

WAC 296-155-34005 Structural and mechanical lifters. (1) Structural and mechanical lifting devices must be constructed in accordance with ASME B30.20-2010, Below-the-Hook Lifting Devices.

(2) The rated load of the lifting device must be legibly marked on the main structure or on a tag attached to it where it is visible. If the lifting device is made up of several lifters, each detachable from the group, these lifters must also be marked with their individual rated loads.

(3) All structural and mechanical lifting devices must be marked with the following information:

- (a) Manufacturer's name and address;
- (b) Serial number;
- (c) Lifter weight, if over one hundred pounds (45 kg);
- (d) Rated load as required in subsection (2) of this section;
- (e) Name and address of repairer or modifier, when the lifting device has been repaired or modified.

(4) **Installation.**

(a) Structural and mechanical lifters must be assembled and installed according to manufacturer's instructions.

(b) The installer must check for correct rotation of all motors.

(5) **Inspection.**

(a) A qualified person must inspect all new, altered, repaired, or modified lifting devices according to Tables 20 and 21. The inspection of altered, repaired or modified lifting devices can be limited to the parts affected, if a qualified person determines that is all that is needed.

(b) The operator must inspect the lifting device before and during every lift for any indication of damage. Check the following items:

- (i) Surface of the load for debris;
- (ii) Condition and operation of the controls; and
- (iii) Condition and operation of the indicators and meters when installed.

(c) Lifting devices must be inspected, by the operator or another competent person, according to Table 20.

(i) If any damage is found, have a qualified person determine whether there is a hazard.

(ii) Hazardous conditions must be corrected before continuing use.

**Table 20
Structural and Mechanical Lifter Frequent Inspection**

Inspect for:	How often:
Structural members for: <ul style="list-style-type: none"> • Deformation. • Cracks. • Excessive wear on any part of the lifter. 	<ul style="list-style-type: none"> • Normal service - Monthly. • Heavy service - Weekly to monthly. • Severe service - Daily to weekly.
The device for:	

Inspect for:	How often:
<ul style="list-style-type: none"> Loose or missing: <ul style="list-style-type: none"> - Guards. - Fasteners. - Covers. - Stops. - Nameplates. 	<ul style="list-style-type: none"> Special or infrequent service - As recommended by a qualified person before and after each occurrence. Before use, when any lifter has been idle for at least one month.
<ul style="list-style-type: none"> All functional operating mechanisms for maladjustments interfering with operation. 	
<ul style="list-style-type: none"> Automatic hold-and-release mechanisms for maladjustments interfering with operation. 	

- Note:**
- Normal service means service that involves operation with various weights within the rated load limit, averaging less than 65% of rated load limits.
 - Heavy service means service that involves operation within the rated load limit, that exceeds the limits of normal service.
 - Severe service means service that involves normal or heavy service with abnormal operating conditions.

(d) A qualified person must perform a periodic inspection on structural and mechanical lifters according to Table 21. Include the items in Table 20 of this section.

(i) You must correct hazardous conditions before continuing use.

(ii) You must keep inspection reports of the most recent periodic inspection.

**Table 21
Structural and Mechanical Lifting Device Periodic Inspection**

Inspect for:	How often:
Loose bolts or fasteners.	<ul style="list-style-type: none"> Normal service for equipment in place - Yearly.
Cracked or worn gear, pulleys, sheaves, sprockets, bearings, chains, and belts.	<ul style="list-style-type: none"> Heavy service - Semiannually.
Excessive wear of friction pads, linkages, and other mechanical parts.	<ul style="list-style-type: none"> Severe service - Quarterly.
Excessive wear at hoist hooking points and load support clevises or pins.	<ul style="list-style-type: none"> Special or infrequent service - As recommended by a qualified person before the first such occurrence and as directed by the qualified person for any subsequent occurrences.

- Note:**
- Normal service means service that involves operation with various weights within the rated load limit, averaging less than 65% of rated load limits.
 - Heavy service means service that involves operation within the rated load limit, that exceeds the limits of normal service.
 - Severe service means service that involves normal or heavy service with abnormal operating conditions.

(6) Operational tests.

(a) A qualified person must perform an operational test on new, altered, repaired, or modified lifters before use. The qualified person can limit the testing of altered, repaired or modified lifters to the parts affected.

(b) The following items must be tested:

(i) Lifters with moving parts must be tested to determine that the lifter operates according to the manufacturer's instructions.

(ii) Lifters with manually operated or automatic latches must be tested to determine that the latch operates according to manufacturer's instructions.

(iii) All indicator lights, gages, horns, bells, alarms, pointers, and other warning devices must be tested.

(c) Dated reports of all operational tests must be kept on file.

(7) **Repair.**

(a) You must repair structural and mechanical lifting devices as follows:

(i) Adjustments and testing must be done only by a qualified person;

(ii) Replacement parts used must be at least equal to the original manufacturer's specifications;

(iii) You must inspect the device according to subsection (5) of this section before returning to service.

(b) You must take the following precautions before repairs on a lifting device are started:

(i) You must disconnect, lock out and tag all sources of power "Out of Service," if applicable;

(ii) You must tag the lifting device removed from service for repair "Out of Service."

(8) Lifting devices must be operated only by qualified personnel.

(9) Operators must do the following:

(a) Test all controls before use, each shift;

(b) Consult a competent person before handling the load whenever there is any doubt as to safety;

(c) Respond only to instructions from competent persons, except for stop signals. The operator must obey a stop order at all times, no matter who gives it;

(d) Do not load the lifting device in excess of its rated load or with any load that it is not specifically designed for;

(e) Apply the lifter to the load according to the instruction manual;

(f) Check that:

(i) Lifter ropes or chains are not kinked.

(ii) Multiple part lines are not twisted around each other.

(g) Bring the lifter over the load in a way that minimizes swinging;

(h) Keep the load or lifter from contacting any obstruction;

(i) Set down any attached load and store the lifting device before leaving it;

(j) Check that all personnel are clear of the load;

(k) Using the lifter for side pulls or sliding the load is prohibited, unless specifically authorized by a qualified person;

(l) Riding on loads or the lifting device is prohibited.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-34005, 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, § 296-155-34005, filed 12/31/12, effective 2/1/13.]