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TITLE 280 – DEPARTMENT OF REVENUE

CHAPTER 30 – DIVISION OF MOTOR VEHICLES

SUBCHAPTER 15 – SAFETY AND EMISSIONS

PART 4 – Rules, Regulations and Standards for the Inspection of Motorcyles, Motor Scooters and Other Motor-Driven Cycles

4.1 Authority

This Part is promulgated pursuant to R.I. Gen. Laws §§ 31-10.1-7, 31-38-4, and 31-47.1-7.

4.2 Purpose

The General Provisions, Station Requirements and Inspection Procedures for motorcycle inspection stations are the same as public inspection stations as provided in Part 3 of this Subchapter ~~Sections 1,2, 3 and 4 of the Official Manual for vehicle inspection~~ except as to those provisions which by their nature can have no application.

4.3 Minimum Requirements for Appointment as a Motorcycle Inspection Station

A. Each inspection station is expected to have at least one (1) inspector who has been licensed as a motorcycle operator for at least two (2) years and has demonstrated to the Registry that he/she is familiar with motorcycle repair problems. He/she shall have had at least two (2) years' experience as a motorcycle mechanic.

B. Each motorcycle inspection station will be held fully responsible for the approval of each and every cycle presented for inspection as to the compliance with all the motorcycle inspection rules and regulations except that the station will not be held responsible by the Registry as to the strength of the materials or the quality of the workmanship of any cycle that is presented for inspection.

C. Each motorcycle inspection station must meet all the requirements of public stations except those requirements that by their nature have no application to the motorcycle provided, however, that every motorcycle inspection station shall have:

1. An inspection lane at least 25 feet long and 6 feet wide.

2. A rigid tape measure distinctively marked at ¼" – 15" and 18".

3. A brilliancy meter capable of measuring light in thousands candlepower.

4. Headlamp aiming equipment capable of measuring headlamps according to regulations.

5. A brake tester capable of measuring the stopping distance at 20 miles per hour.

6. Measuring tools for rake and trail.

    a. An adjustable or ~~collapsable~~collapsible straight-edge (Such as: ~~collapsable~~collapsible auto radio antenna or 6 foot folding ruler.)

    b. A 6-inch protractor designed for measuring degrees of a circle.

    c. A rigid carpenter's framing square marked off in inches with each side at least 16 inches in length.

4.4 Registration and Vehicle Identification

A. Every cycle must be registered at the time of inspection. Examine this registration and be sure to compare the vehicle identification number with the cycle and the registration card. Be sure to check the cycle plate numbers to see that they agree with the registration card.

B. Cause for rejection:

1. Cycle is not registered;~~.~~

2. Cycle plate and identification numbers do not agree with the registration; and~~.~~

3. Registration card or registration plate is missing, mutilated or not validated.

4.5 Brakes and Brake Lining Material

A. Every motorcycle, motor scooter or motor-driven cycle must be equipped with at least one (1) rear brake, which may be operated by hand or foot, and which is adequate to control and stop the vehicle within forty (40) feet from a speed of twenty (20) miles per hour or which brake is capable of deceleration at a rate of ten and seven tenths (10.7) feet per second per second. Cycles with brakes on

all wheels must be able to stop within thirty (30) feet from a speed of twenty (20) miles per hour, or be capable of deceleration at a rate of thirteen (13) feet per second per second.

B. You can check the stopping distance by using an approved deceleration meter or similar device during the road test.

C. All components of the braking system whose malfunction could reduce braking efficiency should be inspected. The cycle should be specifically checked for worn, missing or defective pins; broken or missing springs; rods, clevises, or couplings; misaligned anchor pins; worn cables; frozen, rusted or inoperative connections; missing spring clips; improper wheel bearing adjustment; or defective grease retainers. Visually check brake pedal shaft and bearings for wear and misalignment. All brakes on the cycle must be in good working order. It is not mandatory to pull a wheel on a cycle; however, the wheel may be pulled to further examine the brakes and/or brake lining material. The brake lining material must be at least 1/64th of an inch above any metal.

D. Do not approve any cycle if the braking assembly is not sufficiently covered so as to protect the brake lining friction material from road debris and elements of weather that could cause the brake lining material to lose its effectiveness.

