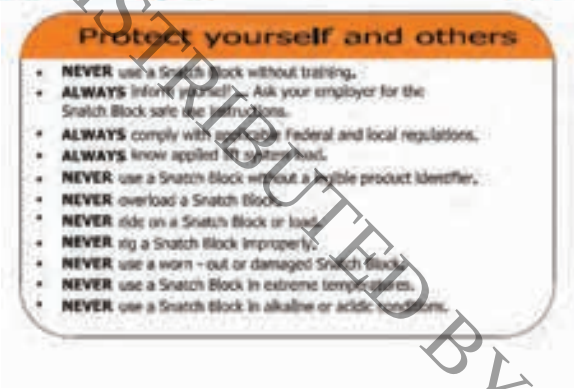
Snatch Block Warnings and Use Limitations

This document contains warnings and use limitation information applicable to Gunnebo Johnson Corporation Snatch Blocks and is furnished with all Gunnebo Johnson Corporation shipments. Component distributors and lift system manufacturers must pass on this information in their warnings and use limitation literature where Gunnebo Johnson Corporation Snatch Blocks are involved.



- **Never use a Snatch Block without training...** OSHA regulation requires responsible work practice.

  "The employer shall permit only those employees qualified by training or experience to operate equipment or machinery" – OSHA 1926.20 (b) (4).

  Employee training should include information given in OSHA training literature, ASME B30.26 - 2010 "Rigging Hardware" standard, lift system manufacturer's literature, Gunnebo Johnson Corporation's DVD of "Recommended Inspection Practices for Johnson Lifting Accessories", and this document.

- **Always inform yourself...** Ask your employer for Snatch Block safe use instruction.

  "The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury" – OSHA 1926.21 (b) (2).

- **Always comply with applicable Federal and local regulations...** Federal and local regulations govern worksite activity.

  Understand all governing laws and safety standards before use of Snatch Blocks in lift systems.

  "If a particular standard is specifically applicable to a condition, practice, means, method, operation, or process, it shall prevail over any different general standard..." — OSHA 1910.5 (c) (1).

  Contact OSHA at (800) 321-6742, or www.OSHA.gov and ASME at (800) 843-2763, or www.ASME.org for reference assistance.

- **Always know applied lift system load ...** Avoid improper Snatch Block selection.

Lift system load (LSL) applied to the snatch block fitting is based upon line pull (LP) and load factor (LF) for a given lift angle (LA).

Maximum LSL applied to snatch block fitting must be known for proper snatch block selection.

LSL is calculated by the following formula:

LSL = (LP) * $(LF)_{LA}$ See illustration and table in Figure No. 1. LSL must be calculated for each snatch block in the lift system.

Snatch Block Working Load Limit (WLL) with appropriate design factor shall be equal to or greater than the corresponding maximum LSL.

- **Never use a Snatch Block without a legible product identifier...** Product Identification is required to insure proper application.

  Snatch Blocks have a product identifier giving WLL, design factor, wire rope range, and important user warnings. The information is required for confirmation of proper application prior to use.

Example of Product Identifier

- **Never overload a Snatch Block...** Understand Working Load Limits.

  The rated load of the rigging block shall not be exceeded. - ASME B 30.26-5.9.1 (b).

  Working Load Limit (WLL) is the maximum working load to be applied to a Snatch Block load fitting for the given application. WLL applies to in-line loading and does not include torsional, binding, shock or side load effects.

  Standard Gunnebo Johnson Corporation WLL's are based on a 4 design factor. Lift dynamics, duty cycle and lift system type may require an increased design factor, hence a reduced WLL. Inattention to required design factor can result in Snatch Block overload. Contact Gunnebo Johnson Corporation Service Department for assistance at (800) 331-5460.

- **Never ride on a Snatch Block or load...** Avoid death or injury.

  General worksite regulations require; No hoisting, lowering, swinging or traveling shall be done while anyone is on the load or hook." — OSHA 1910.180 (h) (3) (v).

  All portions of the human body shall be kept from between the rigging block, its running lines, the load, and any other rigging during lifting or load-handling activities. ASME B30.26-5.9.2 (a)

  All employees shall be kept clear of loads about to be lifted and of suspended loads.

  Snatch Blocks shall not be used in scaffold or personnel lift systems unless complying with applicable federal or local system and fall arrest regulations.

