TB 11-6625-3263-25

SUPERSEDES TB 11-6625-3263-25, DATED 12 SEPTEMBER 2000

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

TEST EQUIPMENT MODERNIZATION (TEMOD) PROGRAM GUIDE AND REPLACEMENT LISTS

HEADQUARTERS, DEPARTMENT OF THE ARMY

DECEMBER 2004

SUMMARY OF CHANGES

TB 11-6625-3263-25
TEMOD Program Guide and Replacement Lists

This revision:

- Describes the TEMOD Program, management organization, approach, as well as fielding and removal procedures.
- Lists all new TEMOD TMDE items.
- Provides a single source for identifying replaced TMDE and the replacement item.
- Combines all TEMOD Program information previously published.

FOREWORD

Chartered on 4 January 1983, the Product Manager (PM), Test Equipment Modernization (TEMOD) is responsible for the management of the Army's Test, Measurement and Diagnostic Equipment (TMDE) Modernization Program. The TEMOD program objectives are:

a. Improve the materiel readiness of the Army's weapon systems.

b. Reduce the number of TMDE items in the field.

c. Eliminate obsolete TMDE from the inventory.

d. Reduce TMDE operational and support costs.

These objectives will be accomplished by acquiring state-of-the-art, off-the-shelf, electronic test equipment to replace the existing obsolete inventory of general purpose electronic test equipment (GPETE).

This technical bulletin describes the TEMOD program, the management organization, equipment, approach, fielding, and removal procedures. With hundreds of items being replaced by the TEMOD program, it has become necessary to provide a single, accurate source of replacement data for all TEMOD items. This technical bulletin provides a single source for identifying TMDE being replaced and any special conditions associated with the replacement and takes precedence over any other published replacement listing.

This publication replaces TB 11-6625-3263-25, dated September 2000.

TEMOD Program Guide and Replacement Lists

Summary. This technical bulletin covers the test Equipment Modernization (TEMOD) Program and the replacement listings for TEMOD procured items. It describes the management organization, approach, fielding and removal procedures, new items and lists those items being replaced. It explains how to use the listings as a source document for TMDE users and materiel developers.

Applicability. This technical bulletin applies to the Active Army, National Guard (ARNG), and the U.S. Army Reserve (USAR).

Impact on New Manning System. This technical bulletin does not contain information that affects New Manning System.

Suggested Improvements. The proponent for this technical bulletin is the Assistant Product Manager, Test Equipment Modernization. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended change to Publications and Blank Forms) directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000.

LIST OF EFFECTIVE PAGES

Date of issue for original and change pages are:

Original .....0.....2 DEC 2004

Total number of pages in this manual is 223 consisting of the following:

Page No.	*Change No.
Cover	0
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3-1 thru 3-4	0
4-1 thru 4-211/(4-212 blank)	0
Glossary-1 and Glossary-2	0

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Technical Bulletin
No. 11-6625-3263-25

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 2 December 2004

TEST EQUIPMENT MODERNIZATION (TEMOD) PROGRAM GUIDE AND REPLACEMENT LISTS

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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

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TABLE OF CONTENTS

*This bulletin supersedes TB 11-6625-3263-25, dated 12 September 2000, including all changes.

CHAPTER 1
INTRODUCTION

1-1. PURPOSE.

This technical bulletin describes the TEMOD Program, the management organization, equipments, fielding and removal procedures. It is also a consolidated replacement guide for technical and logistics personnel who are involved in the use, authorization and requisition of TMDE. It contains replacement lists for the current TEMOD procured items. These lists identify replaced TMDE, and where applicable, it states those conditions that limits replacement. This information will assist materiel developers in selecting TMDE for new systems. It also provides a reference for conditional replacement items.

1-2. RELATED PUBLICATIONS.

AR 70-1	Army Acquisition Policy
AR 710-2	Inventory Management Supply Policy Below the Wholesale Level
AR 750-43	Army Test, Measurement, and Diagnostic Equipment Program
DA Pam 700-21	The Army Test, Measurement, and Diagnostic Equipment Register Index and Instructions
DA Pam 700-21-1	DA TMDE PIL
SB 700-20	Army Adopted/Other Items Selected for Authorization/List of Reportable Items

1-3. EXPLANATION OF ABBREVIATIONS AND TERMS.

Abbreviations and special terms used in this technical bulletin are explained in the glossary.

CHAPTER 2
TEMOD PROGRAM

Section I. OVERVIEW

2-1. OBJECTIVES.

a. The Product Manager (PM), TMDE is responsible for the life-cycle management of all Army General Purpose TMDE (GPTMDE). Execution of the modernization function is assigned to the Assistant Product Manager, TEMOD. The objectives of the TEMOD program are to improve the materiel readiness of weapons systems, minimize TMDE proliferation and obsolescence, and reduce TMDE support costs.

b. APM, TEMOD accomplishes this mission through:

(1) Coordination with TRADOC to identify and prioritize Army GPTMDE needs.

(2) Utilization of an accelerated acquisition and deployment process, which provides logistically supportable GPTMDE, incorporating current technologies, to the user as quickly as possible.

(3) The optimization of TMDE requirements definition, deployment planning, asset tracking, and acquisition decision making, resulting in significant dollar savings to the Army, a reduction in the number of TMDE instruments necessary to satisfy user's needs, and increased maintenance productivity.

2-2. APPROACH.

a. APM, TEMOD utilizes a Nondevelopmental Item (NDI) acquisition process to procure state-of-the-art TMDE. The NDI process permits full deployment within 5 years of project start or 30 months after contract award. The TEMOD NDI acquisition process is as follows:

(1) The process utilizes a Bid Sample/Two-Step Sealed Bid approach, initiated by an user's survey to determine actual instrument requirements, and a market research to identify current marketplace capabilities. This information is evaluated along with the TRADOC initiated and DA approved requirements document to determine equipment specifications. Once the specifications are identified, a Step I solicitation (which includes a Request for Bid Samples) is released. Bid Samples are representative instruments provided to the government by competing manufacturers. Vendors respond to the Step I solicitation by submitting bid samples.

(2) Bid samples are tested for performance, and evaluated for supportability and ease of use, identifying those samples meeting pre-established criteria.

(3) Those vendors successfully completing Bid Sample testing are issued a Step II solicitation, (including an invitation for bid). Contracts are awarded on the basis of the lowest life cycle cost, and are generally firm-fixed-price, 5-year, indefinite quantity contracts to accommodate increases in requirements and to assure the long term availability of the instrument.

(4) Concurrent with TEMOD fieldings, obsolete and uneconomically supportable instruments are identified for removal from the units receiving the new equipment, thereby reducing substantially operational and support costs incurred by the Army.

Section II. FIELDING

2-3. OVERVIEW.

a. The introduction of new TMDE is essential for the success of the Army's Force Modernization Program and critical for the readiness of fielded weapons systems. The fielding and removal procedures shown in figure 2-1 were developed to assure the orderly and responsive fielding of new TMDE and the removal from units of displaced TMDE.

b. When the U.S. Army Materiel Command (AMC) and the U.S. army Training and Doctrine Command (TRADOC) requirement analyses and program planning results in a decision to modernize a particular type or category of TMDE, the fielding process in figure 2-1 is initiated. The highlights are as follows:

(1) Coordination with the gaining command results in the Memorandum of Notification (MON) acceptance, Materiel Fielding Plan (MFP) comments or acceptance, signed Materiel Fielding Agreement (MFA), and validated Materiel Requirements List (MLR) being completed 12 to 24 months prior to fielding.

(2) The Basis of Issue Plan (BOIP) is distributed by the Force Management Support Agency (FMSA) to the gaining commands approximately 3 years prior to the TEMOD established First Unit Equipped (FUE) date.

(3) The Department of the Army Letter of Authorization (LOA) allows gaining units to receive and retain the new TMDE pending update of the unit's The Army Authorization Documentation System (TAADS) documentation. The LOA directs the command to coordinate necessary TAADS changes with FMSA and report compliance with the LOA directed changes during the normal Management of Change (MOC) windows.

(4) The equipment is sent to a Materiel Management Center (MMC), Supply Supporting Activity (SSA), or Directorate of Logistics (DOL) facility for deprocessing and issue to the gaining units. The gaining commands can designate other activities to stage and hand-off, but the above are the most common.

(5) The displaced items flow through the SSA, MMC, or DOL to the supply Depot or Defense Reutilization and Marketing Office (DRMO), or as directed by the instructions contained in the MFP or the instructions provided by the item manager.

2-4. RESPONSIBILITIES.

TEMOD equipment fieldings involve two major organizations: The TMDE Materiel Manager (TMM), commonly the "Fielding Command," and the "Gaining Command." The responsibilities for these organizations are given below.

a. TMDE Materiel Manager (TMM)/Fielding Command.

(1) Prepares and distributes the MON to gaining commands and program/project/ product managers (PM) approximately one to two years prior to fielding.

(2) Initiates BOIP/Qualitative, Quantitative Personnel Requirements Information (QQPRI).

(3) Prepares, a draft distribution plan and MRL based on the BOIP Impact Report.

(4) Prepares and distributes the draft MFP to all gaining commands 12 to 24 months before fielding.

(5) Prepares and distributes the final MFP before fielding. The final MFP will include:

(a) End Item materiel Requirements List (MRL)/Distribution Plan

(b) Deployment Schedule

(c) Disposition Instruction for Displaced TMDE

(d) Project Codes

(e) Warranty Procedures

(f) New Equipment Training Plans (NETP)

(g) Staging and Calibration Requirements

(h) Gaining Command Responsibilities

(i) Signed Materiel Fielding Agreement (MFA)

(6) Programs funds for initial DS/GS level repair parts.

(7) Submits required requisitions for fielding under the Total Package Fielding (TPF) concept.

(8) Ensures the gaining command is provided a Letter of Authorization for the initial fielding quantity of the required TMDE.

b. Gaining Command

(1) Reviews MON and provides comments no later than (NLT) 45 days after receipt of MON.

(2) Inputs the gaining command TAADS requirements into the BOIP when it is staffed to the command.

(3) Approves or updates the detailed distribution plan/End Item Materiel Requirements List (EI/MRL).

(4) Reviews draft MFP and provides comments NLT 90 days after receipt. The Materiel Fielding Agreement (MFA) and approved MRL shall be signed by the TMM and gaining command as scheduled in the draft MFP.

(5) Completes End Item MRL in lieu of Mission Support Plans (MSP).

(6) Prepares TAADS documentation changes for submission to the USAFMSA based upon the staffing of the BOIP and EI/MRL. The DA/LOA will be used to retain the TMDE until gaining command TAADS submitted changes to USAFMSA take affect.

(7) Coordinates schedules, facilities and personnel for New Equipment Training, if required.

(8) Coordinates funding requirements in accordance with the Army Modernization Information Memorandum (AMIM).

(9) Includes in the MRL the requirements for parts not shipped with the end items or those that are demand supported.

(10) Calls TMDE forward.

(11) Provides a staging area. The staging area will:

(a) Receive, inspect, and inventory all new items.

(b) Coordinate receipt of new equipment with gaining units.

(c) Issue new equipment with transfer of property accountability.

(d) Return copy of DD Form 1348-1 to U.S. Army AMCOM TPF office.

2-5. FIELDING PROCEDURE.

a. The TEMOD item fielding procedure is shown in figure 2-2. The numbered steps in this figure show the normal flow of the old and new TMDE. At each step the equipment requires the following documentation:

(1) Step 1. The Transportation Control Movement Document (TCMD).

(2) Step 2. DD Form 1348-1 issue document.

(3) Step 3. DD Form 1348-1 turn-in document.

(4) Step 4. Copy of turn-in document to Depot or DMRO.

b. TMDE identified for replacement may be retained at the Class VII SSA or the Central Turn-in point for 45 days to assure that TEMOD items adequately fulfill mission requirements. MFPs may also contain a second list of potentially replaced TMDE; during the 45-day period, using units should further determine if on-hand instruments identified are replaceable by the TEMOD item. If so, this would require the user to update authorization documents.

c. TEMOD MFPs provide disposition instructions for all replaced TMDE identified in the BOIP. TEMOD replaced items must be turned in concurrent with the issue of the new TMDE, unless temporarily retained IAW paragraph 2-5b. These instructions will direct that old TMDE be turned in to DRMO or to the wholesale supply system. Items identified for disposal will not require a technical inspection for turn-in.

d. Using units should inform Product Manager, Test, Measurement and Diagnostic Equipment, ATTN: SFAE-CSS-CS-T-TEMOD, Redstone Arsenal, AL 35898-5000 of TMDE that cannot be replaced by the TEMOD item.

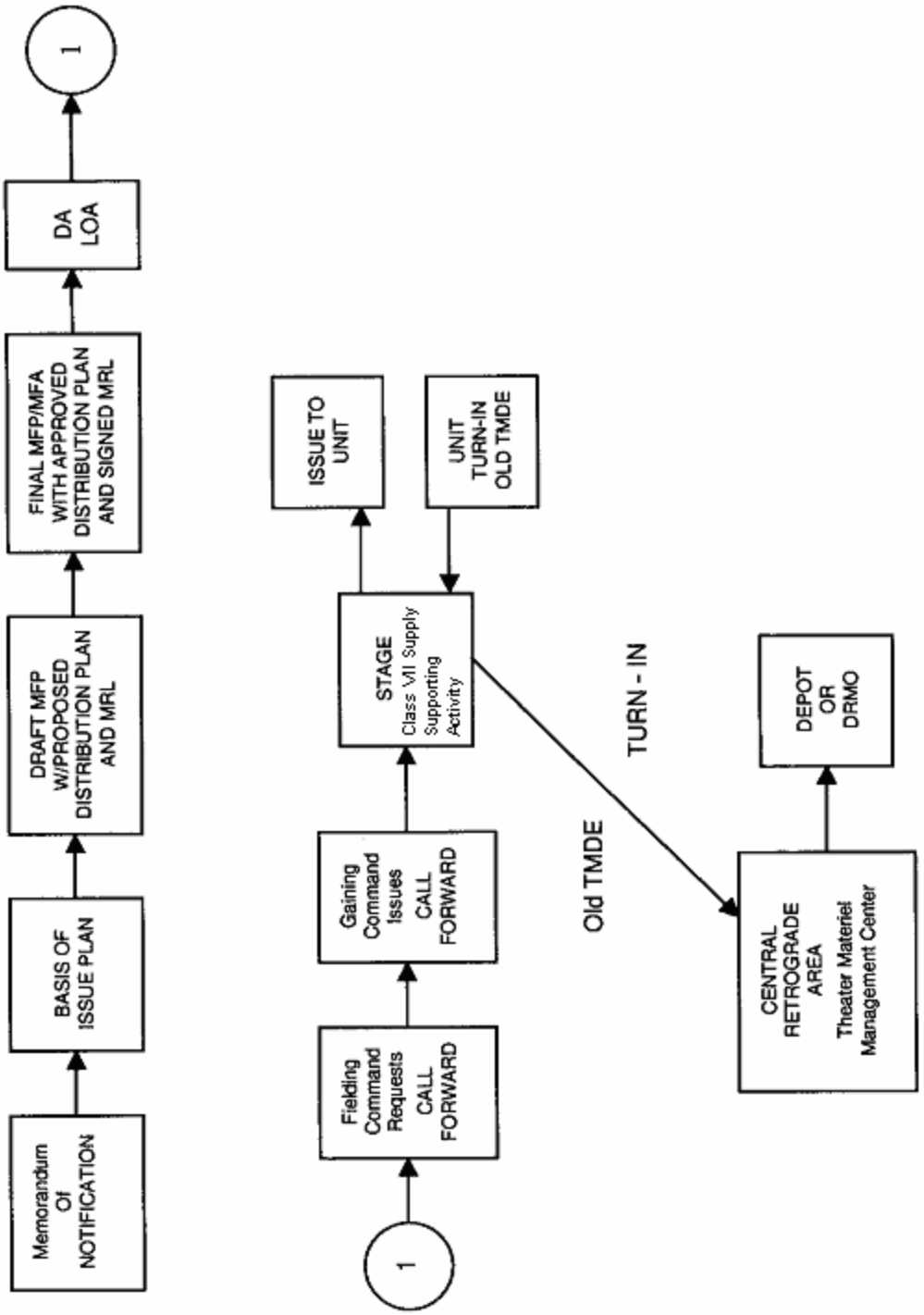


Figure 2-1. Summary of the TEMOD Fielding/Purge Process

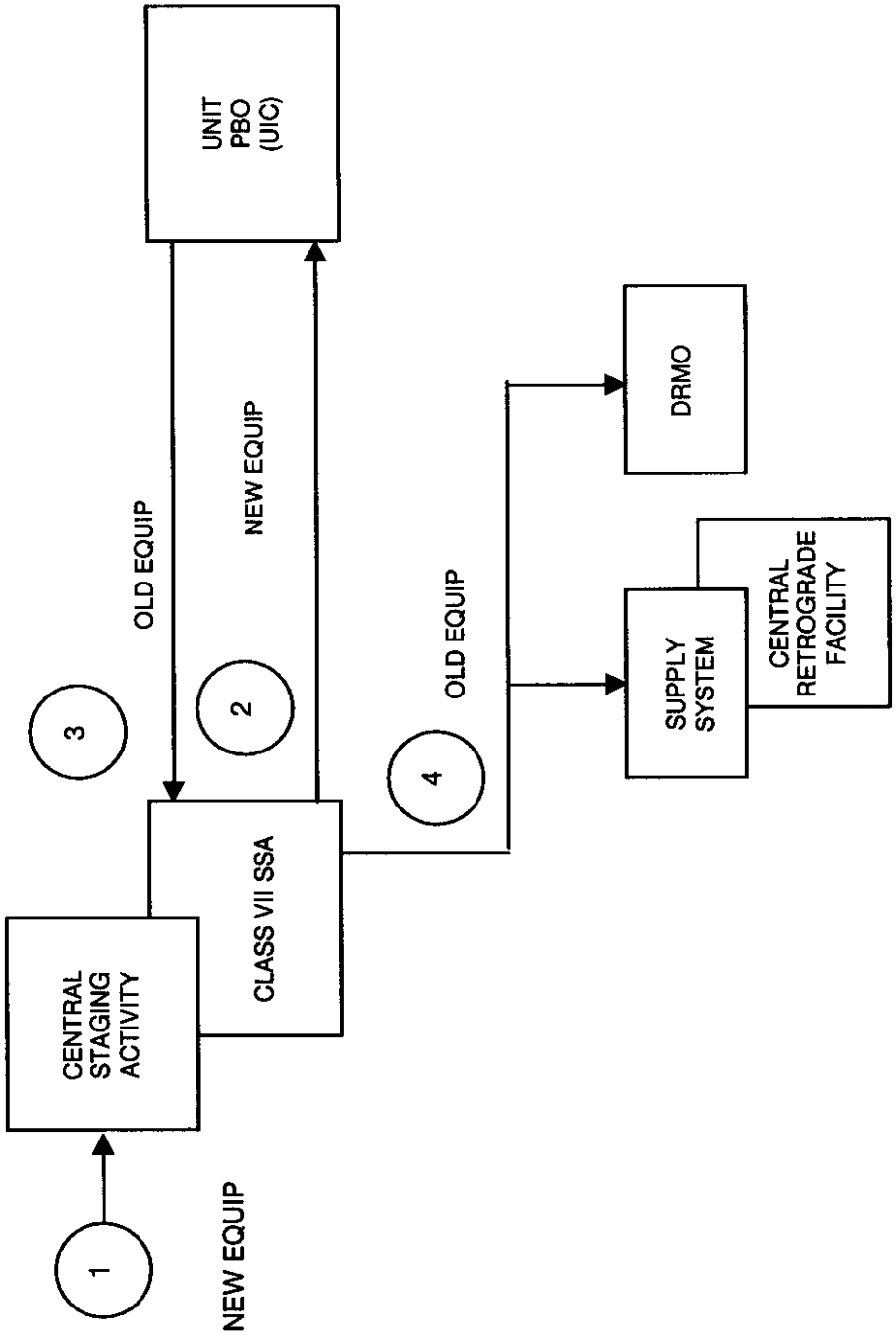


Figure 2-2. TEMOD Fielding Procedures

CHAPTER 3
TEMOD EQUIPMENT STATUS

Section I. REPLACEMENT LIST PROCEDURES

3-1. DESCRIPTION.

a. This technical bulletin represents the results of the TEMOD program's efforts since 1981. Prior to this program, the Army's inventory of GPTMDE was in excess of 4,790 makes and models. The TEMOD items listed in section II can potentially replace over 1017 fielded makes and models of TMDE. This reduction in makes and models will reduce weight and volume for deployment, and increase TMDE availability.

b. The TMDE listed in the replacement lists will be used to replace fielded items and as a source for materiel developers in selecting TMDE for new systems.

3-2. NEW ITEMS DESCRIPTION.

a. The TEMOD items are listed in table 3-1. This list has five columns: TEMOD Item, Nomenclature, FY Contract Award, Contract Expiration Date, and Status. Items not currently in production are shown by an double asterisk in the Contract Expiration Date column. These items are not available and you should not attempt to modify your MTOE/TDA to authorize them.

b. TEMOD items technical descriptions are included in chapter 4. These descriptions will help you make replacement decisions when condition codes apply.

Section II. REPLACEMENT PROCEDURES

3-3. INSTRUCTIONS FOR USE.

a. There are two separate replacement lists and a condition codes list. These are found in sections II and III. They are as follows:

(1) Chapter 4, Section I, lists the TEMOD items technical description and replacement lists.

(2) Chapter 4, section II, lists the replaced items to the TEMOD item.

(3) Chapter 4, section III, lists the condition codes with the condition description.

b. Each TEMOD item listed in chapter 4, section I (Equipment Description) includes the following information: Nomenclature, Line Item Number (LIN), National Stock Number (NSN), Manufacturer, Model Number, Commercial and Government Entity (CAGE), BOIP, and specifications.

c. The replacement list for each TEMOD item is divided in two separate sections: Items Replaced and Removed from Field and Items Potentially Replaceable. The “Items Replaced and Removed from Field” section contains items of TMDE that will be unconditionally replaced and removed from the Army unit. The section of “Items Potentially Replaceable” lists TMDE items that can be replaced by the TEMOD item; however, certain conditions exist that may prevent the item from being replaced in all applications. These conditions are identified by condition codes in the right hand column of the list. A description of the applicable condition codes follows the list.

d. The TEMOD replacement lists show the calibratable component for the end item. Calibratable components are shown as “CC:” and listed under the item. For example:

AN/GRM-50
CC: SG-479/U

The above entry shows the SG-479/U is the calibratable component of the AN/GRM-50 and it is replaceable by the same TEMOD item replacing the AN/GRM-50.

e. The following steps are required to identify a replacement item. They describe the replacement process from the on-hand or authorized TMDE item to the TEMOD replacement.

(1) Identify the on-hand or authorized item.

(2) Check chapter 4, section II, to determine the TEMOD replacement.

(3) Check chapter 4, section I, to determine status, and applicable condition codes. If the item is listed under the “Items Replaced and Removed from Field,” it will be replaced and no further action is required. For an item listed under the “Items Potentially Replaceable” do (4) through (7) below.

(4) Compare the on-hand/authorized item description to the TEMOD item description. Pay special attention to the conditions described in the applicable condition codes.

(5) Compare the TEMOD item technical characteristics against your requirements.

(6) Decide whether to replace or not.

(7) Initiate changes based on replacement decisions.

(8) If additional information is required, contact TEMOD at:

Assistant Product Manager
Test, Measurement and Diagnostic Equipment
ATTN: SFAE-CSS-CS-T-TEMOD
Redstone Arsenal, AL 35898-5000

3-4. CONDITION CODE CATEGORIES.

a. Conditions that may prevent an item from being replaced in all applications are identified by an alphanumeric code. The alpha portion (the first letter) of a condition code indicates the general category of the code. The following are the five general categories:

(1) "E" – Category for explaining specific technical issues.

(2) "I" – Category for information only.

(3) "M" – Category for plug-in module/mainframe relationships.

(4) "P" – Category concerned with removing of equipment from the field.

(5) "T" – Category concerned with general technical or economic issues.

b. Condition codes are normally associated with the "Items Potentially Replaceable" portion of the TEMOD Replacement Lists. In some cases a condition code may apply to the "Item Replaced and Removed from the Field" portion. Chapter 4, section III, lists all the condition codes with the condition codes descriptions.

Table 3-1. Equipment Item Status

TEMOD Item	Nomenclature	FY Contract Award	Contract Expiration Date
AN/GRM-114A	Test Set, Radio	81	* *
AN/GRM-114B	Test Set, Radio	89	* *
AN/GSM-64D	Voltmeter, Digital 5-1/2 Digits	86	* *
AN/GTM-12	Test Set, Telephone Cable 26 Pair	93	* *
AN/PRM-34	Test Set, Radio	81	* *
AN/PSM-45	Multimeter, Digital, 3-1/2 Digits	82	* *
AN/PSM-45A	Multimeter, Digital, 3-1/2 Digits	87	* *
AN/UPM-155	Test Set, Radar	99	* *
AN/URM-200	Radio Interference Measuring Set	82	* *
AN/URM-206	Generator, Signal	81	* *
AN/URM-213	Test Set, Radio Frequency Power	92	* *
AN/USM-437	Test Set, Electrical Cable	88	* *
AN/USM-459	Counter, Electronic	81	* *
AN/USM-459A	Universal Frequency Counter	86	* *
AN/USM-459B	Universal Frequency Counter	94	* *
AN/USM-485	Transmission Test Set, Portable	86	* *
AN/USM-486/U	Multimeter, Digital, 4-1/2 Digits	82	* *
AN/USM-486A	Multimeter, Digital, 4-1/2 Digits	92	* *
AN/USM-488	Oscilloscope, Dual Trace 100 MHz	83	* *
AN/USM-489A	Spectrum Analyzer	89	* *
AN/USM-489(V)1	Spectrum Analyzer	83	* *
AN/USM-490	Level Meter, Frequency Selective	83	* *
AN/USM-491	Test Set, Radio Frequency Power	86	* *
AN/USM-608	Transmission Test Set	86	* *
AN/USM-620	Spectrum Analyzer	91	* *
AN/USM-677	Spectrum Analyzer	01	Mar 06
ME-523/U	Modulation Meter	94	* *
ME-545/G	Voltmeter, True RMS	87	* *
ME-563/U	Clamp-On Ammeter	94	* *

See footnotes at end of table

Table 3-1. Equipment Item Status - Continued

TEMOD Item	Nomenclature	FY Contract Award	Contract Expiration Date
OS-261C(V)1/U	Oscilloscope, Dual Trace 200 MHz	82	* *
OS-288/G	Oscilloscope, Dual Trace 400 MHz	88	* *
OS-291/G	Oscilloscope	88	* *
OS-303/G	Oscilloscope, 600 MHz	01	May 06
SG-1112(V)1/U	Generator, Signal	83	* *
SG-1144/U	Generator, Signal	81	* *
SG-1170/U	Generator, Signal	82	* *
SG-1171/U	Generator, function	82	* *
SG-1205(V)1/U	Generator, Pulse	82	* *
SG-1206/U	Sweep Generator	88	* *
SG-1207A/U	Signal Generator	97	* *
SG-1207/U	Generator, Signal	86	* *
SG-1219/U	Generator, Signal	84	* *
SG-1288/G	Generator, Signal	86	* *
TD-1225A(V)2/U	Counter, Mircrowave Frequency	81	* *
TD-1338(V)1/USM	Counter, Electronic RF Pulse	81	* *
TS-4084/G	Analyzer, Distortion	85	* *
TS-4165( )/G	Test Set, Electrical Cable	88	* *
TS-4281( )/G	Analyzer, Data Communications	90	* *
TS-4317/GRM	Radio Test Set	89	* *
TS-4320(P)/G	Test Set, Optical Fiber	91	* *
TS-4358( )/G	Optical Power Test Set	93	* *
TS-4463/P( )	Pitotstatic Test Set	95	* *
TS-4511/P	Local-Wide Area Network Analyzer	99	* *
TS-4530/UPM	Test Set, Radar	02	Sep 07

* * Contract expired prior to 1 Aug 04.

CHAPTER 4
EQUIPMENT DESCRIPTION AND REPLACEMENT LISTS

EQUIPMENT DESCRIPTION AND REPLACEMENT LISTS (Cont)

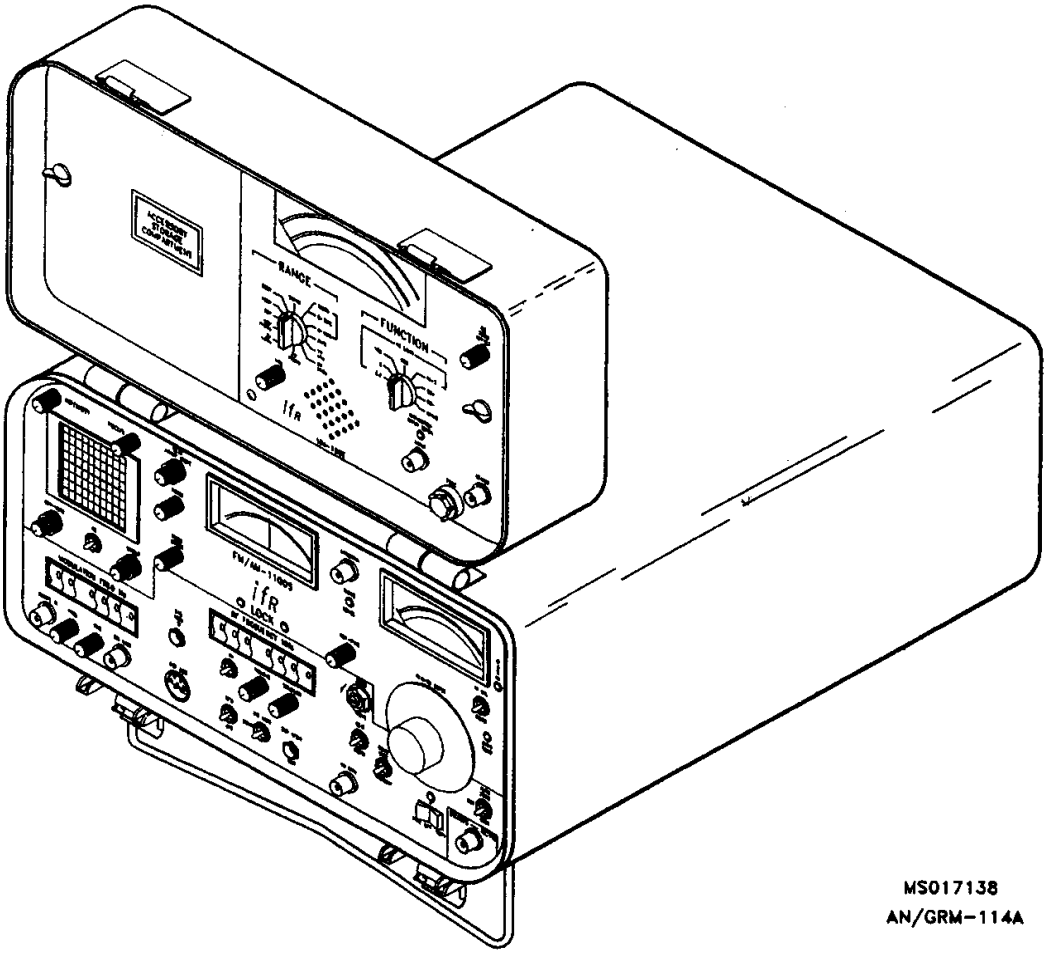
Designator	Nomenclature	Paragraph	Page
TS-4281( )/G	Analyzer, Data Communications	4-48	4-151
TS-4317/GRM	Radio Test Set	4-49	4-154
TS-4320(P)/G	Test Set, Optical Fiber	4-50	4-157
TS-4358( )/G	Optical Power Test Set	4-51	4-160
TS-4463/P()	Pitot-Static Test Set	4-52	4-163
TS-4511/P	Local-Wide Area Network Analyzer	4-53	4-166
TS-4530/UPM	Test Set, Radar	4-54	4-169

Section I. EQUIPMENT DESCRIPTION

4-1. Test Set, Radio AN/GRM-114A

LIN: T87468
Manufacturer: IFR Systems, Inc.
BOIP: C029AA

NSN: 6625-01-144-4481
Model: FM/AM 1100S W/MM 100E
CAGE: 51190



*****OBSOLETE*****

The TS-4317/GRM is an enhancement of the AN/GRM-114A. The AN/GRM-114A's will not be removed from the field, but replaced by the TS-4317/GRM through attrition.

SPECIFICATIONS, AN/GRM-114A

RF Signal Generator Frequency: 100 Hz to 999.9 MHz
Frequency Accuracy: 0.00005% (10 to 999 MHz) ± 5 Hz (100 Hz to 10 MHz)
Residual FM less than 100 Hz

RF Output Level: -110 to 0 dBm (20 kHz to 1 GHz)

Accuracy: ± 2.5 dB up to 400 MHz, ± 3.0 dB above 400 MHz (-110 to -35 dBm) at 0 to -35 dB, ± 2.5 dB (20 kHz to 600 MHz), ± 4.0 dB (600 to 999.9 MHz)

Output Impedance: 50 ohms
AM: 10 Hz to 5 kHz, 0 to 90%
FM: 50 Hz to 20 kHz rate, 10 Hz to ± 20 kHz deviation

Oscilloscope:

Frequency Response: DC to 1 MHz
Vertical Input Range: 10 and 100 mV/Div, 1 and 10 V/Div
Sweep Rate: 10 µs/Div to 10 ms/Div

Spectrum Analyzer Dynamic Range: 70 dB from -100 to -30 dBm
Frequency Range: 1 MHz to 1 GHz
Resolution Bandwidth: 30 kHz

Audio Generator Variable Tone: 10 Hz to 20 kHz, ± 0.01%
Fixed Tone: 1 kHz, ± 20 Hz

Receiver monitor selectivity narrow, mid and wide
Deviation meter 0 to 20 kHz, ± 7%
Input Power: 100 W continuous
Frequency Error Measurements: 0-20 dB, ± 1 dB
Distortion: 0-10%, ± 1.5% and 0-30%, ± 3.5%

Voltmeter:

DC Volts: .1 to 300 V
AC Volts: 1 to 300 V, 50 Hz to 20 kHz
Ohmmeter Ranges: 1 ohm to 10 kohms

Dimensions: 12” H x 19” W x 22” D
Weight: 48 lbs

Manuals:
TB-9-6625-2059-35
TM 11-6625-3016-10-1
TM 11-6625-3016-14
TM 11-6625-3016-20-1
TM 11-6625-3016-24P
TM 11-6625-3016-24P-1
TM 11-6625-3016-40-1
DMWR 11-6625-3016-1

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code E56.		

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/GRM-50	J52472	6625-00-868-8353	P3, E56, E60
CC: SG-479/U	J52472	6625-00-495-3279	P3, E56, E60
AN/GRM-50A	J52472	NONE	P3, E56, E60
CC: SG-479A/U	J52472	6625-00-868-8353	P3, E56, E60
AN/GRM-50B	J52472	NONE	P3, E56, E60
CC: SG-479B/U	J52472	6625-00-819-0472	P3, E56, E60
AN/GRM-50C	J52472	6625-00-003-3238	P3, E56, E60
CC: SG-479C/U	J52472	6625-00-762-3786	P3, E56, E60
AN/URM-103	J53682	6625-00-868-8352	P3, E56, E60, E37
CC: SG-297/U	NONE	6625-00-868-8362	P3, E56, E60, E37
AN/URM-120	V89534	6625-00-813-8430	P3, E56
CC: TS-1285	NONE	6625-00-965-1477	P3, E56
AN/URM-120A	V89534	6625-01-039-1488	P3, E56
AN/URM-127	J53712	6625-00-126-0196	P3, E56, E58
CC: SG-377	J53712	6625-00-783-5965	P3, P56, E58
AN/URM-48	J52960	6625-00-553-1178	P3, E37
CC: SG-12/U	J54604	6625-00-669-0124	P3, E37
AN/USM-207	F19198	6625-00-911-6368	P3, E56, E57
CC: CP-814	NONE	6625-00-954-1941	P3, E56, E57
CC: CV-1921	NONE	6625-00-948-0182	P3, E56, E57
AN/USM-207A	F19198	6625-00-044-3228	P3, E56, E57
CC: CP-814A	NONE	6625-00-156-0607	P3, E56, E57
CC: CV-1921A	NONE	6625-00-890-7890	P3, E56, E57
DA-75/U	G77126	6625-00-177-1639	P3, E56
ME-26/U	M80276	6625-00-544-8691	P3, E56, E61
ME-26A/U	M80276	6625-00-360-2493	P3, E56, E61
ME-26B/U	M80276	6625-00-646-9409	P3, E56, E61
ME-26C/U	M80276	6625-00-646-9409	P3, E56, E61
ME-26D/U	M80276	6625-00-913-9781	P3, E56, E61
ME-30	M80413	6625-00-376-4921	P3, E56, E62
ME-30A/U	M80413	6625-00-643-1670	P3, E56, E62
ME-30B/U	M80413	6625-00-580-5298	P3, E56, E62
ME-30C/U	M80413	6625-00-818-2360	P3, E56, E62
ME-30D/U	M80413	6625-00-643-1670	P3, E56, E62
ME-30E/U	M80413	6625-00-420-9354	P3, E56, E62
ME-30F/U	M80413	6625-00-420-9354	P3, E56, E62
ME-57/U	M38609	6625-00-647-3737	P3, E56
ME-57A/U	M38609	6625-00-432-7312	P3, E56
SG-12/U	J54604	6625-00-669-0124	P3, E37
TS-723/U	A58033	6625-00-668-9418	P3, E56, E59
TS-723A/U	A58033	6625-00-137-0092	P3, E56, E59

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
TS-723B/U	A58033	6625-00-668-9418	P3, E56, E59
TS-723C/U	A58033	6625-00-852-3853	P3, E56, E59
TS-723D/U	A58033	6625-00-668-9418	P3, E56, E59

Condition Codes

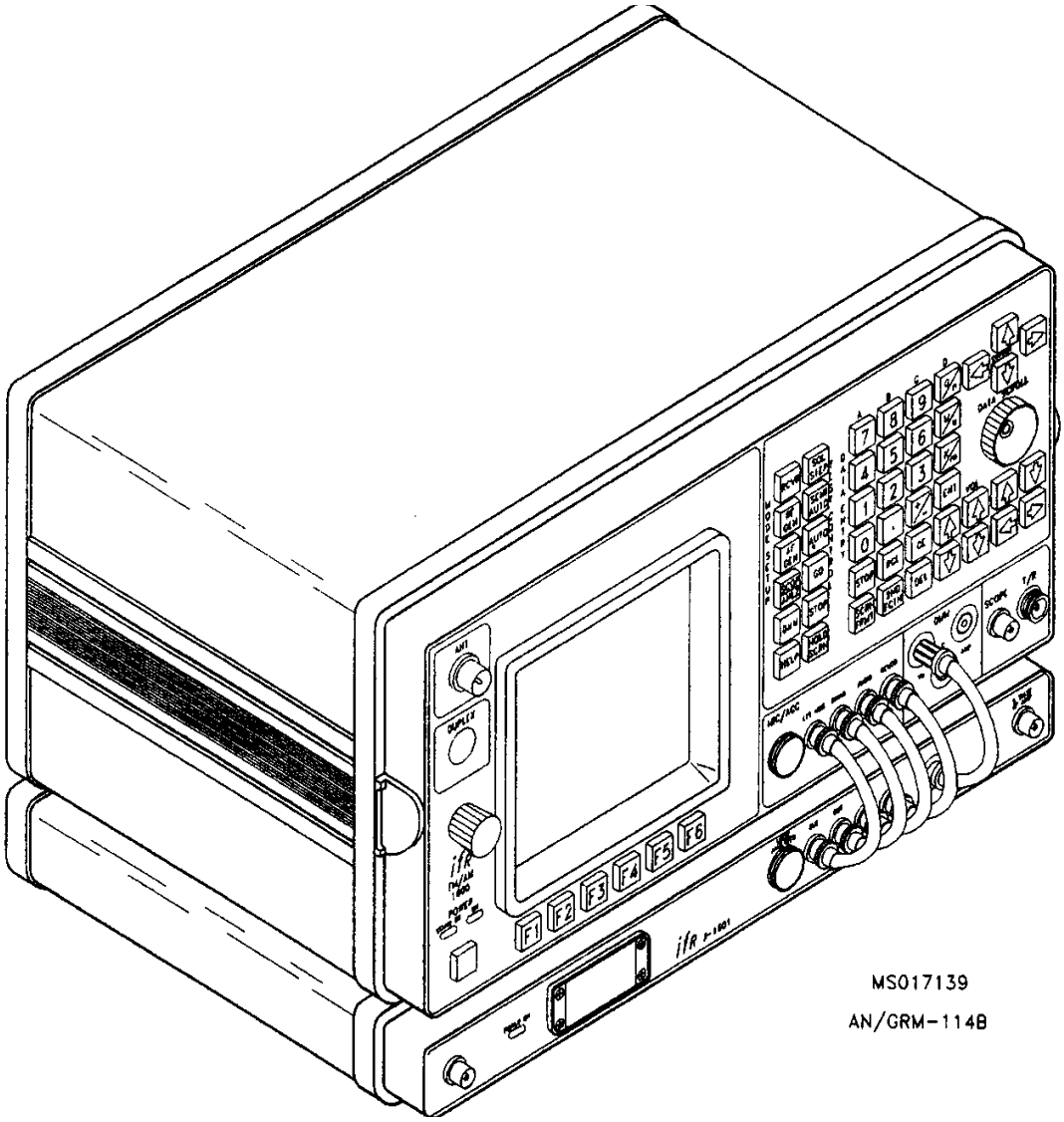
Code	Condition
E3	The MX-8364A and the AN/USM-308V1 are identical units.
E37	Replaced by AN/GRM-114A only when used for FM radio repair. In all other cases this item is replaced by SG-1144.
E56	The AN/GRM-114A is intended as an enhancement item of TMDE to be used to augment standard bench equipment for field FM and avionics radio repair. When authorized for such use, the TMDE at these bench positions (listed with condition code E56) will remove from the field all TMDE previously dedicated for such use and receive an AN/GRM-114A. Note that the replacement ratio of bench positions to AN/GRM-114A's will be 2:1; i.e., if there are four bench positions that have all or a portion of the TMDE listed with condition code E56, two benches will remove from the field all equipment and receive each an AN/GRM-114A; the other two benches will not receive any AN/GRM-114A's and retain their TMDE. Most of the TMDE retained will be replaced by other TEMOD items (see additional condition code listed with each TMDE).
E57	Replaced by AN/USM-459 in cases other than that described in E56.
E58	Replaced by SG-1288 in cases other than that described in E56.
E59	Replaced by TS-4084/G in cases other than that described in E56.
E60	Replaced by SG-1144 or SG-1170 in cases other than that described in E56 (also see condition codes E35, E36 and E54)
E61	Replaced by AN/USM-486 in cases other than that described in E56. Also see condition code E8.
E62	Replaced by AN/USM-486 in cases other than that described in E56. Also see condition code E9.
P3	Item removed from the field in certain applications; see applicable "E" code/s.

4-2. TEST SET, RADIO AN/GRM-114B

LIN: R36178
Manufacturer: IFR Systems, Inc.
BOIP: P033AA

NSN: 6625-01-309-2824
Model: IFR 1600/1601
CAGE: 51190

(Management Transferred to PM, TRCS - Ft. Monmouth, NJ)



SPECIFICATIONS

RF Signal Generator: 250 kHz to 999.9999 MHz
Frequency Accuracy: ± .5 PPM
RF Output Level: -127 to 0 dBm
Output Impedance: 50 ohms
AM: 0, 1 to 90%; 500 kHz to 999.999 MHz
FM: 0, ± 100 Hz to ± 25 kHz, up to 20 kbs Digital; 0, 1 to ± 20 kHz deviation

Oscilloscope: DC to 1.0 MHz

AF Signal Generator: 10 Hz - 40 kHz, .7 mV to 2.5 V rms (150 ohms), and up to 3 V rms (600 ohms), Digital .1 to 5 V or 7 V for SINCGARS

AF Counter: 10 Hz to 40 kHz

Frequency Meter: 250 kHz to 999.9999 MHz

Power Meter: .2 mW to 200 W

Deviation Meter: FM carriers
FM Deviation Range: ± 100 kHz
FM Carrier Range: 250 kHz to 1 GHz
Modulation Meter:
Modulation Range: 1 to 100%
Carrier Range: 250 kHz to 1 GHz

Distortion Analyzer Range: 1 to 20%
Frequency: 770 Hz and 1 kHz

SINAD Range: 3 to 30 dB
Frequency: 770 Hz

Voltmeter:

AC Volts: .1 mV to 500 V, 50 Hz to 20 kHz
DC Volts: .1 mV to 2000 V

Current Meter: .01 mA to 20 A DC

Ohmmeter: .1 ohm to 20 M ohms

Spectrum Analyzer Dynamic Range: -95 to -30 dBm
Frequency Range: 250 kHz to 999.9999 MHz

Remote Control: IEEE-488 Interface

Dimensions: 9.7” H x 17” W x 22” D

Weight: 60 lbs

Manuals: TM 9-6625-3245-24P
TB 9-6625-2296-35
TM 11-6625-3245-12
TM 11-6625-3245-40
DMWR 11-6625-3245

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code E104.		

