

**WAC 204-91A-170 Minimum tow truck equipment standards.** (1) All tow/recovery trucks used by a registered tow truck operator for public or private impounds or in response to patrol requests must meet the minimum standards listed in this section. Classes "A," "B," "B-2," "C," "D" only if factory equipped with a boom or retractable boom, "E" only if factory equipped with a side recovery system, and "S-1" are considered recovery trucks for patrol requests and must be used by the registered tow truck operator in response to these requests unless the operator requests and patrol accepts nonrecovery trucks or other equipment. The patrol will provide information concerning the general description of the type and condition of the vehicle and its type of load if applicable at the time of request for an initial tow if reasonably available.

(2) **Minimum standards:**

(a) All equipment used in conjunction with the tow truck winching system must be used in such a way as not to exceed the equipment working load limit. All equipment must comply with the Washington safety and health administration (WSHA) regulation if applicable.

Industry standards set the working load limit of wire rope or equivalent material at one-fifth of the manufacturer's rated nominal or breaking strength.

(b) Each wire rope or equivalent material must be capable of being fully extended from and fully wound onto its drum. Each wire rope or equivalent material must meet the industry standards for specified type of use with equipment.

OSHA (1410.179 (h)(2iiia)) requires **no less** than two wraps of rope remain on drum when rope is "fully extended." This is to ensure the full load **never** bears on the rope to drum connection.

(c) The wire rope on each recovery class truck must be equivalent to a 6 x 19 or 6 x 37 "extra improved plowed steel" (XIP) independent wire rope center (IWRC), and must meet all industry standards for working load limit.

(i) The operator must retain a receipt of purchase from the manufacturer indicating the type and WLL of wire rope, and document the type and date the wire rope was installed on each vehicle.

(ii) Class "A," "D," and "E" trucks may utilize either IWRC or fiber core wire rope.

(d) All wire rope must be in good working order. The following industry standards for **out-of-service** criteria will apply:

(i) No more than six randomly distributed broken wires in one rope lay, or more than three broken wires in one strand in one rope lay.

(ii) Excessive abrasion causing the loss of more than one-third the original diameter of an outside individual wire.

(iii) Evidence of rope deterioration from corrosion.

(iv) Kinking, crushing, or other damage that results in detrimental distortion of the rope structure.

(v) Any evidence of heat damage.

(vi) Any marked reduction in diameter either along the entire main length or in one section.

(vii) Unlaying or opening up of a tucked splice.

(viii) Core protrusion along the entire length.

(ix) End attachments that are cracked, deformed, worn, or loosened.

(x) Any indication of strand or wire slippage in end attachments.

(xi) More than one broken wire in the vicinity of fittings.

(e) Wire rope end connections shall be swaged or, if clamped, must have a minimum of three forged clamps spaced a minimum of six rope diameters apart and attached with the base or saddle of the clamp against the longer or "live" end of the cable. The "U" bolt will be placed over the short or "dead" end of the rope and will be of the proper size for the cable being clamped.

(i) Recovery or tow hooks must be installed, maintained, and used in the manner in which the manufacturer prescribes.

(ii) Recovery or tow hooks must be replaced if the throat opening has increased beyond the manufacturer recommendations, the load bearing point has been worn by ten percent, or the hook is twisted by more than ten degrees.

(iii) Wire rope clamps must be installed and torqued per manufacturer specifications.

(f) All wire rope related equipment, sheaves, etc., must conform to the diameter of the wire rope being used or to the original tow truck equipment manufacturer specifications.

(g) All winching equipment, booms, snatch blocks, etc., must have permanently affixed durable factory identification, stating the working load limit. If this identification has been removed or is no longer readable, it is criteria for placing the item out-of-service. Equipment may be reinspected by a recognized recertification company. If the equipment is acceptable, it may be reidentified with a working load limit and a recertification company identifier. It will be deemed acceptable if the operator maintains a copy of the certification of winching equipment provided the serial number on the equipment corresponds with the certification provided by the manufacturer.

(h) Snatch block hooks that were manufactured with a retractable safety retention clip must have a functional clip installed.

(i) All block and tackle equipment used in the winching system which shows signs of permanent deformation, significant wear or damage is criteria for placing the item out-of-service.

(j) All "J" hook chain assemblies must be grade "7" chain or better.

(k) Safety chains must only be used for the securing of vehicles to the truck. Must be minimum grade "7" chain or meet the original manufacturer's recommendations. Safety chain hooks that were manufactured with retractable safety retention clips must have a functional clip installed.

(l) Comply with legal lighting, equipment, and license requirements.

