
DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

Inspection and Repair of New Aviation Tool System Kits

Headquarters Department of the Army, Washington, D.C.
19 December 2007

DISTRIBUTION STATEMENT A: Approved for public release, distribution is unlimited

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

NOTE

This publication replaces paragraph 5. j., of TB 1-4920-445-20-1 dated 9, June 2004.

1. **PURPOSE.** The purpose of this TB is to inspect all New Aviation Tool System (NATS) kits returning from Enduring Freedom/Iraqi Freedom (EF/IF), perform repairs by replacing tool boxes and foam inserts to correct reported operational problems, and to incorporate approved configuration changes.
2. **PRIORITY CLASSIFICATION.** PRIORITY.
3. **SUMMARY OF PROBLEM.** Operations in EF/IF may have caused serious deterioration to the New Aviation Tool System (NATS) kits, which will make necessary replacement or repair of box and foam inserts necessary.
4. **APPLICATION.** This TB shall be applied to all kits listed in Table 1 returning from operations in SWA. Fielding will occur based on Department of the Army Master Priority List (DAMPL) sequence and be coordinated through all applicable MACOMs.
 - a. Table 1 lists all the NATS tool kits that are eligible for a replacement box and foam inserts under this TB, based on inspection criteria

TABLE 1. NATS TOOL KITS (CLASS VII, MAJOR ITEM)			
DESCRIPTION	PART NUMBER	NSN	LIN
Tool Kit, General Mechanic's, Army Aircraft	CL 5180-99-B01	5180-01-375-6925	W30949
Tool Kit, Airframe Repairer's, Army Aircraft	CL 5180-99-B02	5180-01-376-0436	W30675
Tool Kit, Electrical Repairer's, Army Aircraft	CL 5180-99-B06	5180-01-375-6926	W36703
Tool Kit, Power Plant Repairer's, Army Aircraft	CL 5180-99-B07	5180-01-375-6927	W38073
Tool Kit, Powertrain Repairer's, Army Aircraft	CL 5180-99-B13	5180-01-375-6928	W49238
Tool Kit, Hydraulic Repairer's, Army Aircraft	CL 5180-99-A03	5180-00-323-4891	W43279
Tool Kit, Aircraft Inspector Technical (TI)	CL 5180-99-A09	5180-00-323-5114	W30812

NOTE

NATS Tool kits in Table 1, requiring a replacement box shall be transferred to the replacement boxes listed below Table 3 (rolling suitcase type box with flip top and front, containing pre-cut foam insert drawers). The Technical Inspector Kit listed in Table 1 requiring replacement shall be transferred to a small plastic brief case type container listed in Table 3.

- b. Table 2 below lists all tool kits manufactured by Kipper Tool Company. These tool kits are covered by a complete manufacturer warranty; tools, box and foam. These Kipper tool kits should be inspected for serviceability by owning units and any organization having unserviceable components should coordinate directly with Kipper tool Company for warranty service. This warranty process can be exercised at any time by emailing: warranty@kipperool.com (www.kipperool.com) or calling customer service at 800-295-9595. Since these Kipper tools kits are covered under an Original Equipment Manufacturer (OEM) warranty process, they are not eligible for a replacement box and foam under this insert under the provisions of this RESET TB.

TABLE 2. KIPPER TOOL KITS (CLASS VII, MAJOR ITEMS)			
DESCRIPTION	PART NUMBER	NSN	LIN
Tool Kit, General Mechanic's, Army Aircraft	KIT PEOAVN-B01	5180-01-548-4210	W30949
Tool Kit, Airframe Repairer's, Army Aircraft	KIT PEOAVN-B02	5180-01-548-4211	W30675
Tool Kit, Electrical Repairer's, Army Aircraft	KIT PEOAVN-B06	5180-01-548-4213	W36703
Tool Kit, Power Plant Repairer's, Army Aircraft	KIT PEOAVN-B07	5180-01-548-4216	W38073
Tool Kit, Powertrain Repairer's, Army Aircraft	KIT PEOAVN-B013	5180-01-548-4217	W49238
Tool Kit, Hydraulic Repairer's, Army Aircraft	KIT PEOAVN-B03	5180-00-548-4219	W43279
Tool Kit, Aircraft Inspector Technical (TI)	KIT PEOAVN-B09	5180-00-548-4223	W30812

- 5. INSPECTION AND REPAIR PROCEDURES.** RESET of all kits will be accomplished by fielding team representatives who will inspect all tool boxes and monitor the transfer of the tools from the defective kits to the replacement boxes. The fielding team will provide all replacement boxes and foam inserts thus requiring no Military Standard Requisitioning and Issue Procedures (MILSTRIP) activity by the units. The criteria cited in paragraph 5. a, b, c represents grounds to replace the existing tool boxes and foam inserts. Inspection criteria for the kits are as follows:
- a. Inspect outside “green” box for cuts, tears, holes, inoperable hinges and latches.
 - b. Inspect foam tower and side panels for deterioration, brittleness, fuel/oil stains, elongated “pick holes” resulting in loss of tool retention. Any loss of tool retention presents potential for foreign object damage (FOD) and a possible safety issue.
 - c. Inspect metal and plastic boxes for dents, cracks, broken latches, hinges trays and handles.

NOTE

Any of the discrepancies listed in the paragraph 5 above, will be cause for replacement under RESET.

TABLE 3. REPLACEMENT TOOL BOX ONLY WITH UNIQUE FOAM INSERTS (CLASS II, SECONDARY ITEM)		
DESCRIPTION	PART NUMBER	NSN
Tool Kit, General Mechanic’s, Army Aircraft	KIT PEOAVN-B01-RESET	5140-01-556-9111
Tool Kit, Airframe Repairer’s, Army Aircraft	KIT PEOAVN-B02-RESET	5140-01-556-9114
Tool Kit, Electrical Repairer’s, Army Aircraft	KIT PEOAVN-B06-RESET	5140-01-556-9116
Tool Kit, Power Plant Repairer’s, Army Aircraft	KIT PEOAVN-B07-RESET	5140-01-556-9119
Tool Kit, Powertrain Repairer’s, Army Aircraft	KIT PEOAVN-B13-RESET	5140-01-556-9122
Tool Kit, Hydraulic Repairer’s, Army Aircraft	KIT PEOAVN-A03-RESET	5140-01-556-9100
Tool Kit, Aircraft Inspector Technical (TI)	KIT PEOAVN-A09-RESET	5140-01-556-9108

- 6. CORRECTION PROCEDURES.** Not applicable unless a questionable defect with equipment is identified. A questionable defect will require that a Quality Deficiency Report (QDR) be processed.
- 7. DESIGNATION OF RESET TOOL KIT NSNs.** RESET tool kits will be re-designated under applicable NSNs listed in Table 4, and will continue to be carried under existing Line Item Number (LIN).

TABLE 4. RESET TOOL KIT WITH TOOLS (CLASS VII, MAJOR ITEM)

DESCRIPTION	PART NUMBER	NSN	LIN
Tool Kit, General Mechanic's, Army Aft	KIT PEOAVN-B01-RESET W-TOOLS	5140-01-556-9150	W30949
Tool Kit, Airframe Repairer's, Army Aft	KIT PEOAVN-B02-RESET W-TOOLS	5140-01-556-9149	W30675
Tool Kit, Electrical Repairer's, Army Aft	KIT PEOAVN-B06-RESET W-TOOLS	5140-01-556-9148	W36703
Tool Kit, Power Plant Repairer's, Army Aft	KIT PEOAVN-B07-RESET W-TOOLS	5140-01-556-9144	W38073
Tool Kit, Powertrain Repairer's, Army Aft	KIT PEOAVN-B13-RESET W-TOOLS	5140-01-556-9139	W49238
Tool Kit, Hydraulic Repairer's, Army Aft	KIT PEOAVN-A03-RESET W-TOOLS	5140-01-556-9154	W43279
Tool Kit, Aircraft Inspector Technical (TI)	KIT PEOAVN-A09-RESET W-TOOLS	5140-01-556-9153	W30812

- 8. SUPPLY/PARTS AND DISPOSITION.** For all kits being RESET, the exchanging unit is responsible for ensuring that the proper tools are in each kit by Component List (CL). Missing and broken tools on requisition will remain on requisition to fill known shortages. Units will requisition proper tools to ensure proper tools by CL are in the kit. All CLs can be found on the Department of the Army SC 9999-01-SKO, Consolidated Publication Component Lists. This list can be obtained by CD (Unit Supply) or downloaded from the U.S. Army Logistics Support Activity (LOGSA) website at: <https://weblog.logsa.army.mil/sko/index.cfm>. Component tools within these boxes are eligible for replacement under the U.S. Army warranty tool exchange program. Please contact Ms. Shelli Worrell, commercial: (309)-782-6134, DSN: 793-6134, e-mail: Shelli.Worrell@us.army.mil. All warranty replacements should be completed prior to having the NATS tool kits RESET to facilitate bringing the tool kit up to a fully functional state. Units are encouraged to immediately exercise the warranty procedures below to ensure that all serviceable tools are on hand prior to the RESET effort. Residual material will be processed by the fielding team. Logistical support from gaining unit/installation will be required to transfer residual material to Defense Reutilization Marketing Service (DRMS). Second Destination Transportation Account Code (TAC) funding will be provided by the Fielding team.
- 9. NATS TOOL WARRANTY PROCEDURE -- ROCK ISLAND ARSENAL (RIA).**

NOTE

All NATS fielded tools are covered under a Rock Island Arsenal warranty program and can be exchanged via Email or FAX. provide a list citing the manufacturer's part number, NSN if available, tool item name, brand name (OEM), quantity and the unit designation (maintenance section/unit etc.) that you need etched on the tools. Forward the above information to:

Shelli Worrell
 DSN: 793-6134 // Commercial: (309)782-6134
 E-mail: Shelli.Worrell@us.army.mil
 Fax: DSN: 793-4563 // Commercial: (309)782-4563

The Warranty Program is easy to use and designed to be as seamless as possible for the soldier's. The program is predicated on a one-for-one tool exchange with the OEM tool vendors. The OEMs provide replacement tools upfront and the broken or unserviceable tool is returned to them to complete the warranty process. RIA is required to return unserviceable tools back to the OEMs to receive credit.

Steps:

- a. Contact Ms. Worrell with list of tools and provide required information.
- b. Warranty process with OEM is exercised.
- c. Replacement tool is sent to soldier.
- d. Soldier sends unserviceable tool to Ms. Worrell to complete the process.

NOTE

RIA cannot always get the tools required/ordered. In the event, RIA will attempt to replace or find a tool that is equivalent from another tool vendor. RIA will make every attempt to obtain the tool ordered. Some tool vendors may have long lead times for filling orders. RIA shall coordinate with tool vendors to resolve any issues.

Ship all unserviceable tools to the address listed below.

Rock Island Arsenal
Bldg. 299
Tool Warranty Program
Rock Island, IL 61299-5000
ATTN: Shelli Worrell

10. TECHNICAL PUBLICATIONS AFFECTED/CHANGED. Not Applicable.

11. POINTS OF CONTACT.

- a. Logistics points of contact for this TB is Mr. John McGuire, SFAE-AV-AS-AG, DSN: 645-8540 or commercial (256) 955-8540, e-mail john.mcguire@peoavn.redstone.army.mil.
- b. Technical point of contact for this TB is Mr. Ed Cholewa, AMSAM-MMC-AV-SA, DSN: 897-1575 or commercial (256) 313-1575, e-mail: Edmund.Cholewa@us.army.mil.