E. Every cycle manufactured with more than one brake must have all such brakes in good working order.

F. Cause for rejection:

1. the c~~C~~ycle is not able to stop within minimum distances;~~.~~

2. the b~~B~~raking assembly is not sufficiently covered;~~.~~

3. the cycle has w~~W~~orn, missing or defective parts;~~.~~

4. the b~~B~~rake lining material is broken or contaminated; or~~.~~

5. the b~~B~~rake lining material less than 1/64th of an inch above any metal.

4.6 Body Items

A. Check cycle for obvious defects in body items that are broken, inadequate, missing, bent or defective, so as to cause injury to the operator, passenger or other persons using the highways.

B. Body items may include, but are not limited to, frame, rollover bars, chain, motor mounts and supports, flaps, saddle bags and any other extra equipment that may or may not be required that has been added to the cycle.

C. Cause for rejection:

1. Any body item that is broken, bent, missing or defective so as to cause injury to person or property.

4.6.1 Chain Guard

A. Any drive chain on a motorcycle shall be equipped with a chain guard or covering device to prevent any chain or chain sprocket contact with any rider.

B. No cycle shall pass inspection if:

1. the c~~C~~hain guard is missing;~~.~~

2. the c~~C~~hain guard is not securely attached;~~.~~

3. the c~~C~~hain guard is too small to afford proper protection to rider;~~.~~ or

4. the c~~C~~hain guard is located improperly so as not to afford proper protection to rider.

4.7 Exhaust and Fuel System

A. Check over the muffler and all the parts of the exhaust system, paying particular attention to rotted and corroded surfaces and mufflers that have been altered, modified, deleted or adjusted in any manner that would cause the exhaust system to generate a higher or louder sound level than would be generated by the exhaust system customarily installed by the manufacturer as original equipment. No part of the exhaust system shall be higher than the rear fender.

1. ~~NOTE:~~ Some mufflers have a small hole that is made by the manufacturer to provide drainage. These holds should not be cause for rejection.

B. Visually check the fuel system and its lines and piping for leaks and worn spots (chafing).

C. Check the throttle linkage, including the cables, for worn, bent, broken, corroded or missing parts.

D. No cycle(s) shall pass inspection if:

1. Any exhaust system ~~that~~ has been altered, modified, deleted or adjusted so as to cause a sound louder than what was intended by the manufacturer of the cycle engine as intended for street use;~~.~~

2. Any exhaust system ~~that~~ has any breaks, holes or leaking patches or seams;~~.~~

3. Exhaust systems or its elements are not securely fastened to the cycle or higher than the rear fender;~~.~~

4. Fuel leakage occurs at any point along the fuel system;~~.~~

5. The f~~F~~uel tank and piping ~~that~~ is not securely attached to the cycle;~~.~~

6. The f~~F~~uel tank is not vented properly; or~~.~~

7. Any fuel throttle linkage ~~that~~ is not properly aligned or that is bent, broken or missing.

4.8 Fenders

A. All cycles shall be equipped with front and rear fenders at least twelve inches (12") ~~inches~~ in length. Every front and rear fender shall be of a construction and type so as to render protection to the operator or passenger of the cycle and other persons using the highways against flying objects thrown about by the cycle wheels.

B. No cycle(s) shall pass inspection if:

1. The f~~F~~ender is missing;~~.~~

2. The f~~F~~ender is not securely attached;~~.~~

3. The f~~F~~ender is too small to afford proper protection against flying objects; or~~.~~

4. The f~~F~~ender interferes with steering of cycle.

4.9 Foot Rests

A. Every cycle must have at least one (1) foot rest on each side of the vehicle for each seat on the cycle.

B. Cause for rejection:

1. No foot rests for each seat.

2. Foot rests not adequate.

4.10 Hand Grip (for passenger)

A. Every cycle with a passenger seat must have at least one (1) appropriate hand bar or grip firmly attached to the cycle for the passenger's use.

B. Cause for rejection:

1. Hand bar or grip not adequate

2. Hand bar or grip missing.

4.11 Headlamps

A. Headlamps shall be of a type approved by the Registrar of Motor Vehicles. Every headlamp shall be aimed~~AIMED~~ and adjusted to ~~COMPLY~~ comply with the current SAE standards.

B. Every headlamp shall be mounted at a height of not more than fifty-four inches (54") or less than twenty-four (24") from the center of the headlamp above the level surface upon which the vehicle rests. The color of the lens of any headlamp shall be clear or crystal.

C. The headlamp or headlamps on every motor vehicle, motorcycle or motor scooter shall be of a type which shall emit a clear white light. The use of colored or tinted lenses is prohibited.

