Important Safety Information for Users of

Bashlin Lineman's Climbing Equipment

⚠ - WARNING - ⚠

For your personal safety, this booklet must be completely read and all of the information understood completely before using these products.

BASHLIN INDUSTRIES INC.

119 WEST PINE ST., P.O. BOX 867, GROVE CITY, PA 16127-0867

(724) 458-8340 FAX (724) 458-8342 www.bashlin.com

No. BLCE-405-A Rev. 11-11

Table of Contents

Important Safety Information

Se hable Espanol, (Para una versió espanola de este folleto de la seguridad, contacta las Industrias de Bashlin S.a. por favor.)

Nous parlons Français (Pour une version française de ce livret de sûreté, contacter les Industries de Bashlin Inc s'il vous plaît.)

Other languages upon request

This information is intended for the user of the products indicated. It must be included with the product, read and understood by the user prior to placing this product into service. This equipment is to be used by properly trained, professional workers. The information in this booklet, manufacturer's demonstrations, sales seminars, catalog information or other promotional materials may be a part of but does not constitute proper or complete training in the use of these products.

⚠ - WARNING - ⚠

Lack of proper training or the incorrect use and/or abuse of these products may cause accidents, injury or death.

The user must inspect this equipment before each use. Any equipment found to be worn out, damaged, subject to shock loading or in any way questionable, must immediately be removed from service or accident, injury and even death could result. Specific guidelines for inspection are included in this information booklet.

⚠ - WARNING - ⚠

Bashlin equipment must not be altered. Altering or modifying these products voids all warranties, may affect performance, and could cause accident, injury or death to the user.

General Information for Bashlin Climbing Equipment

These products are fabricated from leather and synthetic woven materials and rated metal hardware. They are assembled by riveting and/or sewing. The thread used in assembly is of a contrasting color to permit easy inspection.

These products are manufactured in accordance with OSHA,ANSI, ASTM F887, and/or CSA standards and are labeled as such. Please contact us for information regarding specific applicable standards for each product.

⚠ - WARNING - ⚠

Shock loading is extremely damaging to climbing equipment. Any belt, harness pole strap, APL or climber that has been shock loaded must be removed from service.

Lineman's Climbing Belts

Sizing

Proper sizing is one of the most important considerations in the purchase of a lineman's tool belt. An improperly sized belt is uncomfortable and may cause an accident or injury.

Bashlin tool belts are measured by the "D" size, which is the distance between the heels of the D-rings. On 4 D-Ring belts (GD, GXD, GXDMP, G4D, GX4DMP) this is the lower belt assembly.

All linemen's tool belts must be ordered according to the "D" size.

To Determine Your "D" Size

1. Locate the point where the heel of the "D" ring should rest. As the photo illustrates, this is approximately 4" down from the top of the hip bone.
2. Begin to measure from this point. Measure around the buttocks to the same point on the opposite side.

When a properly sized tool belt is worn, the D-rings will point nearly straight ahead and the tongue adjustment will be in the center holes as shown in photo 3.

For the Padded Rest-A-Back (ex. 88BP) or Hip-Grip (ex. 88GP) tool belts, add 2" to your standard "D" measurement.

Sizing Range for Bashlin 2 D-Ring Tool Belts - Per ASTM F887

D Size In.	Minimum	Center Hole	Maximum	Tool Loops
D18	32	36	40	3
D19	33	37	41	3
D20	34	38	42	3
D21	36	40	44	4
D22	37	41	45	4
D23	38	42	46	4
D24	40	44	48	4
D25	41	45	49	4
D26	42	46	50	4
D27	44	48	52	4
D28	45	49	53	4

Sizing Range for Back Support and 4 D-Ring Tool Belts

D Size In.	Upper Tongue B-Series	Upper Tongue G-Series/4D
D18	29-36	33-39
D19	30-37	35-41
D20	31-38	35-41
D21	32-39	37-43
D22	33-40	37-43
D23	34-41	39-45
D24	35-42	39-45
D25	36-43	41-47
D26	37-44	41-47
D27	38-45	43-49
D28	39-46	45-51

Stock and Special Belts

Bashlin stocks right handed belts, in sizes D-18 to D-28 of the most popular belts. Belt sizes may vary on different style belts. Larger belts, up to D-32, may be ordered. There is an additional cost for sizes D-29 to D-32.

Belts and holsters with left hand design are available at no additional cost. Add "LH" to the part number.

Tips for Using Bashlin Tool Belts

- Never climb or work while engaging both ends of your pole strap into one “D-Ring” of your tool belt.
- Always visually verify the snap-hooks or carabiners are engaged and the gates fully closed and locked before allowing the equipment to support your weight. Don’t rely on the “click”…for more than a few guys that was the last thing they heard before they heard the sound of the ambulance.
- Never store belts, harness straps, or pads near stoves, steam coils, radiators, truck exhaust, etc...this will dry and weaken the materials. Store your belt in a clean, dry location.

⚠ - WARNING - ⚠

Bashlin’s 80 Suspenders, 81 Gut Straps, and 83 Detachable Rest-a-Back are designed only to carry the weight of the tools and belt you are wearing. They are not tested for or designed to support your body weight. Incorrect use, such as using these products in combination with a tool belt to fashion a saddle and loosening the tool belt is very dangerous. The components of the 80, 81 and 83 could break under these circumstances. The result will be your belt sliding off of your hips and your falling to the ground.

- Never connect a twisted strap or lanyard to the “D-Rings”
- Always climb with the snap keepers facing outward and the pole strap flat, with no twists, against the pole with the buckle side out.
- When “free” climbing never let go of the pole or structure while repositioning your strap or lanyard.
- Never carry any wire, tools, or other accessories on the “D-Rings” of your tool belt. Any foreign objects carried on the “D” could interfere with the operation of the snap-hook, or carabiner, causing an accidental disengagement resulting in a fall.
- Never attach your hand-line directly to your tool belt. Use a hand-line carrier such as the No. 33. When Mrs. Smith accidentally catches your hand-line on the bumper of her car, she won’t drag you off the pole.

