INCH-POUND

A-A-59100
April 10, 1997
SUPERSEDING
MIL-K-818D
30 September 1985

COMMERCIAL ITEM DESCRIPTION

KNIFE, POCKET, GENERAL PURPOSE

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. SCOPE.

1.1 Scope. This commercial item description (CID) covers one type and size general purpose pocket knife made of corrosion-resistant steel and consisting of a cutting blade, a can opener blade, a leather punch blade, a combination screwdriver and bottle cap lifter blade, and a clevis.

1.2 Intended use. The pocket knife is intended for use as a cutting tool, leather punch, screwdriver, can opener, and bottle cap lifter.

2. SALIENT CHARACTERISTICS

2.1 Materials. All components of the knife shall be made of corrosion-resistant material.

2.2 Design. The knife shall consist of the components shown on figures 1 and 2. Using the thumb nail, it shall be possible to open any blade while the other blades remain open or closed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5018 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 5110

2.3 Components. The cutting blade shall measure a nominal 3 1/4 inches in length. The leather punch blade shall be concave formed on one side and convex formed on the opposite side. Springs shall be used to allow for proper blade opening, for closing, and for use, one spring for the cutting blade and punch, and one for the can opener blade and screwdriver/bottle cap lifter blade. The rounded handle plates shall measure a nominal 3 5/8 inches by 3/4 inch and shall incorporate a knurled design on the outer surface on each side. The rivets used to assemble the knife shall be set to ensure that all components fit tightly, and that the blades are held firmly but open freely. The clevis shall have flattened ends with holes to receive the rivet. The rivet used to attach the clevis shall be capable of holding the components in place without the clevis. When attached, the clevis shall be held firmly in place and rotate freely around its axis.

2.4 Physical requirements.

2.4.1 Hardness. Hardness values shall be as specified in 2.4.1.1 through 2.4.1.5 when tested as specified in 4.2.1.1.

2.4.1.1 Cutting blade. The cutting blade shall be heat treated to a Rockwell "C" hardness range of 56 to 59 except that the tang shall have a Rockwell "C" hardness range of 25 to 40.

2.4.1.2 Can opener blade. The can opener blade shall be heat treated to a Rockwell "C" hardness range of 45 to 50 except that the tang shall have a Rockwell "C" hardness range of 25 to 40.

2.4.1.3 Leather punch blade. The leather punch blade shall be heat treated to a Rockwell "C" hardness range of 45 to 50 except that the tang shall have a Rockwell "C" hardness range of 25 to 40.

2.4.1.4 Screwdriver/bottle cap lifter blade. The screwdriver bottle cap lifter blade shall be heat treated to a Rockwell "C" hardness range of 45 to 50 except that the tang shall have a Rockwell "C" hardness range of 25 to 40.

2.4.1.5 Springs. The entire spring shall be uniformly heat treated and stress relieved to a Rockwell "C" hardness range of 45 to 50.

2.5 Performance requirements.

2.5.1 Cutting blade. The cutting blade shall not show undue wear such as nicks, fractures or breaks when tested as specified in 4.2.2.1.

2.5.2 Can opener blade. The can opener blade shall not fracture, break or bend while opening cans when tested as specified in 4.2.2.2. The tops of the cans shall be completely severed with the ragged cut edge of the can turned down into the can.

2.5.4 Springs. The springs shall show no signs of cracks, breaks, distortion, or permanent set when tested as specified in 4.2.2.4.

2.6 Marking. The letters "U.S." shall be centered and indented on the handle plate (can opener and screwdriver side). The manufacturer's name, trade mark, or trade name, and the year of manufacture shall be indented in characters 1/16 inch high on the cutting blade adjacent to the rivet hole.

2.7 Workmanship. There shall be no sharp edges (except for blades), rough edges, or burrs, when the knife is open or closed. All rivet holes shall be smooth. Rivets shall have smooth, rounded heads. The back and ends of the knife shall be ground and polished in accordance with good commercial practice so that all mating components are flush.

