# **BUCKINGHAM MFG.**

# SADDLES FOR ARBORISTS USE

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.

All Arborist Saddles manufactured by Buckingham Mfg. Co. are made from the finest quality components. Buckingham offers a wide selection of Arborist Saddle designs with models ranging from deluxe to economy. All styles feature the same quality but vary relative to the comfort features. Some Arborist Saddles are manufactured with Replaceable Suspension Bridges. Replacement Suspension Bridges are supplied separately and include detailed replacement instructions to be used when replacing the Suspension Bridge. Use only replacement Suspension Bridges (manufactured from approved webbing and tree climbing rope) supplied by Buckingham Mfg. Use bridge PN W2-size for PN 1490 5.0 Master Series Saddles. Use bridge PN W5-size for PN 1480 Agility series.

#### **SIZING**

Fit is important to comfort. Be sure to allow for wear over heavy clothing. In order to obtain an optimum fit, the work positioning D-rings should be positioned slightly forward of the hip bones. Below are typical fits given according to waist size.

X-Small = 24 -28" (610 - 711 mm) waist size Small = 28 -32" (711-813 mm) waist size Medium = 32-36" (813-914 mm) waist size Large = 36-40" (914-1016 mm) waist size X-Large = 40-44" (1016-1118 mm) waist size

### **GUIDELINES FOR USE**

- Know and follow the ANSI Z133 -17 Standard for tree care operations. To obtain a copy of the ANSI Z133 -17 Standard, call NAA at 1-800-733-2622 or ISA at 1-888-ISA-TREES. Also, as required by the Australian Standard AS/NZS 1891.1 2007, reference section 3.3.3 for guidance, selection, use and maintenance matters.
- Use these products for positioning and suspension only. Not Intended for Fall Arrest. (see Fig. 1).
- The use of fall arrest equipment is highly recommended in addition to the use of saddles and belts.
- Only compatible connecting devices that meet industry standards should be connected to circle D-rings.
- Attach only positioning connecting devices to the waist strap circle D-rings.
- Positioning and suspension anchor points must support your weight plus any job related load.
- User weight not to exceed 350 lbs. (158.7 kg.) when fully equipped.
- Maximum load capacity for snaps / rings (for hand or chainsaw attachment) is 15 lbs. (6.8 kg.) when fully fueled. Accessory rings and loops are not intended for human support or tool attachment. (See the TYPICAL ARBORIST SADDLE CONSTRUCTION and TYPES OF ATTACHMENT POINTS sections on the following pages).





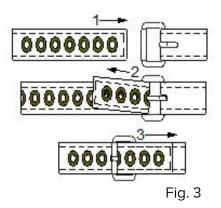
Fig. 1

Suspension

Work Positioning

# **WEARING INSTRUCTIONS**

- 1. Thoroughly inspect saddle and all related equipment before each use.
- 2. Unbuckle the waist strap and each leg strap (if applicable).
- 3. Pull the saddle up around the waist with the waist strap connecting buckle in the front (leg straps, butt strap or batten seat towards the back).
- 4. Adjust the saddle until the work positioning D-rings are positioned just slightly forward of the hip bones.
- 5. Fasten the waist strap:
  - a. If tongue buckle style: fasten in the same manner as you would fasten an ordinary belt buckle (see Fig 3). b. If friction buckle style: follow the steps in Fig. 4.
- 6. Ensure the waist strap is snug, but comfortable. Use the waist strap keeper to contain any excess strap.
- 7. Adjust individual leg straps, butt strap, or batten seat to a snug but comfortable position.
- 8. Wrap the leg straps (if applicable) around the legs so that the padded portion is behind the leg and the buckles are in front.



- From the rear of the friction buckle insert the billet end of the waist strap through the center slot of the friction buckle as shown in step 2.
- 2. Push the slide bar of the friction buckle to the left then loop the waist strap around the slide bar and pull back through the rear of friction buckle
- 3. Grasp the billet end of the waist strap and pull snugly to ensure the waist strap is snug, but comfortable.

