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CHAPTER 37-12-02 SPECIAL MOTOR VEHICLES

Section

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37-12-02-01. General considerations.

- 1. **Scope.** Vehicles constructed, reconstructed, or modified shall comply with all provisions of North Dakota Century Code chapter 39-21 and any other applicable provision of North Dakota Century Code title 39, unless specifically excepted. The requirements of this chapter shall not supersede the original and unaltered design, construction, or equipment standards of motor vehicles manufactured by a recognized manufacturer.
- 2. **Definitions.** The terms used throughout this chapter have the same meaning as in North Dakota Century Code title 39, except:
 - a. "Recognized manufacturer" means a manufacturer of motor vehicles intended for use on the public roadways and for distribution and sale in interstate commerce.
 - b. "Recognized manufacturer or assembler" means every fabricator of a special vehicle assembled in its entirety as a complete product for use on the public roadways.
 - c. "Special motor vehicles" means those passenger vehicles and trucks with an unladen weight of six thousand pounds [2721.55 kilograms] or less equipped with two or more axles having at least two wheels per axle, and which are intended for use on public highways. The term "special motor vehicle" includes the following types:
 - (1) Type I Those vehicles which are restored to or retain their original configuration but which may contain changed steering, brake, power train, or suspension systems.

- (2) Type II Those vehicles changed from the recognized vehicle manufacturer's original body configuration but which retain the general appearance, including changes to the body chassis or engine of the original vehicle. This type may also include changes and modifications to engine, chassis, brake system, power train, steering, and suspension systems.
- (3) Type III Other than type I and type II special vehicles, those vehicles custom built with fabricated parts, or parts taken from existing vehicles.
- 3. **Manufacturer's certification.** The manufacturer or assembler of a special vehicle (type I, II, or III) shall provide a certification of fact that the vehicle is designed and manufactured for use on the public roadway and complies with the performance and equipment requirements of this chapter. Nothing contained in this chapter shall preclude the motor vehicle division director from requiring a certificate of inspection to ensure compliance with the standard.

History: Effective July 1, 2008.

General Authority: NDCC 39-02-03 **Law Implemented:** NDCC 39-02-03

37-12-02-02. Body requirements.

- 1. **Door latches.** Every special motor vehicle that is equipped with doors leading directly into a compartment that contains one or more seating accommodations shall be equipped with mechanically actuated door latches which firmly and automatically secure the door when pushed closed and which allow each door to be opened from the inside by the actuation of a convenient lever, handle, or other suitable device.
- 2. **Floor pan.** Every special vehicle shall be equipped with a floor pan under the entire passenger-carrying compartment. The floor pan shall support the weight of the number of occupants that the vehicle is designed to carry. The floor pan shall be so constructed that it prevents the entry of exhaust fumes.
- 3. **Hood latches.** A front-opening hood shall be equipped with a primary and secondary latching system to hold the hood in a closed position.
- 4. **Instrumentation and controls.** Every special vehicle shall be equipped with a circular steering wheel with an outside diameter of not less than thirteen inches [33.02 centimeters].

5. **Rearview mirror.** Every special vehicle shall be equipped with two rearview mirrors having substantially unit magnification. One shall be mounted on the inside of the vehicle in such a position that it affords the driver a clear view of a straight level road surface at least two hundred feet [60.96 meters] to the rear. The other shall be mounted on the outside of the vehicle on the driver's side in such a position that it affords the driver a clear view to the rear. When an inside mirror does not give a clear view to the rear, the right-hand outside mirrors shall be required in lieu thereof. The mirror mounting shall provide for mirror adjustment by tilting in both horizontal and vertical directions. Each mirror shall have a minimum of ten square inches [64.52 square centimeters] of reflective surface.

History: Effective July 1, 2008. General Authority: NDCC 39-02-03 Law Implemented: NDCC 39-02-03

37-12-02-03. Chassis requirements.

