

***TM 1-1730-225-23P**

TECHNICAL MANUAL

**FIELD MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST
FOR**

**TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 (EIC: N/A)**

*This manual supersedes TM 55-1730-225-23P, dated 25 November 1986, including all changes.

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WP 0001 00	0	WP 0002 00	0	WP 0003 00	0	WP 0004 00	0

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DEPARTMENT OF THE ARMY
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TECHNICAL MANUAL
FIELD MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST
FOR
TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 (EIC: N/A)

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CURRENT AS OF 20 April 2009

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TABLE OF CONTENTS

	<u>WP Sequence No.</u>
Introduction To Repair Parts And Special Tools List (RPSTL).....	0001 00
Repair Parts List.....	0002 00
Group 01 Tow Bar Assembly, Aircraft.....	0002 00
Part Number Index.....	0003 00
NSN Index.....	0004 00

**TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 EIC: N/A**

INTRODUCTION TO REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

INTRODUCTION

Scope

This RPSTL lists and authorizes spares and repair parts, special tools, special test measurement and diagnostic equipment (TMDE) and other special support equipment required for performance of the Two-level maintenance of the Tow Bar Assembly. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the Source, Maintenance, and Recoverability (SMR) codes.

General

In addition to the Introduction work package, this RPSTL is divided into the following work packages.

- 1. Repair Parts List Work Packages.** Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package.
- 2. Special Tools List Work Packages.** Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
- 3. Cross-Reference Indexes Work Packages.** There are two cross reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

Source Code	Maintenance Code	Recoverability Code
XXXXX	XXXXX	XXXXX
1st two positions: How to get an item.	3rd position: Who can install, replace, or use the item.	4th position: Who can do complete repair* on the item.
		5th position: Who determines disposition action on unserviceable items.

* Complete Repair: maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

Source Code. The source code tells you how you get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES – CONTINUED

– Continued

Source Code	Application/Explanation
PA	
PB	
PC	NOTE Items coded PC are subject to deterioration.
PD	
PE	
PF	
PG	Stock items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code.
KD	
KF	
KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.
MO-Made at Service/AMC level	
MF-Made at Field/ASB level	
MH-Made at Below Depot Sustainment level	
ML-Made at SRA/TASMG	
MD-Made at depot	Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RP-STL. If the item is authorized to you by the third position code of the SMR code, but the source code indicates it is made at higher level, order the item from the higher level of maintenance.
AO-Assembled by Service/AMC level	
AF-Assembled by Field/ASB level	
AH-Assembled by Below Depot Sustainment level	
AL-Assembled by SRA/TASMG	
AD-Assembled by depot	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the third position of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
XA	Do not requisition an "XA" coded item. Order the next higher assembly. (Refer to NOTE below.)
XB	If an item is not available from salvage, order it using the CAGEC and P/N.
XC	Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES – CONTINUED

– Continued

Source Code	Application/Explanation
XD	Item is not stocked. Order an XD-coded item through local purchase or normal supply channels using the CAGEC and P/N given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes except for those items source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance:

Maintenance Code	Application/Explanation
C -	Crew or operator maintenance done within Field maintenance.
O -	Service/AMC maintenance can remove, replace, and use the item.
F -	Field/ASB maintenance can remove, replace, and use the item.
H -	Below depot sustainment can remove, replace, and use the item.
L -	Specialized repair activity or TASMGC can remove, replace, and use the item.
D -	Depot can remove, replace, and use the item.

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Maintenance Code	Application/Explanation
O -	Service/AMC is the lowest level that can do complete repair of the item.
F -	Field/ASB is the lowest level that can do complete repair of the item.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES – CONTINUED

– Continued

Maintenance Code	Application/Explanation
H -	Below depot sustainment is the lowest level that can do complete repair of the item.
L -	Specialized repair activity or TASMG is the lowest level that can do complete repair of the item.
D -	Depot is the lowest level that can do complete repair of the item.
Z -	Nonreparable. No repair is authorized.
B -	No repair is authorized. No parts or special tools are authorized for maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

Recoverability Code	Application/Explanation
Z -	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
O -	Reparable item. When uneconomically repairable, condemn, and dispose of the item at unit level.
F -	Reparable item. When uneconomically repairable, condemn, and dispose of the item at the direct support level.
H -	Reparable item. When uneconomically repairable, condemn, and dispose of the item at the general support level.
D -	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
L -	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA)/TASMG.
A -	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES – CONTINUED

PART NUMBER (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When you use an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:

1. The federal item name, and when required, a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

QUANTITY (QTY) (Column (7)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package.

STOCK NUMBER Column. This column lists the NSN in National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN.

NSN

(e.g., 5385-01-574-1476)

NIIN

When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

2. Part Number (P/N) Index Work Package. P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

PART NUMBER Column. Indicates the part number assigned to the item.

FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.

ITEM Column. The item number is the number assigned to the item as it appears in the figure reference in the adjacent figure number column.

SPECIAL INFORMATION

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers for bulk material are also referenced in the Description Column of the line item

SPECIAL INFORMATION – CONTINUED

entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in TM 1-1500-204-23-10.

Index Numbers. Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN / Part Number (P/N) Index work packages and the bulk material list in the repair parts list work package.

Illustrations List. The illustrations in this RPSTL contain unit authorized items. Illustrations published in this TM that contain unit authorized items also appear in this RPSTL. The tabular list in the repair parts list work package contains only those parts coded "O" in the third position of the SMR code, therefore, there may be a break in the item number sequence.

HOW TO LOCATE REPAIR PARTS**1. When NSNs or P/Ns Are Not Known.**

First. Using the table of contents, determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.

Second. Find the figure covering the functional group or the subfunctional group to which the item belongs.

Third. Identify the item on the figure and note the number(s).

Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.

2. When NSN Is Known.

First. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.

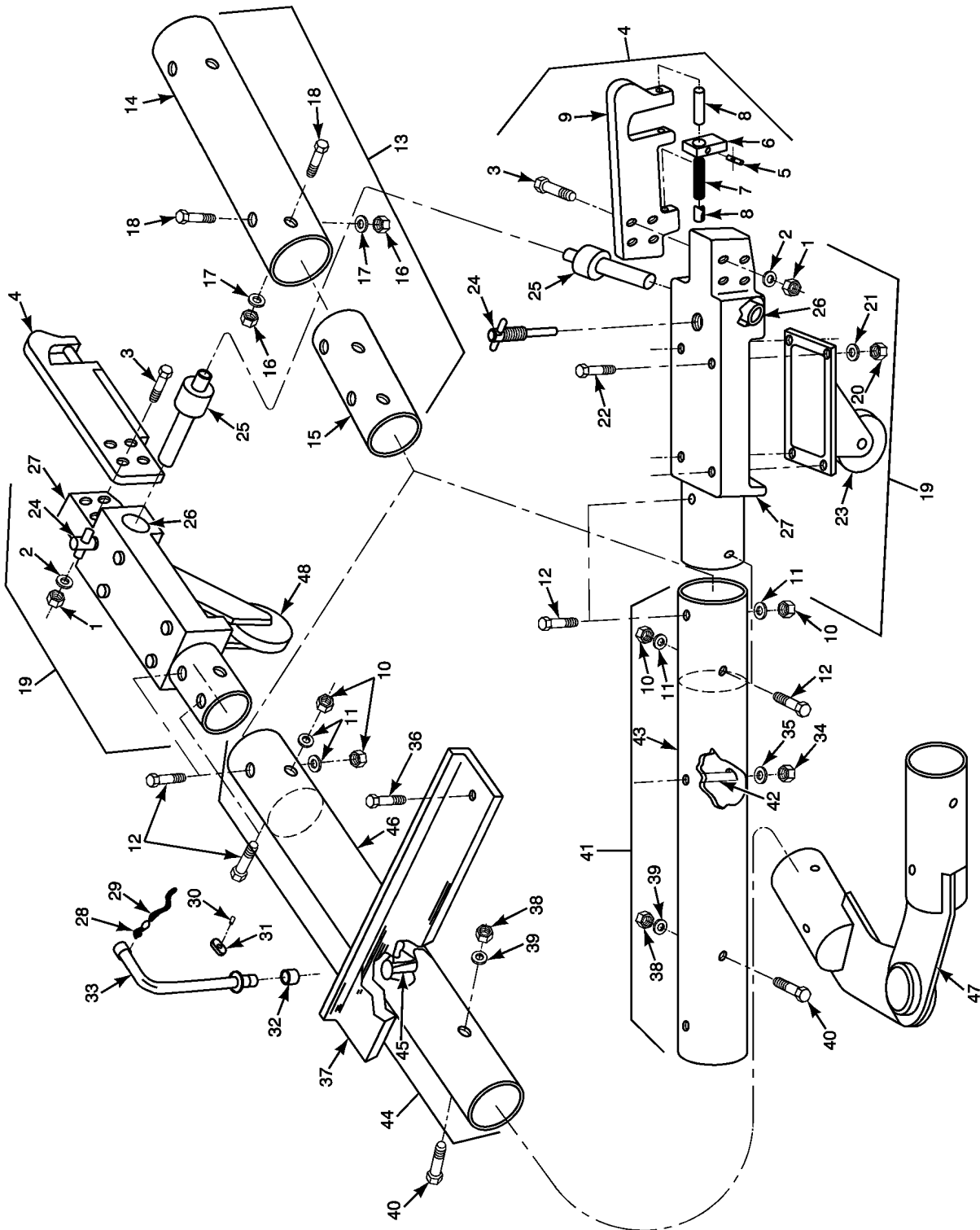
Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

3. When P/N Is Known.

First. If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.