⚠ - WARNING - ⚠

Bashlin tool belts must be worn tightly and on, but not below the hips. Incorrectly wearing a tool belt may cause accident, injury or death.

- Only lineman's holsters are to be attached to and used on the climbing belt. Attach it to the belt correctly with the screwdriver pocket toward your back. This will keep the tools in your holster separated from the "D-ring" and reduce the chance of accidentally hooking your snap or carabiner into a tool.
- Never puncture the cushion section of the belt to hang tools on the belt.

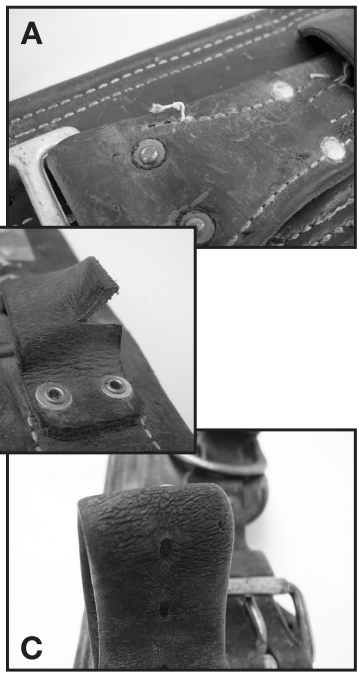
⚠ - WARNING - ⚠

A Lineman's tool belt, even one with 4 D-Rings is not a saddle and must not be worn as one. The belt should be worn snugly with the lower D's on, ***not below*** the hips. The upper belts on the wide (B and G) series belts as well as the upper straps on the 4 D-Ring belts are not to be worn on the hips. Wearing the belt incorrectly may cause you to be ejected from the belt, causing injury or death.

Inspecting Your Bashlin Tool Belt

This equipment should be inspected before each use. Your tool belt must be inspected for the following;

- Electrical burns, cracks, or deformation of the "D-rings" or buckles.
- Loose rivets or broken stitching on the hardware attachment points, and other primary strength members. **(A)**
- Degraded or torn nylon strength members, as well as other physical, chemical, heat or age related damage.
- Broken or loose tool loops, snaps or a worn holster attachment point. **(B)**
- Dry rotted leather. **(C)**
- Elongated holes in the tongue.



⚠ - WARNING - ⚠

Any belt displaying evidence of any one of these conditions must be removed from service. The average useful life of a tool belt is 5-8 years of normal usage.

Cleaning and Maintaining your Bashlin Tool Belt

Regularly cleaning your climbing belt will improve its appearance, make it last longer, and keep your clothes cleaner. Dirt can get into the leather and nylon fibers actually breaking them down. The cleaning process will also help you to spot any worn components that could cause future trouble.

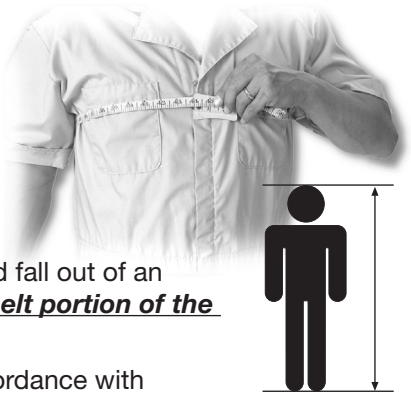
These belts consist primarily of leather and nylon components. The leather should be cleaned using a saddle soap, while the nylon is cleaned better with mild soap and water. Avoid any petroleum based cleaners that may damage nylon. After the dirt is removed, oil the leather using a commercial leather preserver such as mink, Neatsfoot or bee oil. The belt should be cleaned and leather oiled at least every 90 days, more if the work conditions require it. After cleaning and oiling the belt, let it dry overnight. Take a moment to wipe off the excess oil from the leather, as it will stain your clothing and attract dirt. If the leather is kept moist, it will last a long time. However, once the leather begins to dry, no amount of oil will repair the damage. Preserve you belt and your investment by regularly maintaining your belt.

See our catalog or www.bashlin.com for leather care and cleaning products.

Lineman's Climbing Harnesses

Bashlin's Lineman's Climbing Harnesses merge a line belt with a full body harness. They provide an extra level of comfort and security when working on a pole, especially when using wood pole fall restricting devices (WPFRD). These products meet the requirements of the ASTM F887 for electric arc performance.

Sizing Bashlin Lineman's Climbing Harness



Proper sizing is essential for comfort and performance in the event of a fall. An improperly sized harness just doesn't feel good. In the event of an incident requiring the equipment to arrest a workers fall, the individual could fall out of an improperly sized harness. ***To size the belt portion of the harness, see page 4 of this booklet.***

The Bashlin harnesses are sized in accordance with the torso of the worker. For the wearer, this involves measuring their height and chest size to determine the harness size based on those measurements. For most individuals, their overall height will determine the correct size. However, if the chest measurement is too large for the corresponding height, move to the larger size. If the chest

size is too small for the height, use the individual's height to determine the size. For 99% of the individuals, this method will determine the proper size. For the other 1% of you, kindly contact us.

Sizing Bashlin Lineman's Climbing Harnesses

H Style Harnesses-662R and 662A

Size		Height	Chest
O	One Size Fits Most	5' 4" - 6' 3"	34 in. - 48 in.
X	X-Large	6' 3" - 6" 6"	48 in. - 54 in.
2X	Double X-Large	6' 6" - 6' 10"	54 in. - 60 in.

