

INCH-POUND

A-A-50114A

February 21, 1990

SUPERSEDING

A-A-50114

March 31, 1987

## COMMERCIAL ITEM DESCRIPTION

## PITON, MOUNTAIN, KNIFEBLADE OFFSET

The General Services Administration has authorized the use of this commercial item description in preference to types II and III of MIL-P-1474.

## 1. SALIENT CHARACTERISTICS

1.1 Design and construction. The knifeblade offset piton shall be chrome-molybdenum alloy 4130. The finish shall be black oxide. The maximum weight shall be 2.3 ounces. The manufacturer's identification symbol shall be permanently marked on the piton. Pitons shall be similar to figure 1, which is for illustrative purposes only and is not intended to preclude procurement of pitons otherwise meeting all the requirements of this document.

1.2 Dimensions. The overall length of the piton shall be  $3\text{-}3/8 \pm 1/8$  inch. The piton shall have a rounded offset 90 degrees to the blade. There shall be two carabiner holes, one on the offset and another one adjacent to the offset on the main blade. The holes shall be  $0.625 \pm 0.063$ ,  $-0$  inch in diameter. The blade shall be tapered from a thickness of  $0.025 +0.010$ ,  $-0$  inch at the end opposite the carabiner holes to a thickness of  $0.120$ ,  $+0.025$ ,  $-0$  inch. The blade width shall be 0.870 inch minimum to 1.280 inches maximum.

## 2. QUALITY ASSURANCE

2.1 Certification. The contractor shall certify, and maintain substantiating evidence, that the product offered meets the salient characteristics and requirements of this Commercial Item Description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Commander, U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5014.

AMSC N/A

FSC 8465

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2.2 Visual examination. Each lot of pitons shall be inspected in accordance with MIL-STD-105. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0. The lot size shall be expressed in units of pitons. The sample unit shall be one piton. The pitons shall be examined for the defects listed below:

Finish not smooth and adherent; not free of burrs, rough spots, sharp edges, slivers, flat areas or projections; any component missing or not specified type; any component fractured, split, dented, bowed, malformed, damaged or loose; not free of forging lap, blade tapers not uniform; markings in wrong location, incomplete, illegible, incomplete, or not as specified.

2.3 Dimensional examination. The pitons shall be examined without damaging or disassembling the pitons. Any dimension not within the specified tolerances shall be classified as a defect. The lot size shall be expressed in units of pitons. The sample unit shall be one piton. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

2.4 Testing. The knifeblade pitons shall be pull tested in a vise. The vise opening shall consist of standard flat knurled parallel jaws. Eighty percent of the blade length of the piton shall be held firmly in the clamp. A 2000-pound minimum force shall be applied at a right angle to the gripping surface by insertion of a steel hook or link, diameter  $1/2 \pm 1/32$  inch, through the hole on the blade portion of the piton. Any piton that fails to withstand a minimum force of 2000 pounds without permanent deformation shall be classified as a defect. The lot size shall be all offset knifeblade pitons offered for delivery at one time. The inspection level shall be S-2. Any test failure shall be cause for rejection of the lot. The test shall be performed at room temperature. Any industrial testing machine may be used to determine compliance with this requirement.

### 3. PACKAGING

3.1 Preservation. Pitons that are not furnished with a protective finish, shall be cleaned by process C-1, dried, and then coated with type P-1 preservative in accordance with MIL-P-116.

3.2 Packaging. Twelve pitons shall be packaged in an intermediate box. The intermediate box shall be snug-fitting and fabricated from 200-pound test corrugated fiberboard.

3.3 Packing. Two hundred forty pitons packaged as specified, shall be packed in a close-fitting corrugated fiberboard shipping container conforming to style RSC, type CF, class domestic, grade 275 of PPP-B-636. The shipping container shall be completely filled with no voids and of a size that can be palletized in accordance with MIL-STD-147. Each shipping container shall be closed in accordance with the appendix of PPP-B-636.

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3.4 Palletization. When specified (see 4.2), pitons, packed as specified, shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means C and D, or film bonding means F or G, in accordance with MIL-STD-147.

3.5 Marking. In addition to any special markings required by the contract or purchase order, intermediate boxes, shipping containers, and palletized unit loads shall be marked in accordance with MIL-STD-129.

#### 4. NOTES

4.1 Intended use. The pitons are intended to be used in operations involving steep ascents to provide security for men and equipment by driving the pitons into cracks in rocks.

4.2 Order data. Acquisition documents should specify the following:

- a. Title, number, and date of this document.
- b. When palletization is required (see 3.4).

4.3 Sources of documents.

4.3.1 Source of government documents. Copies of military and Federal documents are available from:

Standardization Documents Order Desk  
Bldg. 4D, 700 Robbins Avenue  
Philadelphia, PA 19111-5094

#### MILITARY INTERESTS:

##### Custodians:

Army - GL  
Navy - NU  
Air Force - 99

##### Review activities

Air Force - 82  
DLA - CT

##### User activity

Navy - MC  
Air Force - 45

#### CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

#### PREPARING ACTIVITY:

Army - GL

(Project 8465-0060)

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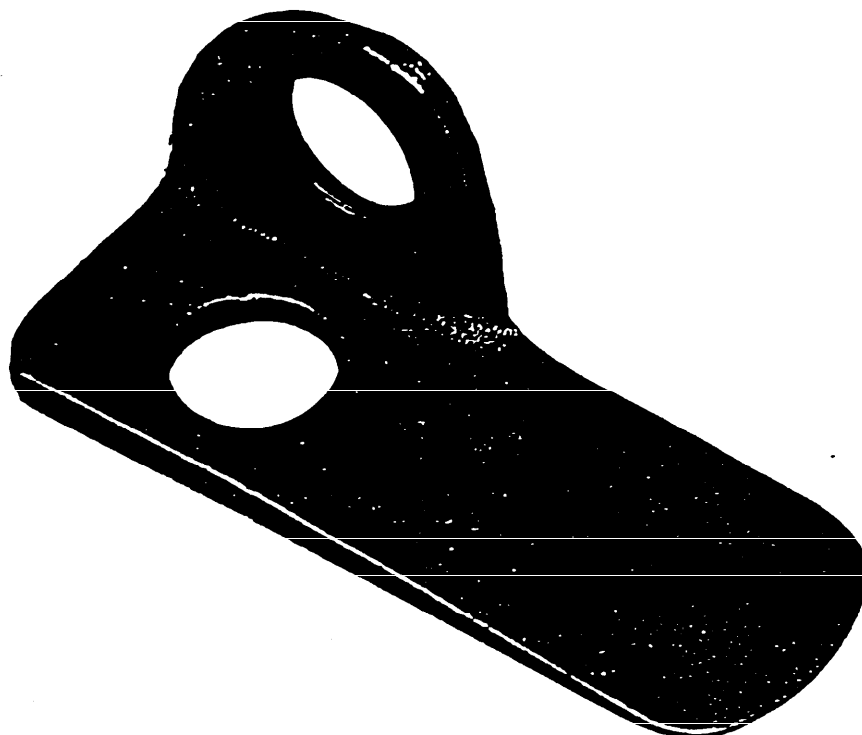


FIGURE 1. Piton, Mountain, Knifeblade, Offset.