Second. Look up the item on the figure in the applicable repair parts list work package.

TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 EIC: N/A
REPAIR PARTS LIST



MS030913

Figure 1. Tow Bar Assembly, Aircraft.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
GROUP 01						
TOW BAR ASSEMBLY, AIRCRAFT						
FIGURE 1. TOW BAR ASSEMBLY, AIRCRAFT						
	PAOFF	1730-00-967-9556	81996	AA1730-1251	TOW BAR ASSEMBLY	1
1	PBOZZ	5310-00-982-4971	96906	MS21045C6	. NUT, SELF-LOCKING	4
2	PBOZZ	5310-00-167-0821	88044	AN960-616	. WASHER, FLAT	4
3	PBOZZ	5306-00-180-0307	88044	AN6-27A	. BOLT, MACHINE	4
4	PAOZZ	1730-01-087-4230	81996	AA1730-1251-93	. HOOK ASSEMBLY	2
5	PAOZZ	5315-00-298-9738	96906	MS171535	.. PIN, SPRING	1
6	PAOZZ	1730-01-016-3567	81996	AA1730-1251-21	.. HANDLE, TOW BAR	1
7	PAOZZ	5360-01-016-7767	81996	AA1730-1251-23	.. SPRING, HELICAL	1
8	PAOZZ	5315-01-016-3563	81996	AA1730-1251-43	.. PIN, RETRACTOR	1
9	PAOZZ	1730-01-016-3568	81996	AA1730-1251-9	.. HOOK, TOW-BAR, AIRCRAFT	1
10	PAOZZ	5310-00-982-4975	96906	MS21046C8	. NUT, SELF-LOCKING	4
11	PAOZZ	5310-00-167-0823	88044	AN960-816	. WASHER, FLAT	4
12	PAOZZ	5306-00-208-3649	88044	AN8-36A	. BOLT, MACHINE	4
13	PAOZZ	1730-01-260-6255	81996	1730-EG-027	. EXTENSION, TOWBAR	2
14	XDOZZ		81996	1730-EG-027-1	.. TUBE, METALLIC	2
15	XDOZZ		81996	1730-EG-027-2	.. TUBE, METALLIC	2
16	PAOZZ	5310-00-982-4975	96906	MS21046C8	.. NUT, SELF-LOCKING	4
17	PAOZZ	5310-00-167-0823	88044	AN960-816	.. WASHER, FLAT	4
18	PAOZZ	5306-00-208-3649	88044	AN8-36A	.. BOLT, MACHINE	4
19	PBOZZ	1730-01-111-4305	81996	AA1730-1251-785	. HOUSING	2
20	PBOZZ	5310-00-059-9266	96906	MS21046C5	.. NUT, SELF-LOCKING	4
21	PBOZZ	5310-00-167-0820	88044	AN960-516	.. WASHER, FLAT	4
22	PBOZZ	5306-00-151-2621	88044	AN5-22A	.. BOLT, MACHINE	4
23	PAOZZ	5340-00-205-5628	06004	4689-1	.. CASTER, SWIVEL	1
24	PBOZZ	1730-01-087-4229	81996	AA1730-1251-48	.. LOCKSCREW ASSEMBLY	1
25	PBOZZ	5315-01-021-0056	81996	AA1730-1252-11	.. PIN, SHOULDER, HEADLESS	1
26	PBOZZ	3120-01-017-5921	80020	NAF1066-16-252	.. BUSHING, SLEEVE	1
27	PAOZZ	1730-01-087-4231	81996	AA1730-1251-78	.. HOUSING	1
28	PBOZZ	4030-00-954-8801	96906	MS87006-43	. HOOK, CHAIN	2
29	PAOZZ	4010-00-530-2050	81348	RRC271	. CHAIN, WELDLESS	1
30	PBOZZ	5320-00-619-4093	96906	MS20426AD4-9	. RIVET, SOLID	1
31	PAFZZ	1730-01-168-2972	81996	AA1730-1251-35	. STOP	1
32	PAOZZ	5360-01-084-5122	81996	AA1730-1251-33	. SPRING, HELICAL, COMPRESSION	1
33	PAOZZ	1730-01-087-4228	81996	AA1730-1251-27	. RELEASER	1
34	PBOZZ	5310-00-167-1289	88044	AN310-8	. NUT, PLAIN, CASTELLATED	1
35	PBOZZ	5310-00-167-0823	88044	AN960-816	. WASHER, FLAT	1
36	PBOZZ	5306-00-720-7818	99044	AN8-40A	. BOLT, MACHINE	1
37	PAOZZ	1730-01-159-7991	81996	AA1730-1251-41	. ANGLE	1
38	PBOZZ	5310-00-982-4975	96906	MS21046C8	. NUT, SELF-LOCKING	4
39	PBOZZ	5310-00-167-0823	88044	AN960-816	. WASHER, FLAT	4
40	PBOZZ	5306-00-208-3649	88044	AN8-36A	. BOLT, MACHINE	4
41	PAOOO	4710-01-255-2169	81996	AA1730-1251-515	. TUBE ASSEMBLY, LH	1
42	XDOZZ		81996	AA1730-1251-15	.. GUIDE, TUBE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
43	PAOZZ	1730-01-522-3380	81996	AA1730-1251-5	. . TUBE, METALLIC	1
44	MFOZZ		81996	AA1730-1251-615	. TUBE, LEFT HAND	1
45	XDOZZ		81996	AA1730-1251-15	. . GUIDE TUBE	1
46	PAOZZ	1730-01-522-2928	81996	AA1730-1251-6	. . TUBE METALLIC	1
47	PAOZZ	1730-01-147-6597	81996	AA1730-1251-87	. LUNETTE ASSEMBLY	1
48	PAOZZ	5340-01-260-6258	06004	4089-1	. CASTER, RIGID	1