X-Style 683 **Saddle Style 647/649** **H-Style 662V**

Size		Height	Chest
S	Small	5' 4" - 5' 7"	34 in. - 36 in.
M	Medium	5' 8" - 5' 11"	36 in. - 40 in.
L	Large	6' 0" - 6' 3"	40 in. - 44 in.
X	X-Large	6' 3" - 6' 6"	44 in. - 48 in.
2XL	XX-Large	6' 6" +	48 in. - 52 in.
3XL	XXX-Large	6' 6" +	52 in. - 56 in.

After determining the proper harness size, find the tool belt size by using the directions on page 4 of this booklet.

Need more information? Contact our customer service and ask about our video "Donning Bashlin Harnesses".

Tips for Using Bashlin Lineman's Climbing Harnesses

- Wear your harness as snugly or, if you prefer, as tight as possible. This will reduce strap slippage and help keep you in the harness in the event of an arrested fall.
- Do not use an improperly sized harness.
- Only use a harness made for the work being performed.
- Keep the back attachment point positioned between the shoulder blades. This will allow peak performance of the harness should it be used to arrest a fall. It will also help keep the straps on the shoulders during day to day use.
- Avoid exposing the harness to excessive heat, chemicals and prolonged sunlight that degrade the material.

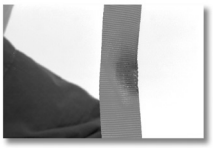
- Store the harness in a ventilated area, and clean it with soap and water regularly. We suggest a canvas or nylon bag for storage and to carry as well as to protect the harness at the work-site.
- Don't violate safety rules.

Inspecting Bashlin Lineman's Climbing Harness

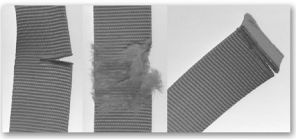
The user must inspect the harness prior to each use. In addition, a competent person, as defined by the ANSI Z359, other than the user must inspect the equipment annually. This inspection must be documented, and a record of the inspection kept as long as the equipment is in service. We recommend that the equipment be tagged with a serial number, and the same number noted on the enclosed inspection record (page 27).

These products must be inspected for the following;

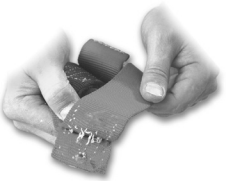
- Hardware-Look for cracks, deformation, electrical burns and secure attachment points. Inspect the snap hooks for easy and smooth operation, and gates that close completely. If using a quick release buckle, make sure it won't open if only 1 tab is depressed.



- Nylon or polyester strength members-burns, cuts, chemical or ultraviolet degradation, worn fibers, abrasion.
- Splices-Broken or cut stitches, fraying, burns or worn fibers.



- Rivets-Loose, bent or corroded rivets
- Evidence of shock loading - including deployed tags on shock absorbers, broken stitches, elongated grommets, bent hardware, or even witnessing an incident that doesn't appear to affect the equipment.



- Inspect the tool belt per the information found on page 6 of this booklet.

⚠ - WARNING - ⚠

Any equipment with evidence of any one of these conditions must be removed from service immediately.

The average useful life of harnesses products is 1-4 years, from the date of manufacture depending on work conditions, care and usage.

See the inspection record on the back cover of this booklet.

Maintaining Bashlin Lineman's Climbing Harness

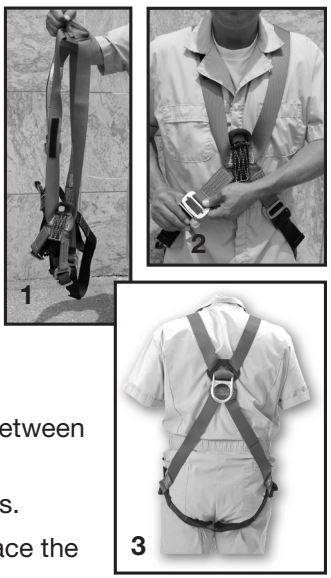
Clean the tool belt per page 7 of this book. Your harness should be cleaned as needed to remove dirt that will break down nylon fibers and to remove sweat and other chemicals that may degrade the webbing. Cleaning is best done by hand washing with mild laundry soap and water, rinsing the soap out completely, and hang drying. If the tool belt can be removed from the harness it may be machine washed on the gentle cycle by placing it in a nylon mesh bag. Do not machine dry these products.

The equipment is best stored in a ventilated canvas or nylon bag. It will be protected from mechanical and chemical damage as well as the sunlight that will severely degrade webbings. The ventilation is needed to reduce the chance of mold and mildew, especially in humid climates. Do not store next to excessive heat.

Styles of Bashlin Lineman's Climbing Harnesses

Bashlin offers several different styles of Lineman's climbing harnesses. They offer unique methods of connecting the harness and belt together, to accommodate different climbing styles. For specific information regarding your harness, please see the data sheet included with your product. If none is included with your harness, contact customer service.

Donning Bashlin Harnesses



- Grasp the harness by the back attachment point, remove all twists from the material and open the chest closure, or as on the 683 style one side of the chest assembly. **(1)**
- Place the harness on the shoulders and fasten the chest closure. **(2)**
- Buckle the leg straps.
- Adjust the shoulder straps so the seat strap is snugly underneath the buttocks.
- The back attachment must be squarely between the shoulder blades. **(3)**
- Tighten the leg, chest and shoulder straps.
- If your harness has 2 piece buckles, replace the

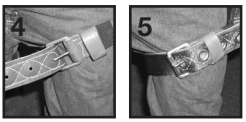
plastic keepers an inch or so away from the buckles. This is done by placing the keeper under the strap, pinching the webbing and sliding the material into the slots of the keeper. This will greatly reduce any slippage of the 2-piece buckle. Then simply slide the remaining material into the elastic keepers. With grommet style buckles, simply place any excess webbing under the elastic keepers. **(4)**

- Make a final check of all buckles and straps before beginning the work.
- Secure the tool belt in the normal manner. The belt must be worn correctly, per the instructions in this booklet. See pages 4-5.

