

NDAC Article 37-06 – Multiple Vehicle Combinations

NDHP Motor Carrier Division

Ref: 9-1 Annex A (1/14)

Chapter

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Chapter 37-06-01

Definitions - Equipment and Operation

Section

- 37-06-01-01. Definitions
- 37-06-01-02. Equipment

37-06-01-01. Definitions. In this article, unless the context or other subject matter requires:

1. "B-train" means a truck-tractor, semitrailer, and semitrailer.
2. "Converter dolly" means an auxiliary axle assembly equipped with a fifth wheel used to convert a semitrailer to a trailer.
3. "Double bottom" means a truck-tractor, semitrailer, and trailer or semitrailer converted to a trailer by use of a converter dolly.
4. "Fifth wheel" means a device used to connect a truck-tractor or converter dolly to a semitrailer.
5. "Gooseneck" means a coupling device attached to the frame of a trailer or vehicle used to connect the trailer or vehicle to a truck-tractor or to the bed of a truck or pickup truck.
6. "Pickup truck" means a small truck with a capacity of less than one ton [907.18 kilograms] registered as a truck or as a passenger vehicle.
7. "Semitrailer" includes every vehicle of the trailer type so designed and used in conjunction with a truck or truck-tractor that some part of its own weight and that of its own load rests upon or is carried by a truck or truck-tractor, except that it does not include a "housetrailer" or "mobile home".
8. "Trailer" includes every vehicle without motive power designed to carry property or passengers wholly on its own structure and to be drawn by a motor vehicle, except that it does not include a "housetrailer" or "mobile home", which terms mean a vehicle as defined in this subsection which is designed and intended for use as living or sleeping quarters for people and which is not used for commercial hauling of passengers.
9. "Triple bottom" (triple trailers) means a truck-tractor, semitrailer, and two trailers or two semitrailers converted to trailers by use of converter dollies.
10. "Truck" includes every motor vehicle designed, used, or maintained primarily for transportation of property.
11. "Truck-tractor" includes every motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn.
12. "Unit" means one motor vehicle or one vehicle.

13. "Vehicle" includes every device in, upon, or by which any person or property may be transported or drawn upon a public highway, except devices moved by human power or used exclusively upon stationary rails or tracks.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-01-02. Equipment.

All vehicle combinations must comply with the applicable requirements for equipment as specified in North Dakota Century Code chapter 39-21, and:

1. Every trailer must be equipped with a drawbar and a means of attaching the drawbar to the towing and towed vehicles. Such drawbar must be structurally adequate for the weight being drawn, be properly and securely mounted, provide for adequate articulation at the connection without excessive slack at that location, and can be provided with a locking device that prevents accidental separation of the vehicles.
2. Every trailer, including a semitrailer utilizing a converter dolly, must have safety chains or cables installed. Such chains or cables shall be connected prior to any over-the-road movement.
3. The lower half of a fifth wheel mounted on a truck-tractor or converter dolly must be secured to the frame of that vehicle with properly designed brackets, mounting plates or angles, and properly tightened bolts of adequate size and grade, or devices that provide equivalent security. The installation shall not cause cracking, warping, or deformation of the frame. The installation must include a device for positively preventing the lower half of the fifth wheel from shifting on the frame to which it is attached.
4. The upper half of a fifth wheel must be fastened to the semitrailer with at least the same security required for the installation of the lower half on a truck-tractor or converter dolly.
5. Each fifth wheel assembly must have a locking mechanism.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

Chapter 37-06-02

Implements of Husbandry

Section

37-06-02-01. Combination permitted - Limitation

37-06-02-01. Combination permitted – Limitation.

Two implements of husbandry or two liquid fertilizer tanks may be towed by a pickup, truck, or farm tractor operated by resident farmers, ranchers, dealers, or commercial fertilizer companies between sunrise and sunset at a speed limit not to exceed twenty-

five miles [40.25 kilometers] per hour. A packer-drill combination shall be considered one implement of husbandry. Such combination may not exceed seventy-five feet [22.86 meters] in length.

