# **BUCKINGHAM MFG.**

# P/N W1-size, W2-size & W3-size Saddle Bridge Replacement Instruction

Warning: Do not use this product if you cannot understand and follow the instructions and warnings that come with it and complete all necessary functions.

These instructions are to be used to replace the suspension bridge on Buckingham arborist saddles. The W1 & W2 series replacement suspension bridge are to be used for saddles with aluminum or steel ring bridge attachment points.

The W3 series replacement suspension bridge is to be used for saddles with steel shackle bridge attachment points.

(W1 & W2 Series) These kits contain only the Rope Suspension Bridge with two attached rubber bumpers (Fig. 1) or only the Web Bridge (Fig. 2).

#### Notes:

- Use only replacement Suspension Bridges (manufactured from approved webbing & tree climbing rope) supplied by Buckingham Mfg.
- Rope colors & lengths may vary.
- Both the Rope and Web style Suspension Bridges cinch to the rings in the same manner. The attachment instructions below show only the rope style for clarity.
- It is only necessary to disassemble one side of the saddle, your preference as to whether the right or left side. Ensure you disassemble the leg strap and Suspension Bridge Adjustment Strap on the same side of saddle.
- Separate the hook and loop fastener on the leg strap and disconnect the leg strap guick connect buckle.
- Remove the interlocking halves of the guick connect buckle from the leg strap. (Fig. 3).
- Pull the leg strap through the Leg Strap Connector (Fig. 4). 3)
- Unthread the Suspension Bridge Adjustment Strap through the Spring Loaded Friction Buckle (Fig. 5).
- Then pull the strap through the Web Loop w / accessory ring / snap hook, the D-ring, Suspension Bridge Adjustment Strap Retaining Loop and finally through the Aluminum/Steel Ring (Fig. 6).
- Create a large eye in the side of the Suspension Bridge that is still connected to the saddle.
- Feed the free end of the Suspension Bridge through the eye created in the attached end as shown in Fig. 7 and remove the Suspension Bridge.
- Discard the old Suspension Bridge at this time.



Fig. 5



Fig. 6







#### Attaching the new Suspension Bridge:

- Feed one eye of the Suspension Bridge through the free Aluminum/Steel Ring (Fig. 8a.) Next pass the opposite eye of the suspension bridge through the eye passed through the ring (Fig. 8b.) Ensure the bight of the eye is seated tightly between the cover of the suspension bridge and ring. (Fig. 8c).
- 10) Pass the opposite eye of the suspension bridge through the Aluminum/Steel Ring that is still connected to the saddle (Fig. 9a). Pass the opposite side ring assembly through the eye (Fig. 9b). Continue to pull the suspension bridge through the other eye of the suspension bridge until the bight of the eye is seated tightly between the cover of the suspension bridge and ring (Fig. 9c).







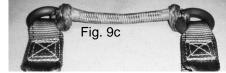


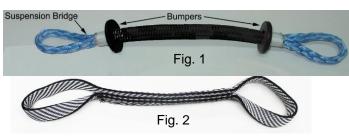


Fig. 8c

Fig. 3

Fig. 4





- 11) Feed the free end of the Suspension Bridge Adjustment Strap through the Aluminum/Steel Ring, Suspension Bridge Adjustment Strap Retaining Loop, the D-ring, Web Loops with accessory rings.
- 12) Thread the free end of the strap through the Spring Loaded Friction Buckle as shown in Fig. 10.
- 13) Thread the leg strap through the Leg Strap Connector. Ensure the hook fastener is on the correct side of the leg strap so that once the buckle is threaded, the hook on the leg strap is facing the loop on the leg pad.
- 14) Thread the leg strap through the single slot half of the Quick Connect Buckle Frame (Fig. 11a & 11b) then through the top slot of the double slot Quick Connect Frame Adjuster Bar. Next make a loop and pass the web back through the bottom slot of the Quick Connect Frame Adjuster Bar. Finally, insert web back through the Quick Connect Buckle Frame as shown in Fig. 11b.
- 15) Adjust the buckle as needed and fasten the Quick Connect Buckle. Adhere the excess leg strap to the loop fastener on the leg strap stitched to the leg pad.