D. Every cycle shall be equipped with at least one (1) and not more than two (2) headlamps. Every high beam shall be so aimed and of such intensity as to reveal persons and vehicles at a distance of ~~350~~ three hundred fifty feet (350') ahead of the vehicle.

E. Every low beam shall be so aimed and of such intensity as to reveal persons and vehicles at a distance of at least ~~100~~ one hundred feet (100') ahead of the vehicle.

F. Cycles may be equipped with single beam headlamp(s) of sufficient intensity to reveal a person or a vehicle at a distance of not less than one hundred feet (100') ~~100 feet~~ provided that the lamp be so aimed that when the cycle is loaded, none of the high intensity portion of light shall project higher than the level of the center of the lamp from which it comes, or more than six inches (6") to the left or six inches (6") to the right of the vertical center of the lamp at a distance of ~~25~~ twenty-five feet (25') ahead of the lamp. Check by using testing target or mechanical headlight tester.

G. The law requires that cycles have sufficient lighting to reveal a person or a vehicle at:

1. One hundred feet (100’)~~100 feet~~ when operated at less than twenty-five miles per hour (25 mph).

2. Two hundred feet (200’)~~200 feet~~ when operated at twenty-five miles per hour (25 mph)~~25 or more mph~~.

3. Three hundred feet (300’)~~300 feet~~ when operated at thirty five (35) or more miles per hour (mph).

H. In order to meet the above minimum requirements, headlamps shall have a candlepower rating of no~~t~~ less than five thousand (5,000) candlepower. ~~NOTE:~~ High beam indicators are not required.

I. Cause for rejection:

1. Any headlamp is not aimed properly;~~.~~

2. Any headlamp is not properly or securely mounted on the vehicle;~~.~~

3. Any bulb in any lamp required by law or regulation ~~which~~ fails to function properly;~~.~~

4. An improperly connected circuit ~~which~~ does not light the proper filaments for the different switch positions;~~.~~

5. Any lens is~~A~~ cracked, tinted, broken or missing;~~ lens.~~

6. A lens ~~that~~ is rotated, upside down, wrong-side out, or is otherwise incorrectly installed;~~.~~

7. A headlamp ~~with~~ has dirt or moisture inside, any obvious discoloration, contamination, reflector deterioration or colored other than as originally manufactured;~~.~~

8. A lamp shows~~ing~~ a beam of color contrary to law or regulation; or~~.~~

9. Any lamp is not of an approved type.

4.12 Helmets

A. All cycle helmets that are used on the public highways in the State of Rhode Island must be of a type approved by the Division~~Registry~~ of Motor Vehicles.

B. The DivisionRegistry is approvingshall approve only helmets that have been tested and certified as meeting the standards of the American National Standards Institute, Z-90.1. You may obtain information from the Registry of Motor Vehicles on all such helmets that have been approved.

C. Cause for rejection:

1. Helmet not of an approved type as listed on approved helmet list; and/or.

2. Helmet cracked or broken.

4.13 Horn

A. Every cycle is required to be equipped with a horn in good working order and capable of emitting sound that is audible under normal conditions from a distance of not less than two hundred feet (200')200 feet, but no horn or other horn device shall emit an unreasonably loud or harsh sound or whistle.

B. The horn button must be located within easy reach of the operator.

C. Check cycle (except police cycles) for any bell or siren that is not authorized.

D. Cause for rejection:

1. A horn that is unreasonably loud;.

2. It has aAny unauthorized siren, bell or wolf whistle;.

3. The hHorn is not securely fastened;.

4. The hHorn that requires the manual grounding of wire to be operative;.

5. The hHorn is out of reach of driver's normal operating position; or.

6. The hHorn is not audible under normal conditions at two hundred feet (200')200 feet.

4.14 Mirror

A. Every cycle shall be equipped with a rear view mirror which is located on the left side of the vehicle so as to reflect to the driver a view of the highway for a distance of two hundred feet (200') two hundred (200) feet to the rear of such vehicle. Check the mirror to see that it is securely attached and that the mirror glass is not cracked, broken fogged or missing.

B. Every mirror shall consist of a minimum reflective surface of ten (10) square inches and shall be circular, oval, rectangular or square in shape and shall not contain any sharp edges, projections or irregular indents.