Items Potentially Replaceable

None

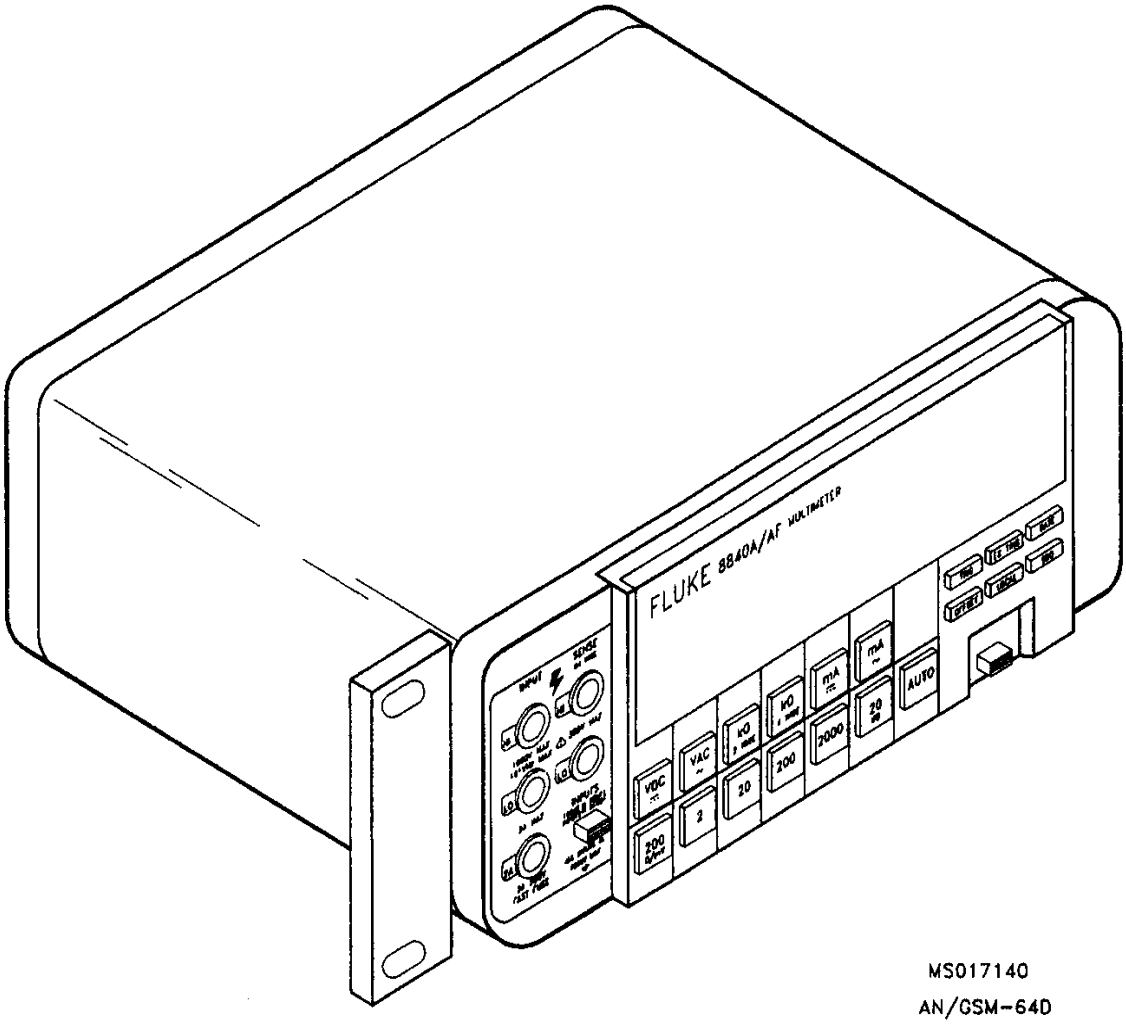
Condition Codes

Code	Condition
E104	The AN/GRM-114B is the Army's next generation radio test set used for field support of single channel and SINCGARS frequency hopping radios. It will be used to verify radio performance characteristics and troubleshoot at the Direct Support (DS) level of maintenance. The AN/GRM-114B consists of two components. The General Purpose test functions to verify the performance characteristics of single channel radios and the Special Purpose test functions to verify the performance characteristics unique to the SINCGARS radios. In terms of improved operational effectiveness, the AN/GRM-114B will execute SINCGARS radio performance tests in 3 minutes instead of the current 25 minutes.

4-3. VOLTMETER, DIGITAL, 5 1/2 DIGIT, AN/GSM-64D

LIN: Y14526
Manufacturer: Fluke
BOIP: None

NSN: 6625-01-221-9367
Model: 8840A/AF(05)
CAGE: 09536



SPECIFICATIONS

DC Voltage Range: 0 to 1000 V

True RMS AC Voltage Range: 0 to 1000 V

Resistance Range: 0 to 20 Megohms

DC Current Range: 0 to 2 A

AC Current Range: 0 to 2 A

Other Features Include: Ratio, Digital Self-Test, Closed Case Calibration, IEEE-488 Interface

Dimensions: 3.47” H x 8.5” W x 14.6” D

Weight: 3.4 kg (7.5 lbs)

Manuals: TB 9-6625-1429-35
TM 11-6625-444-14-3
TM 11-6625-444-24P-3

Remarks: The AN/GSM-64D will be distributed to satisfy shortages to LIN Y14526 authorizations (AN/GSM-64, AN/GSM-64A, AN/GSM-64B and AN/GSM-64C) through the pull system in which material fielding is not envisioned.

Items Replaced and Removed from Field

None

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/GSM-64	Y14526	6625-00-870-2264	P1
CC: ME-218	NONE	6625-00-146-7469	P1
AN/GSM-64A	Y14526	6625-00-165-5779	P1
CC: ME-218A	NONE	6625-00-165-5779	P1
AN/GSM-64B	Y14526	6625-00-022-7894	P1
AN/GSM-64C	Y14526	6625-00-124-0834	P1
ME-463/U	NONE	6625-00-331-2742	P6
ME-498	M60381	6625-00-538-9794	E102

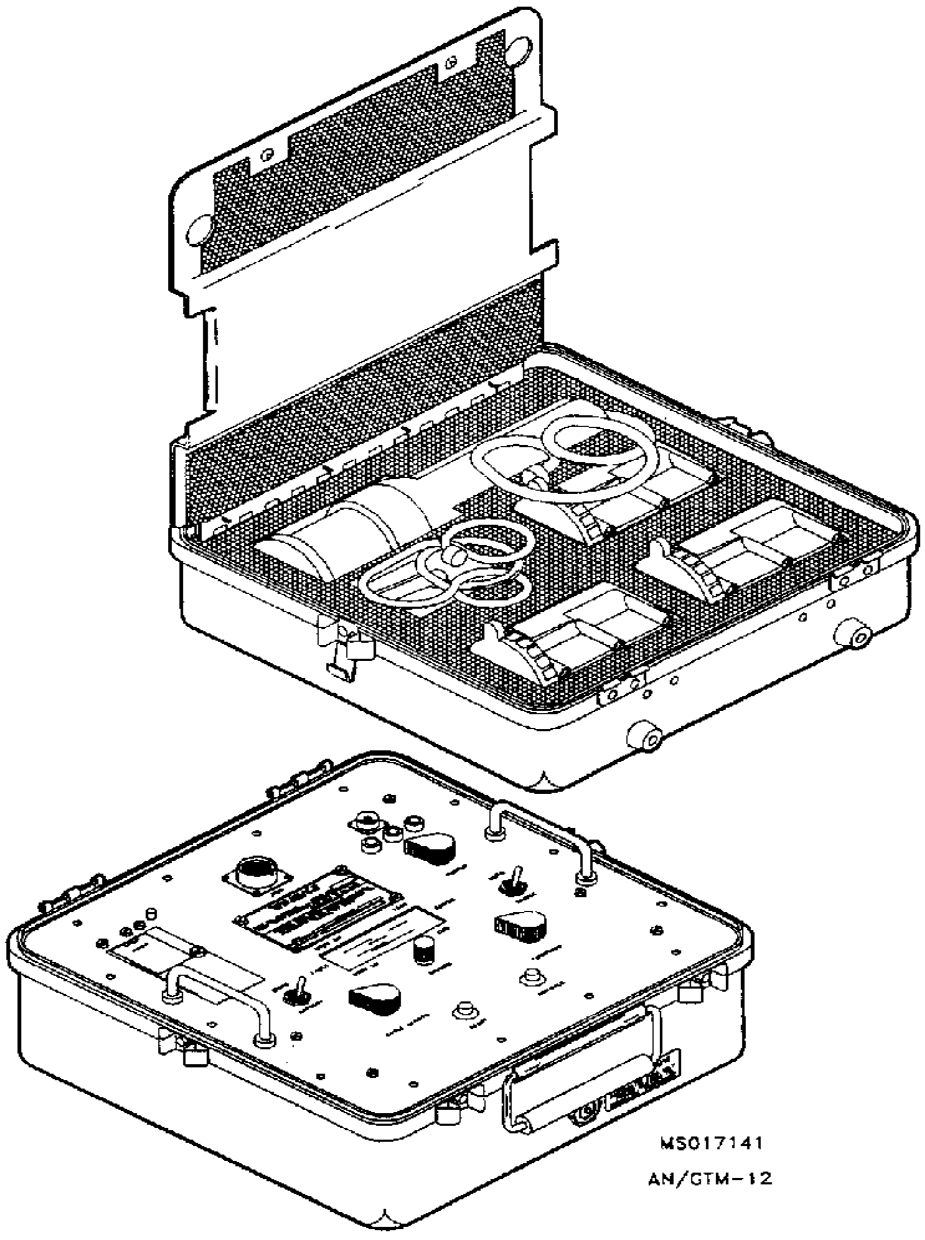
Condition Codes

Code	Condition
E102	The AN/GSM-64D can potentially replace the ME-498. The AN/GSM-64D does not measure above 1000 volts AC and the ME-498 measures up to 1200 volts AC. Units not requiring measurements over 1000 volts DC should use the AN/GSM-64D.
P1	Item will not be removed from the field at this time, however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P6	Item replaced by TEMOD item and will be removed from the field by attrition only.

4-4. TEST SET, TELEPHONE CABLE, AN/GTM-12

LIN: T92821
Manufacturer: ABC Digital Electronics Inc.
BOIP: C133AA

NSN: 6625-01-304-6220
Model: 2612
CAGE: 53089



SPECIFICATIONS

26 Pair Cable Tester for CX-4566-U Cable

Distance Measuring Range: 0 to 2,000 feet in increments of 250 feet

Tests: Continuity, Insulation Resistance, Cross-Talk, Self-Test

Unit can be battery operated.

Dimensions: Not to exceed 18.0” L x 18.0” W x 9.0” H

Weight: Not to exceed 35.0 lbs

Manuals: TM 11-6625-3329-12
TM 11-6625-3329-24P
TM 11-6625-3329-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
NONE			I 14

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
NONE			I 14

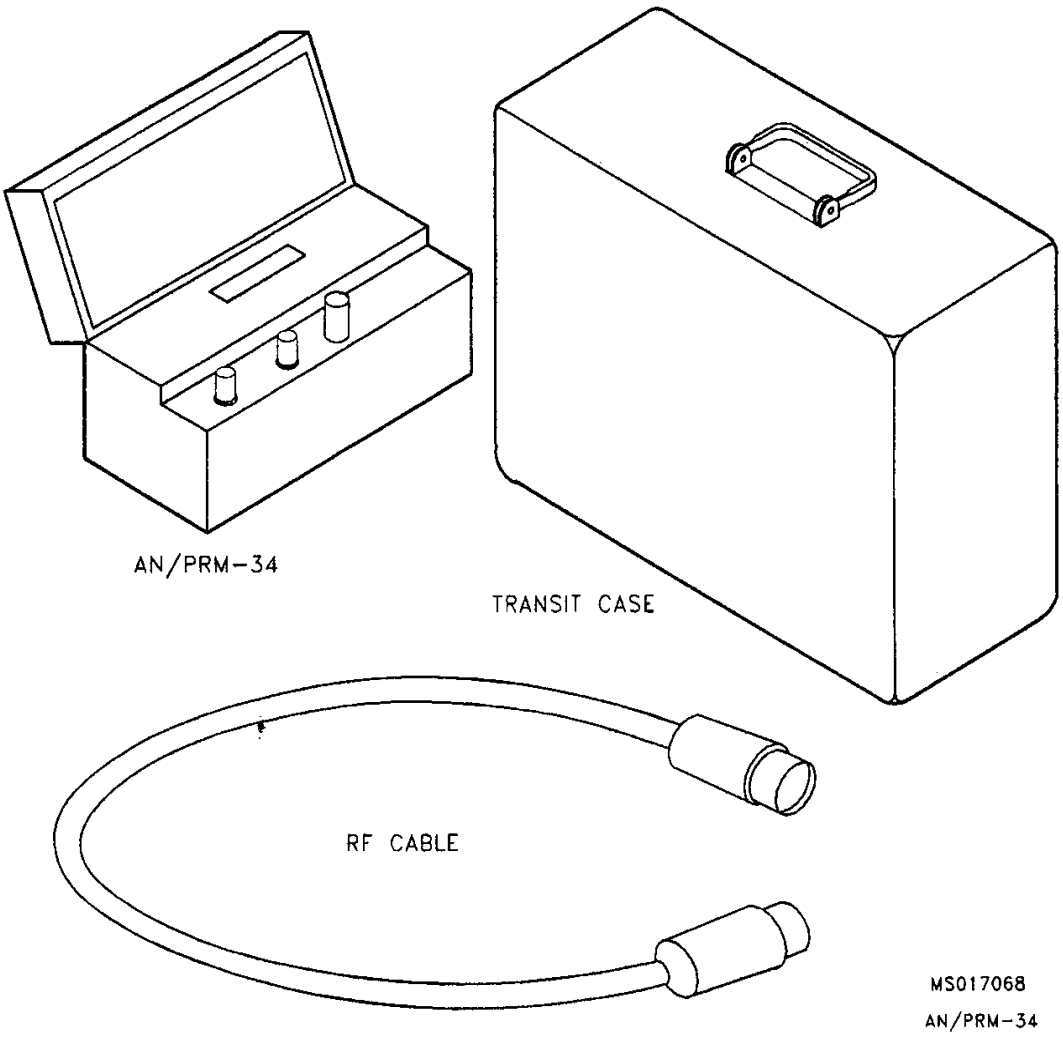
Condition Codes

Code	Condition
I 14	This TEMOD item represents a new capability to the Army inventory and will not replace any existing items.

4-5. TEST SET, RADIO AN/PRM-34

LIN: R93169
Manufacturer: Cincinnati Electric Corp.
BOIP: None

NSN: 6625-01-094-5646
Model: TS-113C
CAGE: 80045



SPECIFICATIONS

Receive Sensitivity: 3 uV ± 1%

Forward Power: 1 to 50 W ± 20%

Reverse Power: 1 to 20 W ± 20%

Frequency Range: 30 to 80 MHz ± 2 kHz

RF Output: -97 dBm

Temperature Range: -20 to 50 degrees C

Dimensions: 3.5” H x 4.5” W x 8.5” D

Weight: 12 lbs

Manuals: TB 9-6625-2171-35
TM 11-6625-3015-14
TM 11-625-3015-14-HR
TM 11-6625-3015-24

Items Replaced and Removed from Field

None

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/URM-182	V89641	6625-00-148-9371	P3, T1, E1
CC: TS-2609/U	NONE	6625-00-933-8786	P3, T1, E1
AN/URM-182A	V89641	6625-01-062-3599	P3, T1, E1
CC: TS-3754/U	NONE	6625-01-062-3600	P3, T1, E1
ID-1189	K73763	6625-00-926-4357	P3, E2

Condition Codes

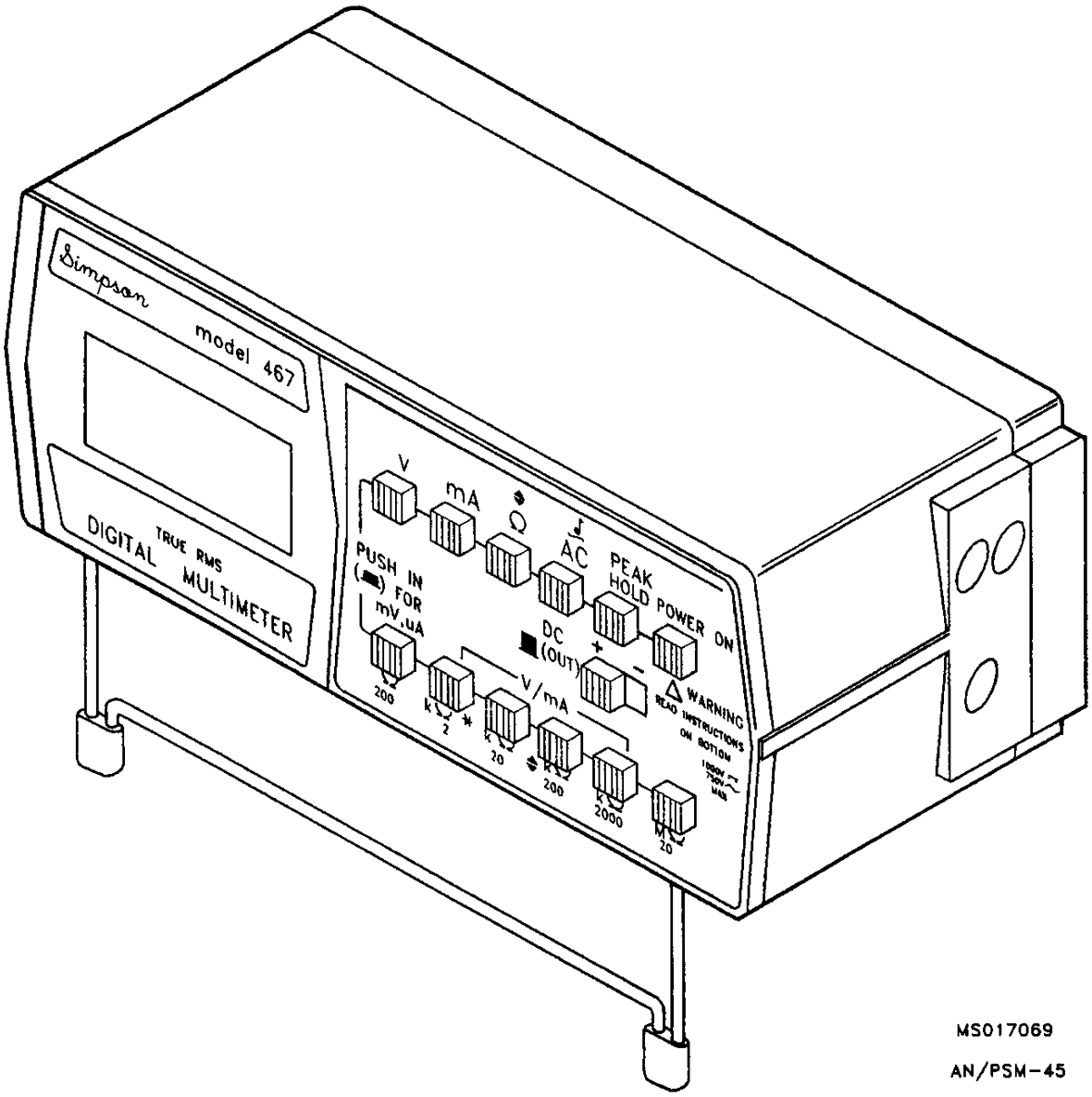
Code	Condition
E1	The AN/PRM-34 replaces the AN/URM-182 and AN/URM-182A where it is used to test AN/VRC-12, AN/PRC-77 and AN/PRC-68 radios. Where the only application of the AN/URM-182 and AN/URM-182A is to test the above radios it should be removed from the field. Where the additional measurement capabilities of the AN/URM-182 and AN/URM-182A are required for other applications, the AN/URM-182 and AN/URM-182A should be retained.
E2	The ID-1189 is used with AN/PRT-4 and AN/PRR-9 radios. The ID-1189 should be removed from the field when the AN/PRT-4 and AN/PRR-9 radios are replaced by the AN/PRC-68 radio. This may occur concurrent with AN/PRM-34 fielding to the extent that AN/PRC-68 radios and AN/PRM-34 test sets are fielded concurrently.
P3	Item removed from the field in certain applications; see applicable “E” code/s.
T1	Items capabilities exceed those of TEMOD item; however, depending upon measurement requirement, TEMOD item may be substituted (i.e., range of performance greater than equivalent function in TEMOD item).

4-6. MULTIMETER, DIGITAL, 3 1/2 DIGIT AN/PSM-45

LIN: M60449
Manufacturer: Simpson
BOIP: None

NSN: 6625-01-139-2512
Model: 467
CAGE: 55026

(Management Transferred to B64 AMCOM – Redstone Arsenal, AL)



MS017069

AN/PSM-45

SPECIFICATIONS

AC Voltage Range: 0 to 750 V

DC Voltage Range: 0 to 1000 V

AC Current Range: 0 to 2 A

DC Current Range: 0 to 2 A

Resistance Range: 0 to 20 megohms

Pulse Detection: 50 µs

Issued with 5-kilovolt probe and a 10-amp shunt; it will analyze both steady and pulsating signals.

Operating Temperature Range: 18 to 20 degrees C

Dimensions: 2” H x 4.6” W x 5.63” D

Weight: 1.3 lbs

Manuals: TB 9-6625-2147-35
TM 11-6625-3052-14
TM 11-6625-3052-24P

Remarks: Overall accuracy of meter when using high voltage probe is ± 5% for DC measurements and ± 5% for AC measurements to 60 Hz. Frequency range of high voltage probe is DC to 60 Hz.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
230	M81098	6625-00-242-7016	I1
2918712A17	Y14389	6625-00-238-1255	I1
6625-00-239-9588	Y14389	6625-00-239-9588	-
779	M81037	6625-00-373-3437	I1
785	M81037	6625-00-270-3776	I1
AN/PRM-5	M79728	6625-00-519-0112	-
CC: TS-618/U	NONE	6625-00-519-0113	-
AN/PSM-4A	M79860	6625-00-643-1668	-
CC: ME-48A/U	NONE	6625-00-933-8880	-
AN/PSM-4D	M79860	6625-00-073-2227	-
AN/URM-105	M80002	6625-00-581-2036	-
AN/URM-105B	M80002	6625-00-884-1758	-
CC: ME-77B/U	NONE	6625-00-884-1759	-
AN/URM-105C	M80002	6625-00-999-6282	-
CC: ME-77C/U	M80002	6625-00-999-6282	-
ME-250/U	M80961	6625-00-699-2411	-
ME-492	M39565	6625-00-474-7437	-
ME-77	M80687	6625-00-284-0854	-
TS-257/ARM	V88092	6625-00-649-3149	-
TS-26/TSM	V94740	6625-00-244-0502	-
TS-26A/TSM	V94740	6625-00-594-2103	-
TS-297/U	M81235	6625-00-373-1967	-

Items Replaced and Removed from Field - Continued

Designator	LIN	NSN	Condition Code
TS-352/U	M81372	6625-00-242-5023	-
TS-352B/U	M81372	6625-00-553-0142	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
160	NONE	6625-00-935-1333	I1, P2
260743	NONE	6625-00-356-8306	P2, I1
281-2963003	NONE	6625-00-782-5655	P2, I1
528	NONE	6625-00-356-7515	P2, I1
622	NONE	6625-00-232-9829	P2, I1
6625-00-117-2895	NONE	6625-00-117-2895	P2
6625-00-493-9321	NONE	6625-00-493-9321	P2
6625-00-724-8582	NONE	6625-00-724-8582	P2
666	NONE	6625-00-975-4482	I1, P2
666 VOMA	NONE	6625-00-543-1438	I1, P2
AN/PSM-3	NONE	6625-00-649-5113	P2
AN/PSM-6	M79865	6625-00-643-1686	P3, E50
CC: ME-70	NONE	NONE	P3, E50
CC: ME-70A	NONE	6625-00-713-0477	P3, E50
AN/PSM-6A	M79865	6625-00-656-5871	P3, E50
CC: ME-70B	NONE	NONE	P3, E50
AN/PSM-6B	M79865	6625-00-957-4374	P3, E50
CC: ME-70C	NONE	NONE	P3, E50
AN/USM-223	M80242	6625-00-999-7465	P3, E89
CC: ME-297/U	NONE	6625-00-167-1144	P3, E89
B61014PB	NONE	6625-00-890-7662	P2, I1
B61014R	NONE	6625-00-890-7663	P2, I1
B61014U	NONE	6625-00-890-7664	P2, I1
B61014W	NONE	6625-00-890-7665	P2, I1
ME-328/USM-238	NONE	6625-00-929-0905	P2
TS-257/ARM	NONE	6625-00-538-9219	P2
TU0M3	NONE	6625-00-087-2793	P2, I1
WV77E	NONE	6625-00-817-9298	P2, I1

Condition Codes

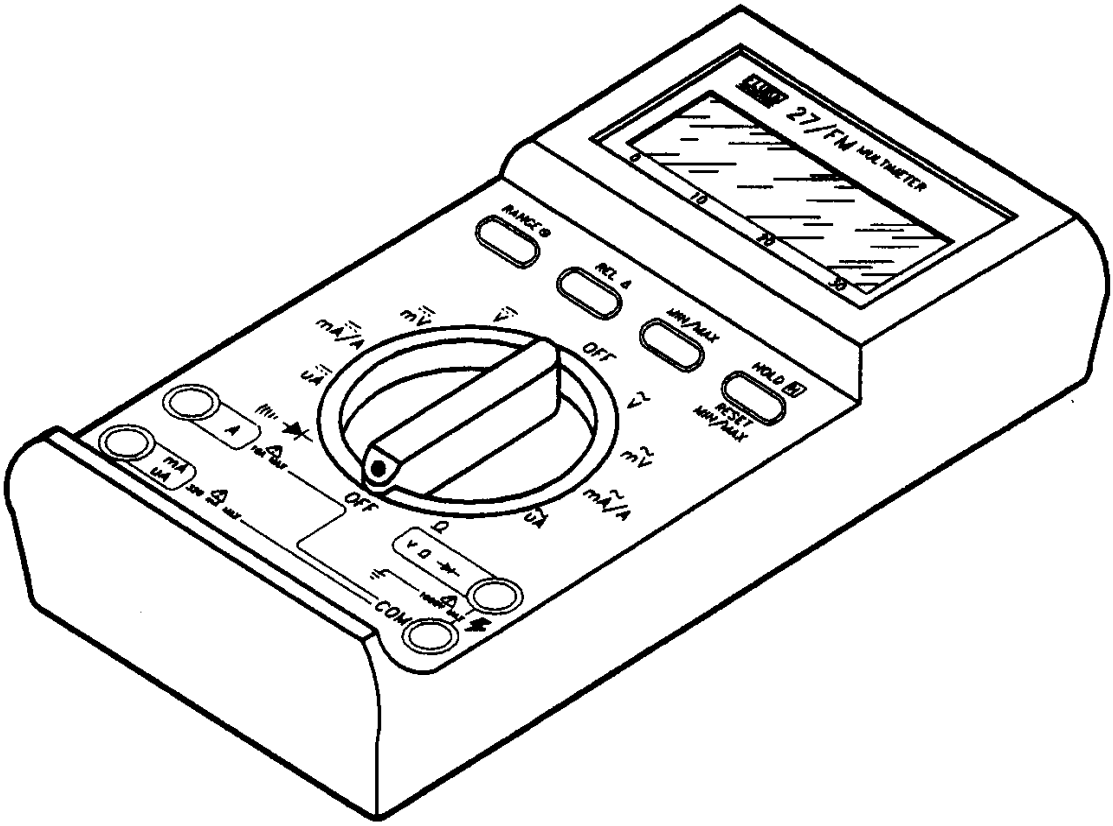
Code	Condition
E50	The AN/PSM-6 series meters will be replaced by the AN/PSM-45 in all applications except where low temperature operation (below 0 degrees C) is required. Only know low temperature requirement is for MICOM: HAWK, -34 to +41 degrees C and AN/TSQ-73, -32 to +40 degrees C.
E89	The AN/USM-223 will be replaced by the AN/PSM-45 in all applications except where it is used to perform maintenance on the UH-60A Black Hawk. UH-60A Black Hawk maintenance requires a meter that measures “smoothness during rotation” of various potentiometers as well as linear voltage readings. In these cases, the Simpson 260-7 series, NSN 6625-01-092-1198 will be used in lieu of the AN/PSM-45.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P2	Item does not have a LIN, however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE’s/TDA’s updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable “E” code/s.

4-7. MULTIMETER, DIGITAL, 3 1/2 DIGITS AN/PSM-45A

LIN: M60449
Manufacturer: Fluke
BOIP: None

NSN: 6625-01-265-6000
Model: 27/FM
CAGE: 89536

(Management Transferred to B64 AMCOM – Redstone Arsenal, AL)



MS017142
AN/PSM-45A

AC Voltage Range: 0 to 750 V

DC Voltage Range: 0 to 1000 V

AC Current Range: 0 to 10 A

DC Current Range: 0 to 10 A

Resistance Range: 0 to 20 Megohms

Other Features Include: 5 kilovolt High Voltage Probe and Carrying Case

Dimensions: 8” H x 3.75” W x 2.2” D

Weight: 1.6 lbs

Manuals: TB 9-6625-3199-35
TM 11-6625-3199-14
TM 11-6625-3199-24P-1

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I10.		

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I10.		

Condition Codes

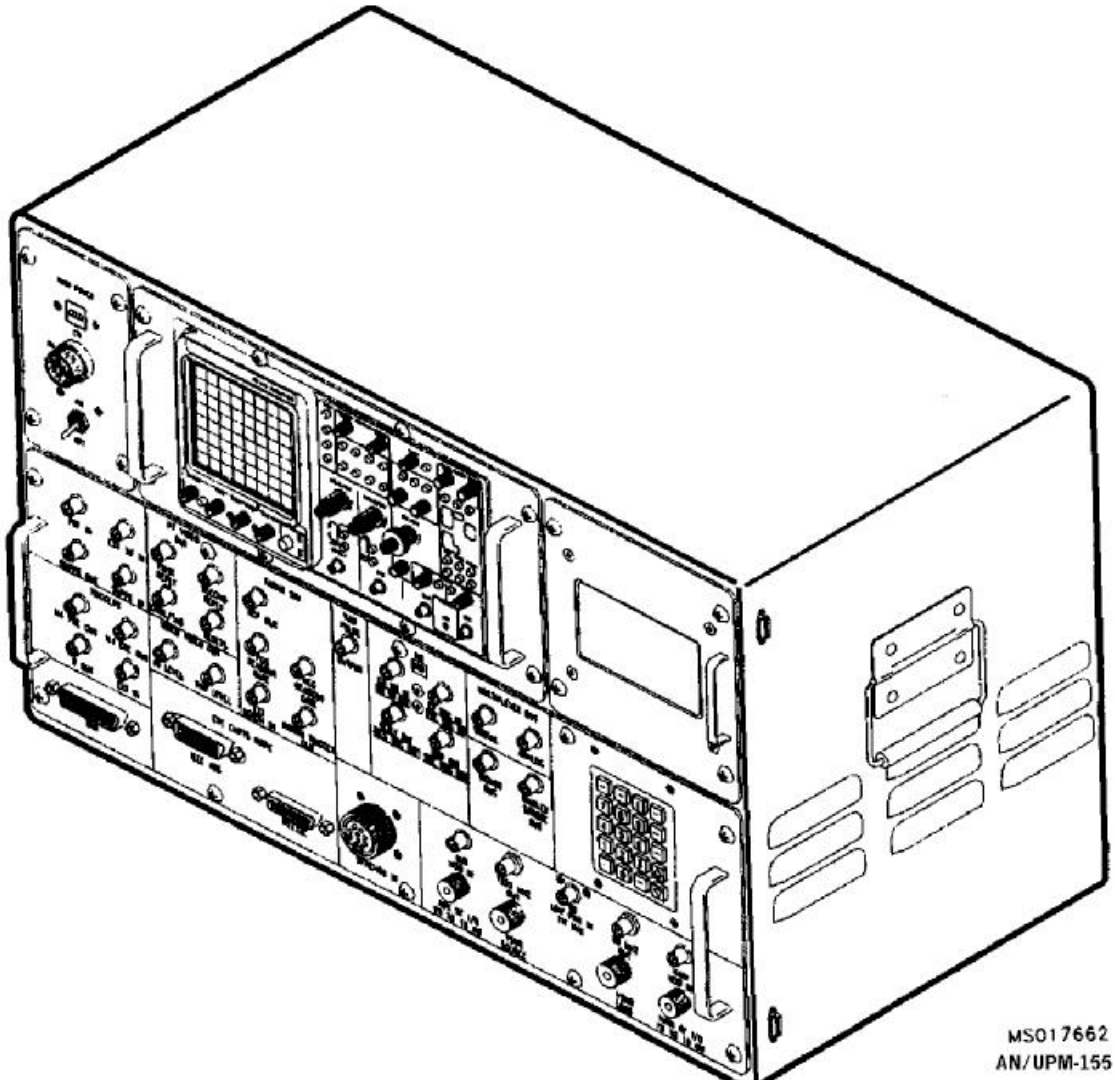
Code	Condition
I10	The AN/PSM-45A was procured to satisfy shortages of the AN/PSM-45. The AN/PSM-45A will not replace/purge the AN/PSM-45, it will be issued to users who require the AN/PSM-45. The AN/PSM-45 and the AN/PSM-45A are functionally equivalent. The AN/PSM-45A can replace all items replaced by the AN/PSM-45.

4-8. TEST SET, RADAR, AN/UPM-155

LIN: R19417
Manufacturer: NavCom Defense Electronics, Inc.
BOIP: P071AA

NSN: 6625-01-307-0512
Model: N/A

CAGE: 57057



SPECIFICATIONS

Interrogator Simulation Characteristics (Transponder Testing):

Modes 1, 2, 3/A, and C Pulse Width: 0.8 +/- 0.1 usec
Mode 1 Pulse Spacing: 3 +/- 0.1 usec
Mode 2 Pulse Spacing: 5 +/- 0.2 usec
Mode 3/A Pulse Spacing: 8 +/- 0.2 usec
Mode C Pulse Spacing: 21 +/- 0.2 usec
Interrogator Side Lobe Suppression control pulse:
Pulse Width: 0.8 +/- 0.1 usec
Pulse Spacing: 2.0 +/- 0.15 usec

Mode 4 Sync Pulse Width: 0.5 +/- 0.1 usec
Mode 4 Sync Pulse Spacing: 2.0 +/- 0.10 usec

Mode 4 Word A: 0, 2, 4, 6, 10, 13, 15, 17, 20, 24, 26, 30, 33, 35, 38, 41, 43, 45, 48, 50, 52, 54, 58, 61, 63, 66, 68, 71 usec pulse train challenges +/- 0.10 usec

Mode 4 Word B: 0, 2, 4, 6, 10, 12, 15, 17, 19, 22, 25, 28, 30, 32, 35, 37, 40, 44, 48, 51, 53, 55, 57, 60, 62, 64, 66, 70 usec pulse train challenges +/- 0.10 usec

Mode 4 Word C: 0, 2, 4, 6, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72 usec pulse train challenges +/- 0.10 usec

RF challenge carrier frequency: 1030 MHz +/- 0.2 MHz

Transponder Simulation Characteristics (Transponder Testing):

Modes 1, 2, 3/A, and C Reply Codes (Pulse Spacing): 0, 1.45, 2.90, 4.35, 5.80, 7.25, 8.70, 11.60, 13.05, 14.50, 15.95, 17.40, 18.85, 20.30 usec +/- 0.15 usec

Mode 4 Pulse Spacing: 1.75 +/- 0.05 usec

Mode 4 KIT / KIR Simulators

RF reply carrier frequency: 1090 MHz +/- 3.0 MHz

Operating Power Requirements: 115/230 VAC, 50/60/400 Hz

Operating Temperature Range: 0 to +50 degrees C

Storage Temperature Range: -40 to +70 degrees C

Dimensions: 25” W x 19” D x 16” H

Weight: 110 lbs. (less front cover and accessories)
135 lbs. (with front cover and accessories)

Manuals: TM-43-6625-912-12
TM-43-6625-912-24P
TM-43-6625-912-40

The AN/UPM-155 is a microprocessor-based radar test set which is capable of testing Mark X and Mark XII compatible Identification Friend or Foe equipment, including transponders and interrogators. The AN/UPM-155 is capable of generating Mode 1, 2, 3/A, C, and 4 challenges. Mode 4 challenges utilize an internally simulated cryptographic information transmitter (KIT) and an internally simulated cryptographic information receiver (KIR) in an unsecured location.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/TPM-25A	V84021	6625-01-045-9988	-
AN/UPM-98	V84876	6625-00-580-3771	-
AN/UPM-98A	V84876	6625-00-912-0429	-
AN/UPM-98B	V84876	6625-00-403-7990	-
AN/APM-239A	V99416	6625-00-802-7425	-
AN/APM-245A	V92715	6625-00-164-6551	-
AN/APM-305	V99436	6625-00-179-1532	-
AN/APM-305A	V99436	6625-01-052-3881	-

Items Potentially Replaceable

None

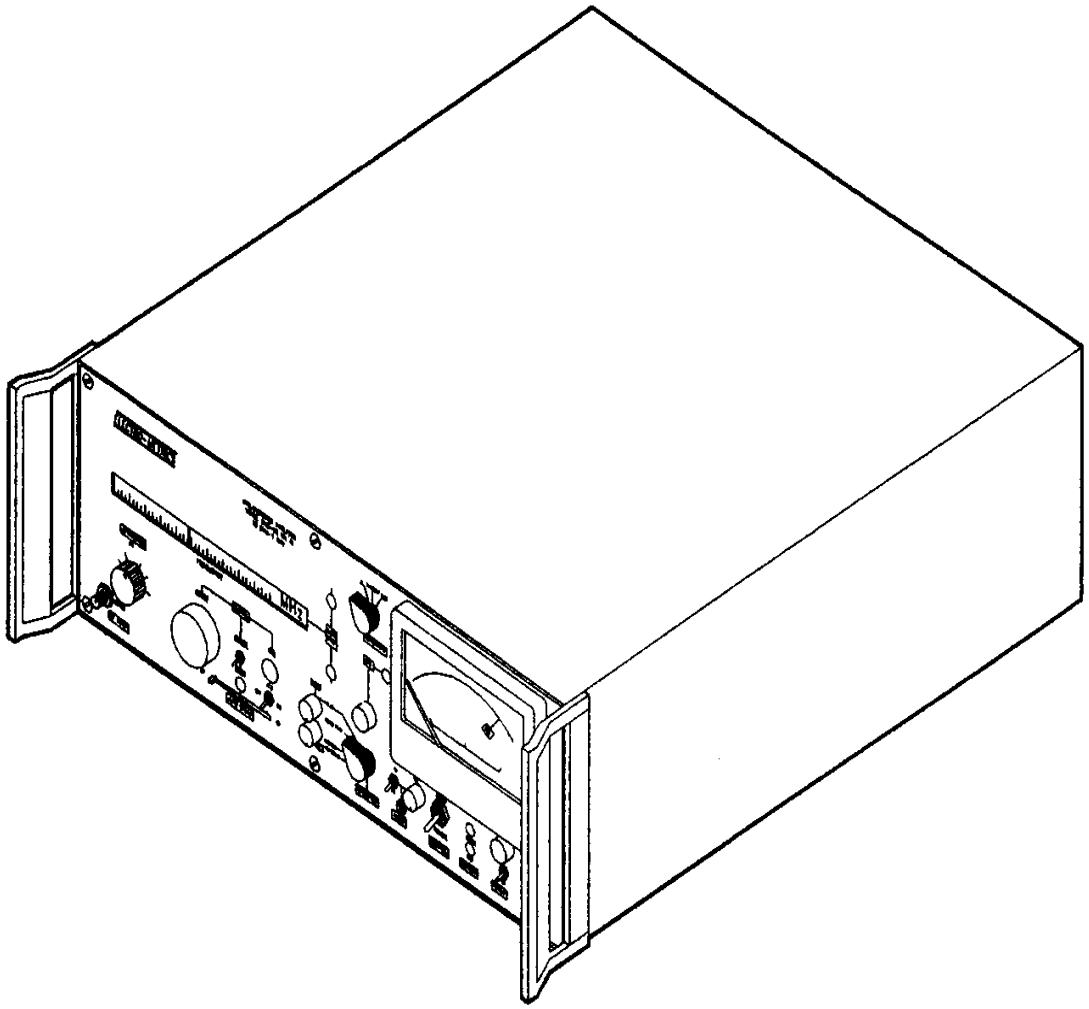
Condition Codes

None

4-9. RADIO INTERFERENCE MEASURING SET AN/URM-200

LIN: Q23305
Manufacturer: Electro-Metrics, Penril
BOIP: None

NSN: 6625-01-083-9446
Model: EMC 25-200
CAGE: 18581



MS017143
AN/URM-200

SPECIFICATIONS

Input Impedance: 50 ohms

IF Bands 1-7: 175 kHz

Bands 8-10: 1.6 MHz

Bands 11-15: 8.7 MHz

IF Image and Spurious Rejection: 45 dB minimum

Impulse Generator: 10 kHz to 1000 MHz

X-Y Plotting: 0 to 1.5 VDC into 100 kohms on each axis

Frequency Range: 10 kHz to 1 GHz ± 2%

Attenuation: 0 to 100 dB ± 1 dB

Output Meter Range: .01 µV to 1 V

Dimensions: 7” H x 19” W x 22” D

Weight: 65 lbs

Manuals: TB 9-6625-1491-35
TM 11-6625-2949-14
TM 11-6625-2949-14-HR
TM 11-6625-2949-24P
DMWR 11-6625-2949

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-85 CC: ME-204	Q23305 NONE	6625-00-776-0595 6625-00-731-7914	- -

Items Potentially Replaceable

None

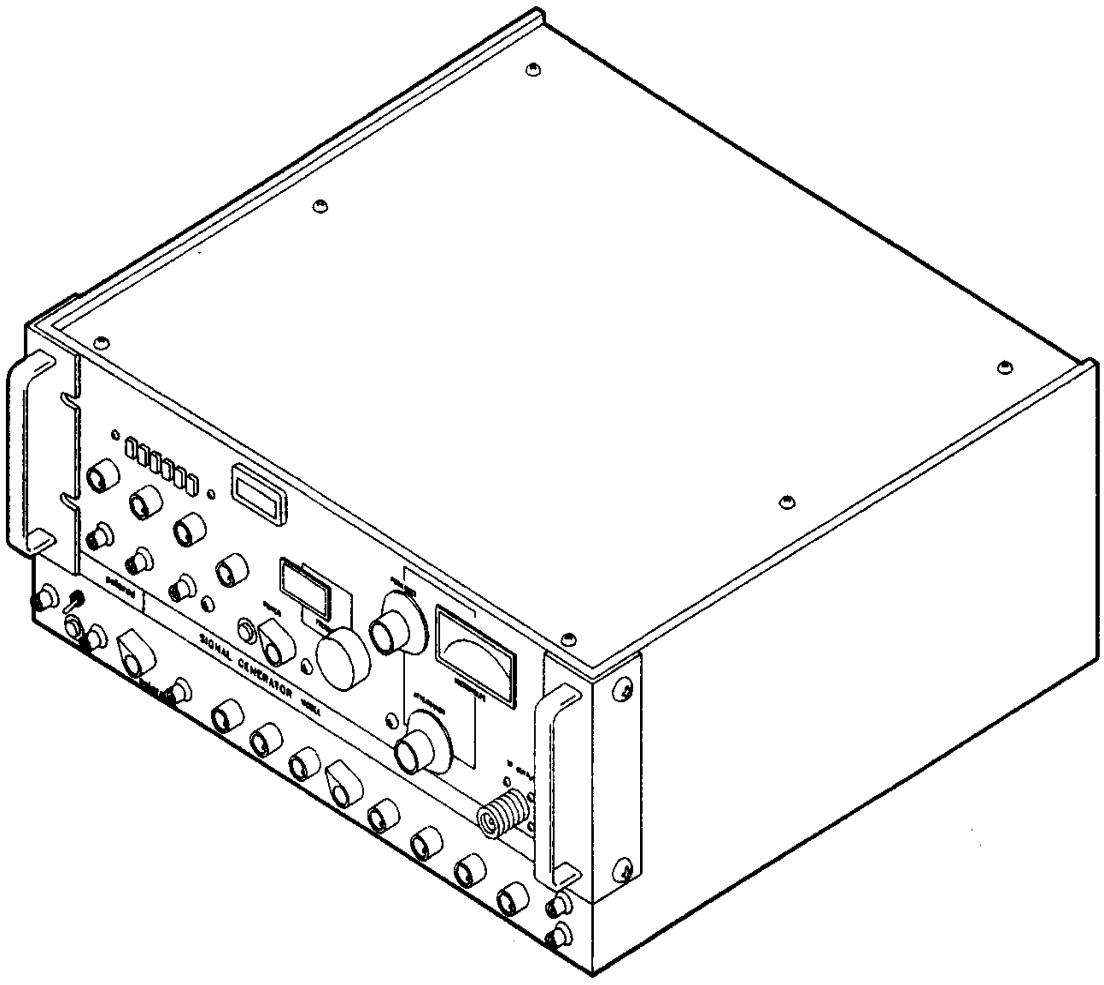
Condition Codes

None

4-10. GENERATOR, SIGNAL, AN/URM-206

LIN: S72214
Manufacturer: Polarad Electronics Corp.
BOIP: C009AA

NSN: 6625-01-077-8503
Model: 1608E-Y
CAGE: 82199



MSO17071
AN/URM-206

SPECIFICATIONS

Frequency Range: 6.95 to 11 GHz

Delta F Control Range: 1.5 MHz min

Output Impedance: 50 ohms

VSWR: less than 2:1

Pulse Rate: 10 Hz to 10 kHz

FM Deviation: 0 to 5 MHz

Volt Peak Modulation: 15 to 50 V

Output Power: -130 to 6 dBm

Other Features Include: Internal FM, square wave, and pulse modulation. External pulse modulation.

Dimensions: 7” H x 16.75” W x 17” D

Weight: 46 lbs

Manuals: TB 9-6625-2000-35
TM 11-6625-2948-14P
TM 11-6625-2948-24P

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-44A	J52823	6625-00-990-7700	-
CC: TS-622A	NONE	6625-00-649-5192	-
SG-944/U	J56371	6625-00-107-8173	-

Items Potentially Replaceable

None

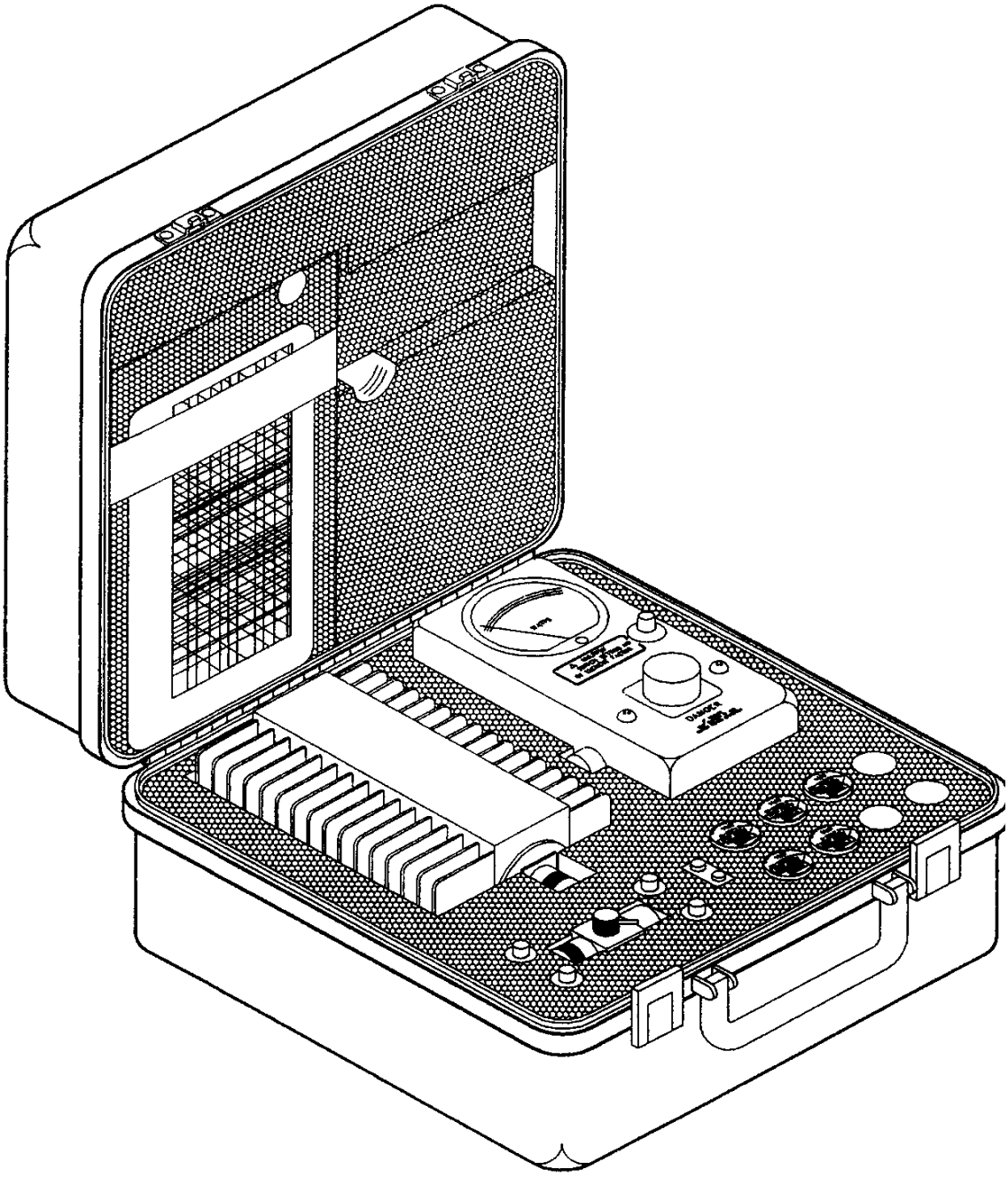
Condition Codes

None

4-11. TEST SET, RADIO FREQUENCY POWER AN/URM-213

LIN: R22666
Manufacturer: Bird Electronic Corp.
BOIP: P044AA

NSN: 6625-01-288-6515
Model: 4410A w/4275-020 Variable 515 Sampler, Corial Resistor, 8665, 4010-2, 4, 5, 6, 8 elements
CAGE: 70998



MS017447
AN/URM-213

SPECIFICATIONS

RF Power Range: 0.1 to 10,000 W 450 kHz to 25 MHz
0.1 to 1,000 W 25 to 1,000 MHz

Frequency Range: 450 kHz to 1,000 MHz

Input Impedance: 50 ohms

Input/Output Connector: Type N Female

Directivity (Min): 28 dB

Insertion Loss (Max): 0.1 dB up to 1,000 MHz

VSWR (Max): 1.05 up to 1,000 MHz

Accuracy: ± 5% of full scale from 450 kHz to 1,000 MHz

Power Source: Battery

Dimensions: 13.75” L x 6” W x 12.75” H

Weight: 15 pounds

Manuals: TB 9-6625-2303-50
TM 11-6625-3276-14&P

Remarks: The item described above is a portable, general purpose, in-line directional wattmeter with termination for the measurement of CW signals.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-120	V89534	6625-00-790-2746	-
AN/URM-120A	V89534	6625-01-039-1488	-
AN/URM-120B	NONE	6625-01-123-8098	-
AN/USM-298	V89876	6625-00-880-5119	I12
BENDIX 711N			I1
BIRD 612		6625-00-308-2668	P2, I1
BIRD 6156			P2, I1
ELECTRO-IMPULSE DMP-3			P2, I1
ME-11C		6625-00-057-4922	P2
ME-497	W38609	6625-01-064-3555	-
ME-82	Y38678	6625-00-511-4397	-
TS-1285			-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/URM-167	V89581	6625-00-933-8112	I3, P3, E98
AN/URM-182	V89641	6625-00-148-9371	T3, T5, I3, E97
AN/URM-182A	V89641	6625-01-062-3599	T3, T5, I3, E97
ME-69			P2, I1, E98
TS-2609/U		6625-00-933-8786	T3, T5
TS-2609A			T3, T5
TS-3754/U			T3, T5

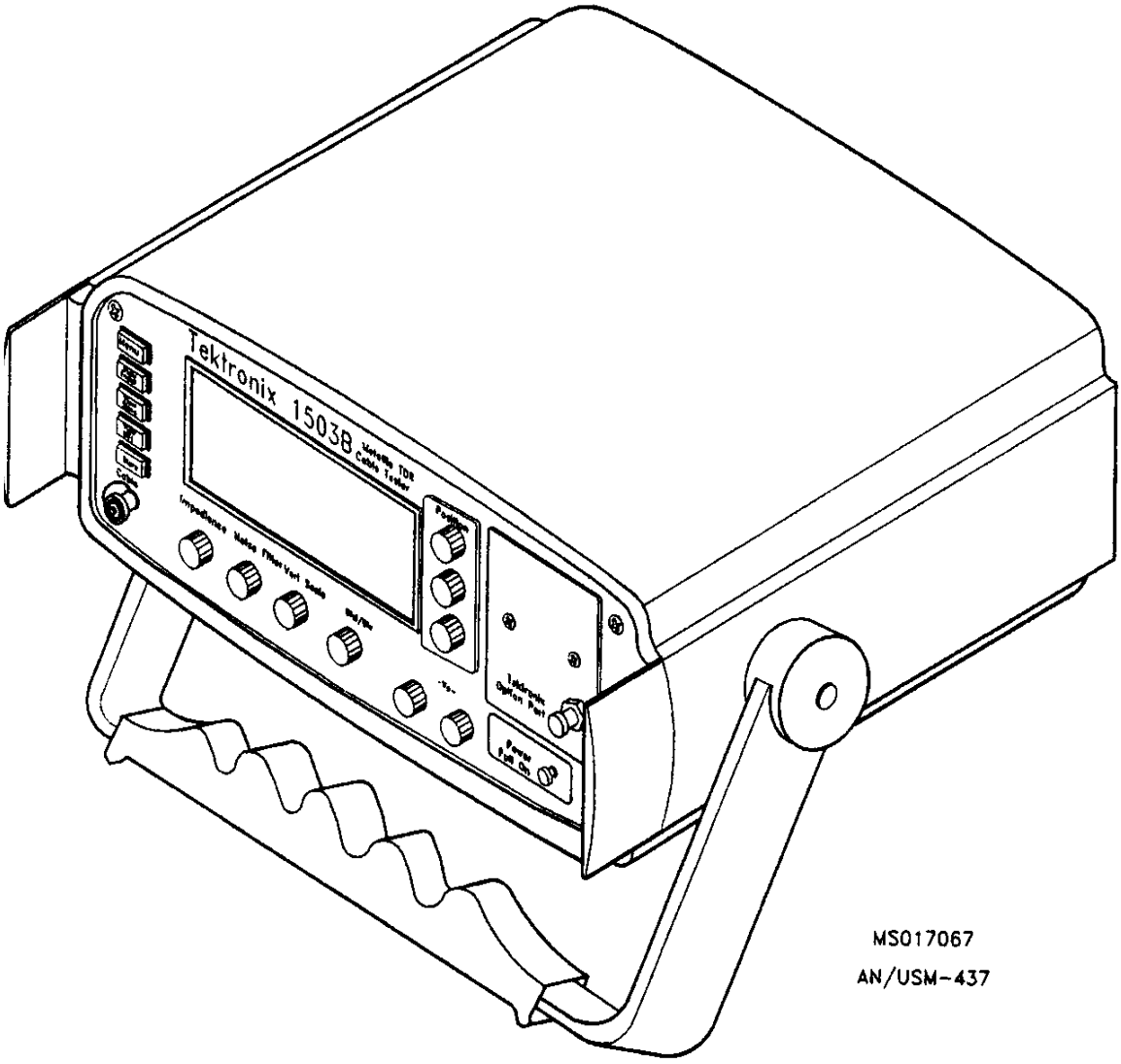
Condition Codes

Code	Condition
E97	The AN/URM-182 and AN/URM-182A are very small, light, and rugged instruments used primarily with mobile, airborne and pack-carried transmitters and transceivers. The AN/PRM-34 replaced the AN/URM-182, and AN/URM-182A in certain cases (see cc: E1).
E98	The upper frequency limit of the TEMOD item is 1000 MHz with the elements supplied. Other elements can be ordered if there is a need above 1,000 MHz.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I3	The salient technical characteristics of the potentially replaceable TMDE that exceed those of the TEMOD item are listed in the appropriate code. These technical differences listed are the major differences in performance between the two items; other technical differences may exist which could prevent replaceability by the TEMOD item. Before a user adopts the TEMOD item as a replacement, a detailed spec comparison should be performed.
I12	The AN/USM-298 has two plug-in elements included with it, the ranges that are covered by these elements are covered by the new item. Although the characteristics of the AN/USM-298 state that it covers from 1000-2300 MHz, the plug-in elements supplied only cover up to 1000 MHz.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue, not one of performance.)
T5	TEMOD item measurement capabilities greatly exceed those of target replacement item.

4-12. TEST SET, ELECTRICAL CABLE AN/USM-437

LIN: V73959
Manufacturer: Tektronix
BOIP: QQPRI

NSN: 6625-01-292-6530
Model: 1503B
CAGE: 80009



SPECIFICATIONS

Distance Measuring Range: 0 to 50,000 feet

Maximum Resolution: 2 feet

Test Pulse Amplitude: 10 V ± 20% unterminated
5 V ± 20% terminated

Output Impedance: 50 ohms, 75 ohms, 93 ohms, 125 ohms

Unit can be battery operated.

Dimensions: 5.0” H x 12.4” W x 18.7” D

Weight: 18.0 lbs

Manuals: TB 9-6625-1967-35
TM 11-6625-3235-14
TM 11-6625-3235-24P

Remarks: The AN/USM-437 will be issued (not fielded) to fill valid AN/USM-437(V) 1 series shortages.

Items Replaced and Removed from Field

None

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/USM-437(V)	V73959	6625-00-996-7821	P1
AN/USM-437(V)1	V73959	6625-01-030-0993	P1

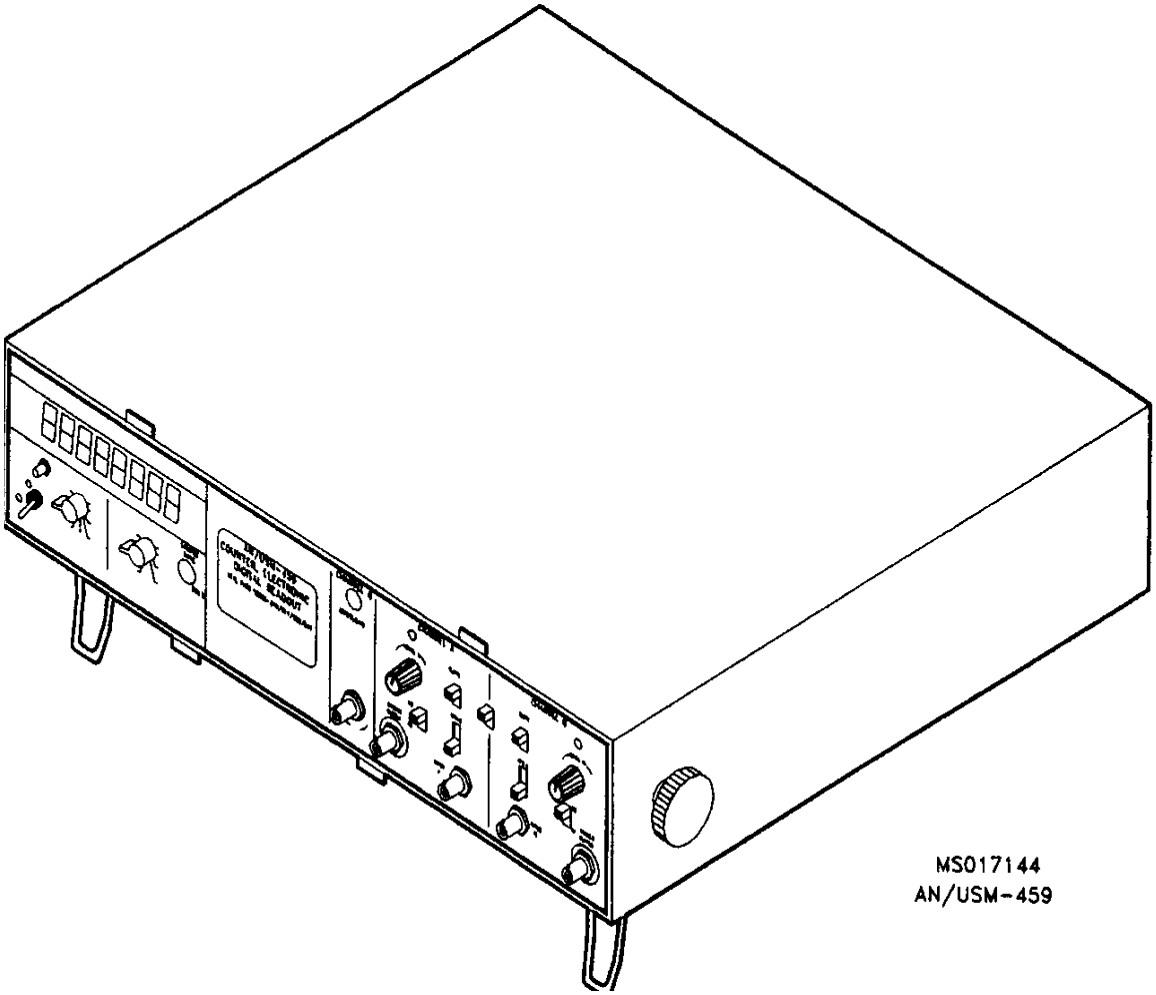
Condition Codes

Code	Condition
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)

4-13. COUNTER, ELECTRONIC AN/USM-459

LIN: C19266
Manufacturer: Hewlett Packard
BOIP: None

NSN: 6625-01-061-8928
Model: 5328A-010/011/030/041
CAGE: 28480



MS017144
AN/USM-459

SPECIFICATIONS

Frequency Range: DC to 512 MHz

Time Interval Averaging Range: .1 µs to 10^6 s

Time Interval Range: 100 ns to 1 s

Other Features Include: Programmable through HP-IB bus, temperature controlled crystal oscillator, channel C, and programmable input

Operating Temperature: 0 to 50 degrees C

Dimensions: 5.5” H x 16” W x 25” D

Weight: 30.87 lbs

Manuals: TB 9-6625-2071-35
TM 11-6625-2941-14
TM 11-6625-2941-24P

Remarks: Unfilled requirements for the AN/USM-459 will be satisfied by the AN/USM-459A whose specifications are equal to or better than the AN/USM-459.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/TSM-16	J00319	6625-00-542-1666	-
CC: FR-114/U	NONE	6625-00-542-1677	-
CC: FR-114A/U	NONE	6625-00-542-1677	-
AN/URM-79	J00593	6625-00-668-9749	-
CC: FR-4/U	J01141	6625-00-669-0080	-
AN/URM-80	J00730	6625-00-649-4286	-
CC: FR-5/U	NONE	6625-00-669-0086	-
AN/URM-81	J00867	6625-00-539-9910	-
CC: FR-6/U	J00867	6625-00-649-4280	-
AN/USM-207	F19198	6625-00-911-6368	-
CC: CP-814	NONE	6625-00-954-1941	-
CC: CV-1921	NONE	6625-00-948-0182	-
AN/USM-207A	F19198	6625-00-044-3228	-
CC: CP-814A	NONE	6625-00-156-0607	-
CC: CV-1921A	NONE	6625-00-890-7890	-
AN/USM-26	V87890	6625-00-543-1356	-
CC: FR-38A/U	NONE	6625-00-605-7189	-
CP-1033/U	F19233	6625-00-407-0762	-
CP-772	F18614	6625-00-973-4837	-
CV-2002	F01440	6625-00-226-3483	-
FR-40/GSM-1	M37650	6625-00-669-0730	-

Items Potentially Replaceable

None

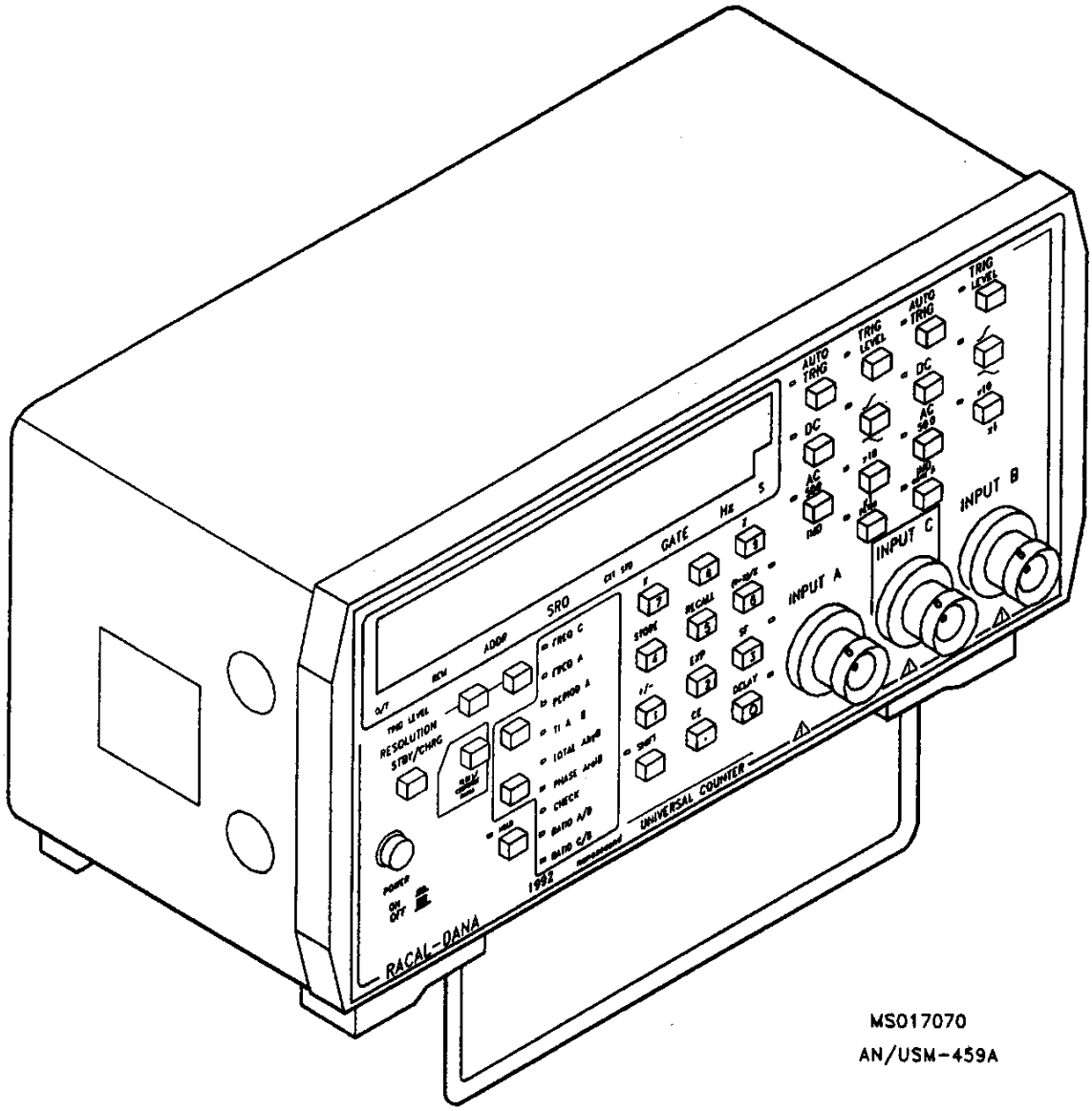
Condition Codes

None

4-14. UNIVERSAL FREQUENCY COUNTER AN/USM-459A

LIN: C19266
Manufacturer: Racal-Dana
BOIP: None

NSN: 6625-01-271-3012
Model: 1992-04E, 055
CAGE: 21793



SPECIFICATIONS

Frequency Range: DC to 1.3 GHz

Time Interval Range: 0 to 8 x 10^5 s

Period A Range: 6.25 ns to 1.7 x 10^3 s

Input Impedance: 50 ohms, 1 Megohm

Time Delay Range: 200 µs to 800 ms

Frequency Range Sensitivity: 15 to 75 mV RMS

Other Features Include: 9 digit display, AC or DC coupling, high stability oven oscillator, and it is programmable through the IEEE-488 interface.

Dimensions: 3.97" H x 8.35" W x 13.03" D

Weight: 8 lbs

Manuals: TB 9-6625-2017-35
TM 11-6625-3232-12
TM 11-6625-3232-40

Remarks: The AN/USM-459A will be distributed to satisfy shortages of AN/USM-459 authorizations through the pull system in which materiel fielding is not envisioned.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I11.		

Items Potentially Replaceable

None

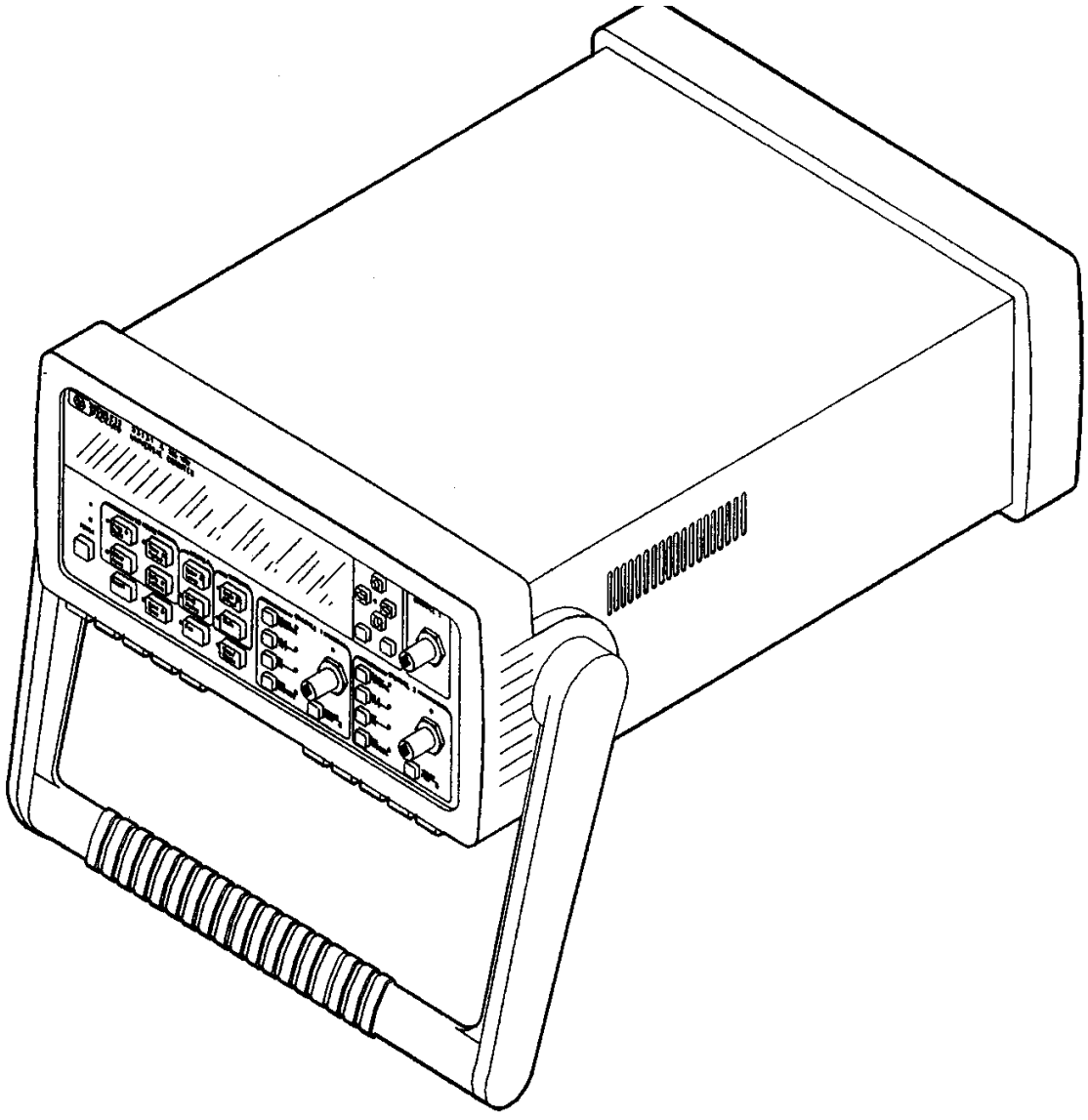
Condition Codes

Code	Condition
I11	The AN/USM-459B was procured to satisfy shortages of the AN/USM-459. The AN/USM-459A will not replace the AN/USM-459, it will be issued to users who require the AN/USM-459. The AN/USM-459 and the AN/USM-459A are functionally equivalent. The AN/USM-459A can replace all items replaced by the AN/USM-459.

4-15. UNIVERSAL FREQUENCY COUNTER AN/USM-459B

LIN: C19266
Manufacturer: Hewlett Packard
BOIP: None

NSN: 6625-01-406-7390
Model: HP 53131A option H05
CAGE: 9E579



MS0171145
AN/USM-459B

SPECIFICATIONS

Frequency Range: 0.1 Hz to 1.3 GHz

Time Interval Range: -1.0 ns to 10^5 s

Period A Range: 4.44 ns to 1700 s

Input Impedance: 50 ohms, 1 Megohm

Time Delay Range: 100 µs to 10 s

Frequency Range Sensitivity: 15 to 40 mV RMS

Other Features Include: 10 digit resolution with 1 s gate time, AC or DC coupling, high stability oven oscillator, and it is programmable through the IEEE-488 interface.

Temperature, Operating: 0 to 50 ºC

Temperature, Storage: -40 to 71 ºC

Size: 3.5” H x 8.4” W x 13.7” D

Weight: 8 lbs

Manuals: TB 9-6625-907-12
TM 9-6625-907-40
TM 9-6625-907-24P

Remarks: The AN/USM-459B will be distributed to satisfy shortages of AN/USM-459 and AN/USM-459A authorizations through the pull system in which material fielding is not envisioned.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I11.		

Items Potentially Replaceable

None

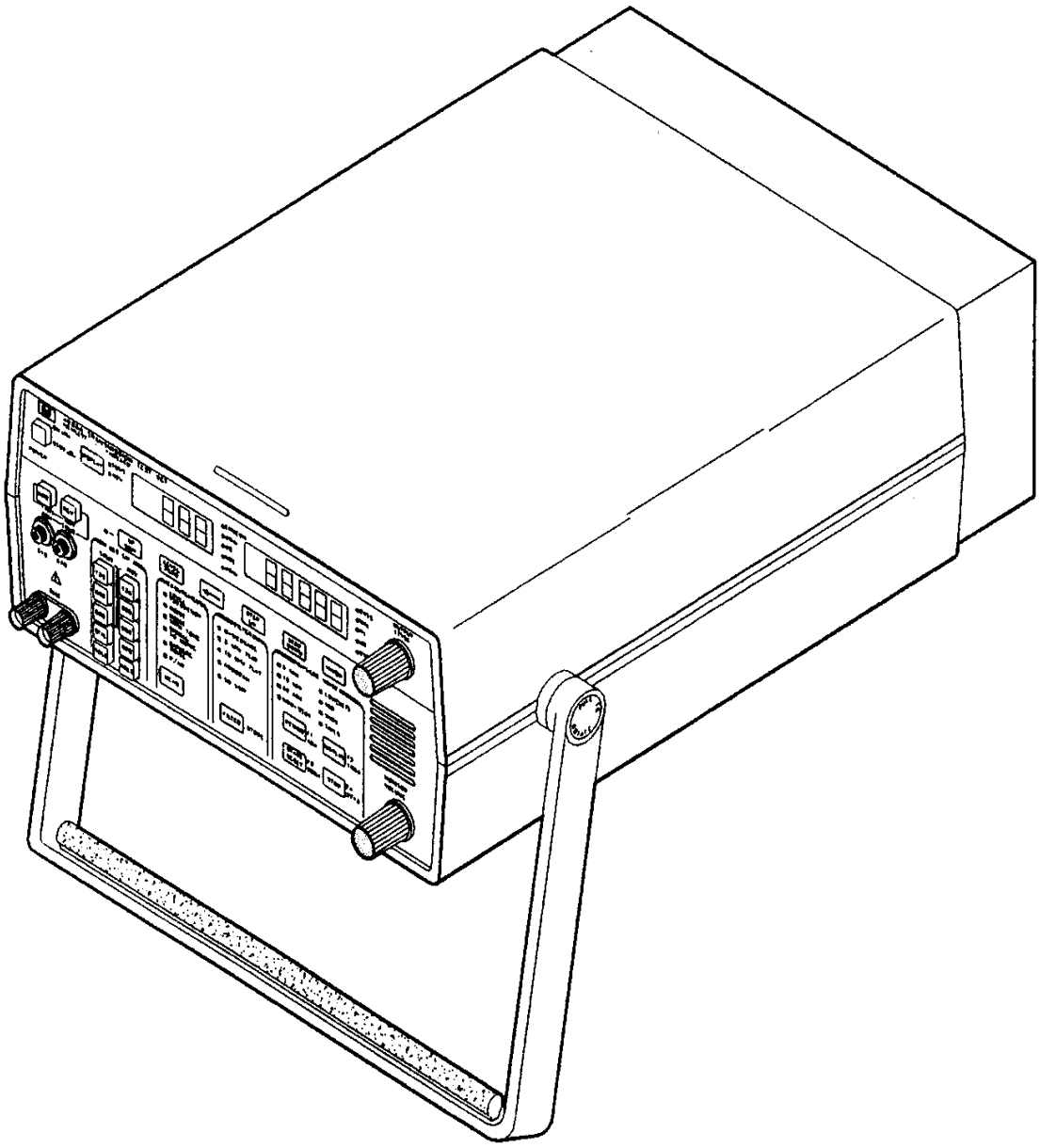
Condition Codes

Code	Condition
I11	The AN/USM-459B was procured to satisfy shortages of the AN/USM-459 and AN/USM-459A. The AN/USM-459B will not replace the AN/USM-459 or AN/USM-459A, it will be issued to users who require the AN/USM-459 and AN/USM-459A. The AN/USM-459, AN/USM-459A and the AN/USM-459B are functionally equivalent. The AN/USM-459B can replace all items replaced by the AN/USM-459 and AN/USM-459A.

4-16. TRANSMISSION TEST SET, PORTABLE AN/USM-485

LIN: T49348
Manufacturer: Hewlett Packard
BOIP: C082AB

NSN: 6625-01-205-6492
Model: 4935A/E01
CAGE: 28480



MS017146
AN/USM-485

SPECIFICATIONS

Receive Level Range: -60 to +13 dBm

Receive Frequency Range: 20 Hz to 110 kHz

Transmit Level Range: -40 to +13 dBm

Transmit Frequency Range: 10 Hz to 110 kHz

C-Message Circuit Noise: 0 to 100 dBm

Impulse Noise Threshold: 30 to 109 dBm

Peak-to-Average Ratio (P/AR) Range: 0 to 120 P/AR units

Filters: C-Message, 3 kHz flat, program, 15 kHz flat, 50 kbit, 1010 Hz notch

Internal NICAD battery or AC powered

Dimensions: 5.0” H x 11.0” W x 15.0” D

Weight: 14 lbs

Manuals: TB 9-6625-2151-35
TM 11-6625-3186-10
TM 11-6625-3186-24
TM 11-6625-3186-24P

Remarks: The AN/USM-485 will be distributed under the TPF Fielding System. Under the TPF system the end item project code and the spare codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/PTM-8	V94338	6625-00-894-0516	-
AN/USM-181	V94466	6625-00-740-0344	-
CC: ME-260/U	NONE	6625-00-965-1534	-
CC: SG-543A/U	J53234	6625-00-965-1532	-
AN/USM-423	V94637	6625-01-015-6563	-
CC: ME-260B/U	NONE	6625-00-911-0744	-
CC: SG-543B/U	NONE	6625-00-159-2356	-
TA-885/U	V94671	6625-00-255-1083	-
TS-140/PCM	V95014	6625-00-243-4888	-
TS-3171/U	V67271	6625-00-918-5721	-
TS-3329/U	V96425	6625-00-251-5211	-
TS-3483/U	V96438	6625-00-115-8006	-
TS-559/FT	V95425	6625-00-540-9051	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
12B	NONE	6625-00-445-6930	I1, P2
3551A	NONE	6625-01-062-0176	I1, P2
3551A-C01	NONE	6625-01-068-4386	I1, P2
4935-003	M20303	NONE	I1, P1
AN/PTM-3	NONE	NONE	P2
AN/USM-343	NONE	6625-00-922-0742	P2
AN/USM-377	NONE	6625-00-140-2335	P2
CC: ME-260B/U	NONE	6625-00-911-0744	P2
CC: SG-543A/U	NONE	6625-00-965-1532	-
AN/USM-391	NONE	NONE	P2
CP-1101/U	F18785	6625-00-894-2759	P3, E19, T5
ME-22/PCM	M37376	6625-00-498-3469	P3, T5, E21
ME-71/FCC	M37513	6625-00-545-7949	P3, T5, E22
SG-15/PCM	J54878	6625-00-229-1087	P3, T5, E83
TS-3156/U	NONE	6625-00-133-7496	P3, T2, E20
TS-3157/U	NONE	6625-00-166-5128	P3, T2, E23
TS-400	NONE	NONE	P2
TS-569/FT	NONE	6625-00-188-3234	P2
TTI-1103B	NONE	6625-00-005-1272	P2, I1
TTI-1110A	NONE	NONE	I1, P2
TTS-12A	NONE	6625-00-943-5938	I1, P2

Condition Codes

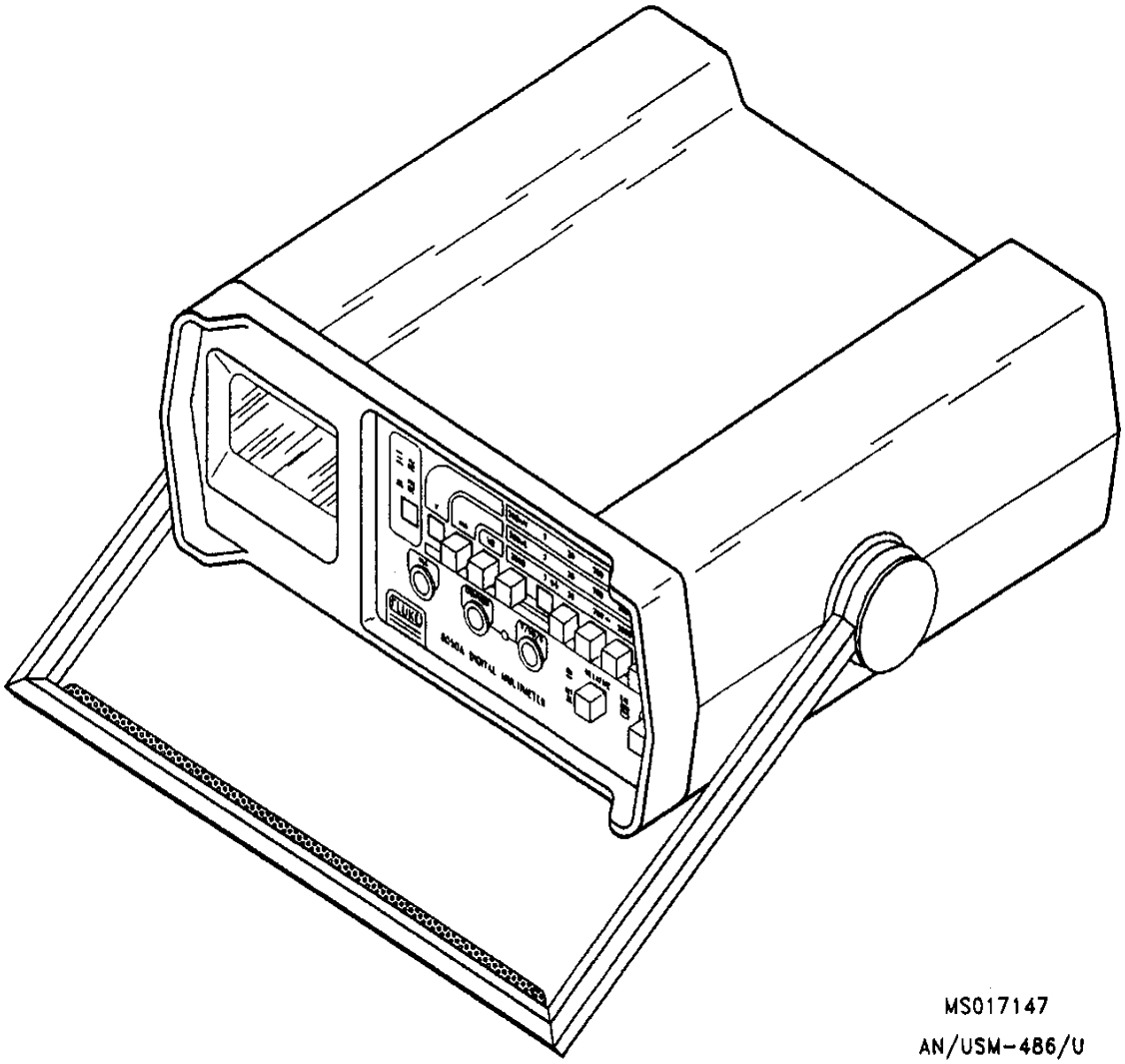
Code	Condition
E19	CP-1101 measures impulse noise only, TEMOD item performs the following measurements: level (transmit and receive), par, noise and noise to ground.
E20	TS-3156 measures level and noise. TEMOD item performs the following additional measurements: par, noise to ground and impulse noise.
E21	ME-22 measures level. TEMOD item performs the following additional measurements: transmit level, par, noise, noise to ground and impulse noise.
E22	ME-71 has a receive level range of -70 to +42 dBm from 20 to 500 kHz. TEMOD item has a level range of -40 to +10 dBm for both transmit and receive over the range 50 Hz to 110 kHz and performs the following additional measurements: noise, noise to ground, par and impulse noise.
E23	TS-3157 has a transmit and receive frequency range of 300 Hz to 3.5 kHz. The TEMOD item has a frequency range of 50 Hz to 100 kHz and performs the following additional measurements: noise, noise to ground, par and impulse noise.
E83	This item is on the replacement list of AN/USM-485, SG-1288 and SG-1171. If item is used for telephone testing applications, replace with AN/USM-485. If used for general purpose applications, replace with SG-1288 or SG-1171 (see condition code E25).

Condition Codes – Continued

Code	Condition
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
T2	TEMOD item is technically similar and may be substituted depending upon measurement. (i.e., Some functions in replaced item not found in TEMOD item.)
T5	TEMOD item measurement capabilities greatly exceed those of target replacement item.

4-17. DIGITAL MULTIMETER, 4 1/2 DIGIT AN/USM-486/U

LIN: M23954 NSN: 6625-01-145-2430
Manufacturer: Fluke Model: 8050A-01
BOIP: C044AA CAGE: 89536



MS017147
AN/USM-486/U

SPECIFICATIONS

AC Voltage Range: 0 to 750 V ± 2% +50 digits

DC Voltage Range: 0 to 1000 V ± .05% +3 digits

AC Current Range: 0 to 2 A ± 2% +50 digits

DC Current Range: 0 to 2 A ± .5% +2 digits

Resistance Range: 0 ohms to 20 Megohms

Decibels (dB) Range: -60 to 60 dBm

Overload protection is at least 50% of full scale deflection.

Power Source: Battery and AC-operated

Dimensions: 2.5” H x 8.5” W x 10” D

Weight: 2.38 lbs

Manuals: TB 9-6625-2274-35
TM 11-625-3055-14
TM 11-6625-3055-24P

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/USM-303	M80259	6625-00-933-2406	-
CC: ME-258/U	NONE	6625-00-196-2861	-
AN/USM-303A	M80259	6625-00-168-0585	-
AN/USM-337	Z45297	6625-00-489-8908	-
DM501	Z45207	6625-00-500-6640	I1
ME-227/U	Y13224	6625-00-555-2312	-
ME-227A/U	Y13224	6625-00-160-0622	-
ME-262/U	M80976	6625-00-739-1192	-
TS-340/U	Y13293	6625-00-643-0624	-
TS-505/U	M81646	6625-00-243-0562	-
TS-505A/U	M81646	6625-00-504-2628	-
TS-505B/U	M81646	6625-00-553-0841	-
TS-505C/U	M81646	6625-00-581-8347	-
TS-505D/U	M81646	6625-00-580-4910	

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
111	NONE	6625-00-937-6679	I1, P2
303	NONE	6625-00-519-1570	I1, P2
3439A	NONE	625-00-325-0995	I1, P2
3443A	NONE	6625-00-482-7207	I1, P2, P5
3444A	NONE	6625-00-071-8965	I1, P2, P5
3445A	NONE	6625-00-082-1434	I1, P2, P5
3465A	NONE	6625-00-039-7922	I1, P2
3469A	NONE	6625-00-763-4080	P2
3490A OPT 060	NONE	6625-00-557-8305	I1, P2
5703S2127	NONE	4931-00-932-5034	I1, P2
600	NONE	6625-00-879-4626	I1, P2
784	NONE	6625-00-879-4626	I1, P2
8000A	NONE	6625-00-322-8715	I1, P2
8000A01	NONE	6625-00-210-7584	I1, P2
8100A	NONE	6625-00-433-4234	I1, P2
AN/USM-123	NONE	6625-00-684-3083	E99, P3
AN/USM-319	NONE	6625-00-433-2403	P2
CC: ME-376	NONE	NONE	P2
AN/USM-319A	NONE	6625-00-433-2402	P2
CC: ME-376A	NONE	NONE	P2
ME-231 FYQ5	NONE	6625-00-013-2630	P2
ME-26/U	M80276	6625-00-544-8691	P3, E8
ME-26A/U	M80276	6625-00-360-2493	P3, E8
ME-26B/U	M80276	6625-00-646-9409	P3, E8
ME-26C/U	M80276	6625-00-646-9409	P3, E8
ME-26D/U	M80276	6625-00-913-9781	P3, E8
ME-30	M80413	6625-00-376-4921	P3, E9
ME-303A/U	M80991	6625-00-969-4105	E84
ME-30A/U	M80413	6625-00-643-1670	P3, E9
ME-30B/U	M80413	6625-00-580-5298	P3, E9
ME-30C/U	M80413	6625-00-818-2360	P3, E9
ME-30D/U	M80413	6625-00-643-1670	P3, E9
ME-30E/U	M80413	6625-00-420-9354	P3, E9
ME-30F/U	M80413	6625-00-420-9354	P3, E9
ME-450	NONE	6625-00-149-6301	E105
PL-1344/U	P11093	6625-00-957-0511	P5
TS-585/U	M81783	6625-00-151-4230	P3, E24
TS-585A/U	M81783	6625-00-244-0501	P3, E24
TS-585B/U	M81783	6625-00-244-0501	P3, E24
TS-585C/U	M81783	6625-00-244-0501	P3, E24
TS-585D/U	M81783	6625-00-684-5438	P3, E24

Condition Codes

Code	Condition
E8	The ME-26D measures AC voltages from approximately 50 mv to 300 volts rms at frequencies from 20 Hz to 700 MHz (different for other versions of ME-26's). The TEMOD item measures AC voltages from 10 mv to 750 volts rms at frequencies from 20 Hz to 50 kHz (3 dB bandwidth is 200 kHz). With RF probe, TEMOD item measures voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Where the TEMOD items measurement capabilities do not satisfy the users measurement requirements, units should retain the ME-26. In all other cases where the TEMOD item satisfies the measurement requirement, the ME-26 should be removed from the field. Only known applications where problems have been reported is when the ME-26 is used to support the AN/GRC-106 and AN/GRC-50.
E9	The ME-30 measures voltages from approximately 100 µv to 300 volts rms at frequencies from 10 Hz to 4 MHz. The TEMOD item measures voltages from 10 mV to 750 volts rms at frequencies from 20 Hz to 50 KHz (3 dB bandwidth is 200 kHz). With RF probe, TEMOD item measures voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Where the TEMOD items measurement capabilities do not satisfy the users measurement requirements units should retain the ME-30. In all other cases where the TEMOD item satisfies the measurement requirement the ME-30 will be removed from the field.
E24	The TS-585 measures power from 0.2 milliwatts to 5 watts or -10 to +37 dBm with a variable input impedance from 2.5 to 20,000 ohms. The TEMOD item measures dBm referenced to only 15 selectable impedances: 50, 75, 93, 110, 125, 135, 150, 250, 300, 500, 600, 800, 900, 1000 and 1200 ohms. Output is not displayed in watts. In applications that require a variable input impedance, the AN/USM-486 does not replace the TS-585.
E84	This item is a Hewlett Packard Model 410C. It can measure dc voltages to 1500 volts; ac voltages of 0.5 to 300 volts from 20 Hz to 700 MHz. The AN/USM-486 can measure dc voltages to 1000 volts; ac voltages to 750 volts from 20 Hz to 50 kHz (3 dB bandwidth is 200 kHz). With an RF probe, it can measure voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Use AN/USM-486 where the additional measurement capabilities of the HP 410C are not required. Otherwise, retain HP 410C.
E99	This item is a Simpson Model 269 analog volt-ohm-ampere meter. It can measure DC voltages to 4000 volts, AC voltages to 800 volts, and DC current to 8 amps. The AN/USM-486 can measure DC voltages to 6000 volts with high voltage probe, AC voltages to 750 volts, and DC current to 2 amps. Use the AN/USM-486 where the additional AC voltage and DC current capabilities of the AN/USM-123 are not required. Otherwise, retain the AN/USM-123.
E105	This item is a Simpson model 260 analog volt-ohm-ampere meter. It can measure DC voltage to 5000 volts, AC voltage to 5000 volts, DC current to 10 Amps and -20 to +4.9 dBm. The AN/USM-486 can measure DC voltages to 6000 volts with high voltage probe, AC voltages to 750 volts, and DC current to 2 amps. Use the AN/USM-486 where the additional AC voltage, DC current and decibels measurement capabilities of the ME-450 are not required. Otherwise, retain the ME-450.

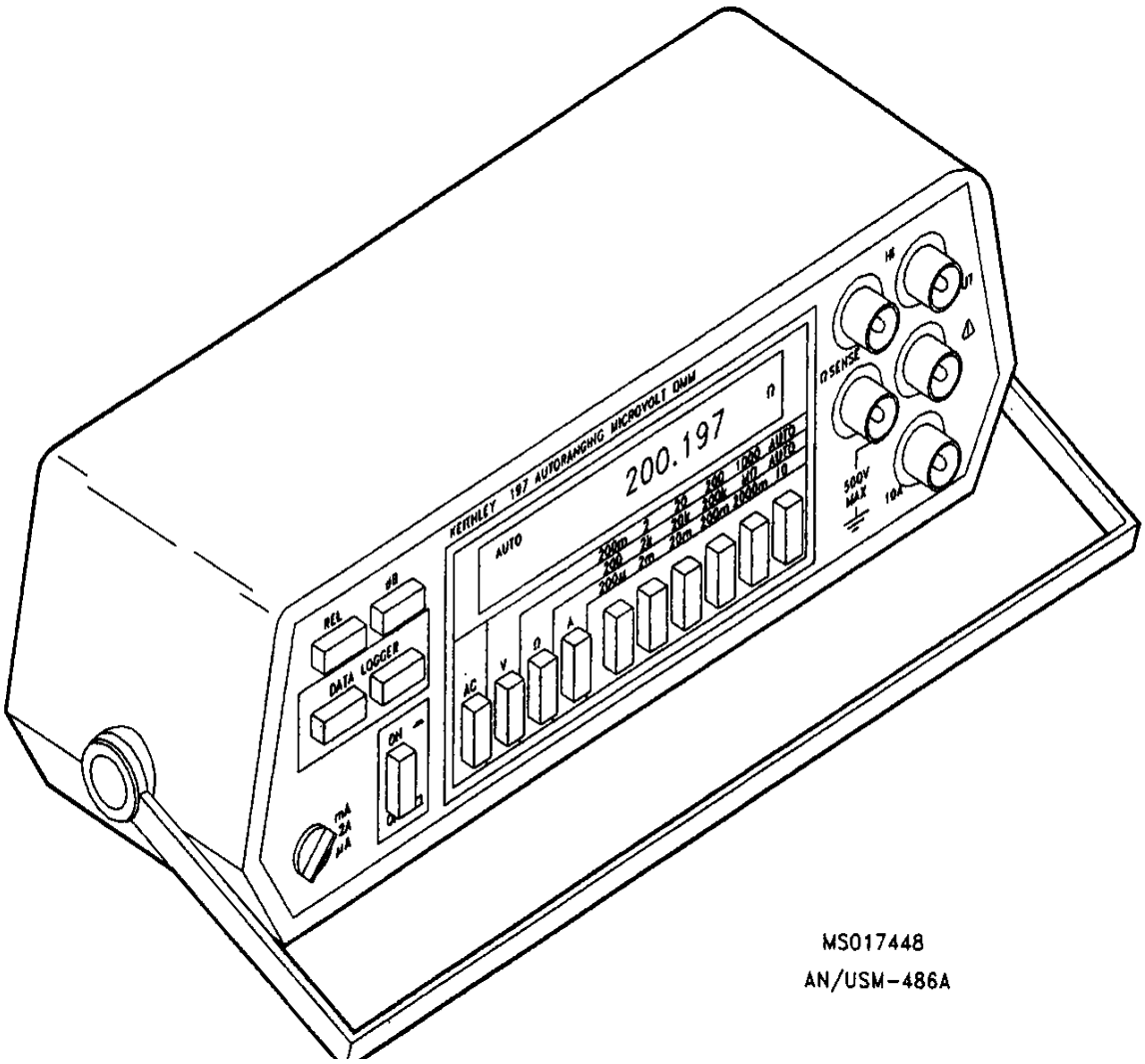
Condition Codes – Continued

Code	Condition
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
P5	Plug in removed only when mainframe is removed from the field.

4-18. DIGITAL MULTIMETER, 4 1/2 DIGIT AN/USM-486A

LIN: M23954
Manufacturer: Keithley Instrument
BOIP: C044AA

NSN: 6625-01-368-3429
Model: 197-MIL
CAGE: 80164



SPECIFICATIONS

AC Voltage Range: 0 to 750 V ± 2% +50 digits

DC Voltage Range: 0 to 1000 V ± .05% +3 digits

AC Current Range: 0 to 10 A ± 2% +50 digits

DC Current Range: 0 to 10 A ± .5% +2 digits

Resistance Range: 0 ohms to 20 Mohms

Decibels (dB) Range: -58 to +30 dBm

Overload protection is at least 50% of full scale deflection.

Dimensions: 3.5” x 9.25” x 10.75”

Weight: 3 lbs, 14 oz

Manuals: TB 9-6625-1986-35
TM 11-6625-3055-14
TM 11-6625-3055-24P
DMWR 11-6625-3055

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I15.		

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
	NOTE See Condition Code I15.		

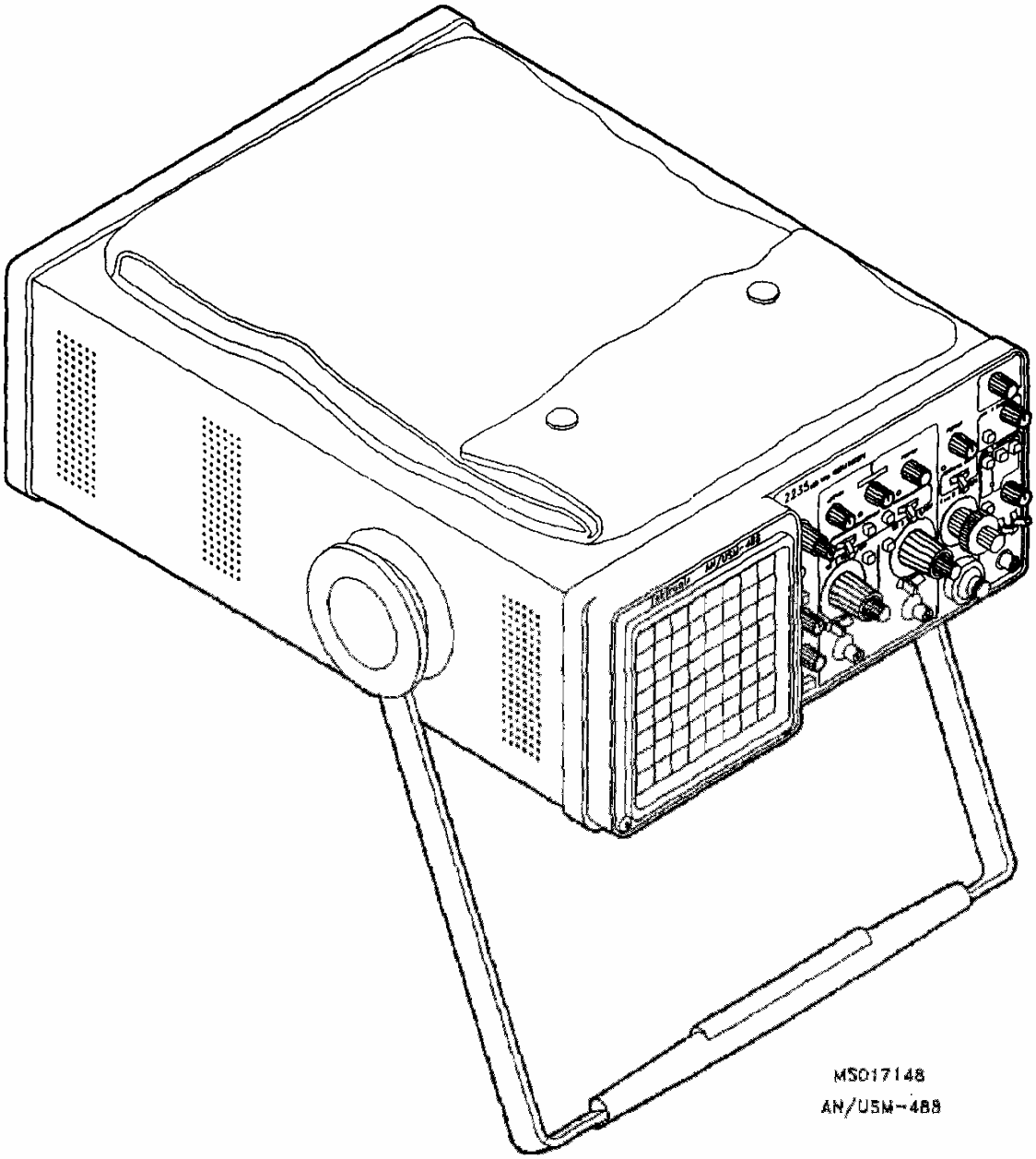
Condition Codes

Code	Condition
I15	The AN/USM-486A was procured to satisfy shortages of the AN/USM-486. The AN/USM-486A will not replace the AN/USM-486, it will be issued to users who require the AN/USM-486. The AN/USM-486 and the AN/USM-486A are functionally equivalent. The AN/USM-486A can replace all items replaced by the AN/USM-486.

4-19. DUAL-TRACE OSCILLOSCOPE, 100 MHZ AN/USM-488

LIN: P30693
Manufacturer: Tektronix
BOIP: C062AA

NSN: 6625-01-187-7847
Model: 2235-001
CAGE: 80009



SPECIFICATIONS

Bandwidth: DC to 100 MHz

Risetime: less than 3.5 ns

Vertical Deflection: 2 mV/Div to 5 V/Div

Sweep Rate: .05 µs/Div to .5 s/Div 10x Mag 5 ns/Div

Maximum Input Voltage: 400 V (DC + peak AC) or 800 V (P-P to 10 kHz)

Power Requirements:

Line Voltage Range: 90 to 250 VAC
Line Frequency Range: 48 to 440 Hz

Operating Temperature: 0 to 50 degrees C

Dimensions: 5.4” H x 12.9” W x 17.3” D

Weight: 13.5 lbs

Manuals: TB 9-6625-2139-35
TM 11-6625-3135-12
TM 11-6625-3135-24P
TM 11-6625-3135-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
212	P49833	6625-01-061-5519	I1
7403N	N32525	6625-00-270-8448	I1
AN/USM-117	N30231	6625-00-787-0304	-
CC: OS-106	NONE	6625-00-955-0666	-
AN/USM-117A	N30231	6625-00-902-3330	-
AN/USM-117B	N30231	6625-00-787-0304	-
AN/USM-117C	N30231	6625-00-998-0356	-
CC: OS-106C	NONE	NONE	-
AN/USM-140A	N30256	6625-00-987-6603	-
CC: OS-121A	NONE	6625-00-071-0787	-
AN/USM-140B	N30256	6625-00-072-5589	-
CC: OS-121B	NONE	NONE	-
AN/USM-140C	N30256	6625-00-999-3592	-
CC: OS-121C	NONE	6625-00-071-0787	-
AN/USM-182	N30368	6625-00-952-3979	-
CC: OS-155P/U	NONE	NONE	-
AN/USM-182A	N30368	6625-00-133-1196	-
AN/USM-184	N30505	6625-00-895-2711	-
AN/USM-24	N29546	6625-00-668-9460	-
AN/USM-24C	N29546	6625-00-642-2429	-
AN/USM-281	N30572	6625-00-053-3112	-
CC: OS-189(P)	NONE	NONE	-
AN/USM-281A	N30572	6625-00-228-2201	-

Items Replaced and Removed from Field – Continued

Designator	LIN	NSN	Condition Code
CC: OS-189A(P)	NONE	6625-00-437-1833	-
AN/USM-281B	N30572	6625-00-427-4514	-
AN/USM-281C	N30572	6625-00-106-9622	-
CC: OS-245(P)/U	NONE	6625-00-106-9623	-
AN/USM-281D	N30572	6625-00-106-7497	-
AN/USM-281E	N30572	6625-00-134-1407	-
AN/USM-296	N30954	6625-00-127-4903	-
AN/USM-296A	N30954	6625-00-115-9201	-
CC: OS-252(P)/U	NONE	NONE	-
AN/USM-309(V)1	N30615	6625-01-121-6328	-
AN/USM-309(V)2	N30615	6625-00-160-0854	-
AN/USM-32	N29683	6625-00-519-1954	-
CC: OS-34	NONE	6625-00-682-4779	-
AN/USM-50	N29820	6625-00-553-0264	-
AN/USM-50A	N29820	6625-00-649-4978	-
AN/USM-50B	N29820	6625-00-532-4288	-
AN/USM-50C	N29820	6625-00-892-6065	-
AN/USM-81	N29957	6625-00-701-4038	-
CC: MX-2330/G	NONE	6625-00-363-8935	-
CC: MX-2330A/G	NONE	NONE	-
AN/USM-89	N30094	6625-00-752-7958	-
CC: OS-104B	NONE	NONE	-
AN/USM-89B	N30094	6625-00-819-5911	-
CC: OS-104B	NONE	NONE	-
OS-123/U	N32012	6625-00-981-0898	-
OS-242/U	N32148	6625-00-953-7832	-
OS-5010(P)/USM-508	N30916	6625-00-072-5466	-
OS-8/U	N31327	6625-00-643-1740	-
OS-8A	N31327	6625-00-643-1719	-
OS-8C	N31327	6625-00-026-9414	-
OS-8E	N31327	6625-00-649-9284	-
OS-8G	N31327	6625-00-738-6175	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
120A	NONE	6625-00-986-4945	I1, P2
120AR	NONE	6625-00-726-9479	I1, P2
1220A	NONE	6625-00-623-3462	I1, P2
1402A	NONE	6625-00-948-4715	P2, P5, I1
1421A-C06	NONE	6625-00-491-0264	P2, P5, I1
1423A	NONE	6625-00-068-8411	P2, P5, I1
160B	NONE	6625-00-291-1029	I1, P2
1707A	Z47541	6625-00-472-3264	I1
1740A	NONE	6625-01-033-5066	I1, P2
175A	NONE	6625-00-858-6363	I1, P2
1805A	NONE	6625-00-777-3083	P2, P5, I1
1808A	NONE	6625-01-025-8795	P2, P5, I1

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
180A	NONE	6625-00-135-6977	I1, P2
180D	NONE	6625-00-022-8228	I1, P2
1821F	NONE	6625-00-248-6968	P2, P5, I1
211	NONE	6625-00-007-8895	I1, P2
213	NONE	6625-01-030-4791	I1, P2
323	NONE	6625-00-195-5244	I1, P2
326	NONE	6625-00-395-9393	I1, P2
3A6	NONE	6625-00-988-2583	P2, P5, I1
3A7	NONE	6625-00-998-3407	P2, P5, I1
3A74	NONE	6625-00-051-2899	P2, P5, I1
3S2	NONE	6625-00-470-1532	P2, P5, I1
3T77	NONE	6625-00-246-9709	P2, P5, I1
422 OPT 125B	Z47509	6625-00-087-1739	P3, I1, E78
453A	NONE	6625-00-765-9181	I1, P2
465B OPT 04/07	NONE	6625-01-136-1542	I1, P2
465DM40	NONE	6625-01-021-4090	I1, P2
465DM40 OPT 05	NONE	6625-01-079-6477	I1, P2
514AD	NONE	6625-00-648-8345	I1, P2
515	NONE	6625-00-953-7834	I1, P2
515A	NONE	6625-00-585-5665	I1, P2
516	NONE	6625-00-953-8246	I1, P2
531A	NONE	6625-00-986-4968	I1, P2
5354D	NONE	6625-00-685-9109	P2, P5, I1
5354T	NONE	6625-00-691-6556	P2, P5, I1
535A	NONE	6625-00-799-7956	I1, P2
536	NONE	6625-00-751-7815	I1, P2
5403D40	NONE	6625-01-034-3269	I1, P2
547	NONE	6625-00-931-3224	I1, P2
555 MOD 21A/22A	NONE	6625-00-821-6778	I1, P2
556	NONE	6625-00-133-4627	I1, P2
581	NONE	6625-00-445-6947	I1, P2
5A18N	NONE	6625-00-191-9502	P2, P5, I1, T1
5A21N	NONE	6625-01-070-1483	P2, P5, I1, T6
5A26	NONE	6625-01-038-1261	P2, P5, I1, T6
5A48	NONE	6625-01-008-1480	P2, P5, I1, T1
5B10N	NONE	6625-00-191-9535	P2, P5, I1, T1
5B12N	NONE	6625-00-270-0779	P2, P5, I1, T1
5B42	NONE	4931-01-008-1479	P2, P5, I1, T1
7603	NONE	6625-00-261-5127	I1, P2
7603 OPT1	NONE	6625-00-566-3062	I1, P2
945	NONE	6625-00-445-6935	I1, P2
AM-1839/USM	P45390	6625-00-701-4037	P5, T1
AM-1839B/USM	P45390	6625-00-678-6637	P5
AM-1841/USM	P45527	6625-00-679-6509	P5, T1
AM-1841A	P45527	6625-00-716-0883	P5, T1
AM-1842/USM	P45664	6625-00-679-6510	P5, T1
AM-1842A/USM	P45664	6625-00-600-9164	P5, T1
AM-2153	NONE	6625-00-716-0812	P2, P5
AM3148/USM	P45801	6625-00-875-1058	P5

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
AM-3174/USM	045817	6625-00-799-8110	P5
AM-3567/USM	N32934	6625-00-964-9680	P5
AM-3567A/USM	N32934	6625-00-832-5214	P5
AM-3568/USM	N32936	6625-00-987-3442	P5
AM-4030/U	NONE	6625-00-078-5214	P2, P5
AM-4031	NONE	6625-00-947-7541	P2, P5
AM-4031A/U	NONE	6625-00-935-4246	P2, P5
AM-4032	NONE	6625-00-078-5216	P2, P5
AM-4455/U	NONE	6625-00-923-4127	P5, P2
AM-4610/U	NONE	6625-00-764-6297	P2, P5
AM-6199/U	NONE	6625-00-135-6978	P2, P5
AM-6447/USM	NONE	6625-00-253-3778	P2, P5
AM-6565/U	NONE	6625-00-106-9625	P2, P5
AN-6566/U	NONE	6625-00-106-7499	P2, P5
AM-6610/U	NONE	6625-00-907-1508	P2, P5
AM-6785/U	A48970	6625-00-361-5318	P2, P5, T6
AM-6786/U	A11341	6625-00-478-0597	P5, T1
AM-6880/U	A49038	6625-00-185-7817	P5, T7
AM-6948/U	P40723	6625-01-030-4113	P5, T1
AN/USM-105	NONE	6625-00-724-8059	P2
AN/USM-105A	NONE	6625-00-785-6500	P2
CC: OS-82A	NONE	6625-00-413-1353	P2
AN/USM-141	NONE	6625-00-895-2711	P2
CC: OS-122	NONE	6625-00-957-4136	P2
AN/USM-151	NONE	6625-00-892-4401	P2
CC: MX-3668	NONE	NONE	P2
AN/USM-154	NONE	6625-00-678-1696	P2
AN/USM-164	NONE	6625-00-986-4969	P2
AN/USM-186	NONE	6625-00-078-5218	P2
CC: OS-157	NONE	6625-00-073-5220	P2
AN/USM-196	NONE	6625-00-714-3992	P2
CC: OS-159(P)	NONE	NONE	P2
AN/USM-215	NONE	6625-00-989-5448	P2
CC: OS-170	NONE	NONE	P2
AN/USM-218	NONE	6625-00-923-4125	P2
AN/USM-218A	NONE	6625-00-103-2037	P2
AN/USM-254	N33151	6625-00-069-5477	P2
CC: OS-185/U	N33151	6625-00-069-5477	P2
AN/USM-273	NONE	6625-00-930-6637	P2
CC: OS-188/U	NONE	NONE	P2
AN/USM-353 (V)	NONE	6625-00-797-0250	P2
AN/USM-353(V)1	NONE	6625-00-230-3772	P2
AN/USM-354	NONE	6625-00-549-3391	P2
AN/USM-354(V)1	NONE	6625-00-231-0400	P2
AN/USM-355 (V)	NONE	6625-00-821-6778	P2
AN/USM-355(V)1	NONE	6625-00-491-7104	P2
AN/USM-364	NONE	6625-00-469-2263	P2
AN/USM-364 (V) 1	NONE	6625-00-377-6793	P2
AN/USM-364(V)2	NONE	6625-00-469-2263	P2

Item Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
AN/USM-425 (V) 1	NONE	6625-01-032-6914	P2, P4
AN/USM-504	NONE	6625-00-679-0399	P2
AN/USM-507	NONE	6625-00-921-4456	P2
MX-2330/G	NONE	6625-00-539-8539	P2, P5
MX-2930A/USM-105	NONE	6625-00-893-0229	P2, P5
MX-2930B/USM	NONE	6625-00-759-0741	P2, P5
MX-2930C/USM	NONE	6625-00-071-0788	P2, P5
MX-2962/USM-105	N32971	6625-00-856-5064	P5
MX-2995/USM-117	NONE	6625-00-955-0644	P2, P5
MX-2996/USM-117	NONE	6625-00-376-5066	P2, P5
MX-3057/USM	NONE	6625-00-871-3314	P2, P5
MX-3078/USM	NONE	6625-00-961-5888	P2, P5
OS-106/USM-117	NONE	6625-00-955-0666	P2
OS-110	NONE	6625-00-948-1701	P2
OS-121A/USM-140	NONE	6625-00-071-0787	P2
OS-124	NONE	6625-00-166-1024	P2
OS-132	NONE	6625-00-852-0179	P2
OS-172AP/USM-218	NONE	6625-00-103-2037	P2
OS-189AP/USM-281	NONE	6625-00-437-1833	P2
OS-193/PU	NONE	6625-00-999-2732	P2
OS-193P/U	NONE	6625-00-957-0509	P2
OS-193PA/U	NONE	6625-00-539-8539	P2, P5
OS-201(P)/USM-310	NONE	6625-00-135-6977	P2
OS-215P/U	NONE	6625-00-449-7652	P2
OS-220P/U	NONE	6625-00-910-5974	P2
OS-232/U	NONE	6625-00-986-4940	P2
OS-233	NONE	6625-00-880-1935	P2
OS-233A	NONE	6625-00-400-3704	P2
OS-233AP/U	NONE	6625-00-400-3704	P2
OS-233P/U	NONE	6625-00-789-2201	P2
OS-261/U	N33160	6625-00-127-0079	P3, E79
OS-261A(V) 1/U	N32160	6625-01-066-4511	P3, E79, E80
OS-261B(V) 1/U	N32160	6625-01-101-1318	P3, E79, E81
OS-261C(V) 1/U	N32160	6625-01-119-7314	P3, E79, E80, E81
OS-267(V) 1/U	NONE	6625-00-322-8716	P2
OS-5001/U	NONE	6625-00-510-1823	P2
PL-1186	NONE	6625-00-450-2024	P2, P5
PL-1186A	NONE	6625-00-234-6117	P2, P5
PL-1187	NONE	6625-00-229-7041	P2, P5
PL-1187A/USM	NONE	6625-00-410-2406	P2, P5
PL-1292	NONE	6625-00-210-6759	P2, P5
PL-1293	NONE	6625-00-247-4461	P2, P5
PL-1293/U	P11173	6625-00-133-4631	P5
PL-1309	NONE	6625-00-247-6779	P2, P5
PL-1310	NONE	6625-00-248-0369	P2, P5
PL-1311/U	NONE	6625-00-248-1255	P2, P5
PL-1312/U	NONE	6625-00-248-3620	P2, P5
PL-1313/U	P11182	6625-00-930-8118	P5
PL-1332	NONE	6625-00-958-4153	P2, P5

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
PL-1336/U	P11202	6625-00-796-4851	P5
PL-1378	NONE	6625-00-893-8745	P2, P5
R422	NONE	6625-00-377-6793	I1, P2
R453A	NONE	6625-00-283-7893	I1, P2
R465	NONE	6625-00-471-3015	I1, P2
R465B	NONE	6625-01-120-6521	I1, P2
R5403D40	NONE	6625-01-008-1688	I1, P2
R7403N	NONE	6625-00-185-7816	I1, P2
R7603	NONE	6625-00-373-7497	I1, P2
RM15	NONE	6625-00-553-4699	I1, P2
RM31	NONE	6625-00-813-2456	I1, P2
RM31A	NONE	6625-00-990-3198	I1, P2
RM35A	NONE	6625-00-986-4940	I1, P2
RM504	NONE	6625-00-045-9895	I1, P2
RM545B	NONE	6625-00-709-6004	I1, P2
RM547	NONE	6625-00-929-1895	I1, P2
RM561	NONE	6625-00-968-4564	I1, P2
RM585A	NONE	6625-00-910-5974	I1, P2
SC502	NONE	6625-01-023-7093	I1, P2, T3
SG-855	NONE	6625-00-127-7755	P2, P5, T1
T922	NONE	6625-01-061-4242	I1, P2
TD-1085	NONE	6625-00-270-8409	P2, P5
TD-1086/U	NONE	6625-00-106-7500	P2, P5
TD-1159/U	P11970	6625-00-261-5139	P5
TD-5037	NONE	6625-00-930-8119	P2, P5
TD-793A	NONE	6625-00-400-2476	P2, P5
TS-324/U	N33151	6625-00-869-2402	P2

Condition Codes

Code	Condition
E78	Item is battery operated; TEMOD item is not. Replace with TEMOD item if battery operation is not required.
E79	The OS-261 series has a bandwidth to 200 MHz while the TEMOD item has a bandwidth to 100 MHz. If users do not require a bandwidth above 100 MHz, the replacement for the OS-261 series is the AN/USM-488. Units that do not require the bandwidth of the OS-261 series should take action to change their authorization documents to reflect authorization for the AN/USM-488.
E80	Item has an external battery option (Tektronix Model 475 with option 07).
E81	Item has an EMC option (Tekronix Model 475 with option 04).
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.

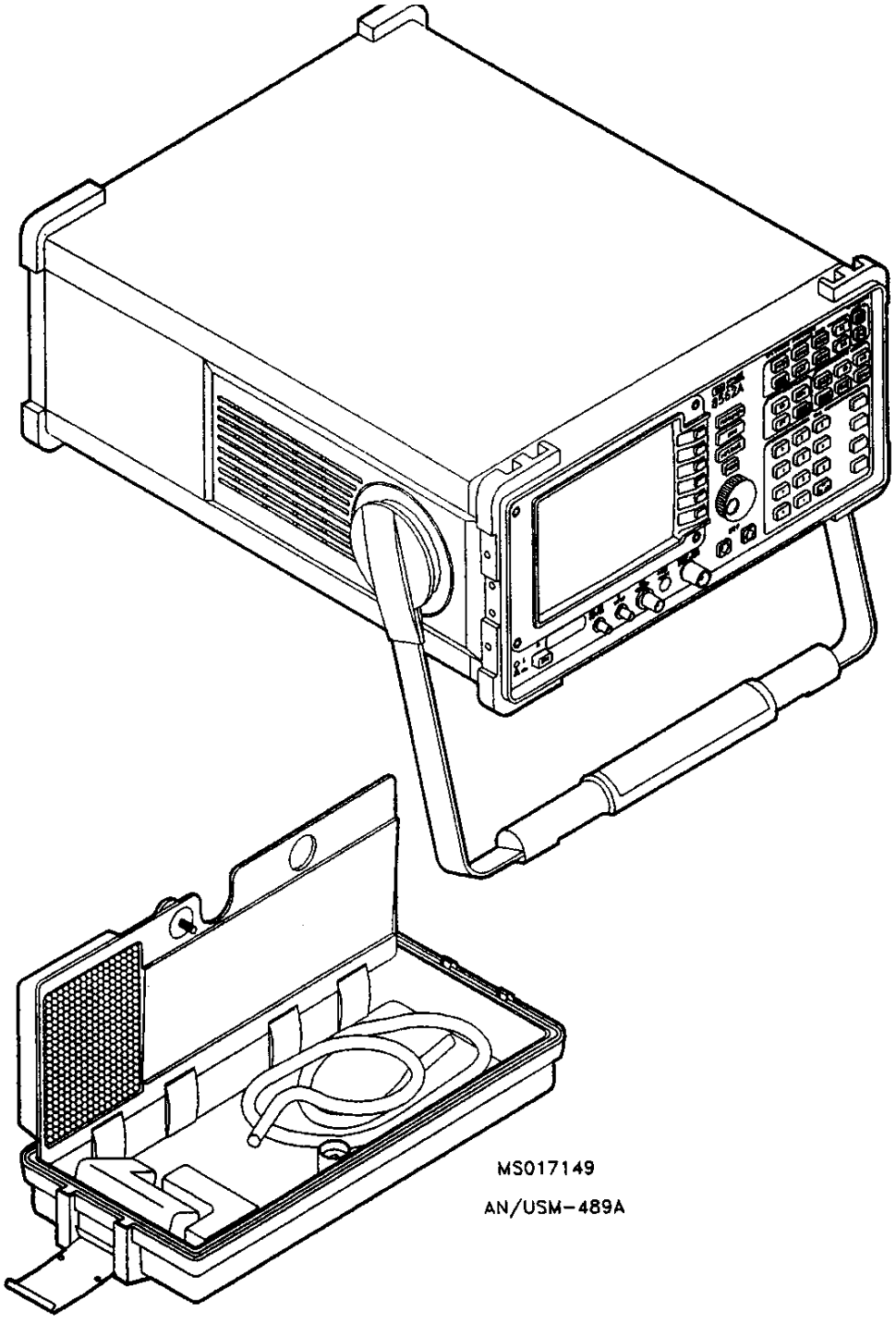
Condition Codes – Continued

Code	Condition
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
P4	Although these items do not have a LIN, they will be included on the BOIP and will be removed from the field.
P5	Plug in removed only when mainframe is removed from the field.
T1	Items capabilities exceed those of TEMOD item; however, depending upon measurement requirement, TEMOD item may be substituted. (i.e., Range of performance greater than equivalent function in TEMOD item.)
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue, not one of performance.)
T6	The AM-6785 is a Tektronix Model 7A26 plug-in used in the series 7000 mainframes. The 7A26 has a bandwidth of 200 MHz while the TEMOD item has a bandwidth of 100 MHz. Units that do not require the bandwidth of the AM-6785 and are using a non-storage mainframe should use the AN/USM-488. Units that require 200 MHz bandwidth and are using a non-storage oscilloscope should use the OS-288/G.
T7	The AM-6880 is a Tektronix Model 7A18, 7A18A Dual Trace Amplifier plug-in used in the series 7000 mainframes. The 7A18, 7A18A has a bandwidth of 75 MHz while the TEMOD has a bandwidth of 100 MHz.

4-20. SPECTRUM ANALYZER, AN/USM-489A

LIN: S01416
Manufacturer: Hewlett Packard
BOIP: 6065AA

NSN: 6625-01-259-1060
Model: HP 8562A
CAGE: 28480



*****OBSOLETE*****

The AN/USM-489A has been replaced by the AN/USM-677.

SPECIFICATIONS

Frequency Range: 50 kHz to 21 GHz (Interal Mixer)

Frequency Span/Div Range: 2.5 kHz to 19.25 GHz

Read Resolution: 1 kHz

Sweep Time: 50 µs to 60 s for zero span, 50 µs to 100 s for span ³ 2.5 kHz

Display Reference Level: -120 to +30 dBm

Other Options Include: 18 to 40 GHz Waveguide Mixer, Test and Adjustment Module.

Input Impedance: 50 Ohms

Input Voltage: 90 to 140 Vac or 180 to 250 Vac, 47 to 440 Hz

Dimensions: 6.4” H x 12.7” W x 16.7” D

Weight: 44 lbs

Manuals: TB 9-6625-2250-35
TM 11-6625-3250-12
TM 11-6625-3250-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/UPM-110	A57074	6625-00-720-2495	-
AN/UPM-58	A56800	6625-00-523-8576	-
AN/UP-84	A56937	6625-00-557-8262	-
CC: TS-1011	A56937	6625-00-752-8344	-
AN/USM-366	S00875	6625-00-494-2937	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/UPM-84A	A56937	6625-00-411-3072	E26
CC: TS-1916	NONE	6625-00-937-5258	E26
F-1414/U	A04054	6625-00-253-4833	E28
IP-1216(P)/GR	A57322	6625-00-424-4370	E28
PL-1388/U	P11208	6625-00-431-9339	M2, E31
PL-1392/U	P16915	6625-00-558-2324	M2, E27
PL-1400/U	P11147	6625-00-422-4314	M2, E28
PL-1406/U	P11720	6625-00-140-0156	M2, E28
SG-1125	G14409	6625-00-185-4802	E30

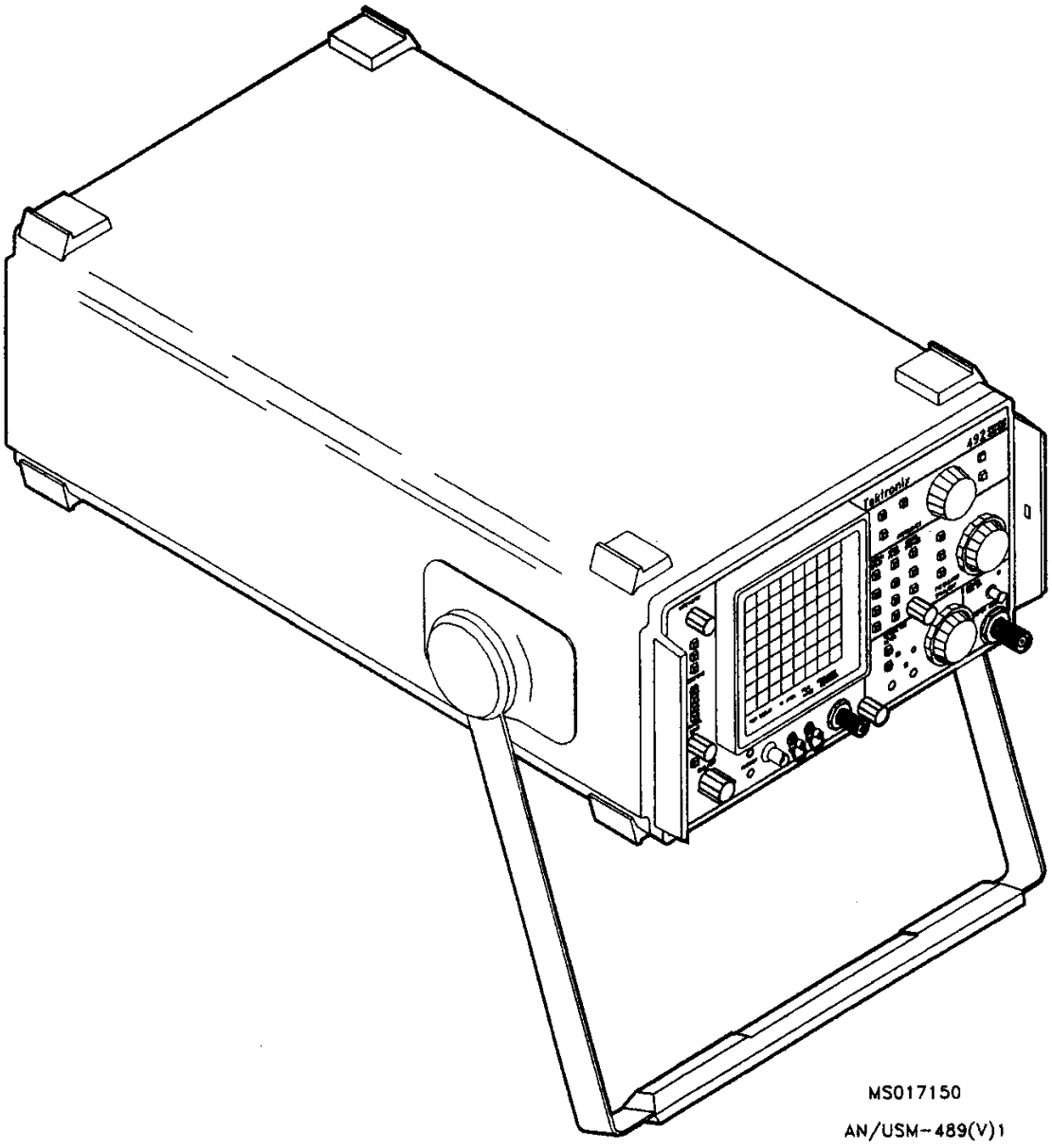
Condition Codes

Code	Condition
E26	Upper frequency limit of the AN/URM-84A is 63 GHz. Upper frequency limit of the AN/USM-489 is 40 GHz with mixers supplied (to 220 GHz with additional Tektronix mixers). If a unit is authorized an AN/UPM-84A and does not require a frequency range above 40 GHz then the AN/USM-489 can replace the AN/UPM-84A.
E27	Subject item is a plug in unit used with Tektronix 7000 series mainframes. If the 7000 series mainframe is used only with the PL-1392/U, then the mainframe shall be removed from the field with the PL-1392/U. If the mainframe is used with other plug-ins, then the unit shall retain the mainframe but still remove the PL-1392/U from the field.
E28	The AN/USM-489(V)1 or AN/USM-489A can replace the IP-1216(P)/GR when used with the plug-in configurations listed below and when the SG-1125/U is not required to be used in conjunction with the PL-1406/U. Configurations replaceable by AN/USM-489(V)1 or AN/USM-489A: IP-1216/PL-1400 IP-1216/PL-1400/F-1414 IP-1216/PL-1406 IP-1216/PL-1406/PL-1400 IP-1216/PL-1406/PL-1400/F-1414
E30	Tracking generator used with PL-1406/U.
E31	Plug-in IF section removed from the field only when unit does not have the PL-1387/U or the PL-1399/U.
M2	Item is a plug-in module that is functional only when used with a mainframe.

4-21. SPECTRUM ANALYZER AN/USM-489(V)1

LIN: S01416
Manufacturer: Tektronix
BOIP: C065AA

NSN: 6625-01-079-9495
Model: 492-1/2/3/21
CAGE: 80009



*****OBSOLETE*****

The AN/USM-489(V)1 has been replaced by the AN/USM-677.

SPECIFICATIONS

Frequency Range: 50 kHz to 21 GHz (internal coaxial mixer)

Frequency Span/Div Range: 500 Hz to 10 GHz

Readout Resolution: Within 1 MHz

Sweep Time: 20 µs/Div to 5 s/Div (10 s/Div in auto)

Display Reference Level: -123 to 40 dBm

Other Options Include: 18 to 40 GHz Wave Guide Mixer Set, Digital Storage, Internal Preselection, and Frequency Stabilization/100 Hz Resolution

Input Impedance: 50 ohms

Input Voltage: 90 to 132 VAC or 180 to 250 VAC, 48 to 440 Hz

Dimensions: 6.9” H x 12.9” W x 19.7” D

Weight: 49 lbs

Manuals: TB 9-6625-2134-35
TM 11-6625-3136-12
TM 11-6625-3136-24P
TM 11-6625-3136-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/UPM-110	A57074	6625-00-720-2495	-
AN/UPM-58	A56800	6625-00-523-8576	-
AN/UPM-84	A56937	6625-00-557-8262	-
CC: TS-1011	A56937	6625-00-752-8344	-
AN/USM-366	S00875	6625-00-494-2937	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/UPM-84A	A56937	6625-00-411-3072	E26
CC: TS-1916	NONE	6625-00-937-5258	E26
F-1414/U	A04054	6625-00-253-4833	E28
IP-1216(P)/GR	A57322	6625-00-424-4370	E28
PL-1388/U	P11208	6625-00-431-9339	M2, E31
PL-1392/U	P16915	6625-00-558-2324	M2, E27
PL-1400/U	P11147	6625-00-422-4314	M2, E28
PL-1406/U	P11720	6625-00-140-0156	M2, E28
SG-1125	G14409	6625-00-185-4802	E30

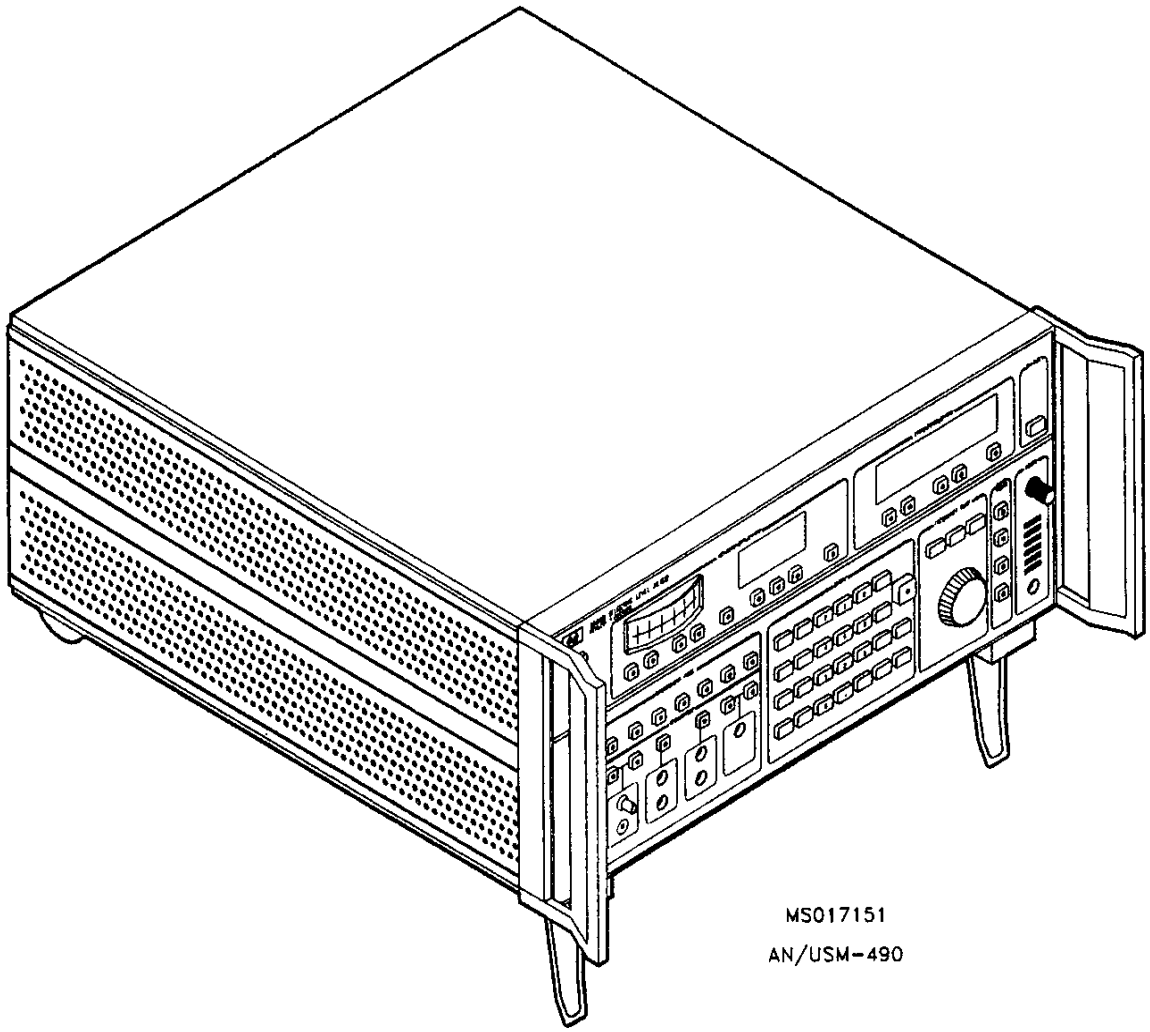
Condition Codes

Code	Condition
E26	Upper frequency limit of the AN/UPM-84A is 63 GHz. Upper frequency limit of the AN/USM-489 is 40 GHz with mixers supplied (to 220 GHz with additional Tektronix mixers). If a unit is authorized an AN/UPM-84A and does not require a frequency range above 40 GHz then the AN/USM-489 can replace the AN/UPM-84A.
E27	Subject item is a plug in unit used with Tektronix 7000 series mainframes. If the 7000 series mainframe is used only with the PL-1392/U, then the mainframe shall be removed from the field with the PL-1392/U. If the mainframe is used with other plug-ins, then the unit shall retain the mainframe but still remove the PL-1392/U from the field.
E28	The AN/USM-489(V)1 can replace the IP-1216(P)/GR when used with the plug-in configurations listed below and when the SG-1125/U is not required to be used in conjunction with the PL-1406/U. Configurations replaceable by AN/USM-489(V)1: IP-1216/PL-1400 IP-1216/PL-1400/F-1414 IP-1216/PL-1406 IP-1216/PL-1406/PL-1400 IP-1216/PL-1406/PL-1400/F-1414
E30	Tracking generator used with PL-1406/U.
E31	Plug-in IF section removed from the field only when unit does not have the PL-1387/U or the PL-1399/U.
M2	Item is a plug-in module that is functional only when used with a mainframe.

4-22. FREQUENCY SELECTIVE LEVEL METER AN/USM-490

LIN: F60502
Manufacturer: Hewlett Packard
BOIP: C066AA

NSN: 6625-01-138-3351
Model: 3586B-001/003/004/C01/907
CAGE: 28480



SPECIFICATIONS

Input Impedance	Frequency Range
75 ohms	50 Hz to 32.5 MHz
124 ohms	4 kHz to 10 MHz
135 ohms	4 kHz to 1 MHz
600 ohms	50 Hz to 108 kHz

Frequency Resolution: ± 1 Hz

Time Base Frequency Accuracy: 0.2 PPM/YR

Selectivity: 20 Hz, 400 Hz, 3100 Hz, C-Message weighting

Amplitude Resolution: .01 dB

Amplitude Level Accuracy: ± .25 to ± 1 dB (within -100 to 20 dBm range)

Image Rejection: 70 dB

Input Level Measurement Range: -120 to +20 dBm

Power Requirements: 100/120/220/240 VAC, 48 to 66 Hz

Operating Temperature: 0 to 55 degrees C

Other Features Include: Demod output with speaker, tracking output, IEEE-488 interface, self-test, auto calibration, North American (Bell) format

Dimensions: 7” H x 16.75” W x 18.38” D

Weight: 50 lbs

Manuals: TB 9-6625-2137-35
TM 11-6625-3087-12
TM 11-6625-3087-24P
TM 11-6625-3087-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
FR-205/U	J01605	6625-00-832-9047	-
TS-3066(V)3/U	F40334	6625-01-012-1071	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
121	NONE	6625-00-720-3175	E64,E77,I1,I3,P2,T5
125A	NONE	6625-00-898-5397	E65,E77,I1,I3,P2,T5
125B	NONE	6625-00-003-6119	E65,E77,I1,I3,P2,T5
125B	NONE	6625-00-062-6785	E65,E77,I1,I3,P2,T5
126A	NONE	6625-00-756-7919	E66,E77,I1,I3,P2,T5
127C	NONE	NONE	E67,E77,I1,I3,P2,T5

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
128A	NONE	NONE	E68,E77,I1,I3,P2
129B	NONE	6625-00-107-8259	E69,E77,I1,I3,T1,T2
301B	NONE	6625-00-004-5373	E70,E77,I1,I3,T1,T2
302A	NONE	6625-00-409-4572	E39,E77,I1,I3,P2,T1,T2
302A	NONE	6625-00-958-4473	E39,E77,I1,I3,P2,T1
302A	NONE	6625-00-974-3558	E39,E77,I1,I3,P2,T1
302A	NONE	6625-00-107-8259	E39,E77,I1,I3,P2,T1
302A	NONE	6625-00-075-6195	E39,E77,I1,I3,P2,T1
303B	NONE	6625-00-575-8013	E71,E77,I1,I3,P2,T1,T2
305A	NONE	6625-00-459-8570	E72,E77,I1,I3,P2,T1,T2
310A	NNE	6625-00-469-4306	E40,E77,I1,I3,P2,T1,T2
310A	NONE	6625-00-832-5213	E40,E77,I1,I3,P2,T1
310A	NONE	6625-01-004-8225	E40,E77,I1,I3,P2,T1
312A	NONE	6625-01-036-2050	E41,E77,I1,I3,P2,T2
312BH55	NONE	6625-00-041-5591	E41,E77,I1,I3,P2,T2
3581A	NONE	6625-01-012-7669	E42,E77,I1,I3,P2,T2,T3
3581A-003	NONE	6625-01-235-8451	E42,E77,I1,I3,P2,T2,T3
3581A-C05	NONE	6625-01-145-0278	E42,E77,I1,I3,P2,T2,T3
3581C	NONE	6625-01-146-3558	E43,E77,I1,I3,P2,T2,T3
3581C-001	NONE	6625-01-075-5565	E43,E77,I1,I3,P2,T2,T3
3586B	NONE	6625-01-096-1726	E44,E77,I1,I3,P2,T2
3586B-003, 004	NONE	6625-01-131-6974	E44,E77,I1,I3,P2,T2
3586C	NONE	6625-01-129-2095	E45,E77,I1,I3,P2,T2
3590A	NONE	6625-00-401-5353	E46,E77,I1,I3,T1,T2
3590A	NONE	6625-00-451-6754	E46,E77,I1,I3,T1,T2
3591A	NONE	6625-00-450-0532	E47,E77,I1,I3,T1,T2
3591A	NONE	6625-00-062-4227	E47,E77,I1,I3,T1,T2
3745A	T35211	6625-01-091-0779	E48,E77,I1,I3,T1
AN/USM-306(V)	NONE	6625-00-453-5666	I3,E72,E77,T1,T2
AN/USM-306(V)1	V87958	6625-00-459-8568	I3,E72,E77,T1,T2
CC: IP-1018A/U	A58223	6625-00-465-1173	I3,E72,E77,T1,T2
CE-21A	NONE	6625-00-146-7484	E73,E77,I1,I3,P2,T2
CE-24A	NONE	6625-01-080-0289	E74,E77,I1,I3,P2,T2,T3
CE-24A	NONE	6625-01-099-6716	E74,E77,I1,I3,P2,T2,T3
CE-24A	NONE	6625-01-011-6413	E74,E77,I1,I3,P2,T2,T3
CE-70	NONE	6625-01-105-2552	E75,E77,I1,I3,P2,T2
CE-70/71	NONE	6625-01-092-8233	E75,E77,I1,I3,T1,T2
CE-70/71/72	NONE	6625-01-104-2904	E75,E77,I1,I3,T1,T2
FR-209(V)1/U	NONE	6625-00-066-4385	I3,E66,E77,T5
FR-210/U	NONE	6625-00-107-8259	I3,E69,E77,T1,T2
FR-211/U	NONE	6625-00-146-7484	I3,E73,E77
ME-295/U	NONE	6625-00-017-8669	I3,E65,E77,T2
ME-378/U	NONE	6625-00-197-6383	I3,E63,E77,T3
ME-451/G	NONE	6625-00-137-0102	I3,E71,E77,T1,T2
TF-2330A	NONE	6625-00-168-0955	E76,E77,I1,I3
TS-1830/U	NONE	NONE	I3,E29,E39,E77,T2
TS-1830A/U	A58173	6625-00-806-5929	I3,E39,E77,T2
TS-1830D/U	NONE	6625-00-845-7183	I3,E39,E77,T2
TS-2333/USM	A57277	6625-00-068-7175	I3,E40,E77,T1, T2

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
TS-2333A/USM	A57277	6625-00-068-7175	I3,E40,E77,T1,T2
TS-2721/U	NONE	6625-00-815-9873	I3,E72,E77,T1,T2
TS-2968/U	NONE	6625-00-459-8570	I3,E72,E77,T2
TS-3066(V)1/U	NONE	6625-00-160-0535	I3,E41,E77,T2
TS-3066(V)2/U	NONE	6625-00-689-7685	I3,E41,E77,T2

Condition Codes

Code	Condition
E29	Part of AN/GRM-32.
E39	HP 302A wave analyzer family: frequency range is 20 Hz to 50 kHz, with inputs amplitude range from 30 microvolts to 300 volts full scale. High input impedance from 100 kohms to 1 megohm. May be powered by 18 to 24 VDC battery source. Companion external sweep drive (HP 297A) available. TEMOD item frequency range is 50 Hz to 32.5 MHz, with input amplitude range from -120 to +20 dBm and input impedances of 75, 124, 135, 600 and 10 kohms. TEMOD item cannot be powered by battery source. HP 302A family similar to TS-1830, A, C, D/U and TS-1827/U.
E40	HP 310A, B wave analyzer family: input impedance 10k, 30k and 100 kohms, with input amplitude range from 10 microvolts to 100 volts full scale; selectivity filter BW=200, 1000, 3000 Hz. Companion external mechanical sweep drive (HP 297A) available. TEMOD item input impedances: 75, 124, 135, 600 and 10 kohms; input amplitude range from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing. HP 310A, B similar to TS-2333, A/USM.
E41	HP 312A, B selective voltmeter family: input impedance 50 to 600 ohms; selectivity filter BW=200, 1000, 3100 Hz. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing. HP 312A, B similar to TS-3066(V)/U family.
E42	HP 3581A wave analyzer: frequency range is 15 Hz to 50 kHz; input impedance 1 megohm; input amplitude range 100 nanovolts to 30 volts full scale and -150 to +30 dBm or dBv; selectivity BW=3, 10, 30, 100, 300 Hz; X-Y recorder outputs; internal battery and charging circuit; portable. TEMOD item frequency range from 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 kohms; input amplitude from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E43	HP 3581C selective voltmeter: frequency range is 15 Hz to 50 kHz; input impedance 600, 900 10 k, 1 megohm; input amplitude range is 100 nanovolts to 30 volts full scale and -150 dBm to +30 dBm or dBV; selectivity BW=3, 10, 30, 100, 300 Hz; X-Y recorder outputs; sweep capability; internal battery and charging circuit; portable. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedance of 75, 124, 135, 600 and 10 kohms; input amplitude from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.

