

WAC 296-305-04510 Aerial apparatus. (1) All new aerial devices must be constructed and initially tested in accordance with the 2009 edition of NFPA 1901, Standard for Automotive Apparatus.

(2) All aerial devices must be operated in accordance with the manufacturer's recommendations.

(3) All aerial devices must be maintained, tested and repaired in accordance with the manufacturer's instructions and nonconflicting portions of the 2002 edition of NFPA 1911, Standard for the Inspection, Maintenance, Testing and Retirement of In-Service Automotive Fire Apparatus.

(a) All devices, as well as the section of the apparatus which supports the turntable, must be inspected at least once every year.

(b) All devices, as well as the section of the apparatus which supports the turntable, must be nondestructively tested by a certified testing agency every five years.

(c) After any accident that causes structural damage, testing must be performed and all defects corrected before the apparatus is returned to service.

(4) Aerial devices must be used according to the following requirements:

(a) The number of firefighters permitted on aerial devices must be in accordance with the manufacturer's instructions.

(b) Aerial devices must not be positioned under dangerous cornices or other loose overhanging objects that may endanger firefighters and personnel working from or climbing the ladders, except where rescue operations are essential.

(c) When working near energized electrical lines, the following minimum working clearances for all equipment and personnel must be observed:

(i) For lines rated 50 kv or below, the minimum clearance between the lines and any part of the equipment must be ten feet.

(ii) For lines rated over 50 kv, the minimum clearance must be ten feet plus 0.4 inch (1 cm) for each 1 kv.

(iii) For low voltage lines (operating at 600 volts or less), the work must be performed in a manner to prevent the firefighters or equipment from contacting the energized conductor.

(d) Fire apparatus aerial devices must be positioned for the greatest stability feasible at the fire scene.

(e) The tip of the aerial device must not be forcefully extended against a solid structure.

Note: If allowed by manufacturer's recommendations, aerial devices may be utilized for ventilation in accordance with those recommendations.

(f) Aerial ladders must not be extended or retracted while firefighters are climbing the ladder.

(g) Locking in must not be permitted. If it is necessary for firefighters to be positioned on the aerial device, they must be secured by at least a ladder belt.

(h) Ladder pipes, when in use, must be secured to the aerial in such a manner so that the ladder pipe cannot accidentally be dislodged while in operation.

(i) The operator of an aerial device must remain on the turntable whenever firefighters are working from the aerial. If the aerial device is used only as a ground ladder, no operator is needed on the turntable.

(5) The following must regulate the design and use of the operating turntable and aerial device:

(a) Ladders must have nonskid protection on the rungs.

(b) Turntable controls and valves for rotating, extending or elevating the aerial device must be clearly and distinctly marked as to function.

(c) Aerial controls must be spring loaded and have a safety catch so that the controls will return to the neutral position if the operator is incapacitated.

(d) The operator of the aerial device must be provided with a nonskid surface on the turntable.

(e) A railing of approximately forty-four inches in height, and if possible, not less than thirty-six inches in length, must be installed on the turntable in back of the operator's position.

(f) A spotlight of not less than 75,000 candlepower (950,000 lumens) or a floodlight with not less than 850 cp (10,500 lumens) must be provided at the base to illuminate the aerial device at night in any position of operation.

(6) The following must regulate the communication systems on the aerial devices and on the automotive fire apparatus:

(a) A two-way voice communication system must be installed between the top fly of the ladder or platform and the lower control station.

(b) There must be some type of electrical signal or voice communication located in the tractor of tillered aerial for communication signals between the tillerman and driver. The apparatus must not be moved unless the proper signal, as shown in Appendix E, is received from the tillerman.

(7) The automotive fire apparatus used in conjunction with aerial devices must be used according to the following:

(a) Ground jacks or outriggers must be deployed before an aerial device is put into operation.

(b) Ground plates must be deployed under the outriggers or jacks at all times.

(c) Hand, airbrakes, and spring brakes must be set whenever an aerial device is in operation.

(d) In addition to ground jack supports and outriggers, wheel chocks must be used whenever the aerial device is in operation.

(e) Wheel chocks must be rated by the manufacturer of the chock for the apparatus it is to be used on.

(f) Sand or similar products must be put under jacks, outriggers, and ground plates when operating on ice or snow.

(8) Railings on elevated platforms must be constructed so that there is no opening greater than twenty-four inches below them.

(9) A plate must be located at the aerial device control units, clearly visible to the operator at the lower control position, listing the following information:

(a) Model and serial number of the manufacturer.

(b) Rated capacity of the platform.

(c) Operating pressure of the hydraulic and pneumatic systems.

(d) Cautions or restrictions of operation.

(e) Control instructions.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 18-22-116, § 296-305-04510, filed 11/6/18, effective 12/7/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and 29 C.F.R. 1910.156, Fire brigades. WSR 13-05-070, § 296-305-04510, filed 2/19/13, effective 1/1/14.]