

Important Safety Information for Users of **Bashlin Climbers and Accessories**



- 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

UP / DOWN / ALL-AROUND SAFETY

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Important Safety Information

Se hable Espanol, (Para una versi6n espanola de este folleto de la seguridad, contacta las Industrias de Bashlin S.a. por favor.)

Nous parlons Franais (Pour une version franaise de ce livret de s6ret6, contacter les Industries de Bashlin Inc s'il vous pla6t.)

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.

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.

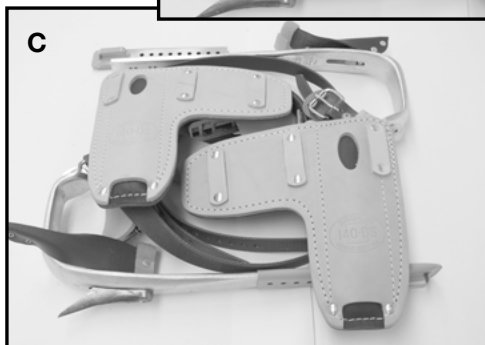
All Bashlin pole climbers come with the following items standard; **(A)**

- 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.

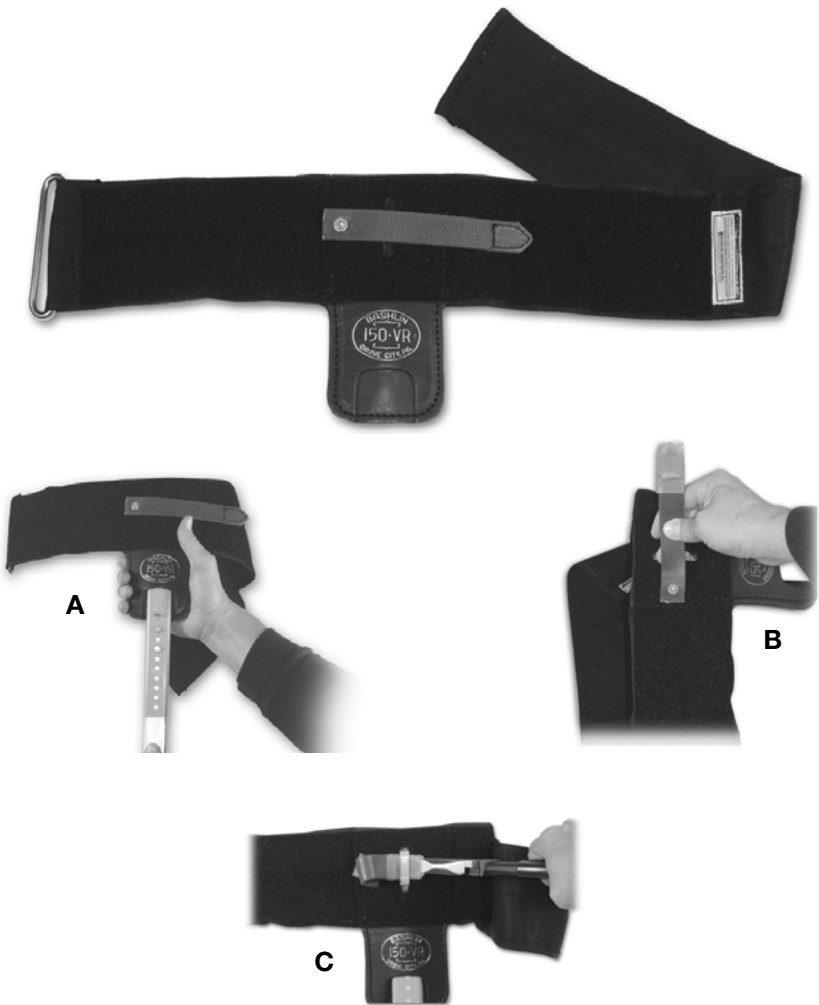
Strap Climber Pad Attachment (110, 130, 140, 145 or 150 series pads)

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.



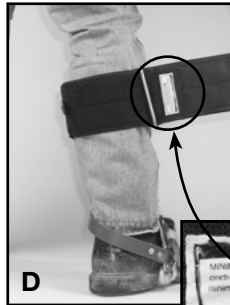
Hook-n-Loop Pad Attachment (145-V or 150V series pads)

- 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.



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. **(D)**

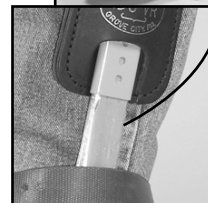


⚠ - WARNING - ⚠

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



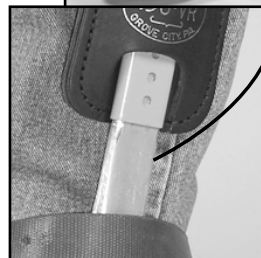
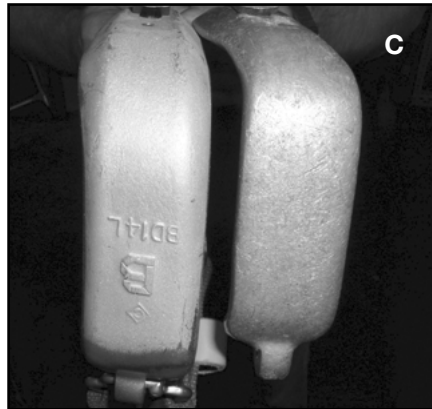
loop is damaged or not secured to pad.

- **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**
- **Short or improperly shaped gaffs** as determined by using Bashlin's No.5 gauge.



Using the Bashlin Gaff Gauge

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



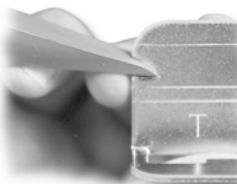
B. **Thickness**-Insert the gaff into the larger portion of the section of the gauge marked with a "T". Make sure the gaff is lying flat against the gauge. When the gaff is placed in the larger opening the cross section of the gaff roughly 1 inch from the tip is being measured. The tip should fall between 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 10.

E



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.



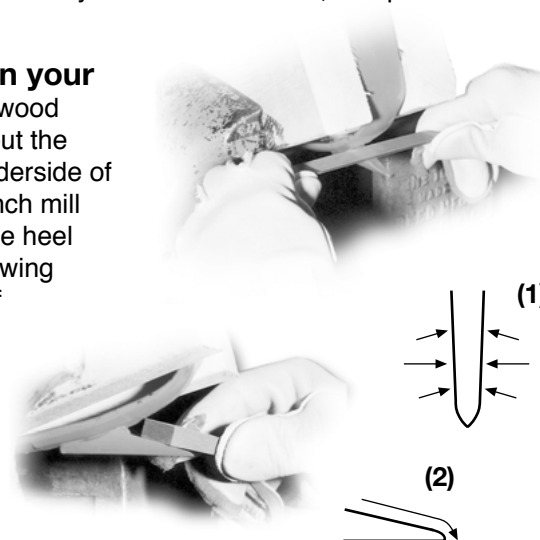
Bashlin's 27 Gaff Shaping Kit has all of the tools needed to maintain your gaffs

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

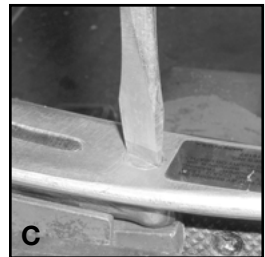
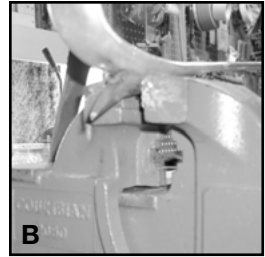
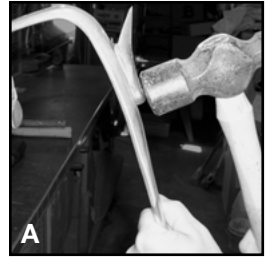
1. Wearing a pair of gloves, attach the bottom strap of one of your climbers.
2. Grasp the top of the shank and touch the tip of the gaff against the pole at a comfortable height that will be easy to step into.
3. Holding the top of the shank against the pole, step into the stirrup. Steady yourself with 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.

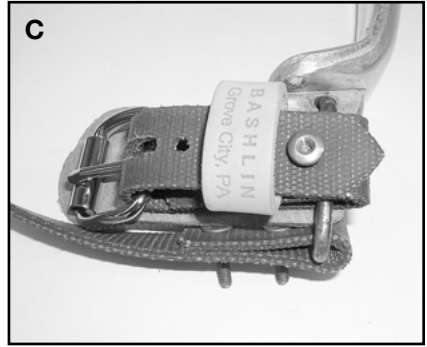


Installing 87N Bottom Straps

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)**.

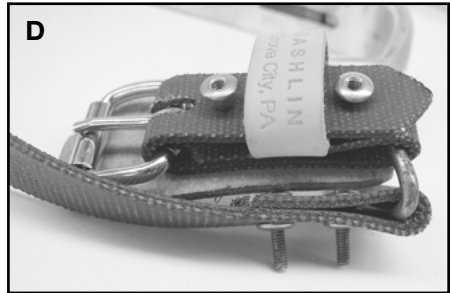


3. Remove the buckle strap. Assemble the new buckle assembly on the shank using the other shank as a pattern. It is easiest to place the leather keeper under the strap, then insert the screw-riev in the hole closest to the ring **(C)**, insert the second rivet **(D)**, and tighten both screws.



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

UP / DOWN / ALL-AROUND SAFETY

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