# **Pole & Tree Climbers**

## Features:



Adjustable climber length. Steel sleeve moves in 1/4" (6 mm) increments for the most comfortable fit.

Contoured leg irons help position gaffs securely and comfortably.

#### **Replaceable gaff**

firmly attaches to the leg iron with a center pin and two TORX<sup>®</sup> screws. 8" x 8" (203 x 203 mm) cushioned, high-grade leather climber pads for maximum comfort.

Neoprene-impregnated nylon climber straps for long-lasting life.

## Secure sleeve and leg

iron connection. Two slotted hex-head bolts with lock washers and barreltype nuts join the steel sleeve and leg iron together.

Steel split ring secures ankle strap in place and allows for quick replacement.

**4-7/16" (113 mm) wide stirrup** provides greater foot support.

## Pole Climbers with 1-1/2" Gaffs – Complete Set

## **1972AR Series**

- Includes 8" x 8" (203 x 203 mm) cushioned leather pad, steel sleeve, leg iron, gaff, split ring, and nylon calf and ankle straps.
- C.C.A. pole gaff. Designed to penetrate the hardest salt-treated poles.
- To determine size needed, measure from instep to 1" (25 mm) below knee.
- Sold in pairs only.





Cat. No.	Adjustable Length	Shipping Weight (lbs.)	Replacement Gaff Cat. No.	Replacement Pad Cat. No.	Replacement Calf Strap Cat. No.	Replacement Ankle Strap Cat. No.
CN1972AR	15" - 19" ( 381 mm - 483 mm)	6.00	72	8210	5301-18	5301-20
CN1972ARL	17" - 21" (432 mm - 533 mm)	6.25	72	8210	5301-18	5301-20

CN1972ARL



**AWARNING:** For your protection, Klein recommends that climbers be replaced when original gaff and two replacement gaffs have been used on the climbers.

TORX® is a registered trademark of Acument Intellectual Properties, LLC. All Klein climber straps are sold in pairs only. All Klein ankle straps and pads are sold in pairs only.

# **Pole & Tree Climbers**

## Pole Climbers with 1-9/16" Gaffs - Complete Set

## **1986AR Series**

- Gaffs are longer in length and wider in angle than 1-1/2" gaffs for exceptional resistance to cutouts.
- Includes 8" x 8" (203 x 203 mm) cushioned leather pad, steel sleeve, leg iron, gaff, split ring, and nylon calf and ankle straps.
- To determine size needed, measure from instep to 1" (25 mm) below knee.
- Sold in pairs only.

Cat. No.	Adjustable Length	Shipping Weight (lbs.)	Replacement Gaff Cat. No.	Replacement Pad Cat. No.	Replacement Calf Strap Cat. No.	Replacement Ankle Strap Cat. No.
CN1986AR	15" - 19" ( 381 mm - 483 mm)	6.20	86	8210	5301-18	5301-20
CN1986ARL	17" - 21" (432 mm - 533 mm)	6.35	86	8210	5301-18	5301-20

## Tree Climbers with 2-3/4" Gaffs – Complete Set

## **1907AR Series**

- Extra-long gaffs for maximum penetration when climbing trees.
- Includes 8" x 8" (203 mm x 203 mm) cushioned leather pad, steel sleves, leg iron, gaff, split ring, and nylon calf and ankle straps.
- To determine size needed, measure from instep to 1 " (25 mm) below knee.
- Sold in pairs only.

Cat. No.	Adjustable Length	Shipping Weight (Ibs.)	Replacement Gaff Cat. No.	Replacement Pad Cat. No.	Replacement Gaff Cat. No.	Replacement Ankle Strap Cat. No.
CN1907AR	15" - 19" (381 mm - 483 mm)	6.20	07	8210	5301-18	5301-20
CN1907ARL	17" - 21" (432 mm - 533 mm)	6.75	07	8210	5301-18	5301-20



- POLE CLIMBERS ONLY. Includes steel sleeve, leg iron, split ring, and gaff.
- To determine size needed, measure from instep to 1" (25 mm) below knee.
- Sold in pairs only.

