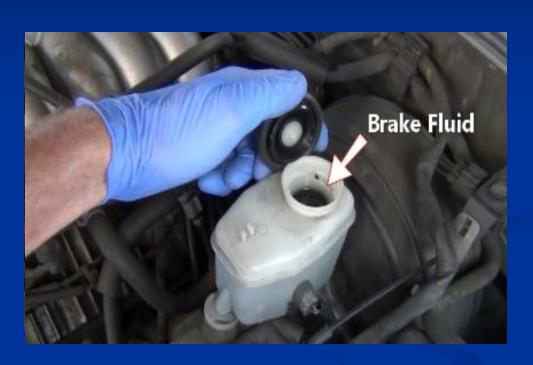


Continued: Footbrakes shall not be approved if:

(d) The reservoir of the master cylinder is **not** full.

Reservoir filled according to manufacture specifications.

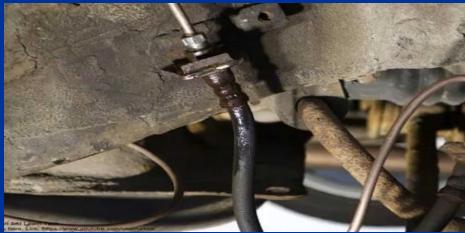
The inspection mechanic must remove the reservoir cap to verify fluid and level unless fill line is visible.



Continued: Footbrakes shall not be approved if:

- (e) There is visible leakage or audible seepages in hydraulic, vacuum or air lines and cylinders, or visible cracked, chafed, worn or weakened hoses.
- Pay close attention to vehicles with oversized tires or rims because they may rub the brake hoses.

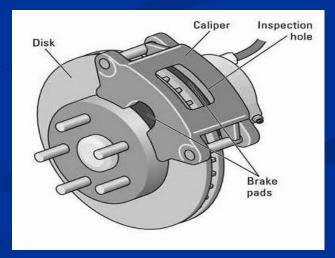




Continued: Footbrakes shall not be approved if:

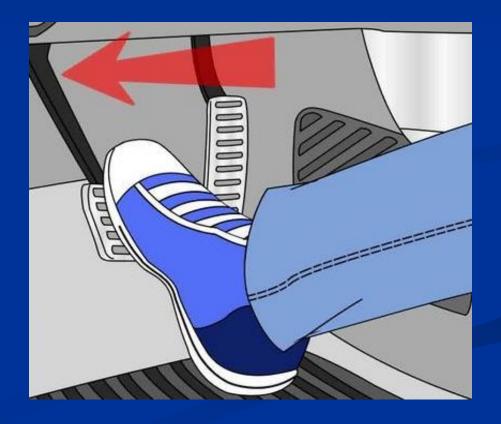
(f) The vehicle has any part
of the brake system
disconnected, the brake lines
and hoses do not meet the
manufacturer's specifications
or are made of a material not
approved for motor vehicles.





Continued: Footbrakes shall not be approved if:

(g) Once applied, and while holding pedal pressure for **one minute**, the brake pedal gradually moves toward the toeboard, indicating fluid leakage.



Continued: Footbrakes shall not be approved if:

- (2) Inspection mechanics are not required to remove wheels of the vehicle to examine the condition of the brakes. (Except as provided previously in this Rule.)
- An inspection mechanic shall raise vehicles to check the underside of a vehicle, including the applicable brake components list in this Rule.



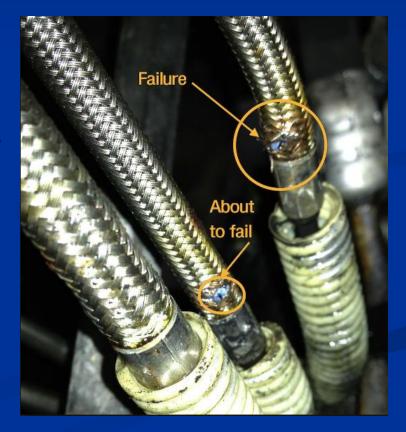
Continued: Footbrakes shall not be approved if:

- (3) Auxiliary, parking, or holding handbrakes shall not be approved if:
 - (a) There is no lever reserve when the brake is fully applied.
- Some Chevrolet Trucks/SUVs will have no lever reserve from the factory.



Continued: Footbrakes shall not be approved if:

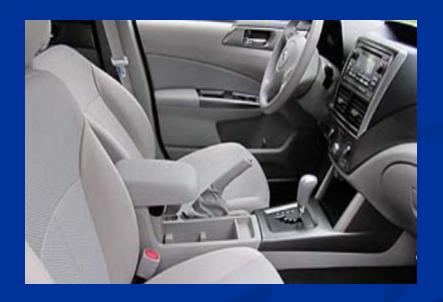
(b) Cables are visibly frayed or frozen, or there are missing or defective cotter pins, broken or missing retracting springs, or worn rods or couplings.



Continued: Footbrakes shall not be approved if:

(c) The operating mechanism,when fully applied, fails tohold the brakes in the appliedposition without manual effort(i.e. The lever will not stay set.)

Some levers are pump to set.



Continued: Footbrakes shall not be approved if:

- (d) When emergency or handbrakes are applied, without depressing the accelerator, they fail to hold vehicle.
- Emergency brake should be tested by setting the brake with the vehicle running and in gear. Do not depress the accelerator while performing this test.



■ The illumination of the "ABS" light does not constitute a failure Unless the ABS unit is leaking or damaged. If there is an electrical malfunction of the ABS system, the manufacturer is required to use the service brake as a "back-up plan".

G.S. 20-124 states:

- (a) Every motor vehicle when operated upon a highway shall be equipped with brakes adequate to control the movement of and to stop such vehicle or vehicles, and such brakes shall be maintained in good working order and shall conform to regulations provided in this section. (b) Repealed by Sess Law)
- (c) Every motor vehicle when operated on a highway shall be equipped with brakes adequate to control the movement of and to stop and hold such vehicle and shall have all originally equipped brakes in good working order, including two separate means of applying the brakes. If these two-separate means of applying the brakes are connected in any way, they shall be so constructed that failure of any one part of the operating mechanism shall not leave the motor vehicle without brakes.

Additional Sections (d) through (h) specified in Lesson Plan.

■ G.S. 20-129(a) states:

Every vehicle upon a highway within this State Shall be equipped with lighted headlamps and rear lamps as required for different classes of vehicles.

- As a "Rule of Thumb" for lights being inspected. If the lights were installed by the manufacturer, they are approved by the Commissioner.
- Fog lamps or auxiliary lamps are not required and are not part of the safety inspection.

(a) Headlights shall conform to the requirements of G.S. 20-129(b)

Headlights shall not be approved if:

(1) There are not at least two headlamps, or at least four on dual headlamp systems. Motorcycles and motor driven cycles need only one headlamp;





If unable to determine the color of the bulb, hold a piece of white paper in front of the light beam.

Continued: Headlights shall not be approved if:

- (2) The headlamp lens or light produces other than a white or yellow light.
- Xenon lights installed by the manufacturer and Xenon light replacement kits are allowed.
- Colored headlamp bulbs are illegal and constitute as a failure.



Continued: Headlights shall not be approved if:

(3) Any lens or reflector is cracked, broken, discolored, or missing.



Continued: Headlights shall not be approved if:

- (4) The high beam-low beam dimmer switch does not operate, or the high beam indicator light does not burn on vehicles.
- Low speed and MUV vehicles are not required to have a high beam indicator.



Continued: Headlights shall not be approved if:

(5) Lights can be moved by hand, due to broken fender or loose support, or if a good ground is not made by the mounting.





Continued: Headlights shall not be approved if:

6) Foreign materials such as shields, half of lens painted are placed on the headlamp lens that <u>interferes</u> with the light beam of lamp.



Failing to properly test the vehicle headlight alignment could result in a criminal fine, civil fine or both.

"Adjusting" the headlights is considered a correction.

Continued: Headlights shall not be approved if:

(7) Lights are improperly aimed.

Using a headlight testing device that meets Society of Automotive Engineers' (SAE) standards or light testing chart that is approved by the Division.

The Headlamp alignment must be checked during each inspection by use of approved headlight aimer, undamaged on-board aimer or wall chart.

.0533 Lights (Headlights)



Continued: Headlights shall not be approved if:

(8) Lights project a dazzling or glaring light when on low beam as defined in G.S. 20-131(b)

20-131(b) Headlamps comply with the provisions prohibiting glaring and dazzling lights if none of the main bright portion of the headlamp beams rise above 42 inches, 75 feet ahead of the vehicle.

 Dazzling or glaring may be caused by a high beam bulb installed in a low beam position.

.0533 Lights (Headlights)

Continued: Headlights shall not be approved if:

(9) the vehicle is equipped with headlamps that change the original design or performance of the headlamps; or do not comply with Federal Motor Vehicle Safety Standard No. 108, as adopted by the National Highway Traffic Safety Administration.

Headlight Aiming

The following video is intended for informational purposes only. The NCDMV License & Theft Bureau does not endorse any particular brand or manufacturer.

.0533 Lights (Headlights)

Due to the increased intensity and performance of modern headlights it is imperative that the headlights on each vehicle be checked.

- Headlamps <u>must</u> be checked during each inspection by use of approved headlight aimer, undamaged on-board aimer or wall chart.
- Failing to properly test the vehicle headlight adjustment could result in a criminal fine, civil fine or both.

General Statute

20-131(a) The **Headlamps of motor vehicles** shall be so constructed, arranged, and adjusted that, they at all times, under normal atmospheric conditions, produce a driving light sufficient to render clearly a person 200 feet ahead. Every new motor vehicle, other than a motorcycle or motor-driven cycle, registered in this State after January 1, 1956, which has multiple-beam road-lighting equipment shall be equipped with a beam indicator, which shall be lighted whenever the uppermost distribution of light from the headlamps is in use. Sections (b) through (e) listed in lesson plan.



(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.



After-market and trailer lights are acceptable as long as they are securely attached and project light to the rear of the vehicle.