(m) Portable tail, stop, and turn signal lights for vehicles being towed. When in use, the lights must be mounted on the same level and as widely spaced laterally as practicable.

(n) Have department of licensing registration and truck numbers painted or permanently affixed to both sides of the truck. Have firm's name, city of address, and phone number permanently affixed to both sides of the vehicle. Letters must be a minimum of three inches high with one-half inch strokes.

(o) Have a revolving, strobe, or intermittent red light with three hundred sixty degrees visibility. Trucks may also be equipped with flashing amber and/or white lights which may be used in conjunction with the red lamps. Additionally, trucks must also be equipped with a warning light visible from the driver seat which is energized when the red revolving light or flashing amber lights are activated.

(p) Have a broom, minimum twelve inches wide, with a handle at least four feet long.

(q) Have a scoop type shovel, minimum seven inches wide, overall length minimum three feet long and a minimum of a three-gallon hard or solid sided receptacle (trash bags of any type will not meet this requirement) able to contain debris typically found at collision scenes without breaking.

(r) Be maintained in a reasonably clean condition.

(s) Have at least one steel pinch bar four feet long, tapered on one end and flattened on the other with a minimum diameter of three-quarters of an inch.

(t) Have a two-way radio or mobile telephone capable of communicating with a base station. A citizen band radio does not suffice. The communication device must:

(i) Be in proper working order and function correctly throughout the assigned tow areas for all towing operations including on call drivers.

(ii) Be used in a lawful manner.

(u) Have one 20 BC rated or two 10 BC rated fire extinguishers accessible and secured on or in the tow truck.

(v) Axle weight must comply with the requirements of RCW 46.37.351.

(w) Carry two gallons of absorbent material designed to and capable of absorbing a one-gallon liquid spill from a motor vehicle. For the purposes of this chapter, vehicular liquids consist of motor oil, antifreeze, transmission fluid, and gear oil.

(3) **Class "A" tow trucks:** Trucks that are capable of towing and recovery of passenger cars, pickup trucks, small trailers, or equivalent vehicles. Class "A" tow trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(a) A fourteen thousand five hundred pound minimum manufacturer's gross vehicle weight rating (GVWR).

(b) Dual tires on the rear axle.

(c) A minimum of one hundred feet of three-eighths inch continuous length XIP wire rope on each drum, measured from the point of attachment at the drum to the hook.

(d) A minimum eight-ton boom rating with a single hydraulic boom. Dual winches to control a minimum of two service drums.

(e) A minimum of two snatch blocks rated at 4.0 tons each.

(f) A wheel lift, tow sling, or other comparable device made of material and used in such manner so as to protect vehicles being towed or recovered.

(g) A portable dolly or its equivalent for hauling vehicles not otherwise towable. The transported vehicle must be attached to the dolly or its equivalent with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(h) If equipped with a wheel lift system, it must have a fully extended working load rating of at least three thousand pounds and a seven thousand pound tow rated capacity. The transported vehicle must be attached to the wheel lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(i) A minimum of one ten-foot or two five-foot recovery chains used in the winching system and must be minimum grade "7" chain with matching fittings.

(j) Permanently affixed safety chains.

(4) **Class "B" tow trucks:** Trucks that are capable of towing and/or recovery of medium size trucks, trailers, motor homes, or equivalent vehicles. Class "B" tow trucks must meet the requirements

of subsection (2)(a) through (w) of this section, and in addition must have:

(a) Eighteen thousand pounds minimum manufacturer's gross vehicle weight rating (GVWR).

(b) A minimum of one twelve-ton single hydraulic boom with two independent winches and drums.

(c) A minimum of one hundred feet of seven-sixteenths inch continuous length XIP IWRC wire rope on each drum, measured from points of attachment at the drum to the hook.

(d) A minimum of four standard release tools (caging stud assemblies).

(e) A minimum of two snatch blocks rated at 4.0 tons each.

(f) A wheel lift, tow sling, or other comparable device made of material and used in such manner so as to protect vehicles being towed or recovered.

(g) A portable dolly or its equivalent for hauling vehicles not otherwise towable when the class "B" tow truck is being used for class "A" tows. The transported vehicle must be attached to the dolly or its equivalent with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(h) If equipped with a wheel lift system, it must have a fully extended working load limit of at least six thousand pounds and a twenty thousand pound tow rated capacity. The transported vehicle must be attached to the wheel lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(i) A minimum of one ten-foot or two five-foot one-half inch diameter recovery chains used in the winching system and must be grade "8" chain with matching fittings.

(j) Permanently affixed safety chains.

