

[INCH-POUND]  
A-A-3045  
October 29, 1996

## COMMERCIAL ITEM DESCRIPTION

### HAMMER, GEOLOGISTS' (PROSPECTING PICK)

The General Services Administration has authorized the use of this Commercial Item Description for procurement of type V hammer as specified in GGG-H-86C for all federal agencies.

#### 1. SCOPE.

1.1 Scope. This Commercial Item Description covers a geologists' (prospecting pick) hammer used for driving nails, breaking stone, and similar uses.

#### 2. CLASSIFICATION

2.1 Classification. Not applicable.

#### 3. SALIENT CHARACTERISTICS.

3.1 Design. The hammer shall be designed with a square cross-sectional shape with a flat face on one end and a pointed pick on the opposite end and shall be similar to Figure 1. The length of the pick from the near side of the eye to the point shall be not less than 4 inches. The flat face shall have a medium-fine, bright polished finish and the remainder of the exposed metal shall be fully polished. The hammer head and handle shall be forged steel. The face and pick end shall be hardened to between 50 and 57 on the Rockwell C scale. The hammer shall conform to the dimensions and weights specified in Table I.

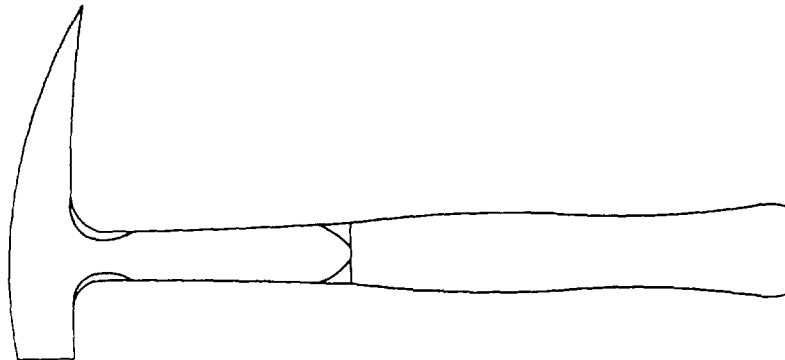


Figure 1. Hammer, geologists' (prospecting pick).

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Federal Supply Service, Tools and Appliances Commodity Center, Kansas City, MO 64131.

A-A-3045

TABLE I. Hammer, geologists' (prospecting pick)

Weight $\pm 2$ (Ounces)	Head length overall $\pm 3/4$ (Inches)	Distance across flats at face $\pm 3/16$ (Inch)	Handle length overall $\pm 1$ (Inches)
16	7-1/4	3/4	13
24	7-3/4	7/8	13

3.1.1 Handle. The handle shall be forged solid steel integral with the head, or forged steel welded securely to the head. The handle shall not loosen under any working conditions. The grip portion shall be covered with a nylon-vinyl, leather, acrylonitrile rubber, or PVC grip. The grip length shall be at least 8 inches.

3.2 Hardness. When tested in accordance with ASTM E18, the face and pick of the hammer shall be between 50 and 57 on the Rockwell C scale. The test shall be performed on the face and pick, close to the point but not closer than 1/8 inch.

3.3 Identification marking. The tool shall be marked with the manufacturer's name or identifying symbol and the state or country of manufacture, unless otherwise specified. All identification markings shall be engraved, etched, molded, or indented directly on the item's surface in such a manner that it remains clearly legible throughout the life of the item.

3.4 Workmanship. Details of workmanship shall be in accordance with the best commercial practice. Paints, coatings, platings, and finishes shall be smooth, adherent, continuous, and not stained or discolored. External surfaces shall be free of tool and gouge marks, nicks, or other surface imperfections. The item shall be free from manufacturing workmanship defects (e.g., sharp or rough external edges, corners, or surfaces) and material workmanship defects (e.g., pits, rips, fins, burrs, tears, nodules, cracks, blisters) which may adversely impact the item's serviceability, durability, safety, or appearance.

#### 4. REGULATORY REQUIREMENTS.

4.1 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).

4.2 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 Federal Standard 376) and all other requirements of this document 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.

#### 5. QUALITY ASSURANCE PROVISIONS.

5.1 Product conformance. The product provided to the Government shall conform to the contractually specified requirements. For product characteristics and requirements which are not contractually specified, the provided product shall conform to the producer's own drawings, standards, specifications, and quality assurance practices for the highest quality product commercially offered by the producer. If the product is not commercially offered by the producer, the best commercial practices shall apply. The Government reserves the right to require proof of such conformances prior to first delivery and thereafter as provided for under the provisions of the contract.

