TECHNICAL MANUAL

OPERATOR'S, AVIATION UNIT AND INTERMEDIATE MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS

FOR

TESTER, GYRO INDICATOR, PITCH LOOP AND ROLL PART NO. 3500 NSN 4920-01-069-6853

HEADQUARTERS, DEPARTMENT OF THE ARMY
24 APRIL 1981

WARNING

HIGH VOLTAGE

is used in the operation of this equipment.

DEATH ON CONTACT

may result if personnel fail to observe the safety precautions.
Learn the areas containing high voltage in each piece of equipment.
Be careful not to contact high voltage connections when installing or operating this equipment.
Before working inside the equipment, turn power off and ground points of high potential before touching them.

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 24 April 1981

Operator's, Aviation Unit and Intermediate
Maintenance Manual
Including Spare Parts and Special Tools Lists

for

TESTER, GYRO INDICATOR, PITCH, LOOP AND ROLL
PART NO. 3500
NSN 4920-01-069-6853

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MTT, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished directly to you.

CHAPTER 1

INTRODUCTION

SECTION I. GENERAL INFORMATION

1-1. Scope.

a. These instructions are for your use in operating and maintaining the gyro tester. They contain information on the installation, operation, preventative maintenance, maintenance and preparation for storage and reshipment of the equipment. The gyro tester is designed for testing the performance characteristics of various aircraft instrument components such as directional heading indicators, attitude horizon indicators, and directional gyro transmitters.

b. Appendix A contains a list of references while Appendix B describes the maintenance allocated by the maintenance allocation chart.

1-2. Maintenance Forms and Records. Maintenance forms, records and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

1-3. Destruction of Army Material to Prevent Enemy Use. The procedure for destroying Army material to prevent use are listed in TM 750-244-1-4.

1-4. Administrative Storage of Equipment. Refer to TM 740-90-1 for administrative storage of equipment instructions.

1-5. Reporting Equipment Improvement Recommendations (EIR). EIR can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure, just simply tell why the design is unfavorable or why a procedure is difficult, ElR may be submitted on SF 368 (Quality Deficiency Report). Mail directly to Commander, US Army Troop Support and Aviation Material Readiness Command, ATTEN: DRSTS-MPM, 4300 Goodfellow Boulevard, St. Louis, Missouri 63120. A reply will be furnished to you.

SECTION II. DESCRIPTION AND LEADING PARTICULARS

1-6. Description. Referring to Figure 1-1, the major assemblies of the gyro tester consist of the base (16), cradle (15), drive motor (10), control panel (29), fork (7), vibrator motor (8), gimbal ring (6), mounting plate (5), and adapter plate (2). Simulated rates of loop and turn, attitudes of dive and climb, and loops in pitch and roll are provided by the gyro tester for any transmitters or gyro indicators having a maximum diameter of six inches or less.

Legend for Figures 1-1 and 2-1:

1. Gimbal index knob
2. Adapter plate
3. Leveling pad (4)
4. Circular level
5. Mounting plate
6. Gimbal ring
7. Fork
8. Vibrator motor
9. Circular level
10. Drive motor
11. Oil filler plug
12. Gear box
13. Torque limiter
14. Fork index knob
15. Cradle
16. Base
17. Cradle index knob
18. Power cable
19. Rotation rate adjust
20. Rotation rate adjust
21. Rotation rate adjust
22. Rotation switch
23. Indicator light
24. Fuse holder
25. Vibrator motor switch
26. Rotational rate switch
27. Indicator light
28. Fuse holder
29. Control panel
30. Lock screw (not visible)
31. Attachment screw (4)

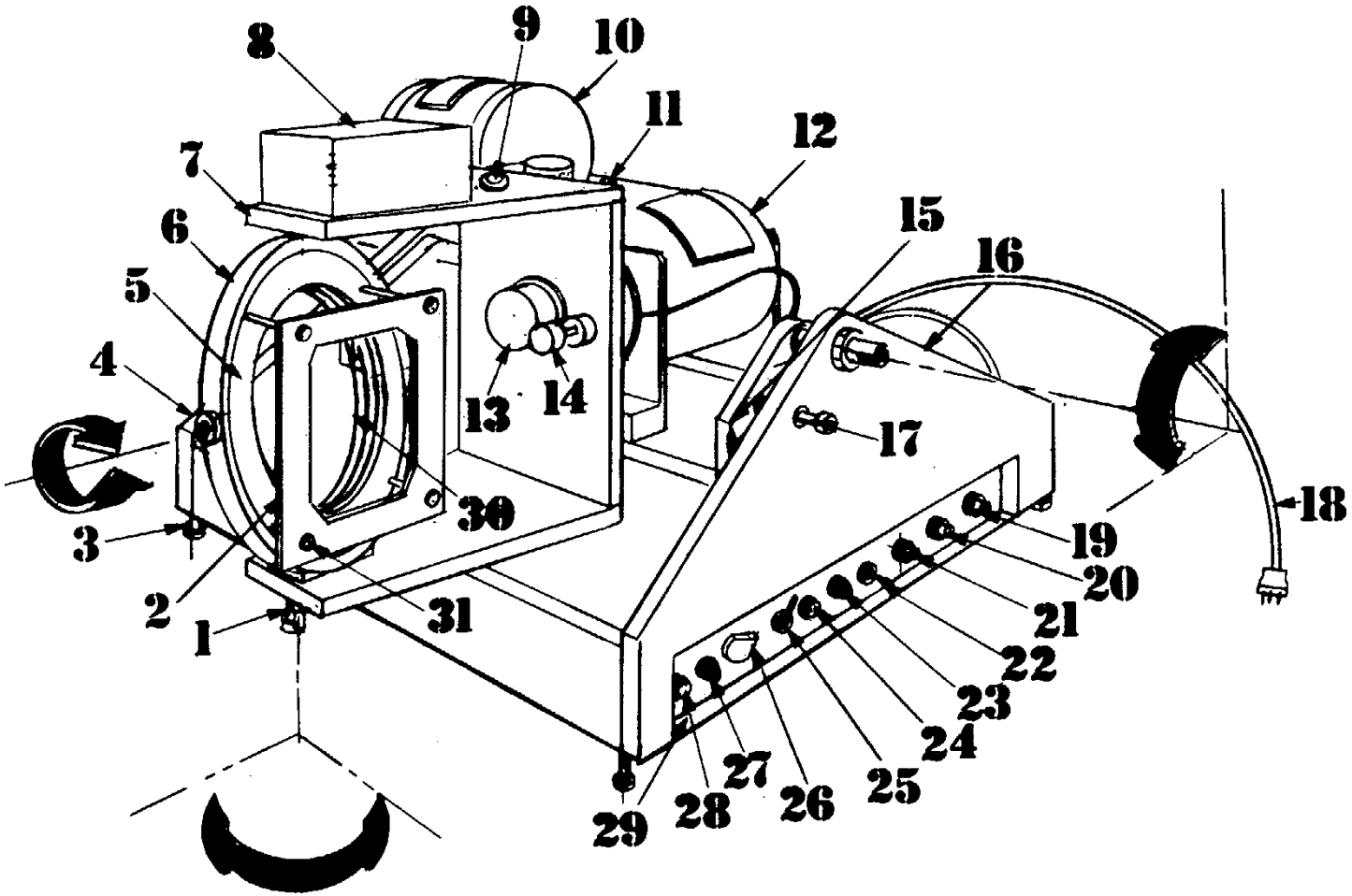

Figure 1-1. Gyro Tester, Left Front View.

1-7. Identification. The manufacturer's identification plate mounted on the base specifies the supply voltage and frequency, Federal stock number, manufacturer's part number, and serial number.

1-8. Tabulated Data.

a. Gyro Tester.

Manufacturer: Baganoff Engineering Inc.
St. Louis, Mo. 63042
Model: 3500
Power Input 115-volt ac (alternating current), 60 H_z
Power cord length: 9 foot

b. Wiring Diagram.

A schematic diagram for the gyro tester is shown in Figure 1-2.

c. Shipping Dimensions.

Length: 17.5 inches
Width: 15.2 inches
Height: 24.5 inches

d. Weight: 85 pounds

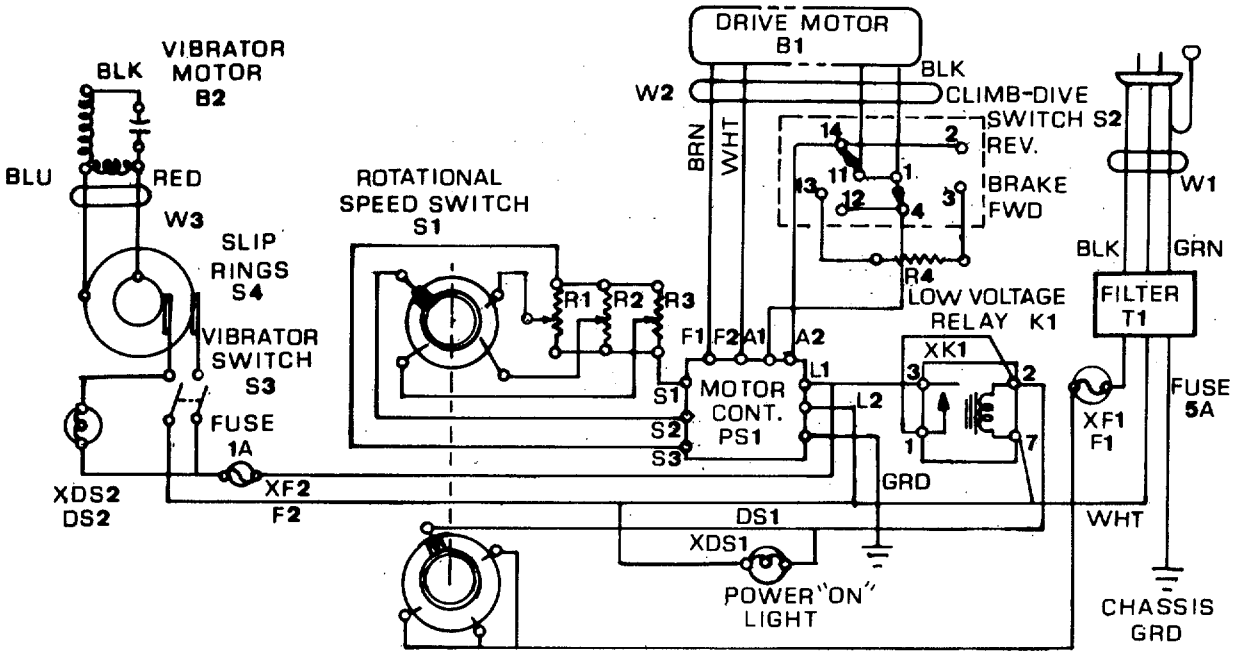

Figure 1-2. Schematic Wiring Diagram.