2.8 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within the tolerances specified using conversion tables contained in the latest revision of ASTM E 380, and all other requirements of this commercial item description are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable. The contracting officer has the option of accepting or rejecting the product.

3. REGULATORY REQUIREMENTS

3.1 Contractor-recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4. QUALITY ASSURANCE PROVISIONS

4.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, shall conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market or the same product that has successfully been delivered to the Government on a previous contract or purchase order. The Government reserves the right to require proof of such compliance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

The following market acceptability criteria is necessary to document the quality of the product to be provided under this CID:

The company must have sold a minimum of 1000 units meeting the requirement of this CID, in the commercial or government marketplace over the past 2 years.

4.2 Tests.

4.2.1 Component tests.

4.2.1.1 Hardness. Blades and springs specified in 2.4.1 shall be tested for hardness as specified in ASTM E 18 prior to assembly. Any value not within the specified range shall constitute a test failure.

4.2.2 End item tests.

4.2.2.1 Cutting blade. The cutting blade shall be tested by cutting ten shavings, not less than 1/16 inch thick by 1/4 inch wide by 2 inches long, from a strip of hardwood. In cutting the shavings, the blade shall enter the wood at an angle of not less than 30 degrees. Any blade nicks, fractures, or breaks shall constitute a test failure.

4.2.2.2 Can opener blade. The can opener blade shall be tested by severing the tops of three circular, three elliptical, and three rectangular cans, each having a circumference of at least 20 inches. Any fracturing, breaking, or bending of the blade, or any blade unable to completely sever the tops of the cans while having the ragged cut edge turned down into the can shall constitute a test failure.

4.2.2.3 Screwdriver/bottle cap lifter blade. With the screwdriver end of the blade secured in a slot having a depth not more than twice blade thickness, apply a force of 20 inch-pounds to the knife handle in both a right and left direction. Any permanent set, fracture, break, or other deformity shall constitute a test failure.

4.2.2.4 Springs. The springs shall be tested for durability by placing the knife in a fixture and opening and closing the cutting blade at a rate of 30 to 35 cycles per minute for a total of 3000 cycles. Any cracks, breaks, distortion, or permanent set shall constitute a test failure.

5. PACKAGING

5.1 Packaging. Preservation, packing, and marking requirements shall be as specified in the contract or purchase order (see 6.1).

6. NOTES

6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the

following information in the procurement documents (if applicable):

a. Title, number, and date of this CID.
b. Preservation, packing, and marking required (see 5.1)

6.2 Sources for Non-Government Association Documents.

ASTM STANDARDS

E 18 - Standard Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials
E 380 - Use of the International System of Units (SI) (The Modernized Metric System)

(Application for copies of ASTM standards should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohoken, PA 19428-2959).

6.3 Sources of supply. A manufacturer whose products are known to meet the requirements of this CID is listed below; however, competition is not limited to this company.

Camillus Cutlery Corporation
52-54 W. Genesee Street
P. O. Box 38
Camillus, NY 13031
315/672-8111

6.4 National Stock number (NSN). The following is the NSN assigned, which corresponds to this CID:

Knife, Pocket, General Purpose - 5110-00-162-2205

MILITARY INTERESTS:

Custodians

Army - GL
Navy - AS
Air Force - 99

Review Activities

Navy - MC
Air Force - 84

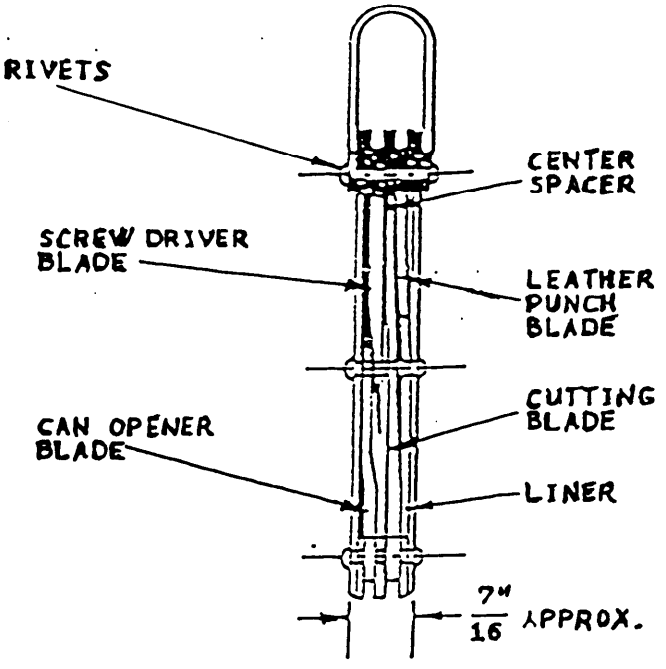
CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

PREPARING ACTIVITY:

Army -GL

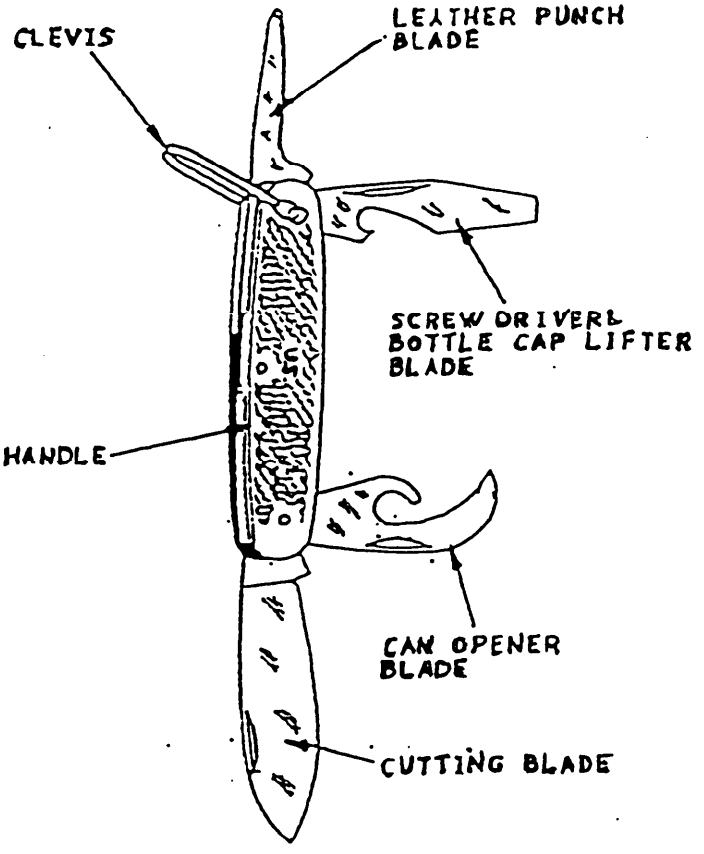
Project 5110-0354



TOP VIEW

KNIFE ASSEMBLY, CLOSED

FIGURE 2



KNIFE ASSEMBLY, OPEN

FIGURE 1

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER A-A-59100	2. DOCUMENT DATE (YYMMDD) 97 - 04 - 10

3. DOCUMENT TITLE Knife, Pocket, General Purpose

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)	b. ORGANIZATION	
c. ADDRESS (Include Zip Code)	b. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (If applicable)	7. DATE SUBMITTED (YYMMDD)

a. NAME U.S. Army Natick RD&E Center	b. TELEPHONE (Include Area Code) (1) Commercial 508-233-5175 (2) AUTOVON 256-5175
c. ADDRESS (Include Zip Code) Commander, U.S. Army Natick RD&E Center Attn: SSCNC-WEF Natick, MA 01760-5018	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340