rock exotica
GEAR FOR THE Z AXIS

Omni-Rigging Block
Instructions for Use

MHP55
Omni-Rigging Block

Material Handling and Load Lifting

Meets or exceeds requirements of ASME B 30.26-15

Size: 2.6"

WARNING! EXPERT USE ONLY

Manufactured in **USA** using domestic & foreign materials

- These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.
- These instructions DO NOT tell you everything you need to know.
- Always know the total load on the primary load fitting
- Do not use unless you can and will understand and assume all risks and responsibilities for all damage/injury/death that may result from use of this equipment or the activities undertaken with it.
- Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.
- Do not use around electrical hazards, moving machinery or near sharp edges or abrasive surfaces.
- We are not responsible for any direct, indirect or accidental consequences or damage resulting from the use of our products.
- Stay up to date! Regularly go to our website and read the latest user instructions.

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MHP55500 3/2016 A

	MHP55 2.6"
Inner Sheave Diameter	2.6" (66mm)
Outer Sheave Diameter	2.95" (75mm)
Rope ≤ ..." Ø ≤ ..."(... mm)	3/8" - 1/2" (9.5mm - 13mm)
WLL	4,500 lbf
Height	7.53" (191.3mm)
Width	3.62" (92.5 mm)
Weight	29.9 oz (850 gm)
Rope Type	Fiber
	Meets ASME B 30.26

Thank you for purchasing this Rock Exotica product. The Omni-Rigging Block combines a pulley with a swivel and offers tremendous advantages. It allows installation and removal of the rope while the pulley is still anchored, which prevents dropping it & is often easier when rigging mechanical advantage systems. It does require that the user understand how it works and takes responsibility for making sure the sideplates are closed & locked. It also requires that the user be competent and familiar with using pulleys for lifting operations.

DEFINITIONS

Working Load Limit: the maximum mass or force which the product is designed to support. The Working Load Limit is calculated by dividing the minimum breaking strength by an appropriate design factor.
Working Load Limit is used interchangeably with the following terms
–Rated load
–SWL
–WLL
–Safe working Load
–Resultant safe working load

Design Factor is the ratio of the minimum breaking strength to the working load limit

! MANDATORY LOCKING PROCEDURE!

The sideplate must be closed and locked with the button fully extended, or strength will be greatly reduced and the rope may fall out with catastrophic results. You must understand how the sideplate & locking button work & must faithfully do the following every time you use it:
1. Visually confirm the sideplate is fully closed and the locking button is fully extended.
2. Test the sideplate by attempting to rotate it to confirm by touch that it is locked.
Do not allow anything to contact the button when in use. Regularly check that the sideplate is locked and the pulley is positioned properly. If the pulley cannot be kept in sight, use a conventional pulley.

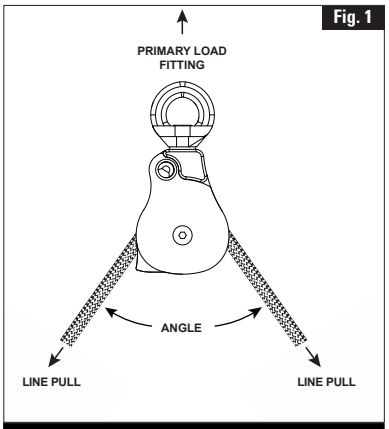

Fig. 1

Angle Factor Mulitpliers

Angle°	Factor	Angle°	Factor
0°	2.00	**100°**	1.29
10°	1.99	**110°**	1.15
20°	1.97	**120°**	1.00
30°	1.93	**130°**	.84
40°	1.87	**135°**	.76
45°	1.84	**140°**	.68
50°	1.81	**150°**	.52
60°	1.73	**160°**	.35
70°	1.64	**170°**	.17