C. Cause for rejection:

1. There is n~~N~~o mirror;~~.~~

2. The m~~M~~irror is cracked, broken, fogged or loose;~~.~~

3. The m~~M~~irror is located so that the operator cannot see to two hundred feet (200') ~~200 feet~~ to the rear;~~.~~

4. The m~~M~~irror is not properly shaped;~~.~~ or

5. The m~~M~~irror is not securely attached.

4.15 Plate (Registration)

A. The issued registration plate ~~issued~~ shall at all times be securely fastened in a horizontal position to the vehicle for which it is issued so as to prevent the plate from swinging. It shall be attached at a height not less than twelve inches (12") from the ground when measuring from the bottom of such plate. It shall be located in a place and position to be clearly visible and shall be maintained free from foreign materials and in a condition to be clearly legible from a distance of sixty feet (60') to the rear. The rear registration plate shall be illuminated with a white light.

B. Cause for rejection:

1. Plates that are dirty;~~.~~

2. Plates that cannot be read clearly from sixty feet (60')~~60 feet~~;~~.~~

3. Cardboard or any other home-made type of plate;~~.~~

4. Plates that are not securely attached or which are tied on to the cycle with either wire, rope or some other material;~~.~~

5. Plates that are obscured by various slogans, colored glass or plastic, decals or other implements that may interfere with the identification of the plate;~~.~~

6. Plates that are not located close to the plate lamp so that the light will properly illuminate the plate during the nighttime;~~.~~

7. Plate numbers that do not agree with the registration card; or.

8. Plates that have been cut, altered or changed from their original design or color or shape.

4.16 Reflectors

A. Every cycle shall be equipped with at least one reflector located on the rear of the cycle. This reflector may be incorporated in the rear tail lamp lense. The reflectors shall be mounted at a height of not less than 20 twenty inches (20") nor more than sixty inches (60") inches from the ground and shall be visible at nighttime from all distances within three hundred feet (300') feet to fifty feet (50') feet from the vehicle when directly in front of lawful upper beams of headlamps.

B. Cause for rejection:

1. Any reflector that fails to reflect the required color of light;.

2. It has bBroken or missing reflectors;.

3. Any reflector is not securely or properly attached; or.

4. If a rReflector not located properly.

4.17 Seats

A. Buddy or dual seats on motorcycles, motor scooters or motor-driven cycles are acceptable in lieu of separated seats, providing separate foot rests and appropriate handlebar or grip is furnished for the passenger.

B. All seats must be securely attached.

C. Cause for rejection:

1. A lLoosely mounted seat;.

2. A sSeat not provided with separate foot rest or handlebar grip; or.

3. Any cycle withoutNo seat.

4.18 Speedometer

A. Every cycle manufactured or equipped with a speedometer must be checked to ascertain whether the speedometer is in proper working order. When road checking the vehicle, observe the speed dial indicator to see if it is acting properly. The inspection station is not expected to be responsible for the

calibration of the speedometer but you will be expected to reject a vehicle with an obvious defect.

B. Cause for rejection:

1. A m~~M~~issing or inoperative speedometer;~~.~~

2. Broken or disconnected speedometer cables; or~~.~~

3. A d~~D~~ial indicator that does not move or act properly.

4.19 Steering and Wheel Alignment

A. The steering and alignment items ~~should~~ shall be checked for adjustment and broken or defective parts with particular attention being made to the frame and front fork, so that when the cycle is being turned, there will be no interference with the steering. Visually inspect the wheel track to ascertain if the wheels are unreasonably out of line. Check the height of the highest part of the handle grips and ascertain if they are more than 15 inches in height above the uppermost portion of the seat. Handlebars or grips that are lower than the seat are acceptable if they do not interfere with the steering of the cycle. The handlebars shall provide a minimum of ~~18~~ eighteen inches (18") between the handle grips when measured from the outside edge of such grips.

B. Cause for rejection:

1. A b~~B~~ent frame;~~.~~

2. A b~~B~~ent or damaged front fork;~~.~~

3. Wheels out of line;~~.~~

4. Broken or loose components in conjunction with the steering or alignment;~~.~~

5. Loose, broken or defective handlebars; or~~.~~

6. Handle grips that measure more than fifteen inches (15") ~~inches~~ above the seat.

4.20 Stop Lamp

A. Every cycle must be equipped with a stop lamp and the rear of the vehicle shall emit a red or yellow light plainly visible from a distance of one hundred feet (100')~~100 feet~~ to the rear of the vehicle during normal sunlight and at nighttime.

B. Any cycle that is equipped with more than one (1) stop lamp shall have all such stop lamps in good working order. Every stop lamp shall be actuated upon application of the service brake which may or may not be incorporated with a tail lamp.

