

Man Handler™ Snatch Block Warnings and Use Limitations

This document contains warnings and use limitation information applicable to Gunnebo Johnson Corporation Man Handler 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 Man Handler Snatch Blocks are involved.

Protect yourself and others

- **NEVER** use a Manhandler Snatch Block without training.
- **ALWAYS** inform yourself ... Ask your employer for Man Handler Snatch Block safe use instructions.
- **ALWAYS** comply with applicable Federal and local regulations.
- **ALWAYS** know applied lift system load.
- **NEVER** use a Man Handler Snatch Block without a legible product identifier.
- **NEVER** overload a Man Handler Snatch Block.
- **NEVER** use a Man Handler Snatch Block without complying with fall arrest regulations.
- **NEVER** rig a Man Handler Snatch Block improperly.
- **NEVER** use a worn – out or damaged Man Handler Snatch Block.
- **NEVER** use a Man Handler Snatch Block in extreme temperatures.
- **NEVER** use a Man Handler Snatch Block in alkaline acidic conditions.

- **Never use a Man Handler 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).

“...The training shall include... the nature of ... fall hazards...” – OSHA 1926.454 (a) (1).

Employee training should include information given in OSHA training literature, lift system manufacturer’s literature and this document.

- **Always inform yourself.** Ask your employer for ManHandler 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 Man Handler snatch blocks in lift systems.

The following are some regulations governing material and personnel handling systems.

“Safety Requirements for Scaffolding” – OSHA 1910.28

“When hoisting machines are used on two-point suspension scaffolds, such machines shall be of a design tested and approved by a nationally recognized testing laboratory...” – OSHA 1910.28 (g) (3).

“Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms” – OSHA 1910 Subpart F.

“Scaffolds” — OSHA 1926 Subpart L.

“Material Hoists, Personnel Hoists and Elevators” — OSHA 1926.552

“No person shall be allowed to ride on material hoists except for the purposes of inspection and maintenance.”— OSHA 1926.552 (b) (1) (ii).

“Personnel hoists used in bridge tower construction shall be approved by a registered professional engineer and erected under the supervision of a qualified engineer competent in this field.” — OSHA 1926.552 (c) (17) (i).

“Crawler Locomotive and Truck Cranes; No hoisting, lowering, swinging or traveling shall be done while anyone is on the load or hook.” — OSHA 1910.180 (h) (3) (v).

Construction worksite regulation stipulates: “The use of a crane or derrick to hoist employees on a personnel platform is *prohibited*, except when the erection, use and dismantling, of conventional means of reaching the worksite, such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform or scaffold, would be *more hazardous* or is *not possible* because of structural design or worksite conditions.” — OSHA 1926.550 (g) (2).

“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).

The following safety standards provide additional recommendations for material and personnel handling systems:

“Safety Requirements for Personnel Hoists on Construction and Demolition Sites” — ANSI A10.4

“Prohibition of Snatch Blocks. No snatch blocks or hood type sheaves shall be used on any hoist tower.” — ANSI A10.5-13.5.9

“Safety Requirements for Rope-Guided and Nonguided Workers’ Hoists for Construction and Demolition Operations.” — ANSI A10.22

“Work Platforms Suspended from Cranes or Derricks.” — ANSI A10.28

“Safety Requirements For Powered Platforms and Traveling Ladders and Gantries for Building Maintenance.” — ANSI A120.1

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

INFORM A RIGGER – PASS THE WORD

- **Always know applied lift system load.** Avoid improper Man Handler snatch block selection.

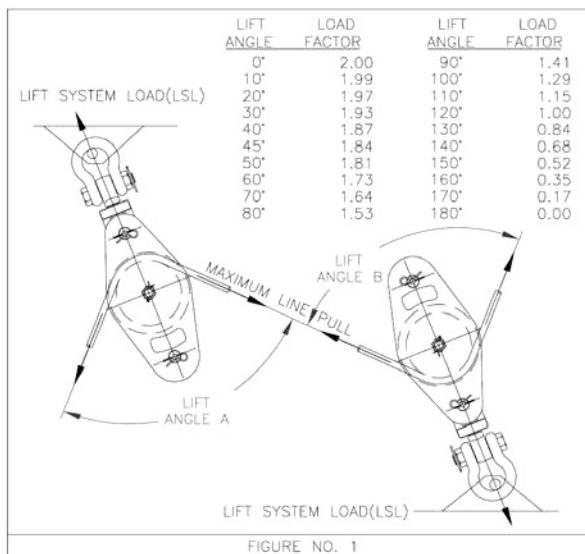
Lift system load (LSL) applied to the snatch block fitting is based upon line pull (LP) and load factor (LF) for a given lift angle (LA).

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 WLL with appropriate design factor shall be equal to or greater than the corresponding maximum LSL.



- **Never use a Man Handler snatch block without a legible product identifier.** Product Identification is required to insure proper application.

Man Handler 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



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- **Never overload a Man Handler snatch block.** Understand Working Load Limits

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

The following are some regulations and standards governing lift system design factors.

“Scaffolds shall not be loaded in excess of the working load for which they are intended.” — OSHA 1910.28 (a) (7).

“Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.” — OSHA 1910.28 (a) (4).

“Each suspension rope, including connecting hardware, used on adjustable suspension scaffolds shall be capable of supporting, without failure, at least six times the maximum intended load applied or transmitted to that rope with the scaffold operating at either the rated load of the hoist, or two (minimum) times the stall load of the hoist, whichever is greater.” — OSHA 1926.451 (a) (4).