Buckles on Bashlin Harnesses

- **Interlocking Pass-Thru Buckles –** Connect these buckles by sliding the smaller adjuster through the slot on the frame attached to the harness. **(1)** Note it will slide through much easier if the printing on the top of the adjuster is turned toward the attachment point of the frame. **(2**) Be certain the free end of the strapping is captured by the frame. After the buckle is secured and the strap adjusted, tuck the webbing into the keeper to restrict the strap movement. **(3)**

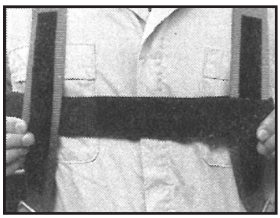
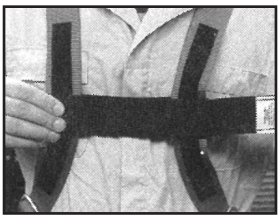
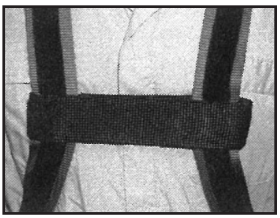
- **Grommet Tongue Buckles –** Slide the end of the billet through the buckle frames and adjust the strap to the correct length. Place the tongue of the buckle frame through the billet grommet that will make the strap the correct length, **(4)** then secure the end of the billet in the keeper. **(5)**



- **Quick Release Buckles –** Connect the buckles by sliding the male end in the female section until both of the tabs “click” and the buckle is locked. **(6-7)** The buckle is released by depressing both tabs until the male end can be removed. **(8)** Both tabs must be moved to release the buckle. If it releases when only one tab is moved, the harness should be removed from service. Adjust the strap after the buckle is connected, then tuck the excess webbing into the strap keeper to maintain the adjustment.

Proper Use of Bashlin's Hook and Loop Body Harness Chest Closure

- Adjust chest strap to the proper vertical position on the shoulder straps. It should cross at the mid-point of a chest pocket.
- Wrap the strap under and over the right shoulder strap. Firmly press the hook and loop material together across the length of the strap.
- Tuck the free end of the strap behind the left shoulder strap.

⚠ - WARNING - ⚠

For the chest strap closure of the harness to be secure, at least 2" of the strap must extend beyond the inside edge of the left shoulder strap. The hook and loop must be secure at all times during use. Keep the material free from foreign matter that could keep the hook and loop sections from securely mating. If there are any indications of wear, remove the harness from service.

Pole Straps and Adjustable Positioning Lanyards (APL)

Bashlin's Pole Straps and Adjustable Positioning Lanyards (APL) are made from woven nylon, 6 ply nylon, nylon reinforced leather or braided rope with a red center. These straps are designed to be used with the climbing belt as a positioning strap. They are not lanyards for fall arrest, nor are they to be used for pulling the line truck out of a ditch.

Bashlin pole straps and adjustable positioning lanyards use double action locking snaps, or carabiners.

Tips for Using Bashlin's Pole Straps and Adjustable Positioning Lanyards

- Never climb or work while engaging both ends of your pole strap into one "D-Ring" of your tool belt.
- Always visually verify the snap-hooks or carabiner are engaged and

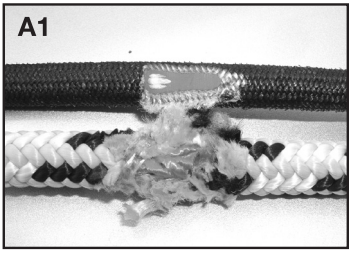
the gates fully closed and locked before allowing the equipment to support your weight. Don't rely on the "click"…for more than a few guys that was the last thing they heard before they heard the sound of the ambulance.

- Never store belts, straps, or pads near stoves, steam coils, radiators, truck exhaust, etc...this will dry and weaken the leather. Store in a clean, dry location.
- Never connect a twisted strap or lanyard to the "D-Rings"
- Always climb with the snap keepers facing outward and the pole strap flat, with no twists, against the pole with the buckle side out.
- When "free" climbing never let go of the pole or structure while repositioning your strap.
- Disabling the locking devices on the APL or Pole Strap Hooks is not very intelligent and can be dangerous. The locking snap-hooks and carabiners are not sized in proportion to the "D-ring". If the lock is disabled, they will be prone to accidental disengagement or roll-out.
- The leather keeper on the pole strap is an integral part of the strap as designated by the ASTM F887 standard. Removing this piece of leather not only makes the strap not compliant (Important at the Lineman's Rodeo or in case of an accident), it also makes it harder for you to maintain control of the length of your strap.

Inspecting Bashlin Pole Straps and Adjustable Positioning Lanyards

These straps and lanyards must be inspected prior to each use. They should be inspected for the following;

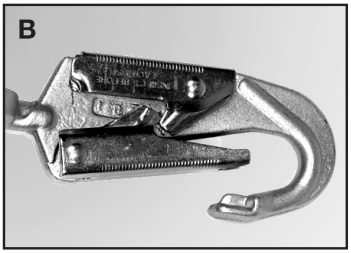
- Electrical burns, cracks, or deformation of the snap-hooks, buckle or adjustable carabiner.
- Loose rivets or broken stitching on the hardware attachment points, sewn splices or compression fittings, and other primary strength members.
- Degraded or torn nylon strength members, as well as other physical, chemical, heat or age related damage.
- Dry rotted leather.
- Exposed red wear indicator **(A) (A1)**
- Elongated holes, or broken stitches on the strap material or rope.

