

DESCRIPTION FOR PURCHASE

DFP No. 434

TOOL SET, AIRCRAFT ARMAMENT REPAIRMAN, INDIVIDUAL

1. Scope. This tool set provides the necessary components to repair and maintain the aircraft armament systems and support equipment currently in the Army inventory. The tool set is intended for use by MOS 15J, 15X, 15Y (formerly MOS 68J/68X per MOS change document dated 25 April 2003) repairman.

- 1.1 Abstract. The Aircraft Armament Repair, Individual Tool Set is specifically organized to provide the aviation armament repairman the tools needed to maintain and repair aircraft armament. The general design and layout of the tool kit has been specified to the degree that is required to assure that the kit serves the daily life style and work needs of the individual repairman. The mission may include repair and maintenance of weapon systems utilized by rotary wing aircraft such as the Blackhawk, Apache, and Kiowa helicopters. The kit consists of a tool chest with a hinged lid and a set of various maintainer type hand tools contained in dedicated foam cutouts in various removable drawers. The usual operating procedure will be to transport the chest to the work site, open it, remove the tools on a "as required" basis and replace the tool in its specified location when the maintenance task is completed

2. Applicable documents.

2.1 Government documents. Commercial Item Description, A-A-1927D, for padlocks, forms a part of this specification to the extent specified herein. Unless otherwise specified, the issue of this document shall be the latest listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS), and supplement thereto, that is cited in the solicitation. Copies of Federal Specifications may be obtained from the General Services Administration Business Service Office in Washington, DC, call (202) 619-8925.

2.2 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for attached drawings), the text of this specification shall take precedence. Nothing in this document, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. Product requirements.

3.1 General description. The Tool Set, Aircraft Armament Repairman, Individual consists of a tool chest, the prescribed tool load, (see paragraphs 3.4.1 – 3.4.111) and other items as identified by the kits component list and such items, devices or characteristics as necessary to provide rapid inventory capability and tool position retention during transportation and rough handling.

3.2 Design. The chest shall be configured with the following characteristics.

- a. drawers that open to the front (see 3.5.2)
- b. a top that opens up to expose a tool bay (see 3.5.4)
- c. a permanently installed separately locking compartment to hold mechanic's personal items such as car keys, jewelry and wallet (see 3.5.5)
- d. a way to secure the drawers to keep them from opening while the chest is being moved around (see 3.5.2)
- e. a drawer organizing method that will display each tool in its dedicated location and that will retain the tools in their positions during use, transport and rough handling of the chest (see 3.5.3)
- f. a full load of tools as identified by the enclosed component listing (see 3.4)

- g. permanently attached wheels and a handle for rolling the tool chest around without having to carry it (see 3.5.7)
- h. two handles, one on each end of the chest (see 3.5.6)

3.3 Construction of the chest. The chest shall be new and constructed of parts and materials that are without defects. Each chest shall be delivered assembled and loaded with the required component list items so that the kit can be immediately used for its intended purpose.

3.3.1 Materials. Unless otherwise specified herein, the chest shall be made of any suitable material that will meet all of the performance requirements set forth in this specification.

3.3.2 Workmanship. The quality of workmanship imparted to the chest shall equal or exceed that typically provided to domestically produce commercial products of this type. The chests presented for acceptance shall have been manufactured with skill and care; shall be uniform, neat, and clean; and shall be free from irregularities and anomalies which degrade form, fit, function, performance or appearance.

3.3.3 Tools and related items to be loaded into the kit. All tools shall be of an industrial or professional quality. Industrial/professional quality tools are normally distinguished from general purpose and home owner quality tools in that they are designed for constant and rigorous use by professionals in an industrial environment. Only industrial/professional quality tools that have a verifiable market place acceptance shall be included in this tool set. The toolbox shall allow enough space for a 15% expansion of the total tool load.

Disclaimer: In order to help clarify the Government's requirements digital images of actual tools available in the commercial market place have been included along with the verbal descriptions of the tools. The use of any particular image does not imply that the Government has a preference for a specific brand of tool, nor does it imply that the tool in the image automatically meets our requirements, especially as they relate to those requirements driven by law regarding tools that must be made inside the United States or its territories or any other governing rules, regulations and laws. The verbal description of the tool is the controlling requirement. It is the responsibility of the suppliers and manufacturers to assure that tools offered to fulfill the need meet all of the requirements related to the tool.

3.4 Component list. The items identified in paragraphs 3.4.1 thru 3.4.111 shall be loaded into the tool chest.

- 3.4.1 BIT, SCREWDRIVER (0). ¼ IN HEX DR, CROSSTIP, #0 TIP SIZE, STEEL, 1 IN OVERALL, LENGTH NOMINAL



- 3.4.2 PLIERS, CANNON PLUG: 8"-11" overall length, ability to grip irregularly shaped object (such as cannon plug or round pipe) from a minimum of .5"-.75" and a maximum of 2.5" in diameter; replaceable, non-marring vinyl jaw inserts



- 3.4.3 PLIERS, ARC JOINT: 9"-11" overall length, serrated jaws, minimum jaw capacity 1.375", minimum of 5 adjustments, vinyl grip handles.



- 3.4.4 BOX, SMALL PARTS. Plastic, 6 compartment, 8" long, 4-1/8" deep, 1-5/32" high, transparent



- 3.4.5 BRUSH, PARTS CLEANING. Oval, black bristle, bristle size 7/8" wide, 2-1/8" long, 11/16" thick,



- 3.4.6 HANDLE, BREAKER BAR. 1/4" square drive, 6" ± 1/2" in length, flex handle, chrome plated



- 3.4.7 HANDLE, BREAKER BAR. 3/8" square drive, flex handle, 9.5±.5" long, chrome plated



- 3.4.8 EXTENSION, SOCKET WRENCH. ¼" square drive, 14" ± .5" long, chrome plated, 5/16" shank dia.



- 3.4.9 EXTENSION, SOCKET WRENCH. 3/8" square drive, 3±.5" long, chrome plated



- 3.4.10 EXTENSION, SOCKET WRENCH. 3/8" square drive, 6±.5" long, chrome plated



- 3.4.11 EXTENSION, SOCKET WRENCH. ¼" square drive, 6±.5" long, chrome plated, 5/16" shank dia.



- 3.4.12 EXTENSION, SOCKET WRENCH. ¼" square drive, 1-1/2" ± .5" long, chrome plated, 5/16" shank dia.



- 3.4.13 EXTENSION, SOCKET WRENCH, FLEXIBLE, (6). ¼ IN SQ DR, 6" ± .5" OVERALL LENGTH, 5/16" ± 1/16" CABLE DIA



- 3.4.14 FLASHLIGHT. USES 2 standard alkaline "AA" Batteries or readily available lithium BATTERIES, has a BLUE FILTER that can be applied to the lens without removing the bezel or clear lens. Must have the ability to switch from colored filter to clear without physically removing the filter from the flashlight (known source: Surefire's G2 Nitrolon with F27 blue filter)



3.4.15 HAMMER, HAND, DEADBLOW. 16 OZ HEAD WEIGHT



3.4.16 HAMMER HAND, MACHINIST'S. ball peen, 8 oz weight, fiberglass handle, ergonomic grips



3.4.17 HANDLE, SOCKET WRENCH, RATCHET. 3/8" square drive, non quick release, 7.625" ± .500" long typical, chrome, able to change ratchet direction with hand holding the ratchet



3.4.18 HANDLE, SOCKET WRENCH, RATCHET. 1/4" square drive, 5" ± .5" in length, chrome plated, able to change ratchet direction with hand holding the ratchet



- 3.4.19 HANDLE, SOCKET WRENCH, SPEEDER, AND BRACE TYPE. ¼ in sq dr, 16" ± 1" overall length, steel overall, polished or satin finish acceptable



- 3.4.20 KEY SET HEX HD SCREW. 9 piece, hex sizes 1.5, 2, 2.5, 3, 4, 5, 6, 8 & 10 mm, ball end, L shaped, with plastic caddy that holds each key individually and has key sizes permanently marked on the caddy.



- 3.4.21 KEY SET HEX HD SCREW. 13 piece, hex sizes .05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, ¼, 5/16 and 3/8", ball end, L shaped with plastic caddy that holds each key individually and has key sizes permanently marked on the caddy.