Cat. No.	Adjustable Length	Shipping Weight (Ibs.)	Replacement Gaff Cat. No.	Gaff Length
1972AR	15" - 19" (381 - 483 mm)	4.50	72	1-1/2" (38 mm)
1972ARL	17" - 21" (423 - 533 mm)	4.85	72	1-1/2" (38 mm)
1986AR	15" - 19" (381 mm - 483 mm)	4.50	86	1-9/16" (40 mm)
1907AR	15" - 19" (381 - 483 mm)	4.85	07	2-3/4" (70 mm)
1907ARL	17" - 21" (423 - 533 mm)	4.95	07	2-3/4" (70 mm)

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CN1907AR

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# **Climber Accessories**

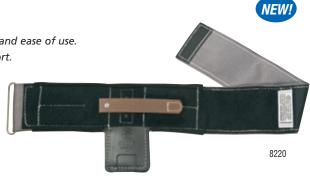
## Klein Velcro<sup>®</sup> – Climber Pads

- 4" of Velcro provides the maximum amount of adjustability.
- Continuous wrap with metal cinch loop for quick attachment and ease of use.
- Extra wide cuff fastens around the calf to provide more support.
- Padded for additional comfort.

Cat. No.	Description	Weight (lbs.)
8220	8220L (left) 8220R (right) only sold in pairs	1.75

Velcro<sup>®</sup> is a registered trademark of Velcro Industries B.V.

**AWARNING:** It is important that users of this product read, understand, and follow all instructions, cautions and warnings that are attached to and/or packed with this product.



# **Climber Replacement Parts & Accessories**

## **Replacement Gaffs and Accessories**

 Replacement gaffs include, TORX<sup>®</sup> screws, and wrench.

Cat. No.	Description	Qty.	Shipping Weight (lbs.)		
Replacement	Replacement Pole Climbing Gafts				
72*	1-1/2" (38 mm) Pole Climbing Gaffs (supplied with the 1972AR series)	2	.50		
86*	1-9/16" (40 mm) Pole Climbing Gaffs (supplied with the 1986AR series)	2	.60		
Replacement	Tree Climbing Gaffs				
07*	2-3/4" (70 mm) Tree Climbing Gaffs (supplied with the 1907AR series)	2	.75		
Gaff Accessor	ies				
244	Long Gaff Screw (should be ordered with Cat. No. 247)	1	.01		
247	Short Gaff Screw (should be ordered with Cat. No. 244)	1	.01		
34910	Screw w/Lock Washer Set (for steel sleeve) (4) screws with lock washers and (4) T-nuts		.01		
-					

86

\*Gaffs sold in pairs only.





aUe

 Convenient climber gaff guide assists with sharpening gaffs and checking proper gaff width, thickness, and point profiles.



# Cat. No.DescriptionShipping Weight (lbs.)KG-1Gaff-sharpening kit for pole and tree climbers.10

**AWARNING:** For your protection, Klein recommends that climbers be replaced when original gaff and two replacement gaffs have been used on the climbers.

Gaff Sharpening Kit

Me

07

 Handy kit contains: 8" fine-tooth file, 3" honing stone, Klein KG-1 gaff gauge, fully-illustrated gaff sharpening instructions, and canvas roll-up case.

# Cat. No.ShippingWeight (lbs.)KG-2.50



86

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# **Climber Replacement Parts & Accessories**



## **Climber Pads for Pole and Tree Climbers**

- 3/4" (19 mm) thick cushioned right
- and left "L"-shaped leather pads.
- Sold in pairs only.

Cat. No.	Overall Size	Shipping Weight (lbs.)
8210	8" x 8" (20 x 20 cm)	.10



## **Climber Straps for Pole and Tree Climbers**



- Durable neoprene-impregnated nylon strap is chemical/abrasion resistant and non-conductive.
- Tongue buckle has roller for easy adjustment.
- Sold in pairs only.

Cat. No.	Overall Size	Shipping Weight (lbs.)
5301-18	1" x 22" (25 mm x 56 cm)	.35
5301-20	1" x 26" (25 mm x 66 cm)	.40
5301-21	1-1/4" x 22" (32 mm x 56 cm)	.50
5301-22	1-1/4" x 26" (32 mm x 66 cm)	.46

## **Ankle Straps for Pole and Tree Climbers**

•••••••••••••••••••••••
5301-20

- Durable neoprene-impregnated nylon strap is chemical/abrasion resistant and non-conductive.
- Tongue buckle has roller for easy adjustment and a comfortable leather buckle pad.
- Sold in pairs only.

**AWARNING:** For your protection, Klein recommends that climbers be replaced when original gaff and two replacement gaffs have been used on the climbers.

All Klein climber straps are sold in pairs only.

All Klein ankle straps and pads are sold in pairs only





# Warning Tags & Labels – Pole and Tree Climbers

#### **Pole and Tree Climber Catalog Numbers**

KG-1, KG-2, 07, 72, 86, 1907AR, CN1907AR, 1907ARL, CN1907ARL, 1945G, 1972G, 1972AR, CN1972AR, 1972ARL, CN1972ARL, 1972G, 1986AR, CN1986AR, 1986ARL, CN1986ARL, 5301-18, 5301-19, 5301-20, 5301-21, 5301-22, 5301-23, 8210

- Climbing equipment is for use by properly trained professionals only.
- Use climbing equipment only for the specific purpose for which it is designed and intended.
- Klein Tools recommends a combined body, clothing and tool weight of 300 pounds or less for use with our pole and/or tree climbers.
- Always visually check that all buckles are properly closed before use.
- Before each use check that: 1) gaffs are free of dents, gouges or scratches 2) gaffs have proper width, thickness, point profile and sharpness. Only evaluate gaffs with Klein KG-1 gaff gauge. 3) Resharpen, or discard and replace gaffs if they fail inspection.
- Before each use check that: 1) climber straps and pads are free of burns, cuts, broken stitches or excessive wear,
  2) rivets are not bent, loose or missing, 3) buckles are not distorted or cracked, tongue does not bind on buckle and buckle holes are not damaged.
- 4) Remove from service, destroy and discard item if it fails inspection and replace immediately.
- Never allow this equipment to come in contact with fire, high-temperature surfaces, welding sparks, or other heat sources.
- Never punch holes in or alter a strap or climber.
- For leather components: Leather is subject to deterioration by cracking, wearing thin, tearing, weakening and chemical attack. Carefully maintain with Neat's-foot oil or equivalent. Inspect straps for these conditions before each use. Remove from service, destroy and discard strap if it shows any signs of deterioration and replace immediately.
- While climbing, avoid gaff contact with metal, such as pole hardware, tags, nails, poster staples, etc.
- Poles are NOT all alike. Different wood species, climate, pole age, and preservative treatments (Creosote, Penta, CCA) affect climbability, resulting in significant differences in gaff penetration. Visually check gaff penetration with your full weight on the climber before any climb. If penetration is shallow, use extreme caution. The gaff could "cut-out," or the increased stress could lead to tip breakage. For proper penetration, the minimum underside length of a pole climber gaff is 1-7/16" (37 mm).
- Trees are NOT all alike. Different species and bark thickness affect climbability. Visually check gaff penetration as described for pole climbers before any climb. For proper penetration: 1) Use a tree-climber gaff with a minimum underside length of 2-1/4" (57 mm). 2) When bark thickness measures more than 2-1/2" (64 mm), make sure gaff has adequate length for proper penetration of wood under the bark.
- After climbs, remove climbers to avoid gaff damage from hard surfaces or each other while walking.
- Use gaff guards to protect gaffs between uses.
- Limiting gaff replacement on climbers to two times is highly recommended.
- Employer- instruct employee as to proper use and warnings before use of equipment.
- Read, understand and follow all information provided with climber before use.







# Pole & Tree Climb



#### General

1. Check for wear and deterioration. Before each use, carefully inspect the complete system for signs of wear, deterioration, or evidence of impact loading. Visually inspect for loose threads, pulled rivets, cuts, abrasions, or other evidence of chemical or physical deterioration that may have weakened the material or assembly.

2. Inspect hardware for malfunctions or cracks. Check all hardware, including rivets and buckles.

3. Destroy and replace all worn or damaged equipment. Immediately destroy and replace any component that does not pass inspection.

## **Specific**

1. Check straps and pads. Make sure straps and pads are free of tears, burns, broken stitches, or excessive wear. Since leather is subject to deterioration, carefully check for cracking, wearing thin, tearing, weakening, chemical attack, or other signs of deterioration. (See Fig. 1)

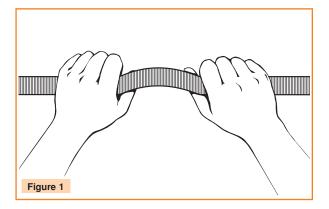
2. Check rivets, buckles, and other metal parts. Check that rivets are not bent, loose, or missing. Check that all buckles are not distorted or cracked, tongue does not bind on buckle, and buckle holes are not damaged. Also check split ring, leg iron, and steel sleeve for signs of excessive wear or damage. (See Fig. 2)

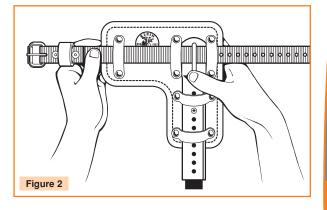
3. Check gaffs. Check that gaffs are free of dents, gouges, or scratches.

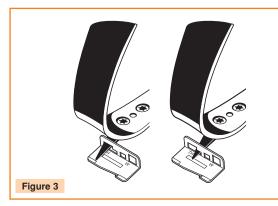
4. Check gaff thickness with Klein gaff gauge. For pole gaffs only, insert the gaff as far as possible through the large opening in the gauge marked "TH" (See Fig. 3). Make sure the top ridge is flush against the gauge base. The point of the gaff should fall within the limits formed by the last line and the edge of the gauge as illustrated. If it does, the gaff is the proper thickness, approximately 1" (25.4 mm) from the point. For **pole and tree gaffs**, insert gaff as far as possible through the small opening in the gauge marked "TH" (See Fig. 3). Make sure the top ridge is flush against the gauge base. The point should fall within the center two lines as illustrated. If it does, the gaff is the proper thickness, as measured approximately a 1/2" (12.7 mm) from the point.

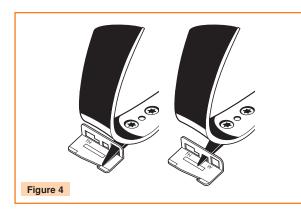
5. Check gaff width with Klein gaff gauge. For pole gaffs only, insert gaff as far as possible through the large square opening in the gauge marked "W" (See Fig. 4). Make sure the top ridge is flush against the gauge base. The point should fall within the limits formed by the last line and the edge of the gauge as illustrated. If it does, the gaff is the proper width, approximately 1" (25.4 mm) from the point. For pole and tree gaffs, insert gaff as far as possible through the small opening in the gauge marked "W" (See Fig. 4). Make sure the top ridge is flush against the gauge base. The point should fall within the limits formed by the center two lines as illustrated. If it does, the gaff is the proper width, approximately a 1/2" (12.7 mm) from the point.

**NOTE:** See page 22 for remaining procedure steps.













# **Pole & Tree Climbers Inspection Procedures**

6. Check gaff profile/contour with Klein gaff gauge. For pole and tree gaffs, place the side of the gaff along the front edge of the gauge with the gaff point resting in the notch. The point should follow the configuration of the gauge to assure the proper "rounding off" of the tip within 1/4" (6.4 mm) of the point. (See Fig. 5)

Minimum safe length for a **pole-climbing gaff** is  $1-7/16^{\circ}$  (37.5 mm), measured on the underside of the gaff. Minimum safe length for a **tree-climbing gaff** is the greater of the following: A)  $2-1/4^{\circ}$  (57 mm), measured on the underside of the gaff, or B) long enough to penetrate the bark on the tree and properly penetrate the core of the tree. Always test the penetration of tree gaffs at the base of the tree before climbing to be sure gaffs extend through the bark and properly penetrate the core of the tree.

### 7. Check gaff sharpness with the "plane test."

**Step 1:** Place climber with gaff pointing downward and upper strap loop resting against a horizontal board or pole. Hold the leg iron parallel to the wood surface with the stirrup vertical. Push the climber horizontally in the direction of the gaff without any downward pressure except the weight of the climber. (See Fig. 6)

**Step 2:** The gaff is properly sharpened if the gaff buries itself in the wood within a few inches of its starting position and can no longer be moved forward (See Fig. 7). The gaff is NOT properly sharpened if the gaff merely slips, slides, or plows a shallow groove in the wood (See Fig. 8). In this case, either replace the gaff following the "Replacement-Gaff Assembly Instructions" or resharpen the gaff following the "Gaff Sharpening Instructions."

For free copies of instructions, call Klein Tools at **1-800-553-4676**. A resharpened gaff must be tested for proper width, thickness, and point profile, and it must also pass the "plane test" before use.

The "plane test" reveals possible penetration problems not noticeable to the naked eye. Figure 9 shows how a properly sharpened gaff cuts its way into the pole for proper support. Figure 10 shows how an improperly sharpened gaff can "cut-out."

8. Destroy and replace all worn or damaged OPE equipment. If evidence of excessive wear, deterioration, or mechanical malfunction is observed, replace the equipment immediately. Never work with worn or damaged OPE equipment. Using damaged or worn equipment can cause serious injury or death.

**9. The inspector is the most important part of the inspection.** Check all equipment thoroughly, and follow all safety procedures and guidelines. Do not take any shortcuts.