Condition Codes – Continued

Code	Condition
E44	HP 3856B-003-004, selective level meter: similar to AN/USM-490 with different signal input connectors.
E45	HP 3586C selective level meter: similar to AN/USM-490 with different signal input connectors; input impedance 50, 75, 600, 10 kohms; selectivity filter BW=20, 400, 3100 Hz; simplified front panel. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E46	HP 3590A wave analyzer family: frequency range is 20 Hz to 620 kHz; input impedance 100 kohms; input amplitude range 3 microvolts to 30 volts full scale; selectivity BW=10, 100, 1000, 3100 Hz; X-Y recorder outputs; sweep capability; HP 3593A, 3594A, 3595A plug-in modules determine salient capabilities. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 kohms; input amplitude from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E47	HP 3591A selective voltmeter family: frequency range is 20 Hz to 620 kHz; input impedance 75, 135, 150, 600, 50 kohms and 100 kohms; input amplitude range is 3 microvolts to 30 volts full scale; selectivity BW=10, 100, 1000, 3100 Hz; X-Y recorder outputs; used with HP 3594A plug-in. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedance of 75, 124, 135, 600, 10 kohms; input amplitude from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E48	HP 3745A, 3745B selective level measuring sets: frequency range is 1 kHz to 25 MHz; input impedance 75, 124, 135/150 ohms; input amplitude range is -125 dBm to +15 dBm; selectivity BW=22, 3100, 4800 Hz; sweep capability; X-Y recorder outputs; 3745A designed for CCITT formats; 3745B designed for North American (Bell) formats. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 kohms; input amplitude from -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; North American (Bell) format.
E63	Rycom 3131 selective voltmeter: input impedance 75, 135, 600 and 4 kohms; input signal level -100 to +22 dBm; selectivity filter BW=250, 2500 Hz; rack mounted and portable versions; contains rechargeable nicad batteries; p/o AN/TRC-90, 90A, 129, 129A, 132, 132A. Similar to ME-378/U. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; not battery powered.
E64	Sierra 121 Carrier Frequency Voltmeter Family: Input Signal Level -70 dBm to +42 dBm (245 microV to 97.5 V); input impedance 135, 600, 2.4 kohms, 10 kohms 20-pin input connector; selectivity filter BW=100 Hz. TEMOD item input signal level -120 to +20 dBm; input impedance 75, 124, 135, 600 and 10 kohms; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E65	Sierra 125 Frequency Selective Voltmeter Family: Input impedance: 135, 600, 20 kohms; input signal level -90 to +32 dBm; selectivity filter BW=250, 2500 Hz; similar to ME-295/U. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.

Condition Codes – Continued

Code	Condition
E66	Sierra 126A, B Frequency Selective Voltmeter families: Input impedance 75, 135, 600, 5 k, 8.9 k, 39 k ohms dependent upon input plug-in modules; input signal amplitude -80 to +32 dBm (24.5 microV to 30 V); selectivity filter BW=250, 2500 Hz; 50 M ohm high impedance probe available (Model 126B/PA); similar to FR-209(V)1/U. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; input signal amplitude -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing probe not provided.
E67	Sierra 127C Frequency Selective Voltmeter Family: Input impedance 135, 600 ohms; input signal amplitude -70 to +22 dBm; selectivity filter BW=100, 250, 500 Hz; portable; battery pack. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; input signal amplitude -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; not portable.
E68	Sierra 128A Frequency Selective Voltmeter Family (with Model 128PA probe assemblies): Input impedance 75, 135, 600, 8 k, 13 k, 100 k ohms; input signal amplitude -100 to +32 dBm (3 microV to 30 V); selectivity filter BW=250, 3100 Hz; may be operated by 24-28V external DC source; similar to FR-205/U. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; input signal amplitude -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; AC power only.
E69	Sierra 129B Frequency Selective Voltmeter Family: Input impedance 600, 100 kohms; input signal level -90 to +50 dBm (30 microV to 300 V F.S.); selectivity filter BW=10, 100 Hz; self-contained rechargeable batteries; tracking generator; similar to FR-210/U. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E70	Sierra 301A, B Wave Analyzer Family: Frequency range 20 Hz to 100 kHz; input signal level -90 to +50 dBm (30 microV to 300 V F.S.); input impedance 600, 100 kohms; selectivity filter BW=10, 100 Hz; self-contained batteries; tracking generator. TEMOD item frequency range 50 Hz to 32.5 MHz; input signal level -120 dBm to +20 dBm; input impedance 75, 124, 135, 600 and 10 kohms; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E71	Sierra 303A, B Frequency Selective Level Meter Family: Input impedance 75, 135, 600, 2.1 k, 3.8 k, 16 k ohms; input signal level -100 to +22 dBm (10 microV to 10 V); selectivity filter BW=80 and 2300 or 3100 Hz; rechargeable internal batteries; portable; four preselected pilot frequencies; similar to ME-451/G. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E72	Sierra 305A, 3055 Transmission Measurement System (305AL Level Meter TS-2968/U, 305AT Tuning Unit, 360 Spectrum Display Unit; may also contain 305AG tracking signal generator, 230A-233A passive and active probes: Frequency range: 1 kHz to 33.5 MHz; input impedance 50, 75, 135, 2 k, 4 k, 100 k ohms depending upon probe; input signal level -109 to +22 dBm; spectrum display calibrated in frequency and amplitude; selectivity filter BW=250, 3100 Hz; similar to Test Set, Radio AN/USM-306,

Condition Code – Continued

Code	Condition
	AN/USM-306(V)1, TS-2721/U. TEMOD item frequency range 50 Hz to 32.5 MHz; input impedance 75, 124, 135, 600 and 10 kohms; no probe supplied; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing.
E73	Cushman CE-21 Selective Levelmeter: 75, 124, 135, 600, 10 k, 20 k, 100 k ohms; model 211A bridging probe; input signal level -110 to 19 dBm; selectivity filter BW==200, 2300 Hz and C-MSG weighing; similar to FR-211/U. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; no probe supplied; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100, C-MSG weighing.
E74	Cushman CE-24A Selective Levelmeter: Input impedance 75, 124, 135, 150, 600, 10 k, 20 k ohms; input signal level -120 to +12 dBm; selectivity filter BW=45, 2300 Hz; portable; internal rechargeable batteries. TEMOD item input impedance 75, 124, 135, 600, 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E75	Cushman CE-70 Frequency Selective Levelmeter: Input impedance 75, 124, 135, 600 and 100 kohms (with model 701 bridging probe); input signal level -129 to +12 dBm; selectivity filter BW=75, 1740, 3100 Hz. CE-70 may be paired with CE-71 spectrum display and CE-72 signal generator. TEMOD item input impedance 75, 124, 135, 600 and 10 kohms; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100, C-MSG weighing.
E76	Marconi TF2330A Wave Analyzer: Frequency Range 20 Hz to 76 kHz; input signal level 30 microV to 300 V F.S.; selectivity filter BW=7 Hz. TEMOD item frequency range is 50 Hz to 32.5 MHz; input signal level -120 to +20 dBm; selectivity filter BW=20, 400, 3100 Hz, C-MSG weighing.
E77	All makes/models contain signal input connectors and corresponding input impedance different than those of the TEMOD item (AN/USM-490); impedances may be specified for unbalanced, balanced, terminating or bridging conditions. Typically, wave analyzer input impedances are greater than those for selective level meters.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I3	The salient technical characteristics of the potentially replaceable TMDE that exceed those of the TEMOD item are listed in the appropriate “E” code. These technical differences listed are the major differences in performance between the two items; other technical differences may exist which could prevent replaceability by the TEMOD item. Before a user adopts the TEMOD item as a replacement, a detailed spec comparison should be performed.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be purged by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE’s/TDA’s updated). Following formal authorization and requisition, the TEMOD item will be issued.

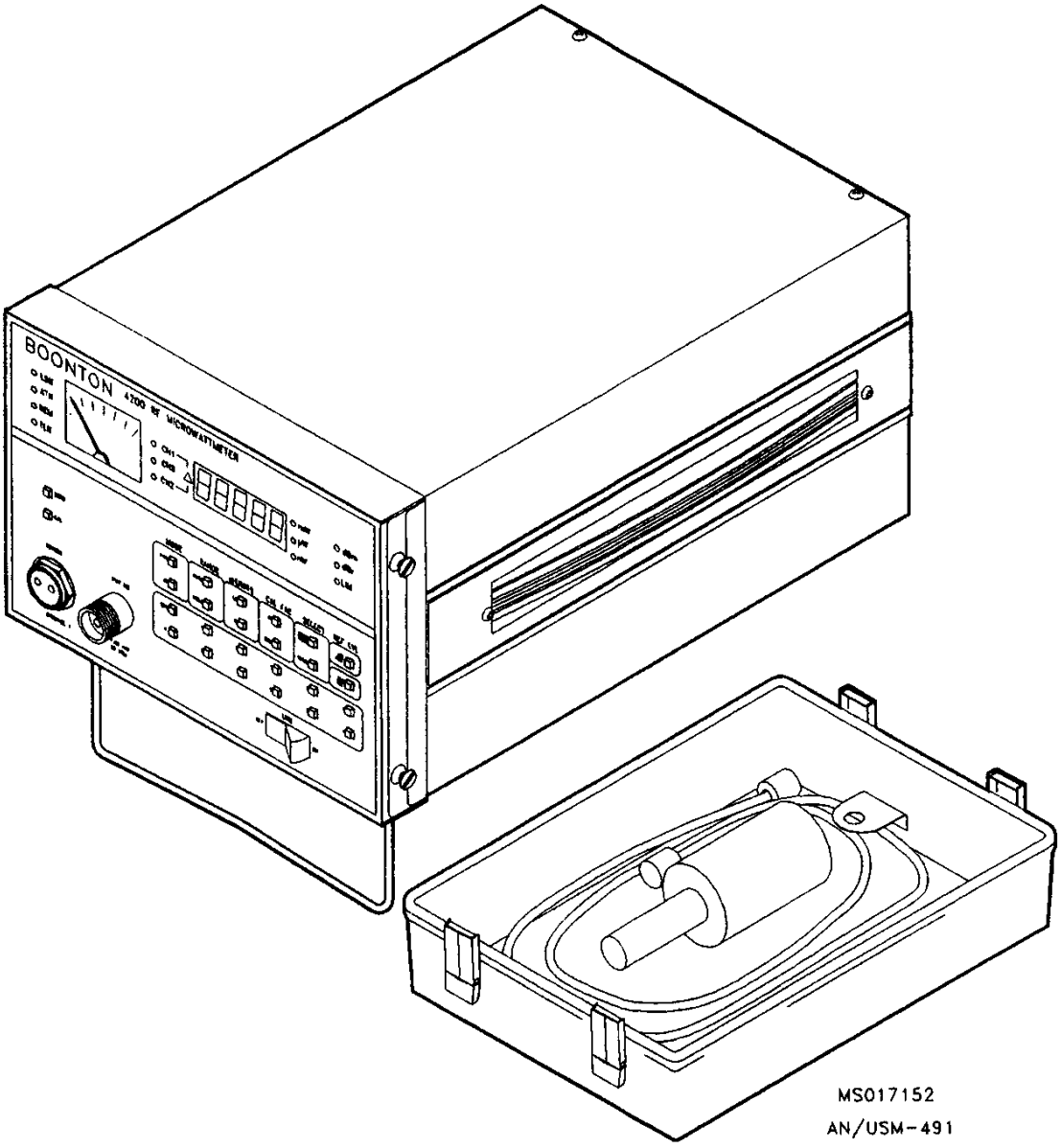
Condition Codes – Continued

Code	Condition
T1	Items capabilities exceed those of TEMOD item; however, depending upon measurement requirement, TEMOD item may be substituted. (i.e., Range of performance greater than equivalent function in TEMOD item.)
T2	TEMOD item is technically similar and may be substituted depending upon measurement requirement. (i.e., Some functions in replaced item not found in TEMOD item.)
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue, not one of performance.)
T5	TEMOD item measurement capabilities greatly exceed those of target replacement item.

4-23. RADIO FREQUENCY POWER TEST SET AN/USM-491

LIN: T89944
Manufacturer: Boonton Electronics
BOIP: C058AA

NSN: 6625-01-191-7679
Model: 4200-01A W/4200-6E
CAGE: 04901



SPECIFICATIONS

With Boonton Model 4200-6E-S/16 sensor:

RF Power Range: 100 nW to 1 W (-40 to +30 dBm) up to 5 W (+37 dBm) with 20 dB, 5 W attenuator

Frequency Range: 100 kHz to 18 GHz

Input Impedance: 50 ohms

Input Connector: Type N

Includes capability for remote operation through the IEEE-488 (GPIB) bus.

Additional sensor used with but not part of AN/USM-491 is available in Army Inventory Boonton Model 4200-5G (MX-18291/USM-491).

RF Power Range: 1 µW to 100 mW (-30 to +20 dBm)

Frequency Range: 18 to 26.5 GHz

Dimensions: 5.85” H x 8.3” W x 13.75” D

Weight: 10 lbs

Manuals: TB 9-6625-2185-35
TM 11-6625-3164-14
TM 11-6625-3164-24P

Remarks: The AN/USM-491 will be distributed under the TPF Fielding system. Under TPF the end item project code and the spare project codes are the same.

Note: Instrument power and frequency ranges are determined by the sensor utilized. Pulse power measurements may require a thermal sensor (i.e., Boonton PN 9E is not provided with instrument).

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
432C	V90236	6625-00-553-4622	I1
AN/URM-98	Y38404	6625-00-566-4990	-
AN/USM-161	V89808	6625-00-892-5541	-
CC: DT-255	NONE	5985-00-856-9117	-
AN/USM-260	T14956	6625-00-917-3099	-
CC: TS-2557/U	T14956	6625-00-917-3099	-
ME-441	P61827	6625-00-436-4883	-
ME-51/UP	M80550	6625-00-543-1350	-
TS-125/AP	V90082	6625-00-229-1038	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
430B	NONE	6625-00-556-8801	P2, I1
432A-001	NONE	6625-00-147-3534	P2, I1
432A-E12	NONE	6625-00-148-8069	P2, I1
432B	NONE	6625-00-138-6522	P2, I1
435A	NONE	6625-00-449-9167	P2, I1
440C	NONE	6625-00-470-0507	P2, I1
450	NONE	6625-01-064-2115	I1, P2
8478B	NONE	6625-00-811-2435	E34, I1
8484A	NONE	6625-01-028-2882	E34, I1
AN/URM-23	NONE	6625-00-537-5681	P2
AN/USM-193	NONE	6625-00-892-5263	P2
CC: TS-2082/U	NONE	6625-00-892-5264	P2
G486A	NONE	5985-00-832-5945	E34, I1
H486A	P63966	6625-00-916-6791	E34, I1
K486A	NONE	6625-00-880-1217	E34, I1
M486A	NONE	6625-00-869-8081	E34, I1
P486A	NONE	5935-00-404-0409	E34, I1
P486A	NONE	6625-00-912-8334	E34, I1
R486A	NONE	6625-00-931-8812	E34, I1
TS-2557A	NONE	NONE	P2, E49, I2
TS-3546/U	NONE	6625-00-022-8151	P2
TS-3793	T90150	6625-01-075-0261	P1, E38
TS-730/URM	NONE	6625-00-521-1263	P2
X486A	NONE	5985-00-442-6083	E34, I1
X486A	NONE	6625-00-065-3213	E34, I1
X670	NONE	4931-00-737-6216	P2, I1

Condition Codes

Code	Condition
E34	This is a power sensor used with one of the power meters being replaced by the AN/USM-491. The power sensor shall be turned in with the power meter. No AN/USM-491 will be issued with the return of a power sensor alone.
E38	Depending upon power sensor used with basic power meter, the TS-3793 may exceed the power range or frequency range of the AN/USM-491. The AN/USM-491 measures power from 100 nW to 1 W without any additional attenuators; with attenuator supplied, the AN/USM-491 can measure power to 5 watts at frequencies from 100 kHz to 18 GHz. An additional sensor not supplied with the AN/USM-491 but available from Army inventory, will measure power from -30 dBm (1 µW) to +20 dBm (100 mW) at frequencies from 18 to 26.5 GHz (sensor is Boonton #4200-5G). Before replacing the TS-3793 with the AN/USM-491, check power and frequency measurement requirements.
E49	This item is a HP 432A with option 002.

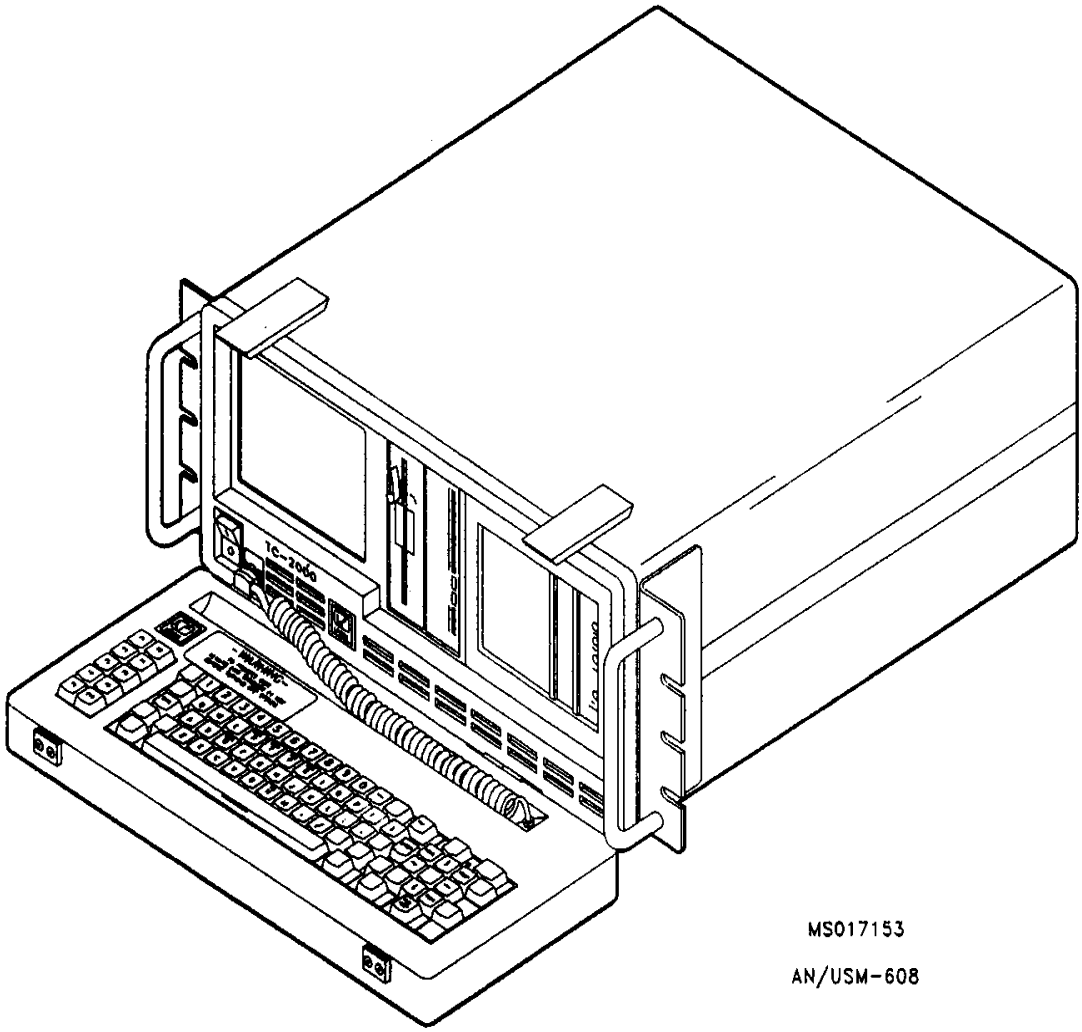
Condition Codes – Continued

Code	Condition
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I2	This item is part of the AN/USM-260.
P1	Item will not be removed from the field at this time, however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC-A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.

4-24. TRANSMISSION TEST SET AN/USM-608

LIN: T49280
Manufacturer: LP-COM
BOIP: C082AA

NSN: 6625-01-246-8206
Model: TC-2000-01 Modified
CAGE: 40244



SPECIFICATIONS

Frequency Range: 20 Hz to 110 kHz

Input Level Range: -40 to 10 dBm

Noise Range: 0 to 100 dBm

Peak-to-Average ratio (P/AR) Range: 0 to 120 P/AR units

Filters: C-Message, 3 kHz Flat, 15 kHz Flat, Program, 50 kbit, 1010 Hz Notch

Input Impedance: 135, 600, 900, and 1.2 kohms

Other Measuring Capabilities Include: Impulse noise, S/N ratio, intermodulation distortion, jitter (amplitude and phase), hits (gain and phase), dropouts, envelope delay, return loss, master/slave operation and computer control through IEEE-488 interface.

Dimensions: 8" H x 17" W x 19" D

Weight: 35 lbs

Manuals: TB 11-6625-2210-35
TM 11-6625-3187-10
TM 11-6625-3187-24
TM 11-6625-3187-24P

Remarks: The AN/USM-608 will be distributed under the TPF Fielding System. Under TPF the end item project code and the spares project codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
4940A	NONE	6625-01-005-5453	I1, P4
4940A-003	NONE	6625-01-004-8963	I1, P4
4943A	NONE	6625-01-091-0778	I1
4945A-101	NONE	6625-01-198-2634	I1, P1
4945A-102	T13078	NONE	I1, P1
520A	NONE	6625-01-091-1148	I1
520B2	NONE	6625-01-091-1149	I1

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
9041	NONE	6625-00-068-0641	I1,T5,P3,E15,E17
ME-490/U	M38807	6625-01-005-7226	T5,P3,E15,E16
TS-2395/G	H11043	6625-00-841-5078	P3,T5,E13,E15
TS-2669/GCM	M20069	6625-00-880-1578	P3,T5,E14,E15
TS-2669A/GCM	M20069	6625-00-126-0217	P3,T5,E14,E15
TS-2669B/GCM	NONE	6625-00-140-8505	P3,T5,E14,E15

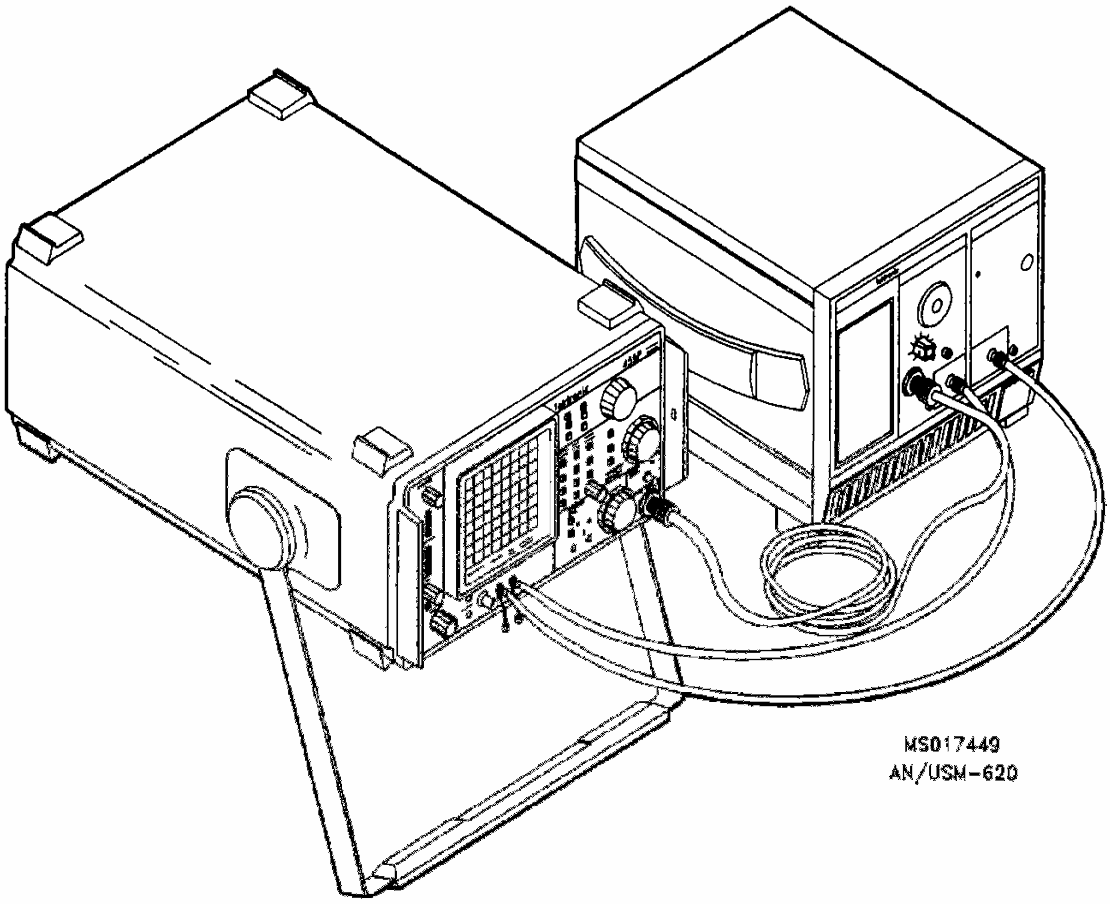
Condition Codes

Code	Condition
E13	The TS-2395 measures envelope delay from 300 Hz to 110 kHz for 50, 75, 135 and 600 ohm circuits. The TEMOD item measures envelope delay from 200 Hz to 100 kHz for 135, 600 and 900 ohm circuits.
E14	The TS-2669 measures envelope delay from 100 Hz to 550 kHz for 75, 120, 135, 150, 600 and 900 ohm circuits. The TEMOD item measures envelope delay from 200 Hz to 110 kHz for 135, 600 and 900 ohm circuits.
E15	The TEMOD item measures envelope delay from 200 Hz to 100 kHz for 135, 600 and 900 ohm circuits in addition to the following: level, noise, impulse noise, non-linear distortion, jitter, hits, par, s/n and return loss.
E16	The ME-490 measures jitter and hits.
E17	The 9041 measures level and return loss. It also contains decade buildout capacitors.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P1	Item will not be removed from the field at this time, however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P3	Item removed from the field in certain applications; see applicable “E” code/s.
P4	Although these items do not have a LIN, they will be included on the BOIP and will be removed from the field.
T5	TEMOD item measurement capabilities greatly exceed those of target replacement item.

4-25. SPECTRUM ANALYZER AN/USM-620

LIN: S01484
Manufacturer: Tektronix Inc.
BOIP: P035AA

NSN: 6625-01-312-9513
Model: 495P, TR503, TM5003
CAGE: 80009



SPECIFICATIONS

Frequency Range: 100 Hz to 1.8 GHz

Resolution Bandwidth: 10 Hz to 1 MHz (selectable)

Tracking Generator:
- Frequency Range: 300 kHz to 1.8 GHz
- Attenuation Range: 60 dB
- Flatness: +2.25 dB
- Dynamic Range: 95 dB

Manuals: TM 11-6625-3278-12
TM 11-6625-3278-24P
TM 11-6625-3278-40-1
TM 11-6625-3278-40-2

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
IP-1018	A58223	6625-00-465-1733	-
PL-1391	P11459	6625-01-015-6587	M4
TS-3150	NONE	6625-00-724-1650	P2
TS-3170	A58223	6625-00-465-1733	-
TS-3170A	A58223	6625-00-833-3701	-
TS-3237	A58233	6625-00-463-9412	-
TS-3628 (V) 1/U	NONE	6625-00-359-1927	P2

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
IP-1216	A57322	6625-00-424-4370	M3
PL-1387	S00625	6625-00-167-5267	M3
PL-1388	P11208	6625-00-431-9339	M3
PL-1399	P11146	6625-01-432-5055	M3

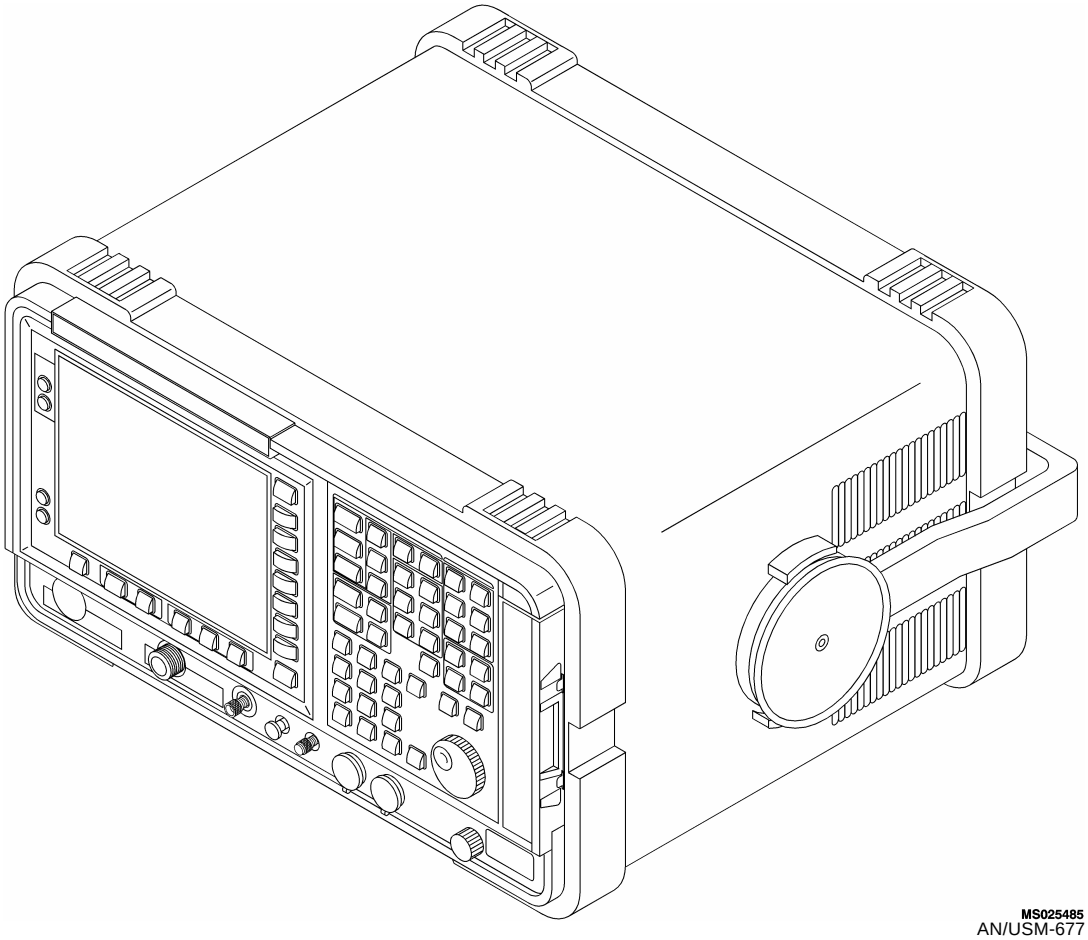
Condition Codes

Code	Condition
M3	The IP-1216 is a mainframe that requires plug-ins to operate. The AN/USM-620 will replace the IP-1216 only when the IP-1216 is used with the PL-1388 plug-in and either or both of the following plug-ins: PL-1387, PL-1399.
M4	The PL-1391 is a plug-in for an oscilloscope mainframe, the Tektronix 7603. The AN/USM-620 will replace the PL-1391 plug-in.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.

4-26. SPECTRUM ANALYZER AN/USM-677

LIN: A70285
Manufacturer: Agilent Technologies
BOIP: P077AA

NSN: 6625-01-470-7545
Model: E4407B
CAGE: 1LQK8



MS025485
AN/USM-677

SPECIFICATIONS

Frequency Range: 9 kHz to 26.5 GHz

Frequency Span: 0 Hz (zero span), 100 Hz to 26.5 GHz

Resolution Bandwidth (RBW) Range:

-3 dB bandwidth – 1 kHz to 3 MHz, in 1-3-10 sequence, 5 MHz
-6 dB bandwidth (EMI) – 9 kHz to 120 kHz

Amplitude Measurement Range: Input Attenuator: 0 to 65 dB, in 5 dB steps

Amplitude Maximum Safe Input Level:

Average Continuous Power: + 30 dBm (1W)
Peak Pulse Power: + 50 dBm (100W)

Sweep Time Range: Span > 0 Hz: 1 ms to 4000s
Span = 0 Hz: 10 µ to 4000s

Display: Digital

Power Requirements:

AC Operation
Voltage, Frequency: 90 to 132 Vrms, 47 to 440 Hz, 195 to 250 Vrms, 47 to 66 Hz
Power Consumption: < 300 W

DC Operation
Voltage: 12 to 20 Vdc
Power Consumption: <200 W

Temperature Range: Operating: 0° C to +55° C
Disk Drive: 10° C to +40° C
Storage: -40° C to +75° C

Dimensions:

w/o handle 222mm H x 373 mm W x 409 mm D
(8.88 in H x 14.92 in W x 16.36 in D)
w/ handle 222 mm H x 408 mm W x 516 mm D
(8.88 in H x 16.32 in W x 20.64 in D)

Weight: 17.1 kg (37.7 lbs)

Manuals: TB 9-6625-2339-35
TM 43-6625-914-12
TM 43-6625-914-24P
TM 43-6625-914-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/USM-366	S00875	6625-00-494-2937	---
AN/USM-489(V) 1	S01416	6625-01-079-9495	---
AN/USM-489A	S01416	6625-01-259-1060	---

Items Potentially Replaceable

None

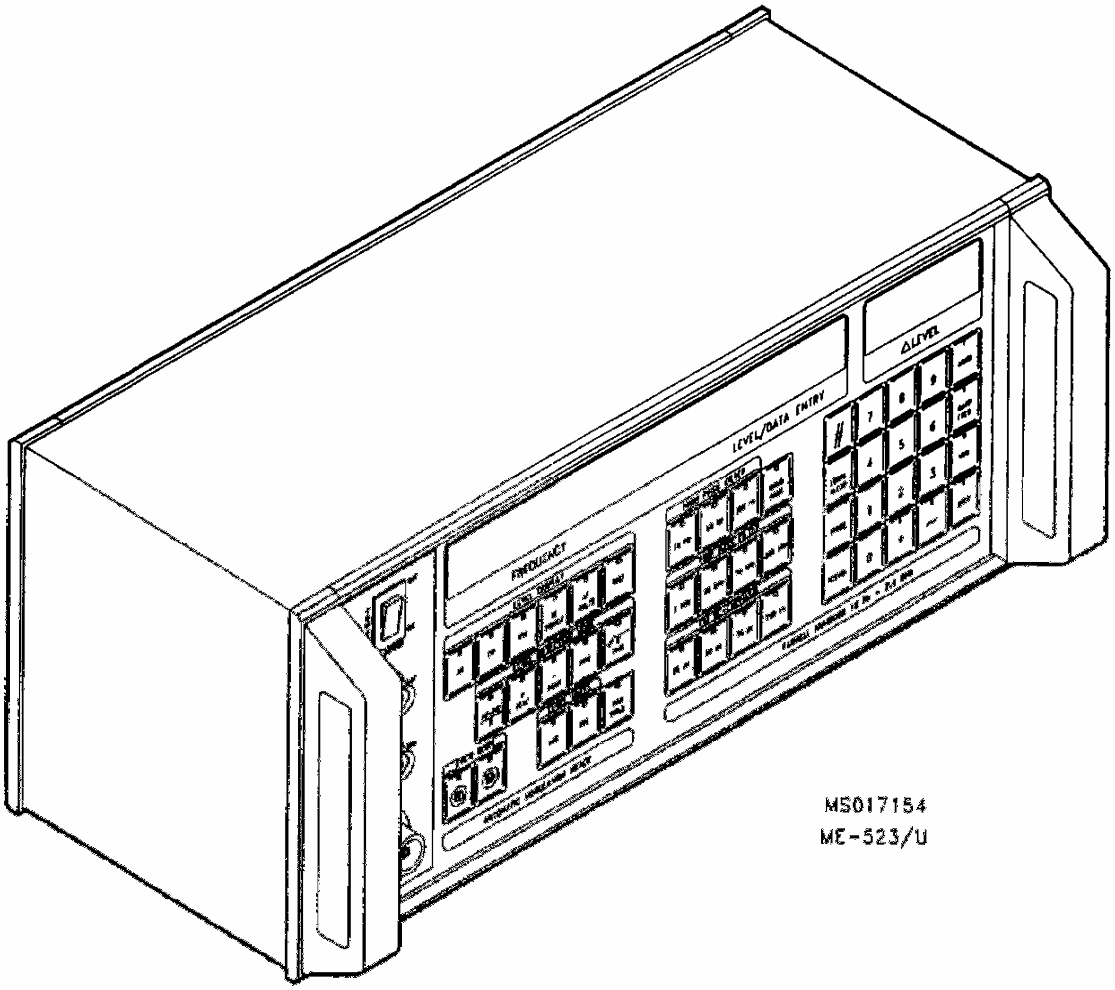
Condition Codes

None

4-27. MODULATION METER, ME-523( )/U

LIN: M61743
Manufacturer: Farnell Instruments, LTD
BOIP: P048AA

NSN: 6625-01-406-7388
Model: AMM2000/2Q
CAGE: 21066



SPECIFICATIONS

Bandwidth: 150 kHz to 1.8 MHz

Modulation Measured: Amplitude, Frequency, and Phase

Modulation Rates: AM: up to 50 kHz
FM: up to 200 kHz
PM: up to 4 kHz

Accuracies: Carrier: ± 3 counts of LSD
AM: ± 2.5% + 1 count above 5% modulation
FM: ± 3% + 1 count
PM: ± 3% + 1 count

Deviation: FM: 400 kHz
PM: ± 50 radians

Audio Counter Range: 30 Hz to 100 kHz

Stability: ± ppM over 0 to 40 ºC

Aging Rate: Better than 10^{-6} per year

Power Measurement: + 10 to + 30 dBm

Dimensions: 145 mm H x 330 mm W x 405 mm D

Weight: 9 kg

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
ME-57A/U	M38609	6625-00-432-7312	-
CE-3	M66473	6625-01-046-4914	-
Meter Modulation	NONE	6625-00-060-3320	-
8901B	NONE	6625-01-238-8830	-
Meter Modulation	NONE	6625-00-403-7967	-
FM Deviation	NONE	6625-00-679-7877	-
ME-525/USM	NONE	6625-01-136-8477	-
ME-525A/USM	NONE	6625-01-161-1459	-
ME-506/U	NONE	6625-01-060-5879	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
ME505A/U	M61675	6625-01-154-4844	E106

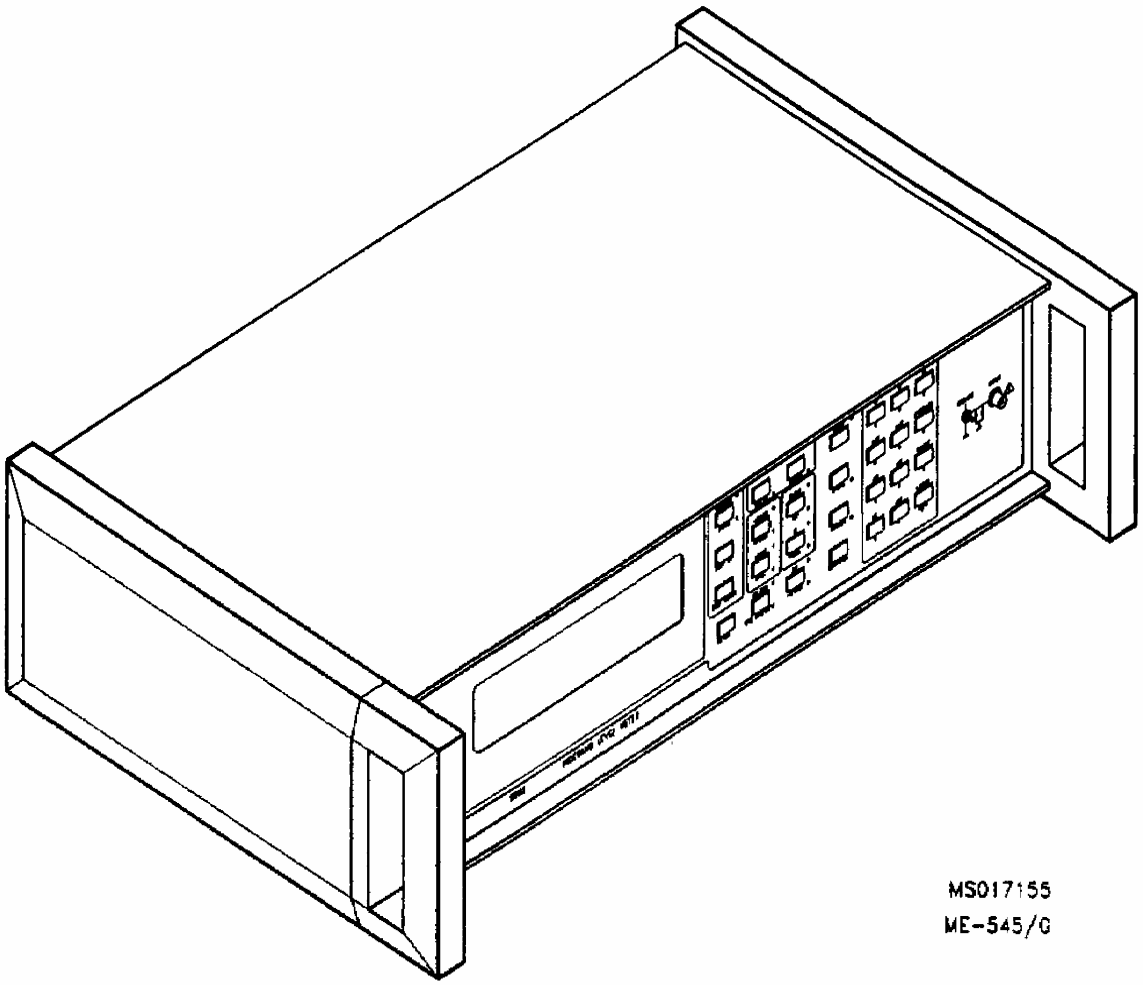
Condition Codes

Code	Condition
E106	Accuracies Differences, Bandwidth = Unit: 2.4 MHz, Gov Spec: 1.8 MHz.

4-28. VOLTMETER, TRUE RMS ME-545/G

LIN: T64244
Manufacturer: Racal Dana Instruments
BOIP: C123AA

NSN: 6625-01-255-4547
Model: 5002-S-8040
CAGE: 21793



SPECIFICATIONS

AC Voltage Range: 100 µV to 316 V

Frequency Range: 2 Hz to 19.99 MHz

3 dB Point: 40 MHz Typical

Power Requirements: 115/230 VAC, 50-400 Hz

Special Functions: Crest factor measurements, peak, peak to peak, average, watts, dB, and dBm measurements.

Capabilities Included: Auto ranging, recorder output, and IEEE-488 interface bus.

Dimensions: 3.5” H x 17.4” W x 15.9” D

Weight: 14.91 lbs

Manuals: TB 11-6625-2193-35
TM 11-6625-3200-14
TM 11-6625-3200-24P

Remarks: The ME-545/G will be distributed under the TPF Fielding System. Under TPF the end item project code and the spare project codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
ME-425/U	Y15342	6625-00-729-6907	-
ME-459/U	Y15488	6625-00-229-0457	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/USM-224	V60660	6625-00-727-4706	P1
CC: ME-318/U	Z96973	6625-00-727-4706	P1
AN/USM-265	NONE	6625-00-935-4294	P2
CC: ME-340/U	NONE	6625-00-054-3487	P2
AN/USM-265A	NONE	6625-01-069-4088	P2
ME-269 ()/GRM-58	NONE	NONE	P2
ME-314/U	NONE	NONE	P1, E5
ME-316/FRM-16 (V)	NONE	NONE	P2
ME-318/U	NONE	6625-00-727-4706	P1, E5
ME-340/U	NONE	6625-00-054-3487	P2
ME-340A/U	NONE	NONE	P2
ME-444/U	Y15402	6625-00-726-6949	P3, T1, E6
ME-460V (1)/U	NONE	NONE	P2
ME-462/U	NONE	NONE	P2
ME-465/U	NONE	6625-00-782-0640	P2
ME-501/U	NONE	6625-00-179-2633	P2

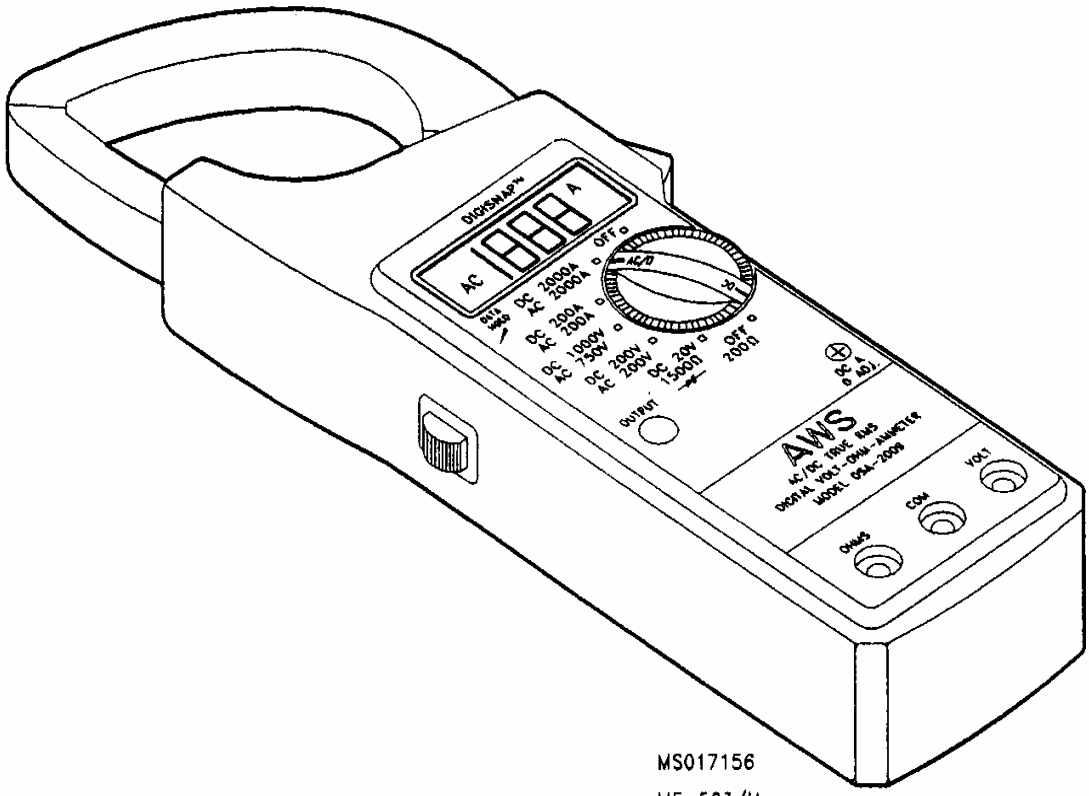
Condition Codes

Code	Condition
E5	The ME-318/U, ME-314/U and the AN/USM-224 are identical units.
E6	The ME-444/U AC voltage range is 100 microvolts to 330 volts. The TEMOD replacement item's AC voltage range is 100 microvolts to 300 volts. The ME-444/U should be removed from the field and replaced by the TEMOD item when no measurement requirement exists above 300 volts.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
T1	Items capabilities exceed those of TEMOD item; however, depending upon measurement requirement, TEMOD item may be substituted. (i.e., Range of performance greater than equivalent function in TEMOD item.)

4-29. DIGITAL CLAMP-ON AMMETER ME-563/U

LIN: A39017
Manufacturer: A. W. Sperry
BOIP: P040AA

NSN: 6625-01-411-8935
Model: DSA-2009
CAGE: 58935



MS017156
ME-563/U

SPECIFICATIONS

Display: 3.5 digit LCD

Frequency Range: 45 to 500 Hz

AC Current: 0.1 to 300 amps

DC Current: 0.0 to 300 amps

Power: Battery

Dimensions: 11” H x 4” W x 3” D

Weight: 32 ounces

Manuals: TM 9-6625-909-12
TM 9-6625-909-24P
TM 9-6625-909-40

NOTE: The ME-563/U is a digital clamp-on ammeter that measures current without being in series with the source and load.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
ME-65A/U	A38401	6625-00-985-5251	-
	A39086	6625-00-237-9312	-
	A39771	6625-00-519-2998	-
	A39360	6625-00-538-8215	-
AN/USM-33	M80139	6625-00-649-9172	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
ME-452/U	A39497	6625-00-519-2493	E106
	A39908	6625-00-539-8208	E106
ME-488/U	A38743	6625-00-816-9324	E106
ME-511/U	Z04766	6625-00-781-5769	-
ME-489/U	M38985	6625-00-649-0411	E106

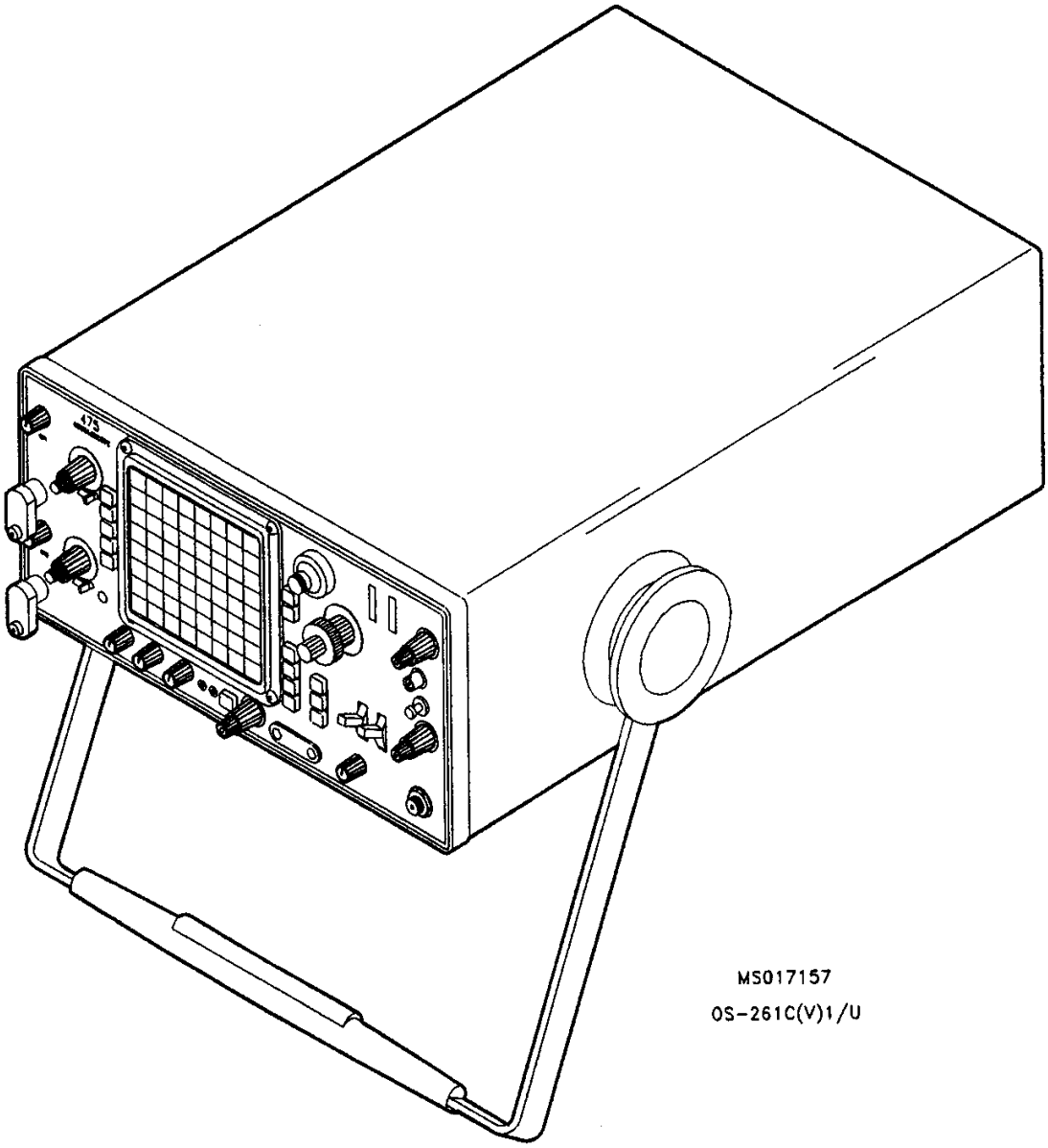
Condition Codes

Code	Condition
E106	This item should be removed from the field and replaced by the ME-563/U when Measuring amps only.

4-30. DUAL-TRACE OSCILLOSCOPE, 200 MHZ OS-261C(V)1/U

LIN: N32160
Manufacturer: Tektronix
BOIP: None

NSN: 6625-01-119-7314
Model: 475-04, 07
CAGE: 80009



*****OBSOLETE*****

The OS-261C(V)1/U has been replaced by the OS-303/G.

SPECIFICATIONS

Bandwidth: DC to 200 MHz

Vertical Deflection: 2 mV/Div to 5 V/Div ± 3%

Rise Time: Less than 1.8 ns

Sweep Rate: .01 µs/Div to .5 s/Div, X10 magnification 1 ns/Div

Power Requirements:

AC Line Voltage Ranges: 110 V, 115 V, 120 V, 220 V, 230 V, and 240 V ± 10%

Line Frequency Range: 48 to 440 Hz

DC Line Voltage Range: 12 or 24 V

Other Options Include: EMI modification and DC operation

Dimensions: 6.2” H x 13.1” W x 18.1” D

Weight: 25.3 lbs

Manuals: TB 9-6625-2240-35
TM 11-6625-2735-14
TM 11-6625-2735-14-1
TM 11-6625-2735-24-1
TM 11-6625-2735-24-1

Remarks: Unfilled requirements for the OS-261(V)1/U will be satisfied by the OS-288 ( )/G, whose specifications are equal to or better than the OS-261C(V)1/U.

Items Replaced and Removed from Field

None

Items Potentially Replaceable

None

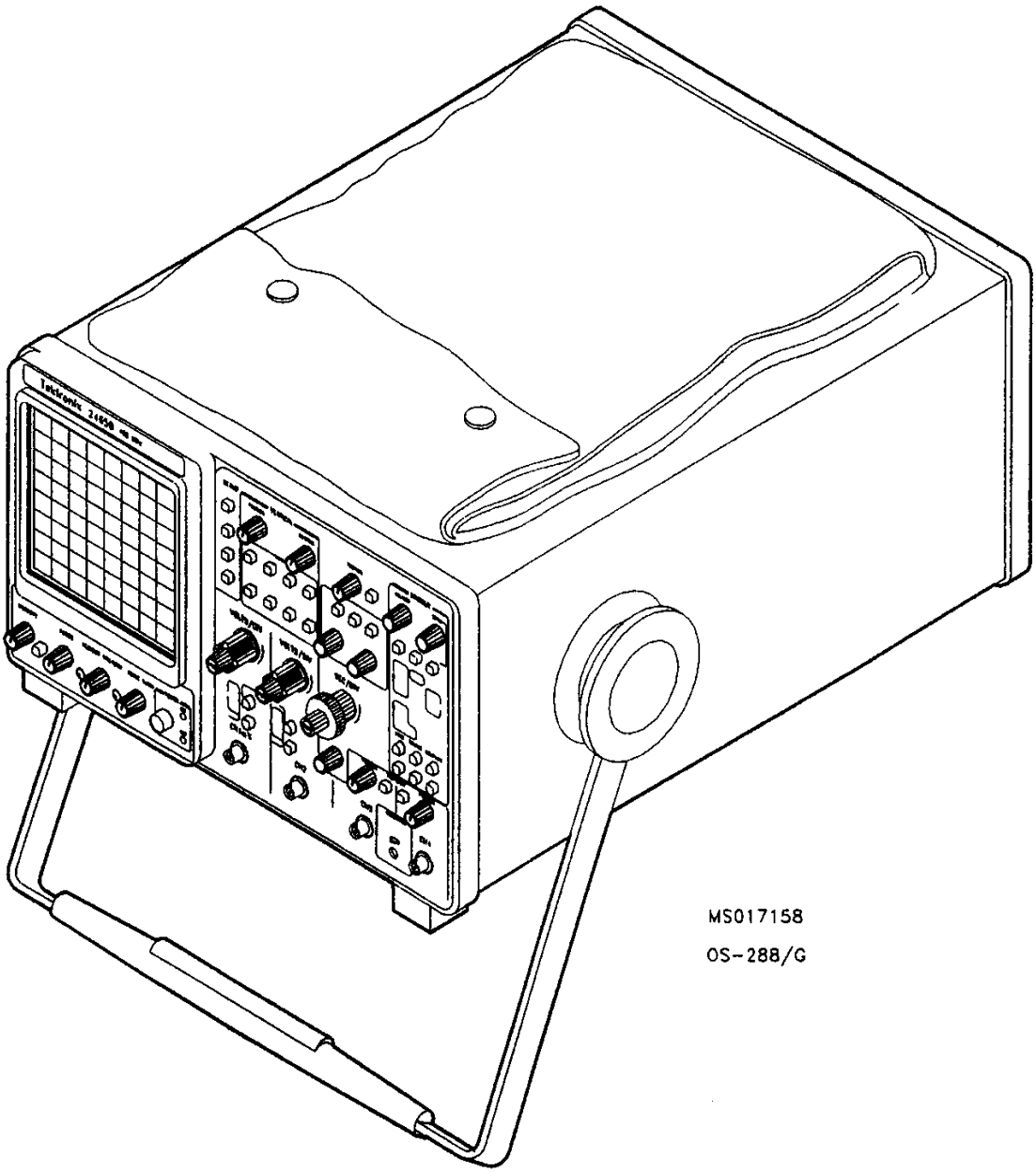
Condition Codes

None

4-31. FOUR CHANNEL (DUAL TIME BASE) OSCILLOSCOPE OS-288/G

LIN: N32160
Manufacturer: Tektronix
BOIP: None

NSN: 6625-01-272-8054
Model: 2465B
CAGE: 80009



*****OBSOLETE*****

The OS-288/G has been replaced by the OS-303/G.

SPECIFICATIONS

Bandwidth: DC to 400 MHz

Vertical Deflection Factor: 2 mV/Div to 5 V/Div (Channel 1 and 2) 100 mV/Divand 500 mV/Div ± 10% (Channel 3 and 4).

Sweep Rate: 5 ns/Div to .5 s/Div X10 magnification to 500 ps/Div.

Rise Time: Less then 1 ns

Maximum Input Voltage: 400 V (DC + peak AC); 800 V P-P AC at 10 kHz or less (1 Megohm Input Impedance).

Power Requirements:

Line Frequency: 48 to 440 Hz

Line Voltage Ranges: 90 to 132 VAC
180 to 250 VAC

Dimensions: 7.5” H x 13” W x 18.4” D

Weight: 24 lbs

Manuals: TB 9-6625-2191-35
TM 11-6625-3234-12
TM 11-6625-3234-24
TM 11-6625-3234-34P
TM 11-6625-3234-40

Remarks: OS-288 will be issued against LIN N32160 authorizations through the pull system in which materiel fielding is not envisioned, but letter of notification (LON) will be provided.

Items Replaced and Removed from Field

None

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1722A	P30847	6625-01-007-9957	P1, I1
1725A	NONE	6625-01-152-0428	P1, I1
454-163D	NONE	6625-00-470-2723	P1, I1
454A	NONE	6625-00-127-5729	P1, I1
475A	P30162	6625-00-618-4902	P1, I1
AN/USM-483	NONE	6625-01-104-6520	P1
OS-261/U	N32160	6625-00-127-0079	P1
OS-261A(V)1/U	N32160	6625-01-066-4511	P1
OS-261B/U	N32160	6625-01-101-1318	P1
OS-261C/U	N32160	6625-01-119-7314	P1

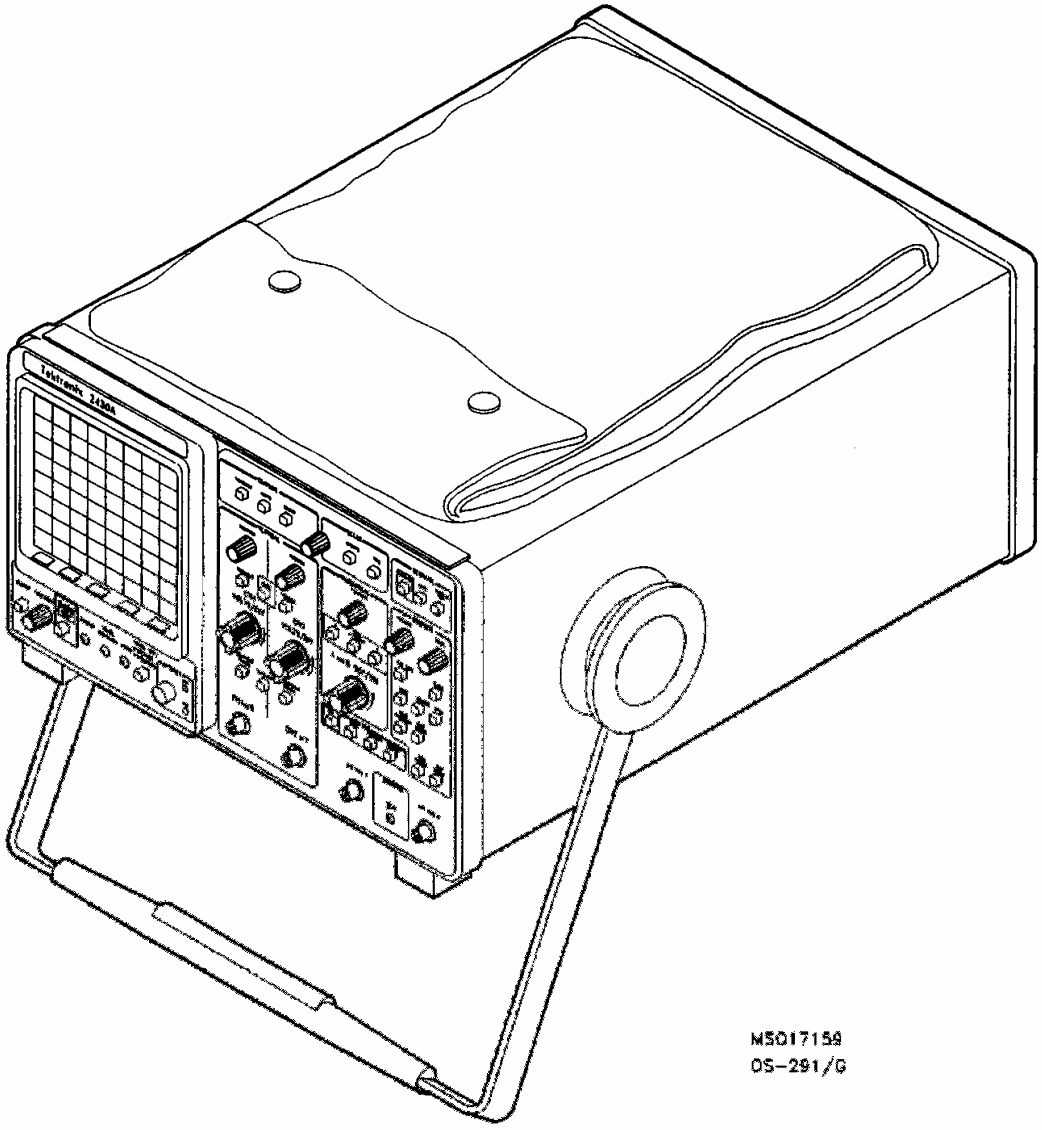
Condition Codes

Code	Condition
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)

4-32. OSCILLOSCOPE OS-291/G

LIN: P33687
Manufacturer: Tektronix
BOIP: P038AA

NSN: 6625-01-258-0022
Model: 2430A
CAGE: 80009



*****OBSOLETE*****

The OS-291/G has been replaced by the OS-303/G.

SPECIFICATIONS

Bandwidth: DC to 150 MHz

Vertical Deflection: 2 mV/Div to 5 V/Div

Sweep Rate: 5 ns/Div to 5 s/Div

Maximum Input Voltage: 400 V (DC - Peak AC)
800 V P-P at 10 kHz or less

Input Impedance: 1 Mohm

Maximum signal Event Useful Storage Bandwidth: 40 MHz

Maximum Sample Rate: 100 Ms/s

Vertical Resolution: 8 bits (1 to 256 over 10.24 vertical divisions)

Record Length: 1024 points per channel

Power Requirements:

Line Voltage Ranges: 90 to 132 VAC and 180 to 250 VAC

Line Frequency: 48 to 440 Hz

Dimensions: 6.3” H x 13.0” W x 18.9” D

Weight: 28.1 lbs

Manuals: TB 9-6625-2251-35
TM 11-6625-3241-12
TM 11-6625-3241-24P
TM 11-6625-3241-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
434	N29152	6625-00-305-1395	I1
464	N32223	6625-01-026-0598	I1
468	NONE	6625-01-200-9619	I1
5441	NONE	6625-01-035-3043	I1
R5115	NONE	6625-00-551-8076	I1
T912	NONE	6625-01-060-2932	I1

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
181A	N33151	6625-00-442-3550	I1, E85, E86
181AR	NONE	6625-00-476-1862	I1, E85, E86
184A	N33151	6625-01-012-5980	I1, E85, E86
7313	NONE	6625-00-324-3295	I1, E85, E86
7613	NONE	6625-00-551-7851	I1, E85, E86
7623	NONE	6625-00-595-5266	I1, E85, E86
OS-262(P)/U	P32228	6625-01-007-9416	E85, E86
OS-275 (P)/U	P33651	6625-01-093-2261	E85, E86
OS-275 (P)A/U	P33651	6625-01-134-3220	E85, E86
R7313	NONE	6625-01-016-1315	I1, E85, E86

Condition Codes

Code	Condition
E85	This item will NOT be replaced by the OS-291/G if it is used with any of the following plug-in modules:

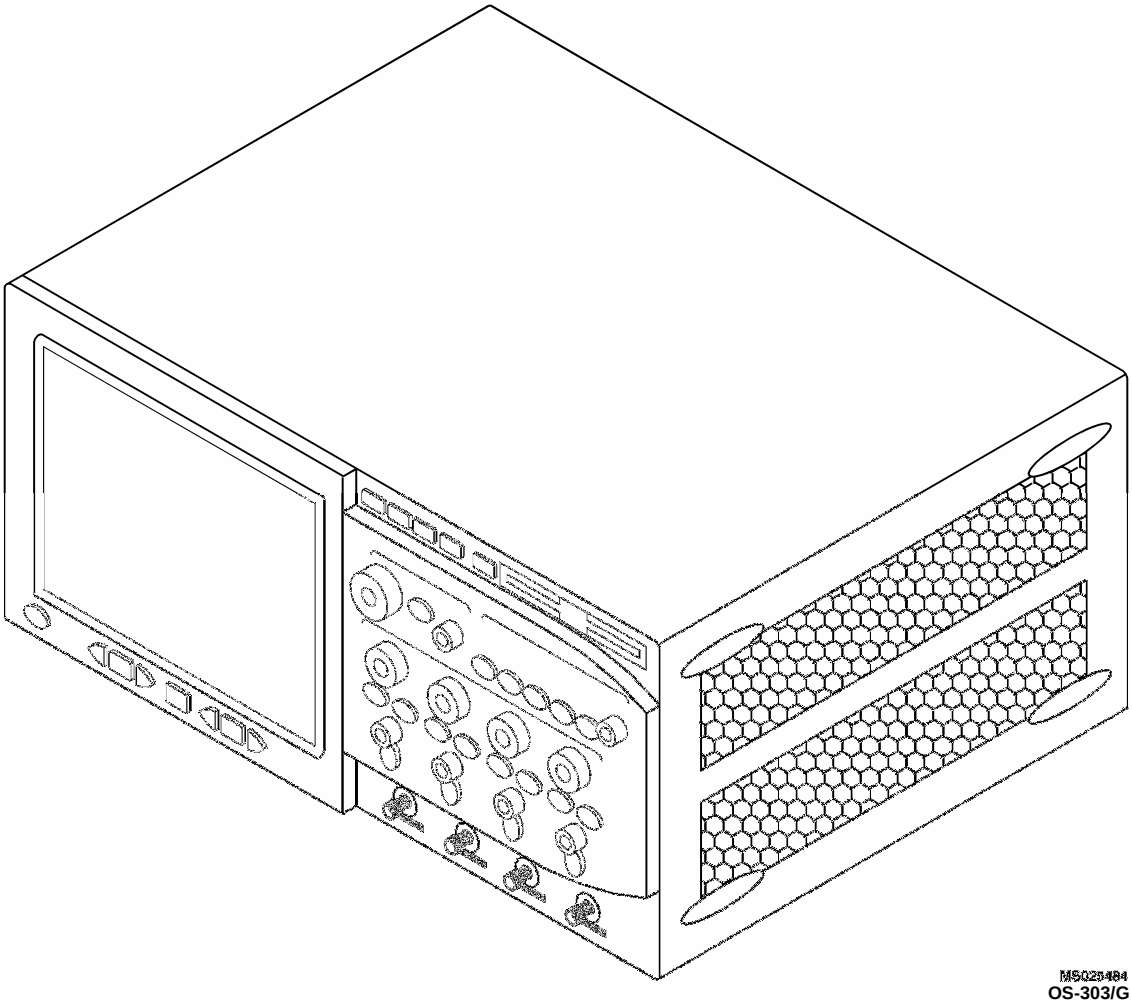
LIN	NOMENCLATURE	NSN
P11091	AM-6881/U	6625-00-478-0594
P11459	PL-1391/U	6625-01-015-6587
A54416	AM-6787/U	6625-00-489-6449
NONE	PL-1407/U	6625-00-392-2604
NONE	TD-1161/U	6625-00-489-6450
A11341	AM-6786/U	6625-00-478-0597
P16915	PL-1392/U	6625-00-558-2324
P11212	TD-1160(P)/U	6625-00-004-1644
NONE	7CT1N	6625-00-548-8190
NONE	7D13	6625-00-517-6880
NONE	7D13A	6625-01-175-4241
A58053	7L14	6625-01-120-2082
-	7M11	6625-00-364-7806
-	AN/USM-310(V)	6625-00-253-3788
-	HP1809A	6625-01-017-8561
-	HP8557A	6625-01-096-3693
NONE	QQ-3330/GSM	6625-01-071-4293
NONE	HP 8559A	6625-01-096-0347
-	HP8755B	6625-01-095-8095

E86	This item will not be replaced by the OS-291/G if the user requires a stored single shot response faster than 70 ns risetime.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.

4-33. FOUR CHANNEL OSCILLOSCOPE OS-303/G

LIN: P32409
Manufacturer: Agilent Technologies
BOIP: P078AA

NSN: 6625-01-470-7541
Model: 54831M
CAGE: 1LQK8



MS023484
OS-303/G

SPECIFICATIONS

Acquisition:

Maximum Sample Rate (Real Time/Single Shot):

2-channel mode (two channels interleaved together); 4 GSa/s
4-channel mode (each channel): 2 GSa/s

Maximum Effective Sample Rate (Equivalent Time/Repetitive Sampling):

250 GSa/s

Memory Depth/Record Length:

1 million points per channel
2 million points on two channels when interleaving two channels

Vertical:

Bandwidth: DC to 600 MHz

Vertical Deflection: 1 mV/div to 5 V/div, for 1 MΩ coupling
1 mV/div to 1 V/div, for 50 Ω coupling

Maximum Input Voltage: 250V (DC + Peak AC), for 1 MΩ input impedance
5 Vrms, for 50 Ω input impedance

Horizontal:

Sweep Rate: 500 ps/div to 20 s/div

Resolution: 4 ps

Timebase Accuracy: 50 ppm (±0.005%)

Non-volatile Waveform Storage: LS-120, 120 MB floppy disk drive
10 GByte (or greater) hard disk drive

Power Requirements:

Voltage, Frequency: 108 to 132 Vrms, 47.5 to 52.5 Hz or 57 to 63 Hz
108 to 132 Vrms, 380 to 420 Hz
216 to 264 Vrms, 47.5 to 52.5 Hz or 57 to 63 Hz

Maximum Power Consumption: 500 Watts

Dimensions (excludes handles): 216 mm H x 437 mm W x 440 mm D
(8.51 in H x 17.19 in W x 17.34 in D)

Weight: 14 kg (30.87 lbs)

Manuals: TB 9-6625-2344-35
TM 43-6625-915-12
TM 43-6625-915-24P
TM 43-6625-915-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
OS-261/U	N32160	6625-00-127-0079	---
OS-261A(V)1/U	N32160	6625-01-066-4511	---
OS-261B	N32160	6625-01-101-1318	---
OS-261C	N32160	6625-01-119-7314	---
OS-262(P)/U	P32228	6625-01-007-9416	---
OS-275(P)/U	P33651	6625-01-093-2261	---
OS-275(P)A/U	P33651	6625-01-134-3220	---
OS-288/G	N32160	6625-01-272-8054	---
OS-291/G	P33687	6625-01-258-0022	---

Items Potentially Replaceable

None

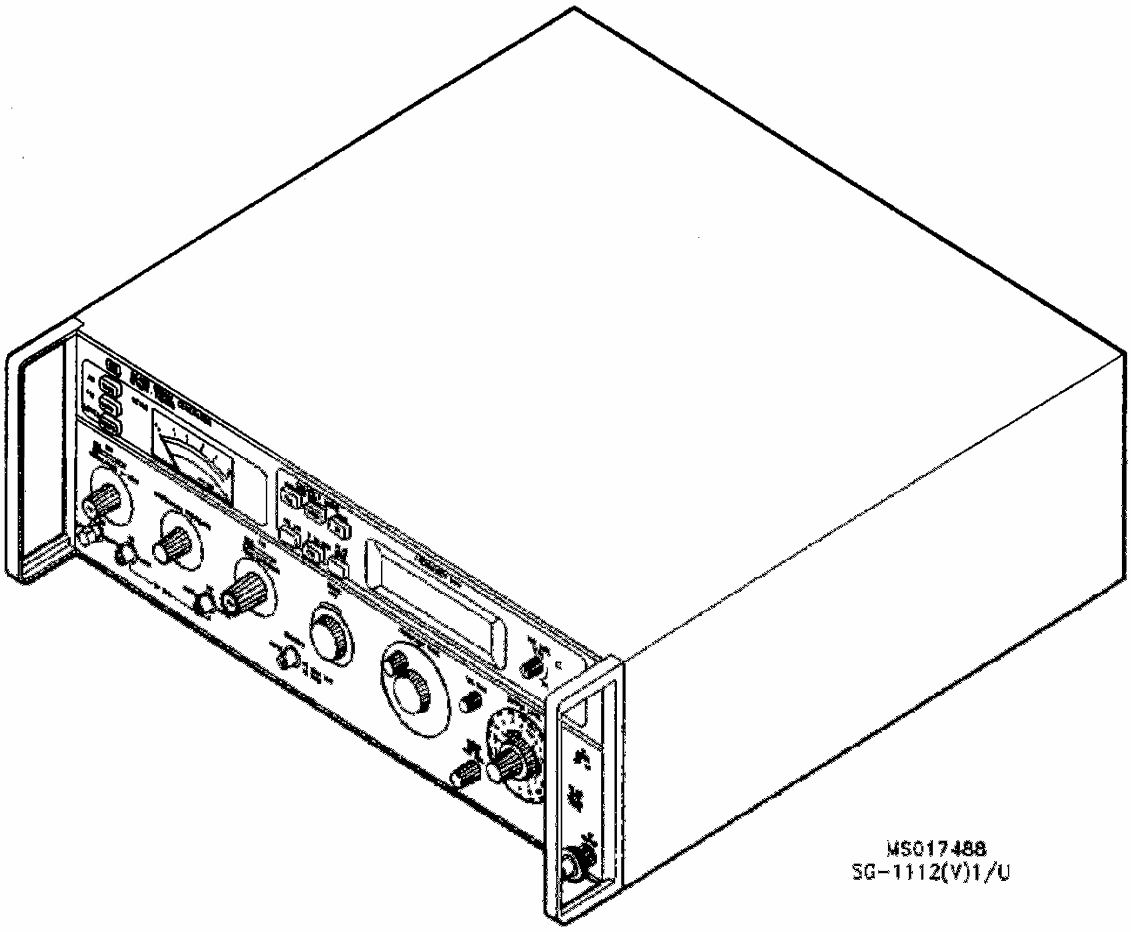
Condition Codes

None

4-34. GENERATOR, SIGNAL SG-1112(V)1/U

LIN: S48051
Manufacturer: Hewlett-Packard
BOIP: NONE

NSN: 6625-00-566-3067
Model: 8640B OPT 004
CAGE: 28480



SPECIFICATIONS

Frequency Range: 500 kHz to 512 MHz

Output Level: -142 to +15 dBm

Output Impedance: 50 ohms

Voltage Range: .018 µV to 1.3 V

Built-In Counter: 20 Hz to 550 MHz

External Input Impedance: 2 kohms

AM Modulation (Internal): 400 to 1000 Hz

FM Deviation: 2.56 MHz Peak

Internal FM Tones: 400 and 1000 Hz

Power Requirements: 100/120 VAC, 48-440 Hz and 220/240 VAC

Dimensions: 5.5” H x 16.75” W x 18.75” D

Weight: 46 lbs

Manuals: TB 9-4931-488-35
TM 11-6625-2780-14&P
TM 11-6625-2780-24&P

Remarks: This is a TEMOD item specially procured for supporting avionics and VHF communications receivers.

Items Replaced and Removed from Field

None

Items Potentially Replaceable

None

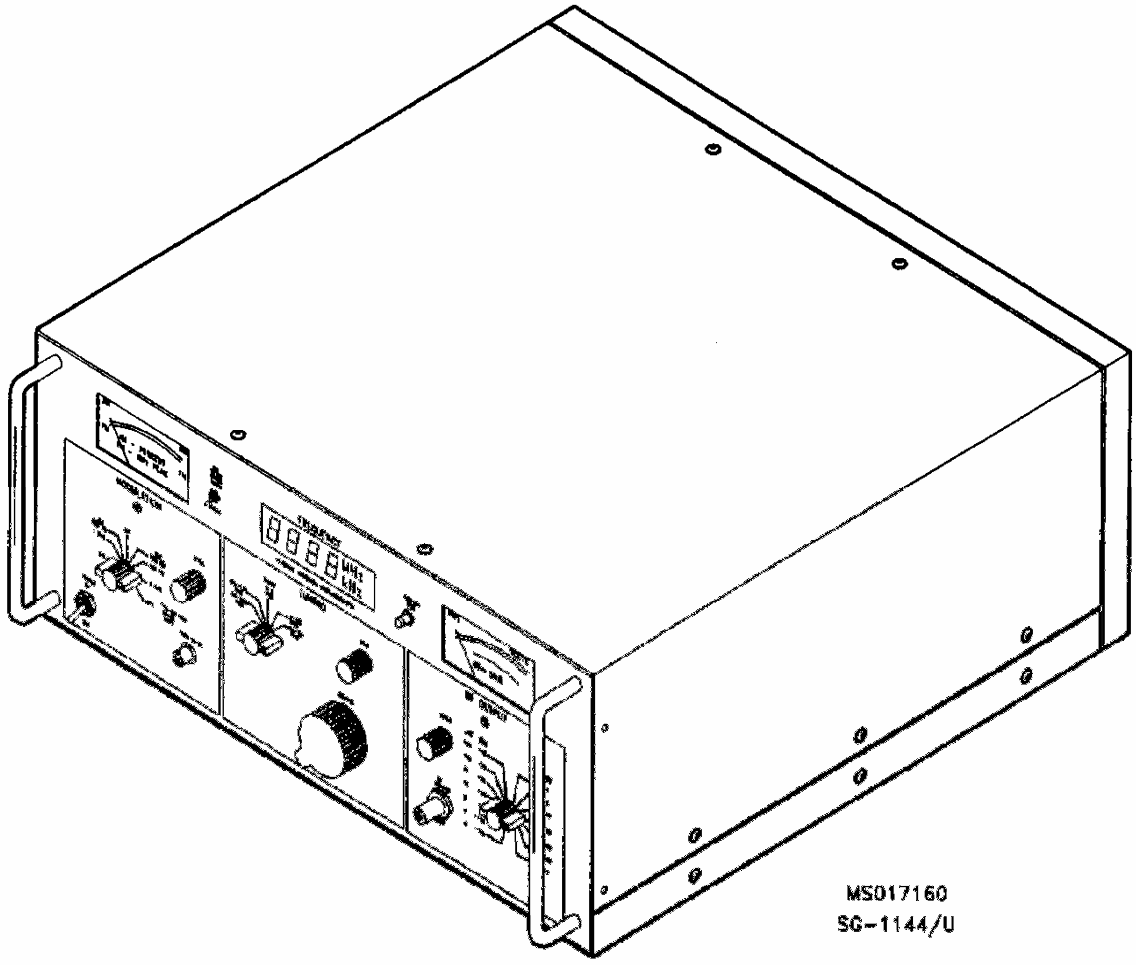
Condition Codes

Code	Condition
I14	This TEMOD item represents a new capability to the Army inventory and will not replace any existing items.

4-35. GENERATOR, SIGNAL SG-1144/U

LIN: G56451
Manufacturer: AUL Instruments
BOIP: C011AA

NSN: 6625-01-075-8478
Model: 101840
CAGE: 25778



*****OBSOLETE*****

The SG-1144/U has been replaced by the SG-1207A/U.

SPECIFICATIONS

Frequency Range: 50 kHz to 80 MHz ± 1%

Output Level: -127 to +10 dBm

Output Impedance: 50 ohms

Voltage Range: 100 nV to 1.0 V rms across a 50-ohm load

External Input Impedance: 600 ohms

AM Depth: 0 to 90%

AM Modulation (Internal): 400 and 1000 Hz

AM Modulation (External): 20 Hz to 20 kHz 5 V P-P max, Square Wave 3 kHz

FM Deviation: 0 to 75 kHz from 20 to 80 MHz

Internal FM Tones: 150 Hz, 400 Hz, 1000 Hz

Power Requirements: 115/230 VAC; 50/60/400 Hz

Dimensions: 7” H x 17” W x 17.75” D

Weight: 37.5 lbs

Manuals: TB 9-6625-2077-35
TM 11-6625-2954-14&P
TM 11-6625-2954-24P
DMWR 11-6625-2954

Remarks: This is a TEMOD item, however, no additional procurements of SG-1144’s are anticipated. Use SG-1170 as replacement. The SG-1144 will not be replaced by SG-1170; additional requirements for SG-1144’s will be satisfied with SG-1170’s.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-25BD	J52549	6625-00-649-5193	E35
AN/URM-25D	J52549	6625-00-494-8565	E35
CC: SG-85	NONE	6625-00-669-0256	E35
AN/URM-25F	J52549	6625-00-643-1548	E35
CC: SG-103	NONE	6625-00-510-1827	E35
AN/URM-25H	J52549	6625-00-934-8732	E35
CC: SG-85B	NONE	NONE	E35
AN/URM-25J	J52549	6625-00-922-5968	E35
CC: SG-85C	NONE	NONE	E35

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/GRM-50	J52472	6625-00-868-8353	E35, E82
CC: SG-479/U	J52472	6625-00-495-3279	E35, E82
AN/GRM-50A	J52472	NONE	E35, E82
CC: SG-479A/U	J52472	NONE	E35, E82
AN/GRM-50B	J52472	NONE	E35, E82
CC: SG-479B/U	J52472	6625-00-819-0472	E35, E82
AN/GRM-50C	J52472	6625-00-003-3238	E35, E82
CC: SG-479C/U	J52472	6625-00-762-3786	E35, E82
AN/GRM-103	J53682	6625-00-868-8352	P3, E35, E36
CC: SG-297/U	J53682	6625-00-868-8362	P3, E35, E36
AN/URM-48	J52960	6625-00-553-1178	P3, E35, E36
CC: SG-12/U	J54604	6625-00-669-0124	P3, E35, E36
AN/USM-212	NONE	6625-00-902-7579	P2, E35
AN/USM-272	NONE	6625-00-957-0421	P2, E35
CC: SG-768/U	NONE	6625-00-054-3480	P2, E35
AN/USM-313	NONE	4931-00-777-1384	P2, E35
SG-1038/U	NONE	6625-00-411-4558	P2, E35
SG-12/U	J54604	6625-00-669-0124	P3, E35, E36
SG-20/U	NONE	6625-00-240-6136	P2, E35

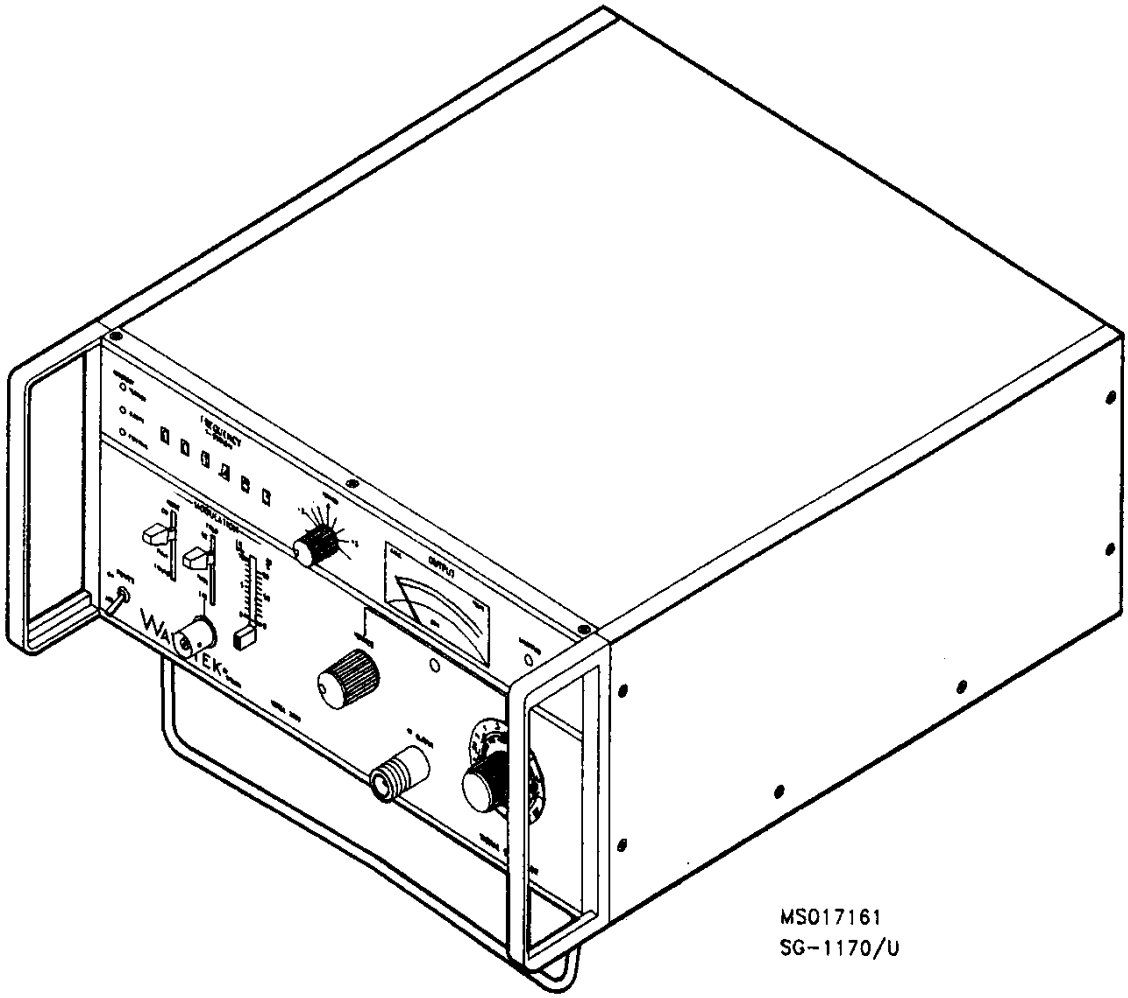
Condition Codes

Code	Condition
E35	This item is also replaceable by the SG-1170. Issue SG-1144 until stock is exhausted. No additional procurements for SG-1144's are anticipated.
E36	Replaced by SG-1144 (or SG-1170, see E54) when used in all applications other than FM radio repair. When used to repair FM radios, the AN/GRM-114A can replace this item at bench positions designated for the AN/GRM-114A.
E82	The AN/GRM-50 series has an output of +22.5 dBm (3 volts) into 50 ohms. The SG-1144 and the SG-1170 both have output voltages of +13 dBm (1 volt) into 50 ohms; the AN/GRM-114A, 0 dBm (0.1 volts) into 50 ohms. Where the AN/GRM-50 series is used to support AM radios with high output power that require 3 volts RMS stimulus to drive audio circuitry (such as the AN/GRC-106), units will retain the AN/GRM-50's. Units that do not require output voltages above +13 dBm for testing end systems such as the AN/VRC-12 and AN/PRC-77 radios should purge the AN/GRM-50's with the SG-1144 or SG-1170 or AN/GRM-114A (also see E36, E37, and E54.)
P2	Item does not have LIN, however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.

4-36. SIGNAL GENERATOR SG-1170/U

LIN: S48187
Manufacturer: Wavetek
BOIP: C051AA

NSN: 6625-01-120-3501
Model: 3001-608
CAGE: 34280



*****OBSOLETE*****

The SG-1170/U has been replaced by the SG-1207A/U.