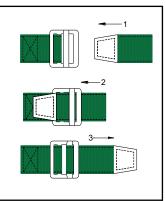


Fig. 4

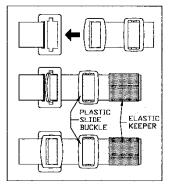
Fig. 5

#### 9. Fasten the leg straps:

- a. If tongue buckle style: fasten in the same manner as in figure 3.
- b. If interlocking buckle style: follow the steps in figure 5.
- 10. Contain excess strap with the leg strap keepers.
- 11. Before climbing make final adjustments of all hardware to ensure the saddle has a snug but comfortable fit ensuring that all hardware is properly connected.

Replaceable back support pads: Some saddles are manufactured with replaceable back support pads. These pads attach to waist straps by: a) web loops with buckles, b) web loops with hook and loop fastener or c) hook and loop fastener attached directly to the back pad and waist strap.

If attaching back pad by method a or b: Ensure back pad is properly aligned to waist strap, all web loops encircle the waist strap and all buckles or hook and loop fasteners are securely attached.



If attaching back pad by method c) ensure back pad is properly aligned to waist strap, if applicable waist strap is properly threaded through keeper loops and hook and loop fasteners are securely attached.

#### **WARNINGS**

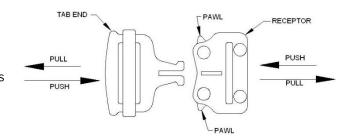
- Manufacturer's instructions shall be provided to the user of this product. If additional copy is needed, contact Buckingham Mfg. Co.
- Completely read, understand, and follow all instructions, warnings, and cautions pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death.
- Buckingham arborist saddles are manufactured in accordance with ASTM F887 and are intended for use as personal protection equipment only, not for towing or hoisting and when properly used, comply with the requirements of ANSI Z133 -17.
- Buckingham arborist saddles product number H1480 series conforms to the Australian standard AS/NZ 1891.1:2007 section 3.3.3.
- The rear loop centered at the top of the back pad on Buckingham arborist saddles is not to be used for belay due to the potential of the user being inverted in the event of a fall.
- This product is designed to be used by a person with a maximum weight of 350 lbs. when fully equipped.
- Fall protection equipment, (i.e. fall arrest, work positioning belts, climbers, retrieval, suspension etc.) should not be resold or provided to others for re-use after use by original user. as assurance cannot be granted that a used product meets criteria of applicable standards and is safe for use to a subsequent user.
- Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs to this equipment.
- This equipment is intended for use by properly trained professionals only. Do not use without proper training.
- Please consult with your physician prior to using this product. Do not use this product under the influence of drugs or alcohol
- Before use the first time, the user should carry out a suspension test in a safe place to ensure that the equipment is the correct size, has sufficient adjustment and is of an acceptable comfort level for the intended use.
- Before use of the equipment, consideration should be given as to how any necessary rescue could be safely achieved.