“Factor of safety for driving-machines and sheaves.” — ANSI A10.4-22.9.

“When blocks are used to provide additional load carrying capacity, the suspension system shall be designed to support four times the rated load of the hoist multiplied by the number of active ropes.” — ANSI 10.8-6.2.2.

“The personnel rating design factor shall not be less than 12.0” — API 2C — 7.55.

Standard Gunnebo Johnson Corporation WLLs are based on a 4 design factor for material handling and a 12 design factor for handling personnel. 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 Man Handler snatch block overload. Contact Gunnebo Johnson Corporation Service Department for assistance at (800) 331-5460.

- **Never use a Man Handler snatch block without complying with fall arrest system regulations.** Avoid death or injury.

“Personal fall protection. Employees on working platforms shall be protected by a personal fall arrest system meeting the requirements of appendix C, Section I, of this standard, and as otherwise provided by this standard.” — OSHA 1910.66 (j).

“Ladder safety devices, and related support systems...” — OSHA 1926.1053 (a) (22).

“Safety Belts, Lifelines, and Lanyards” — OSHA 1926.104.

“This subpart sets forth requirements and criteria for fall protection in construction workplaces...” — OSHA 1926.500 (a) (1).

“This section sets forth requirements for employers to provide fall protection systems...” — OSHA 1926.501(a) (1).

“Fall protection systems required by this part shall comply with applicable provisions...” — OSHA 1926.502 (a) (1).

“Fall protection. All persons shall be provided with and shall use a personal fall protection system complying with ANSI Z359.1-1992 (R1999)...” — ASME A120.1.-3.7.5.10.

“Fall protection equipment and emergency-descent devices shall not be used as a primary support to accomplish work.” — ANSI 10.8-6.1.9.

“Full body harnesses shall be used and the lanyard shall be secured to the suspended platform or above the crane hook or ball.” — ANSI A10.28-10.2.

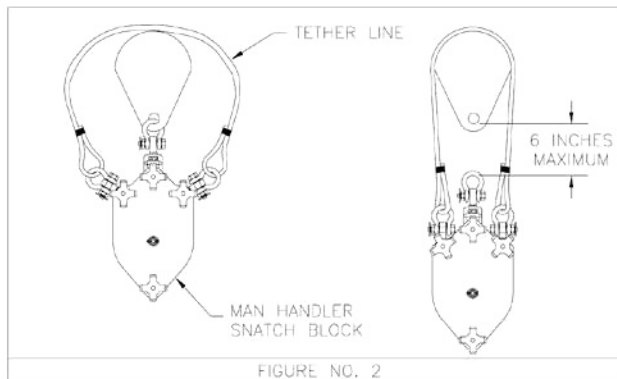
Man Handler snatch blocks shall not be used in personnel lift systems unless complying with applicable federal or local system and fall arrest regulations.

- **Never rig a Man Handler snatch block improperly.** Avoid dropped loads and snatch block damage.

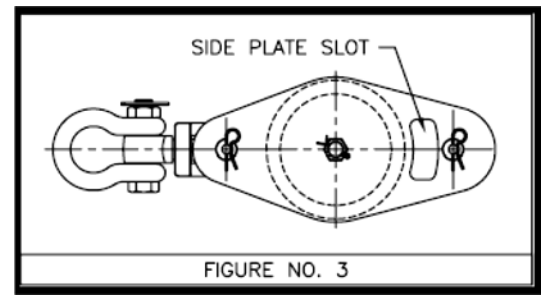
Man Handler snatch block pin keepers must be properly installed before use.

Man Handler snatch block must be rigged to insure necessary freedom for in-line loading alignment.

Man Handler snatch block equipped with tether line option must be rigged with no more than a maximum of six (6) inches of tether line slack. Excessive slack under emergency conditions may result in injury or death to lifted personnel. See Figure No. 2.



Caution: Use side plate slot for block handling only. User is responsible for all other applications. See Figure No. 3.



- **Never use a worn-out or damaged Man Handler snatch block.** Avoid malfunction or failure.

OSHA regulations, ASME and ANSI standards previously referenced give appropriate lift system inspection requirements.

A thorough periodic inspection of the Man Handler snatch block shall be made on the basis of (A) frequency of use; (B) severity of service conditions; (C) nature of lifts being made; and (D) experience gained on the service life of Man Handler snatch blocks used in similar circumstances. Such inspections shall in no event be at intervals greater than once every 12 months.

Man Handler snatch block components with wear greater than 10 percent of the original dimension for any cross-section shall be removed from service.

Man Handler snatch block side plates, latch pin, sheave, center pin, yoke, keepers, swivel “T” or attachment that is broken, cracked, bent, stretched, twisted or severely corroded shall be removed from service and shall not be repaired.

Bearing replacement is indicated when sheave wobble or poor- rotation is observed.

Corrugated sheave groove reduces wire rope life and should be replaced to maximize wire rope performance.

- **Never use a Manhandler snatch block in extreme temperatures.** Avoid functional or structural failure.

Man Handler Snatch Blocks shall be permanently removed from service if heated above 300°F.

Man Handler Snatch Blocks shall not be used while heated above 200°F or cooled below -40°F.

Man Handler Snatch Blocks Working Load Limit (WLL) on product identifier is valid between temperatures of 200°F and -4°F.

Man Handler snatch Blocks WLL shall be reduced by 50% when cooled below -4°F.

- **Never use a Man Handler snatch block in alkaline or acidic conditions.** Avoid structural failure.

Gunnebo Johnson Corporation Man Handler 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 Man Handler components shall be done only by Gunnebo Johnson Corporation.