History: Effective October 1, 1983; amended effective November 1, 1987.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

Chapter 37-06-03

Combinations of Two, Three, or Four Vehicles - Seventy-five Feet or Less

Section

37-06-03-01. Authorized combinations of vehicles - Routes of operation

37-06-03-02. Limited combinations of vehicles

37-06-03-01. Authorized combinations of vehicles - Routes of operation.

The following combinations of vehicles may be operated on all North Dakota highways provided the overall length does not exceed seventy-five feet [22.86 meters]:

1. Any combination of two units.
2. A truck-tractor and semitrailer may draw a trailer or semitrailer converted to a trailer by use of a converter dolly and fifth wheel. This combination of vehicles is commonly referred to as an A-train or a double bottom.
3. A truck-tractor and semitrailer may draw a semitrailer. This combination of vehicles is commonly referred to as a B-train.
4. A combination of four units consisting of a truck-tractor, semitrailer, and two trailers. A semitrailer used with a converter dolly is considered to be a trailer. This combination of vehicles is commonly referred to as triple trailers or a triple bottom.
5. A motor vehicle drawing three motor vehicles attached to the towing motor vehicle by a triple saddle mount. In such a mount, the front wheels of the towed motor vehicle are mounted upon the bed of the towing vehicle, with any other towed motor vehicle being mounted in a like manner on the preceding motor vehicle.

History: Effective October 1, 1983; amended effective November 1, 1987; March 1, 1999.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-03-02. Limited combinations of vehicles.

A motor vehicle may draw two trailers or two vehicles subject to the following conditions:

1. The towed vehicles, in addition to brakelights, stoplights, and turn signals, shall be equipped with front and rear clearance lights, and side marker lights, and reflectors as prescribed by North Dakota Century Code chapter 39-12.
2. All hitches must be of a load-bearing capacity capable of bearing the weight of the

towed vehicles.

- a. The towing vehicle must have a hitch commonly described as a fifth wheel or gooseneck design, or one that is attached to the frame.
 - b. The hitch on the rear of the vehicle connected to the towing vehicle must be attached to the frame of the towed vehicle.
 - c. All hitches, other than a fifth wheel or gooseneck, must be of a ball and socket type with a locking device or a pintle hook.
3. The drawn vehicles shall be equipped with brakes and safety chains adequate to control the movement of, and to stop and hold, such vehicles. When the drawn vehicle is of a fifth wheel or gooseneck design, safety chains are not required. If the gross weight of the second drawn vehicle is three thousand pounds [1360.78 kilograms] or less, brakes are not required on the second vehicle. When brakes are required, the brakes shall be so designed as to be applied by the driver of the truck or motor vehicle from the cab. The brakes shall be so designed and connected so that in case of an accidental breakaway the brakes shall be automatically applied on the drawn vehicle that breaks loose.

History: Effective October 1, 1983; amended effective November 1, 1987.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

Chapter 37-06-04

Combinations of Two, Three, or Four Vehicles - Over Seventy-five Feet

Section

37-06-04-01	Authorized Combinations of Vehicles Exceeding Seventy-Five Feet
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37-06-04-01. Authorized combinations of vehicles exceeding seventy-five feet.

The following combinations of vehicles exceeding seventy-five feet [22.86 meters] in overall length may be operated on those highways described in section 37-06-04-02:

1. Any combination of two units.
2. A truck-tractor and semitrailer may draw a trailer or semitrailer converted to a trailer by use of a converter dolly and fifth wheel. This combination of vehicles is commonly referred to as an A-train or a double bottom.
3. A truck-tractor and semitrailer may draw a semitrailer. This combination of vehicles is commonly referred to as a B-train.