- This product is to be used for positioning and suspension only, **NOT FOR FALL ARREST**. Therefore, it may be necessary to supplement arrangements for work positioning / suspension with collective means (i.e. safety nets) or personal means of protection against falls from a height (i.e. fall arrest system).
- This equipment must only be used for the specific purpose for which it is designed and intended.
- Destroy any and all equipment subjected to impact loading.
- Never work without independent fall arrest protection if there is danger of a fall.
- Keep equipment from coming into contact with sharp edges, abrasive surfaces, extreme temperatures, excessive ultra violet rays, chemical agents, electrical hazards, moving machinery and hazardous atmospheres. Exposure to these elements may have a detrimental effect on the integrity of the equipment. Sharp and abrasive surfaces may include but not be limited to (sheet metal, steel, concrete, block, stone, laminated materials etc.)
- Always visually check that all buckles are properly closed before use. (If making a connection to a point that cannot be seen by the wearer, either ensure the connection is made before donning the equipment or the connection is made and checked for security by a second person).
- Attach only locking connecting devices meeting standards / regulations for intended use for positioning and suspension to belt D-rings and attachment points.
- Only positioning connecting devices should be attached to side D-rings.
- Do not connect any tools, accessory loops / snaps, etc. to the positioning circle D-rings as they are for attachment of connecting device locking snap hooks / carabiners only.
- Never use combinations of components or subsystems, or both, which may affect or interfere with the safe function of each other.
- Use only replacement Suspension Bridges manufactured from approved tree climbing rope supplied by Buckingham Mfg.
- Position and / or adjust the work positioning lanyard in such a manner that the anchorage point is maintained at or above waist level, the lanyard is kept taut and free movement is restricted to a maximum of 2 ft. (0.6 m).
- Positioning and suspension anchor points, as a minimum, must support user's weight plus all additional job related loads. Fall arrest anchor points must support a minimum of 5000 lbf. (22.2 kN) per attached worker and be independent of worker support.
- As a minimum, the materials used in the manufacture of this product are acceptable for use under all normal environmental conditions tolerable to humans.
- Always visually check that each snap hook / carabiner freely engages D-ring or anchor point and keeper / gate is
  completely closed with each use. Never rely solely on the feel or sound of a snap hook / carabiner engaging. (If making a
  connection to a point that cannot be seen by the wearer, either: Ensure the connection is made before donning the
  equipment or the connection is made and checked for security by a second person).
- Inspection before each use should include, but not be limited to checking that: 1) fabric or belt strap is free of burns, cuts, broken stitches or excessive wear, 2) rivets are not bent, loose or missing, 3) buckles and D-rings are not distorted or cracked, 4) if there is a tongue buckle, that the tongue does not bind on the buckle and buckle holes are not damaged. Always remove from service, destroy and discard Arborist Saddle if it fails inspection.
- Never attach a non-locking connecting device (i.e. ladder, rebar hook etc.) to D-rings.
- During use, all fastening and adjusting elements must be regularly checked to ensure adjustment and closure.
- Snap hooks <u>shall not</u> be engaged to a D-ring to which another snap hook or other connector is attached unless the snap hook is the locking type and designed for such use.
- Never disable locking mechanism of a snap hook or carabiner.
- Never alter Fall Protection Equipment in any way.
- This equipment should be a personal issue to the employee using it.
- Product covered under these instructions / warnings should not be resold / redistributed or re-used after use by original user.
- Employer instruct your employees as to proper use, warnings and cautions before use of this equipment.

# Additional Instructions / Warnings for Quick Connect Buckle

#### **FOR YOUR INFORMATION AND ATTENTION:**

Quick Connect Buckles on those Full Body Harnesses and Arborist's Tree Saddles that include this style of buckle may unintentionally disengage under the condition outlined below:



If the pawls of the buckle do not freely rotate, proper engagement of the tab end to the receptor end of the buckle will be hindered / restricted. If as a result of the users movements or through contact with an obstruction during the course of his/her work, one of the two pawls of the receptor end of the buckle is depressed while tension is induced on the strapping attached to the buckle, the potential exists that disengagement of the tab end of that side from the pawl may occur. If that position is maintained and again through the users movements or contact with an obstruction the opposite side pawl is depressed, the tab end of the buckle may totally disengage from the receptor end.

#### TO ELIMINATE THE POTENTIAL FOR THIS CONDITION, YOU THE USER SHOULD:

- 1. Inspect your equipment before each use as you would for all safety equipment. Equipment should be replaced if you have any question / doubt about it being safe for use.
- 2. Always position the buckles of your equipment so that contact with obstructions is avoided.
- 3. Test the pawls on your Quick Connect Buckles to ensure they freely rotate and return back to their original position. If any pawl does not freely rotate, the buckle should be (a) cleaned as outlined below to ensure there are no obstructions inside the buckle hindering its intended function and (b) lubricated with a lightweight lubricant such as WD-40°, as recommended for locking snaphooks. If the pawl still does not freely rotate, you should contact Buckingham Mfg. at the telephone number outlined below and request a Returned Goods Authorization Number for immediate return of your harness or Arborists tree saddle for our inspection and/or buckle replacement.
- 4. Ensure the receptor end and tab end of the Quick Connect Buckle is fully connected with both locking pawls engaged. When the two halves are properly attached together, a clicking sound should be heard. Complete by pulling the adjuster strap through the buckle and tighten until it is snug but comfortable, thus ensuring complete engagement.

