

**WAC 296-155-53402 Assembly, disassembly, or reconfiguration.**

(1) When assembling, disassembling, or reconfiguring a crane/equipment (or attachments), all applicable manufacturer prohibitions must be followed and complied with. The procedures used shall be in written or digital format, remain on-site for the entire duration that the crane is on-site, and must comply with:

(a) For tower cranes only:

(i) Manufacturer procedures applicable to assembly, disassembly, or reconfiguration; or

(ii) Written procedures from a RPSE.

(b) For all cranes/equipment other than tower cranes:

(i) Manufacturer procedures applicable to assembly, disassembly, or reconfiguration; or

(ii) Employer procedures for assembly, disassembly, or reconfiguration. Employer procedures may be used only where the A/D director can demonstrate that the procedures used meet the requirements in subsection (1) of this section.

**(2) Supervision - Competent/qualified person.**

(a) Assembly, disassembly, or reconfiguration must be directed by a person who meets the criteria for both a competent person and who is qualified in accordance with the requirements of WAC 296-155-53303.

(b) The A/D director has the authority and shall ensure prompt corrective measures are taken, to eliminate hazards associated with the assembly, disassembly, or reconfiguration work.

(c) The A/D director must provide direct on-site supervision of all assembly, disassembly, or reconfiguration work.

**Note:** The A/D director may rely on and be assisted by other qualified personnel.

**(3) Protecting assembly, disassembly, or reconfiguration crew members out of operator view.**

(a) Before a crew member goes to a location that is out of view of the operator, and is in, on, under, or near the crane/equipment (or load) where the crew member could be injured by movement of the crane/equipment (or load), the crew member must inform the operator that they are going to that location.

(b) Where the operator knows that a crew member went to a location covered by (a) of this subsection, the operator must not move any part of the crane/equipment (or load) until the operator is informed in accordance with a prearranged system of communication that the crew member is in a safe position.

**(4) Working under the boom, jib or other components.**

(a) When pins (or similar devices) are being removed, employees must not be under the boom, jib, or other components, except where the requirements in (b) of this subsection are met.

(b) **Exception.** Where it is demonstrated that site constraints require one or more employees to be under the boom, jib, or other components when pins (or similar devices) are being removed, the A/D director must implement procedures that minimize the risk of unintended dangerous movement and minimize the duration and extent of exposure under the boom. (See WAC 296-155-56430 Assembly, disassembly, or reconfiguration—Working under the boom, jib or other components—Sample procedures for minimizing the risk of unintended dangerous boom movement.)

(5) **Capacity limits.** During all phases of assembly, disassembly, or reconfiguration, rated capacity limits for loads imposed on the crane/equipment, components (including rigging), lifting lugs and crane/equipment accessories must not be exceeded.

(6) **Cantilevered boom sections.** Manufacturer limitations on the maximum amount of boom supported only by cantilevering must not be exceeded. Where these are unavailable, a RPE familiar with the type of crane/equipment involved must determine this limitation in writing, which must not be exceeded.

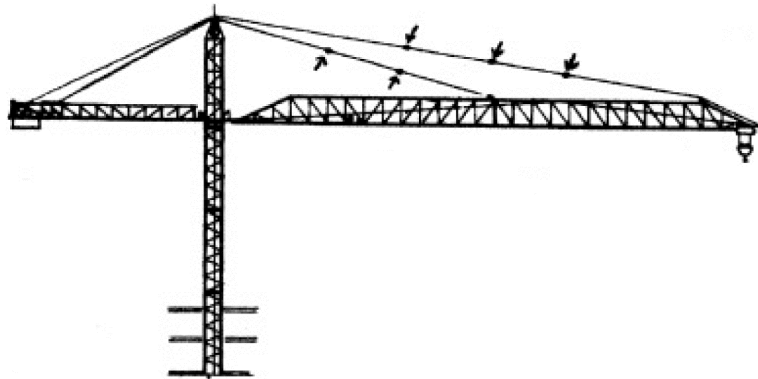
(7) **Weight of components.** The weight of each of the components must be readily available.

(8) **Shipping pins.** Reusable shipping pins, straps, links, and similar equipment must be removed. Once they are removed they must either be stowed or otherwise stored so that they do not present a falling object hazard.

(9) **Pile driving.** Cranes used for pile driving must not have a jib attached during pile driving operations.

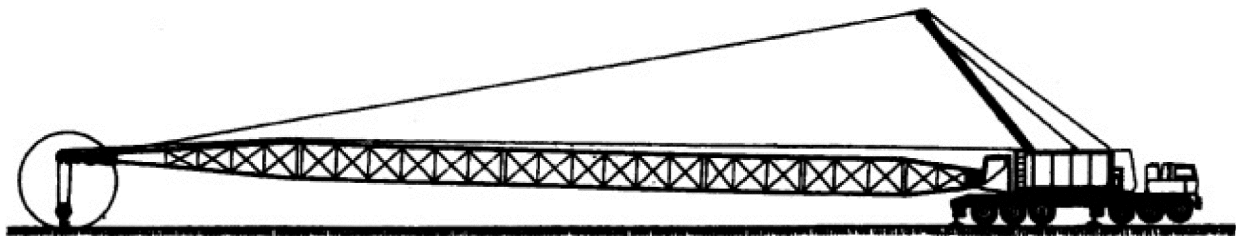
(10) The following are additional requirements for dismantling of booms and jibs, including dismantling for changing the length of booms and jibs (applies to both the use of manufacturer procedures and employer procedures):

(a) None of the pins in the pendants are to be removed (partly or completely) when the pendants are in tension. See example in Figure 3;

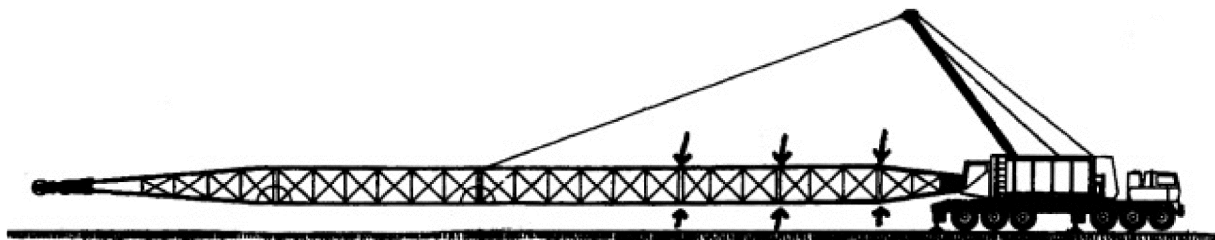


**Figure 3. Pins (indicated by arrows) are not to be removed while pendants remain in tension.**

(b) None of the pins (top and bottom) on boom sections located between the pendant attachment points and the crane/equipment body are to be removed (partly or completely) when the pendants are in tension. See examples in Figures 4 and 5;

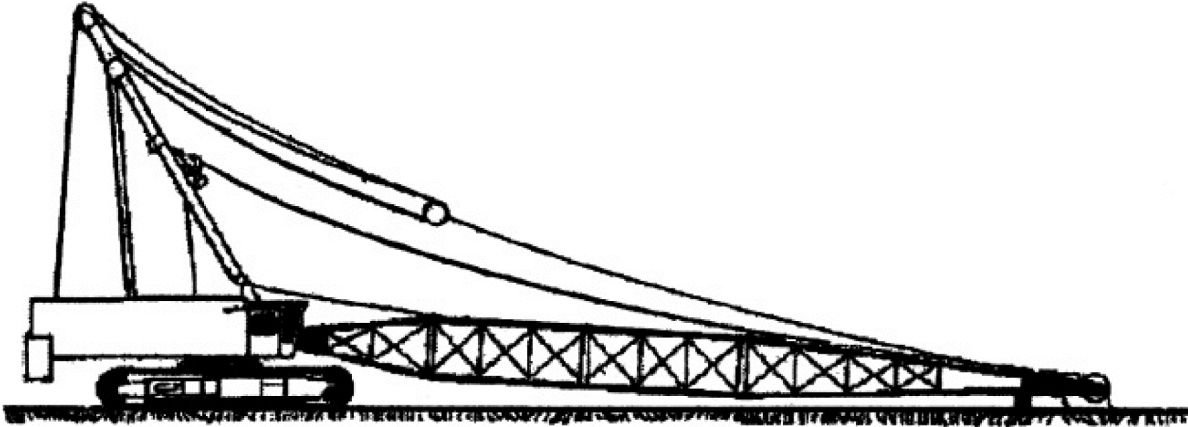


**Figure 4. Pendant is in tension while connected to uppermost boom section, and no pins are to be removed.**



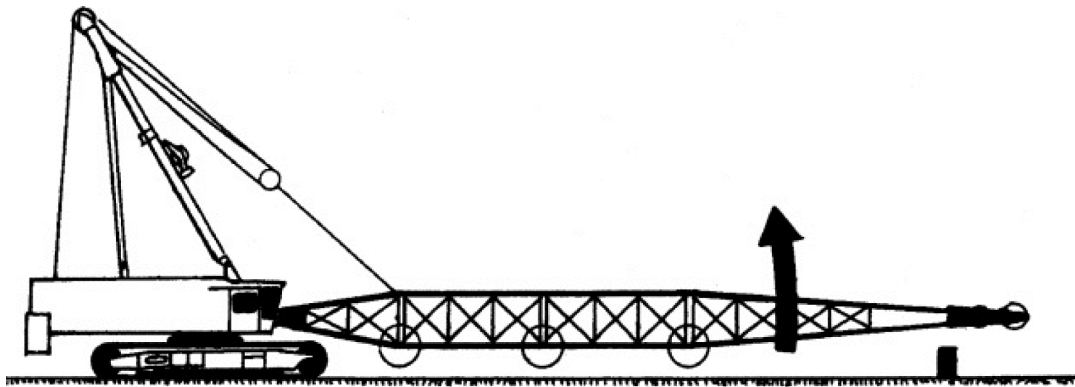
**Figure 5. Pendant is in tension, and pins between pendant attachment point and crane body (indicated by arrows) are not to be removed. Note that, because the cantilevered portion of the boom is not supported, only the bottom pins ahead of the pendant may be removed. See Figure 8.**

(c) None of the pins (top and bottom) on boom sections located between the uppermost boom section and the crane/equipment body are to be removed (partly or completely) when the boom is being supported by the uppermost boom section resting on the ground (or other support). See example in Figure 6; and

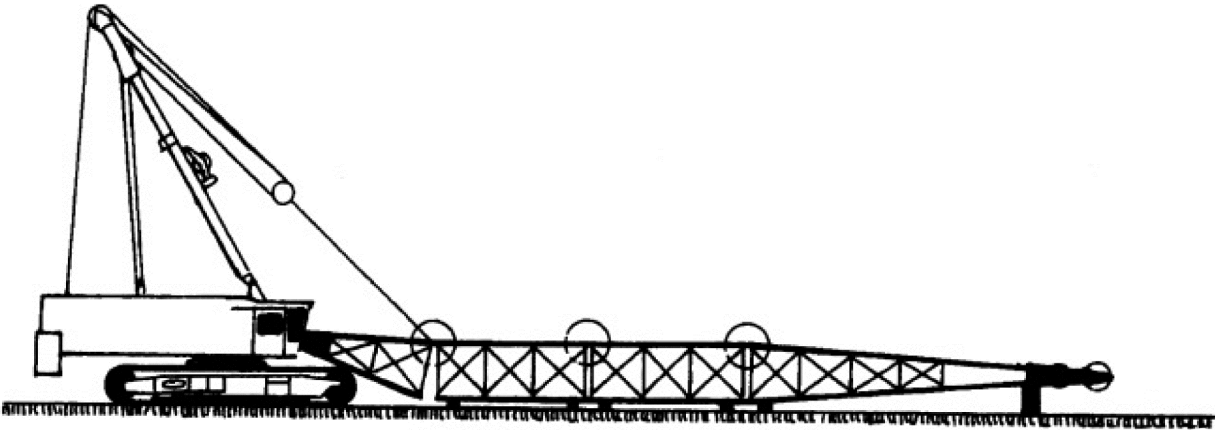


**Figure 6. Uppermost boom section is resting on ground, and no pins between uppermost boom section and crane body are to be removed.**

(d) None of the top pins on boom sections located on the cantilevered portion of the boom being removed (the portion being removed ahead of the pendant attachment points) are to be removed (partly or completely) until the cantilevered section to be removed is fully supported. See examples in Figures 7 and 8.



**Figure 7. Cantilevered portion of boom is not supported, and top pins therefore are not to be removed. Bottom pins (circled) may be removed.**



**Figure 8. Cantilevered portion of boom is supported, and top pins (circled) may therefore be removed.**

(11) When using employer procedures instead of manufacturer procedures for assembling, disassembling, or reconfiguration, it must be ensured that the procedures are designed to:

- (a) Prevent unintended movement, and to prevent collapse, of any parts of the crane/equipment;
- (b) Provide adequate support and stability of all parts of the crane/equipment during the assembly, disassembly, or reconfiguration process;
- (c) Position employees involved in the assembly, disassembly, or reconfiguration operation so that their exposure to movement or collapse is minimized; and
- (d) Employer procedures must be developed by a qualified person.

(12) Assembly, disassembly, or reconfiguration in the vicinity of power lines, must follow the requirements located in WAC 296-155-53408.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 25-16-089, s 296-155-53402, filed 8/5/25, effective 9/5/25. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-53402, filed 4/19/16, effective 5/20/16. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW, and 29 C.F.R. 1926, Subpart CC. WSR 13-02-068, § 296-155-53402, filed 12/31/12, effective 2/1/13. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.440, 49.17.060, and 29 C.F.R. 1926, Subpart CC. WSR 12-01-086, § 296-155-53402, filed 12/20/11, effective 2/1/12.]