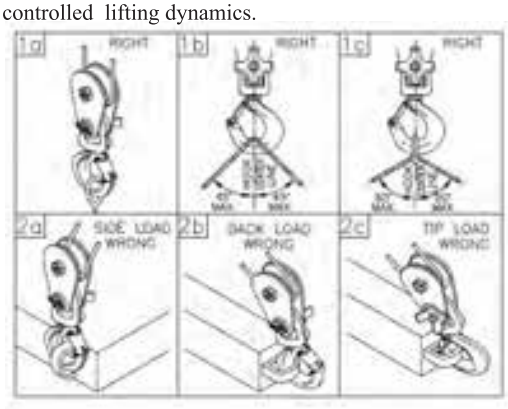
  Personnel Hoisting Exception - OSHA 1926.550 (g) (2) and OSHA Directive CPL 2-1.29

- **Never rig a Snatch Block improperly....** Avoid dropped loads and snatch block damage.

  Rigging shall be centered in the base (bowl/saddle) of the hook to avoid point loading of the hook and rigging disengagement. (See figure 1a, 1b, & 1c).

  Snatch Blocks shall not be used in such a manner as to place a side load or back load on the Snatch Block or load fitting. (See figure 2a, 2b, & 2c.

  When using a latch to close the throat opening of the hook, care shall be taken that the rigging load is not carried by the latch. Hook latches aid in the retention of loose slings under slack rigging conditions only and are not intended to be anti-fouling devices during lifting. Such fouling is extremely dangerous and shall be avoided by proper rigging and controlled lifting dynamics.



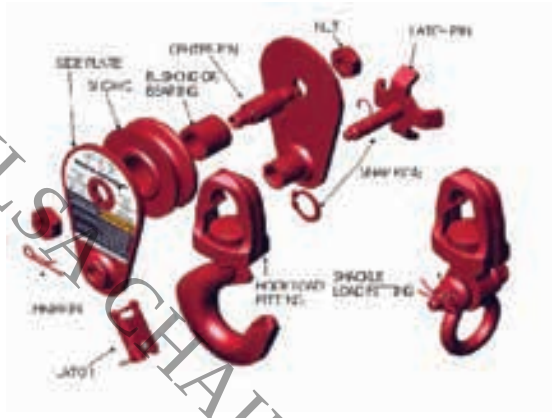
- **Never use a worn-out or damaged Snatch Block...** Avoid malfunction or failure.

  A visual inspection of the Snatch Block shall be performed by a designated person each day before the Snatch Block is used.

  A complete periodic inspection shall be performed by a designated person.... ASME B30.26-5.8.3 (a)

  Snatch Blocks shall be removed from service if conditions such as the following are present and shall only be returned to service when approved by a qualified person:

  (a) missing or illegible identification
  (b) misalignment or wobble in sheaves
  (c) excessive sheave groove corrugation or wear
  (d) missing or loose nuts, latch pin, hairpin retainer, snap rings, or other fasteners and retaining devices
  (e) indications of weld spatter or arc strikes
  (f) heated above 150°F (66°C)
  (g) excessive pitting or corrosion
  (h) bent, cracked, twisted, distorted, stretched, elongated, or broken load bearing components
  (i) excessive wear, nicks, or gouges
  (j) a 10% reduction of the original dimension for any cross-section
  (k) excessive damage to load bearing threads
  (l) evidence of unauthorized welding or modifications
  (m) for hooks, the removal criteria specified in ASME B30.10
  (n) for shackles, the removal criteria specified in ASME B 30.26
  (o) other conditions, including visible damage that cause doubts as to the continued use of the rigging block
  (p) Lack of sheave bearing lubrication. Continuous operation: lubricate bushings every 8 hours and roller bearings every 24 hours. Intermittent operation: lubricate bushings and bearing every 14 days.



- **Never use a Snatch Block in extreme temperatures...** Avoid functional or structural failure.

  Snatch Blocks shall not be heated above 150°F (66°C) or used 20°F (11°C) below the sevice temperature given on the identification tag.

  Snatch Block Working Load Limit is valid between 150°F (66°C) and service temperature given on the identification tag.

  Working Load Limit must be reduced when lifting below the service temperature given on the identification tag because cold temperature begins to affect the Snatch Block material properties.

  50% of the WLL must not be exceeded when lifting in temperatures between the service temperature given on the identification tag and 20° F (11°C) below the service temperature.

- **Never use a Snatch Block in alkaline or acidic conditions...** Avoid structural failure.

  Gunnebo Johnson Corporation Snatch Blocks shall not be used in alkaline or acidic conditions. Resulting metal embrittlement and accelerated corrosion can cause sudden failure. Hot dip galvanizing and electro-plating of Snatch Block components shall be done only by Gunnebo Johnson Corporation.