SECTION III. TEST EQUIPMENT, SPECIAL TOOLS AND MATERIALS

Special test equipment or tools are not required to perform maintenance on the gyro tester.

1-9. Consumable Materials. Consumable materials required by AVIM maintenance are contained in Table 1-1.

Table 1-1: Consumable Materials

Item Number	Nomenclature	Military Specification
1	Moisture barrier material	MIL-B-121
2	Desiccant (activated)	MIL-D-3464
3	Cleaning solvent, methanol alcohol	

CHAPTER 2

OPERATING INSTRUCTIONS

SECTION I. INSTRUMENTS AND CONTROLS

2-1. General. Information relative to the location and function of the controls and instruments necessary to operate the gyro tester is contained in this section. A close-up picture of the control panel (29) is shown in Figure 2-1.

2-2. Rotation Switch. This is a three position toggle-type switch located on the control panel (22, Figure 2-1) which energizes, de-energizes or reverses the direction of the drive motor (10, Figure 1-1).

2-3. Rotational Rate Switch. This four position rotary switch located on the control panel (26, Figure 2-1) applies ac power to the gyro tester, and at the same time, selects the rotational rate for the gimbal ring-fork assembly in steps of 10, 15, or 20 degrees per second.

2-4. Vibrator Motor Switch. This two position toggle-type switch (25, Figure 2-1) located on the control panel turns the vibrator motor (8, Figure 1-1) "ON" or "OFF".

2-5. Cradle Index Knob. This knob (17, Figure 1-1) mounted on the base is used to lock the cradle (15, Figure 1-1) in the horizontal or vertical position.

2-6. Gimbal Index Knob. This knob (1, Figure 1-1) located on the fork (7) locks the gimbal ring (6) in a plane either parallel to, or at a right angle to the fork.

2-7. Fork Index Knob. This knob (14, Figure 1-1) is mounted on the fork and in the engaged position locks the gimbal ring-fork assembly in either the 0 degree or 360 degree positions (after one full turn). By pulling the knob and twisting it one-quarter turn clockwise or counterclockwise, it disengages allowing the fork to turn continuously.

2-8. Leveling Pad. Four leveling pads (3, Figure 1-1) located on the base (16) are used to level the tester.

2-9. Circular Level. Two circular levels (4, Figure 1-1) and (9) are used as visual aids in leveling the unit.

2-10. Indicator Light.

a. When ac power has been applied to the unit indicator light (27, Figure 2-1) glows.

b. When ac power has been applied to the vibrator motor through application of toggle switch (25, Figure 2-1), indicator light (23, Figure 2-1) glows.

2-11. Rotation Rate Adjust Control.

a. Potentiometer (19, Figure 2-1) is used to set the 20 degrees per second rotational rate of the gimbal ring-fork assembly.

b. Potentiometer (20, Figure 2-1) is used to set the 15 degrees per second rotational rate.

c. Potentiometer (21, Figure 2-1) is used to set the 10 degrees per second rotational rate.

2-12. Fuse Holder.

a. A 5 ampere fuse in location (28, Figure 2-1) provides electrical protection for the unit from the incoming ac power.

b. A 1 ampere fuse in location (24, Figure 2-1) provides electrical protection for the vibrator motor.

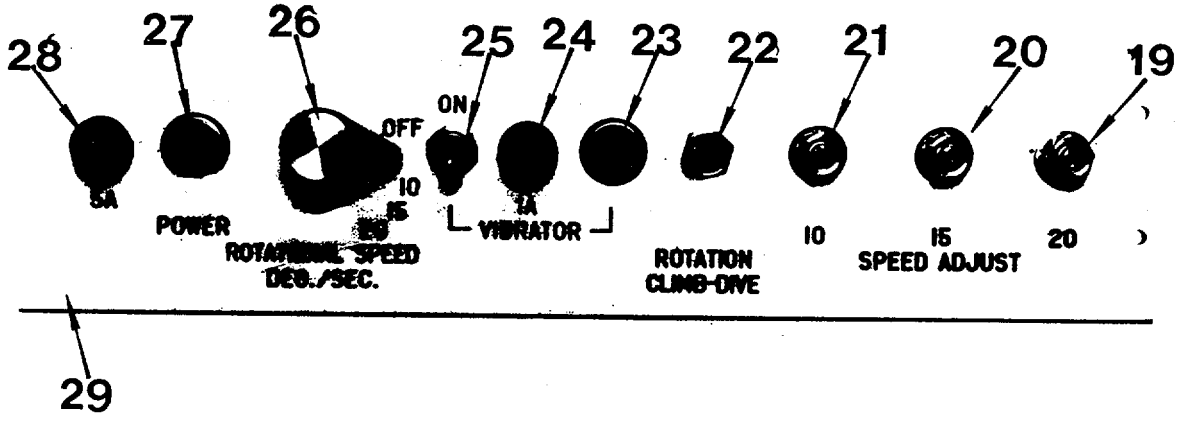

Figure 2-1. Control Panel.

SECTION II. OPERATION

2-13. General. The instructions contained in this section are for the use of the operating personnel.

2-14. Set-Up.

a. The gyro tester should be located on top of a test bench with sufficient table space for the tester and other equipment. The power cable (18, Figure 1-1) is connected to a 115 volt, ac, 60 Hz power source.

CAUTION

Set the vibrator and rotation toggle switches (22 and 25) and turn the rotational rate switch (26) to the "OFF" positions prior to applying power to the gyro tester. This will prevent any wires that may be leading from the gyro transmitters under test from becoming unnecessarily wrapped up.

b. As a first step in leveling the gyro tester, set the fork in the horizontal position shown. Engage the fork index knob (14) and proceed to level the base using four leveling pads (3) while observing circular level (9).

c. Pull out the gimbal index knob (1) and rotate the gimbal ring (6) so that its plane is parallel to the plane of the fork as shown. Release the knob and secure the gimbal ring. Pull out the cradle index knob and rotate the cradle (15) so that it is in the vertical plane. Release the knob and secure the cradle. Proceed to level the tester by using the leveling pads (3) and observing the circular level (4).

d. Mount the indicator to be tested on the adapter plate (2). Instruments under 6 inches in diameter can be accommodated by the mounting plate (5).

2-15. Rates of Dive and Climb Simulation.

a. Pull out cradle index knob (17, Figure 1-1) and rotate cradle (15) to horizontal position shown in Figure 1-1. Secure cradle by releasing knob.

b. Rotate fork (7) to 0 degree position by pulling out fork index knob (14). Secure fork by releasing knob. If one 360 degree loop in dive or climb is desired, leave fork index knob engaged. If continuous loops in dive or climb are desired, pull out and rotate knob one-fourth turn.

c. Positioning of indicator under test axially within the gimbal ring may be accomplished by first loosening lock screw (30, Figure 1-1) rotating the mounting plate (5), and finally re-tightening the lock screw.

d. Set the rotational rate switch (26) to the value called for by the Technical Manual of the unit under test.

e. Set the vibrator motor switch (25) to the "ON" position if called for by the Technical Manual.

f. The gyro tester is put into operation by setting the rotation switch (22) to the "ON" or "REVERSE" position as required.

2-16. Rates of Roll Simulation.

a. Position the plane of the gimbal ring (6, Figure 1-1) perpendicular to the plane of the fork (7) by pulling out the gimbal index knob (1).

b. Steps in the operation are the same as 2-15. (b) through (f).

2-17. Rates of Turn Simulation.

a. Position the plane of the gimbal ring (6, Figure 1-1) perpendicular to the plane of the fork (7) by pulling out the gimbal index knob (1).

b. Rotate the cradle (15) to the vertical position by pulling out the cradle index knob (17).

NOTE

Exercise care to re-engage the index knob before turning loose of the cradle. Dropping the fork assembly onto the base could cause misalignment of the tester.

c. Additional steps in the operation are the same as 2-15. (b) through (f).

SECTION III. OPERATION UNDER UNUSUAL CONDITIONS

2-18. Humid Conditions. Inspect all electrical components for signs of corrosion. Use a fine sandpaper to remove corrosion from the terminals of components, particularly, the fuse holders and lamp holders.

2-19. Dusty Conditions. It is important to keep dust off the unit. Cover the gyro tester when not in use.

2-20. Salt Water Conditions. Immediately wipe off the unit with a cloth dampened with fresh water if it comes into contact with salt spray. Dry thoroughly.

CHAPTER 3

AVIATION UNIT MAINTENANCE INSTRUCTIONS

SECTION I. PREPARATION FOR INSTALLATION, STORAGE AND SHIPMENT

3-1. Unpacking Unit. Remove wood box from around the gyro tester being careful not to damage unit.

3-2. Preparation of Unit for Storage.

a. Position the fork (7) in the vertical position and the gimbal ring (6) in a plane parallel to the ground.

b. Wrap the gyro tester in a moisture barrier material (Item 1, Table 1-1).

3-3. Preparation of Unit for Shipment. In addition to following the steps in paragraph 3-2, secure the gyro tester in a wood crate. Preservation, packaging, and marking requirements for shipment must be in accordance with the instructions contained in Figure 4-1.

SECTION II. INSPECTION AND SERVICING OF NEW EQUIPMENT

3-4. Inspection Requirements.

a. Follow the before-operation services given in paragraph 3-7.

b. Perform a complete visual inspection of the gyro tester for broken wires, corroded terminals and cracked or loose parts.

3-5. Servicing. The gyro tester is lubricated and ready for operation.

3-6. Lubrication.

a. Table 3-1 contains instructions on the types of lubricants that are satisfactory depending upon the temperatures and on the intervals for replacement.

Table 3-1: Lubrication Chart

Lubricants	Expected Temperatures		Intervals
	Above +32° F	-50 °to +40° F	
GO-LUBRICANT, Gear Universal GOS-LUBRICANT, Gear Universal Sub-zero Gear housing	GO 90	GOS	1 year
GAA-GREASE, Automotive and artillery Drive motor bearings	All temperatures		1 year

b. Remove the oil plug (11, Figure 1-1) and fill the gear box with suitable oil given in Table 3-1. Observe the glass window, oil level indicator to check the proper amount.

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SECTION III. PREVENTATIVE MAINTENANCE

3-7. Services Performed by the Operator. These services are performed on a daily basis.

