


BUCKINGHAM MFG.

Buck Side Swivel PN 50071B1 (with Swivel Top) / PN 50072B1 (with Shackle Top) Buck Double Side Swivel PN 50071B2 (with Swivel Top) / 50072B2 (with Shackle Top) 5/8" x 2 1/8" Sealed Ball Bearing Pulleys - Instructions and Warnings

INTRODUCTION: Thank you for purchasing this Buckingham Mfg. product. The Buck Side Swivel™ & Buck Double Side Swivel™ are heavy duty aluminum pulleys that have a 5/8" diameter rope capacity with a 2500 lbf. working load limit. The "Side Swivel" plates allow rope to be installed/removed without disconnecting it from the anchor point. Specially designed side plates are ideal for use with progress capture Prusiks. Swivel Top and Shackle Top prevents twisting of ropes. Ideal for building mechanical advantage with the Ox Block. This pulley requires that the user understand how it works and takes responsibility for making sure sideplates are closed & locked.

Strength: In a single pulley, half the load is on one side of the rope and half is on the other. The total load on the pulley is thus 2x the mass that is being raised or lowered. In a double pulley the load is 4x the load on the 4 individual ropes. Breaking Strength & Working Load are based on this equal loading. **If the sideplates are not fully locked by the buttons, the strength will be severely reduced, to about 2250 lbf. (10kN), but also, the rope may fall out.** Pulleys must be free to align with the load, **any restriction / side loading is dangerous (i.e. may result in damage to or unintentional opening of the sideplates allowing the rope to fall out).**

	50071B1 - Single Sheave with Swivel Top	50071B2 - Double Sheave with Swivel Top	50072B1 - Single Sheave with Shackle Top	50072B2 - Double Sheave with Shackle Top
	2.125" (54 mm)	2.125" (54 mm)	2.125" (54 mm)	2.125" (54 mm)
Maximum Rope Diameter	5/8" (16 mm)	5/8" (16 mm)	5/8" (16 mm)	5/8" (16 mm)
MBS	10,000 lbf. (44 kN)	10,000 lbf. (44 kN)	10,000 lbf. (44 kN)	10,000 lbf. (44 kN)
WLL	2,500 lbf. (11 kN)	2,500 lbf. (11 kN)	2,500 lbf. (11 kN)	2,500 lbf. (11 kN)
Height	7" (178 mm)	8" (203 mm)	7.625" (194 mm)	8.625" (219 mm)
Width	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)
Thickness	1.813" (46 mm)	3.25" (82.6 mm)	1.813" (46 mm)	3.25" (82.6 mm)
Weight	1.6 lbs. (726 gm)	2.6 lbs. (1.18 kg)	1.9 lbs. (862 gm)	2.9 lbs. (1.32 kg)

WARNING!

For expert use only!

- These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.
- It is the user's responsibility to obtain specific training and to use it safely. These instructions DO NOT tell you everything you need to know.
- 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.



Single & Double Sheave Side Swivel Pulleys are shown. Hardware may vary from that shown. Buck Side Swivel & Double Side Swivel are available with a swivel or shackle top. Fig. 1 & 2. (Swivel Top models shown throughout this document).

Warnings: Shackle Top models (PN 50072B1 and 50072B2) are designed for easy attachment / removal of various length slings / hardware and are assembled with the Nyloc Nut being loosely threaded on the Shoulder Bolt. Therefore before use, ensure the Nyloc Nut is completely tightened so that it bottoms out against the shoulder of the bolt. See last page of this document for sling / hardware removal and installation instructions.

- Any device is subject to failure-carefully check before and after each use.
- You must always have a backup-never trust a life to a single tool.
- Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.
- You must have a rescue plan and the means to implement it. Inert suspension in a harness can quickly result in death!
- 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.

Fig. 1



Fig. 2



! Mandatory Locking Procedure ! Sideplates must be closed and locked with the buttons fully extended, or strength will be greatly reduced and the rope may fall out with catastrophic results. You must understand how the sideplates & locking buttons work & must faithfully do the following **every time** you use it (Fig. 3 & 4).

1. **Visually** confirm each sideplate is fully closed and the locking buttons are fully extended (Fig. 3 & 4).

2. **Test** the sideplates by attempting to rotate to confirm by touch that they are locked.

Do not allow anything to contact the buttons when in use. Regularly check that the sideplates are locked and the pulley is positioned properly. If the pulley cannot be kept in sight, use a conventional pulley.

Fig. 3



Fig. 4



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!** (Fig. 5).

Always use a properly rigged Prusik Minding Pulley (Fig. 6).

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 (Fig. 7).

To Open Sideplates: Depress the button & rotate sideplates away from the buttons. The rope can now be removed or installed. In the sideplate open position the strength is severely reduced, Never use the Buck Side Swivel with a sideplate open.