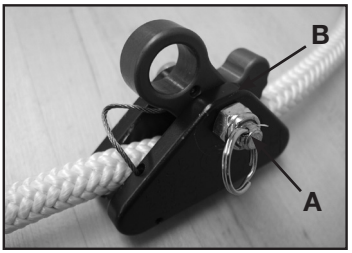


⚠ - WARNING - ⚠

Any pole strap or lanyard displaying evidence of any one of these conditions must be removed from service. The average useful life of Bashlin straps and lanyards is 1-4 years of normal usage.

- Improperly functioning or damaged snap hooks or carabiners including;
  - A sticking gate or locking mechanism **(B)**
  - Gages that don't close completely
  - A malfunctioning locking mechanism
  - Weak or missing springs





- For **Adjustable Positioning Lanyard (APL),** inspect the friction adjuster for freedom of movement. There must be no debris in the unit. Inspect cables and set screws for condition and proper engagement. **(A)** The nut on the through bolt must be secure. **(B)** Do not oil the mechanical adjustors as they will accumulate dust and dirt, which could cause them to stick.

Maintaining your Bashlin Pole Strap and/or Adjustable Positioning Lanyard

Regularly cleaning your strap or lanyard will make it last longer. Dirt will get into the leather and nylon fibers actually breaking them down. Dirt and debris will also diminish the performance of the friction adjuster. The cleaning process will also help you to spot any worn components that could cause future trouble.

These products consist of leather and synthetic components. The leather should be cleaned using a saddle soap, while the nylon is cleaned better with mild soap and water. Avoid any petroleum based cleaners that may damage nylon. Hang the nylon strap or lanyard to dry overnight. For leather straps, after the dirt is removed, oil the leather using a commercial leather preserver such as mink, Neatsfoot or bee oil. The leather strap should be cleaned every 90 days, more if the work conditions require it. After cleaning and oiling, let it dry overnight. Then take a moment to wipe off the excess oil from the leather, as the

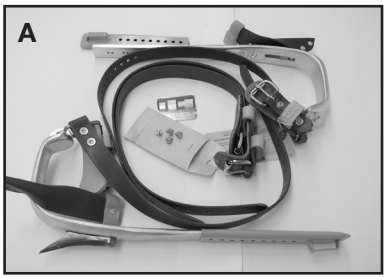
excess will attract dirt. If the leather is kept moist, it will last a long time. However, once the leather begins to dry, no amount of oil will repair the damage. Preserve your strap and your investment by regularly maintaining your strap.

For information regarding Wood Pole Fall Restricting products, see the information included with the product.

See our catalog or www.bashlin.com for leather care and cleaning products.

Climbers

Your Bashlin climbers are known the world over for their comfort and superior performance. Whether your choice is the popular BD14, or one of the rugged steel climbers, BD12 or BD16, you have the proven Bashlin 17° angle gaff, roomy comfortable stirrup and innovative offset design.

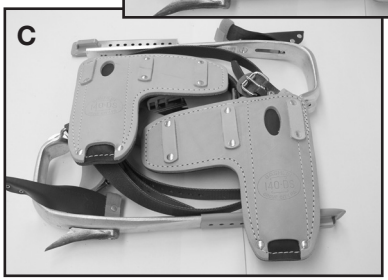


All Bashlin pole climbers come with the following items standard; **(A)**

- 1 pair of shanks with the bottom nylon straps installed
- 1 pair of gaff guards
- 1 pair of top slides with 4 screws in a small packet
- 1 gaff gauge (Pole Climbers Only)

If any of these listed items are not in your box, please contact us immediately.

In addition, these climbers are sold as sets and include the following items designated by part number



- Climbers with bottom straps (ex. BD14-1N)
- Add 85 N top straps (ex. BD14-2N) **(A)**
- Add 110D climber pad (ex. BD14-3N)
- Replace 110D climber pad with 130D (ex. BD14-4N) **(B)**
- Replace 130D with 140DS climber pad (ex. BD14-5N) **(C)**

Sizing Your Bashlin Climbers

For maximum comfort and performance, the climber shank must be adjusted to fit your leg. This is done by performing the following steps;

- Place the adjustable top slide on the shank.
- Put your foot in the stirrup and move the top of the adjuster to a point two fingers below the bottom of the knee bone. **(D)**
- Holding the top slide in place, install one of the screws, recheck the position, then install the second screw.
- Adjust the second shank to the same size.
  - The shank should be low enough to keep the pad from rubbing your knee bone. If you are experiencing excessive rubbing on the knee bone, lower the top slide.
  - The standard adjustment for Bashlin climbers per ASTM F887 is 14 3/4 to 18 inches. *If by adjusting your climbers to the proper height, the top slide is in the last hole, or if the climbers are simply too short, you must use the longer top slides, number 14ATS, for aluminum climbers or 16ATS for steel.* Using the longer adjusters gives you a better fit and reduces the flexing of the shank section of the climber, especially in the critical section 4-8 inches above the gaff.(See Climber Inspection).

Climber Pads

Bashlin climber pads reduce the shin discomfort caused by standing on climbers for extended periods of time.

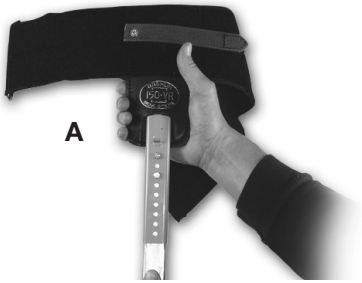
Strap Climber Pad Attachment

(110, 130, 140, 145 or 150 series pads)

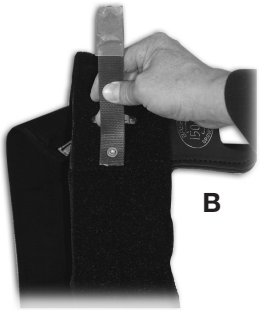
Strap pads are held on your Bashlin climbers with a 1 inch nylon strap that has a tongue buckle closure. The strap is normally oriented with the buckle close to the front of the pad. The pad should wrap around the front of your leg and inside of the shank.