(5) **Class "B-2" tow trucks:** Trucks that are capable of towing or recovery of medium size trucks, trailers, motor homes, or equivalent vehicles and are rated at over 30,000 GVWR with air brakes. Class "B-2" tow trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(a) A minimum of one hundred fifty feet of seven-sixteenths inch continuous length XIP IWRC wire rope on each drum, measured from points of attachment at the drum to the hook.

(b) A minimum of one fourteen-ton single hydraulic boom with two independent winches and drums.

(c) A minimum of two snatch blocks rated at 6.0 tons each.

(d) Air brakes and a system capable of supplying air to towed vehicles.

(e) Permanently affixed safety chains.

(f) Class "B-2" tow trucks must also meet the requirements of subsection (4)(d), (f), (g), (h), and (i) of this section.

(6) **Class "C" tow trucks and class "C" rotator trucks:** Trucks that are capable of towing and/or recovery of large trucks, trailers, buses, motor homes, or similar vehicles. Class "C" trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(a) A forty-six thousand pound manufacturer's gross vehicle weight rating (GVWR).

(b) Tandem rear axle truck chassis (both drive axles).

(c) A minimum of thirty-ton boom rating with a hydraulic boom. Dual winches to control a minimum of two service drums.

(d) A minimum of two hundred feet of five-eighths inch continuous length XIP IWRC wire rope on each drum measured from the point of attachment at the drum to the hook.

(e) Air brakes and a system capable of supplying air to towed vehicles.

(f) A minimum of four standard release tools (caging stud assemblies).

(g) A wheel lift or under lift system, it must have a fully extended working load limit of at least twelve thousand pounds. The transported vehicle must be attached to the wheel lift or under lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(h) A minimum of one ten-foot or two five-foot five-eighths inch recovery chains used in the winching system and must be a minimum grade "8" chain with matching fittings.

(i) Permanently affixed safety chains.

(j) All chains must be a minimum of grade "7," except as otherwise specified in this section.

(k) A wheel lift, tow sling, or other comparable device used in such a manner as to protect the vehicle being towed or recovered.

(l) A minimum of two snatch blocks rated at 8.0 tons each.

(7) **Class "D" tow trucks:** Trucks that are equipped for and primarily used as "wheel lift" or nonrecovery trucks. Class "D" tow trucks, unless specifically factory equipped with a boom or a retractable boom, are not designed for vehicle recovery and therefore must not be used as a replacement for a class "A" truck unless specifically authorized by the patrol. Class "D" tow trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(a) A 10,000 thousand pound manufacturer's gross vehicle weight rating (GVWR).

(b) A portable dolly or its equivalent for hauling vehicles not otherwise towable. The transported vehicle must be attached to the dolly or its equivalent with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(c) A wheel lift assembly with a fully extended manufacturer's working load limit of three thousand pounds and a seven thousand pound tow rated capacity. The transported vehicle must be attached to the wheel lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(d) One winch and drum with one hundred feet of three-eighths inch XIP wire rope meeting class "A" requirements.

(e) One snatch block rated at 3.5 tons.

(f) A minimum of one five-foot recovery chain for use in the winching system and must be a minimum of grade "7" chain with matching fittings.

(g) Permanently affixed safety chains.

(8) **Class "E" tow trucks:** Trucks that are primarily designed and intended to transport other vehicles by loading and carrying the transported vehicle entirely on the truck. These vehicles may be a flatbed, slide back, tilt bed, or rail design truck. Class "E" trucks, unless specifically factory equipped with a side recovery system, are not designed for vehicle recovery and therefore must not be used as a replacement for a class "A" truck unless specifically authorized by the patrol.

(a) Class "E" trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(i) Four tie downs with a minimum working load limit of three thousand three hundred pounds. The tie downs must be grade "7" or stronger chain, wire rope, nylon strap, or steel strap.

All four tie downs must be used when securing a vehicle. The tie downs must be affixed to the axle, tires, or frame of the transported vehicle both front and rear. All tie down ends must be affixed to the truck bed or rail in a manner that will prevent movement of the transported vehicle. Factory style "T" hook tie downs may be used for front and rear securement.

(ii) One snatch block rated at 4.0 tons.

(iii) Dual tires on the rear axle.

(iv) Fourteen thousand five hundred pound gross vehicle weight rating (GVWR).

(v) Current licensing and tonnage equal to the maximum combination GVWR.

(vi) Four-ton winch rating.

(vii) Fifty feet three-eighths inch XIP fiber core or IWRC wire rope.

(viii) One five-foot grade "7" chain with matching fittings for use in winching.

(ix) Nineteen feet of usable bed capable of carrying vehicles.

