

Hitches or coupling devices

Hitches must meet SAE standards and must be approved by the commissioner of public safety. The hitch should be securely fastened to the frame of the towing vehicle. Except for vehicles equipped with a regulation fifth wheel and kingpin type coupling device, all trailers must be equipped with *safety chains or cables* which are permanently attached to the trailer and attached to the towing vehicle chassis at a point near the hitch. There should be only enough slack in the chains or cables to permit free turning of the vehicles. It is recommended that two chains or cables be used and crossed beneath the coupling device to act as a cradle to hold the trailer tongue off the ground in the event of a hitch failure.

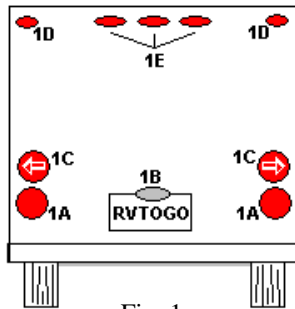


Fig. 1

Lighting requirements for trailers

- Two red tail lights visible from a distance of 500 feet, mounted at the same level and spaced as widely as practicable. Exception: one tail light is required on vehicles manufactured prior to January 1, 1960. **(1A)**
- License plate must be lighted and visible from a distance of 50 feet to the rear. **(1B)**
- Two red reflectors are required on the rear of the vehicle. They must be mounted not less than 20 inches nor more than 60 inches above the roadway and spaced as far apart as practicable. The reflectors must be visible from a vehicle with lawfully lighted headlamps from a range of 50 to 300 feet for non-commercial vehicles and 50 to 500 feet for commercial vehicles. Reflectors may be incorporated into the tail lamps. **(1A)**
- Signal lamps are recommended on all trailers and are required when the signal lamps of the towing unit are not visible to the following driver. **(1C)**

- Brake lamps are recommended on all trailers and required when the brake lamps of the towing unit are not visible to the following driver. (NOTE: tail lamps, brake lamps, signal lamps and reflectors are frequently incorporated into a single lamp housing.) **(1A)**
- Clearance lamps are required on all vehicles, unladen or with load, which exceed 80 inches in width. Front clearance lamps are mounted at least 24 inches above the center of the headlamps and as widely spaced as practicable. They shall be white or amber in color. Two red clearance lamps shall be mounted on the rear. They shall be mounted at the same level spaced as far apart laterally as practicable. **(1D)** Identification lamps are optional. **(1E)**
- Marker lamps are required on all vehicles or combinations exceeding 30 feet in length. One shall be mounted on each side near the front and shall project a white or amber color. One red lamp shall be mounted on each side near the rear of the vehicle. Clearance lamps which are so mounted to also be visible from the side of the vehicle will satisfy this requirement provided an additional white or amber marker lamp is mounted approximately midway between the above specified marker lamps.
- A red lamp visible at a distance of 500 feet is required at night and at other times lighted lamps are required to mark the rear extremity of a load which projects more than four feet beyond the rear of the trailer body or bed. During daylight hours, a red, yellow, or orange flag or cloth, not less than 16 inches square, is required on projecting loads.

Wheel flaps are required on every trailer which is not equipped with fenders or other structural characteristics that prevent water, dirt and other materials from being thrown rearward. The ground clearance of the wheel flap shall not exceed nine inches when the vehicle is empty.

Dimensions

Trailers allowed up to 45 feet maximum length. Maximum length of towing vehicle and one trailer combined is 75 feet. (Fig. 2)

Maximum allowed width of a vehicle is 102".

Maximum height allowed is 13'6".

Three unit RV combinations (Fig. 3) consisting of a full size pickup truck or recreational truck-tractor towing a fifth wheel type trailer and one additional trailer which carries only watercraft, snowmobiles, motorcycles, ATVs, golf carts, or equestrian supplies are allowed with the following restrictions:

1. Tow rating of the pickup or truck-tractor is equal to or greater than the weight of all vehicles being towed.
2. The trailers in the combination are connected to the pickup truck and each other in conformity with state law.
3. The overall length of the combination does not exceed 70 feet.
4. The driver is 18 years of age or older.
5. The vehicle combination is not operated in the seven county metropolitan area from 6:00 AM to 9:00 AM and 4:00 PM to 7:00 PM, Monday through Friday.