Table 3-2: Daily Services

Prior to Operation	During Operation	Securing Unit	Service
X	X	-	Indicator Lights - Inspect them. Replace the fuse or lamp as necessary.
X	X	X	Oil Leaks - Inspect the gear box for oil leaks.
X	-	X	Oil Level - Check the oil level. Make sure the type meets the temperature requirements.
-	-	X	Cleaning - Use a cloth moistened with an approved solvent to clean the gyro tester.

3-8. Services Performed at Six Month Intervals

Table 3-3: Six Month Services

Inspection	Functional	Service
X	-	Visual Inspection - Check the unit overall for loose, missing, or broken parts. Make sure the unit is correctly assembled. Correct any deficiencies before placing unit in operation.
X	-	Electrical Wiring - Check the unit for loose or bare wires or corroded connections. Replace the defective wiring. Use a fine sandpaper to clean connector terminals.
X	-	Prior to Operation - Perform the services listed in Table 3-2. prior to operation.
-	X	Fork Rotation Speed - Check the rotational rate of the fork with the use of a stop watch against the nominal setting given on the rotational rate switch (26, Figure 2-1.), Paragraph 3-19 lists the allowable tolerances.

SECTION IV. OPERATIONAL CHECKOUT

3-9. General. This section lists the most probable failures that may occur to the gyro tester and the most probable cause. The remedy recommended is listed opposite the probable cause.

3-10. Fork Will Not Rotate.

Probable Cause	*Remedy*
a. Burned out fuse	Replace fuse (par. 3-17)
b. Defective drive motor control unit	Report malfunction to Intermediate Maintenance
c. Defective rotation switch	Replace switch (par. 3-16)
d. Defective slip clutch	Report malfunction to Intermediate Maintenance
e. Defective drive motor	Report malfunction to Intermediate Maintenance
f. Defective rotational rate switch	Replace switch (par. 3-15)

3-11. Fork Rotational Rate Inconsistent With Switch Setting.

Probable Cause	*Remedy*
a. Defective drive motor unit	Report malfunction to control Intermediate Maintenance
b. Defective rotational rate switch	Replace switch (par. 3-15)
c. Misadjusted rotational potentiometer	Adjust potentiometer rate (par. 3-19)

3-12. Vibrator Motor Does Not Operate.

Probable Cause	*Remedy*
a. Defective motor	Report malfunction to Intermediate Maintenance
b. Dirty slip rings	Report malfunction to Intermediate Maintenance
c. Defective vibration motor switch	Report switch (par. 3-16)
d.	Burned out fuse Replace fuse (par. 3-17)

3-13. Indicator Lights Do Not Glow

Probable Cause	*Remedy*
a. Defective lamp	Replace lamp (par. 3-18)
b. Defective switch	Replace switch (par. 3-15 & 3-16)

SECTION V. REPAIR AND REPLACEMENT

3-14. General. The gyro tester's electrical system consists of the drive motor, vibration motor, motor control unit, rotational rate potentiometers, slip ring, lamps, fuses and various switches. The power cable connects to a standard 115 volt ac power outlet. Refer to electrical diagram in Figure 1-2.

3-15. Rotational Rate Switch.

a. Removal.

(1) Tag and disconnect the electrical wires from switch (26, Figure 2-1).

(2) Loosen set screw that secures knob.

(3) Remove hex nut and lock washer that secures switch in panel.

b. Replacement.

(1) Position switch in control panel (29) and replace washer and hex nut.

(2) Secure knob with set screw.

(3) Replace electrical leads.

3-16. Rotation and Vibration Switches.

a. Removal.

(1) Tag and disconnect the electrical wires from switch (25, 22).

(2) Loosen set screw that secures knob.

(3) Remove hex nut and lock washer that secures switch in control panel.

b. Replacement.

(1) Position switch in control panel (29) and replace washer and hex nut.

(2) Secure knob with set screw.

(3) Replace electrical leads.

3-17. Fuse Holders.

a. Fuse Replacement. Unscrew cap from fuse holder (24, 28) and remove defective fuse. Insert new fuse with correct ampere rating in holder and screw in cap.

b. Removal.

(1) Tag and disconnect the electrical wires from fuse holder.

(2) Unscrew hex nut from back side of panel and remove holder from front sides.

c. Replacement.

(1) Insert fuse holder from front side of panel and secure with lock washer and hex nut on back side.

(2) Replace electrical leads.

3-18. Indicator Light Holders.

a. Lamp Replacement. Unscrew lens from front side of lamp holder (23, 27) and remove defective lamp. Insert new lamp and secure lens

b. Removal.

(1) Tag and disconnect the electrical wires from the lamp holder.

(2) Unscrew hex nut that secures holder in control panel.

(3) Remove defective lamp holder.

c. Replacement.

(1) Insert new holder in control panel (29) and secure with lock washer and hex nut.

(2) Replace electrical leads.

SECTION VI. GIMBAL RING AND FORK

3-19. Check on Rotational Rates.

a. Set up gyro tester (par. 2-13).

b. Operate the unit with rotational rate switch in the 10 degrees per second position and check rotation speed with stopwatch. The corresponding time should agree within ± 2 percent of nominal. If the time does not agree, perform the following steps:

(1) Loosen shaft lock-nut on speed adjust potentiometer meter (21, Figure 2-1) on front side of panel.

(2) Adjust potentiometer with screw driver until time for one revolution of fork is within desired tolerance.

(3) Secure shaft by tightening lock-nut.

(4) Repeat steps (a) and (b) for rotational rates 15 and 20 degrees per second utilizing potentiometer (20, 19).

SECTION VII. PARTS NUMBER LISTING

3-20. General. The order of mechanical assembly of the gyro tester is detailed in exploded-view Figure 3-1 and corresponding part number listing.

Legend for Figure 3-1:

Index Number	Elec. Comp. Reference Designation	Part Number	Description	Mfr's. Code	Qty.
1		3500	Gyro Tester	57829	1
2		3500-36	Plate, adapter	57829	1
3		TSB-032-8	Screw, Thumb	13345	4
4		S10-48	Standoff	13345	4
5		3500-34	Stud	57829	4
6		3500-30	Ring, gimbal	57829	1
7		3500-31	Plate, mounting	57829	1
8		3500-32	Plate, retainer	57829	1
9		MS-16995-37	Screw, machine	96906	4
10		MS21316-55	Screw, thumb	96906	1
11		3500-19	Level, circular	57829	2
12		3500-40	Fork arm, upper	57829	1
13		3500-46	Fork arm, lower	57829	1
14		MS24671-32	Screw, machine	96906	12

Legend for Figure 3-1: Continued

Index Number	Elec. Comp. Reference Designation	Part Number	Description	Mfr's. Code	Qty.
15		3500-35	Stud, threaded	57829	2
16		76105	Locknut	73734	2
17		76100	Locknut	73734	2
18		AN-960-C416	Washer, steel	88044	2
19		F4DD	Bearing, ball	71335	2
21		3500-37	Enclosure, motor	57829	1
22		MS-35206-218	Screw, machine	96906	4
23	B2	KCI-23	Motor, vibrator	07829	1
24		3500-45	Standoff	57829	4
25		MS-35206-213	Screw, machine	88044	4
26		3500-38	Weight, vibrator	57829	1
27		MS-35206-225	Screw, set	88044	1
28		3500-47	Level, circular	57829	1
29		MS-35206-249	Screw, machine	88044	3
30		494-0046	Capacitor	07829	1
31		MS-35206-241	Screw, machine	88044	1
32		3500-41	Pin, latch, assembly	57829	1
33		3500-33	Plate, latch	57829	1
34		L-32-6	Bushing	99862	2
35		MS-16995-50	Screw, machine	96906	2
36		36-300	Clamp, cable	73734	2
37		AN-565C-24	Screw, machine	88044	2
Note: Index Numbers 41 through 44 not used.					
45		3500-20	Clutch	57829	1
46		MS-51959-34	Screw, machine	96906	4
47		MS-35207-258	Screw, set	88044	2
48		3500-13	Fork arm, vert.	57829	1
49		3500-14	Plate, doubler	57829	1
50		KP-1 2A	Bearing, ball	71335	2
51		MS-51959-32	Screw, machine	96906	4
52		5C-12	Spacer, shaft	73734	1
53		3500-6	Plate, routing	57829	1
54	S4	3500-11	Plate, slip ring	57829	1
55		MS-51959-9	Screw, machine	96906	4
56		3500-9	Plate, insulator	57829	1
57		3500-10	Plate, latch	57829	1
58		3500-12	Cover, dust	57829	1
59		MS24671-28	Screw, machine	96906	4
60		MS35200-1	Screw, machine	96906	4
61		3500-7	Brush, block	57829	1
62		1120051	Brush, 2A	13345	2
63		MS-51957-26	Screw, machine	96906	2
64		36-300	Clamp, cable	73734	1
65		2837/2	Cable, vib. motor	57829	1
66		MS35431-4	Terminals, elec.	96906	2
67		3500-15	Pin, latch, assembly	57829	1
68		KKR-1B	Knob, latch	80205	1
69		3500-18	Spring, latch	57829	1
70		3500-17	Sleeve, latch	57829	1
71		3500-16	Cap, latch	57829	1
72	B1	NSH-34RJ	Motor, drive	07829	1
73		3500-26	Seal, dust	57829	1
74		3500-80	Panel, side, rear	57829	1
Note: Index Number 74 and 75 not used					

Legend for Figure 3-1: Continued

Index Number	Elec. Comp. Reference Designation	Part Number	Description	Code	Mfr's. Qty.
76		MS24671-32	Screw, machine	96906	4
77		3500-70	Cradle, platform	57829	1
78		3500-72	Support, cradle, L/H	57829	1
79		3500-71	Support, cradle, R/H	57829	1
80		MS35308-74	Screw, machine	96906	4
81		3500-59	Shaft, bearing	57829	2
82		KPSA	Bearing, ball	71355	2
83		AN-960-C716	Washer, flat	88044	AR
84		82106	Nut, steel	73734	1
85		L-32-6	Bushing, steel	99862	2
86		3500-51	Support, base, R/H	57829	1
87		3500-50	Support, base, L/H	57829	1
88		3500-52	Panel, side	57829	2
89		3500-53	Panel, top	57829	1
91		MS-24671-42	Screw, machine	96906	8
92		3500-60	Pin, latch, assembly	57829	1
93		KKR-3A	Knob, latch	80205	1
94		3500-61	Spring, latch	57829	1
95		3500-62	Cap, latch	57829	1
96	W3	2837/2	Cable, slip ring	92151	1
97		MS35431-4	Terminal, elec.	96906	2
98	W2	3248	Cable, motor	92151	1
99	PSI	ASH-450	Control, motor	57829	1
100		MS-51958-31	Screw, machine	96906	3
101		3500-25	Plate, marking	57829	1
102	T1	6S1-6A	Filter, EMI	79080	1
103		CSJ38-70013	Relay, voltage	77342	1
104	XK1	MIPST	Socket, octal	71782	1
105		MS-51957-26	Screw, machine	96906	2
106		MS3106A-10SL-3S	Connector, power	96906	1
107		MS31-2A-10SL-3P	Connector, power	96906	1
108	W1	616	Cord, power	92151	1
109		3500-56	Panel, control	57829	1
110		MS-51958-43	Screw, machine	96906	7
111	XF1, XF2	571004	Holder, fuse	75919	2
112	F1	513005	Fuse, 5A	75919	1
113	F2	513001	Fuse, 1A	75919	1
114	XDS1, XDS2	30099	Holder, lamp	28107	2
115	DS1, DS2	32072	Lamp	28107	2
116	S1	MS25002-2	Switch, rotary	96906	1
117		KPN-700	Knob, switch	80205	1
118	R1, R2, R3	73JA-1000	Resistor, variable	80205	3
119	S3	MS35059-22	Switch, toggle	96906	1
120	S2	IGE250-73	Switch, toggle	80205	1
121	R4	995-10A-50	Resistor, 50 ohm	44655	1
122		3500-55	Plate, bottom	57829	1
123		FH2720	Pads, leveling	99862	4
124		MS-51958-28	Screw, machine	96906	8

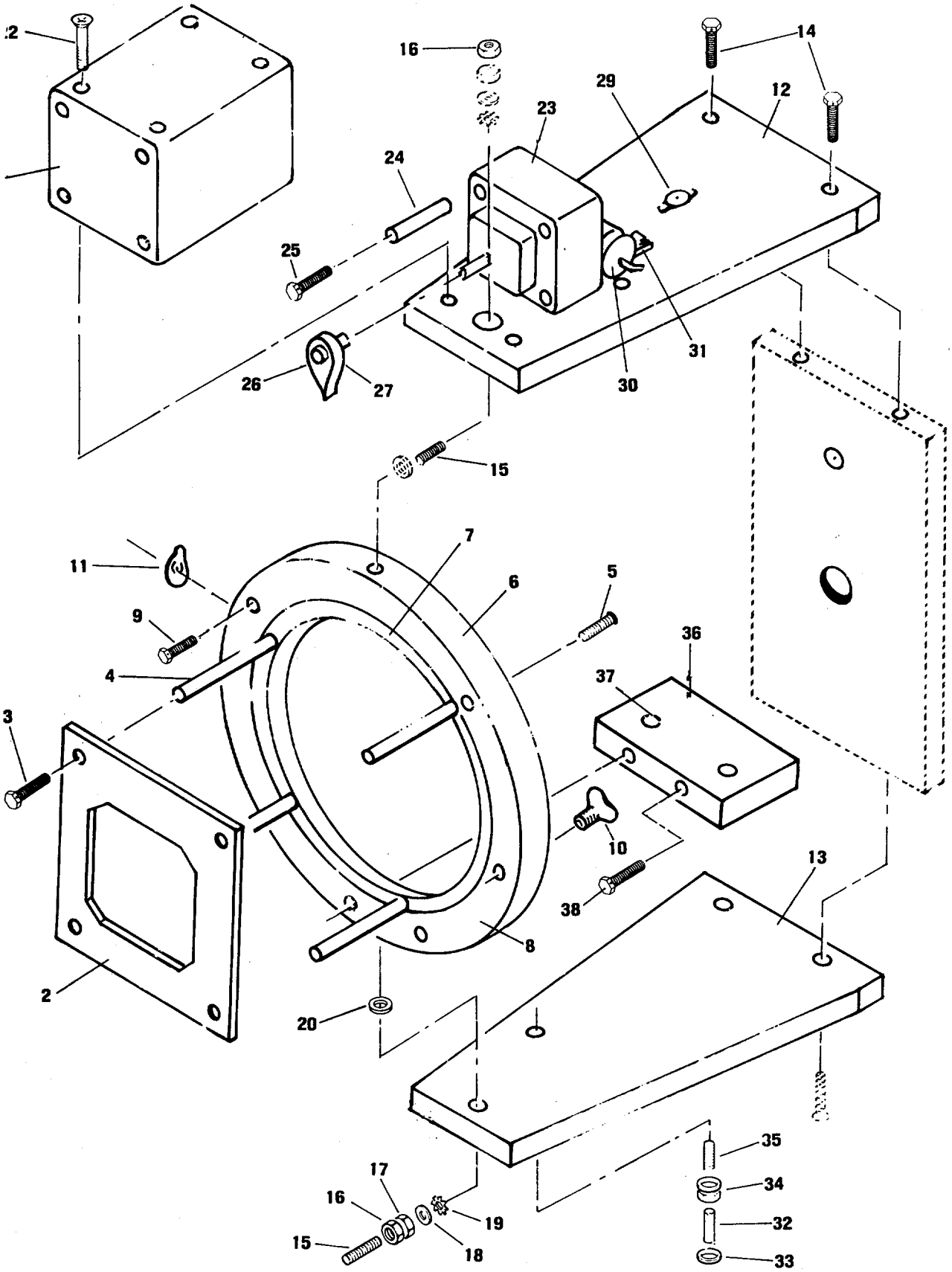

Figure 3-1. Gyro Tester Assembly (Sheet 1 of 3)

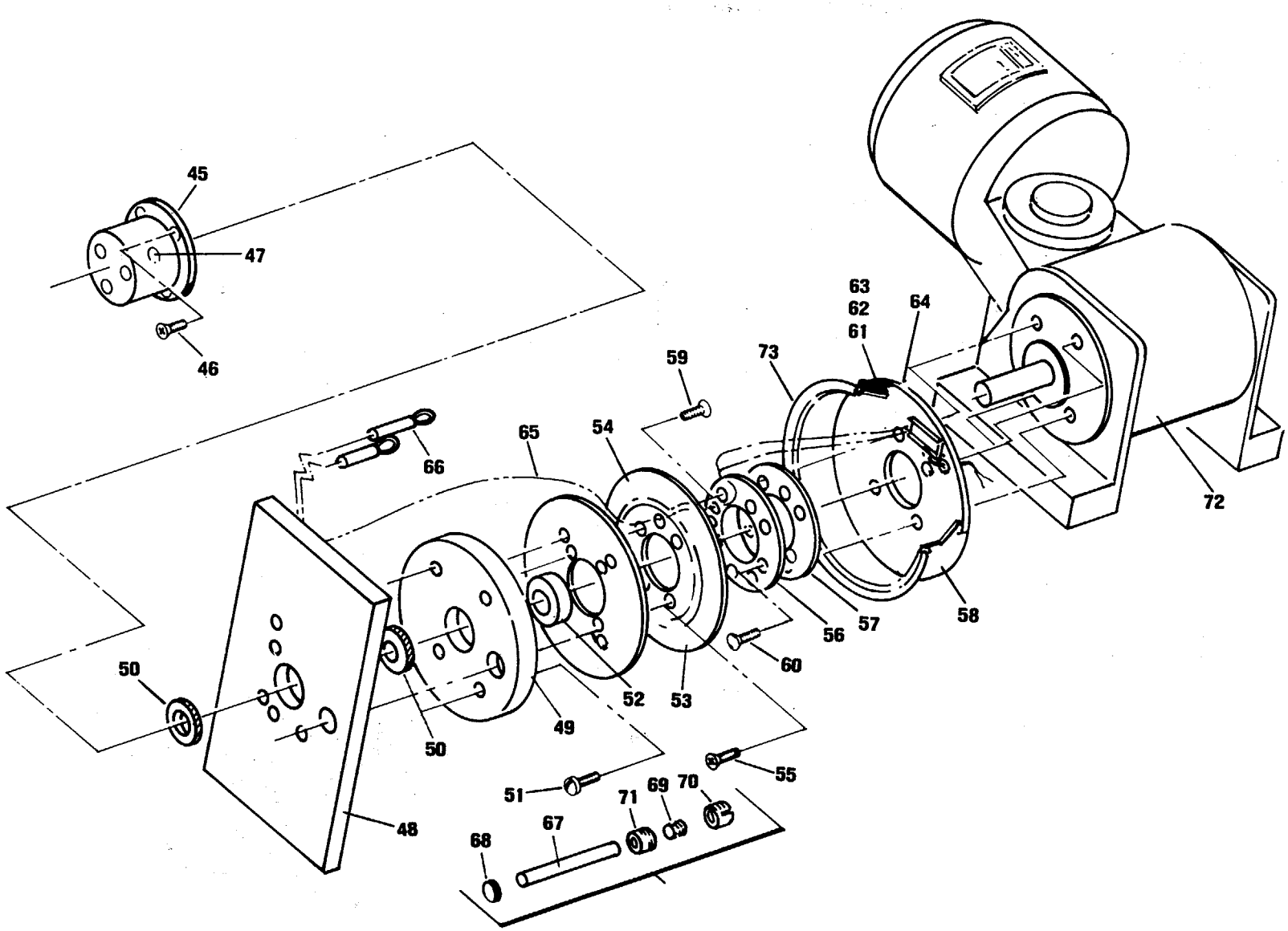

Figure 3-1. Gyro Tester Assembly (Sheet 2 of 3)

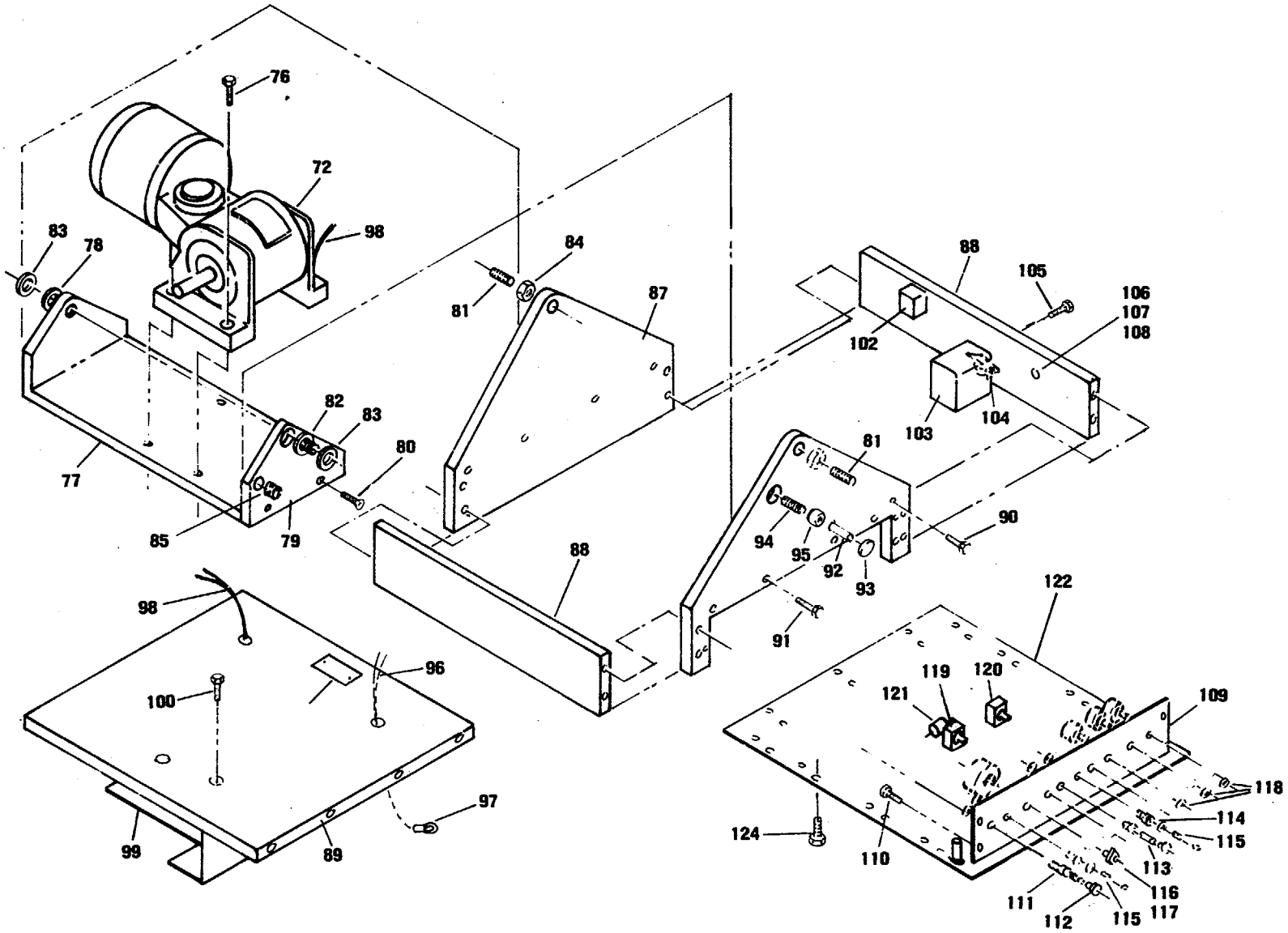

Figure 3-1. Gyro Tester Assembly (Sheet 3 of 3)

3-9/3-10 Blank

CHAPTER 4.

AVIATION INTERMEDIATE MAINTENANCE

SECTION I. PREPARATION FOR MAINTENANCE STORAGE AND SHIPMENT

4-1. Unpacking Unit. Refer to paragraph 3-1, chapter 3.

4-2. Preparation of Unit for Maintenance Storage. Refer to paragraph 3-2, chapter 3.

4-3. Preparation of Unit for Shipment. Refer to paragraph 3-3, chapter 3 and Figure 4-1.

SECTION II. CHECKOUT AND ANALYSIS

a. The Daily Services listed in Table 3-2 of paragraph 3-7 shall be performed upon initial application of power.

b. Follow the operational checkout of paragraph 3-8 to discover any gyro tester malfunctions.

SECTION III. REPAIR PROCEDURES

4-4. Drive Motor Control Unit.

a. Removal

(1) Rest the gyro tester on its back supporting the drive motor weight with suitable blocks.

(2) Remove bottom panel (122, Figure 3-1).

(3) Tag and disconnect the electrical wires from control unit (99, Figure 3-1).

(4) Remove three machine screws holding control unit.

b. Replacement

(1) Position control unit and secure with three machine screws.

(2) Replace electrical leads.

(3) Position bottom panel and secure with machine screws and leveler pads.

(4) Refer to Section IV, paragraph 4-9, for alignment.

4-5. Slip Clutch.

a. Removal.

(1) Release cradle index knob (17, Figure 1-1 and rotate cradle to vertical position.

(2) Loosen two 10-32 thread set screws securing slip clutch (45, Figure 3-1) on drive motor shaft.

(3) Remove four machine screws 46 securing slip clutch to fork.

(4) Pull by hand on slip clutch housing to remove.

b. Replacement.

(1) Position slip clutch and secure with four machine screws.

(2) Tighten two set screws.

(3) New unit should resist one pound of force applied at end of fork using tension gage before beginning to slip.

4-6. Drive Motor.

a. Removal.

(1) Remove slip clutch by referring to paragraph 4-5.

(2) Lift up by hand on fork assembly removing it from drive motor shaft. Be careful in setting fork assembly down on bench not to strike slip ring against any hard object.

(3) Tag and disconnect vibrator motor power leads at brushes.

(4) Release cradle index knob (17, Figure 1-1) and rotate cradle to horizontal position.

(5) Remove four 3/8-18 thread machine screws (76, Figure 3-1) at motor base.

(6) Place the failed and replacement drive motors on their backs to prevent the leakage of lubricant while transferring the dust cover (58, Figure 3-1).

b. Replacement

(1) Position the drive motor on the cradle and secure it with the four machine screws.

(2) Connect electrical leads.

(3) Release cradle index knob and rotate cradle to vertical position.

(4) Slide fork assembly down over drive motor shaft being careful not to strike slip ring against end of shaft.

(5) Replace slip clutch by referring to paragraph 4-5.

(6) Refer to Section IV, paragraph 4-9 for alignment.

4-7. Vibrator Motor.

a. Removal.

(1) Release cradle knob and rotate cradle to horizontal position.

(2) Release motor enclosure (21, Figure 3-1) by removing four hex nuts.

(3) Tag and disconnect the electrical wires from motor.

(4) Detach motor (23) from enclosure by removing four machine screws (25, Figure 3-1).

(5) Release vibrator weight (26, Figure 3-1) from motor shaft by loosening set screw.

b. Replacement

(1) Secure vibrator weight on motor shaft .25 inches from motor housing.

(2) Replace motor in the enclosure by using four machine screws.

(3) Connect the electrical leads.

(4) Secure motor enclosure in place using four hex nuts.

(5) Refer to Section IV, paragraph 4-10 for alignment.

4-8. Dirty Slip Ring.

a. Removal.

(1) Remove slip clutch by referring to paragraph 4-5.

(2) Lift up by hand on fork assembly removing it from drive motor shaft. Be careful in setting fork assembly down on bench not to strike slip ring against hard object.

(3) Clean slip ring (54, Figure 3-1) with a cloth moistened in an approved cleaning solvent.

(4) An alternate is to replace the slip ring if found damaged by tagging and disconnecting leads and removing four screws.

b. Replacement

(1) Replace slip ring by reconnecting leads and securing it with four machine screws.

(2) Replace fork assembly on drive motor shaft being careful not to strike slip ring on end of shaft.

(3) Replace slip clutch by referring to paragraph 4-5.

(4) Refer to Section IV, paragraph 4-10 for alignment.

SECTION IV. ALIGNMENT

4-9. Check on Rotational Rates.

a. Set up gyro tester (per paragraph 2-13).

b. Operate unit with rotational rate switch in the 10 degrees per second position and check rotational speed with stopwatch. The corresponding time should agree within ± 2 percent of nominal. If the time does not agree, perform the following steps.

(1) Loosen shaft lock-nut on potentiometer (21, Figure 2-1) on front side of panel.

(2) Adjust potentiometer with screw driver until time for one revolution of fork is within desired tolerance.

(3) Secure shaft by tightening lock-nut.

(4) Repeat steps (a) and (b) for rotational rates 15 and 20 degrees per second utilizing potentiometers (20, 19).

4-10. Check on Vibration Level.

a. Set up gyro tester per paragraph 2-13.

b. Place rotational rate switch in 10 degrees per second position.

c. Move dive-climb switch lever from center position to either side to initiate rotation of fork assembly.

d. Place vibrator motor switch in "ON" position and feel by hand for vibration of base and cradle.

e. Make sure vibration is present during entire time for one complete rotation of fork assembly.

CONTINUATION SHEET
(TSARCOM Reg 746-1 (J))

REF NO OF DOCUMENT BEING CONTINUED | PAGE | OF

NAME OF OFFEROR OR CONTRACTOR

SECTION G - PRESERVATION/PACKAGING/PACKING
PREPARATION FOR DELIVERY *(OVERHAUL)*

All specifications and standards applicable to the requirements herein shall be the issue in effect on date of invitations for bids.

NOMENCLATURE	STOCK NUMBER
TESTER, GYRO INDICATOR	4920-01-069-6853
	PART NUMBER 3500

NET WEIGHT	SHIPPING DIMENSIONS	GROSS WEIGHT	CUBIC FEET
		202 lbs	5.5

1. PRESERVATION AND PACKAGING [X] LEVEL A [ ] LEVEL B

[X] PACKAGING SHALL BE IN ACCORDANCE WITH SPECIFICATION MIL-P-116. THE FOLLOWING DETAILED REQUIREMENTS SHALL APPLY:

UNIT PKG QTY	METHOD	PRESERVATIVE	WRAP	DUNNAGE	CONTAINER
1	IIa	None	MIL-B-121 Gr A	Wood Block & Brace	See Packing

[ ] a. ITEMS SHALL BE PRESERVED AND PACKAGED IN ACCORDANCE WITH MIL-STD-1188

[ ] b. OTHER

2. PACKING [XX] LEVEL A [ ] LEVEL B

[ ] a. ITEMS, PRESERVED AND PACKAGED AS ABOVE, SHALL BE PACKED IN SNUG-FITTING FIBERBOARD CONTAINERS CONFORMING TO WEATHER-RESISTANT CLASS OF PPP-B-636.

[XX] b. ITEMS, PRESERVED AND PACKAGED AS ABOVE, SHALL BE PACKED IN SNUG-FITTING CONTAINERS CONFORMING TO PPP-B-601, STYLE I, OVERSEAS TYPE.

[ ] c. ITEMS, PRESERVED AND PACKAGED AS ABOVE, SHALL BE PACKED IN ACCORDANCE WITH MIL-STD-1188

[ ] d. NO PACKING REQUIRED (THE UNIT CONTAINER IS THE SHIPPING CONTAINER).

[ ] e. OTHER

3. MARKING

[X] a. MARKING OF SHIPMENTS
THE CONTRACTOR SHALL MARK ALL SHIPMENTS UNDER THIS CONTRACT IN ACCORDANCE WITH THE EDITION OF MIL-STD-129, "MARKING FOR SHIPMENT AND STORAGE," IN EFFECT AS OF THE DATE OF THE SOLICITATION.

[ ] b. MARKING SHALL CONFORM TO REQUIREMENTS OF MIL-STD-1188

[X] c. MATERIEL CONDITION MARKING SHALL BE APPLIED IN ACCORDANCE WITH MIL-STD-129. A MATERIEL CONDITION TAG OF THE APPLICABLE TYPE WILL BE SECURELY ATTACHED DIRECTLY TO ALL UNINSTALLED OR STORED AERONAUTICAL OR AIR DELIVERY ITEMS. WHEN SUCH ITEMS ARE PLACED OR STORED IN CARTONS, PACKAGES, CRATES OR METAL SHIPPING CONTAINERS, A DUPLICATE MATERIEL CONDITION TAG OR LABEL WILL BE SECURELY ATTACHED TO THE EXTERIOR OF THE PACKAGE OR CONTAINER IN SUCH A MANNER THAT WILL AFFORD MAXIMUM PROTECTION FROM HANDLING AND WEATHER. TAGS WILL BE COMPLETED EITHER BY TYPEWRITTEN OR PRINTED BLACK LEAD PENCIL ENTRIES. ITEMS OF A COMMON OR NONTECHNICAL NATURE *(i.e., common hardware, bulk materials, etc.)* THE SERVICEABILITY OF WHICH IS OBVIOUS, AND THE IDENTITY AND INSPECTION REQUIREMENTS ADEQUATELY INDICATED BY COMMERCIAL TAGS, LABELS OR MARKINGS, MAY BE RECEIVED, STORED, ISSUED OR SHIPPED WITHOUT MATERIEL CONDITION TAGS.

[ ] d. EXTERIOR SHIPPING CONTAINERS OF SIMS *(Selected Item Management System)* MATERIEL SHALL BE MARKED WITH SIM PROJECT CODE DISC LABELS IN ACCORDANCE WITH MIL-STD-129. THE CONTRACTING OFFICER WILL PROVIDE SIM PROJECT CODE LABELS ON REQUEST. THEY ARE AVAILABLE IN TWO SIZES, 3 X 3 AND 9 X 9. SPECIFY ON YOUR ORDER THE SIZE AND QUANTITY REQUIRED.

APPROVED BY	ORGANIZATION	DATE
NATHAN SILVERMAN	DRSTS-SDP(2)	29 Jan 79

DRSTS-HQ Form 6512
1 Jun 78

Figure 4-1. Preservation, Packaging, Packing and Marking Requirements.

APPENDIX A

REFERENCES

A-1. Records and Reports.

TM 38-750, Army Equipment Records Procedures.

A-2. Preventative Maintenance.

AR 750-5, Organization, Policies, and Responsibilities for Maintenance Operations.

A-1/A-2 Blank

APPENDIX B

MAINTENANCE ALLOCATION CHART

SECTION I. INTRODUCTION

B-1. Maintenance Allocation Chart.

a. This Maintenance Allocation Chart (MAC) assigns maintenance functions in accordance with the Three Levels of Maintenance concept for army aircraft. These maintenance levels: Aviation Unit Maintenance (AVUM), Aviation Intermediate Maintenance (AVIM) and Depot Maintenance are depicted on the MAC as:

AVUM which corresponds to the 0 code in the Repair Parts and Special Tools List (RPSTL).

AVIM which corresponds to the F code in the Repair Parts and Special Tools List (RPSTL).

DEPOT which corresponds to the D code in the Repair Parts and Special Tools List (RPSTL).

b. The maintenance to be performed below depot and in the field is described as follows:

(1) Aviation Unit Maintenance (AVUM). AVUM activities will be staffed and equipped to perform high frequency "On-Equipment" maintenance tasks required to retain or return equipment to a serviceable condition. The maintenance capability of the AVUM will be governed by the MAC and limited by the amount and complexity of support equipment, facilities required, and number of spaces and critical skills available. The range and quantity of authorized space modules/components will be consistent with the mobility requirements dictated by the air mobility concept. (Assignment of maintenance tasks to divisional company size aviation units will consider the overall maintenance capability of the division, the requirement to conserve personnel and equipment resources and air mobility requirements).

(a) Company Size Aviation Units. Perform those tasks which consist primarily of preventative maintenance and maintenance repair and replacement functions associated with sustaining a high level of equipment operational readiness. Perform maintenance inspections and servicing to include daily, intermediate, periodic and special inspections as authorized by the MAC or higher headquarters. Identify the cause of equipment/ system malfunctions using applicable technical manual troubleshooting instructions. Built-In-Test Equipment (BITE), installed instruments, or easy to use Test Measurement and Diagnostic Equipment (TMDE). Replace worn or damaged modules/components or system alignment and which can be removed/installed with available skills, tools and equipment. Perform operational and continuity checks and make minor repairs. Perform servicing, functional adjustments, and minor repair/replacement. Evacuate unserviceable modules/components and end items beyond the repair capability of AVUM to the supporting AVIM.

(b) Less than Company Size Aviation Units. Aviation elements organic to brigade, group, battalion headquarters and detachment size units are normally small and have less than ten aircraft assigned. Maintenance tasks performed by the aircraft crew chief or assigned aircraft repairman will normally be limited to preventive maintenance, inspections, servicing, spot painting, stop drilling, minor adjustments, module/component fault diagnosis and replacement of selected modules/components. Repair functions will normally be accomplished by the supporting AVIM unit.

(2) Aviation Intermediate Maintenance (A VIM). AVIM provides mobile, responsive "One Stop" maintenance support. (Maintenance functions which are not conducive to sustaining air mobility will be assigned to depot maintenance). Performs all maintenance functions authorized to be done at AVUM. Repair of equipment for return to user will emphasize support or operational readiness requirements. Authorized maintenance includes replacement and repair of modules/components and end items which can be accomplished efficiently with available skills, tools, and equipment. Establishes the Direct Exchange (DX) program for AVUM units by repairing selected items for return to stock when such repairs cannot be accomplished at the AVUM level. Inspects, troubleshoots, tests, diagnoses, repairs, adjusts, calibrates, and aligns system modules/components. Module/component disassembly and repair will support the DX program and will normally be limited to tasks requiring cleaning and the replacement of seals, fittings and items of common hardware. Unserviceable repairable modules/ components and end items which are beyond the capability of AVIM to repair will be evacuated to Depot Maintenance. This level will perform special inspections which exceed AVUM capability. Provides quick response maintenance support, on-the-job-training, and technical assistance through the use of mobile maintenance contact teams. Maintains authorized operational readiness float. Provides collections and classification services for serviceable/unserviceable material. Operates a cannibalization activity in accordance with AR 750-50. (The aircraft maintenance company within the maintenance battalion of a division will perform AVIM functions consistent with air mobility requirements and conservation of personnel and equipment resources. Additional intermediate maintenance support will be provided by the supporting non-divisional AVIM unit).

B-2. Use of the Maintenance Allocation Chart.

a. The MAC assigns maintenance functions to the lowest level of maintenance based on past experience and the following consideration:

(1) Skills available.

(2) Time required.

(3) Tools and test equipment required and/or available.

b. Only the lowest level of maintenance authorized to perform a maintenance function is indicated. If the lowest level of maintenance cannot perform all tasks of any single maintenance function (e.g., test, repair), then the higher maintenance level(s) that can accomplish additional tasks will also be indicated.

c. A maintenance function assigned to a maintenance level will automatically be authorized to be performed at any higher maintenance level.

d. A maintenance function that cannot be performed at the assigned level of maintenance for any reason may be evacuated to the next higher maintenance organization. Higher maintenance levels will perform the maintenance functions of lower maintenance levels when required or directed by the appropriate commander.

e. The assignment of a maintenance function will not be construed as authorization to carry the associated repair parts in stock. Authority to requisition, stock, or otherwise secure necessary repair parts will be as specified in the repair parts and special tools list appendix.

f. Normally there will be no deviation from the assigned level of maintenance. In cases of operational necessity, maintenance functions assigned to a maintenance level may, on a one-time basis and at the request of the lower maintenance level, be specifically authorized by the maintenance officer of the level of maintenance to which the function is assigned. The special tools, equipment, etc. required by the lower level of maintenance to perform this function will be furnished by the maintenance level to which the function is assigned. This transfer of a maintenance function to a lower maintenance level does not relieve the higher maintenance level of the responsibility of the function. The higher level of maintenance will provide technical supervision and inspection of the function being performed at the lower level.

g. Organizational through depot maintenance of the US Army Electronics Command equipment will be performed by designated US Army Electronics Command personnel.

h. Changes to the MAC will be based on continuing evaluation and analysis by responsible technical personnel and on reports received from field activities.

B-3. Definitions.

*a. Inspect***.** To determine serviceability of an item by comparing its physical, mechanical and electrical characteristics with established standards.

b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents and air.

d. *Adjust.* To rectify to the extent necessary to bring into proper operating range.

e. Aline. To adjust specified variable elements of an item to bring to optimum performance.

f. Calibrate. To determine the corrections to be made in the readings of instruments or test equipment used in precise measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument or test equipment being compared with the certified standard.

*g. Install***.** To set up for use in an operational environment such as an emplacement, site or vehicle.

h. Replace. To replace unserviceable items with serviceable assemblies, subassemblies or parts.

*i. Repair***.** To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This includes, but is not limited to, inspection, cleaning, preserving, adjusting, replacing, welding, riveting, and strengthening.

j. Overhaul. To restore an item to a completely serviceable condition as prescribed by maintenance serviceability standards prepared and published for the specific item to be overhauled.

k. Rebuild. To restore an item to a standard as nearly as possible to the original or new condition in appearance, performance, and life expectancy. This is accomplished through the maintenance technique of complete disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements (items) using original manufacturing tolerances and specifications, and subsequent reassembly of the item.

B-4. Functional Groups.

Standard functional groupings are not considered feasible for aviation ground support equipment due to variation and complexity. Therefore, variations to functional groupings may occur.

B-5. Maintenance Categories and Work Times.

The maintenance categories (levels) AVUM, AVIM, and DEPOT are listed on the Maintenance Allocation Chart with individual columns that indicate the work times for maintenance functions at each maintenance level. Work time presentations such as 0.1 indicate the average time it requires a maintenance level to perform a specified maintenance function. If a work time has not been established, the columnar presentation shall indicate "- -". Maintenance levels higher than the level of maintenance indicated are authorized to perform the indicated function.

B-6. Tools and Test Equipment (Section III).

Common tool sets (not individual tools), special tools, test and support equipment required to perform maintenance functions are listed alphabetically with a reference number to permit cross-referencing to column 5 in the MAC. In addition, the maintenance category authorized to use the devise is listed along with the item National Stock Number (NSN) and, if applicable, the tool number to aid in identifying the tool/device.

MAINTENANCE ALLOCATION CHART

NOMENCLATURE OF END ITEMS

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	TESTER, GYRO LOOP AND ROLL P/N 3500 (4) MAINTENANCE CATEGORY AVUM	AVIM	DEPOT	(5) TOOLS AND EQUIPMENT	(6) REMARKS
00	TESTER, GYRO PITCH AND ROLL						
0001	GIMBAL & FORK ASSY. .	INSPECT	0.2				
		SERVICE	0.3				
		REPLACE		0.8		106	
0002	VIBRATOR MOTOR	INSPECT	0.2				
		SERVICE	0.3				
		REPLACE		1.0		106	
		REPAIR			1.5		
0003	DRIVE MOTOR	INSPECT	0.2				
		SERVICE	0.3				
		REPLACE		0.8		106	
		REPAIR			1.5		
0004	SWITCHES	INSPECT	0.2				
		SERVICE	0.3				
		REPLACE		0.5		106	

Figure B-1. Maintenance Allocation Chart.

APPENDIX C
REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)
(Current as of 26 January 1981)

Section I. INTRODUCTION

C-1. Scope. This appendix lists spares repair parts required for performance of Aviation Unit Maintenance (AVUM), and Aviation Intermediate Maintenance (AVIM), and Depot Maintenance of the Tester, Gyro Indicator, Pitch and Roll, Part No. 3500. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

C-2. General. This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the-authorized parts, in figure and item number sequence.

b. Section III. Special Tools List. Not applicable.

c. Section IV. National Stock Number and Part Number Index. A list, in National Item Identification Number (NIIN) sequence of all National Stock Numbers (NSN) appearing in the listings, followed by a list, in alphameric sequence, of all part numbers appearing in the listing. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

C-3. Explanation of Columns.

a. Illustration. This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration in which the item is shown.

(2) Item Number. The number used to identify each item called out in the illustration.

b. Source, Maintenance and Recoverability Codes (SMR).

(1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	Definition
PA	Item procured and stocked for anticipated or known usage.
PB	Item procured and stocked for insurance purpose because essentiality dictates that a minimum quantity be available in the supply systems.
PC	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF	Support equipment which will not be stocked but which will be centrally procured on demand.

Code	Definition
PG	Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which, because of probable discontinuance or shutdown of production facilities, would prove uneconomical to reproduce at a later time.
KD	An item of a depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF	An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at Aviation Unit or Aviation Intermediate levels of maintenance.
KB	Item included in both a depot overhaul/repair kit and a maintenance kit procured on demand.
MO	Item to be manufactured or fabricated at the Aviation Unit Maintenance level.
MF	Item to be manufactured or fabricated at the Aviation Intermediate maintenance level.
MD	Item to be manufactured or fabricated at the depot maintenance level.
AO	Item to be assembled at the Aviation Unit Maintenance level.
AF	Item to be assembled at the Aviation Intermediate Maintenance level.
AD	Item to be assembled at depot maintenance level.
XA	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB	Item is not procured or stocked. If not available through salvage, requisition.
XD	A support item that is not stocked. When required, item will be procured through normal supply channels.
XC	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA and aircraft support items as restricted by AR 700-42.

(2) Maintenance Code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

Code	Application/Explanation
O	Support item is removed, replaced, used at the Aviation Unit Maintenance level.
F	Support item is removed, replaced, used at the Aviation Intermediate Maintenance level.
D	Support items that are removed, replaced, used at depot, mobile depot, specialized repair activity only.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

Code	Application/Explanation
O	The lowest maintenance level capable of complete repair of the support item is the Aviation Unit Maintenance level.
F	The lowest maintenance level capable of complete repair of the support item is the Aviation Intermediate Maintenance level.
D	The lowest maintenance level capable of complete repair of the support item is the depot level.
L	Repair restricted to designated specialized repair activity.

Code	Application/Explanation
Z	Nonreparable. No repair is authorized.
B	No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

(3) Recoverability Code. Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

Code	Definition
Z	Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
O	Reparable item. When uneconomically reparable, condemn and dispose at Aviation Unit Maintenance level.
F	Reparable item. When uneconomically reparable, condemn and dispose at the Aviation Intermediate Maintenance level.
D	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L	Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.
A	Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

d. Part Number. 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 a stock numbered item is requisitioned, the item received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. In the Special Tools List, the initial basis of issue (BOI) appears as the last line in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased accordingly.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable (e.g., shims, spacers, etc.).

C-4. Special Information. Not applicable**.**

C-5. How to Locate Repair Parts.

a. When National Stock Number or Part Number is Unknown.

(1) First. Find the illustration covering the assembly to which the item belongs.

(2) Second. Identify the item on the illustration and note the illustration figure and item number of the item.

(3) Third. Using the Repair Parts Listing, find the figure and item number noted on the illustration.

b. When National Stock Number or Part Number is Known.

(1) First. Using the Index of National Stock Numbers, find the pertinent National stock number or part number. This index is in ascending NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) Second. After finding the figure and item number, locate the figure and item number in the repair parts list.

C-6. Abbreviations. Not applicable.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) FSCM	(5) PART NUMBER	(6) DESCRIPTION *USABLE ON CODE*	(7) U/M	(8) QTY INC IN UNIT
						GROUP 01 GYRO TESTER PITCH AND ROLL		
3-1	2	XDFFF		57829	3500-36	PLATE, ADAPTER	EA	1
3-1	3	XDFZZ		13345	TSB-032-8	.SCREW, THUMB	EA	4
3-1	4	XDFFF		13345	S10-48	STANDOFF	EA	4
3-1	5	XDFZZ		57829	3500-34	.STUD	EA	4
3-1	6	XDFFF		57829	3500-30	RING, GIMBAL	EA	1
3-1	7	XDFZZ		57829	3500-31	.PLATE, MOUNTING	EA	1
3-1	8	XDFZZ		57829	3500-32	.PLATE, RETAINER	EA	1
3-1	9	XDFZZ		96906	MS16995-37	.SCREW, MACHINE	EA	4
3-1	10	XDFZZ		96906	MS21316-55	.SCREW, THUMB	EA	1
3-1	11	XDFZZ		57829	3500-19	.LEVEL, CIRCULAR	EA	2
3-1	12	XDFZZ		57829	3500-40	FORK ARM, UPPER	EA	1
3-1	13	XDFZZ		57829	3500-46	FORK ARM, LOWER	EA	1
3-1	14	XDFZZ		96906	MS24671-32	SCREW, MACHINE	EA	4
3-1	15	XDFZZ		57829	3500-35	STUD, THREADED	EA	2
3-1	16	XDFZZ		73734	76105	LOCKNUT	EA	2
3-1	17	XDFZZ		73734	76100	LOCKNUT	EA	2
3-1	18	XDFZZ		88044	AN-960-0416	WASHER, STEEL	EA	2
3-1	19	XDFZZ		71335	F4CD	BEARING, BALL	EA	2
3-1	20	XDFZZ		88044	AN-960-C416	WASHER, STEEL	EA	6
3-1	21	XDFZZ		57829	3500-37	ENCLOSURE, MOTOR	EA	1
3-1	22	XDFZZ		96906	MS35206-218	SCREW, MACHINE	EA	4
3-1	23	XDDDD		07829	KCI-23	MOTOR VIBRATOR	EA	1
3-1	24	XDFZZ		57829	3500-45	STANDOFF, MOTOR	EA	4
3-1	25	XDFZZ	5305-00-889-3116	96906	MS25206-213	SCREW, MACHINE	EA	4
3-1	26	XDFFF		57829	3500-38	WEIGHT, VIBRATOR	EA	1
3-1	27	XDFZZ	5305-00-984-4982	96906	MS35206-225	.SCREW, MACHINE	EA	1
3-1	28	XDFZZ		57829	3500-47	LEVEL, CIRCULAR	EA	1
3-1	29	XDFZZ	5305-00-984-6197	96906	MS35206-249	SCREW, MACHINE	EA	3
3-1	30	XDFFF		07829	494-0046	CAPACITOR	EA	1
3-1	31	XDFZZ	5305-00-984-6189	96906	MS35206-241	.SCREW, MACHINE	EA	1
3-1	32	XDFFF		57829	3500-41	PIN, LATCH ASSY	EA	1
3-1	33	XDFZZ		80205	KKR-3A	.KNOB	EA	1
3-1	34	XDFZZ		57829	3500-43	.CAP, LATCH	EA	1
3-1	35	XDFZZ		57829	3500-44	.SPRING COMPRESSION	EA	1
3-1	36	XDFZZ		57829	3500-33	PLATE, LATCH	EA	1
3-1	37	XDFZZ		99862	L-32-6	BUSHING	EA	2
3-1	38	XDFZZ		96906	MS16995-50	SCREW, MACHINE	EA	2
3-1	39	XDFZZ		73734	360300	CLAMP, CABLE	EA	2
3-1	40	XDFZZ		88044	AN-565C-24	SCREW, MACHINE	EA	2
3-1	45	XDFFF		57829	3500-20	CLUTCH	EA	1