#### **CLEANING INSTRUCTIONS:**

The Quick Connect Buckle may be cleaned by using a cotton swab, limited air pressure or dipping it into a container of water to remove fine particles and any foreign matter which may enter the receptor end of the buckle and preventing proper engagement and function. The exterior of the buckle should be dried with a clean cloth. The inside of the receptor end of the buckle should be air-dried and re-lubricated.

#### **MAINTENANCE:**

Lubricate pawls weekly or as often as required to maintain smooth operation (no binding) with a lightweight lubricant such as WD-40°, Wipe any excess lubricant off with a clean dry cloth.

Buckingham's primary concern is to provide a quality product to its customers to enable them to carry out their profession in a safe manner. However, it is the user's responsibility to ensure proper equipment use, operation, inspection, and maintenance.

#### INSPECTION

Prior to and after each use, carefully inspect each component. It is also recommended all components be inspected by a competent person every six months or as a minimum, annually. The inspection should include, but not be limited to the following:

- webbing cuts, kinks, abrasions, burns, excessive swelling, excessive wear, discoloration, cracks, charring, broken fibers, loose or broken stitching, chemical exposures (e.g. cleaning materials or hazardous atmospheres) or physical exposures and damaged buckle holes in strap.
- loose, bent or pulled rivets, bent grommets, and broken, cut, or burned threads.
- tongue of buckle binds on buckle frame.
- buckles with spring loaded slide type friction bars slide bars work properly, are not binding, missing, deformed, bent, or otherwise, damaged.
- nicks, cracks, distortion or corrosion of hardware (buckle, D-ring, etc.).
- worn or damaged accessory snaps, rings or loops.

If any evidence of wear or deterioration as outlined is observed, immediately cease use, destroy the product and replace it with new equipment. Should any unusual conditions not outlined above 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.

#### **RUST ON HARDWARE:**

If through regular product inspection you note rust on hardware, the severity of the rust will determine whether your equipment is deemed usable or unacceptable and recommended for removal from service. Below are examples of hardware rust exposure deemed acceptable for keeping your equipment in service or unacceptable and recommended to cease use.

# Slight/Moderate (Acceptable): White Scale / Oxidation and Surface Rust



Slight

Single Slot



2 Slot

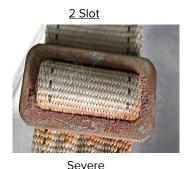


Buckingham recommends cleaning hardware in this condition using an ultrafine Scotch Brite scouring pad (3M part number 14049 available at distributors such as Grainger), cut to approximately a 1" x 1" square, and with WD-40 Multi-Use Product, scrub the areas that exhibit rust in a back and forth motion until all surface rust has been removed.

#### Severe (Unacceptable): Pitting / Excessive Red Rust



Severe





Note: Hardware in this condition is recommended for removal from service.

# \*Dee rings are not shown above but shall follow the same Rust on Hardware criteria as shown above\*

Please contact your Buckingham Customer Service Representative at 800-937-2825 should you have any questions as to condition of the hardware or your product.

#### PROPERTIES OF ARBORIST SADDLE MATERIALS:

Material	Effect of Heat	Effect of Acids & Alkalis	Effect of Bleaches & Solvents	Resistance to Mildew, Aging, Sunlight, Abrasion
Polyester	Sticks at 440 to 445° F. Melts at 482° F.	Good resistance to most mineral acids. Dissolves with partial decomposition in concentrated solution of sulfuric acids. Good resistance to weak alkalis. Moderate resistance to strong alkalis at room temperature. Disintegrates in strong alkalis at boil.	Excellent resistance to bleaches & other oxidizing agents. Generally insoluble except in some phenolic compounds.	Not weakened by mildew. Excellent resistance to aging & abrasion. Prolonged exposure to sunlight causes some strength loss.
Nylon 6	Melts at 419 to 430° F. Slight discoloration at 300° F when held for 5 hr. Decomposes at 600 to 730° F.	Strong oxidizing agents & mineral acids cause degradation. Others cause loss in tenacity & elongation. Resists weak acids. Soluble in formic & sulfuric acids. Hydrolyzed by strong acids at elevated temperatures. Substantially inert in alkalis.	Can be bleached in most bleaching solutions. Generally insoluble in organic solvents. Soluble in some phenolic compounds.	Excellent resistance to mildew, aging & abrasion. Prolonged exposure to sunlight causes some degradation.