Fig. 10

Spring Loaded

Fig. 11a

Fig. 1

(W3 Series) This kit contains the following items shown in Fig. 1:

- Rope Suspension Bridge with two attached Bumpers (Rope colors may vary)
- Clevis Shackle (2)
- O-Ring Washer (2)
- Anti-Wear Bushing (2)
- Clevis Shackle Bolt (2)
- LOCTITE™ (Red 262 or 271)

Note: Suspension Bridge replacement requires the use of a 7/32" Allen wrench or similar to remove and install the Clevis Shackle Bolts.

# Anti-Wear **Bushings** Loctite

## REPLACING THE SUSPENSION BRIDGE (W3 Series)

#### Removing the Suspension Bridge:

Notes: Use only replacement Suspension Bridges (manufactured from approved tree climbing rope) supplied by Buckingham Mfg. Remove and replace one side of the Suspension Bridge at a time.

ErgoLite Saddle shown with Suspension Bridge

- A Suspension Bridge
- B Leg Strap Attachment Strap.
- C Suspension Bridge Adjustment Strap
- D -Clevis Shackle

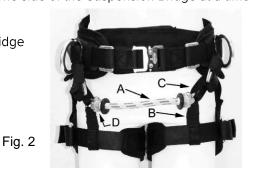


Fig. 3

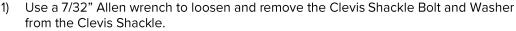
Clevis

Lea Strap

Fig. 4

Attachment Strap

Shackle



- 2) Discard the Clevis Shackle Bolt and Washer.
- Remove the Suspension Bridge from the Clevis Shackle.
- Remove the Clevis Shackle from the Suspension Bridge Adjustment Strap and Leg Strap Attachment Strap and discard (see Fig. 2 & 3).



Notes: The Clevis Shackle Bolts are originally supplied with a thread locking

Used equipment is to be discarded and replaced with new. The Clevis Shackle Bolt

MUST BE equipped with the Anti Wear Bushing to prevent premature wear on the Suspension Bridge (See Fig. 5).



Suspension

Adjustment

Bridge

Strap

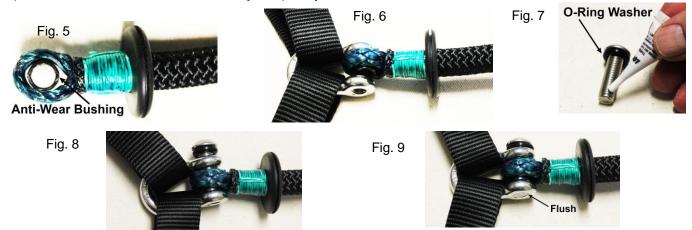
Attachment Strap

Suspension Bridge

Adjustment Strap

Leg Strap

- 1) Ensure there are no twists in the Suspension Bridge Adjustment Strap or the Leg Strap Attachment Strap.
- 2) Align the Clevis Shackle so that the threaded leg will be facing towards the ground and the opening is facing inward when you are wearing the saddle. This will ensure the bolt heads are facing you when the saddle is in use.
- 3) Insert the new Clevis Shackle through the Suspension Bridge Adjustment Strap and Leg Strap Attachment Strap formed eyes (Fig. 4).
- 4) Arrange the eye of the Suspension Bridge so it is a circular shape and place the Anti Wear Bushing into the center of the circle. (Fig. 5).
- 5) Place the Anti Wear Bushing and eye of the Suspension Bridge between the legs of the Clevis Shackle and align the bolt holes in the Clevis Shackle to the opening of the bushing (Fig. 6).
- 6) Place a new O-Ring washer onto the new Clevis Shackle Bolt as shown in Fig. 7.
- 7) Apply the LOCTITE™ thread sealant to the first 3 to 4 threads of the Clevis Shackle Bolt (Fig. 7) [Reference LOCTITE™ instructions].
- 8) Slide the Clevis Shackle Bolt through the non-threaded side of the Clevis Shackle and then the bushing (Fig. 8). Ensure NO material from the Suspension Bridge is blocking the bolt hole or pinched by the bolt.
- 9) Thread the Clevis Shackle Bolt into the threads of the Clevis Shackle (Fig. 8).
- 10) Securely tighten the Clevis Shackle Bolt so that the end of the bolt is **FLUSH** with the outer edge of the Clevis Shackle (Fig. 9). Do not over tighten.
- 11) Repeat Removal and Attachment for opposite side.
- 12) Allow 24 hours for the LOCTITE™ to dry completely.



If any evidence of wear or deterioration of your equipment is observed during this change out, immediately cease use, destroy the product and replace it with new equipment. Should any unusual conditions be observed, or you have reasonable doubt about a particular condition, remove the equipment from service and notify your Supervisor, Safety Director or contact Buckingham Mfg. (1-800-937-2825) for clarification. Failure to carefully and completely inspect your equipment could result in serious injury or death.

