

(11) Regulations for Routine Overweight Permits. The following regulations apply to permit moves to transport nonreducible and nondivisible loads. See section (15) for super heavy and large load movement:

(A) Overweight permits may specify maximum and minimum speeds and method of vehicle operation to reduce hazards or control impact factors and load distribution on pavements and bridges. Overweight loads not oversize and not exceeding the gross weight limit as listed in subsection (11)(D) will be granted day and night movement except travel during holiday and holiday weekend periods as listed in subsection (1)(I) and except for movement in tourist areas listed in subsection (9)(D). All movements authorized under overweight permits will be over specified routes on the state highway system only;

(B) Axles included in booster axle, tandem axle, triple axle, or quadrum axle groups on all hauling units shall be equipped with dual wheels or equivalent tread width. When configuring trailers for hauling units with seven (7) or more axles, conventional axles, or booster axles may be used for the addition of the single axle, tandem axle, or triple axle groups that may be placed at the end of the trailer. Definitions—

1. The term "axle" shall mean a common axis of rotation of one or more wheels whether power-driven or freely rotating, and regardless of the number of wheels carried thereon;

2. The term "axle group" shall mean an assembly of two (2) or more consecutive axles considered together in determining their combined load effect on pavement or structures. Axle groups must have a common equalization system, which will equalize the load between or among axles in both static and dynamic conditions. Any combination of mechanically equalized axles with either air suspension or any other suspension system used to form axle groups is not allowed;

3. The term "spread axles" shall mean two (2) axles, which are more than ninety-six inches (96") apart and are considered single axles;

4. The term "tandem axle" shall mean a group of two (2) or more axles arranged one behind another, where the distance between the extreme centers is more than forty inches (40") and not more than ninety-six inches (96") apart;

5. The term "triple axle or tridem" shall mean a group of three (3) axles, which are fully equalized automatically or mechanically and the distance between the centers of the extreme is more than ninety-six inches (96") and not more than one hundred forty-four inches (144");

6. The term "quadrum axle" shall mean a group of four (4) axles, which are fully equalized automatically or mechanically, the distance between each of the four (4) axles is evenly spaced and the distance between the centers of the extreme is not more than one hundred ninety-two inches (192");

7. The term "lift axle" shall mean any axle designed with the capabilities of manipulation or adjustment of the weight on it or the axle group by use of manual valve(s). Under no circumstances will "lift axles" be recognized in weight computations. An additional axle may be added to an existing axle group provided—

- A. All axles have a common equalization system;
- B. All equalization is accomplished with automatic valves; and
- C. Axle lifting mechanism is located outside the cab, not readily accessible to driver; and

8. The term "booster axle" shall mean an extension of a hauling unit, which when attached to the trailer adds a single axle, tandem, or triple axle group. To be acceptable, a booster axle must connect to the vehicle frame in such a manner as to equalize the load between axles;

(C) The allowable combination configurations for overweight special permits are as follows:

5-Axle Configurations

Single-Tandem-Tandem (1-2-2)

Single-Tandem-Spread (1-2-2)

Minimum distance between the centers of the first and last axles is fifty-one feet (51').

Maximum gross weight allowed on a 5-axle configuration is one hundred four thousand (104,000) pounds.

6-Axle Configurations

Single-Tandem-Triple (1-2-3)

Single-Triple-Tandem (1-3-2)

Minimum distance between the centers of the first and last axle is fifty-one feet (51').

Maximum gross weight allowed on a 6-axle configuration is one hundred twenty thousand pounds (120,000).

Configuration lengths from forty-three feet (43') up to fifty-one feet (51') will be allowed provided that the maximum gross weight on these configurations does not exceed one hundred twelve thousand pounds (112,000). When the configuration length is less than fifty-one feet (51'), the maximum gross weight on any tandem axle grouping shall be forty thousand pounds (40,000) and the maximum gross weight on any tridem axle grouping shall be sixty thousand pounds (60,000).