- 1. **Brakes.** Every special motor vehicle shall be equipped with parking brakes operating on at least two wheels on the same axle which when applied shall be capable of producing a tire to road braking force of not less than twenty-five percent of the gross vehicle weight on a level, dry, concrete or asphalt surface free from loose material. The parking brakes shall be so designed that when once applied they shall remain applied with the required effectiveness despite exhaustion of any source of energy or leakage of any kind.
- 2. **Bumpers.** Every special motor vehicle shall be equipped with a bumper both on the front and rear of the vehicle with the exception of type I and type II special vehicles where the original or predominant body configuration, provided by a recognized manufacturer, did not include such bumper or bumpers in the design of the vehicle. Type I and type II special vehicles, not excepted as noted above, and all type III special vehicles shall be equipped with horizontal load-bearing bumpers or customized bumpers or grill bars of a sturdy construction which have at least an evenly distributed portion of their horizontal load-bearing width within fourteen inches and twenty-two inches [35.56 centimeters and 55.88 centimeters] above a level road surface and which extend no less than the width of their respective wheel track distances, when these distances are measured to the width of standard size tires. The horizontal bumper or customized bumper or grill bar structure shall be at least four and one-half inches [11.43 centimeters] in vertical height and centered on the vehicle's centerline, and attached to the vehicle frame to effectively transfer impact when engaged.

3. Exhaust system.

a. Every special motor vehicle shall be equipped with an exhaust system that is free of leaks, including the exhaust manifolds (including headers), the piping leading from the flange of the exhaust manifolds, the mufflers, and the tailpiping.

- b. Exhaust systems on property-carrying vehicles shall discharge the exhaust fumes to the rear of that part of the vehicle designed for, and normally used for, carrying the driver and passengers.
- c. Exhaust systems on passenger vehicles shall discharge the exhaust fumes at a location to the rear of the vehicle body or direct the exhaust fumes outward from the side of the vehicle body at a location rearward of any operable side windows.
- d. No part of the exhaust system shall pass through any area of the vehicle that is used as a passenger-carrying compartment.
- 4. **Fenders.** All wheels of every special motor vehicle shall be equipped with fenders designed to cover the entire tread width that comes in contact with the road surface. Coverage of the tire tread circumference shall be from at least fifteen degrees in front to at least seventy-five degrees to the rear of the vertical centerline at each wheel measured from the center of wheel rotation. At no time shall the tire come in contact with the body, fender, or chassis of the vehicle.

5. Fuel system.

- a. Every special motor vehicle shall have all fuel system components (tank, tubing, hoses, clamps, etc.) securely fastened to the vehicle with fasteners designed for that purpose, and fastened to assure that the fuel system shall be leakproof and fastened so as not to interfere with the vehicle operation.
- b. Fuel lines shall be positioned so as not to be in contact with high temperature surfaces or moving components.

6. Steering and suspension.

- a. A special motor vehicle shall have no parts extending below the wheel rims in their lowest position, excepting tires and electric grounding devices designed for the purpose.
- b. The steering system shall remain unobstructed when turned from lock to lock.
- c. The steering wheel shall have not less than two turns nor more than six turns when turning the road wheels from lock to lock.
- d. While the vehicle is in a sharp turn at a speed between five miles and fifteen miles [8.05 kilometers and 24.14 kilometers] per hour, release of the steering wheel shall result in a distinct tendency for the vehicle to increase its turning radius.

- e. No special motor vehicle shall be constructed or loaded so that the weight on the wheels of any axle is less than thirty percent of the gross weight of the vehicle.
- f. Special vehicles shall be equipped with a damping device at each wheel location providing a minimum relative motion between the unsprung axle and wheel and the chassis body of plus and minus two inches [5.08 centimeters]. When each corner of the vehicle is depressed and released, the damping device shall stop vertical body motion within two inches [5.08 centimeters].
- 7. **Tires.** The front tires on special motor vehicles must measure a minimum of sixty percent of the tread width of the rear tires.

History: Effective July 1, 2008. General Authority: NDCC 39-02-03 Law Implemented: NDCC 39-02-03

37-12-02-04. Electrical systems requirements - Horn. Every special vehicle shall be equipped with a horn that is electrically operated and that will emit a minimum sound level of eighty-five decibels measured at a distance of two hundred feet [60.96 meters] directly in front of the vehicle under clear weather conditions. The switch used to actuate the horn shall be easily accessible to the driver when operating the vehicle.

History: Effective July 1, 2008.

General Authority: NDCC 39-02-03

Law Implemented: NDCC 39-02-03