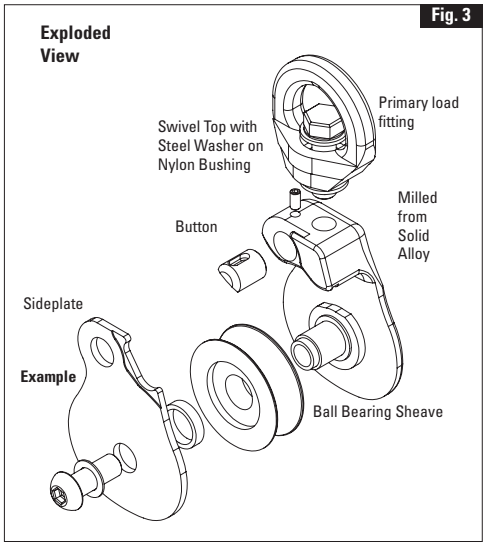

Fig. 3

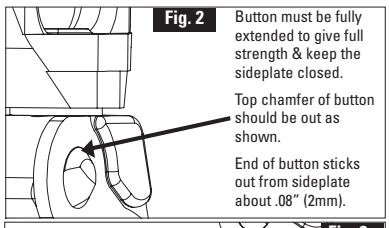
Fig. 2

Button must be fully extended to give full strength & keep the sideplate closed.

Top chamfer of button should be out as shown.

End of button sticks out from sideplate about .08" (2mm).

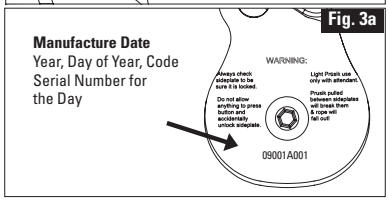

Fig. 3a

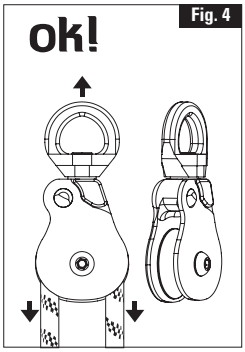

Fig. 4

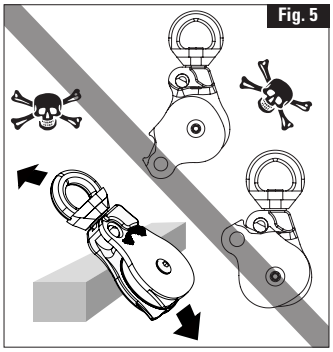
Fig. 5

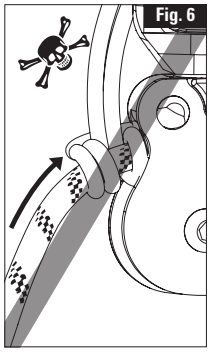
Fig. 6

DOCUMENTATION	
Model	
Complete Batch #	
Year of Manufacture	
Purchase Date	
Date of 1st Use	
User	

DATE	CONDITION	INSPECTOR

Total Load: In a single pulley, the total load on the primary load fitting will vary depending on the angle of the incoming and exiting line. Figure 1 indicates the factor to be multiplied by the weight of the load for a given rope angle. For example, a 0 degree angle has a factor of 2. Therefore the total load on the primary load fitting is 2x the load that is being raised or lowered. This is also illustrated on the pulley. For more information on angle factors multipliers consult ASME B 30.26 or seek specific training from a qualified source.

Working Load Limit: Is based on a 4:1 design factor. Cycle count, lift dynamics and type of lifting system may require an increased design factor and thus a lower WLL. The WLL may also be affected by overloading, product wear, modification, misuse, and environmental factors. You must decide if the design factor is sufficient in your situation or if you need to lower the WLL. Be aware that the WLL of your system may be less than the WLL of the block depending on the rope and other components in the system. Always follow manufactures WLL recommendations for the components of your system.

Intended Use The Omni-Rigging Block is intended to be used for material handling and load lifting applications. Only the loading shown as "OK" is allowed. Always verify proper positioning of your system and components. The block must be free to align with the load, any restraint is dangerous.

Prusik Use - Caution! Prusiks must always have an experienced person tending them. Never allow a jammed Prusik to be pulled in between the sideplates. This can bend or break the pulley and allow the rope to fall out!

Breakage Hazard Do not let an object in between the sideplates and never rig your system so that the pulley is forced against something that could break or open the sideplate, allowing the rope to fall out.

To Open Sideplate Depress the button and rotate sideplate counterclockwise. It should stop at the 2nd button detent. In this position the strength is severely reduced, but the rope will not fall out as easily as it can in the fully open position. To fully open, just depress the button again and rotate.

To Close Sideplate Rotate sideplate past the 2nd detent to the fully closed position. Verify the button extends fully through the hole and test that the sideplate is really locked and secure. You should be able to close it one-handed, but the components will last longer if you depress the button a little to help it when closing. If the sideplate is not fully locked by the button, the strength will be severely reduced.

In Use Do not allow anything to press button and accidentally unlock sideplate. Do not allow anything to pry the sideplates apart, or opening or breakage may occur. Do not side load.

Pinching Hazard Rope travelling through a pulley can suck in hair, fingers, clothing, etc., causing injury and jamming the pulley. Guard against this.

Inspect Before & After Use Check all parts for cracks, deformation, corrosion, wear, etc. Verify that the swivel top rotates normally and the axle screw has not loosened. Verify smooth rotation of the sheaves and security of the axle screw. Verify that the sideplate rotates normally and the button operates properly. The button must not be impaired by dirt, ice, corrosion, etc. Verify smooth rotation of the sheave.

Inspection During Use Regularly inspect and monitor your system, confirming proper connections, position, fully locked sideplates and fully extended buttons.

Detailed Inspection In addition to inspection before, during and after each use, a detailed periodic inspection by a competent person must be done at least every 12 months or more frequently depending on amount and type of use. The hardware shall be examined for conditions listed in ASME 30.26-5.8.5 Consult a qualified person or the manufacturer if there is any question as to the frequency of periodic inspections. Make a copy of these instructions and use one as the permanent inspection record and keep the other with the equipment. It is best to issue new gear to each user so they know its entire history.

Removal Criteria: ASME B30.26-5.8.
Rigging 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) loose or missing bolts or other fasteners and retaining devices
(e) indications of heat damage, including weld spatter or arc strikes
(f) excessive pitting or corrosion
(g) bent, cracked, twisted, distorted, stretched, elongated, or broken load bearing components
(h) excessive wear, nicks, or gouges
(i) a 10% reduction of the original or catalog dimension at any point
(j) excessive damage to load-bearing threads
(k) evidence of unauthorized welding or modifications
(n) other conditions, including visible damage that cause doubt as to the continued use of the rigging block.

In addition to ASME B30.26 removal criteria retire from service & destroy if
1. Is loaded beyond the WLL.
2. Does not pass inspection or there is any doubt about its safety.
3. Is misused, altered, damaged, exposed to harmful chemicals, etc.
4. Button fails to extend fully.
Consult the manufacturer if you have any doubts or concerns.

Thorough and specific training is absolutely essential before use. "Users should be trained in the selection, inspection, cautions to personnel, effects of environment, and rigging practices covered by " ASME B30.26-5.7 There are many ways to misuse this equipment, too many to list or imagine. You must personally understand and assume all risks and responsibilities of using this equipment. If you cannot or do not want to do this, do not use this equipment.

Environmental Factors Moisture, ice, salt, sand, snow, chemicals and other factors can prevent proper operation or can greatly accelerate wear.

Compatibility Verify compatibility with other components of your system. Incompatible connections can cause detachment, breakage, etc.

Lifetime Unlimited for metal products, but will often be much less depending on conditions and frequency of use; it could even be a single use in some cases.

Maintenance & Storage Clean if necessary with fresh water, then allow to dry completely. The button may be cleaned by holding it upside down and spraying a light lubricant into it while operating it. Store in a dry place away from extremes of heat and cold and avoid chemical exposure.
Operating Temperature 120°F (49°C) – 0°F (-18°C)

Principal Material Aluminum alloy, anodized.

Repairs or Modifications to Equipment Are only allowed by the manufacturer or those authorized in writing by the manufacturer.