7-Axle Configurations

Single-Triple-Triple (1-3-3) (Routine Configuration)

Single-Tandem-Quad (1-2-4) (Alternative Configuration)

Single-Tandem-Triple-Single (1-2-3-1)

Single-Triple-Tandem-Single (1-3-2-1)

Single-Tandem-Tandem-Tandem (1-2-2-2)

Minimum distance between the centers of the first and last axles is fifty-five feet (55') for the routine configuration, seventy-five feet (75') for the alternative configuration, and sixty-nine feet (69') for all other configurations.

The following axle group spacing limitation will apply to all of the configurations as shown above, but will not apply to the steering axle. A minimum distance of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem, triple, and quad axle groupings and on single axles used in combination with these groupings.

Maximum gross weight allowed on a 7-axle configuration is one hundred thirty thousand (130,000) pounds for the alternative configuration, one hundred thirty-two thousand (132,000) pounds for the routine configuration, one hundred thirty-eight thousand (138,000) pounds for the 1-2-3-1 and 1-3-2-1 configurations, and one hundred fifty thousand (150,000) pounds for the 1-2-2-2 configuration[s].

8-Axle Configurations

Single-Triple-Quad (1-3-4) (Routine Configuration)

Single-Tandem-Tandem-Triple (1-2-2-3)

Single-Triple-Triple-Single (1-3-3-1)

Single-Triple-Tandem-Tandem (1-3-2-2)

Single-Tandem-Triple-Tandem (1-2-3-2)

Minimum distance between the centers of the first and last axle is sixty-one feet (61') for the routine configuration and seventy-five feet (75') for all other configurations.

The following axle group spacing limitation will apply to all of the configurations as shown above, but will not apply to the steering axle. A minimum distance of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem, triple, and quad axle groupings and on single axles used in combination with these groupings.

Maximum gross weight allowed on an 8-axle configuration is one hundred forty-four thousand (144,000) pounds for the routine configuration, and one hundred sixty thousand (160,000) pounds for all other configurations.

9-Axle Configurations

Single-Triple-Tandem-Triple (1-3-2-3) (Routine Configuration)

Single-Quad-Quad (1-4-4) (Alternative Configuration)

Single-Tandem-Triple-Triple (1-2-3-3)

Single-Triple-Quad-Single (1-3-4-1)

Single-Triple-Triple-Tandem (1-3-3-2)

Single-Tandem-Tandem-Tandem-Tandem (1-2-2-2-2)

Minimum distance between the centers of the first and last axle is seventy-five feet (75') for all configurations. The following axle group spacing limitation will apply to all of the configurations as shown above except for the alternative configuration, but will not apply to the steering axle. A minimum of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem, triple, and quad axle groupings and on single axles used in combination with these groupings. When the alternative configuration is used, a minimum distance of thirty feet (30') shall be required between centers of adjacent axles on the consecutive quad axle groupings.

Maximum gross weight allowed on a 9-axle configuration is one hundred fifty-six thousand (156,000) pounds for the alternative configuration and one hundred sixty thousand (160,000) pounds for all other configurations.

10-Axle Configurations

Single-Triple-Triple-Triple (1-3-3-3) (Routine Configuration)

Single-Tandem-Tandem-Tandem-Triple (1-2-2-2-3)

Single-Triple-Tandem-Tandem-Tandem (1-3-2-2-2)

Single-Tandem-Triple-Tandem-Tandem (1-2-3-2-2)

Single-Tandem-Tandem-Triple-Tandem (1-2-2-3-2)

The minimum distance between the centers of the first and last axle is eighty-five feet (85') for all configurations.

The following axle group spacing limitation will apply to all of the configurations as shown above except for the routine configuration, but will not apply to the steering axle.

A minimum of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem and triple axle groupings.

When the routine configuration is used, a minimum distance of twenty feet (20') shall be required between centers of adjacent axles on the consecutive triple axle groupings.

When possible, the distribution of the loading of the various axle groupings should be done in a manner to equalize the loadings to all of the axles on the entire configuration. When full equalization between the axles on the configuration is not possible, the gross weight variation between the individual axles (excluding the steering axle) on the entire configuration shall not be more than twenty-five percent (25%).

The maximum gross weight allowed on a 10-axle configuration is one hundred sixty thousand (160,000) pounds.