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) FSCM	(5) PART NUMBER	(6) DESCRIPTION *USABLE ON CODE*	(7) U/M	(8) QTY INC IN UNIT
3-1	46	XDFZZ		96906	MS51959-34	.SCREW, MACHINE	EA	4
3-1	47	XDFZZ	5305-00-958-4362	96906	MS35207-258	.SCREW, MACHINE	EA	2
3-1	48	XDFZZ		57829	3500-13	FORM ARM, VERTICAL	EA	1
3-1	49	XDFZZ		57829	3500-14	PLATE, DOUBLER	EA	1
3-1	50	XDFZZ		71335	KP-12A	BEARING, BALL	EA	2
3-1	51	XDFZZ		96906	MS51959-32	SCREW, MACHINE	EA	4
3-1	52	XDFZZ		73734	50-12	SPACER, SHAFT	EA	1
3-1	53	XDFZZ		57829	3500-6	PLATE, ROUTING	EA	1
3-1	54	XDFZZ		57829	3500-11	PLATE, SLIP RING	EA	1
3-1	55	XDFZZ		96906	MS51959-9	SCREW, AMCHINE	EA	4
3-1	56	XDFZZ		57829	3500-9	PLATE, INSULATOR	EA	1
3-1	57	XDFZZ		57829	3500-10	PLATE, LATCH	EA	1
3-1	58	XDFZZ		57829	3500-12	COVER, DUST	EA	1
3-1	61	XDFZZ		57829	3500-7	BRUSH, BLOCK	EA	1
3-1	62	XDFZZ		13345	1120051	BRUSH, 2AMPS	EA	2
3-1	63	XDFZZ		96906	MS51957-26	SCREW, MACHINE	EA	2
3-1	64	XDFZZ		73734	36-300	CLAMP, CABLE	EA	1
3-1	65	XDFZZ		57829	2837/2	CABLE, VIB. MOTOR	EA	1
3-1	66	XDFZZ		96906	MS35431-4	TERMINAL, ELECTRICAL	EA	2
3-1		XDFFF		57829	3500-67	PIN, LATCH ASSY	EA	1
3-1	67	XDFZZ		57829	3500-15	.PIN, LATCH	EA	1
3-1	68	XDFZZ		80205	KK8-18	.KNOB	EA	1
3-1	69	XDFZZ		57829	3500-18	SPRING, ALTCH	EA	1
3-1	70	XDFZZ		57829	3500-17	.SLEEVE, LATCH	EA	1
3-1	71	XDFZZ		57829	3500-16	.CAP, LATCH	EA	1
3-1	72	XDDDD		07829	NSH-34BJ	MOTOR, DRIVE	EA	1
3-1	73	XDFZZ		57829	3500-26	SEAL, DUST	EA	1
3-1	76	XDFZZ		96906	MS24671-32	SCREW, MACHINE	EA	4
3-1	77	XDFZZ		57829	3500-70	CRADLE, PLATFORM	EA	1
3-1	78	XDFZZ		57829	3500-72	.SUPPORT, CRADLE, L/H	EA	1
3-1	79	XDFZZ		57829	3500-71	.SUPPORT, CRADLE, R/H	EA	1
3-1	80	XDFZZ		96906	MS35308-74	..SCREW, MACHINE	EA	4
3-1	81	XDFZZ		57829	3500-59	SHAFT, BEARING	EA	2
3-1	82	XDFZZ		71355	KP8A	BEARING, BALL	EA	2
3-1	83	XDFZZ		88044	AN-960-C716	WASHER, FLAT	EA	6
3-1	84	XDFZZ		73734	82106	NUT, STEEL	EA	1
3-1	85	XDFZZ		99862	L-32-6	BUSHING, STEEL	EA	2
3-1	86	XDFZZ		57829	3500-51	SUPPORT, BASE, R/H	EA	1
3-1	87	XDFZZ		57829	3500-50	SUPPORT, BASE, L/H	EA	1
3-1	88	XDFZZ		57829	3500-52	PANEL, SIDE	EA	1

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) FSCM	(5) PART NUMBER	(6) DESCRIPTION *USABLE ON CODE*	(7) U/M	(8) QTY INC IN UNIT
3-1	89	XDFZZ		57829	3500-80	PANEL, SIDE, REAR	EA	1
3-1	89	XDFZZ		57829	3500-53	PANEL, TOP	EA	1
3-1	90	XDFZZ		96906	MS24671-32	SCREW, MACHINE	EA	8
3-1	91	XDFZZ		96906	MS24671-42	SCREW, MACHINE	EA	8
3-1	92	XDFZZ		57829	3500-60	PIN, LATCH	EA	1
3-1	93	XDFZZ		80205	KKR-3A	KNOB	EA	1
3-1	94	XDFZZ		57829	3500-61	SPRING, LATCH	EA	1
3-1	95	XDFZZ		57829	3500-62	CAP, LATCH	EA	1
3-1	96	XDFZZ		92151	2837/2	CABLE, SLIP RING	EA	1
3-1	97	XDFZZ		96906	MS35431-4	TERMINAL, ELECTRIC	EA	2
3-1	98	XDFZZ		92151	3248	CABLE, MOTOR	EA	1
3-1	99	XDFZZ		57829	ASH-450	CONTROL, MOTOR	EA	1
3-1	100	XDFZZ		96906	MS51958-31	SCREW, MACHINE	EA	3
3-1	101	XDFZZ		57829	3500-25	PLATE, MARKING	EA	1
3-1	102	XDFZZ		79080	6S1-6A	FILTER, EMI	EA	1
3-1	103	XDFZZ		77342	CSJ38-70010	RELAY, VOLTAGE	EA	1
3-1	104	XDFZZ		71782	M1PST	.SOCKET, OCTAL	EA	1
3-1	105	XDFZZ		96906	MS51957-26	SCREW, MACHINE	EA	2
3-1	106	XDFZZ		96906	MS3106A-10SL-3S	CONNECTOR, POWER	EA	1
3-1	107	XDFZZ		96906	MS31-2R-105L-3P	CONNECTOR, POWER	EA	1
3-1	108	XDFZZ		92151	616	CORD, POWER	EA	1
3-1	109	XDFFF		57829	3500-56	PANEL, CONTROL	EA	1
3-1	110	XDFZZ		96906	MS51958-43	.SCREW, MACHINE	EA	7
3-1	111	XDFFF		75919	571004	.HOLDER, FUSE	EA	2
3-1	112	XDFZZ		75919	513005	..FUSE, 5 AMP	EA	1
3-1	113	XDFZZ		75919	513001	..FUSE, 1 AMP	EA	1
3-1	114	XDFZZ		28107	30099	.HOLDER, LAMP	EA	2
3-1	115	XDFZZ		28107	32072	.LAMP	EA	2
3-1	116	XDFZZ		96906	MS25002-2	.SWITCH, ROTARY	EA	1
3-1	117	XDFZZ		80205	KPN-700	.KNOB, SWITCH	EA	1
3-1	118	XDFZZ		80205	73JA-1000	.RESISTOR, VARIABLE	EA	3
3-1	119	XDFZZ		80205	MS35059-22	.SWITCH, TOGGLE	EA	1
3-1	120	XDFZZ		80205	IGE250-73	.SWITCH, TOGGLE	EA	1
3-1	121	XDFZZ		44655	995-10A-50	.RESISTOR, 50 OHM	EA	1
3-1	122	XDFFF		57829	3500-55	PLATE, BOTTOM	EA	1
3-1	123	XDFZZ		99862	FH2720	.PAD, LEVELING	EA	4
3-1	124	XDFZZ		96906	MS51958	.SCREW, MACHINE	EA	8

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5305-00-889-3116	3-1	25	5305-00-984-6189	3-1	31
5305-00-958-4362	3-1	47	5305-00-984-6197	3-1	29
5305-00-984-4982	3-1	27			

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
88044	AN-5650-24	3-1	40	57829	3500-14	3-1	49
88044	AN-960-C416	3-1	18	57829	3500-15	3-1	67
88044	AN-960-C416	3-1	20	57829	3500-16	3-1	71
88044	AN-960-C716	3-1	83	57829	3500-17	3-1	70
57829	ASH-450	3-1	99	57829	3500-18	3-1	69
77342	CSJ38-70010	3-1	103	57829	3500-19	3-1	11
99862	FH2720	3-1	123	57829	3500-20	3-1	45
71335	F4DD	3-1	19	57829	3500-25	3-1	101
80205	IGE250-73	3-1	120	57829	3500-26	3-1	73
07829	KCI-23	3-1	23	57829	3500-30	3-1	6
80205	KKR-1B	3-1	68	57829	3500-31	3-1	7
80205	XKR-3A	3-1	33	57829	3500-32	3-1	8
80205	KXR-3A	3-1	93	57829	3500-33	3-1	36
71335	KP-12A	3-1	50	57829	3500-34	3-1	5
80205	KPN-700	3-1	117	57829	3500-35	3-1	15
71355	KP8A	3-1	82	57829	3500-36	3-1	2
99862	L-32-6	3-1	37	57829	3500-37	3-1	21
99862	L-32-6	3-1	85	57829	3500-38	3-1	26
96906	MS16995-37	3-1	9	57829	3500-40	3-1	12
96906	MS16995-50	3-1	38	57829	3500-41	3-1	32
96906	MS21316-55	3-1	10	57829	3500-43	3-1	34
96906	MS24671-32	3-1	14	57829	3500-44	3-1	35
96906	MS24671-32	3-1	76	57829	3500-45	3-1	24
96906	MS24671-32	3-1	90	57829	3500-46	3-1	13
96906	MS24671-42	3-1	91	57829	3500-47	3-1	28
96906	MS25002-2	3-1	116	57829	3500-50	3-1	87
96906	MS31-2R-105L-3P	3-1	107	57829	3500-51	3-1	86
96906	MS3106A-10SL-3S	3-1	106	57829	3500-52	3-1	88
80205	MS35059-22	3-1	119	57829	3500-53	3-1	89
96906	MS35206-213	3-1	25	57829	3500-55	3-1	122
96906	MS35206-218	3-1	22	57829	3500-56	3-1	109
96906	MS35206-225	3-1	27	57829	3500-59	3-1	81
96906	MS35206-241	3-1	31	57829	3500-6	3-1	53
96906	MS35206-249	3-1	29	57829	3500-60	3-1	92
96906	MS35207-258	3-1	47	57829	3500-61	3-1	94
96906	MS35308-74	3-1	80	57829	3500-62	3-1	95
96906	MS35431-4	3-1	66	57829	3500-67	3-1	
96906	MS35431-4	3-1	97	57829	3500-7	3-1	61
96906	MS51957-26	3-1	63	57829	3500-70	3-1	77
96906	MS51958-31	3-1	100	57829	3500-71	3-1	79
96906	MS51959-32	3-1	51	57829	3500-72	3-1	78
96906	MS51959-34	3-1	46	57829	3500-80	3-1	88A
96906	MS51959-9	3-1	55	57829	3500-9	3-1	56
71782	M1PST	3-1	104	73734	360300	3-1	39
07829	NSH-34RJ	3-1	72	73734	36-300	3-1	64
13345	S10-48	3-1	4	07829	494-0046	3-1	30
13345	TSB-032-8	3-1	3	73734	50-12	3-1	52
13345	1120051	3-1	62	75919	513001	3-1	113
57829	2837/2	3-1	65	75919	513005	3-1	112
92151	2837/2	3-1	96	75919	571004	3-1	111
28107	30099	3-1	114	79080	6S1-6A	3-1	102
92151	3248	3-1	98	92151	616	3-1	108
28107	32072	3-1	115	80205	73JA-1000	3-1	118
57829	3500-10	3-1	57	73734	76100	3-1	17
57829	3500-11	3-1	54	73734	76105	3-1	16
57829	3500-12	3-1	58	73734	82106	3-1	84
57829	3500-13	3-1	48	44655	995-10A-50	3-1	121

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

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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 decigram = .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 milliters = .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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