Continued: Taillights shall not be approved if:

- discolored, the lens or light projects a color other than red, or is covered by a foreign material, such as shields or painted lenses. Cracks on lenses shall not lead to disapproval unless water is likely to short out the bulb.
- The use of repair tape <u>is not</u> acceptable to pass the safety <u>inspection.</u>

Continued: Taillights shall not be approved if:

(3) They do not operate properly or project white light on the license plate (Even in a two-bulb system only one bulb is required to illuminate on the license plate light)

Light Visible from

50 Feet Away

License Plate Light

- License Plate lights <u>must be</u> white in color and illuminate the tag to be read 50 feet away.
- Neon license plate lights will not be approved.



Continued: Taillights shall not be approved if:

(4) They are not mounted.

No magnetic or "temporary" mounting is acceptable.

General Statute

(d) **20-129 (d) Rear Lamps**. – Every motor vehicle, and every trailer or semitrailer attached to a motor vehicle and every vehicle which is being drawn at the end of a combination of vehicles, shall have all originally equipped rear lamps or the equivalent in good working order, which lamps shall exhibit a red light plainly visible under normal atmospheric conditions from a distance of **500** feet to the rear of such vehicle.

Rear Lamps - 500 FEET

One rear lamp or a separate lamp shall be so constructed and placed that the number plate carried on the rear of such vehicle shall under like conditions be illuminated by a white light as to be read from a distance of 50 feet to the rear of such vehicle.

.0533 Lights (Stoplights)

(c) **Stoplights** shall conform to the requirements of G.S. 20-129(g).

Stoplights shall not be approved if:

(1) The lens is cracked, discolored, or the lens or light projects a color other than red or amber, or is covered by a foreign material such as shields or painted lenses. Cracks on lenses shall not lead to disapproval unless water is likely to short out the bulb.

Minor cracks on lenses shall not lead to disapproval unless water is likely to enter lens and lead to bulb failure.



.0533 Lights (Stoplights)

Continued: Stoplights shall not be approved if:

(2) It does not come on when pressure is applied to the footbrake.

- Proper Procedure to check stoplight operation:
 - Use a pedal lock rod; or
 - Use an approved mirror or <u>reflecting windows</u> of bay doors; or
 - Have someone else depress the brake pedal while the inspector/mechanic looks at the bulbs.
- The licensed Inspector Mechanic performing the safety inspection <u>must</u> observe the illumination of the lights.

.0533 Lights (Stoplights)

Continued: Stoplights shall not be approved if:

(3) They are not mounted so as to project light to the rear.



General Statute

G.S 20-129(g), No person shall sell or operate on the highways of the State any motor vehicle manufactured after December 31, 1955, and on or before December 31, 1970, unless it shall be equipped with a stop lamp on the rear of the vehicle. No person shall sell or operate on the highways of the State any motor vehicle, manufactured after December 31, 1970, unless it shall be equipped with stop lamps, ONE ON EACH SIDE of the rear of the vehicle.

> The third brake is not required to illuminate to pass a safety inspection.

G.S 20-129(g) continued

No person shall sell or operate on the highways of the State any motorcycle or motor-driven cycle manufactured after December 31, 1955, unless it shall be equipped with a stop lamp on the rear of the motorcycle or motor-driven cycle.

The stop lamps shall emit, reflect, or display a red or amber light visible from a distance of not less than 100 feet to the rear in normal sunlight, and shall be actuated upon application of the service (foot) brake. The stop lamps may be incorporated into a unit with one or more other rear lamps.

-100 FEET

Additional Lighting

- Some vehicles require additional lighting which is addressed under G.S. 20-129.1. Examples of these vehicles are:
- a) Buses
- b) Trucks
- c) Truck Tractor
- d) Trailer or Semitrailer (gross weight 4,000lbs & greater) Trailers with a gross weight of less than 4,000 pounds are exempt from the inspection requirement.
- e) Pole Trailer

Additional lighting specifications are listed in the lesson plan

.0533 Lights (Parking lights)

(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 or covered by a foreign material, such as shields or painted lenses.



.0533 Lights (Back-Up Lights)

(f) Back-Up Lights. A motor vehicle that was originally equipped with back-up lamps, lamps, must have those lamps maintained in operating condition. Backup lamps shall not be lighted when the motor vehicle is in a forward motion, nor shall the backup lamp emit any color other

than white.

(No more than 2 allowed)

A back-up lamp is not a mandatory requirement for the Inspection.

.0533 Lights

Condensation inside any lenses alone does
 NOT constitute a failure. Disapprove if there is standing water inside the lens.





 Reflectors are not required equipment on passenger vehicles.

.0534 Horn



200 FEET

(a) In addition to the requirements set forth in G.S. 20-125,

The horn shall not be approved if:

(1) it will not emit a sound audible for a distance of at least 200 feet.

Original equipment, operating as intended by the manufacturer, shall meet these requirements. Air horns shall not be substituted for original equipment.

.0534 Horn



Continued: The horn shall not be approved if:

- (2) the wiring or wiring harness has been frayed, been damaged, is broken, or is missing wiring; the horn button is not mounted to the motor vehicle or is not positioned within the driver's reach.
- (3) Operation of the horn interferes with the operation of any other mechanism.

.0534 Horn

Continued: The horn shall not be approved if:

(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.



• In addition to the use of special equipment authorized and required by this subsection, the chief and assistant chiefs of any police department or of any fire department, whether the same be municipal or rural, paid or voluntary, county fire marshals, assistant fire marshals, transplant coordinators, and emergency management coordinators, are hereby authorized to use such special equipment on privately owned vehicles operated by them while actually engaged in the performance of their official or semiofficial duties or services either within or beyond their respective corporate limits.

General Statute

G.S. 20-125 states:

Every motor vehicle when operated on a highway or public vehicular area shall be equipped with a horn in good working order capable of emitting sound audible under normal condition from a distance of not less than

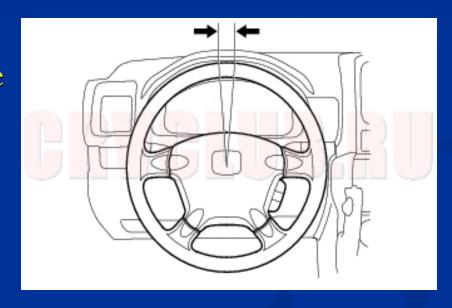
200 feet.



- (a) The inspection mechanic must raise the vehicle check the steering mechanism.
- Pits are OK but, you <u>MUST</u> raise the tires off the floor.



- (b) The steering mechanism shall not be approved if:
- (1) With front wheels in straight ahead position there is more than 3 inches of free play in steering wheels up to 18 inches in diameter or more than 4 inches of free play in steering wheels over 18 inches in diameter. If the vehicle is equipped with power steering, the engine must be operating.

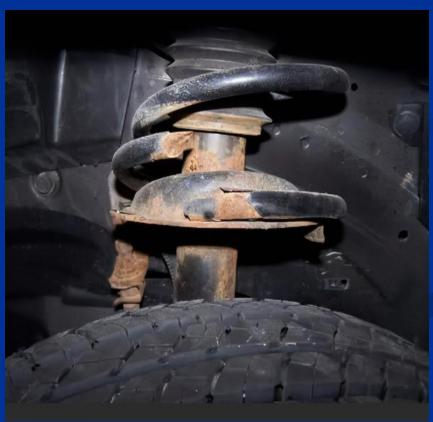


•1 $\frac{1}{2}$ " Side to Side = 3" of free play.

Continued: The steering mechanism shall not be approved if:

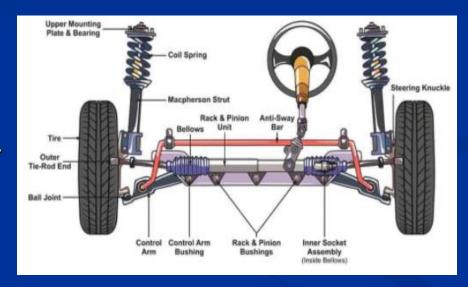
(2) Either front or rear springs are noticeably sagging or broken.





Continued: The steering mechanism shall not be approved if:

(3) The front wheels or front-end assembly is loose, bent, or twisted; or bolts, nuts, or rivets are loose or missing



To fail a vehicle for missing lug nuts or missing studs is the discretion of the inspection mechanic.

Continued: The steering mechanism shall not be approved if:

- (4) Power steering system shows visible leaks, or the power steering belt is loose, worn.
- Rack-N-Pinion steering mechanisms with "morning sickness" fails <u>ONLY</u> if tightness or slippage occurs during the inspection.



- Continued: The steering mechanism shall not be approved if:
- (5) vehicle frame **or** component of the steering mechanism is rusted to the point of mechanical failure



- Continued: The steering mechanism shall not be approved if:
- (6) shock or strut is leaking to the point of failure that will inhibit the steering of the vehicle.



General Statute

G.S. 20-123.1 states:

The steering mechanism of every self-propelled motor vehicle operated on a highway or public vehicular area shall be maintained in good working order, sufficient to enable the operator to control the vehicle's movements and maneuver it safely.

.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.

.0536 Windshield Wiper



Continued: Windshield wipers shall not be approved if:

- (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.

.0536 Windshield Wiper



Continued: Windshield wipers shall not be approved if:

- (4) The wiper or wipers are not adequate to clean rain, snow and other matter from the windshield.
- (5) Parts of the blades or arms are missing or show evidence of damage.

Damage to the windshield is not considered a failure UNLESS it affects the wipers as specified above.

A rear wiper is not required to pass a safety inspection

The Windshield is not part of the Safety Inspection.

General Statute

G.S. 20-127 states:

A vehicle that is operated on a highway and has a windshield shall have a windshield wiper to clear rain or other substances from the windshield in front of the driver of the vehicle and the windshield wiper shall be in good working order. If a vehicle is equipped with more than one windshield wiper to clear substances from the windshield, all windshield wipers shall be in good working order.

