(5) No person may use an end device which has been repaired, unless there has been a total replacement of the load-bearing component with a replacement component meeting the requirements of this section and the manufacturing standards of the original manufacturer of the tiedown assembly.

(6) The anchorages by which a tiedown device is attached to a vehicle shall have a tensile strength at least as great as the tensile strength of the tiedown assembly.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91.

Trans 307.07 Webbing straps. (1) Webbing straps shall have a minimum working load limit of 1,000 pounds per inch of width.

(2) Webbing straps shall be marked by the manufacturer to indicate its working load limit or breaking force limit.

(3) Webbing straps that have been repaired shall bear a clearly legible label stating the name of the company that made the repair and the load rating of the repaired strap.

(4) Webbing straps consisting of woven strands may not be used as a tiedown if:

(a) Cuts, burns or holes through the webbing total more than

1. ¾ inch for webbing which is 4 inches wide.

2. % inch for webbing which is 3 inches wide.

3. % inch for webbing which is 2 inches wide.

(b) Separation of its load-carrying stitch pattern exceeds $\mbox{\sc 4}$ of the total stitch area.

(c) Severe abrasion or other damage reduces the strength of the tiedown by at least 20%.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91.

Trans 307.08 Wire cable. (1) All wire cable shall be a minimum of 3/8 inch diameter with a minimum rated working load limit of 3,000 pounds.

(2) No person may use wire cable that has been repaired or spliced.

(3) No person may use wire cable with more than 3 broken wires in any strand or excessive deterioration.

(4) Wire cable shall have a uniform diameter and may not have any detectable reduction in diameter at any point.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91.

Trans 307.09 Stakes. (1) All stakes shall be metal and of sufficient strength to support the load carried.

(2) Each stake shall be secured to the bed or frame of the vehicle by one of the following means:

(a) Welded to the bed or frame of the vehicle, including as an upright part of a gusseted bunk.

WISCONSIN ADMINISTRATIVE CODE Trans 307

(b) Set into a metal stake pocket which is part of the bed or frame and secured into the stake pocket by:

1. A metal bolt, or

516-6

2. A metal clevis pin, or

3. A retaining chain, which shall be a separate length of chain not also serving as a tiedown, cross chain or retaining chain for another stake, or

4. Any other metal device which locks the stake into the stake pocket so that the stake cannot be removed from the stake pocket without first releasing the retaining mechanism.

(3) Each stack of logs shall be supported by a minimum of 4 stakes, 2 on each side of the vehicle, or by 2 complete gusseted bunks.

(4) Each stack of logs shall be supported by at least 2 stakes on each side of the stack. Stacks of logs exceeding 10 feet in length shall be supported by stakes or gusseted bunks at linear intervals of no more than 10 feet. For stacks of logs over 20 feet in length, the number of stakes on each side of a stack of logs, or of gusseted bunks, shall at least equal the length of the longest log in the stack divided by 10, with any fractions rounded up to the next whole number. This subsection does not apply to pole trailers.

(5) If any portion of any log is stacked higher than the top of any stake on the vehicle, then that stack shall also be secured by tiedowns.

(6) Logs shall be stacked firmly against the stakes on each side of the vehicle or secured by tiedown devices to prevent rolling or shifting.

(7) Logs stacked higher than 5 feet above the bed of a vehicle shall be secured to the vehicle by any of the following:

(a) Tiedowns; or

(b) Cross chains, of the same grade and diameter as tiedowns, which connect the stakes on the opposite sides of each stack of logs; or

(c) A steel gusseted bunk.

Note: A stack of logs higher than the top of the stakes must be secured to the vehicle by tiedowns. s. 348.10(3), Stats.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91, except (1), eff. 2-1-92.

Trans 307.10 Center device. (1) A vehicle with a load surface more than 33 feet in length, transporting logs carried crosswise, or at right angles to the side of the vehicle, shall be equipped with a center device located approximately one-half the distance from the front to the rear of the load surface of the vehicle.

(2) A center device may consist of:

(a) A solid partition, or

(b) Two or more center-mounted metal posts or a hydraulic log loader securely fastened to the frame of the vehicle, or

 $(c)\ Two\ or\ more\ metal\ rings\ or\ hooks,\ bolted\ or\ welded\ to\ the\ frame\ of\ the\ vehicle.$

Register, October, 1991, No. 430

(3) The tiedowns on vehicles with a center device shall be attached to, or threaded through, the center device at least one foot below the level of the load height and satisfy all requirements of s. Trans 307.11.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91, except (1), eff. 2-1-92.

Trans 307.11 Tiedowns. (1) Tiedowns shall encompass the entire load of logs and extend from frame to frame for each stack of logs on the vehicle, except as otherwise provided by s. Trans 307.10 (3).

(2) The aggregate working load limit of tiedowns shall be at least $\frac{1}{2}$ times the total weight of the cargo.

(3) Each stack of logs shall be secured to the vehicle by at least 2 tiedowns.

(4) The linear interval between tiedowns securing the same stack of logs may not exceed 10 feet. For stacks of logs containing logs over 20 feet in length, the number of tiedowns shall at least equal the length of the longest log in the stack divided by 10, with any fractions rounded up to the next whole number. This subsection does not apply to pole trailers.

(5) All logs transported on pole trailers shall be securely fastened by at least 1 tiedown to the front bolster and by at least 1 tiedown to the rear bolster of the vehicle.

(6) All logs on the outer surface of the load shall be secured either by direct contact with the tiedowns or by being firmly held in place by other logs on the outer surface of the load which are in direct contact with the tiedowns.

Trans 307.12 Other regulations. In addition to compliance with this chapter the operator of a vehicle shall exercise reasonable care under the circumstances and shall comply with all applicable federal and state statutes and regulations. The requirements of this chapter are in addition to any other applicable provisions of state and federal law.

Note: The federal load securing requirements of 49 CFR ss. 393.100, 393.102, 393.104, and 393.106, which have been adopted by reference in ss. Trans 325.01 (4) and 327.03 (4), will also apply.

History: Cr. Register, October, 1991, No. 430, eff. 11-1-91.