Hook-n-Loop Pad Attachment
(145-V or 150V series pads)

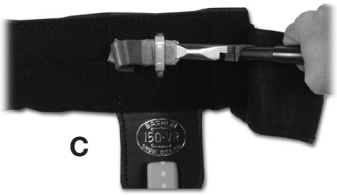
- With the top slide secured to the climber, insert the shank into the tunnel of the pad until the top slide loop is seated in the tunnel slot or steel insert. Squeezing the tunnel will allow the climber to slide in easier. **(A)**
- **(B, C)** Feed the climber pad retaining strap through the top slide loop and/or the steel insert and pull tight to secure the shank to the pad. To assist in sliding the strap through the loop, place a piece of paper or other thin material over the end of the strap while sliding through the top slide loop. A pair of pliers can be used to pull the strap.



A



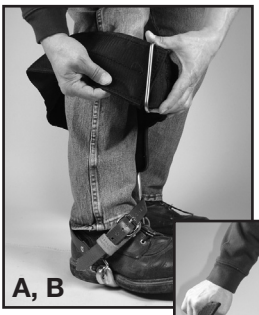
B



C

Wearing Hook-Loop Pads

- Step into the climber and attach the bottom strap securely to your boot. **(A)**
- Feed the free end of the pad with the hook through the steel loop. **(B)**
- Pull through until the pad is snug on your leg. **(C)**
- Secure the free end around the pad, mating the hook to the loop on the body of the pad.
- Check the security of the climber and pad by taking a step or two on the structure you are climbing before ascending in them.

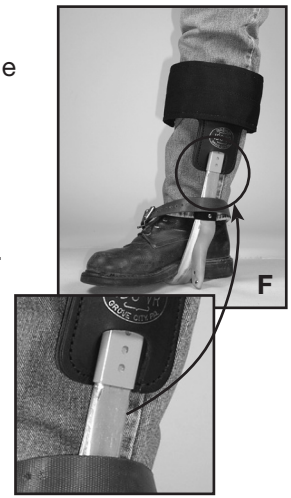


⚠ - WARNING - ⚠

BE CERTAIN YOU HAVE PULLED THE MINIMUM WRAP WARNING LABEL THROUGH THE STEEL LOOP. This will ensure that you have at least the minimum amount of hook/loop interface to properly secure the pad/climber to your leg. Failure to achieve this minimum wrap may result in release causing SERIOUS INJURY OR DEATH **(D)**

Tips for Using Bashlin Climbers

- Only use a Bashlin Gaff Gauge on Bashlin Pole Climbers.
- Remove from service any climbers that have come in contact with an electric arc.
- Never etch or scratch the critical section of the climber shank, 4-8 inches above the gaff. Points of stress will be created, and flexing of the shank will cause a fracture and finally premature failure of the climber shank. **(F)**
- Forged aluminum alloy climbers are 30% lighter than steel, yet compare quite favorably with the strength of shanks made



of either steel or titanium. Aluminum yields a better performing climber than steel or titanium. However, the aluminum is softer than either material, will wear faster, and requires regular inspection and maintenance.

- Do not use aluminum alloy climbers with climbing boots that have a steel heel guard. The heel guard wears deeply into the stirrup of the climber and will require premature replacement of the shanks.
- Bashlin requires that any other manufacturer's equipment used with our products be made in accordance with the ASTM F887 Standards.
- Don't violate safety rules.
- Keep dirt and debris cleared from the hook and loop material with a soft brush. Debris can compromise the performance of the hook and loop material, even causing the strap to release.

⚠ - CAUTION - ⚠

The average useful life of Bashlin Climbing Equipment based on normal usage:

Tool Belts	5 - 8 years
Climbers	2nd set of gaffs
Pole Straps	1 - 4 years

Inspecting your Bashlin Climbers and Pads

Your climbers must be inspected prior to each use. Your climbers should be removed from service until repaired or replaced if you find any of the following:

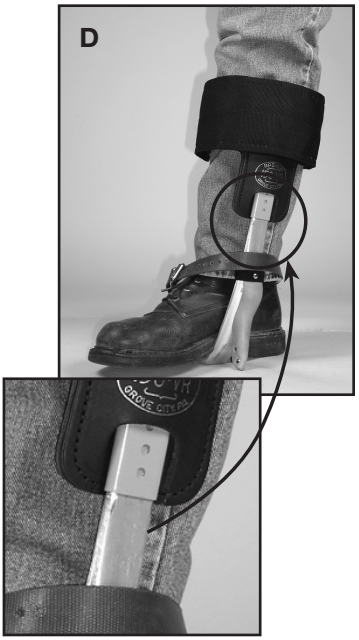
- **Climber straps** that are worn, cut, burned, have elongated holes, or loose buckles.
- **Worn climber pads** that have broken rivets or loops. **(A)**
- **Hook-n-Loop pads** sleeve retaining strap is damaged or missing.

  Hook and loop on pad will not stay secured, or broken stitches. Steel

loop is damaged or not secured to pad.

- **Climber shanks** that have worn thin on the foot tread or shank section. **(B)** If the lettering on the bottom of the foot tread of your aluminum climbers is no longer there, the shank should be retired.**(C)**

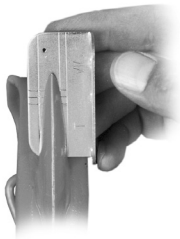
Inspect critical area of the shank, (4-8 inches above the gaff) for deep scratches or cuts. Flex the shank visually inspecting this area for any cracks. **(D)** You can also run your thumbnail along the edges to look to find any indentations or marks that could indicate a crack in the shank section. A crack will form prior to the shank breaking. Close and regular inspection could reveal the weakness before it breaks in the field. The shank is similar to the tires on a car; there is only so much wear, or in this case flexes in the shank, before it will break. The key is to remove the shank from service before it breaks, cracks or when you are 50 feet off of the ground. **Shanks should be replaced when they no longer meet the inspection criteria or when the second set of gaffs wears out.**



- **Loose gaffs**
- **Improper length**, or shape of your gaffs as determined by using Bashlin's No.5 gauge.