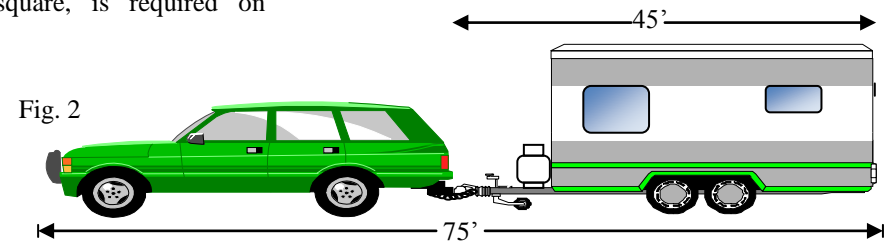


Fig. 2

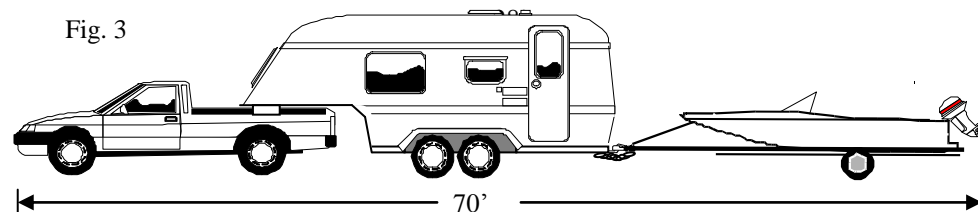


Fig. 3

Brakes

Brakes are required on all trailers with a gross weight of 3,000 pounds or more. Brakes are required on all wheels of a trailer manufactured after June 30, 1988. Trailers equipped with three or more axles and manufactured prior to July 1, 1988, are not required to have brakes on the front axle provided the brakes on all other wheels meet the performance standards prescribed by law. The manufacturers of many new vehicles equipped with anti-lock brake systems require any towed unit be equipped with electric brakes and the towing vehicle be equipped with an electronic brake controller. Every trailer with a gross weight of more than 3,000 pounds shall be equipped with a *breakaway brake* device which will automatically apply and hold the brakes should the trailer accidentally become detached from the towing unit.

Recommended Emergency Equipment

1. Three flares, portable reflector devices, red lanterns or emergency reflective triangles.*
2. Two 16" square red, orange or yellow flags.*
3. First Aid Kit
4. Flashlight
5. Tow chain, shovel, spare tire.
6. Spare trailer tire and jack suitable for use on trailer.

* 1 and 2 above required on vehicles towing travel trailers and house trailers.

Be Safety Conscious

- Check lights before every trip and regularly throughout the trip.
- Adjust rear vision mirrors or use auxiliary rear vision mirrors to optimize rear visibility.
- Reduce your speed when towing.
- Increase following distance. State law requires you to maintain 500 ft. interval in rural areas.
- Be aware of the increased effects of wind gusts and passing vehicles when towing a trailer.
- Secure loads from shifting, falling or leaking.
- Check tires for proper inflation and for defects.
- Service wheel bearings regularly and check often.
- Stop every 100 miles to check trailer, load, and hitch.

What hitch do I need?

Many people spend a lot of time choosing the right vehicle, the right camper, or the right boat. Unfortunately, many people give little thought to the most vital link between the tow vehicle and trailer, the **hitch**. Use the guide below to determine which type of hitch is suited to your needs. NOTE: *Ratings vary slightly between manufacturers.*



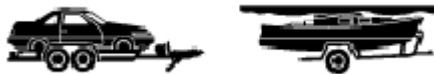
CLASS I HITCH

Gross Trailer Weight to 2,000 lbs.
Hitch Weight up to 200 lbs.



CLASS II HITCH

Gross Trailer Weight to 3,500 lbs.
Hitch Weight up to 350 lbs.



CLASS III HITCH

Gross Trailer Weight to 5,000 lbs.
Hitch Weight up to 500 lbs.



CLASS IV HITCH

(Weight Distributing)

Gross Trailer Weight to 7,500 lbs.
Hitch Weight up to 750 lbs.



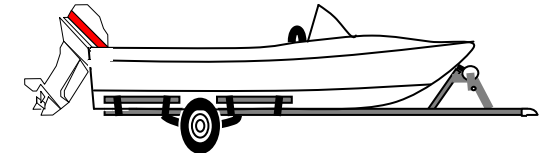
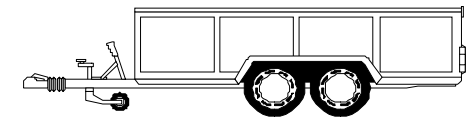
CLASS V HITCH

(Weight Distributing)

Gross Trailer Weight to 10,000 lbs.
Hitch Weight up to 1,000 lbs.

Trailers

On
Minnesota Highways



General requirements for
non-commercial
trailers on Minnesota
roadways



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