To Close Sideplates: Rotate sideplates towards the buttons to the fully closed position. Verify the buttons extend fully through the holes & test that the sideplates are really locked & secure. You should be able to close it one-handed, but the components will last longer if you depress the buttons a little to help it when closing.

In Use: Do not allow anything to press buttons & accidentally unlock sideplates. Do not allow anything to pry the sideplates apart, or opening or breakage may occur.

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

Inspect Before & After Use: The inspection should include, but not be limited to the following:

Check all parts for cracks, deformation, corrosion, wear, etc. Verify that the sideplates rotate normally & the buttons operate properly. The buttons must not be impaired position, fully by dirt, ice, corrosion, etc. Verify smooth rotation of the sheaves. apart, or opening or breakage may occur. Shackle Top models: the Nyloc Nut on the hardware attachment Shoulder Bolt is in place and completely tight against the shoulder of the bolt.

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

Intended Use: This Personal Protective Equipment (PPE) should only be used with energy absorbing systems such as dynamic ropes, energy absorbers, etc. & slack must be kept out of the system to prevent high impact falls. It is intended for use by medically fit, specifically trained and experienced users.

Thorough and specific training is absolutely essential before use: Being at height is dangerous and it is up to you to reduce the risks as much as possible - but the risks can never be eliminated. 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: Buck Side Swivels™ like all equipment must be replaced by the user at regular intervals. This interval should be dictated by the amount of use and type of service the product receives rather than a set time frame. Therefore the manufacturer does not place a time limit on replacement of the Buck Side Swivel™. Due to the rigorous strain the Buck Side Swivel™ endures, it should be replaced at the earliest signs of wear. Buck Side Swivel™ inspection is extremely important and must as a minimum be performed as stated.

Retire from Service & Destroy if it:

1. Is significantly loaded.
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.

Maintenance & Storage: Clean if necessary with fresh water, then allow to dry completely. The buttons may be cleaned by holding them upside down & spraying a light lubricant into them while operating it. Store in a dry place away from extremes of heat and cold and avoid chemical exposure.

Principal Material: Aluminum alloy, anodized.



Fig. 5



Fig. 6



Fig. 7

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

Detailed Inspection: In addition to inspection before, during and after each use, a detailed inspection by a competent inspector must be done at least every 3 months or more frequently depending on amount and type of use. 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.

Sling / Hardware - Removal / Installations:

Buck Side Swivels with Shackle Top (PN 50071 & 50072 series) can be configured to accept various length slings or approved optional hardware (Rigging Hook is shown below Fig. 8).

1. Remove the Nyloc Nut from the Shoulder Bolt using a 3/8" drive ratchet, 9/16" socket and a 1/4" hex wrench or similar (Fig. 8).
2. Remove the hardware by pulling the Shoulder Bolt through the connecting eye of the hardware (Fig. 9).
3. Remove the Shoulder Bolt by pulling it completely through the Shackle Top (Fig. 10).
4. Retain the Shoulder Bolt for re-use.
5. Discard the Nyloc Nut. (A new Nyloc Nut must be used for each reassembly. The Nyloc Nut is intended to be used one time only. Never re-use the Nyloc Nut).

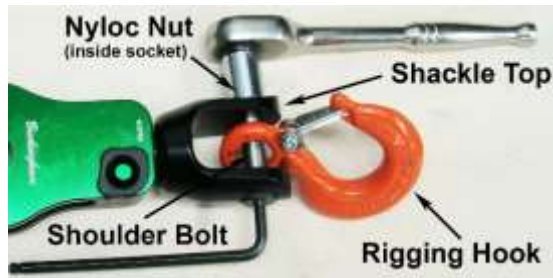


Fig. 8



Fig. 9



Fig. 10

Sling / Hardware - Installation:

1. Obtain a new Nyloc Nut. (Replacement nuts are available from Buckingham - Telephone 1-800-937-2825).
2. Insert the Shoulder Bolt through either hole in the Shackle Top (Fig. 11).
3. Place any Buckingham approved optional hardware between the sides of the Shackle Top and insert the Shoulder Bolt through the connecting eye of the hardware and through the second hole of the Shackle Top (Fig. 11).
4. Thread on the Nyloc Nut and securely tighten it using a 3/8" drive ratchet, 9/16" socket and a 1/4" hex wrench or similar.
5. The Nyloc Nut must be completely tightened so that it bottoms out against the shoulder of the bolt (Fig. 12).



Fig. 11



Fig. 12

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Manufactured in the USA

Information contained in these written instructions supersedes all other information (written, audio, video etc.) produced by Buckingham Mfg. prior to the revision date of this document.