11-Axle Configurations

Single-Tandem-Tandem-Triple-Triple (1-2-2-3-3)

Single-Tandem-Triple-Tandem-Triple (1-2-3-2-3)

Single-Triple-Tandem-Tandem-Triple (1-3-2-2-3)

Single-Triple-Triple-Tandem-Tandem (1-3-3-2-2)

Single-Triple-Tandem-Triple-Tandem (1-3-2-3-2)

Single-Tandem-Triple-Triple-Tandem (1-2-3-3-2)

The minimum distance between the centers of the first and last axle is eighty-five feet (85') for all configurations.

The following axle group spacing limitation will apply to all of the configurations as shown above, but will not apply to the steering axle. A minimum distance of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem and triple axle groupings.

When possible, the distribution of the loading to the various axle groupings should be done in a manner to equalize the loadings to all of the axles on the entire configuration.

When full equalization between the axles on the configuration is not possible, the gross weight variation between the individual axles (excluding the steering axle) on the entire configuration shall not be more than twenty-five percent (25%).

The maximum gross weight allowed on an 11-axle configuration is one hundred sixty thousand (160,000) pounds.

12-Axle Configurations

Single-Tandem-Triple-Triple-Triple (1-2-3-3-3)

Single-Triple-Tandem-Triple-Triple (1-3-2-3-3)

Single-Triple-Triple-Tandem-Triple (1-3-3-2-3)

Single-Triple-Triple-Triple-Tandem (1-3-3-3-2)

The minimum distance between the centers of the first and last axle is eighty-five feet (85') for all configurations.

The following axle group spacing limitation will apply to all of the configurations as shown above, but will not apply to the steering axle. A minimum distance of fourteen feet (14') shall be required between centers of adjacent axles on consecutive tandem and triple axle groupings.

When possible, the distribution of the loading to the various axle groupings should be done in a manner to equalize the loadings to all of the axles on the configuration.

When full equalization between the axles on the configuration is not possible, the gross weight variation between the individual axles (excluding the steering axle) on the entire configuration shall not be more than twenty-five percent (25%).

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The maximum gross weight allowed on a 12-axle configuration is one hundred sixty thousand (160,000) pounds.

(D) The maximum allowable axle weights for permits are as follows:

1. Single axle—twenty thousand (20,000) pounds;
2. Tandem axle group—forty-six thousand (46,000) pounds, but not more than twenty-four thousand (24,000) pounds for any axle of a multi-axle group;
3. Triple axle group—sixty thousand (60,000) pounds, but not more than twenty-one thousand (21,000) pounds for any axle of a multi-axle group;
4. Quadrum axle group—seventy-two thousand (72,000) pounds, but not more than nineteen thousand (19,000) pounds for any axle of a quadrum axle group; and

(E) Prior to issuing an overweight permit, the equalization system of the axle groups on the power unit and the trailer must be accepted by the Missouri Department of Transportation, Motor Carrier Services Division, 1320 Creek Trail Drive, PO Box 893, Jefferson City, MO 65102. Detailed schematic drawings may be requested. It shall be the responsibility of the applicant to contact the Motor Carrier Services Division for approval or disapproval;

(F) When it is necessary to move specialized equipment, such as mobile cranes, rock crushers, drilling equipment, or other equipment which cannot be reasonably reduced in weight to comply with legal weights, consideration shall be given for a special permit for these moves. The applicant must first give assurance that the unit has been reasonably reduced in weight and dimension (exclusive of attachments that are an intricate part necessary for the operation of the machine and/or machine adjustments necessary for weight distribution). After the weight has been reduced to a reasonable minimum, a special permit may be issued for weights not to exceed twenty thousand (20,000) pounds or legal weight on a single axle, forty thousand (40,000) pounds on a tandem axle, sixty thousand (60,000) pounds on a triple axle group, or sixty thousand (60,000) pounds on a quadrum axle group. Axle and axle groups are defined in subsection (11)(C); and

(G) The maximum allowable gross weight in pounds for specialized equipment shall be determined by the number of axles and the distance between the external axles as indicated in the following chart: