

BUCKINGHAM GAFF & CLIMBER INFORMATION

Our skilled craftsmen make the widest choice of climbers and options to provide each user with proper fit and comfort. Buckingham climbers are rated to 350 lbs. when the user is fully outfitted with tools and equipment.

STRENGTH & RELIABILITY



All of Buckingham's leg irons and gaffs are inspected throughout the manufacturing process and samples from each lot are tested to destruction. Buckingham climber leg irons are manufactured from selected high strength grades of steel, titanium and aluminum. Gaffs are forged from a quality steel. Before, during and after manufacturing climbers from every production lot undergo rigorous testing. They are subjected to physical abuse far beyond that encountered in normal use.

- Leg irons are bent 180° around a two inch diameter mandrel to test for ductility
- Gaff tips are bent 3/4" beyond a normal position
- Gaff security is checked then reexamined for loose gaffs
- Hardness of steel in both leg irons and gaffs are rechecked through Rockwell readings
- Gaffs are magnaflux inspected to ensure there are no flaws in the forging
- Upon completion, every climber is reviewed to insure the gaff angle, position and contour meet very tight tolerances
- Once the gaff has been final honed, it is inspected to make sure width, thickness, length, and radius meet the specified requirements
- Random sample climbers are fatigue cycle tested to simulate a Lineman/Arborist climbing a pole or tree
- The deformation test is to aid in the elimination of climber fatigue in the event a climber is used in an unusual manner such as descending a pole with large steps

PROPER FIT & COMFORT

Proper fit is important to your comfort and safety. Correct climber length is normally measured from the boot sole under the instep to a point 1" below the bone projection just below the knee joint with pad attached. Standard sleeves are included unless long sleeves are requested by adding suffix 'L' to the product number.

Long sleeves are generally preferred by people over 6'2".



Tape Measuring

Climber Sleeve Leg Length Adjustment

	Standard Stirrup Width	Narrow Stirrup Width
Standard Sleeves Model 9204	15 3/4" - 18 1/2" (40cm - 47cm)	14 1/2" - 17 1/4" (37cm - 42cm)
Long Sleeves Model 9202	18 3/4" - 21 1/2" (47cm - 54cm)	17 1/4" - 20 1/4" (37cm - 51cm)
Stand. BuckAlloy™ Sleeves Model 92041	15 3/4" - 18 1/2" (40cm - 47cm)	—
Long BuckAlloy™ Sleeves Model 92021	18 3/4" - 21 1/2" (47cm - 54cm)	—

SAFETY & INSPECTION

Climbers and all safety equipment must be inspected by a competent prior to use While inspecting climbers look for:

- Visible cracks; usually a fine jagged line
- Cuts or marks in the steel; created stress risers causing the climber to break at that point
- Make sure loop on climber sleeve is secure
- Make sure footstrap ring or loop is secured to climber stirrup
- Use two fasteners to secure the sleeve to the climber
- Inspect climber strap for cuts and excessive wear
- Make sure the pad loops are secure and free of cuts and are not worn thin
- Inspect climber stirrup to be sure it's not worn too thin
- **Never chisel initials or marks into climbers**

IF ANY OF THESE CONDITIONS EXIST, DISCONTINUE USE IMMEDIATELY

RULE OF THUMB: Buckingham recommends that all replaceable gaff climbers be replaced when the original gaff and one replacement set of gaffs have been worn out from normal use

PROPER GAFF SHARPENING PROCEDURE

An improperly sharpened climber gaff may be as dangerous as a gaff not sharpened at all. The gaff radius tip is critical for gaff penetration. Follow the instructions to be sure of proper maintenance and have a qualified person inspect your work.



1. Place climber in a clamp with blocks on each side to protect the climber
2. File gaff from heel to tip in a smooth over and down motion
Never file across or against the grain or the beehive of the gaff

Hint: Color gaff with black marker to ensure even filing of material



3. Slot marked 'Correct' on the gaff gauge should be your GUIDE to proper shaping of the gaff tip
4. Never use a pole gaff shorter than 1 1/4" long
Never use a tree gaff shorter than 2 1/4" long



MODEL 6303 FOR POLE GAFFS & CCA GAFFS
MODEL 6306 FOR TREE GAFFS

5. Check gaff width and thickness at the 1/2" and 1" windows as illustrated in the instructions included with the gaff gauge

6. Check thickness of stirrup to ensure it is thick enough to support your weight

PERFORMING THE POLE CUT OUT TEST TO ENSURE PROPERLY SHARPENED GAFF



- Place the climber on the leg, holding the sleeve with the hand; palm facing the pole
- With the leg at about 30° angle to the pole and the foot about 12 inches off the ground, lightly jab the gaff into the pole to a distance of approx. 1/4"



- Making certain that the strap loop is held against the pole with pressure from the leg, gradually exert full pressure of the foot straight down on the stirrup without raising the other foot off the ground to maintain balance if the gaff does not hold



- Keeping enough pressure on the stirrup to keep the gaff in the pole but not so much as to cause the gaff to penetrate any deeper

- Push the climber and the hand toward the pole by moving the knee until the sleeve is against the pole

- The point of the gaff shall cut into the wood and hold

- The pole surface cut shall not be longer than 2 inches measured from the point of gaff entry into the pole to the bottom of the cut on the pole surface

REPLACEABLE GAFFS

DOWEL & SCREW

Comes with 4 screws

Climbers issued Jan. 2011 or later

Replacement screws: Model N11T (4/pkg)

A. Model NB9106A for use with all T, TB, & SB, CCA replaceable gaff pole climbers. Measures 1 3/4 (4.5cm).

B. Model A9106A for use with all CCA replaceable gaff BuckAlloy™ climbers. Measures 1 3/4 (4.5cm).

C. Model NB9206A for use with all T, TB, & SB, replaceable gaff pole climbers. Measures 1 3/4 (4.5cm).

D. Model A9206A a 16° angled replaceable dowel and screw pole gaff for the BuckAlloy™ Aluminum climbers

E. Model NB9306 for use with all titanium and steel replaceable gaff tree climbers. Measures 2 3/4 (7cm).

SCREW STYLE

Comes with 4 screws

Climbers issued prior to Jan. 2011

Replacement screws: Model 11T (4/pkg)

F. Model T9106A for use with all T, TB, & SB, CCA replaceable gaff pole climbers. Measures 1 5/8 (4.1cm).

G. Model T9206A for use with all T, TB, & SB, replaceable gaff pole climbers. Measures 1 3/4 (4.5cm)

H. Model TB9306 for use with all titanium and steel replaceable gaff tree climbers. Measures 2 3/4 (7cm).

PIN STYLE

Comes with 4 drive lock pins

Climbers issued prior to Oct. 2007

Replacement screws: Model 11 (4/pkg)

I. Model 9106 for use with CCA pole climbers 9109 (straight) and 9009 (offset). Measures 1 11/16" (4.3cm)

J. Model 9206 for use with pole climbers 9209 (straight) and 9409 (offset). Measures 1 3/4" (4.5cm)

K. Model 9306 for use with tree climbers 9309 (straight) and 9509 (offset). Measures 2 3/4 (7cm)

CCA Gaffs



Pole Gaffs



Tree Gaffs



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CHANGING BUCKINGHAM GAFFS

CHANGING SCREW STYLE GAFFS ON BUCKINGHAM CLIMBERS

Removal

- ◎ Secure the climber such that the heads of the hex head fasteners are facing you
Buckingham recommends using a vise with protective jaw covers or small wooden blocks to secure the climber
- ◎ With a 5/32" hex head wrench loosen and remove the two hex head screws. See Fig. 1
- ◎ To remove the gaff from the climber; place the gaff on a soft surface such as a block of wood and strike the ridge of the gaff 5/8" from the tip of the gaff, the gaff will come out of the slot. See Fig. 2
- ◎ Ensure no damage is done to the climber or climber slot
- ◎ Use two fasteners to secure the sleeve to the climber

Installation

- ◎ Climber slot and gaff lug are manufactured for a precision fit. Climbers are then given a protective powder coat finish that may impede the insertion of gaff into climber slot. Finish may be removed from boss hole and lug with emery cloth.
- ◎ Press the front of the gaff lug into the climber leg iron slot (a light coat of grease will ease insertion.) It may be necessary to drive the gaff in by striking the back ridge of the gaff on a soft surface such as a block of wood. Fig 3.
- ◎ Insert the 2 black grade 8 screws and tighten using a 5/32" x 2 3/4" Allen wrench. Hand tighten with maximum torque to achieve complete tightness. This method can yield Buckingham's 136 in lb tightening recommendation for these fasteners. Visually inspect to ensure screw heads are flushed with the inside surface of climber leg iron. See Fig. 4
- ◎ Screw fasteners should be replaced after the first time removed. If re-using, apply a low to medium strength thread sealant (Loctite® or equivalent) to prevent screws from loosening. Screws may not be removable if permanent sealant used.

Figure 1



Figure 2



Figure 3



Figure 4



CHANGING DOWEL & SCREW STYLE GAFFS ON BUCKINGHAM CLIMBERS

Removal

- ◎ Secure the climber such that the heads of the hex head fasteners are facing you
Buckingham recommends using a vise with protective jaw covers or small wooden blocks to secure the climber
- ◎ With a 3/16" hex head wrench loosen and remove the two gaff attachment screws. Remove the gaff from the opposite direction.
- ◎ If gaff does not release from the leg iron, gently strike the gaff ridge approximately 1/2" from the tip on a soft surface such as a block of wood and remove.
- ◎ Ensure no damage is done to the leg iron or gaff dowel hole
- ◎ Discard the gaff and gaff attachment screws

Installation

- ◎ Press the gaff dowel into the gaff dowel hole of the leg iron, properly orientate the gaff so the tip is facing the stirrup, and align the screw holes of the gaff to the screw holes of the leg iron
- ◎ Insert the two included gaff attachment screws
- ◎ Hand tighten the bottom gaff screw (nearest gaff tip) and repeat hand tightening on the top gaff screw
- ◎ Tighten using a 3/16" x 4" length Allen wrench; hand tighten with maximum torque to achieve complete tightness. This method can yield Buckingham's 235 in lb tightening recommendation for these screws. Note: use of a longer wrench can yield results exceeding the 235 inch pound recommendation resulting in stripping or fracturing the screw head.
- ◎ Visually inspect to ensure screw heads are flushed with the inside surface of climber leg iron.
- ◎ Gaff attachment screws should be replaced after the first time removed, but if re-using, apply a low to medium strength thread sealant (Loctite® or equivalent) to prevent the screws from loosening. Screws may not be removable if a permanent type thread sealant is used.