#### **CLEANING. STORAGE & 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, ultraviolet rays, extreme temperatures, or chemical agents, fumes, etc. To aid in protecting the hardware from rusting, it is recommended that the hardware be treated with lubricants such as WD-40 Multi-Use Product, at regular intervals. Warnings pertaining to cleaning, storage and transportation should be strictly adhered to.

NOTE: Ensure proper fit / size of product before use. This product cannot be returned unless it is in new unused condition.

NOTE: For a COMPREHENSIVE TRAINING PROGRAM, contact ARBOR MASTER TRAINING™ at (860)-429-5028

# Typical Arborist Saddles:

All saddle styles are not shown. Saddle construction may vary in color and design, such as connecting / adjusting hardware, D-ring size / style, lower section style (batten seat or individual leg straps) accessory rings and loops, etc.

#### Notes:

Classic Series: The large web Suspender loop on the back pad of these saddles is not intended for human support. Do not attach a Fall Arrest harness or belay connection to this loop.

Deluxe Series: The large web loop on the back pad of these saddles is intended for the connection of a compatible Buckingham retrofit harness only. Do not belay from this loop.

Agility Series (PN 1480) Master 5.0 Series (PN 1490) and Navigator Series (PN 1470) are void of the large web Suspender Loop at the center of the back pad but are manufactured with two steel rings for suspender attachment. Stability Series (PN 1371) is void of the large web Suspender Loop at the center of the back pad but is manufactured with a single steel ring for suspender attachment.

# TYPICAL ARBORIST SADDLE CONSTRUCTION:







Front View

**Back View (with individual Leg Pads)** 

**Back View (with Batten Seat)** 

# **TYPES OF ATTACHMENT POINTS:**

### **AGILITY SERIES:**



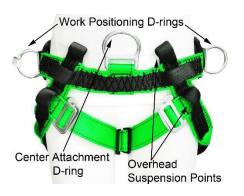




Suspension Bridge with Multiple Stitched Connection Points

PN 1480 SFRIFS

#### **MASTER SERIES:**





# PN 1290 CLASSIC MASTER SERIES:





# PN 11290 DELUXE MASTER SERIES:





PN 1490 Master 5.0 Series

#### **PINNACLE SERIES:**



PN 1291 CLASSIC PINNACLE SERIES:

Work Positioning D-Rings



Accessory Loops (not intended to hang Chainsaw)

Retro Harness
Attachment Loop not intended for Belay
Attachment)

Snaps / Rings (for hand or chainsaw)

PN 11291 Deluxe Pinnacle Series PN 12291 Series (with individual leg straps, not shown)

Overhead Suspension D-rings

#### TRAVERSE SERIES:



PN 1292 Classic Traverse Series



Snaps / Rings (for hand or chainsaw)



Accessory Loops (not intended to hang chainsaw)

Retro Harness
Attachment Loop (not intended for belay attachment)

Snaps/ Rings (for hand or chainsaw)

PN 11292 Deluxe Traverse Series PN 12292 Series (with individual leg straps, not shown)

# **VERSATILE SERIES:**



PN 1293 Classic Versatile Series



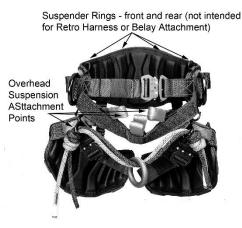




PN 11293 Deluxe Versatile Series PN 12293 Series (with individual leg straps, not shown)

### **NAVIGATOR SERIES**

Note: Navigator series saddles manufactured before 11/22 are not compatible for use with a retro fit harness. For Navigator saddles manufactured after 11/22 use PN REH5 Retro Fit Harness Only. See PN REH5 product instructions for Retro Harness attachment.



PN 1470 SERIES





#### STABILITY SERIES







#### PN 1371 ECONOMY SERIES SADDLES

#### 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 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.
BINGHAMTON, NY
1-800-937-2825
www.buckinghammfg.com

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.