(x) Portable lights when the truck is used in towing mode. When in use, the lights must be mounted on the same level and as widely spaced laterally as practicable.

(b) Class "E" tow trucks may be equipped with a sling, tow bar, and/or a wheel lift system.

(i) If equipped with a towing system:

(A) The system must have a manufacturer's rating appropriate to the vehicle being towed. If used in a towing mode (as opposed to carrying), a sling, tow bar, and/or wheel lift assembly can be used and must have a manufacturer's rating appropriate to the vehicle being towed.

(B) The tow truck must have permanently affixed safety chains.

(ii) If using a wheel lift system, the transported vehicle must be attached to the wheel lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(c) If factory equipped with a side vehicle recovery system, such system must meet all the winch and wire rope minimum requirements listed for a class "A" truck.

(9) **Class "S" tow/recovery trucks:** Tow/recovery trucks that cannot meet the requirements of class "A," "B," "C," "D," or "E" and are not eligible for appropriate waiver as outlined in WAC 204-91A-070(4), may be approved as class "S" (special).

(a) To be designated as a class "S" truck, the operator must submit a request for approval through the district commander to the section that must include:

(i) Why the truck is needed;

(ii) What the truck will be used for;

(iii) The vehicle size;

(iv) Purchased tonnage if required;

(v) Capability; and

(vi) The equipment carried or used with the truck.

(b) The gross vehicle weight rating of the class "S" truck will determine the appropriate equipment required.

(c) If the district commander approves the request, the request will be forwarded with recommendations for equipment and/or operation instructions or limitations to the section for review and final approval.

val. If approval is granted, the equipment must be inspected as outlined in WAC 204-91A-040 with reports forwarded in the normal manner.

(10) **Class "S-1 rotator" trucks:** Trucks that are capable of recovery, towing, or both of large trucks, trailers, buses, motor homes, or similar vehicles. Class "S-1 rotator" trucks must meet the requirements of subsection (2)(a) through (w) of this section, and in addition must have:

(a) A fifty-two thousand pound manufacturer's GVWR.

(b) Tandem or triple rear axle truck chassis with at least two drive axles.

(c) A minimum of forty ton rotating boom rating with a single boom.

(d) A minimum of two hundred feet of five-eighths inch continuous length XIP IWRC wire rope on two drums measured from the point of attachment at the drum to the hook.

(e) Air brakes and a system capable of supplying air to towed vehicles.

(f) A minimum of four standard release tools (caging stud assemblies).

(g) A wheel lift system that has a fully extended working load limit of at least twelve thousand pounds. The transported vehicle must be attached to the wheel lift or under lift with an adjustable tie down, or as otherwise required by the equipment manufacturer.

(h) A minimum of one ten-foot or two five-foot five-eighths inch recovery chains used in the winching system and must be a minimum grade "8" chain with matching fittings.

(i) All chains must be a minimum of grade "7," except as otherwise specified in this section.

(j) A tow sling or other comparable device used in such a manner as to protect the vehicle being towed or recovered.

(k) A minimum of two snatch blocks rated at eight tons each.

(l) Permanently affixed safety chains.

(11) Tow trucks rated as class "A," "B," "B-2," "C," or "E" that are currently in-service with operators holding a current letter of appointment issued by the patrol, not meeting the criteria for classification listed in this section will be allowed to remain on the rotation with those companies.

(12) This section shall be effective on March 1, 2011.

[Statutory Authority: RCW 46.37.005, 46.55.050, and 46.55.115. WSR 14-17-104, § 204-91A-170, filed 8/19/14, effective 9/19/14; WSR 13-18-065, § 204-91A-170, filed 9/3/13, effective 10/4/13; WSR 10-24-068, § 204-91A-170, filed 11/30/10, effective 12/31/10; WSR 09-09-118, § 204-91A-170, filed 4/21/09, effective 5/22/09. Statutory Authority: RCW 46.37.005 and 46.55.115. WSR 07-02-025A, § 204-91A-170, filed 12/22/06, effective 1/22/07. Statutory Authority: RCW 46.37.005. WSR 04-20-021, § 204-91A-170, filed 9/28/04, effective 10/29/04. Statutory Authority: RCW 46.37.005, 46.55.050, and 46.55.115. WSR 02-07-056, § 204-91A-170, filed 3/15/02, effective 4/15/02. Statutory Authority: RCW 46.37.005 and 46.55.050. WSR 94-18-083, § 204-91A-170, filed 9/2/94, effective 10/3/94. Statutory Authority: RCW 46.35.005 [46.37.005]. WSR 89-14-015 (Order 89-04-ESR), § 204-91A-170, filed 6/23/89.]