.0537 Direction Signals

Vehicles required to have directional signals pursuant to G.S. 20-125.1, which does not include motorcycles,

shall be disapproved if:



Continued: Direction Signals shall not be approved if:

(1) The vehicle is not equipped with signals by which the operator of the vehicle may indicate to other motorists approaching from a distance of 200 feet from the front or rear the operator's intentions to turn the vehicle;



200 FEET



Continued: Direction Signals shall not be approved if:

- (2) All lights do not operate properly, or any lenses are broken, missing, or do not fit properly.
- (3) Signal lens or light color is other than red or amber on the rear and other than white or amber on the front, and is covered by a foreign material, such as shields and painted lenses.

Continued: Direction Signals shall not be approved if:

- (4) Lamps are not mounted or wiring, and connections are not working;
- (5) Signals are not visible from front or rear due to faulty or damaged mounting or due to manner in which they are mounted.



Damage

Minor cracks on lenses shall not lead to disapproval unless water is likely to enter lens and lead to bulb failure.

Continued: Direction Signals shall not be approved if:

(6) switch does not operate as designed by the manufacturer or is not located in a position that allows the operator to reach and operate the switch, or the switch that interferes with the operation of other mechanisms.



Trailers satisfying the following conditions are not required to be equipped with a directional signal device:

- (1) The trailer and load does not obscure the directional signals of the towing vehicle from the view of a driver approaching from the rear and within a distance of 200 feet;
- (2) The gross weight of the trailer and load does not exceed 4,000 pounds.

General Statute

G.S. 20-125.1 states:

Vehicles that are operated on a highway or public vehicular area must have a mechanical or electrical signal device by which the operator of another vehicle can see the intention to turn the

vehicle.



.0538 Tires

(a) A vehicle shall be disapproved if:



- (1) Any tire has cuts or snags that expose the cords.
- Foreign objects in tires and dry rotting that constitute failure is the discretion of the inspection mechanic.

.0538 Tires



Continued: Any vehicle shall be disapproved if:

- (2) Any tire has a visible bump, bulge, or knot related to tread or sidewall separation or partial failure of the tire structure including bead area;
- Secondary rubber and sidewall damage, due to low tire pressure, shall constitute a failure if it is an immediate safety hazard.

.0538 Tires

Continued: Any vehicle shall be disapproved if:



(3) there is <u>less than 2/32-inch</u> tread at two or more locations around the circumference of the tire in two adjacent major tread grooves <u>or</u> 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.

Tire depth shall be measured by a tread depth gauge which shall be of a type calibrated in thirty seconds of an inch. 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.

.0539 Tires



Secondary rubber and sidewall damage, due to low tire pressure, shall constitute a failure if it is an immediate safety hazard. (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 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.

.0539 Tires

- G.S. 20-122.1. Motor vehicles to be equipped with safe tires.
- (a) Every motor vehicle subject to safety equipment inspection in this State and operated on the streets and highways of this State shall be equipped with tires which are safe for the operation of the motor vehicle, and which do not expose the public to needless hazard. Tires shall be considered unsafe if cut so as to expose tire cord, cracked so as to expose tire cord, or worn so as to expose tire cord or there is a visible tread separation or chunking or the tire has less than two thirty-seconds inch tread depth 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: Provided, the two thirty-seconds tread depth requirements of this section shall not apply to dual wheel trailers.

.0539 Tire Definitions

As used in this and Rule .0538 of this Section, these terms have the following meanings:

- (1) "Bead" is that part of the tire that is shaped to fit the rim. The bead is made of high tensile steel wires wrapped and reinforced by the plies.
- (2) "Cord" is made from textile, steel wire strands forming the plies or other structure of the tires.
- (3) "Groove" is the space between two tread ribs.
- (4) "Ply" is layers of rubber coated parallel cords forming the tire body.
- (5) "Rib" is the tread section running circumferentially around the tire.
- (6) "Rim" is a metal support for the tire or tire and tube assembly on the wheel. Tire beads are seated on the rim.
- (7) "Sidewall" is that portion of the tire between tread and bead.



.0540 Rear View Mirrors

Rear View Mirrors shall not be approved if:

- (1) There is any movement between the attachment bracket and the windshield;
- (2) Forward vision of the device is obstructed by mirror assembly;
- (3) They do not provide a view of the highway to the rear;
- (4) They are cracked, broken, have sharp edges or cannot be cleaned such that rear vision is not obscured;
- (5) They cannot be adjusted or will not maintain a set adjustment;



.0540 Rear View Mirrors

Continued: Mirrors shall not be approved if:

- (6) Bus, truck, or truck-tractor with a GVWR of 10,001 pounds or more is not equipped with a rear vision mirror on each side. If a vehicle is configured in such a way that the inside mirror is obstructed, a passenger side outside mirror is required;
- (7) Vehicles manufactured, assembled, or first sold after January 1, 1966 are not equipped with outside rear view mirrors on the driver's side. The passenger's outside rear view mirror is not required equipment on passenger vehicles if an inside rear view mirror is present.



.0540 Rear View Mirrors

- If a vehicle is loaded or configured in such a way that the inside mirror is obstructed, a passenger side outside mirror would be required.
- The passenger's outside rearview mirror is NOT required equipment on passenger vehicles if an inside rearview mirror is present.

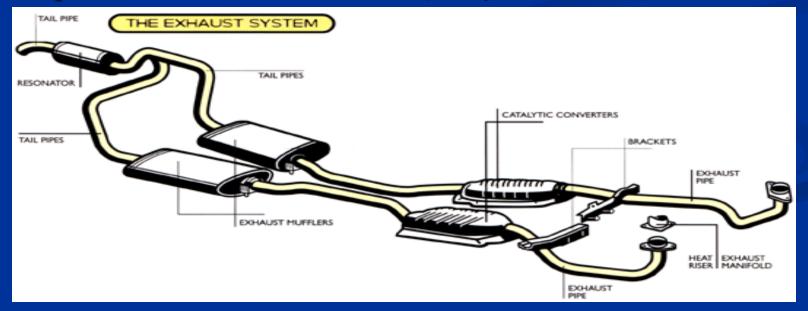
General Statute

G.S. 20-126 (a) states:

No person shall drive a motor vehicle on the streets or highways of this state unless equipped with an inside rearview mirror of a type approved by the commissioner, which provides the driver with a clear, undistorted and reasonably unobstructed view of the highway to the rear vehicle; provided, a vehicle soon constructed or loaded as to make an inside mirror ineffective.

.0541 EXHAUST EMISSION CONTROLS

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 as set forth in G.S. 20-128(d) have been altered without approval of the Department of Environmental Quality



.0541 EXHAUST EMISSION CONTROLS

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 shall pass inspection.



When an unleaded fuel restrictor is tampered with, it is alleged that leaded fuel has been used.
 Once leaded fuel is burned through the engine and exhausted, the lead particles destroy the catalyst components of the catalytic converter.

.0541 EXHAUST EMISSION CONTROLS

- (c) An exhaust system shall not be approved if:
- (1) The vehicle has no muffler or other exhaust system of the type installed at the time of manufacture or does not operate as designed by the vehicle manufacturer;
- (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.



Many mufflers are manufactured with one or more seep holes. The presence of a seep hole does not constitute failure.

A civil penalty shall be assessed against individuals who instruct or allow a person to remove, disconnect, tamper with, or render inoperable any emission control device equipped by the manufacturer of any motor vehicle as described in G.S. 20-183.3.

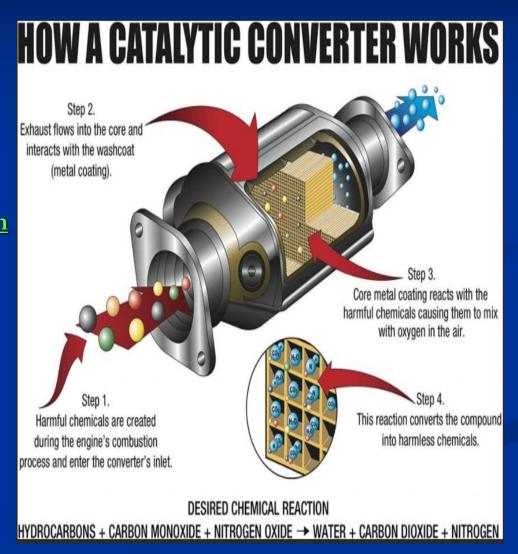




These devices include:

(1) Catalytic Converter

Vehicle originally equipped with a catalytic converter will fail for the tampering portion of the inspection if a new exhaust system is installed without a catalytic converter.



- (2) Unleaded Gas Restrictor
- (3) Air Pump System,
 - There are 2 types of Air Pumps Systems;
 - 1) The pump type is either electrical or belt driven. A missing air or smog pump belt is a failure of the Air Pump System.
 - 2) P.A.I.R. does not require a pump and uses the normal pulsing from the exhaust valves opening and closing.

The removal of engine covers, or shields is not required.



- (4) EGR (Exhaust Gas Recirculation) Valve
- EGR Valves are either vacuum operated or electrically operated.

- **(5)** PCV (Positive Crankcase Ventilation) Valve
- A missing oil filler cap or oil dipstick <u>DOES NOT</u> constitute a failure.
- Not all vehicles are equipped with a actual PCV Valve. Some may be equipped with PCV system that utilizes an orifice in lieu of a valve.







(6) Thermostatic Air Cleaner

- Verify that all vacuum hoses, the preheat tube, PCV System hoses are connected and that the lid is securely attached.
- Only 2 things can be missing snorkel hose and the air filter.

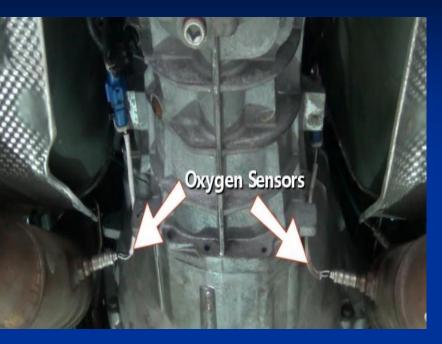


Charcoal Canister



Purge Valve

- (7) Evaporative Emission Systems
- The Evaporative Emission System consists of the charcoal canister, the purge system, the fuel tank and cap, vacuum lines and fuel return and supply lines.
- Disconnected charcoal canister purge vacuum lines <u>fail</u> the Evaporative Emission System.



(8) Oxygen Sensor.

Meters the amount of oxygen in the exhaust gases.