SPECIFICATIONS

Bandwidth: 1 kHz to 520 Mhz

Standard Stability: 0.2 PPM/Hour

Internal Modulation Frequencies: 400 and 1 kHz

AM Depth: 0 to 90%

External AM Modulation Frequency: DC to 20 kHz

FM Deviation: 0-100 kHz

External FM Rate: 50 Hz to 30 kHz

Output Impedance: 50 ohms

Output Level: -137 to +13 dBm

Voltage Range: .03 µV to 1 V

Dimensions: 5.25” H x 12” W x 13.75” D

Weight: 28.6 lbs

Manuals: TB 9-6625-2094-35
TM 11-6625-3029-14
TM 11-6625-3029-24P
DMWR 11-6625-3029

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-26	J52686	6625-00-355-5325	-
AN/URM-26A	J52686	6625-00-643-1541	-
CC: SG-45A	NONE	NONE	-
AN/URM-26B	J52686	6625-00-557-0523	-
CC: SG-117	NONE	NONE	-
AN/URM-26C	J52686	6625-00-491-1132	-
AN/URM-70	J53645	6625-00-519-2104	-
CC: SG-3/U	NONE	6625-00-519-2351	-
AN/USM-44	J53782	6625-00-669-4031	E12
CC: TS-510/U	J53782	6625-00-519-1645	E12
AN/USM-44A	J53782	6625-00-539-9685	E12
CC: TS-510A/U	NONE	6625-00-557-5966	E12
AN/USM-44B	J53782	6625-00-176-5708	E12
CC: TS-510B/U	J53782	6625-00-176-5708	E12
AN/USM-44C	J53782	6625-00-138-7773	-
CC: TS-510C/U	NONE	NONE	-
SG-969/U	J56369	6625-00-400-8228	-
TS-497/URR	J57618	6625-00-669-0258	-
TS-497A/URR	J57618	6625-00-643-3508	-
TS-497B/URR	J57618	6625-00-812-2898	-
TS-497C/URR	J57618	6625-00-684-5203	-

Items Replaced and Removed from Field – Continued

Designator	LIN	NSN	Condition Code
TS-510/U	V61038	6625-00-509-1645	E12
TS-510A/U	V61038	4935-00-789-2964	E12
TS-510B/U	V61038	NONE	E12
TS-510C/U	V61038	NONE	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
102A	G40169	6625-00-296-3536	I1
202E	NONE	6625-00-783-6272	P2, I1
608CR	NONE	6625-00-809-7853	P2, E12, I1
608E	NONE	6625-00-857-4352	P2, E12, I1
AN/GRM-50	J52472	6625-00-868-8353	P3, E54, E82
CC: SG-479/U	J52472	6625-00-495-3279	P3, E54, E82
AN/GRM-50A	J52472	NONE	P3, E54, E82
CC: SG-479A/U	J52472	NONE	P3, E54, E82
AN/GRM-50B	J52472	NONE	P3, E54, E82
CC: SG-479B/U	J52472	6625-00-819-0472	P3, E54, E82
AN/GRM-50C	J52472	6625-00-003-3238	P3, E54, E82
CC: SG-479C/U	J52472	6625-00-762-3786	P3, E54, E82
AN/URM-103	J53682	6625-00-868-8352	P3, E54, E36
CC: SG-297/U	J53682	6625-00-868-8362	P3, E54, E36
AN/URM-181	V94466	6625-00-740-0344	P2
CC: SG-871/U	NONE	6625-00-983-6712	P2
AN/URM-25BD	J52549	6625-00-649-5193	P3, E54, E103
AN/URM-25D	J52549	6625-00-494-8565	P3, E54, E103
CC: SG-85	NONE	6625-00-669-0256	P3, E54, E103
AN/URM-25F	J52549	6625-00-643-1548	P3, E54, E103
CC: SG-103	NONE	6625-00-510-1827	P3, E54, E103
AN/URM-25H	J52549	6625-00-934-8732	P3, E54, E103
CC: SG-85B	NONE	NONE	P3, E54, E103
AN/URM-25J	J52549	6625-00-922-5968	P3, E54, E103
CC: SG-85C	NONE	NONE	P3, E54, E103
AN/URM-48	J52960	6625-00-553-1178	P3, E54, E36
CC: SG-12/U	J54604	6625-00-669-0124	P3, E54, E36
AN/USM-212	NONE	6625-00-902-7579	P2, E54
AN/USM-272	NONE	6625-00-957-0421	P2, E54
CC: SG-768/U	NONE	6625-00-054-3480	P2, E54
AN/USM-313	NONE	4931-00-777-1384	P2, E54
SG-1038/U	NONE	6625-00-411-4558	P2, E54
SG-1144	G56451	6625-01-075-8478	P1, I6
SG-12	J54604	6625-00-669-0124	P3, E54, E36
SG-20/U	NONE	6625-00-240-6136	P2, E54
SG-309()GRC-47	NONE	6625-00-538-9879	P2
SG-975/U	NONE	6625-00-089-6697	P2

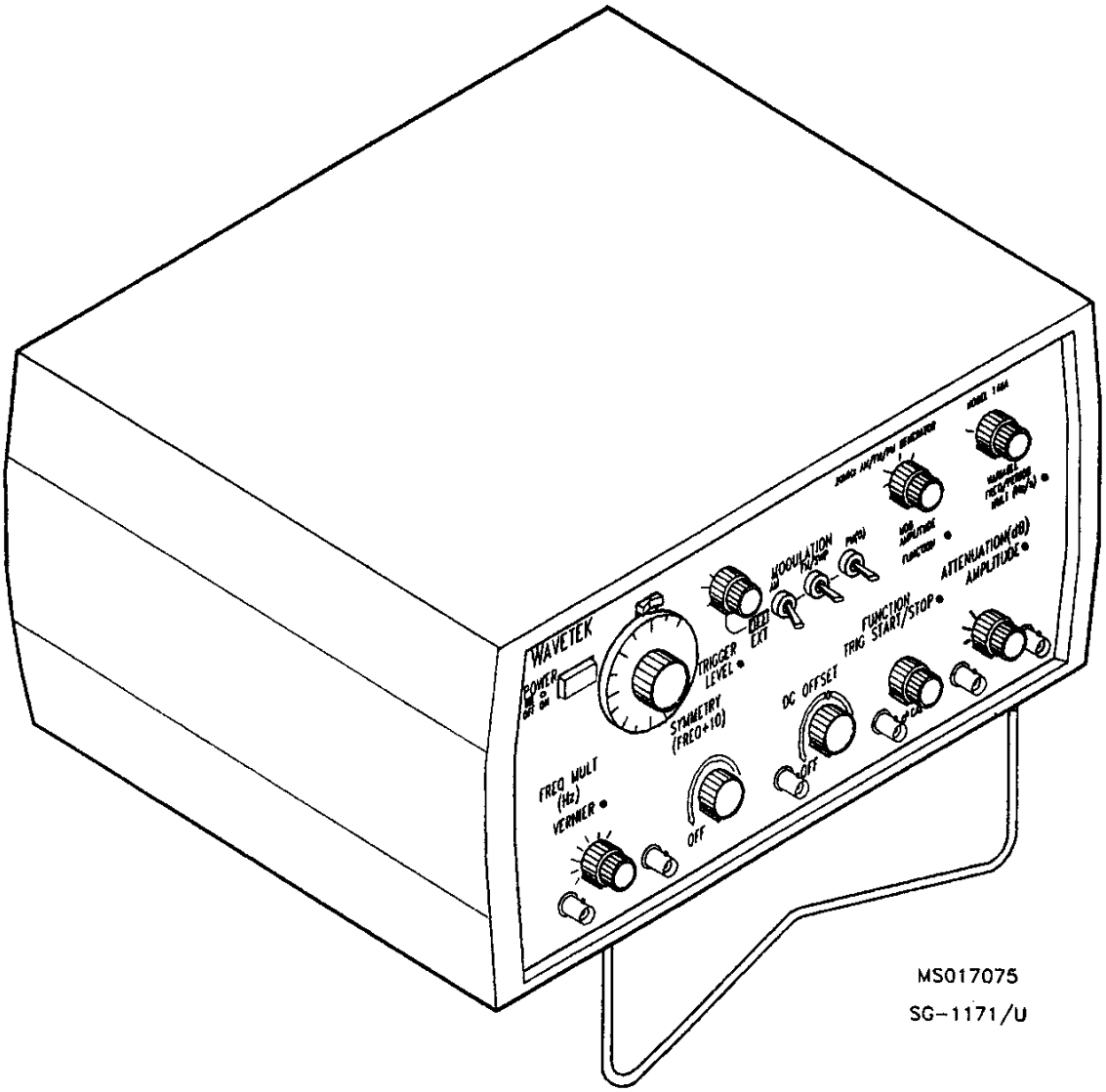
Condition Codes

Code	Condition
E12	The AN/USM-44, AN/USM-44A, AN/USM-44B, TS-510/U, TS-510A/U and the TS-510B/U are various configurations of the Hewlett Packard model 608. The TS-510's are the signal generators, while the AN/USM-44's are the signal generators with case and cables.
E36	Replaced by SG-1144 (or SG-1170, see E54) when used in all applications other than FM radio repair. When used to repair FM radios, the AN/GRM-114A can replace this item at bench positions designated for the AN/GRM-114A.
E54	These items are also on the SG-1144's replacement list. If item has not already been replaced by the SG-1144, and supplies of the SG-1144 are depleted, replacement item is the SG-1170.
E82	The AN/GRM-50 series has an output of +22.5 dBm (3 volts) into 50 ohms. The SG-1144 and the SG-1170 both have output voltages of +13 dBm (1 volt) into 50 ohms; the AN/GRM-114A, 0 dBm (0.1 volts) into 50 ohms. Where the AN/GRM-50 series is used to support AM radios with high output power that require 3 volts RMS stimulus to drive audio circuitry (such as the AN/GRC-106), units will retain the AN/GRM-50's. Units that do not require output voltages above +13 dBm for testing end systems such as the AN/GRM-50's with the SG-1144 or SG-1170 or AN/GRM-114A (also see E36, E37, and E54).
E103	The SG-1170/U will replace this item for all applications except where it is used to support testing of the AN/ARN-83. These units will retain this item.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I6	This is a TEMOD item, however, no additional procurements of SG-1144's are anticipated. Use SG-1170 as replacement (i.e., SG-1144 will not be purged by SG-1170; additional requirements for SG-1144's will be satisfied with SG-1170's).
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item).
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.

4-37. FUNCTION GENERATOR SG-1171/U

LIN: S65581
Manufacturer: Wavetek
BOIP: C028AA

NSN: 6625-01-133-6160
Model: 148A
CAGE: 34280



*****OBSOLETE*****

Additional requirements for the SG-1171/U will be satisfied with the SG-1288/G. However, the SG-1288/G will not remove the existing SG-1171/U from the field.

SPECIFICATIONS

Bandwidth: .0002 Hz to 20 MHz

Output: 15 V P-P amplitude into 50 ohms for sine, triangle and square waves (0 to 80 dB)

DC Offset: +7.2 VDC

Dial Accuracy (Frequency): ± 1% of setting +1% of full range on X100 through X1M ranges
± 2% of setting +2% of full range on X10M ranges

Rise and Fall Times: Less than 5 ns

Pulse Width: .1 µs to 5 s

Dimensions: 5.25” H x 11.25” W x 20.75” D

Weight: 10 lbs

Manuals: TB 9-6625-2102-35
TM 11-625-3051-12
TM 11-6625-3051-24P
TM 11-6625-3051-40
DMWR 11-6625-3051

Remarks: Unfilled requirements for the SG-1171/U will be satisfied by the SG-1288 whose specifications are equal to or better than the SG-1171/U.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/USM-205	J53944	6625-00-788-9672	E25
CC: SG-553/U	NONE	NONE	E25
AN/USM-205A	J53944	6625-01-007-4796	E25
CC: SG-553A/U	NONE	6625-00-376-0275	E25
O-850/U	N24943	6625-00-583-0090	E25
SG-1133	G54124	6625-00-028-4989	E25
SG-298/U	J55700	6625-00-843-0971	E25, E101
SG-298A/U	J55700	6625-00-997-2471	E25, E101
SG-299/U	J55837	6625-00-624-3516	E25
SG-299A/U	J55837	6625-00-897-0060	E25
SG-299B/U	J55837	6625-00-808-5584	E25
SG-299C/U	J55837	6626-00-916-8541	E25
SG-299D/U	J55837	6625-00-150-6338	E25
SG-299E/U	J55837	NONE	E25
SG-321/U	J55944	6625-00-674-7097	E25, E101
SG-321A/U	J55944	6625-00-880-5791	E25, E101
SG-321B/U	J55944	6625-00-935-6924	E25, E101
SG-590	J56248	6625-00-832-3931	E25
SG-632	J56282	6625-00-869-9026	E25
SG-632B/U	J56282	6625-00-933-7840	E25
SG-747/U	J56362	6625-00-118-6736	E25
SG-763/U	J56367	6625-00-865-1261	E25
SG-763A/U	J56367	6625-00-165-1261	E25

Items Replaced and Removed from Field – Continued

Designator	LIN	NSN	Condition Code
TS-433A	H02231	6625-00-223-5108	E25, E100

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
106 TYPE 2	NONE	6625-00-455-5855	P2, I1, E25
107	NONE	6625-00-813-2426	P2, I1, E25
3310A	NONE	6625-00-466-0586	P2, I1, E25
651A	NONE	6625-00-999-5261	P2, I1, E25
AN/USM-256	NONE	6625-00-087-4499	P2, E25
AN/USM-264	NONE	6625-00-935-4214	P2, E25
CC: SG-763/U	J56367	6625-00-054-3483	P3, E25
AN/USM-358	NONE	6625-00-455-7302	P2, E25
F55A	NONE	6625-01-057-5836	P2, I1, E25
FG-501	NONE	6625-00-140-7817	P2, I1, E25
SG-106/U	NONE	6625-00-812-4104	P2, E25
SG-1102/U	NONE	6625-00-148-8289	P2, E25
SG-1128	V82615	6625-00-450-7590	P3, E7, E25
SG-15/PCM	J54878	6625-00-229-1087	T3, E25, P3, E83
SG-502	NONE	6625-00-520-5117	P2, I1, E25
SG-578/U	NONE	6625-00-539-8584	P2, E25
SG-632A/U	J56282	6625-00-493-3023	E25
SG-769/U	NONE	6625-00-257-7689	P2, E25
SG-770/U	NONE	6625-00-073-7416	P2, E25
SG-772/G	NONE	6625-00-935-1330	P2, E25
SG-970/U	NONE	6625-00-145-1193	P2, E25
SG-984/U	NONE	6625-00-183-0169	P2, E25

Condition Codes

Code	Condition
E7	The SG-1128 has balanced output impedance, 135- and 600-ohm output impedances and has a calibrated output attenuator. The TEMOD item does not have any of these features. The SG-1128 will be purged by the TEMOD item where these features are not required. The only known user that requires these features is the Information Systems Command.
E25	This item is being replaced by the SG-1171. The SG-1288 is also capable of replacing subject item. Units with SG-1171 will retain it as a standard LCC A item, while additional requirements will be satisfied by the SG-1288.
E83	This item is on the replacement list of AN/USM-485, SG-1288 and SG-1171. If item is used for telephone testing applications, replace with AN/USM-485. If used for general purpose applications, replace with SG-1288 or SG-1171 (see condition code E25).

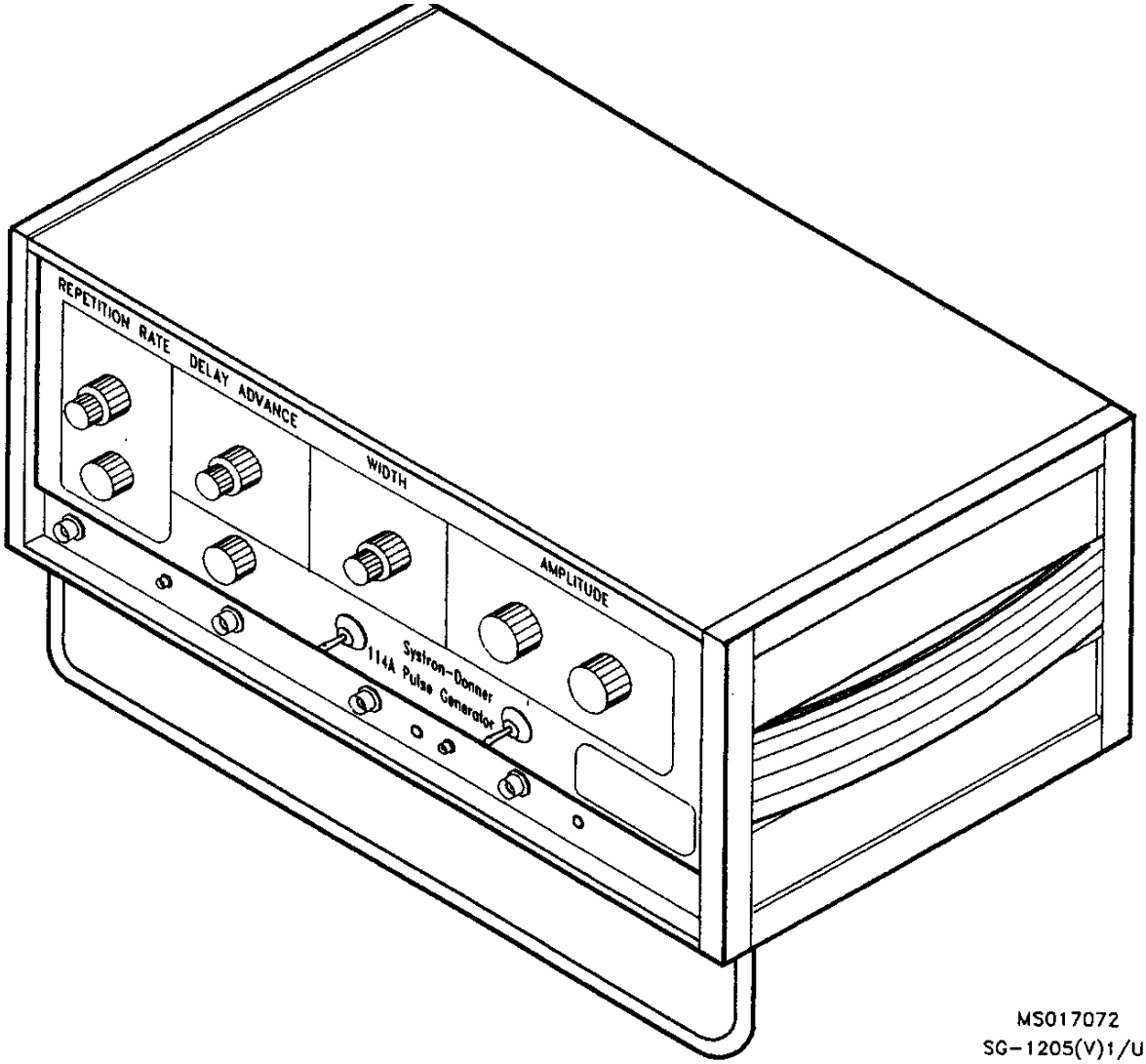
Condition Codes – Continued

Code	Condition
E100	This item is replaced by the TEMOD item when used as a function generator only.
E101	The SG-1171/U will replace this item in all applications except where it is used to perform AH-1 SCAS testing. These units will retain this item until the SG-1288/U is fielded.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue, not one of performance.)

4-38. PULSE GENERATOR SG-1205(V)1/U

LIN: S41465
Manufacturer: Systron-Donner Corp.
BOIP: C019AA

NSN: 6625-01-137-5369
Model: 114A-400
CAGE: 52542



MS017072
SG-1205(V)1/U

SPECIFICATIONS

Pulse Repetition Rate: 10 Hz to 1MHz

Pulse Width: 50 ns to 10 ms

Output Level: 80 mV to 100 V into 50-ohm load

Rise Time: 13 to 17 ns

Fall Time: 13 to 17 ns

Delay Range: 1 µs to 10 ms

Duty Cycle: 10 to 50%

Output Impedance: 50 ohm to 1.5 K ohm

External Input Impedance: 1 Megohm

External Repetition Rate: .5 to 40 V

External Sensitivity: .5 to 40 V

Pulse Aberration: 2 to 6%

Sync Output Signal: 25 V P-P

Sync Output Width: 400 ns

Sync Output Rise Time: Less than 50 ns

Sync Output Fall Time: Less than 300 ns

Dimensions: 5.25” H x 16.25” W x 17” D

Weight: 25 lbs

Manuals:
TB 9-6625-2112-35
TM 11-6625-3050-12
TM 11-6625-3050-24P
TM 11-6625-3050-40
DMWR 11-6625-3050

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/PPM-1	J33711	6625-00-503-0661	-
CC: SG-69	J34328	6625-00-545-7953	-
AN/UPM-15	J33780	6625-00-643-5969	-
CC: TS-592A	NONE	6625-00-519-7600	-
AN/UPM-15A	J33780	6625-00-682-2581	-
CC: SG-343	NONE	6625-00-892-3313	-
SG-69/PPM-1	J34328	6625-00-545-7953	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
TS-592A/UPM-15	NONE	6625-00-519-7600	P2

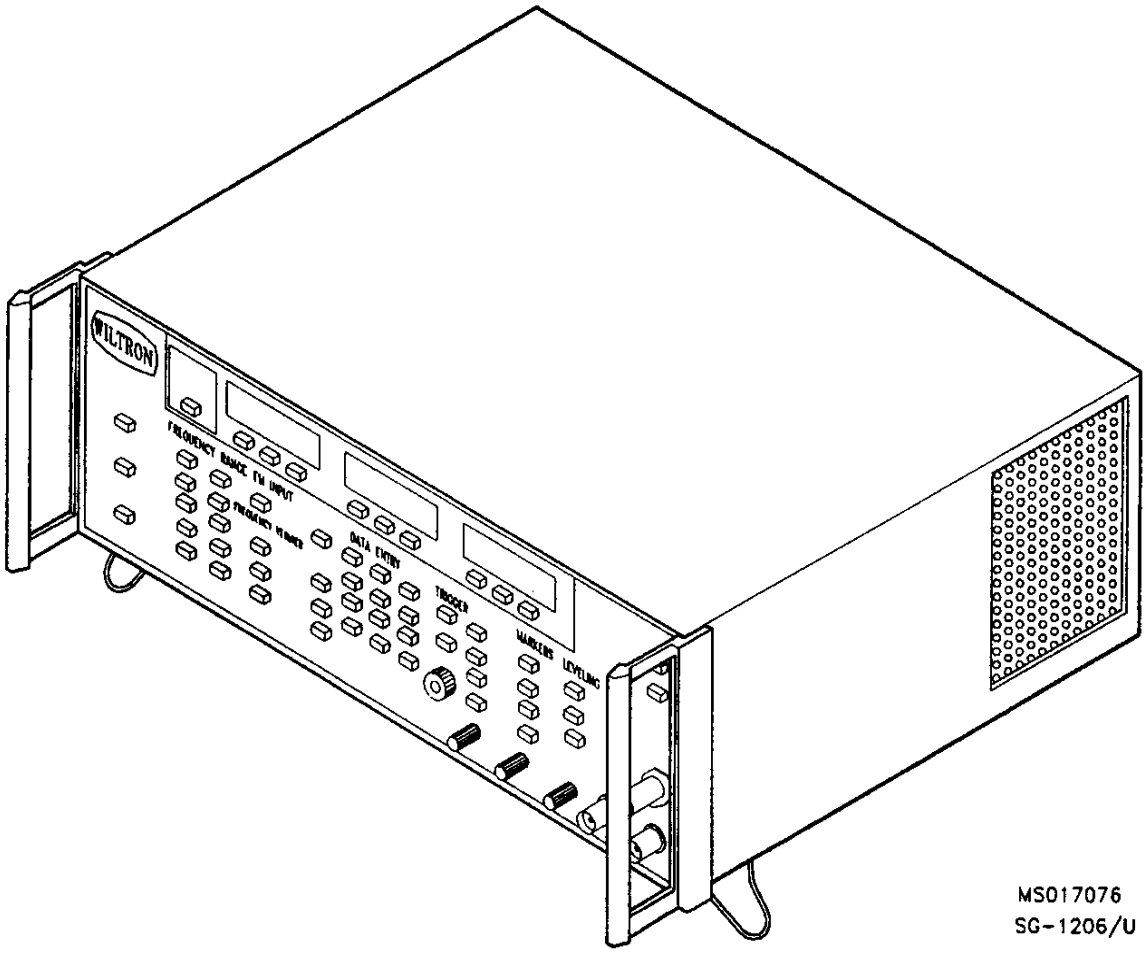
Condition Codes

Code	Condition
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.

4-39. SWEEP GENERATOR SG-1206/U

LIN: G40175
Manufacturer: Wiltron
BOIP: C108AA

NSN: 6625-01-288-6361
Model: 6647M
CAGE: 20944



SPECIFICATIONS

Frequency Range: 10 MHz to 20 GHz

Output Amplitude: -100 to +13 dBm, to 2 GHz
-100 to +10 dBm, to 18 GHz
-100 to +7 dBm, to 20 GHz

VSWR: 1.5:1, to 2 GHz
2.1:1, to 20 GHz

Sweep Time: 10 ms to 99 s

Other Features Include: INT/EXT AM, EXT FM and is IEEE-488 controllable.

Item Contains Following Sweep Modes: Full, F1-F2, Delta F, and Market Sweep

Manuals: TB 9-6625-2259-35
TM 11-6625-3231-12
TM 11-6625-3231-24P
TM 11-6625-3231-40

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
650	J51690	6625-00-874-4517	I1
AN/USM-203	J58919	6625-00-935-0145	-
AN/USM-203A	J58919	6625-00-148-8185	-
AN/USM-220	J53987	6625-00-903-4860	-
CC: AN/USM-219	NONE	NONE	-
CC: 0-1307	NONE	NONE	-
CC: 0-1308	NONE	NONE	-
CC: 0-1309	NONE	NONE	-
AN/USM-222	J53997	6625-00-984-5770	-
CC: AN/USM-219	NONE	NONE	-
CC: O-1306	NONE	NONE	-
CC: O-1307	NONE	NONE	-
CC: O-1310	NONE	NONE	-
SG-1121(V)1/U	P60861	6625-00-007-6661	-
SG-336/U	V58577	6625-00-669-2395	-
SG-407/U	J58851	6625-00-868-8361	-
SG-668P/USM-219	NONE	6625-00-410-2508	-
SG-92/U	J58303	6625-00-546-6662	-
SG-92A	J58303	NONE	-
SG-987	J58953	6625-00-928-3395	-
SG-990	J58869	6625-00-947-7492	-
TS-452/U	J57481	6625-00-708-2946	-
TS-452A/U	J57481	6625-00-538-9303	-
TS-452B/U	J57481	6625-00-643-1706	-
TS-452C/U	J57481	6625-00-643-1591	-
TS-452D/U	J57481	6625-00-828-6410	-
TS-452E/U	J57481	6625-00-115-6941	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1062	NONE	6625-01-185-5409	I1, P2
112D	NONE	NONE	I1, P2
2002A3-B3	NONE	6625-01-159-2225	I1, P2
240A	NONE	NONE	I1, P2
3744A	NONE	NONE	I1, P2
4310AK	NONE	NONE	P2
61084D	NONE	6625-01-103-2493	I1, P2
610D	NONE	6625-01-041-9399	I1, P2
641B	NONE	NONE	I1, P2
641K	NONE	6625-00-948-4734	I1, P2
651AK-53	NONE	NONE	I1, P2, M6
652CK	NONE	NONE	I1, P2, M6
653CK-S2	NONE	NONE	I1, P2, M6
6600	NONE	6625-01-017-8583	I1, P2
691A	NONE	NONE	I1, P2
694C	NONE	6625-00-931-3210	I1, P2
8620A	NONE	NONE	I1, P2, M7
8620C	NONE	NONE	I1, P2, M7
86210B	NONE	6625-01-008-4609	I1, P2, M6
8621A	NONE	6625-00-773-5449	I1, P2, M6
86290A	NONE	6625-00-138-9905	I1, P2, M6
86320A	NONE	6625-00-321-5142	I1, P2, M6
86330A	NONE	6625-00-321-5130	I1, P2, M6
86341B	NONE	NONE	I1, P2, M6
86342A	NONE	6625-00-321-5123	I1, P2, M6
86350A	NONE	6625-00-773-5683	I1, P2, M6
8690A	NONE	6625-00-928-0364	I1, P2, M7
8691A	NONE	6625-00-482-1742	I1, P2, M6
8692A	NONE	6625-00-195-6765	I1, P2, M6
8695A	NONE	6625-00-928-0368	I1, P2, M6
8696A	NONE	6625-00-137-6794	I1, P2
8697A	NONE	6625-00-413-5622	I1, P2
AL-650	NONE	4935-00-106-9684	P2
AN/USM-221	J53992	6625-00-984-5769	-
CC: AN/USM-219	NONE	NONE	P2
CC: 0-1307	NONE	NONE	P2
CC: 0-1308	NONE	NONE	P2
AN/USM-274	NONE	6625-00-786-6777	P2
AN/USM-308/V1	J58125	6625-00-442-3470	E3, M7
AN404	NONE	NONE	I1, P2
CP-932/B	NONE	6625-00-036-7669	P2
L5XA	NONE	NONE	I1, P2, M6
L5XA1	NONE	NONE	I1, P2, M6
LT006	NONE	NONE	I1, P2
MX-8364A	J58125	6625-00-442-3470	E3, M7
O-1637/U	NONE	6625-00-988-6099	P2
PL-1239A/USM-308	P11094	6625-00-450-7594	M1, E4, M5
PL-1240/USM-308	NONE	NONE	P2
PL-1241A/USM-308	P11157	6625-00-435-3143	M1, E4, M5

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
PL-1241B/USM-308	P11157	5895-00-415-6338	M1, E4, M5
PL-1242/USM-308(V)	P11096	6625-00-251-5212	M1, E4, M5
PL-1243/USM-308(V)	P11097	6625-00-422-4311	M1, E4, M5
PL-1304/USM-308(V)	P11197	6625-00-444-2327	M1, E4, M5
PL-1343/U	N27263	5895-00-575-0802	M6
SG-367	NONE	NONE	P2
SG-575	NONE	6625-00-070-9275	P2
SG-595/USM-203	NONE	6625-00-935-8109	P2
SG-677/U	J58948	6625-00-957-0439	P1
SG-677A	J58948	6625-01-074-4337	P1
SG-681	NONE	6625-00-837-0362	-
SG-888	NONE	6625-00-133-7526	P2
SG-972	NONE	6625-00-831-2919	P2
SH-1	NONE	6625-00-965-8161	I1, P2, M6
SM-2000D	NONE	NONE	I1, P2
XR-1500	NONE	NONE	I1, P2

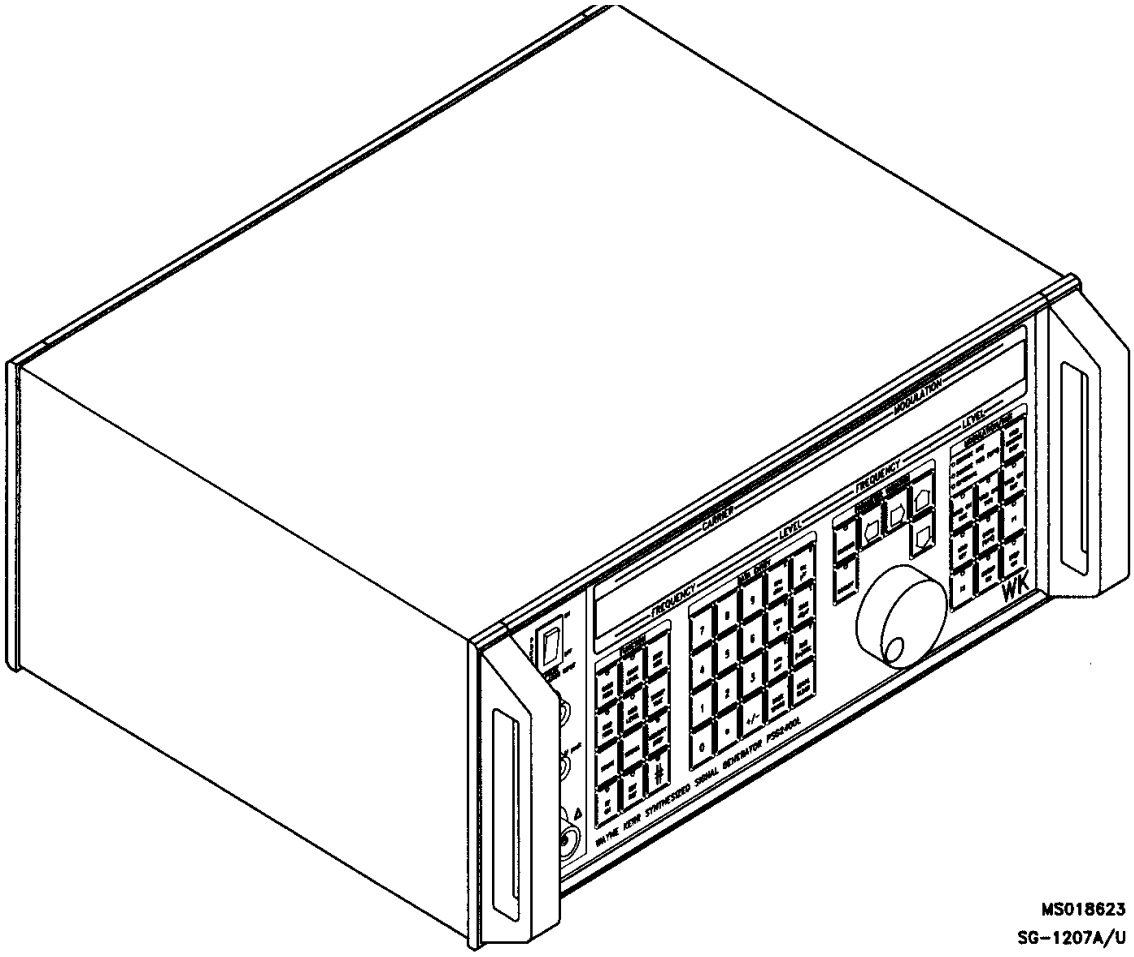
Condition Codes

Code	Condition
E3	The MX-8364A and the AN/USM-308V1 are identical units.
E4	This plug-in is used with mainframe MX-8364A, AN/USM-308V1 or HP 8690A.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
M1	Item is a plug in module technically replaceable by TEMOD item but only when used with the mainframe/end item that is being replaced by TEMOD item.
M5	Replace plug-in and mainframe with SG-1206.
M6	Item is a plug-in that can be used with several mainframes. Do not replace plug-in alone with SG-1206. Replace plug-in and mainframe with SG-1206.
M7	Item is a mainframe. Do not replace mainframe alone with SG-1206. Replace mainframe and plug-ins (if plug-ins are listed on SG-1206 replacement listed) with SG-1206.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.

4-40. SIGNAL GENERATOR SG-1207A/U

LIN: S41715
Manufacturer: Wayne Kerr
BOIP: C076AA

NSN: 6625-01-436-9449
Model: PSG2400L
CAGE: 21066



MS018623
SG-1207A/U

SPECIFICATIONS

Bandwidth: 100 kHz to 2.0 GHz

Frequency Resolution: 100 Hz at all frequencies

Output Level: -125 to +16 dBm at all frequencies

Output Impedance: 50 ohms

Connector: Type N

Power Requirements: 115/220 VAC, 50-400 Hz

Other Features Include: Frequency modulation modes, output level, and most other functions can be remotely programmed through IEEE-488 interface bus.

Dimensions: 6.25” H x 17.0” W x 20.5” D

Weight: 30 lbs

Manuals: ETB 50034
TM 43-6625-911-14&P

Remarks: The SG-1207A/U has been distributed under the Total Package Fielding System. Under TPF the end item project code and the spares project codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-149	J53731	6625-00-903-3501	-
CC: SG-155	NONE	6625-00-903-3500	-
AN/URM-49	J53097	6625-00-669-5131	-
CC: TS-418B/U	NONE	6625-00-643-1546	-
AN/URM-49A	J53097	6625-00-553-7386	-
CC: TS-418C/UU	NONE	6625-00-155-8824	-
AN/URM-64-1	J53508	6625-00-283-9621	-
AN/URM-64-2	J53508	6625-00-553-0433	-
AN/URM-64A1	J53508	6625-00-542-6376	-
CC: TS-419A/U	NONE	6625-00-155-8846	-
AN/URM-64A2	J53508	6625-00-087-4795	-
AN/USM-213	J53974	6625-00-872-3215	-
CC: SG-644/U	NONE	NONE	-
AN/USM-213A	J53974	6625-00-935-4306	-
CC: SG-644A/U	NONE	NONE	-
SG-1170/U	S48187	6625-01-120-3501	-
SG-1144/U	G56451	6625-01-075-8478	-
SG-340A/G	J55992	6625-00-542-1292	-
TS-419U	J57207	6625-00-257-4817	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
8640B	NONE	NONE	E53
SG-1207/U	S41715	6625-01-233-8615	E54
SG-1093/U	J54125	6625-00-318-6304	E51
SG-1112(V)1/U	S48051	6625-00-566-3067	E52
SG-1112(V)2/U	S48119	4931-00-545-2344	E53

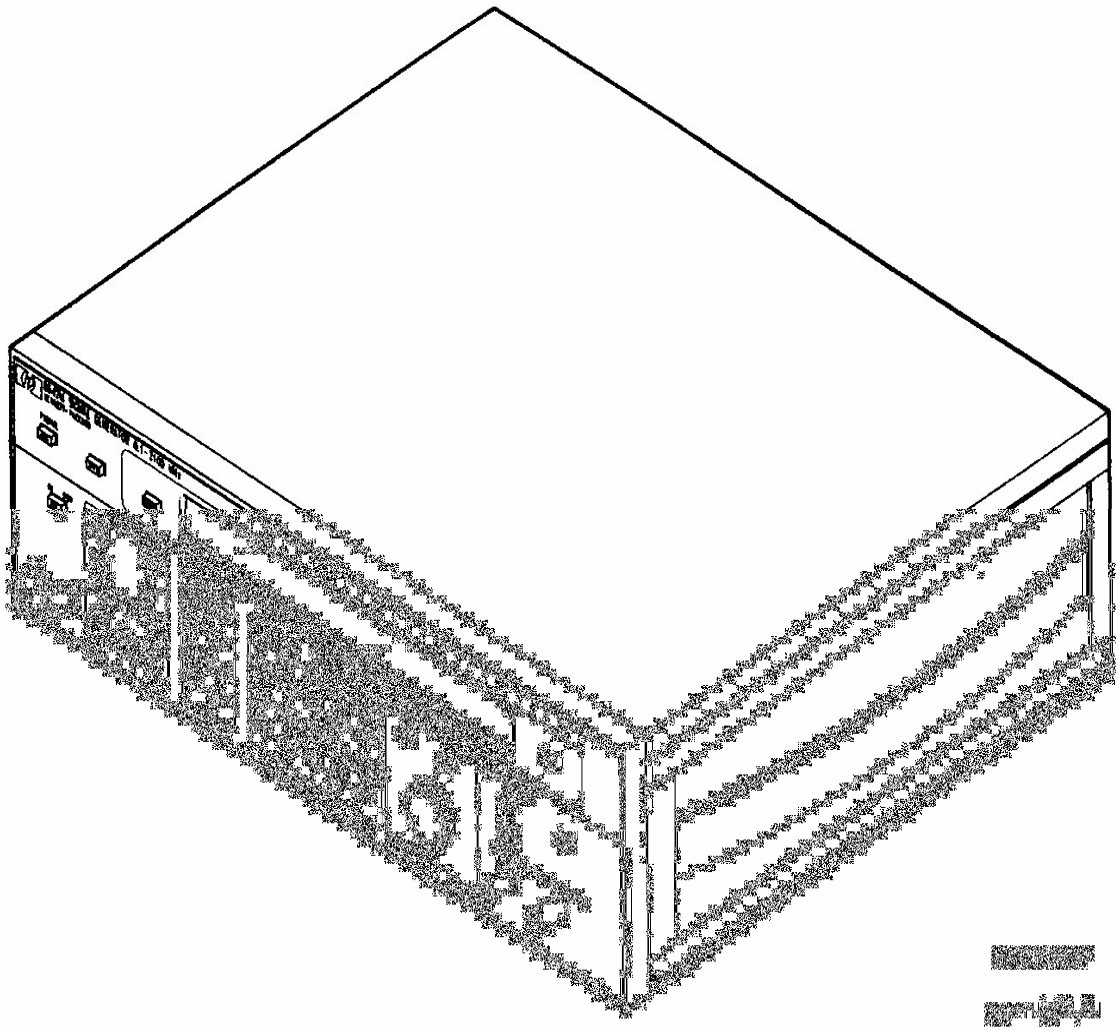
Condition Codes

Code	Condition
E51	This item is an HP 8640 which has a built in frequency counter from 20 Hz to 550 MHz. The TEMOD item does not have this capability. Replace with TEMOD item if counter is not required.
E52	This item is an HP 8640B w/opt 004 which is the avionics option. It also has a built in frequency counter. The TEMOD item has neither of these capabilities. If neither capability is required, replace with TEMOD item.
E53	This item is an HP 8640B w/opt 001 which has an internal frequency counter. The TEMOD does not have frequency counting capabilities. Replace with TEMOD item if frequency counter is not required.
E54	This item is a HP8642M which has a noise floor at -140 dBc/Hz at 3 MHz offset. Replace with TEMOD item if the noise floor is not required below -120 dBc/Hz at 3 MHz offset.

4-41. SIGNAL GENERATOR SG-1207/U

LIN: S41715
Manufacturer: Hewlett Packard
BOIP: C076AA

NSN: 6625-01-233-8615
Model: 8642M
CAGE: 28480



SPECIFICATIONS

Bandwidth: 100 kHz to 2.1 GHz

Frequency Resolution: 1 Hz at all frequencies

Output Level: -140 to +15 dBm at all frequencies

Output Impedance: 50 ohms

Connector: Type N

Power Requirements: 115/220 VAC, 50-400 Hz

Other Features Include: Frequency modulation modes, output level, and most other functions can be remotely programmed through IEEE-488 interface bus.

Dimensions: 5.25” H x 16.75” W x 24.3” D

Weight: 71.5 lbs

Manuals: TB 9-6625-2182-35
TM 11-6625-3165-14
TM 11-6625-3165-24P

Remarks: The SG-1207 has been distributed under the Total Package Fielding System. Under TPF the end item project code and the spares project codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-149	J53731	6625-00-903-3501	-
CC: SG-155	NONE	6625-00-903-3500	-
AN/URM-49	J53097	6625-00-669-5131	-
CC: TS-418B/U	NONE	6625-00-643-1546	-
AN/URM-49A	J53097	6625-00-553-7386	-
CC: TS-418C/U	NONE	6625-00-155-8824	-
AN/URM-64-1	J53508	6625-00-283-9621	-
AN/URM-64-2	J53508	6625-00-553-0433	-
AN/URM-64A1	J53508	6625-00-542-6376	-
CC: TS-419A/U	NONE	6625-00-155-8846	-
AN/URM-64A2	J53508	6625-00-087-4795	-
AN/USM-213	J53974	6625-00-872-3215	-
CC: SG-644/U	NONE	NONE	-
AN/USM-213A	J53974	6625-00-935-4306	-
CC: SG-644A/U	NONE	NONE	-
SG-340A/G	J55992	6625-00-542-1292	-
TS-419U	J57207	6625-00-257-4817	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
8640B	NONE	NONE	E53
SG-1093/U	J54125	6625-00-318-6304	P1, E51
SG-1112(V)1/U	S48051	6625-00-566-3067	P1, E52
SG-1112(V)2/U	S48119	4931-00-545-2344	P1, E53

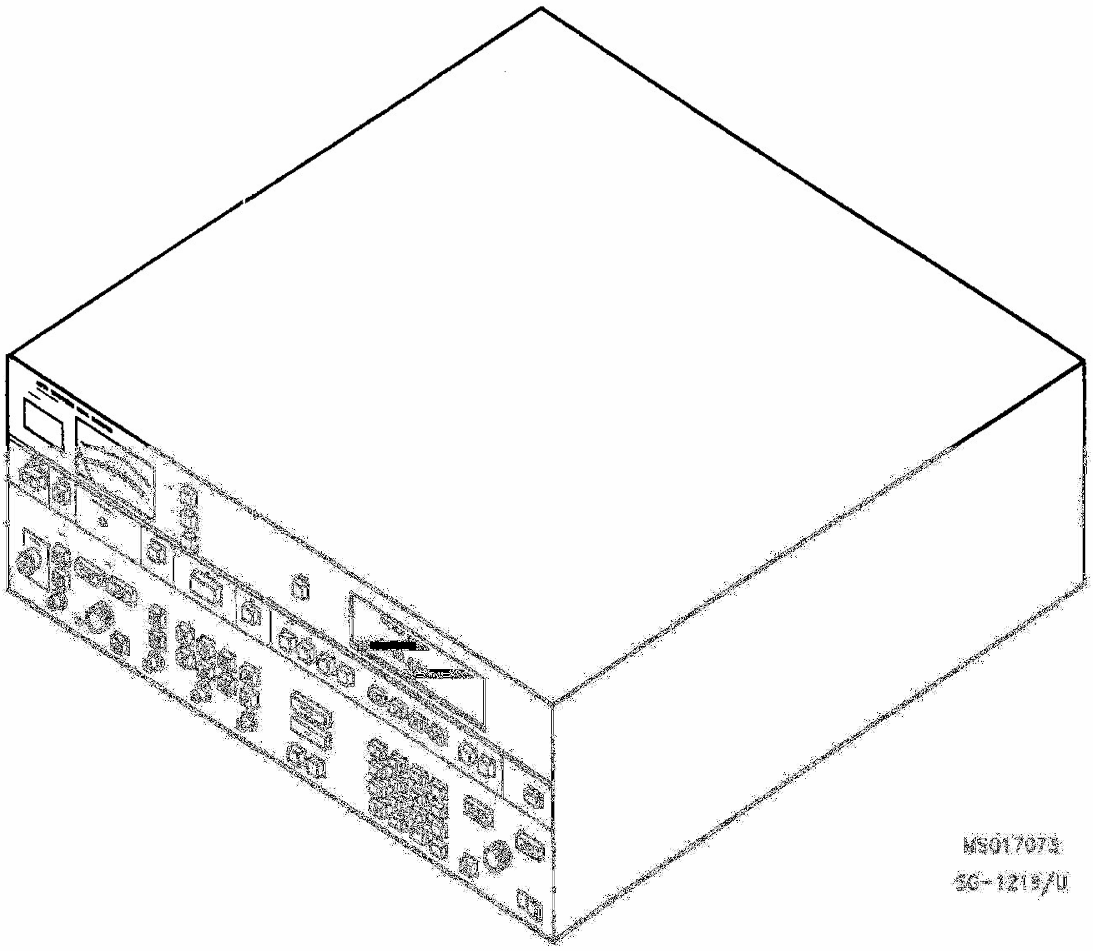
Condition Codes

Code	Condition
E51	This item is an HP 8640 which has a built in frequency counter from 20 Hz to 550 MHz. The TEMOD item does not have this capability. Replace with TEMOD item if counter is not required.
E52	This item is an HP 8640B w/opt 004 which is the avionics option. It also has a built in frequency counter. The TEMOD item has neither of these capabilities. If neither capability is required, replace with TEMOD item.
E53	This item is an HP 8640B w/opt 001 which is an internal variable audio oscillator from 20 Hz to 600 kHz. It also has an internal frequency counter. The TEMOD item has an internal modulation generator from 20 Hz to 100 kHz; it does not have frequency counting capabilities. Replace with TEMOD item if frequency counter and audio oscillator from 20 Hz to 600 kHz is not required.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)

4-42. SIGNAL GENERATOR SG-1219/U

LIN: S48255
Manufacturer: Hewlett Packard
BOIP: C079AA

NSN: 6625-01-188-7441
Model: 8673M
CAGE: 28480



SPECIFICATIONS

Frequency Range: 2 to 18 GHz

Resolution: 3 kHz

Output Level: -120 to 8 dBm

Pulse Width: 100 ns

AM Depth: 0 to 75% with 10 Hz to 50 kHz Frequency Response

FM Deviation: 10 MHz Peak with 50 Hz to 2 MHz Frequency Response

Output Impedance: 50 ohms

Front Connector: Type N

Power Requirements: 115/230 VAC, 50-400 Hz

Rise and Fall Time: 35 ns

Dimensions: 5.25” H x 17.5” W x 25.5” D

Weight: 64 lbs

Manuals: TB 9-6625-2155-35
TM 11-6625-3143-12
TM 11-6625-3143-24P
TM 11-6625-3143-40

Remarks: The SG-1219/U has been distributed under the Total Package Fielding (TPF) System. Under TPF the end item project code and the spares project codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/UPM-60	V84602	6625-00-569-0266	-
CC: TS-743	NONE	NONE	-
AN/UPM-60A	V84602	6625-00-569-0266	-
CC: TS-743A	NONE	NONE	-
AN/URM-61	V53371	6625-00-699-4488	-
CC: TS-403A/U	J56933	6625-00-539-9495	-
AN/URM-61A	J53371	6625-00-519-2056	-
CC: TS-403B/U	J56933	6625-00-620-4371	-
AN/USM-47	S72078	6625-00-555-2263	-
CC: SG-227	NONE	NONE	-
AN/USM-48	J52960	6625-00-553-1178	-
CC: SG-228	NONE	NONE	-
TS-155/UP	J56385	6625-00-192-5085	-
TS-155A/UP	J56385	6625-00-192-5085	-
TS-155B/UP	J56385	6625-00-192-5085	-
TS-155C/UP	J56385	6625-00-643-1589	-
TS-155E/UP	J56385	6625-00-649-5257	-
TS-403A/U	J56933	6625-00-539-9495	-

Items Replaced and Removed from Field – Continued

Designator	LIN	NSN	Condition Code
TS-403B/U	J56933	6625-00-620-4371	-
TS-621U	J58029	6625-00-649-2036	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1107	NONE	NONE	P2, I1
1709A	NONE	6625-00-494-4057	P2, I1
1710	NONE	NONE	P2, I1
2650A	NONE	6625-00-832-6706	P2, I1
616B	NONE	6625-00-752-8622	P2, I1
618BR	NONE	6625-00-886-4971	P2, I1
AN/URM-170	J53721	6625-00-883-3256	P3, E33
CC: SG-756	NONE	NONE	P3, E33
AN/URM-206	S72214	6625-01-077-8503	P3, E32
CC: SG-1145/U	NONE	6625-01-077-8502	P3, E32
AN/URM-44	J52823	6625-00-643-2811	P3, E32
CC: TS-622	NONE	6625-00-643-3517	P3, E32
AN/URM-44A	J52823	6625-00-990-7700	P3, E32
CC: TS-622A	NONE	6625-00-649-5192	P3, E32
AN/URM-52	J53234	6625-00-556-8107	P3, E33
AN/URM-52A	J53234	6625-00-592-5742	P3, E32
AN/URM-52B	J53234	6625-00-965-1501	P3, E32
SG-1174/U	Z73647	6625-01-075-8479	P3, E33
SG-676/G	NONE	6625-00-914-9882	P2
SG-800	NONE	5905-00-815-2355	P2
SG-944/U	J56371	6625-00-107-8173	P3, E32

Condition Codes

Code	Condition
E32	a) Units authorized an AN/URM-206 and/or an AN/URM-44 and/or an AN/URM-44A and/or an SG-944 in addition to any other item on the SG-1219's replacement list without condition codes will receive an SG-1219 (quantity received will be determined by a bench top analysis). Units authorized an AN/URM-206 only will retain it. b) Units authorized an AN/URM-44 and/or an AN/URM-44A and/or an SG-944 without having authorization for any other item on the SG-1219's replacement list without condition codes will receive an AN/URM-206. The AN/URM-206's removed from the field as a result of a) will be redistributed to those units describe in b).