C. Cause for rejection:

1. The sStop lamps do not light when the service brake is applied;.

2. The sStop lamp does not get brighter when incorporated with a lighted tail light or directional signal;.

3. A mMissing or broken lens cause a white light to show from the rear;.

4. The sStop lamp emits a color other than yellow (amber) or red; or.

5. The sStop lamp is not securely fastened to vehicle.

4.21 Suspension

A. Visually examine the suspension system for broken or defective springs and/or shock absorbers.

B. Check front end geometry to determine the angle of rake of the motorcycle (degrees of steering kingpin in relationship to level ground) and to determine steering trail of the front wheel (distance between projected line of kingpin to level ground and the vertical line of the front axle to ground, measured in inches.)

C. The angle of rake shall not be more than forty-five (45) degrees or less than twenty (20) degrees; the trail shall not be more than fourteen inches (14") ~~inches~~ positive or less than two~~2~~ inches (2") positive.

D. RAKE AND TRAIL MAY BE MEASURED AS FOLLOWS:
~~**(See diagram of Motorcycle Front End Geometry)**~~

1. Place the cycle in your inspection lane on flat, smooth level ground in a straight upright position with both wheels in contact with the ground.

2. Place carpenter's square on floor with one outside edge against center of front wheel axle.

3. Place a straight edge along the center line of the steering head (kingpin) and extend it until it touches the ground. Be sure that the straight edge follows the center line of the steering head.

4. In order to measure the angle of rake, (shaded area in diagram) place the BASE CENTER of the protractor at the point where the carpenter's square intersects the straight edge and measure the angle formed in degrees.

5. The trail is the distance in inches between the axle vertical center line and the point where the straight edge touches the ground, (distance between A and B in diagram.) Be sure to keep the straight edge and the carpenter's square in the same position and measure the distance in inches between these two points at ground level.

E. Cause for rejection:

1. A r~~R~~ake more than forty-five (45) degrees;~~.~~

2. A r~~R~~ake less than twenty (20) degrees;~~.~~

3. A t~~T~~rail more than fourteen inches (14") ~~inches~~ positive;~~.~~

4. A t~~T~~rail less than two inches (2") ~~inches~~ positive;~~.~~

5. Broken, worn, missing, disconnected or any malfunctioning part(s) of the suspension system; or~~.~~

6. Broken or missing suspension springs.

4.22 Tail Lamp

A. Every cycle shall be equipped with at least one (1) tail lamp which emits a red light plainly visible from a distance of five hundred feet (500') ~~feet~~ to the rear.

B. Every tail lamp shall be securely attached to the vehicle at a height of not more than seventy-two inches (72") nor less than twenty (20") when measured from a level flat ground service.

C. Cause for rejection:

1. Any tail lamp ~~that~~ fails to function properly;~~.~~

2. Any tail lamp ~~that~~ does not emit a red color;~~.~~

3. Any tail lamp ~~with~~ has a broken or missing lens;~~.~~

4. Any tail lamp ~~that~~ is not securely fastened or properly located on the vehicle;~~.~~ or

5. Any defect in the tail lamp wiring ~~that~~ would cause the light to blink, flutter or not light constantly when the headlamps are lighted.

4.23 Tires Wheels and Rims

A. Tires, wheels and rims should be checked visually for loose wheel mountings and excessive wear or play in the wheel bearings. The tires should be measured with a tire depth gauge to determine if any of the major treads are less than 2/32nds of an inch. Check all parts of tires for broken beads, blowout patches, cuts over one inch or deep enough to see the cord or ply. Check the tire rims for any serious cracks or separations or dents or misalignment. Check for missing or loose spokes and for rim alignment or runout which should not exceed ¼ inch.

B. Cause for rejection:

1. Any tire ~~that~~ is cut so as to expose the tire cords, ply or fabric, or which has a cut longer than one inch (1"); ~~inch.~~

2. Any tire is worn to a point where less than 2/32nds of an inch of the major tread remains; ~~.~~

3. Any tire ~~with~~ has a blowout patch, bubble, bump or blister; ~~.~~

4. There are m~~M~~issing or broken wheel bolts, nuts or spokes or lugs; ~~.~~

5. There are b~~B~~roken or badly worn wheel bearings; ~~.~~ or

6. The r~~R~~unout exceeds one quarter of an inch (¼") ~~of an inch~~.

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