Most manufactures install more than one oxygen sensor; the inspection mechanic is required to visually inspect all.





Vehicles are required to have emission control devices as installed by the manufacturer to be present, connected and in a visually operative condition.

■ The Emission Control System Applications Manual, Mitchell on Demand and All Data are examples of sources to determine what the manufacturer installed on most vehicles.

General Statute

- G.S. 20-128. Exhaust system and emissions control devices (a) No person shall drive a motor vehicle on a highway unless such motor vehicle is equipped with a muffler, or other exhaust system of the type installed at the time of manufacture, in good working order and in constant operation to prevent excessive or unusual noise, annoying smoke and smoke screens.
- (b) It shall be unlawful to use a "muffler cut-out" on any motor vehicle upon a highway.
- (c) No motor vehicle registered in this State that was manufactured after model year 1967 shall be operated in this State unless it is equipped with emissions control devices that were installed on the vehicle at the time the vehicle was manufactured and these devices are properly connected.
- (d) The requirements of subsection (c) of this section shall not apply if the emissions control devices have been removed for the purpose of converting the motor vehicle to operate on natural or liquefied petroleum gas or other modifications have been made in order to reduce air pollution and these modifications are approved by the Department of Environment and Natural Resources.

Inspection Procedure for Motorcycles



The <u>Inspector must drive the motorcycle into the inspection bay</u> and the motorcycle <u>must be lifted</u>.

A motorcycle endorsement is not required to complete a safety inspection of a motorcycle.

(a) Motorcycle Brakes shall fail inspection if:

- (1) When applying brakes to the moving vehicle, there is insufficient force to stop the vehicle.
- (2) Brakes are worn in such a manner that there is an uneven braking force.
- (3) There is an audible or visual indication that the brake lining is worn to the extent it is no longer serviceable.
- (4) There is less than one-third reserve in either footbrake or handbrake total possible travel when the brakes are fully applied.

Continued: Motorcycle Brakes shall fail inspection if:

- (5) Reservoirs of braking cylinders are not full.

 [The Inspection Mechanic is required to remove the master cylinder cap to verify brake fluid level if the level is not visible from the containers outside.
- (6) There is a visible leakage of fluid from any brake line or brake component.
- (7) Handbrake cables are frayed, broken, or frozen or linkage is defective.

Motorcycles are required to be equipped with one brake. (Hand or foot brake).

General Statute 20-124 - Brakes

Every motorcycle and every motor-driven cycle when operated upon a highway shall be equipped with <u>at least one brake</u> which may be operated by hand or foot.



- (b) Motorcycle headlamps shall fail safety inspection if:
 - (1) Headlamp does not operate or is a color other than white.
 - (2) There is more than two headlamps connected on a single switch.
 - (3) Headlamps is cracked or has holes which allows entry of water.
 - (4) There is standing water in the headlamp.
 - (5) Headlamp is out of aim.

Motorcycle headlamp modulators are allowed by Federal Code 49 CFR 571.108

- Harleys, Hondas, and some Kawasaki's have what appears to be 3 or 4 headlamps. The 2 outer lamps are not headlamps; they are driving lamps and do not constitute a failure.
- Motorcycles are not required to have high beam headlamps or high beam indicators.





General Statute 20-129(c) Headlamps on Motorcycles.

Every motorcycle shall be equipped with at least one and not more than two headlamps which shall comply with the requirements and limitations set forth in G.S. 20-131 or 20-132. The headlamps on a motorcycle shall be lighted at all times while the motorcycle is in operation on highways or public vehicular areas.

- (c) Motorcycle rear lamps shall fail safety inspection if:
 - (1) They do not operate.
 - (2) Light is a color other than red.
 - (3) Light is cracked or broken and allows entry of water.
 - (4) There is standing water in the lens.
 - (5) Lamp is not securely mounted.
 - (6) Wiring is broken or frayed.

- The use of rear light integrators is allowed (signal on while brake is applied, one side flashes).
- Imported Yamaha's may be equipped with clear lenses and colored bulbs, as a "Rule of Thumb" if the light was installed by the manufacturer it meets the Commissioner's

.0537 Directional Signals

(a) All vehicles, except motorcycles,
must be equipped with turn signals.

requirements.

- (d) A motorcycle stop lamp shall fail safety inspection if:
 - (1) Lamp does not operate when brakes are applied.
 - (2) Light is a color other than red or amber.
 - (3) Lens is cracked or broken or allows entry of water.
 - (4) There is standing water in the lens.
 - (5) Lamp is not mounted.
 - (6) Wiring is broken or frayed.

- (e) A motorcycle license plate light shall fail safety inspection if:
 - (1) Light does not operate.
 - (2) Light does not illuminate the license plate.
 - (3) Light is a color other than white.

License Plates that have been relocated still must illuminate the license plate.



- (f) A motorcycle horn shall fail safety inspection if:
 - (1) The horn does not operate.
 - (2) The sound emitted is not audible at **200 feet**.
 - (3) The horn is not mounted.
 - (4) The button is mounted so that it cannot be easily operated by the driver.



- (g) Motorcycle tires shall fail safety inspection if:
 - (1) There is less than **2/32 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.
 - (2) Cords are exposed at any location on the tire.
 - (3) Sidewall is cut, bulging, damaged or is cracked due to dry rotting





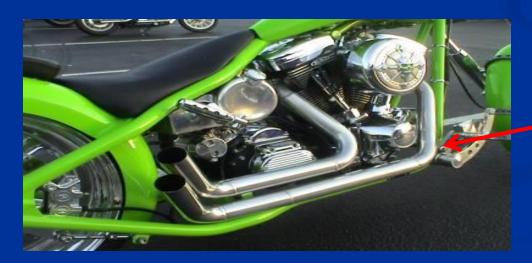


- (h) Motorcycle rear view mirror shall fail safety inspection if:
 - (1) The mirror is missing, broken or cracked.
 - (2) The mirror is not mounted.
 - (3) The mirror will not hold a setting while the vehicle is in operation.

Only one mirror is required.

(There is no requirement on which side it is located.)

- (i) A motorcycle exhaust shall fail safety inspection if:
 - (1) The motorcycle has no muffler.
 - (2) The muffler, exhaust, or tailpipe have holes, leaking joints, seams or patches.
 - (3) The tailpipe end is pinched.



Straight Pipes (no muffler)

A motorcycle exhaust fails if:

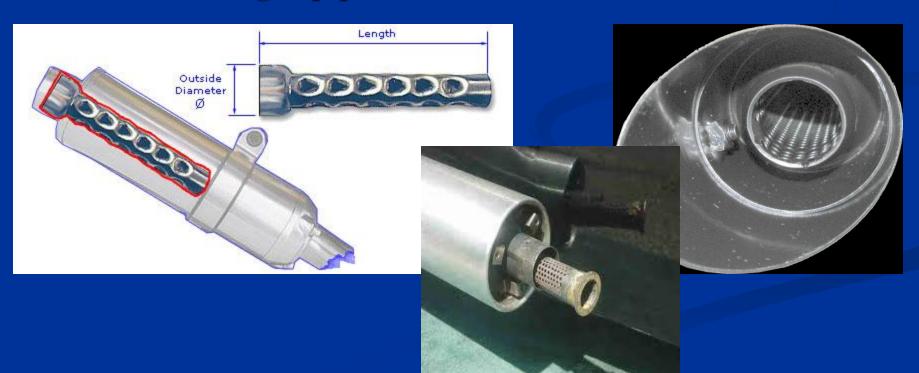
(4) The exhaust system is equipped with a muffler cut-out or bypass.





A motorcycle exhaust fails if:

(5) The muffler baffles have been removed or damaged to create a straight pipe.



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

The Inspection Inspector-Mechanic performing the safety inspection of a motorcycle is not required to have motorcycle endorsement.



.0549 Approval and Disapproval of Vehicles

Vehicles shall not be disapproved for any reason other than those specified in General Statute or NCAC.

Exemptions From Safety Test Requirements

An Exemption may be obtained when a vehicle fails a safety inspection because of <u>missing emission control</u> devices by contacting a local DMV Inspector.

- Vehicle fails the tamper portion of a vehicle inspection because it does not have one or more emission control devices as required by the vehicle manufacturer.
- The consumer will have to show proof that the part needed to pass inspection is no longer manufactured. At least (3) three sources stating that the components are no longer manufactured or available, one of which must be from a dealership, must be provided. The License and Theft Bureau will confirm the availability of the part.

WINDOW TINT

(a) All stations performing window tinting inspections shall have a photometer which has been properly tested and approved by the Commissioner of Motor Vehicles and that complies with Rule .0552 of this section. Stations that do not have an approved tint meter shall not inspect vehicles with after-factory window tinting. Stations are not required to purchase a photometer in order to perform safety inspections on vehicles without after-factory window tinting.

Approved window tint meters and headlight aimers can be found at https://connect.ncdot.gov/business/DMV/pages/inspection-stations.aspx

(b) Prior to initiating the inspection process, the inspection mechanic shall determine if the vehicle has after-factory window tinting by using an automotive film check card or knowledge of window tinting techniques.

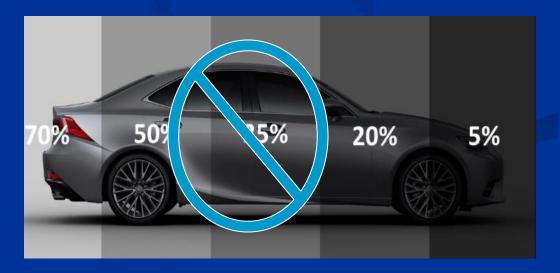


Prior to initiating the inspection process on each vehicle.

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







- (c) The inspector mechanic shall test the photometer calibration against a reference sample of glass provided by the manufacturer **prior to testing** the after-factory window tinting. If the photometer's display is not functioning as designed by the manufacturer or the device exceeds the net light transmission calibration test by plus or minus three percentage points, the unit shall not be used until repaired. Guidelines for photometer calibration tests are as follows:
 - (1) The reference sample must be clean and free of dirt prior to performing the calibration check.
 - (2) If the reference 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.