- 3.4.22 KEY, SOCKET HEAD SCREW .035 in wrenching size nominal, 1.160" min – 1.347" max overall length; 1.125" min – 1.312" max long arm length; .25" min - .438" max short arm length.



- 3.4.23 **KNIFE, POCKET, MULTI-PURPOSE.** Multi-purpose pocket survival tool constructed of stainless steel. Overall length 5-1/8 inches closed, plus or minus 1/8 inch; non-glare satin finish. Pliers' head shall retract and slide into the handle. Other components shall fold into the handles, and when opened, shall lock in the open position and be released by lock release mechanisms on outside of handles. Tool shall consist of the following components: drop point knife blade, file, three flat tip screwdrivers, needle-nose pliers with wire cutter and crimper, one Phillips tip screwdriver, serrated knife blade, can opener, bottle opener, ruler, lanyard eye, and belt attachable carrying case.



- 3.4.24 **PLIERS, DIAGONAL CUTTING.** Side cutters, 8±.5" long, with heavy duty cushion grip handles and hardened cutting edges



- 3.4.25 **PLIERS, LONG NOSE.** , 8±.5" long, professional quality, with cushion grips



- 3.4.26 **PLIERS, LONG REACH.** 8" ± .5" IN OVERALL LENGTH, STEEL, VINYL COMFORT GRIPS,

FLAT NOSE

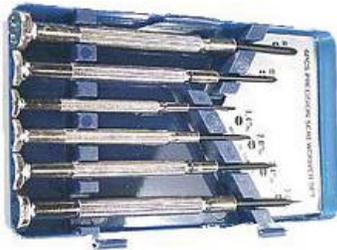


3.4.27 PLIERS, SLIP JOINT. rounded head, $6.75 \pm .5$ " slip joint



3.4.28 PULLER, RECOIL MECHANISM SEE ATTACHED DRAWING

3.4.29 SCREWDRIVER SET, JEWELERS, 6 PC, .025", .040", .055", .070", .080", .1" blade widths, $3.75 \pm .5$ " OVERALL LENGTH



3.4.30 SCREWDRIVER, CROSSTIP. SIZE 0, 2 IN BLADE LENGTH NOMINAL



3.4.31 Not used.

3.4.32 SCREWDRIVER, CROSS TIP. SIZE 1, 3" LONG BLADE LENGTH NOMINAL



3.4.33 SCREWDRIVER, CROSS TIP. SIZE 2, 4" LONG BLADE LENGTH NOMINAL



3.4.34 Not used.

3.4.35 Not used.

3.4.36 SCREWDRIVER, FLAT TIP. 3/8" TIP, 8" LONG BLADE LENGTH NOMINAL



3.4.37 Not used.

3.4.38 Not used.

3.4.39 Not used.

3.4.40 SOCKET WRENCH, 1/2 INCH SQ DR, (27). 27 MM WRENCH SIZE, 12 PT, STD LENGTH, CHROME OR SATIN



3.4.41 SOCKET WRENCH, 1/4 INCH SQ DR, (.156). 5/32IN WRENCH SIZE, STANDARD LENGTH, 6 PT, CHROME OR SATIN



3.4.42 SOCKET WRENCH, ¼ INCH SQ DR, (.187). 3/16 IN WRENCH SIZE, STANDARD LENGTH, 12 PT, CHROME OR SATIN



3.4.43 SOCKET WRENCH, ¼ INCH SQ DR, (.219) 7/32 IN WRENCH SIZE, STANDARD LENGTH, 12 PT, CHROME OR SATIN



3.4.44 SOCKET WRENCH, ¼ INCH SQ DR, (.250). ¼ IN WRENCH SIZE, STANDARD LENGTH, 12 PT CHROME OR SATIN



3.4.45 SOCKET WRENCH, ¼ INCH SQ DR, (.281). 9/32 IN WRENCH SIZE, STANDARD LENGTH, 12 PT, CHROME OR SATIN



3.4.46 SOCKET WRENCH, ¼ INCH SQ DR, (.312). 5/16 IN WRENCH SIZE, STANDARD LENGTH, 12 PT, CHROME OR SATIN