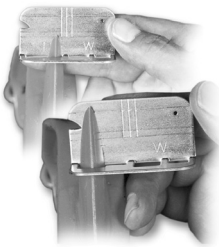
Using the Bashlin Gaff Guage

A



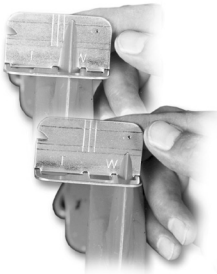
A. **Length**-Place the gaff on the gauge as indicated in the picture. The tip of the gaff should extend beyond the line furthest from the edge, indicating the length is at least 11⁄4 inches. If the gaff is too short it must be replaced.

B



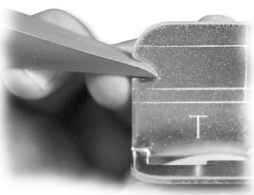
B. **Thickness**-Insert the gaff into the larger portion of the section of the gauge marked with a “T”. Make sure the gaff is lying flat against the gauge. When the gaff is placed in the larger opening the cross section of the gaff roughly 1 inch from the tip is being measured. The tip should fall between the edge of the gauge and the first line. If it falls over the edge, it is too thin and should be replaced. If it falls short of the line, it is too thick and must be reshaped. Repeat the procedure placing the gaff in the smaller portion of the section marked with a “T”. Now the thickness of the gaff is being measured at a point roughly 1⁄2 inch from the tip. The end of the gaff should fall between the two parallel lines above the “T”. If it is long, replace the gaff. If it is short, shape the gaff. (See Maintenance Section)

C

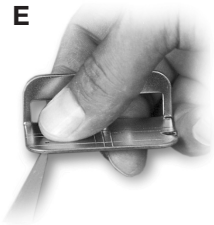


C. **Width**-Repeat the general procedure used to measure the thickness of the gaff on the section of the gauge marked with the “W”. Slide the gaff into the larger portion of the “W” section. Make sure the gaff is flat on the gauge. The tip should fall between the end of the gauge and the first line. If it goes over the edge, replace it. If it falls short, shape the gaff. Continue the inspection by placing the gaff in the smaller portion of the “W” section. Replace the gaff or reshape it as is required by the gauge. (See Maintenance Section)

D



D. **Shape of the tip of the gaff**-There is a small section cut out of the left side of the gauge. This is used to determine if the tip of the gaff is shaped correctly. Place the tip of the gaff in the cut out as indicated. The shape of the tip should approximate the curve of the cut-out. The shape of the tip can be confirmed by testing the tip using the Pole Cut-Out Test shown on page 23.



E. **Size of the tip of the gaff**-There is a small hole in the gauge used to determine if the tip of the gaff is thick enough. Simply place the small hole on the right side of the gaff gauge on the tip of the gaff. If the tip of the gaff protrudes far enough through the hole that you can feel it, the tip is too thin and may break during normal use. The gaff should be removed from service.

⚠ - WARNING - ⚠

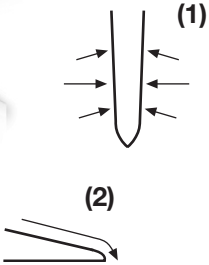
Climbing equipment that does not meet this inspection criteria must be removed from service.

Bashlin's 27 Gaff Shaping Kit has all of the tools needed to maintain your gaffs

Maintenance of Bashlin Climbers

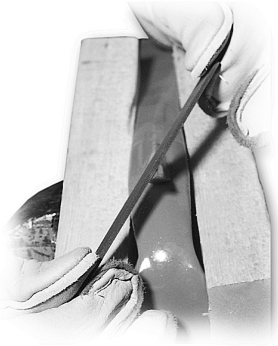
Your climbers, especially the straps and pads should be cleaned and the pads oiled regularly. Replace any old or worn screws, sharpen and shape your gaffs as needed.

Sharpening the gaffs on your Bashlin climbers-Using wood blocks to protect the shank, put the climbers in a vise with the underside of the gaff exposed. Place a 6 inch mill file across the gaff, against the heel and draw it towards you, following the rounded shape of the gaff tip. Filing in this method sharpens **(1)** the edges of the gaff and maintains the correct shape of the tip **(2)**. If you prefer the edges to be sharper, use a honing stone.



Shaping the gaffs on your Bashlin climbers-

Block the climber in a vise, only this time, turn the climber over so the ridge of the gaff is exposed. Using the 6 inch mill file, make smooth rounded cuts and remove as much material as is needed to size the gaff to fit correctly into the gauge. Never file the ridge on the back of the gaff. Check the gaff on the gauge, turn the climber over and sharpen the edges one more time.



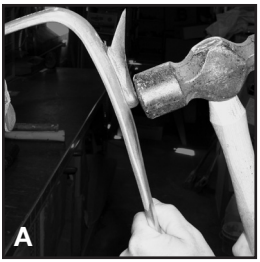
Before Returning Your Climbers to Service, They Should be Field Tested.

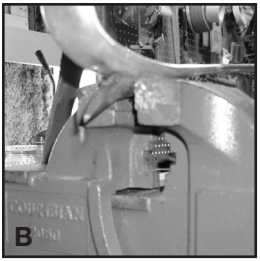
Pole Cut Out Test

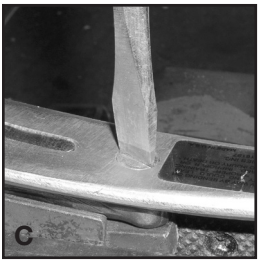
1. Wearing a pair of gloves, attach the bottom strap of one of your climbers.
2. Grasp the top of the shank and touch the tip of the gaff against the pole at a comfortable height that will be easy to step into.
3. Holding the top of the shank against the pole, step into the stirrup. Steady yourself with your other hand.
4. The properly shaped gaff should cut into the pole within an inch. An improperly shaped gaff will break out of the pole.