(d) The inspection mechanic shall perform all tests according to the photometer manufacturer's recommendations.

Window tint shall fail safety inspection if:



Window tint shall fail safety inspection if:

- (1) Any window on the vehicle with after-factory tint has a light transmission of less than thirty-two percent (32%).
- (2) The tint on any window is red, yellow, or amber





Window tint shall fail safety inspection if:

- (3) The tint on the windshield extends more than five (5) inches below the top of the windshield or is below the AS1 line of the windshield, which ever measurement is longer.
- (4) The light reflectance of a tinted window is not twenty percent (20%) or less.





AS1 Line Right or Left Side of Windshield

Window tint shall fail safety inspection if:

- (e) Window tinting on vehicles with after-factory window tint shall not be inspected if the vehicle is exempt from the window tinting restrictions under G.S. 20-127(c)
- (f) The fee as specified in G.S. 20-183.7(a) for inspecting window tinting shall be charged for vehicles with after factory tint

NOTE: The \$10.00 window tint fee charge during an inspection is mandatory.

G.S. 20-127(c) Tinting Exceptions. The window tinting restrictions in subsection (b) of this section (percentage, color and reflectance) apply without exception to the windshield of a vehicle. The window tinting restrictions in subdivisions (b)(1) and (b)(2) of this section (percentage and color only) do not apply to any of the following vehicle windows:

G.S. 20-127(c) Tinting Exceptions:

(1) A window of an excursion passenger vehicle.

(Vehicles transporting persons on sight-seeing or travel tours)





- (2) & (3) Repealed by Session Laws 2012-78, s. 8, effective December 1, 2012. (for-hire and buses)
- (4) A window of a motor home.

- (5) A window of an ambulance.
- (6) The rear window of a property-hauling vehicle. (Trucks)
- (7) A window of a Limousine.
- (8) A window of a Law Enforcement vehicle.
- (9) A window of a multipurpose vehicle that is behind the driver. (Passenger windows on an SUVs, Minivans, Pick-Up Trucks are not measured)









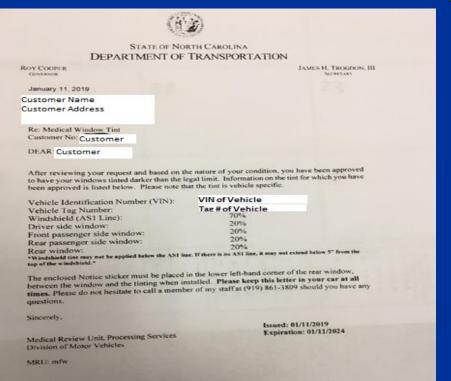
- (10) A window of a vehicle that is registered in another state and meets the requirements of the state in which it is registered. (Rental Vehicle)
- (11) A window of a vehicle for which the Division has issued a medical waiver exception permit under subsection (f) of this section.
 - (A written form is required)

Window Tint Medical Exceptions

- People who suffer from a medical condition that makes them sensitive to visible light are eligible.
- They must apply to the Drivers Medical Evaluation Program.
- Their doctor must complete the Medical Evaluation Form.
- The permit is valid for 5 years unless directed otherwise by the Drivers Medical Evaluation Program.
- A renewal requires a medical recertification.
- They cannot have more than 2 permits at any one time.

Window Tint Medical Exceptions

- The permit must specify the vehicle to which the tint is applied, the windows to be tinted, and the allowed levels of tinting.
- The permit shall be carried in the vehicle at all times.
- A sticker shall be placed on the bottom left side of the rear window <u>between</u> the glass and the tint.



NOTICE

The windows of this vehicle exceeds the requirements of GS 20-127(b) regarding window tinting. Operation of this vehicle without a medical exception permit violates North Carolina law.

Instructions: The sticker must be placed in the lower left-hand corner of the rear window, between the window and tinting when installed.

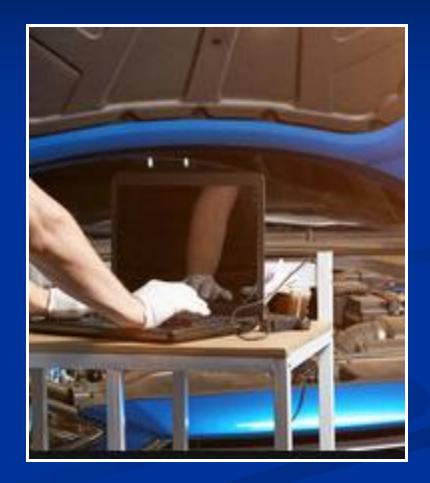
Window Tinting

■ A safety inspection mechanic **Shall Not** inspect an after-factory tinted window of a vehicle for which the Division has issued a medical exception permit pursuant to G.S. 20-127(f).

■ The windshield can have an **UNTINTED** clear film which does not obstruct the vision but which reduces or eliminated ultraviolet radiation from entering the vehicle through the windshield. (Can not have any tint value)

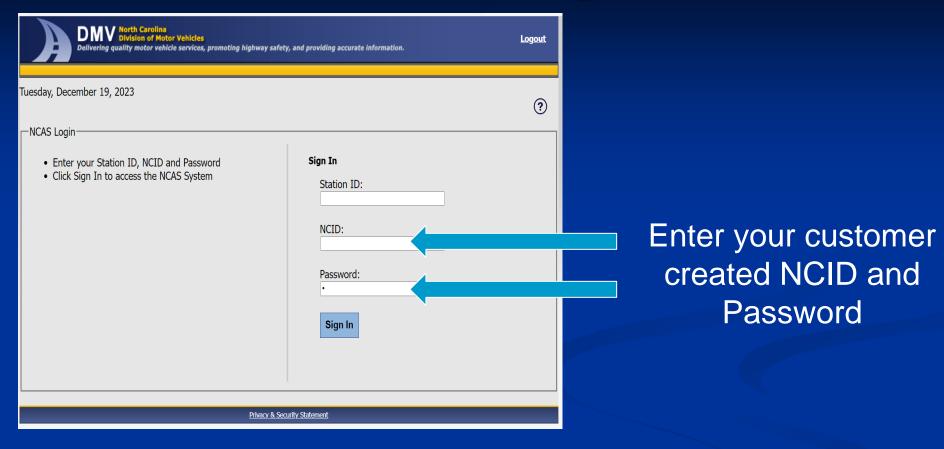
Procedure for conducting a State Inspection





The following inspection procedures are meant to serve as a guide only. The inspection process will vary depending on the type and brand of analyzer, or if the Web-Safety Program is being utilized.

Web Safety Sign In

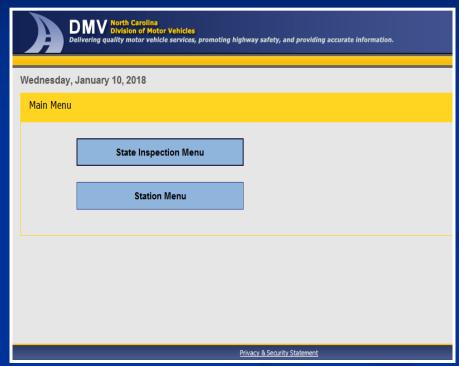


The NCID account must be created by the technician on the NCID web site at https://ncid.nc.gov and provided to the License and Theft Bureau on the LT-310.

The NCID Set up Guide is included in the student lesson plan.

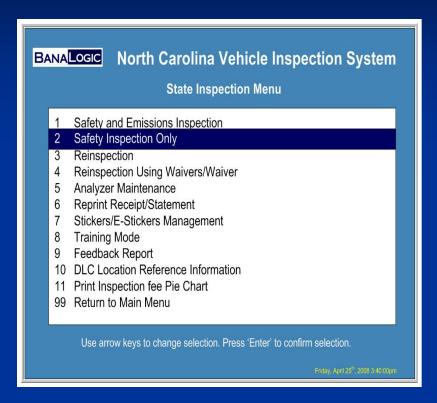
Main Menu

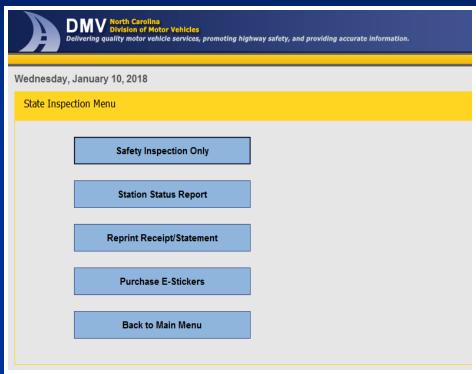




This is the main menu. To conduct an inspection, choose "State Inspection Menu".

State Inspection Menu





To conduct an inspection, select option No. 2 or "Safety Inspection Only"

Inspector ID Entry

BANALOGIC North Carolin	na Vehicle Inspection System
	Enter your Inspector- cense ID Number.
	Friday, April 25 th , 2008 3:40:00pm

Enter your Technician / Mechanic license ID number.

* The Technician / Mechanic ID number is typically your drivers license number. — (Web Safety requires an NCID account when logging on to the web site.)

Inspector Password Entry

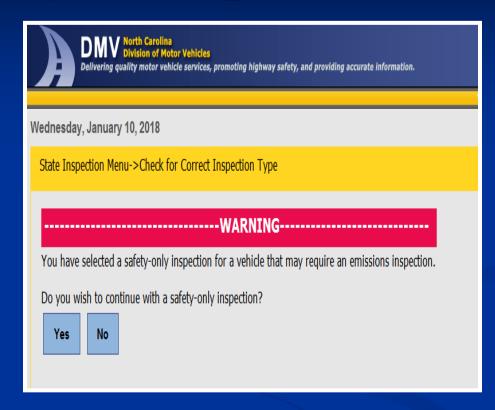
BANALOGIC North Carolina Vehicle Inspection System
Please Enter your access code.

Friday, April 25 th , 2008 3:40:00pm

Enter your access code in the space provided. (Web Safety requires an NCID password)

Safety Only Prompt





Ensure the vehicle requires a safety only inspection before proceeding.