5.2 Responsibility for inspection. Unless otherwise specified, the contractor is responsible for the performance of all inspection requirements and may use any commercial facilities (including the contractor's own facilities) suitable

for performance of the inspection requirements, unless disapproved by the Government. The Government reserves the right to perform any inspections deemed necessary to assure the item conforms to the specified requirements.

5.3 Bid sample(s). When a bid sample requirement is specified in the solicitation, the bid sample(s) shall be inspected for all salient characteristics by the Government. A failure of any bid sample to meet the salient characteristics shall be cause for rejection.

5.4 First article sample(s). When a first article requirement is specified in the contract, the first article sample(s) shall be inspected for all salient characteristics. A failure of any first article sample to meet the salient characteristics shall be cause for rejection.

5.5 Special testing requirements. Each tool shall be tested for cracks prior to being presented for Government acceptance.

5.5.1 Crack detection test. The test shall consist of a bi-directional wet magnetic particle inspection test in accordance with ASTM E709 and shall be performed after heat treating, and prior to applying the grip. If a hammer head has a surface crack, the hammer may be ground or buffed to eliminate this condition, but must maintain the overall weight, shape, and dimensional requirements. All reworked hammers shall be retested and pass the magnetic particle inspection test prior to final assembly. Any hammer found to have a through crack shall be rejected.

5.6 Striking test. The sample(s) being tested shall strike 12 or more blows with the face of the hammer on the end of a rigidly supported steel bar. The hardness of the test face of the bar shall be not less than 92 nor more than 105 on the Rockwell B scale. The cross-sectional area of the test end of the bar shall not exceed the maximum cross-sectional area of the tested hammer face by more than 10 percent. The face of the test end of the bar shall be smooth and may be either flat or slightly convex. Visual examination shall show no evidence of chipping, cracking, or spalling after the test. Failure to meet this test shall be cause for rejection of the hammer and the lot it represents.

5.7 Pick end test. The sample(s) being tested shall be held securely in an upright position by a vise or clamp with the longitudinal axis of the pick end in approximately the vertical position and with the face end of the hammer resting on a solid foundation. A flat, 1/2-inch-wide by 3/4-inch-thick steel bar having a Rockwell B hardness of between 92 and 105 shall be held at right angles to the pick end and shall be struck a sufficient number of blows with a heavy hammer as to make a cut in the bar a minimum of 3/16 inch deep. Visual examination of the pick end shall show no evidence of any flack, bend, crack, fracture, spall or chip, nor shall the sharp edge wear or flatten at the completion of the test. Failure to meet this test shall be cause for rejection of the hammer and the lot it represents.

## 6. PACKAGING.

6.1 Packaging. Requirements of preservation, packing, packaging, and marking of packages shall be as specified in the contract or order.

## 7. NOTES.

(This section contains information of a general or explanatory nature that is not mandatory.)

### 7.1 Addresses for obtaining copies of referenced documents:

Federal Specifications and Standards: Federal Supply Service Bureau, Specification Section, Suite 8100, 470 L'Enfant Plaza, SW, Washington, DC 20407.

Federal Acquisition Regulations (FAR): Government Printing Office, Superintendent of Documents, Washington, DC 20402-9371.

A-A-3045

ANSI/ASQC Z1.4: American Society for Quality Control, P.O. Box 3005, 611 East Wisconsin Avenue, Milwaukee, WI 43201-4606.

ASTM E18 and E709: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.2 Ordering data. Purchasers should select the preferred options permitted herein and should include the following information in procurement documents:

- (a) Title, number, and date of this Commercial Item Description.
- (b) When applicable, the appropriate NSN(s).
- (c) If bid samples are required, the number of samples required, and the subjective inspection requirements.
- (d) If first article samples are required and the number of samples required.
- (e) If lot sampling inspection is required and the applicable lot sampling requirements. For example

Sampling for inspection. Sampling for inspection (both examinations and testing) shall be in accordance with ANSI/ASQC Z1.4.

Inspection. Each sample tool shall be examined and tested for all salient characteristics. The Inspection Level shall be S-2 with an Acceptable Quality Level of 4.0, expressed in terms of defects per hundred units.

- (f) What preservation, packing, packaging, and marking of packages are required.

7.3 National Stock Numbers (NSNs). The following list of NSNs corresponds to the hammer specified in this CID. This list may not be indicative of all possible NSNs associated with this CID.

NSN	SIZE
5120-00-293-3519	24 oz. head

MILITARY INTERESTS:

NONE: DoD has no registered interest in revisions or notices to this Commercial Item Description until further notice.

PREPARING ACTIVITY:

GSA - FSS