12. REPORTING ERRORS. You can help improve this bulletin. If you find mistakes or know of a way to improve procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), located at the back of this bulletin, directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000. A reply will be furnished to you. You may also provide DA Form 2028 information to AMCOM via e-mail, fax or the World Wide Web. Our fax number is: DSN: 788-6546 or Commercial (256) 842-6546. Our e-mail address is: 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this bulletin immediately preceding the hard copy 2028. For the World Wide Web use: <https://amcom2028.redstone.army.mil>.

By Order of the Secretary of the Army:

Official:



JOYCE E. MORROW
*Administrative Assistant to the
Secretary of the Army*

0733705

GEORGE W. CASEY, JR.
*General, United States Army
Chief of Staff*

Distribution:

To be distributed in accordance with the initial distribution number (IDN) 314216 requirements for TB 1-5180-548-20-1.

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" whomever@wherever.army.mil

To: 2028@redstone.army.mil

Subject: DA Form 2028

1 **From: Joe Smith**
2 *Unit: home*
3 **Address: 4300 Park**
4 **City:** Hometown
5 **St: MO**
6 **Zip: 77777**
7 **Date Sent:** 19--OCT--93
8 **Pub no:** 55--2840--229--23
9 **Pub Title: TM**
10 **Publication Date:** 04--JUL--85
11 *Change Number: 7*
12 *Submitter Rank:* MSG
13 **Submitter FName:** Joe
14 *Submitter MName:* T
15 **Submitter LName:** Smith
16 **Submitter Phone:** 123--123--1234
17 **Problem: 1**
18 *Page: 2*
19 *Paragraph: 3*
20 *Line: 4*
21 *NSN: 5*
22 *Reference: 6*
23 *Figure: 7*
24 *Table: 8*
25 *Item: 9*
26 *Total: 123*

27 **Text:**

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS <small>For use of this form, see AR 25-30; the proponent agency is ODISC4.</small>	Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/ Supply Manuals (SC/SM)	DATE 8/30/02
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TO: (Forward to proponent of publication or form)(Include ZIP Code) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM--MMC--MA--NP Redstone Arsenal, AL 35898	FROM: (Activity and location)(Include ZIP Code) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565
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PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER TM 9-1005-433-24	DATE 16 Sep 2002	TITLE Organizational, Direct Support, And General Support Maintenance Manual for Machine Gun, .50 Caliber M3P and M3P Machine Gun Electrical Test Set Used On Avenger Air Defense Weapon System
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ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON
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1	WP0005 PG 3		2			Test or Corrective Action column should identify a different WP number. <div style="text-align: center; font-size: 4em; transform: rotate(-20deg); opacity: 0.5;"> EXAMPLE </div>
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* Reference to line numbers within the paragraph or subparagraph.

TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION 788-1234	SIGNATURE
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TO: (Forward direct to addressee listed in publication) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	FROM: (Activity and location) (Include ZIP Code) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	DATE 8/30/02
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PART II - REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER			DATE	TITLE				
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
<div style="font-size: 100px; opacity: 0.5; transform: rotate(-30deg); pointer-events: none;"> EXAMPLE </div>								

PART III - REMARKS (Any general remarks or recommendations or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)

EXAMPLE

TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 788-1234	SIGNATURE
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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25--30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/ Supply Manuals (SC/SM)	DATE
TO: (Forward to proponent of publication or form) (Include ZIP Code) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898						FROM: (Activity and location) (Include ZIP Code)	
PART 1 --ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER						DATE	TITLE
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON	
* Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE						TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE

TO: <i>(Forward direct to addressee listed in publication)</i> Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
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PART II --REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER			DATE	TITLE				
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III --REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 decagram = 10 grams = .35 ounce
 1 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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PIN: 084527-000