Registration

BANALOGIC

North Carolina Vehicle Inspection System

Vehicle Information Capture

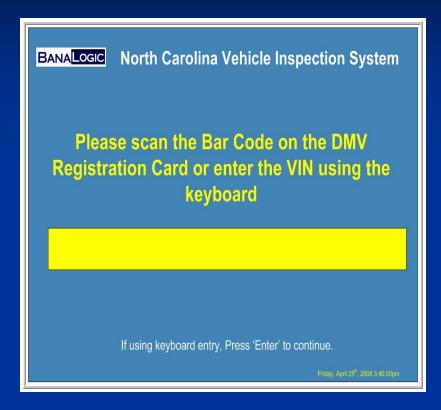
Please ask the customer for their DMV Registration Card.

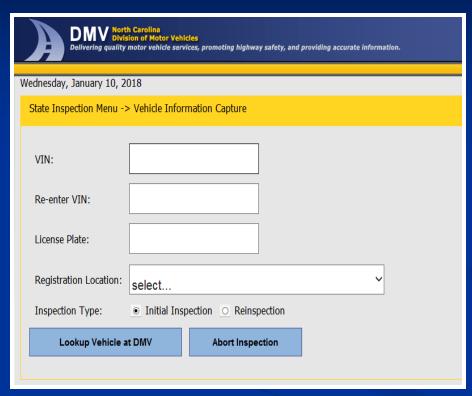
Press any key to continue.

Friday April 25th 2008 3:40:00pn

Obtain the registration card from the customer. <u>If no registration card is presented, scan the information from the vehicle.</u>

VIN Entry

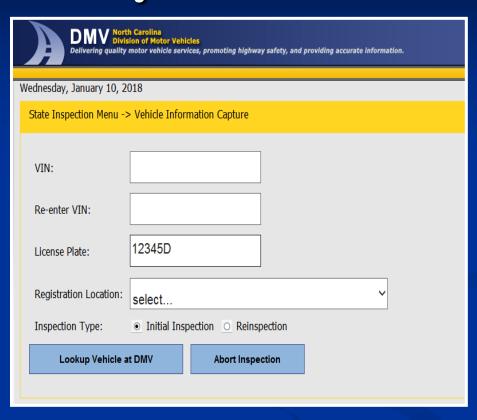




Scan the bar code on the registration card or the Federal Decal. Manual entries of the VIN should only occur if the registration or decal is unable to be scanned.

Plate Entry





Enter the vehicles license plate number. If no plate enter NONE.

For a dealer enter the Dealer # FOLLOWED by a "D"

(Dealer Number followed by "D" not the dealer license plate number)

Registration Location Entry



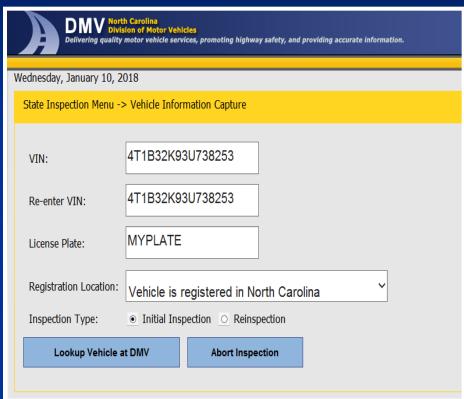
DMV North Carolina Division of Motor Vehicles Delivering quality motor vehicle services, promoting highway safety, and providing accurate information.			
Wednesday, January 10, 2018			
State Inspection Menu -> Vehicle Information Capture			
VIN:			
Re-enter VIN: License Plate:			
Registration Location: Vehicle is registered in North Carolina			
Inspection Type: • Initial Inspection • Reinspection			
Lookup Vehicle at DMV Abort Inspection			

Select the appropriate option.

(Web Safety – select from drop down)

Information Confirmation





Verify entries are correct before proceeding with the inspection.

Initializing Modem

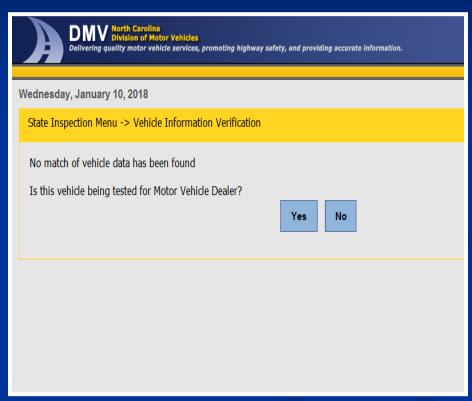
North Carolina Vehicle Inspection System **BANA**LOGIC PERFORMING NETWORK ACCESS, PLEASE WAIT **Initializing Modem**

The computer will now make the first call to the State VID.

(Web Safety will not display this screen)

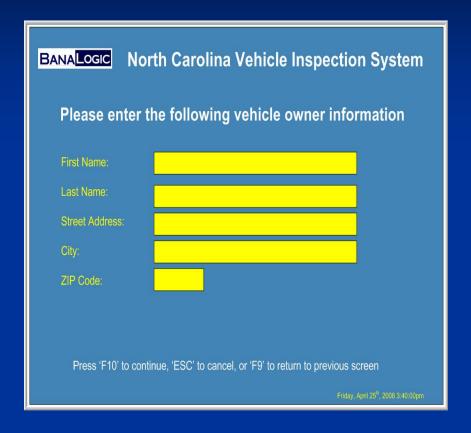
No Match found





If the vehicle is not in the state VID, you will be prompted to enter the dealer number or vehicle owner information.

Owner Information

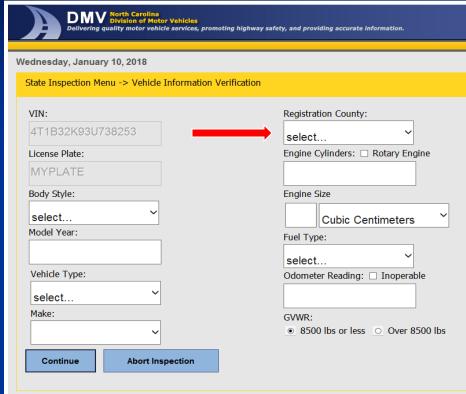


DMV North Carolina Division of Motor Vehicles Delivering quality motor vehicle services, promoting highway safety, and providing accurate information.			
Wednesday, January 10, 2018			
State Inspection Menu -> Vehicle Information Verification			
First Name:			
Last Name:			
Street Address:			
City:			
Zip Code:			
Ok			

Complete owner information as indicated and if required.

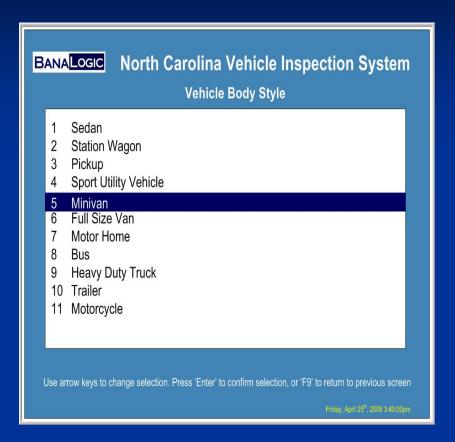
County Entry

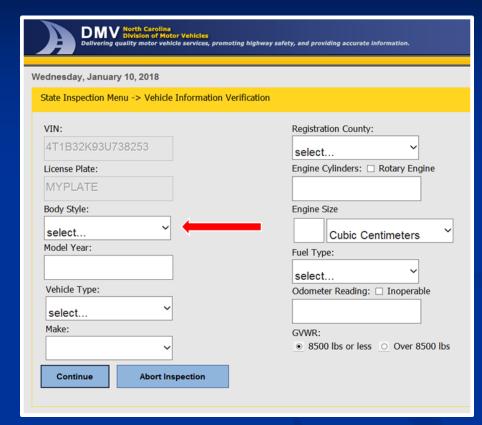




Select the appropriate county as indicated on the vehicle registration. If an Inspector-Mechanic selects one of the 22 emission counties in NC and attempts to complete a safety-only inspection, the analyzer may produce a warning.

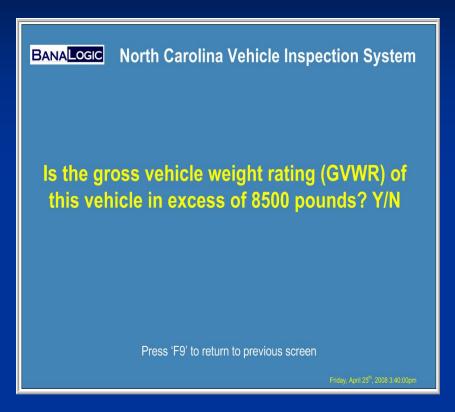
Vehicle Body Style

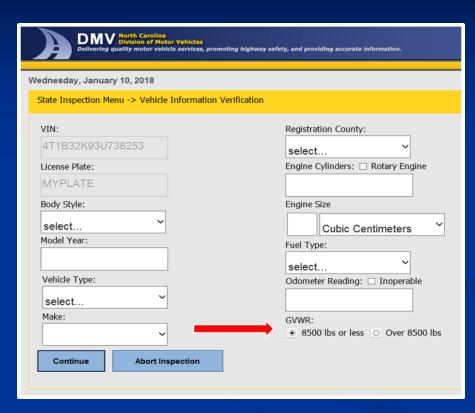




Select the appropriate body style.

Gross Vehicle Weight Rating

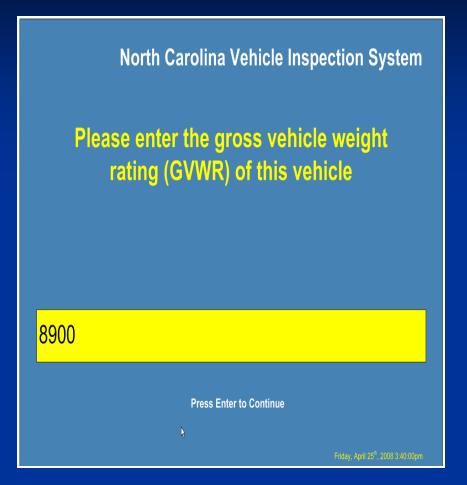


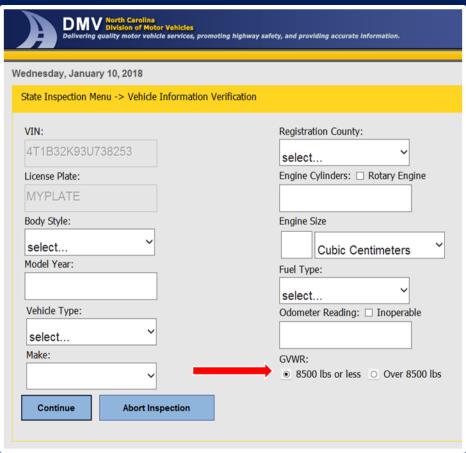


Determine the <u>GVWR</u> from the Federal Decal attached to the driver's door or driver's door seal.