END OF FIGURE

TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 EIC: N/A

PART NUMBER INDEX

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
AA1730-1251	1	0	AN8-36A	1	18
AA1730-1251-15	1	42	AN8-36A	1	40
AA1730-1251-15	1	45	AN8-40A	1	36
AA1730-1251-21	1	6	AN960-516	1	21
AA1730-1251-23	1	7	AN960-616	1	2
AA1730-1251-27	1	33	AN960-816	1	11
AA1730-1251-33	1	32	AN960-816	1	17
AA1730-1251-35	1	31	AN960-816	1	35
AA1730-1251-41	1	37	AN960-816	1	39
AA1730-1251-43	1	8	MS171535	1	5
AA1730-1251-48	1	24	MS20426AD4-9	1	30
AA1730-1251-5	1	43	MS21045C6	1	1
AA1730-1251-515	1	41	MS21046C5	1	20
AA1730-1251-6	1	46	MS21046C8	1	10
AA1730-1251-615	1	44	MS21046C8	1	16
AA1730-1251-78	1	27	MS21046C8	1	38
AA1730-1251-785	1	19	MS87006-43	1	28
AA1730-1251-87	1	47	NAF1066-16-252	1	26
AA1730-1251-9	1	9	RRC271	1	29
AA1730-1251-93	1	4	1730-EG-027	1	13
AA1730-1252-11	1	25	1730-EG-027-1	1	14
AN310-8	1	34	1730-EG-027-2	1	15
AN5-22A	1	22	4089-1	1	48
AN8-36A	1	12	4689-1	1	23

TOW BAR ASSEMBLY, AIRCRAFT
PART NO. AA1730-1251 NSN 1730-00-967-9556 EIC: N/A

NSN INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-059-9266	1	20	5310-00-982-4975	1	16
5306-00-151-2621	1	22	5310-00-982-4975	1	38
5310-00-167-0820	1	21	5315-01-016-3563	1	8
5310-00-167-0821	1	2	1730-01-016-3567	1	6
5310-00-167-0823	1	11	1730-01-016-3568	1	9
5310-00-167-0823	1	17	5360-01-016-7767	1	7
5310-00-167-0823	1	35	3120-01-017-5921	1	26
5310-00-167-0823	1	39	5315-01-021-0056	1	25
5310-00-167-1289	1	34	5360-01-084-5122	1	32
5306-00-180-0307	1	3	1730-01-087-4228	1	33
5340-00-205-5628	1	23	1730-01-087-4229	1	24
5306-00-208-3649	1	12	1730-01-087-4230	1	4
5306-00-208-3649	1	18	1730-01-087-4231	1	27
5306-00-208-3649	1	40	1730-01-111-4305	1	19
5315-00-298-9738	1	5	1730-01-147-6597	1	47
4010-00-530-2050	1	29	1730-01-159-7991	1	37
5320-00-619-4093	1	30	1730-01-168-2972	1	31
5306-00-720-7818	1	36	4710-01-255-2169	1	41
4030-00-954-8801	1	28	1730-01-260-6255	1	13
1730-00-967-9556	1	0	5340-01-260-6258	1	48
5310-00-982-4971	1	1	1730-01-522-2928	1	46
5310-00-982-4975	1	10	1730-01-522-3380	1	43

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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 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 8/30/02
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	
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
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON	
1	WP0005 PG 3		2			Test or Corrective Action column should identify a different WP number.	
EXAMPLE							
* 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	

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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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

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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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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

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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

To change	To	Multiply by	To change	To	Multiply by
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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