4. A truck properly registered and designed to legally carry a gross weight of more than twenty-four thousand pounds [10886.22 kilograms] may draw two trailers or semitrailers provided both trailers or semitrailers are designed to legally carry gross weights of more than twenty-four thousand pounds [10886.22 kilograms], provided both trailers or semitrailers are equipped with safety chains and brakes adequate to control the movement of and to stop and hold such trailers or semitrailers. The brakes shall be designed as to be applied by the driver of the truck from the cab. The brakes shall be designed and connected so that in case of an accidental breakaway the brakes shall be automatically applied on the trailer or semitrailer that breaks loose.
5. A combination of four units consisting of a truck-tractor, semitrailer, and two trailers. A semitrailer used with a converter dolly is considered to be a trailer. This combination of vehicles is commonly referred to as triple trailers or a triple bottom.

History: Effective October 1, 1983; amended effective December 1, 1985; March 1, 1999.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-01.1. Authorized combinations of vehicles exceeding seventy-five feet, not to exceed ninety-seven feet.

The following combinations of vehicles exceeding seventy-five feet [22.86 meters], but not exceeding ninety-seven feet [29.56 meters] in overall length may be operated on those highways described in section 37-06-04-02.

1. A motor vehicle may draw up to three motor vehicles attached to the towing motor vehicle by a saddlemount. In such a mount, the front wheels of the towed motor vehicle are mounted upon the bed of the towing vehicle, with any other towed motor vehicles being mounted in a like manner on the preceding motor vehicle.
2. A motor vehicle may draw up to three motor vehicles with no more than one smaller vehicle fully mounted on the frame of the first or last vehicle in the saddlemount. The drawn vehicles shall each be connected by a saddlemount. This combination of vehicles is commonly referred to as a drive-away saddlemount with fullmount vehicle transporter combination.

History: Effective July 1, 2008.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04; 49 USC 31111

37-06-04-02. Routes of operation.

Authorized combinations of vehicles may be operated on all four-lane divided state highways and on those state highways designated by the director as shown on special highway maps available at the highway patrol and department of transportation headquarters in Bismarck and at the respective district offices in Williston, Minot, Devils Lake, Grand Forks, Fargo, Valley City, Jamestown, and Dickinson. Authorized combinations of vehicles may travel off the designated system a distance of ten miles [16.09 kilometers] on a state highway for the purpose of

procuring food, fuel, repairs, obtaining sleeping quarters (rest), or going to a terminal or points of loading or unloading.

History: Effective October 1, 1983; amended effective November 1, 1987; July 1, 2008.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-03. Minimum power requirement.

The power unit shall have adequate power and traction to maintain a minimum speed of fifteen miles [24.14 kilometers] per hour on all grades.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-04. Weight distribution by trailer weight.

1. In any three-unit combination, the lighter trailer must always be operated as the rear trailer except when the gross weight differential with the other trailer does not exceed five thousand pounds [2267.96 kilograms].
2. In any four-unit combination, the lightest trailer must always be operated as the rear trailer. The other two trailers must be arranged as provided in subsection 1.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-05. Signing requirement.

The last trailer or vehicle in any three-unit or four-unit combination must have a "LONG LOAD" sign mounted on the rear. The "LONG LOAD" sign must be a minimum twelve inches [30.48 centimeters] in height and sixty inches [152.4 centimeters] in length. The lettering must be eight inches [20.32 centimeters] in height with one-inch [2.54-centimeter] brushstrokes. The letters must be black on yellow background.

History: Effective October 1, 1983; amended effective May 1, 1999; July 1, 2008.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-06. Weather restrictions.

Movements of combinations of vehicles authorized for operation under this chapter are prohibited:

1. When road surfaces, due to ice, snow, slush, or frost present a slippery condition which may be hazardous to the operation of the unit or to other highway users;
2. When wind or other conditions may cause the unit or any part thereof to swerve, to whip, to sway, or fail to follow substantially in the path of the towing vehicle; or
3. When visibility is reduced due to snow, ice, sleet, fog, mist, rain, dust, or smoke.

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The North Dakota highway patrol may restrict or prohibit operations during periods when in its judgment traffic, weather, or other safety conditions make travel unsafe.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04