Note: For inspection purposes, a heavy-duty vehicle is considered Over 8,500 pounds.

Weight Entry

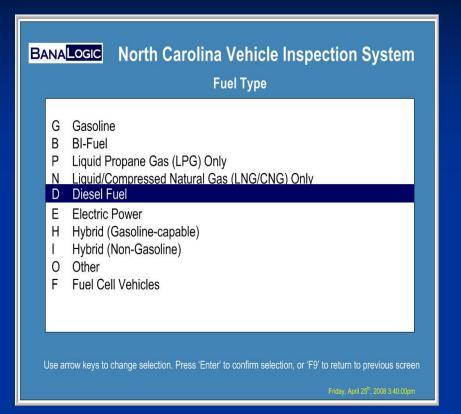


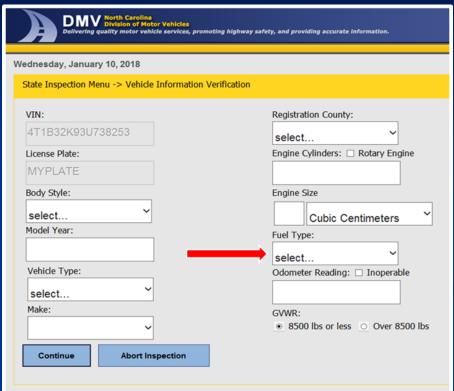


Entry required only if the GVWR exceeds 8500 pounds.

Select 8500 lbs. or less OR over 8500 lbs. for Web Safety Users

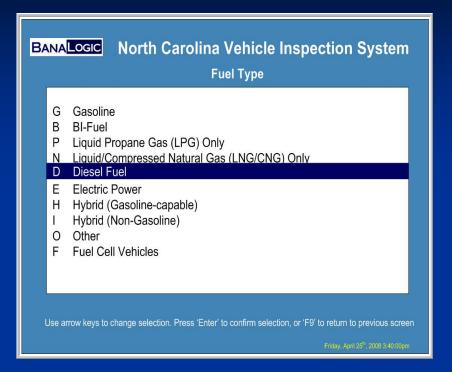
Fuel Type

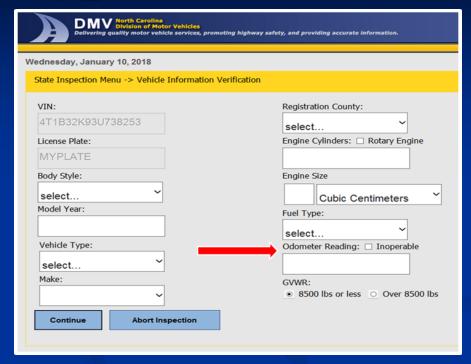




Enter /Select the appropriate fuel type. * If the vehicle operates on gasoline during any portion of the operating cycle, it is a gasoline operated vehicle.

Fuel Type

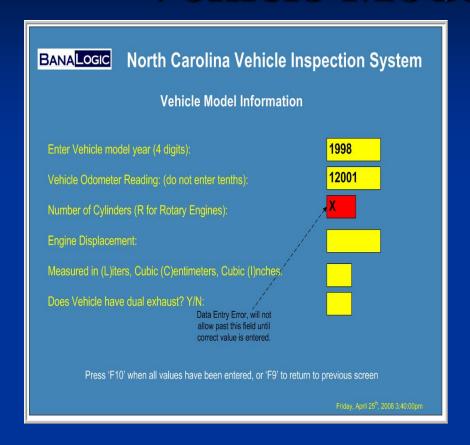


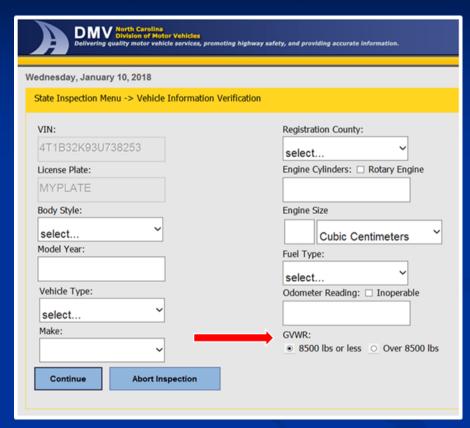


It should be noted that the analyzer and Web Safety are programmed to distinguish which test type is required on a vehicle by the fuel class entry. As an example, if diesel or fuel cell was selected as a fuel class, it would prompt the analyzer to proceed with a safety-only inspection.

Note: Verify the fuel type from the vehicle to make entry.

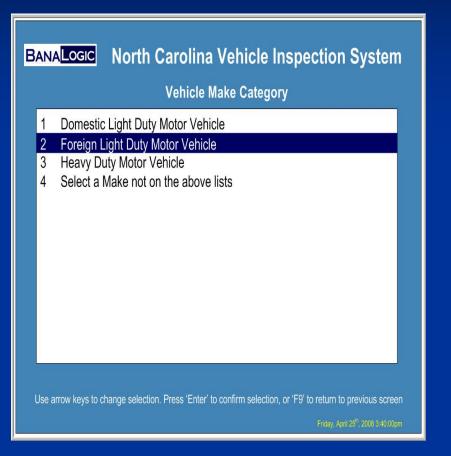
Vehicle Model Information

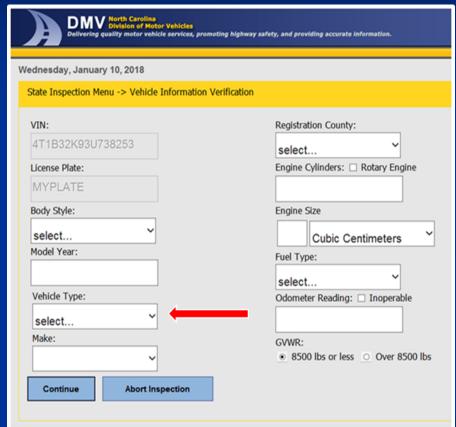




Enter the odometer reading in miles. (Do not enter the tenths digit) If the odometer reading is not available, (broken), enter zeros (0) in the space provided and continue with the inspection.

Vehicle Make Category

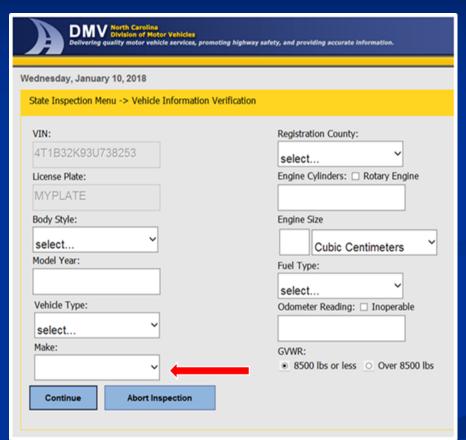




Select the appropriate classification.

Motor Vehicle Make



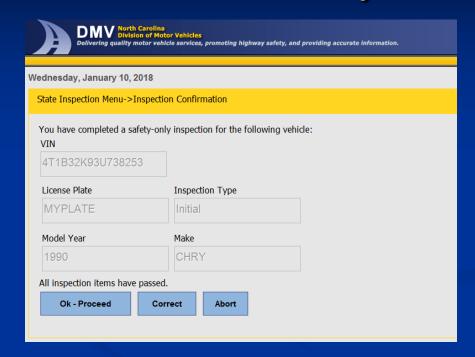


Select the appropriate make from the list provided.

Vehicle Information Summary

Vehicle Information Summary

Make: CHRY
Model Year: 1998
Fuel Type: Gasoline
Body Type: Sedan
County: WAKE

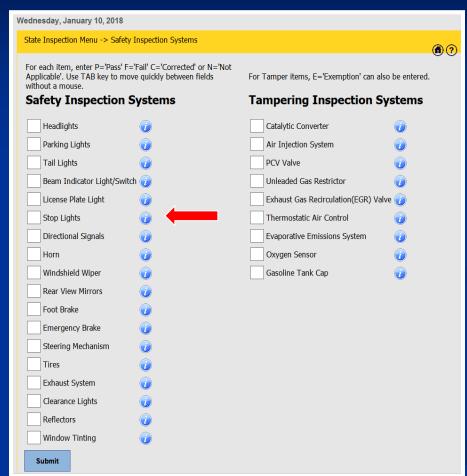


Ensure entries are correct before proceeding.

(Web Safety will display this screen after pass/fail screen)

Safety Inspection Entries

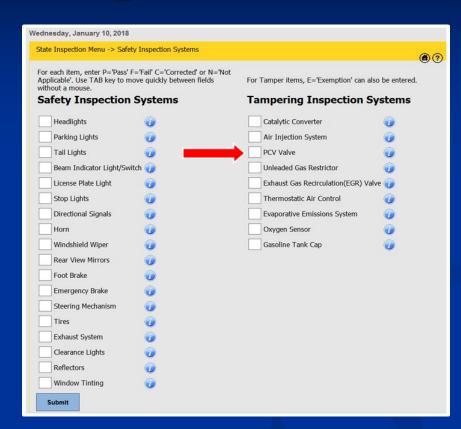




Enter the appropriate remark for each selection.