For additional information regarding the care and maintenance of pole climbing equipment, refer to the Lineman's and Cableman's Handbook by Kurtz and Shoemaker, (Bashlin No. 831).

Replacing Bashlin Gaffs







- Tools needed include a **vise, hammer, 2 blade type screwdrivers with 1⁄4 inch and 1⁄2 inch blades respectively, and a 12 in. adjustable wrench.**

1. Remove the adjustable top slide and pad from the climber.
2. Holding the shank in one hand, strike the gaff on the outside of the shank, at the point where the large screw is in the gaff. This will help loosen any corrosion between the screw and the gaff. **(A)**
3. Place the climber shank in the vise, placing the jaws on the gaff, with the screw up and exposed. **(B)**
4. Use a square shank screwdriver that completely fills the slot. **(C)** Hold the screwdriver tightly in place and loosen the screw using the wrench on the shank. Avoid stripping the screw by keeping constant pressure on the screwdriver. Other tools can be used to achieve similar results. Remove the screw completely.
5. Remove the smaller screw completely.
6. Lightly tap the top of the gaff, then pull the top away to remove it from the shank.

Installing the New Bashlin Gaff

1. Insert the gaff in the slot of the shank.
2. Drive the gaff into position. This is done by either placing the lip of the gaff on a hard edge, or placing the gaff in a block of wood and driving the gaff into position by striking the top of the shank with a hammer. When the holes are aligned, it is in the proper position.
3. Insert the large then the small screw, and tighten.
4. Replace the top slide adjuster and pads.

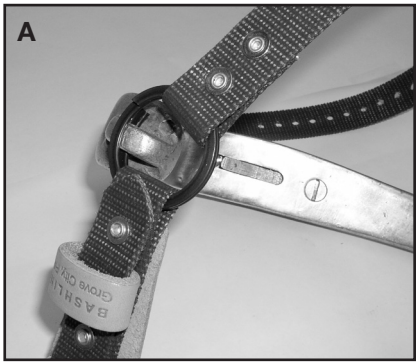
Replacing Bottom Straps on Bashlin Climbers

Your Bashlin Climbers come from the factory with bottom straps installed. Over time they will wear out and require replacement. Before replacing the straps, inspect your shanks per the instructions. If the shanks are worn out, remove them from service and destroy them.

Only work on one shank at a time.
Use the other shank as a pattern for your work.

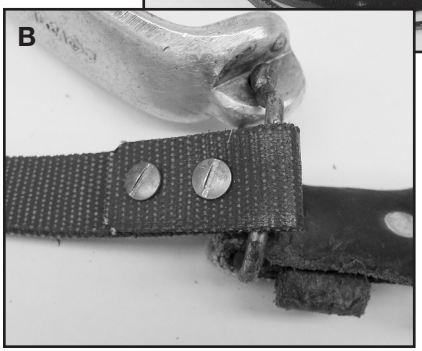
Installing 89N Bottom Straps

1. Remove the old triangle ring using a hack saw or bolt cutter. Inspect the strap lug for cracks or excessive wear.
2. Run a 1⁄4 inch drill through the hole.
3. Block the climber in vise with lug exposed.
4. Using a screwdriver, open the split ring and slide through the hole. The buckle should be toward the front of the shank. **(A)**
5. Completely thread the ring onto the shank.
6. Repeat the procedure on the other shank.

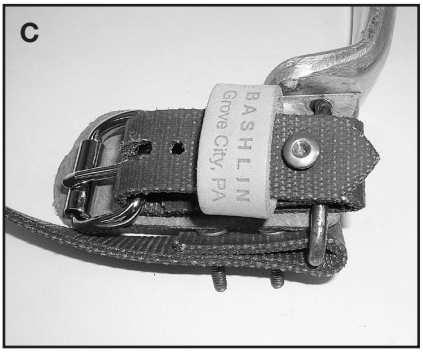


Installing 87N Bottom Straps

1. Inspect the triangle ring for excessive wear, cracks, burns or deformation. If there is any question regarding the condition of the ring, do not use it. Either remove the shank from service or if it is in otherwise good condition, consider the use of the 89N bottom strap assembly.
2. Remove and replace the long strap. Tighten the screw-type rivets **(B)**.



3. Remove the buckle strap. Assemble the new buckle assembly on the shank using the other shank as a pattern. It is easiest to place the leather keeper under the strap, then insert the screw-rivet in the hole closest to the ring **(C)**, insert the second rivet **(D)**, and tighten both screws.



4. Perform steps 1, 2, and 3 on the other shank.
5. Once you are certain the assemblies on both shanks are correct, tighten all of the rivets, and clip the ends off of the screws **(E)**. One at a time, place the head of the screw on a hard surface and round off the clipped ends of the screw-rivets with a hammer **(F)**. This will keep the rivet from loosening up. A rivet working loose may cause an accident.

6. Finally, remove any sharp edges on the clipped end of the rivets using a file, sand paper or emery cloth.

Inspection Record

Part Number _____ Date in Service _____

Employee_____

Date of Inspection	Comments	Inspected By

This equipment must be inspected daily by the user.

Please feel free to copy this form.

Thank you for using Bashlin Products
For more information or if you have questions
Please contact us:

Bashlin Industries Inc.
119 West Pine Street
PO Box 867
Grove City, PA 16127

Phone: 724.458.8340
Fax: 724.458.8342
www.bashlin.com
Email: sales @bashlin.com