### **CLEANING, STORAGE and TRANSPORTATION**

Proper maintenance, storage and transportation of your equipment will prolong its useful life and contribute toward its performance. Nylon and polyester should be cleaned and disinfected with water and mild soap and be allowed to air dry thoroughly without using excessive heat. Your equipment should be stored and

transported so that it does not come into contact with moisture, ultra violet rays, extreme temperatures, or chemical agents. Warnings pertaining to cleaning, storage and transportation should be strictly adhered to.

### ADDITIONAL INSTRUCTIONS / WARNINGS FOR SUSPENSION BRIDGE

This Rope Suspension Bridge is designed to be replaced by the user at regular intervals. This interval should be dictated by the amount of use the product receives rather than a set time frame. Therefore the manufacturer does not place a time limit on replacement of the suspension bridge. Due to the rigorous strain the Rope Suspension Bridge endures, it should be replaced at the earliest signs of wear. Suspension bridge inspection is extremely important and must be performed prior to each use. This inspection should include but not be limited to: webbing and rope cuts, nicks, tears, kinks, abrasions, burns, excessive swelling, excessive wear, discoloration, cracks, charring, broken, fraying or unraveling fibers, loose stitching chemical or physical exposure. Failure to regularly inspect and replace the Rope Suspension Bridge could result in injury or death due to Suspension Bridge failure.

Note: Only authorized replacement parts from Buckingham Mfg. should be used on this product. The use of unauthorized replacement parts will void Buckingham Mfg's Warranty.

#### STATEMENT of OBSOLESCENCE:

Precise "useful life expectancy" or "shelf life" for this product is not specified, as the degree of use, conditions of use, and the degree of care and storage determines useful life. All users maintain responsibility to select proper equipment for the job, be properly trained in its use, and ensure all personnel support equipment passes inspection before each use. Upon evidence of defects, damage or deterioration, all equipment shall be removed from service immediately and tagged or marked as unusable or destroyed. Additionally, all equipment shall be inspected on a regular basis not to exceed one year by a Competent Person, as defined by OSHA/ANSI, to verify that the equipment is safe for use. In the event of any question or concern regarding the condition of such equipment, users shall remove the equipment from service for further inspection. All users must comply with OSHA/ANSI/ASTM standards prior to and in using such equipment. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

#### **INTERNATIONAL USERS:**

Notwithstanding the above, please know that certain international jurisdictions require manufacturers of equipment to provide customers with a maximum useful lifespan (sometimes referred to as a "Statement of Obsolescence"). To the extent required, Buckingham personal protective equipment manufactured from synthetic fiber materials including but not limited to items such as webbing and/or rope are subject to a maximum useful lifespan of ten (10) years from the date of manufacture. As stated above proper usage, storage, maintenance, and care impacts the useful lifespan of equipment. Extreme circumstances may require that product must be retired after only one use. This statement is made in conformance and compliance with BS EN 365:2004. International users must ensure that product inspections are completed by Competent Persons as defined by international standards including but not limited to British Standard ("BS"). If equipment fails any inspections, it must be immediately withdrawn from service and destroyed. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

#### **OUR GUARANTEE:**

We guarantee the equipment we manufacture to be free from defects in material and workmanship. We will repair any equipment deemed to be defective which is returned to us by the original purchaser. However, this guarantee is void if any product is changed or altered in any way, or if the product is used in a manner other than for which it is intended. This express guarantee supersedes all other expressed or implied guarantees, obligations or liabilities. There are no implied warranties of merchantability or fitness for a particular purpose and as such, all implied warranties are specifically disclaimed.

#### LIMITATION ON LIABILITY:

In no event will Buckingham or buyer be liable to the other for lost revenues, lost profits or any other indirect, consequential, special or punitive losses or damages, however caused, whether in action for breach of contract, strict liability, tort, or otherwise, even if advised of the possibility of such losses or damages. In no event will Buckingham's liability exceed the total amount paid by the buyer to Buckingham for the product or equipment giving rise to such claim(s).

Please see other terms and conditions relating to this product at https://buckinghammfg.com/terms-conditions/

## **REGISTRATION:**

Before use of the product, ensure to register and confirm the product at www.buckinghammfg.com/register.

**BUCKINGHAM MFG.** 

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