Tamper Inspecting Entries

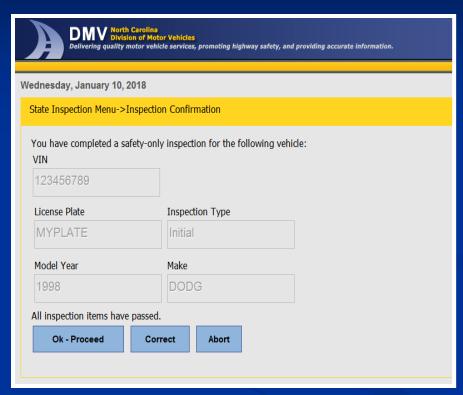




Enter the appropriate remark for each selection.

Inspection Results





Note: A customer that receives a failing inspection may return to the same inspection station within 60 days and obtain a free (labor) re-inspection which will consist of only the failing item(s). Only failed items are checked on a re-inspection.

Network Access

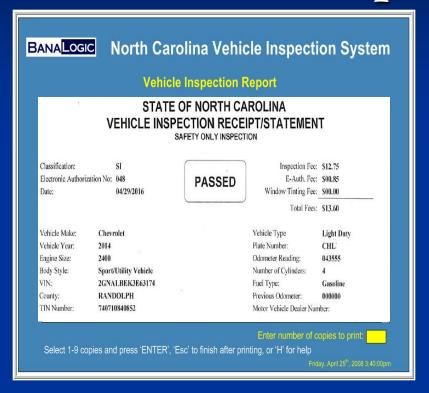


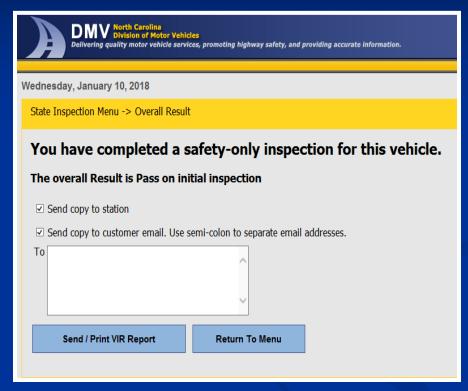


The Analyzer will now make the second and final call to the VID.

The Web Safety program will allow you to send the receipt by email as well as print.

Vehicle Inspection Receipt/Statement





Two receipts should be printed for each inspection. The customer should receive one copy and the station should retain one copy for 18 months. (Both copies should be signed)

If unable to print a copy of the receipt or receipt is not legible, the station should cease operation until the problem is resolved.

Enter the email address in the box provided to email the receipt.

Penalty Schedule for Licensed Safety/OBD Inspection Stations G.S. 20-183.7

Violations of the safety inspection regulations, rules, and procedures may result in the inspector-mechanic, the station, or both receiving the issuance of a civil penalty. In addition, inspector-mechanics may also be cited or arrested for violations of North Carolina General Statutes. (Stations or Technicians that receive a civil violation will have the opportunity to request a hearing from the DMV to defend the charges)

Civil violations are divided into three different levels, each ranging in severity.

Penalty Schedule for Licensed Safety/OBD Inspection Stations G.S. 20-183.7

■ Violations are categorized into 3 types:

Type I Violation: Most Severe

- Station:
 - The 1st or 2nd offense of a Type 1 violation within 3 years will result in a civil penalty of \$250 and a 180-day suspension.
 - ➤ A 3rd or subsequent Type 1 violation within 3 years will result in a 2-year suspension and the assessment of a \$1,000 fine.

■ Technician:

- > The 1st or 2nd offense of a Type 1 violation within 7 years will result in a civil penalty of \$100 and a 180-day suspension.
- ➤ A 3rd or subsequent Type 1 violation within 7 years will result in a 2-year suspension and the assessment of a \$250 fine.

Type I Violation: Most Severe

- Issue a safety electronic inspection authorization to a vehicle without performing a safety inspection of vehicle.
- Issue a safety electronic inspection authorization to a vehicle after performing a safety inspection of the vehicle and determining the vehicle did not pass inspection.
- Allow a person who is not licensed as a safety inspection mechanic to perform a safety inspection for a self-inspector or at a safety station.
- Perform a safety-only inspection on a vehicle that is subject to both a safety and emissions inspection.
- Conduct a safety inspection of a vehicle without driving the vehicle and without raising the vehicle and without opening the hood of the vehicle to check equipment located therein.
- Solicit or accept anything of value to pass a vehicle other than as provided in this Part.

Penalty Schedule for Licensed Safety/OBD Inspection Stations G.S. 20-183.7

Type II Violation

Station:

- ➤ The 1st or 2nd offense of a Type 2 violation within 3 years will result in a civil penalty of \$100.
- ➤ A 3rd or subsequent Type 2 violation within 3 years will result in a <u>90-day</u> suspension and the assessment of a <u>\$250</u> fine.

■ Technician:

- > The 1st or 2nd offense of a Type 2 violation within 7 years will result in a civil penalty of \$50.
- ➤ A 3rd or subsequent Type 2 violation within 7 years will result in a <u>90-day</u> suspension and the assessment of a <u>\$100</u> fine.

Type II Violations

- Issue a safety electronic inspection authorization to a vehicle without driving the vehicle and checking the vehicles braking reaction, foot brake pedal reserve, and steering free play.
- Issue a safety electronic inspection authorization to a vehicle without raising the vehicle to free each wheel and checking the vehicles tires, brake lines, parking brake cables, wheel drums, exhaust system, and the emissions equipment.
- Issue a safety electronic inspection authorization to a vehicle without raising the hood and checking the master cylinder, horn mounting, power steering and emissions equipment.
- Issue a safety electronic inspection authorization to a vehicle with inoperative equipment, or with equipment that does not conform to the vehicle's original equipment or design specifications, or with equipment that is prohibited by any provision of law.
- Impose a fee in the amount that differs from set in NCGS 20-183.7

Penalty Schedule for Licensed Safety/OBD Inspection Stations G.S. 20-183.7

Type III Violations

- Station and/or Technician:
 - The 1st or 2nd offense of a Type 3 violation within 7 years will result in the issuance of a warning letter.
 - ➤ A 3rd or subsequent Type 3 violation within 7 years will result in the assessment of a \$25 fine.
- A safety inspection mechanic whose license has been suspended or revoked, must retake the inspection-mechanic course(s) and successfully complete the course(s) before the mechanic's license(s) can be reinstated. Failure to successfully complete the course continues the period of suspension until the course is completed successfully.

Type III Violations:

■ Fail to post a safety inspection station license issued by the Division.

■ Fail to post all safety information required by federal law and by the Division.

■ Issue a receipt that is signed by a person other than the safety inspection mechanic.

Safety Violations – Other Acts

- It should be noted that NCGS 20-183.7B(d) gives the North Carolina Division of Motor Vehicles the ability to designate other acts or actions that constitute a Type I, Type II, or Type III violation.
- Therefore, although a particular action and/or scenario is not listed in the foregoing slides, an act that violates NCAC, NCGS, or Federal Code may still be deemed a violation.
- A safety inspection mechanic whose license has been suspended or revoked, <u>must retake the inspection-mechanic course(s)</u> and successfully complete the course(s) before the mechanic's license(s) can be reinstated. Failure to successfully complete the course continues the period of suspension until the course is completed successfully.

Modified Utility Vehicle

§ 20-121.1. Operation of a low-speed vehicle, mini-truck, or modified utility vehicle on certain roadways.

The operation of a low-speed vehicle, mini-truck, or modified utility vehicle is authorized with the following restrictions:

- (1) A low-speed vehicle may be operated only on streets and highways where the posted speed limit is 35 miles per hour or less. A mini-truck or modified utility vehicle may be operated only on streets and highways where the posted speed limit is 55 miles per hour or less; provided, a modified utility vehicle may not be operated on any street or highway having four or more travel lanes unless the posted speed limit is 35 miles per hour or less. This subdivision does not prohibit a low-speed vehicle, mini-truck, or modified utility vehicle from crossing a road or street at an intersection where the road or street being crossed has a posted speed limit of more than 35 miles per hour.
- (2) A low-speed vehicle or mini-truck shall be equipped with headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brakes, rearview mirrors, windshields, windshield wipers, speedometer, seat belts, and a vehicle identification number. Any such required equipment shall be maintained in proper working order.
- (2a) A modified utility vehicle shall be equipped with headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brakes, rearview mirrors, a speedometer, seat belts, and a vehicle identification number. Any such required equipment shall be maintained in proper working order. If a modified utility vehicle does not have a vehicle identification number, upon application by the owner, the Division shall assign a vehicle identification number to the modified utility vehicle prior to registration. The operator of and all passengers on a modified utility vehicle that is not equipped with a windshield and windshield wipers shall wear a safety helmet, with a retention strap properly secured, that complies with Federal Motor Vehicle Safety Standard (FMVSS) 218.
- (3) A low-speed vehicle, mini-truck, or modified utility vehicle shall be registered and insured in accordance with G.S. 20-50 and G.S. 20-309.
- (4) Notwithstanding the provisions of any other subdivision of this section, the Department of Transportation may prohibit the operation of low-speed vehicles, mini-trucks, or modified utility vehicles on any road or highway if it determines that the prohibition is necessary in the interest of safety.
- (5) Low-speed vehicles must comply with the safety standards in 49 C.F.R. § 571.500.
- (6) Regardless of age, a mini-truck shall not qualify as an antique vehicle or historic vehicle as described in G.S. 20-79.4(b).

Note: Modified Utility Vehicle as defined in NC General Statute 20-4.01(27) requires a Safety Only Inspection and should be classified as an SUV.



Licensed car mechanic charged with manslaughter in customer's death

BARRE, Vt. —A Barre man was arrested Tuesday after investigators said he didn't thoroughly inspect a vehicle involved in a fatal crash.

Investigators said Steven Jalbert inspected Donald and Elizabeth Ibey's 1992 Chevrolet Corsica in May 2014 but didn't inspect the car well enough before passing it. Elizabeth, 83, died in a car crash two months later. Her death could have been prevented, investigators said.

"When you go in and you pay the fees to have your vehicle inspected, you're depending on that inspection mechanic to take the time to go through, examine that vehicle and tell you 'yes that vehicle is safe to drive," said Glen Button, Director of Enforcement at the DMV.

Thank you for taking the time to attend class at this Community College!