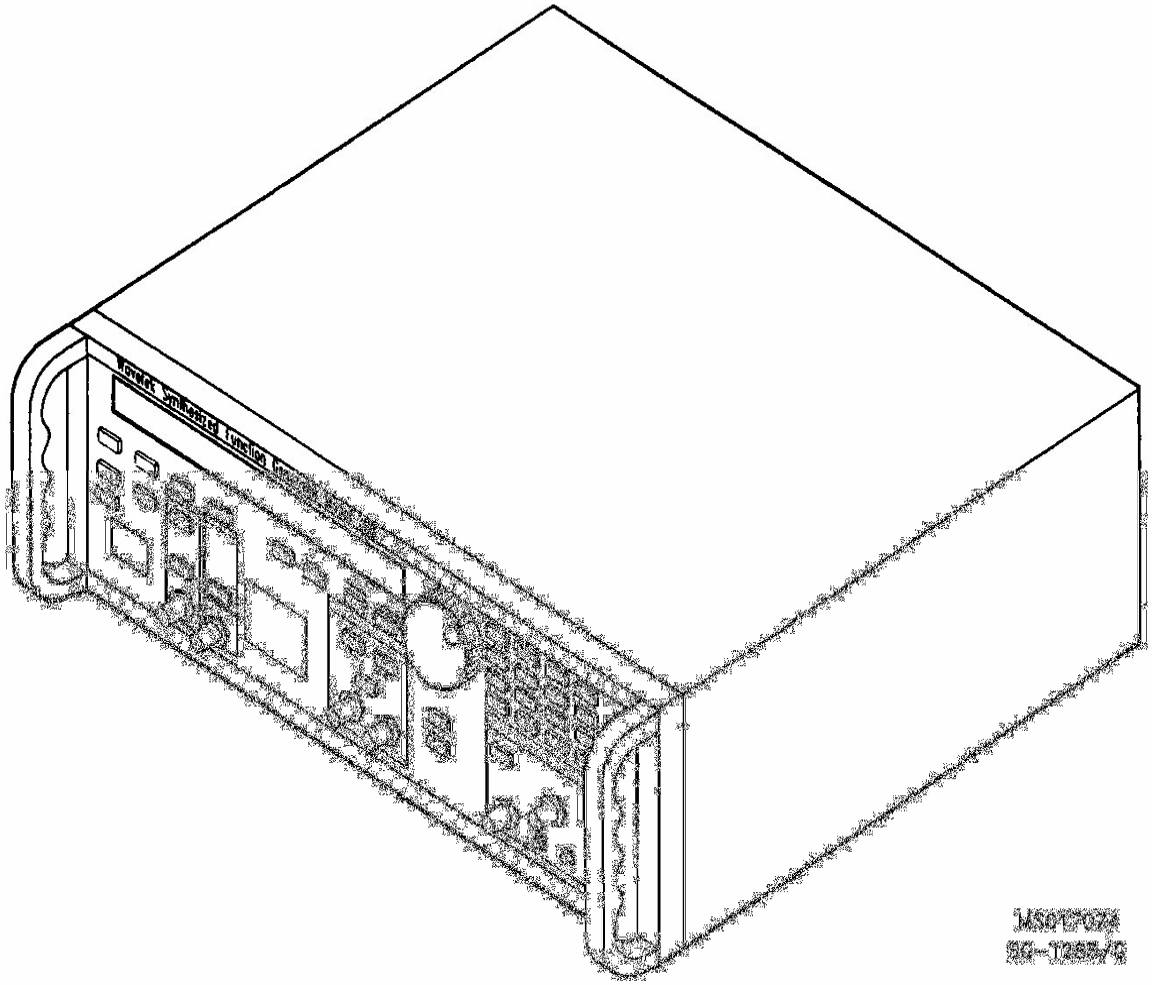
Condition Codes – Continued

Code	Condition
E33	Units authorized an SG-1174 and/or an AN/URM-52 and/or an AN/URM-170 in addition to any other item on the SG-1219's replacement list without condition codes will receive an SG-1219. Units authorized any combinations of the above mentioned three pieces of TMDE without having authorization for any other item on the SG-1219's replacement list without condition codes will not receive an SG-1219.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.

4-43. SIGNAL GENERATOR SG-1288/G

LIN: S48323
Manufacturer: Wavetek
BOIP: C083AA

NSN: 6625-01-276-9421
Model: 288
CAGE: 34280



SPECIFICATIONS

Frequency Range: .002 Hz to 20.00 MHz

Rise/Fall Time: 25 ns for square and triangle waves

Output Amplitude: 2 mV to 30 V P-P open circuit

Output Impedance: 50, 75, and 600 ohms unbalanced 135, 600 ohms balanced

Other Features Include: Sweep, external AM/FM, VCF, and external phase lock capability. Item is IEEE-488 programmable.

Dimensions: 5.22" H x 14" W x 17" D

Weight: 25 lbs

Manuals:
TB 9-6625-2233-35
TM 11-6625-3198-12
TM 11-6625-3198-24P
TM 11-6625-3198-40

Remarks: The SG-1288 will be distributed under Total Package Fielding (TPF) system where full capability beyond SG-1171 is required. Under TPF the end item project code and the spares project code are the same. However, SG-1288's issued against LIN S65581 authorizations will be through the pull system in which material fielding is not envisioned.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-127	J53712	6625-00-783-5965	-
CC: SG-377	NONE	NONE	-
SG-1133	G54124	6625-00-028-4989	-
SG-299A/U	J55837	6625-00-897-0060	-
SG-299C/U	J55837	6625-00-916-8541	-
SG-299D/U	J55837	6625-00-150-6338	-
SG-299E/U	J55837	NONE	-
SG-543	NONE	NONE	P4
SG-543A/U	NONE	6625-00-965-1532	P4
SG-543B/U	NONE	6625-00-159-2356	P4
SG-543C	NONE	NONE	P4
SG-71/FCC	J55289	6625-00-669-0255	-
SG-71A/FCC	J55289	NONE	-
SG-71B/FCC	J55289	6625-00-556-8936	-
SG-71C/FCC	J55289	NONE	-
SG-967	J56368	6625-00-489-3732	-
SG-968/U	J58084	6625-00-107-2094	-
TS-312/FSM1	J56727	6625-00-508-7488	-
TS-312A/FSM1	J56727	6625-00-806-5033	-
TS-312B/FSM1	J56727	6625-00-752-8678	-
TS-382	J56796	6625-00-192-5094	-
TS-382A/U	J56796	6625-00-151-7479	-
TS-382B/U	J56796	6625-00-553-1180	-

Items Replaced and Removed from Field – Continued

Designator	LIN	NSN	Condition Code
TS-382C/U	J56796	6625-00-538-9212	-
TS-382D/U	J56796	6625-00-589-8067	-
TS-382E/U	J56796	6625-00-539-8564	-
TS-382F/U	J56796	6625-00-594-7377	-
TS-421	J57344	6625-00-211-7117	-
TS-421A/U	J57344	6625-00-669-0228	-
TS-421C	J57344	6625-00-435-2588	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1022C	NONE	NONE	P2, I1
106 TYPE 2	NONE	6625-00-455-5855	E25, I1
107	NONE	6625-00-813-2426	E25, I1
1307A	NONE	6625-00-714-4032	I1, P2
1311A	NONE	6625-00-930-3449	I1, P2
1316	NONE	6625-01-040-2312	I1, P2
200A	NONE	6625-00-508-7321	I1, P2
200CD	NONE	6625-00-518-4659	I1, P2
200J	NONE	6625-00-892-0780	I1, P2
201CRC60	NONE	6625-00-927-4318	I1, P2
208A	NONE	6625-00-229-5257	I1, P2
3310A	NONE	6625-00-466-0586	E25, I1
3310B	NONE	6625-00-595-7591	P2
4204A	NONE	6625-00-130-0068	I1, P2
651A	NONE	6625-00-999-5261	E25, I1
651B	NONE	6625-00-937-4961	P2, I1
AN/USM-205	J53944	6625-00-788-9672	E25
CC: SG-553/U	NONE	NONE	E25
AN/USM-205A	J53944	6625-01-007-4796	E25
CC: SG-553A/U	NONE	6625-00-376-0275	E25
AN/USM-256	NONE	6625-00-087-4499	E25
AN/USM-264	NONE	6625-00-935-4214	E25
CC: SG-763/U	J56367	6625-00-054-3483	E25
AN/USM-269	NONE	NONE	P2
AN/USM-358	NONE	6625-00-455-7302	E25
F53A	NONE	NONE	P2, I1
F55A	NONE	6625-01-057-5836	E25, I1
FG-501	NONE	6625-00-140-7817	E25, I1
FG-503	NONE	6625-01-013-5225	P2, I1
O-450/U	NONE	6625-00-669-2911	P2
O-850/U	N25943	6625-00-583-0090	E25
SG-1023	NONE	6625-00-160-1128	P2
SG-1032/U	NONE	NONE	P2
SG-106/U	NONE	6625-00-812-4104	E25
SG-1102/U	NONE	6625-00-148-8289	E25
SG-1128	V82615	6625-00-450-7590	E25
SG-1171/U	S65581	6625-01-133-6160	P1, I7

Items Potentially Replaceable – Continued

Designator	LIN	NSN	Condition Code
SG-15/PCM	J54878	6625-00-229-1087	T3, P3, E83
SG-298/U	J55700	6625-00-843-0971	E25, E101
SG-298A/U	J55700	6625-00-997-2471	E25, E101
SG-299/U	J55837	6625-00-624-3516	E25
SG-299B/U	J55837	6625-00-808-5584	E25
SG-321/U	J55944	6625-00-674-7097	E25, E101
SG-321A/U	J55944	6625-00-880-5791	E25, E101
SG-321B/U	J55944	6625-00-935-6924	E25, E101
SG-502	NONE	6625-00-520-5717	E25, I1
SG-510	NONE	6625-00-678-5616	P2
SG-578/U	NONE	6625-00-539-8584	E25
SG-590	J56248	6625-00-832-3931	E25
SG-621	NONE	6625-00-606-9727	P2
SG-621A	NONE	NONE	P2
SG-632	J56282	6625-00-986-4625	E25
SG-632A/U	J56282	6625-00-493-3023	E25
SG-632B/U	J56282	6625-00-933-7840	E25
SG-747/U	J56362	6625-00-118-6736	E25
SG-763/U	J56367	6625-00-054-3483	E25
SG-763A/U	J56367	6625-00-165-1261	E25
SG-769/U	NONE	6625-00-257-7689	E25
SG-770/U	NONE	6625-00-073-7416	E25
SG-772/G	NONE	6625-00-935-1330	E25
SG-837/U	NONE	5895-00-986-4633	P2
SG-970/U	NONE	6625-00-145-1193	E25
SG-982/U	NONE	6625-00-350-4111	P2
SG-984/U	NONE	6625-00-183-0169	E25
TS-433	H02231	6625-00-223-5108	E25, E100

Condition Codes

Code	Condition
E25	This item is being replaced by the SG-1171. The SG-1288 is also capable of replacing subject item. Units with SG-1171 will retain it as a standard LCC A item, while additional requirements will be satisfied by the SG-1288.
E83	This item is on the replacement list of AN/USM-485, SG-1288 and SG-1171. If item is used for telephone testing applications, replace with AN/USM-485. If used for general purpose applications, replace with SG-1288 or SG-1171 (see condition code E25).
E100	This item is replaced by the TEMOD item when used as a function generator only.
E101	The SG-1171/U will replace this item in all applications except where it is used to perform AH-1 SCAS testing. These units will retain this item until the SG-1288/U is fielded.

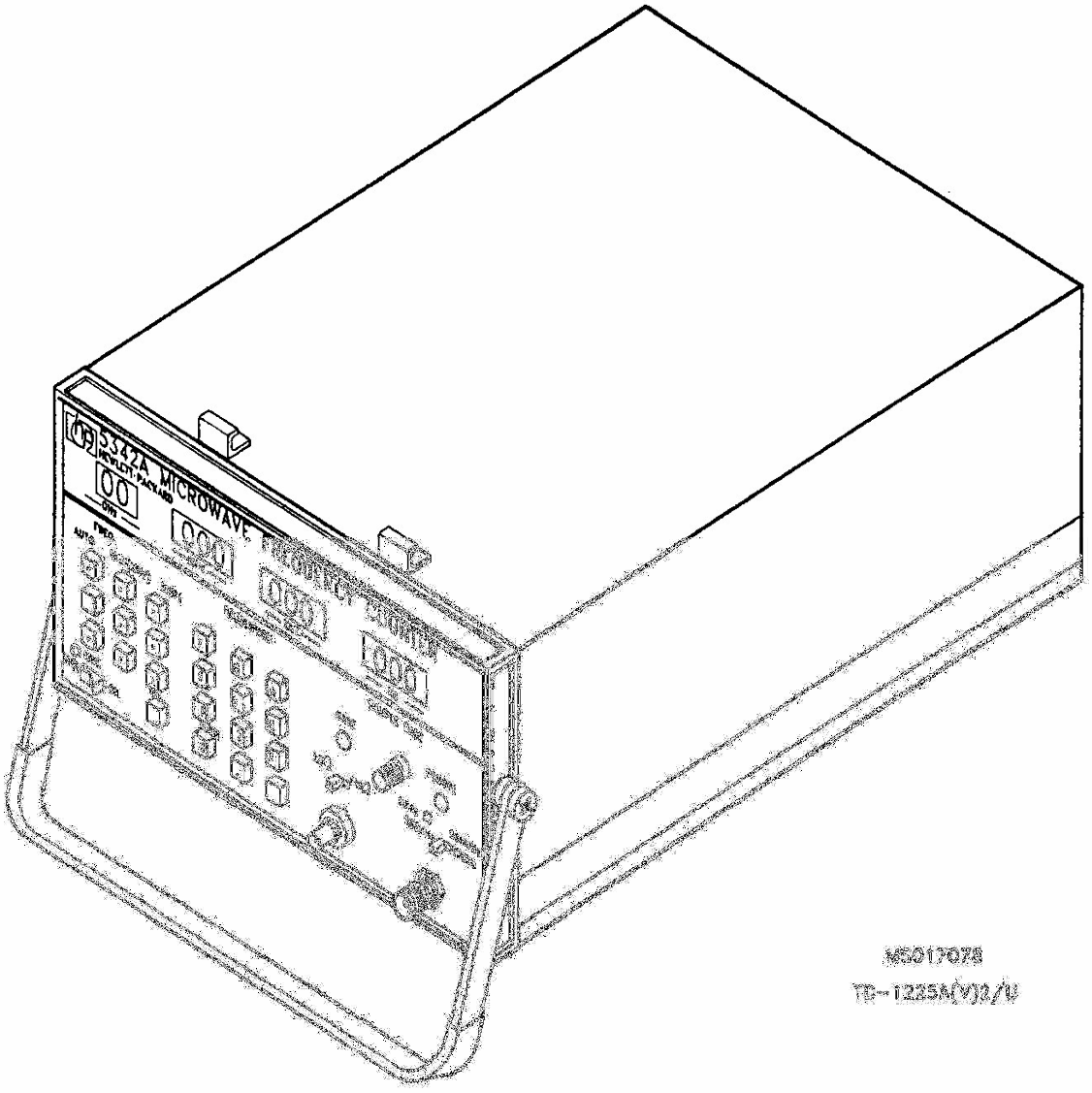
Condition Codes – Continued

Code	Condition
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I7	This is a TEMOD item; however, additional requirements for SG-1171's will be satisfied with SG-1288's. (The SG-1288 will not remove the existing SG-1171 from the field.)
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
P4	Although these items do not have a LIN; they will be included on the BOIP and will be removed from the field.
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue, not one of performance.)

4-44. MICROWAVE FREQUENCY COUNTER TD-1225A(V)2/U

LIN: M65673
Manufacturer: Hewlett Packard
BOIP: C015AA

NSN: 6625-01-121-6934
Model: 5342A-H16
CAGE: 28480



SPECIFICATIONS

Input 1:

Frequency Range: 500 MHz to 18 GHz
Impedance: 50 ohms

Input 2:

Frequency Range: 10 Hz to 500 MHz
Impedance: 50 ohm nominal selected

Frequency Range: 10 Hz to 25 MHz
Impedance: 1 Mohm

Input Sensitivity: Up to -25 dBm

Damage Level: +25 dBm, Peak

FM Tolerance: 20 or 50 MHz P-P

Time Base Crystal Frequency: 10 MHz

Sample Rate: Variable from 20 ms to Hold

IF Output: Rear panel BNC connector provides 25 to 125 MHz

Resolution: 1 Hz to 1 MHz

Dimensions: 5.5” H x 8.375” W x 19.625” D

Weight: 20 lbs

Manuals: TM 9-6625-2021-35
TM 11-6625-3014-14-1
TM 11-6625-3014-24P
DMWR 11-6625-3014

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
CV-2003/U	F01460	6625-00-941-8474	-
CV-3059/U	F01486	6625-00-058-3042	-
TS-186C/U	J01826	6625-00-296-1460	-
TS-186D/UP	J01826	6625-00-376-1662	-
TS-186E/UP	J01826	6625-00-556-1916	-
TS-186F/UP	J01826	6625-00-930-7203	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
CM-77A/USM	E61584	6625-00-080-7204	P3, E18
PL-1320/U	P11192	6625-00-130-0014	M1

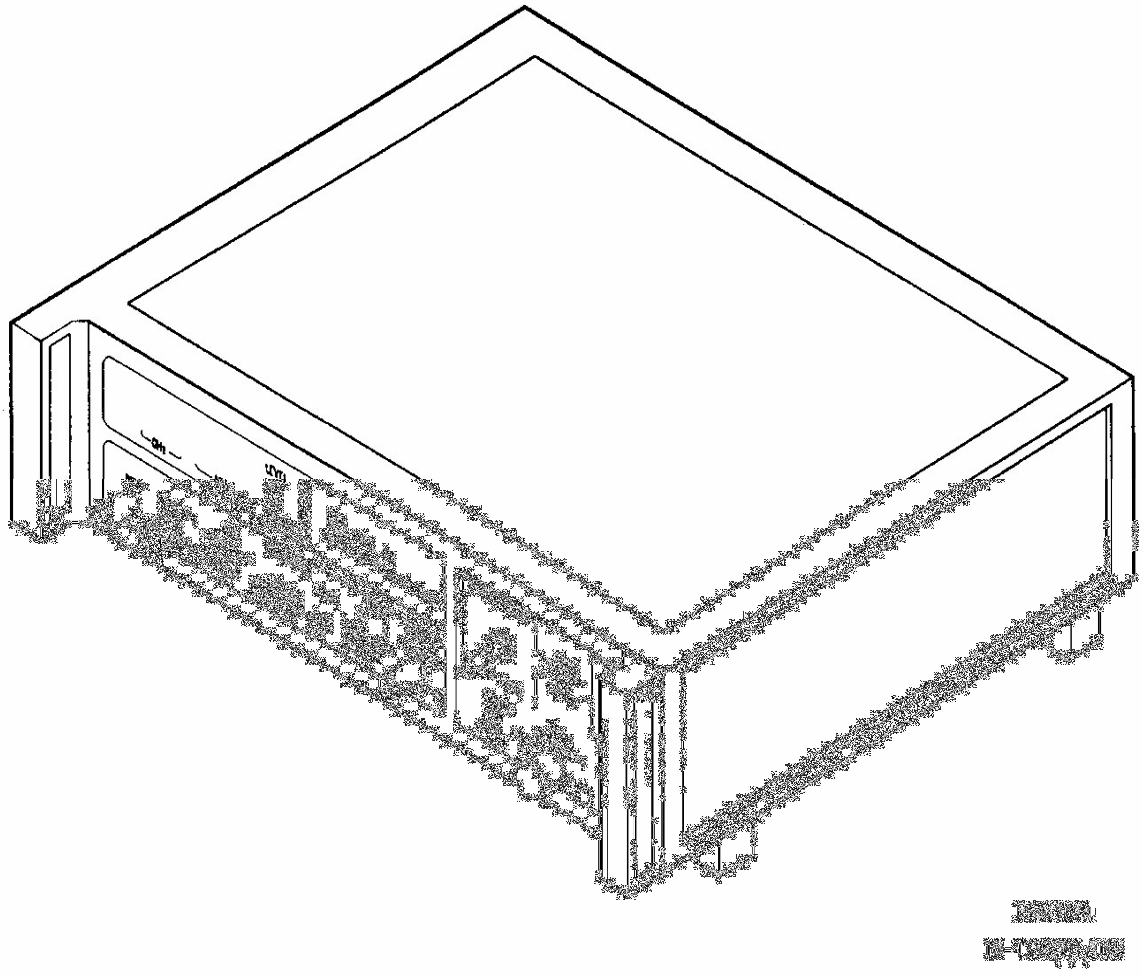
Condition Codes

Code	Condition
E18	The TD-1225A(V) 2 will not replace the CM-77A/USM in the maintenance support application for avionics radios AN/ARC-115, AN/ARC-116, AN/ARC-51, AN/ARC-164 and AN/ARC-186. (The CM-77A/USM has a down converter while the TEMOD item does not.) In all other applications the TD-1225A(V)2 replaces the CM-77A/USM.
M1	Item is a plug in module technically replaceable by TEMOD item but only when used with the mainframe/end item that is being replaced by TEMOD item.
P3	Item removed from the field in certain applications; see applicable “E” code/s.

4-45. COUNTER, ELECTRONIC RF PULSE TD-1338(V)1/USM

LIN: C23901
Manufacturer: EIP Microwave
BOIP: C013AA

NSN: 6625-01-120-7832
Model: 451-V23
CAGE: 34257



SPECIFICATIONS

Bandwidth: 300 MHz to 18 GHz

Input Sensitivity Range: -10 dBm up to 10 GHz
-5 dBm up to 18 GHz

Limiter: Provides protection up to 1 watt peak

Other Features Include: Programming and output compatibility with IEEE STD-488-1978 GPIB.

Dimensions: 3.5” H x 16.75” W x 19” D

Weight: 30 lbs

Manuals: TM 9-6625-1978-35
TB 9-6625-2061-35
TM 11-6625-3031-14
TM 11-6625-3031-24P
DMWR 11-6625-3031

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

NONE

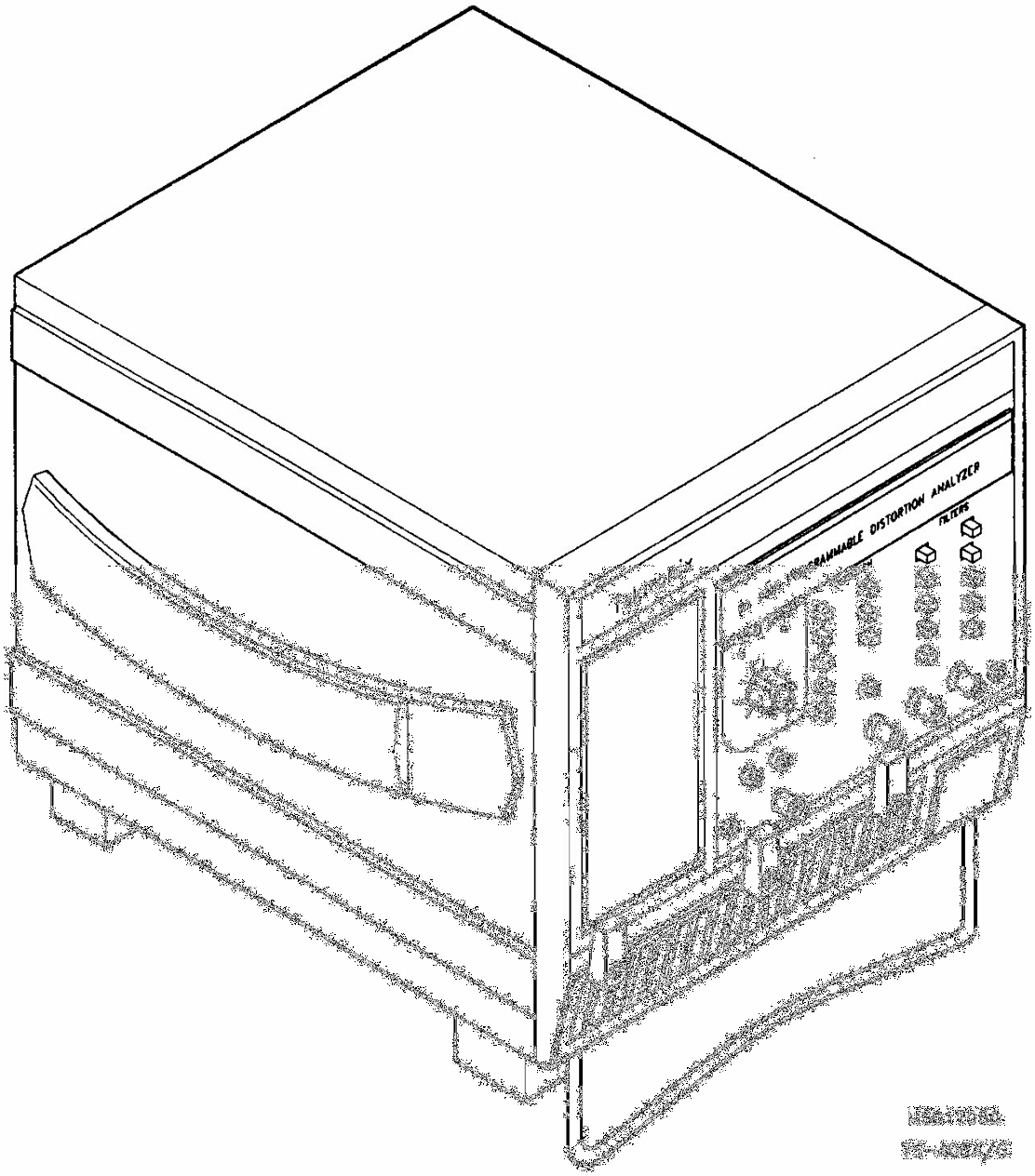
Condition Codes

NONE

4-46. DISTORTION ANALYZER TS-4084/G

LIN: D26583
Manufacturer: Tektronix
BOIP: C071AA

NSN: 6625-01-217-0054
Model: DA4084
CAGE: 80009



SPECIFICATIONS

Fundamental Frequency Range: 10 Hz to 100 kHz

Distortion Range: .2 to 50%

Distortion Accuracy: ± 1 dB(10 Hz to 20 kHz), ± 2 dB(20 to 50 kHz), +3, -4 dB (50 to 100 kHz)

Filters: 400 Hz High Pass, 80 kHz Low Pass, and 30 kHz Low Pass

Voltmeter Full Scale: 200 µV to 200 V

Input Impedance: 100 kohms

Measurements: Total Harmonic Distortion (THD) plus noise, and SINAD

Dimensions: 7.6” H x 9” W x 19.2” D

Weight: 16 lbs

Manuals: TB 9-6625-2170-35
TM 11-6625-3152-14
TM 11-6625-3152-24P

Remarks: The TS-4084/G will be distributed under the TPF Fielding System. Under TPF the end item project code and the spares codes are the same.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/URM-184	G26515	6625-00-871-8012	-
CC: TS-2947	NONE	6625-00-799-8539	-
AN/URM-184A	G26515	6625-00-802-8718	-
TS-2394/G	A55393	6625-00-877-8409	-
TS-723/U	A58033	6625-00-668-9418	-
TS-723A/U	A58033	6625-00-137-0092	-
TS-723B/U	A58033	6625-00-668-9418	-
TS-723C/U	A58033	6625-00-852-3853	-
TS-723D/U	A58033	6625-00-668-9418	-

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
339A	NONE	6625-00-827-4258	E88, I1
AN/URM-180	NONE	6625-00-089-4227	P2
AN/USM-259	NONE	6625-00-878-7290	P2
ME-153/U	NONE	6625-00-629-7051	P2
ME-336/URM	NONE	6625-00-936-3135	P2
TS-1344/U	NONE	NONE	P2
TS-1856/U	NONE	6625-00-985-5229	P2
TS-2465/U	NONE	6625-00-871-8012	P2
TS-3186/U	NONE	NONE	P2

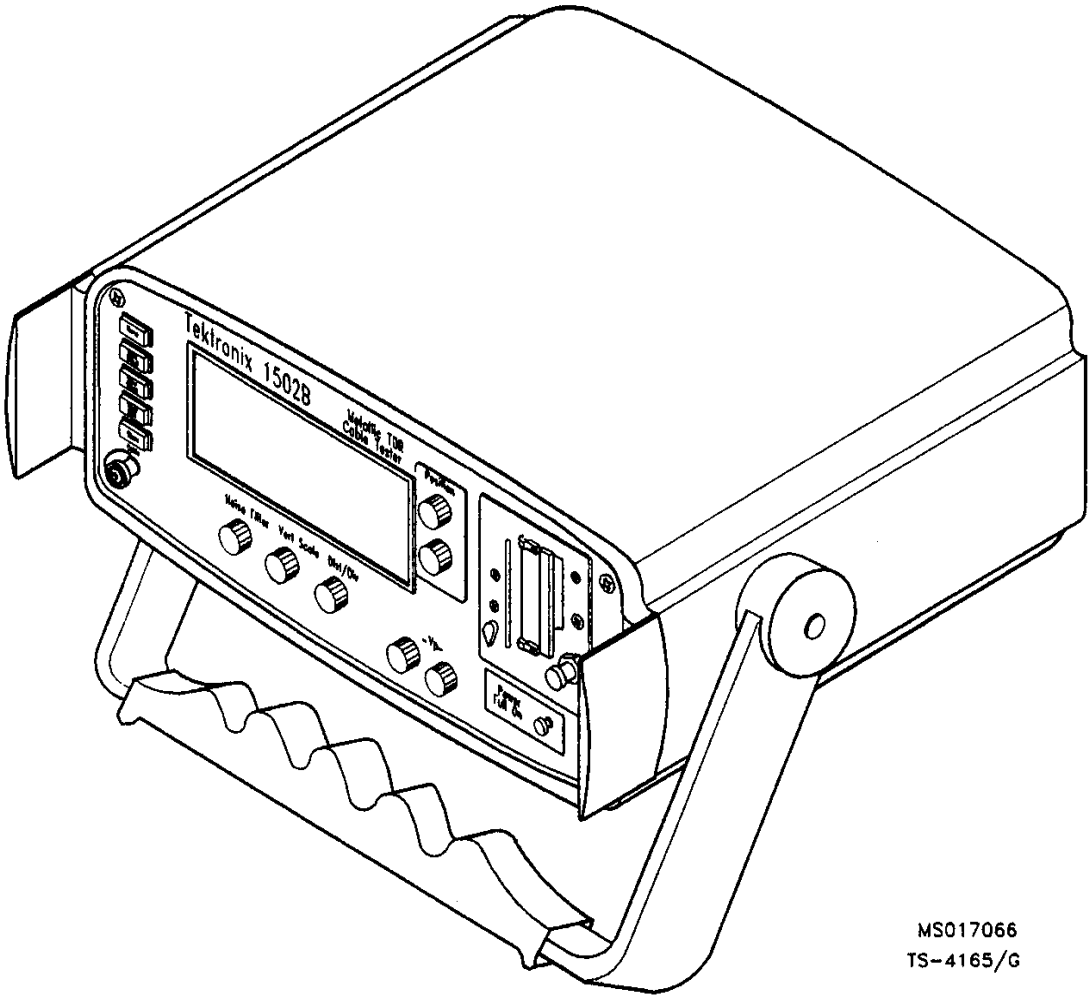
Condition Codes

Code	Condition
E88	The HP 339A has a built in audio oscillator while the TEMOD item does not. Replace the 339A with the TEMOD item if the audio oscillator is not required.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.

4-47. TEST SET, ELECTRICAL CABLE TS-4165( )/G

LIN: C04959
Manufacturer: Tektronix
BOIP: C095AA

NSN: 6625-01-255-4248
Model: 1502B
CAGE: 80009



SPECIFICATIONS

Distance Measuring Range: 0 to 2000 feet

Resolution: .25 feet

Test Pulse Amplitude: .225 mV nominal

Output Impedance: 50 ohms

Other Features Include: Plug in chart recorder and the unit is battery operated.

Dimensions: 5.0” H x 12.4” W x 18.7” D

Weight: 18.0 lbs

Manuals: TM 11-6625-3240-14
TM 11-6625-3240-24P

Remarks: The TS-4165( )/G will be distributed under the Total Package Fielding (TPF) System starting in FY 92. Under TPF the end item project code and the spares are the same.

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1415A	NONE	6625-00-988-2574	I1, P2
1502	NONE	6625-01-003-5561	I1, P1
AN/GSM-45	V73945	6625-00-996-7294	P3, E87
CC: TS-1833	NONE	NONE	P3, E87

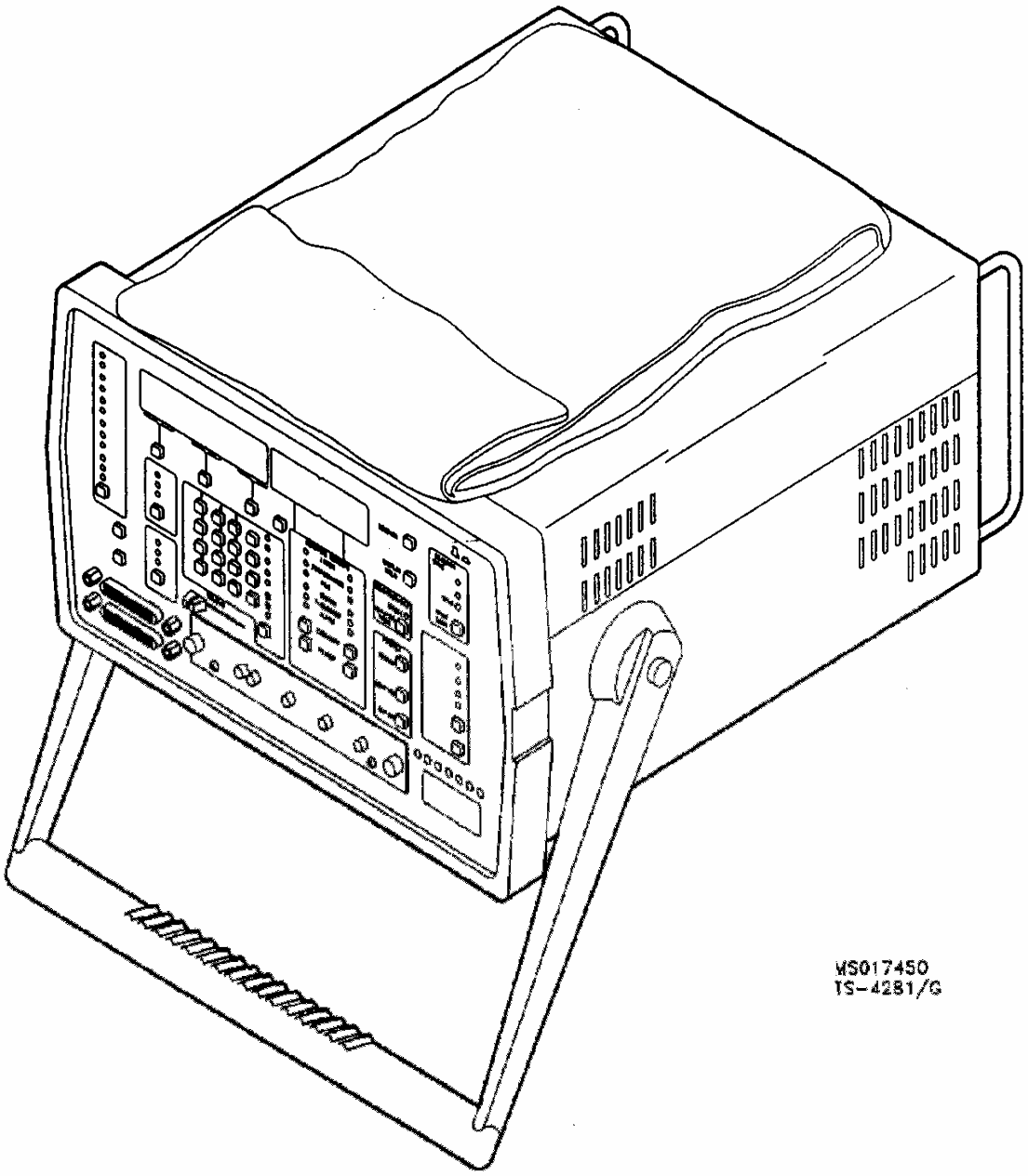
Condition Codes

Code	Condition
E87	The AN/GSM-45 can perform the following test: continuity, RF attenuation and insulation breakdown. The range of the instrument in the RF attenuation test Is 0 to -102 dB. The TEMOD item can perform the continuity test and the RF attenuation test using a different technique. The TEMOD item has a range in the RF attenuation test of 0 to -50 dB. The TEMOD item does not measure insulation breakdown. If the user requires an insulation breakdown test or an RF attenuation test from -50 to -102 dB, the TS-4165 does not replace the AN/GSM-45. In all other cases, replace the AN/GSM-45 with the TS-4165.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
T4	TEMOD item cost is substantially greater than target replacement item. Replacement determined by economics.

4-48. DATA COMMUNICATIONS ANALYZER TS-4281( )/G

LIN: A55606
Manufacturer: TTC
BOIP: C137CA

NSN: 6625-01-340-1781
Model: Fireberd 6000M
CAGE: 18876



SPECIFICATIONS

Data Rate: 75 bps to 45 Mbps

Generated Patterns: PRBS, 4 to 16 bit word, Fixed Patterns

Measurements:
Bit Error Rate (BER)
Bit Error, Sync Loss
Clock Slip
Jitter
Errored and Error Free Blocks
Clock Inversion Detection
Errored and Error Free Seconds
Elapsed Time

Additional Features: CRC Error Counting, All-ones Detection, Excessive Zeros Detection, Bipolar Violation Counting, Jitter and/or Single Error Injection, Manually Selectable Block Size Sectioning and Asynchronous Character Format, Print and Alarm on Event Capabilities.

Data Interfaces:
RS-449 (Military)
DS0, DS1 (T1), DS1C, and DS2 (Bell Standards)
RS-232C
CCIT Recommendation V .35
IEEE-488 General Purpose Interface Bus

Printer Port: RS-232C with selectable baud rates of 110/300/600/1200/2400/4800/9600 bps

AC Power Source: 115/230 Volts AC, 50/60/400 Hz

DC Power Source: -48 Volts DC

Dimensions: 10.25” H x 15.75” W x 15” D

Weight: 26 lbs

Manuals:
TM 11-6625-3264-12
TM 11-6625-3264-24P
TM 11-6625-3264-40

Remarks: This equipment is a portable, general purpose, solid state, programmable data communication analyzer. It measures and displays various bit data information as related to digital transmissions. Capability for remote operation via an IEEE-488 bus is provided. The TS-4281/G is capable of operating with a commercial 41945 DS-3 interface module.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
604M	NONE	6625-01-083-0592	I1, P4, E95, I3

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
1200	NONE	6625-00-383-6183	I1, I3, E94
1645A	NONE	6625-00-487-0662	I1, T4
3780	NONE	NONE	I1, I3, E90
418A1	NONE	NONE	I1, I3, T4, E78
901	NONE	6625-01-064-7144	I1
TS-3641	NONE	NONE	I3, E91, E93, T4
TS-3642	NONE	6625-01-089-3512	I3, E91, E92

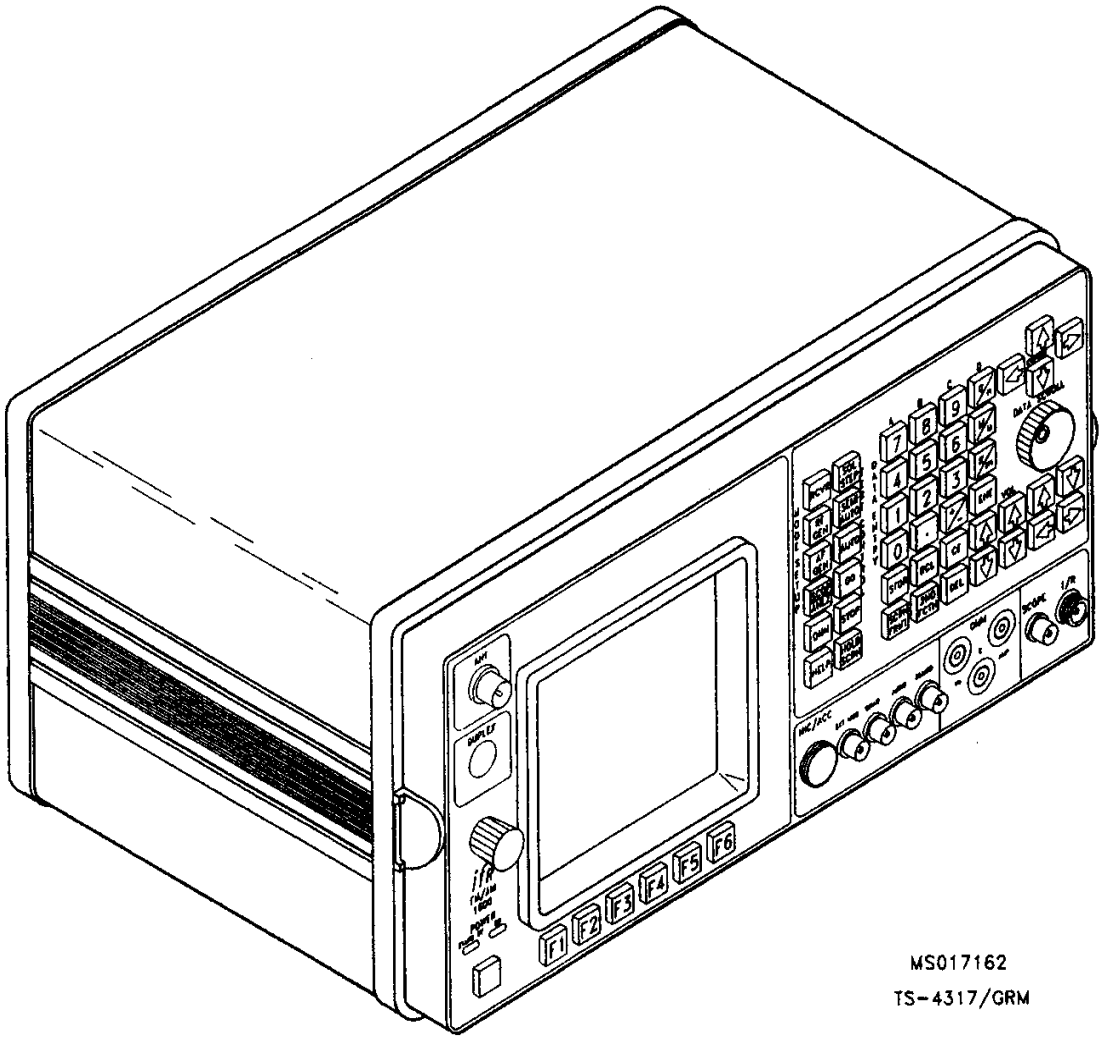
Condition Codes

Code	Condition
E78	Item is battery operated; TEMOD item is not. Replace with TEMOD item if battery operation is not required.
E90	The HP3780 bit range is from 1 kbps to 50 Mbps where the bit rate of the TS-4281()/G is from 75 bps to 13 Mbps.
E91	The TS-3641 and TS-3642 both have a TTL impedance of 150 ohms Input/Output whereas the TS-4281()/G has a TTL impedance of 75 ohms for both the unbalanced output and the unbalanced input along with an auxiliary interface with a 50-ohm TTL output.
E92	The TS-3642 specifies bipolar 75-ohm unbalanced input with -25 to -30 dBm, bipolar 75-ohm balanced input with +5 to -15 dBm, bipolar 75-ohm unbalanced output with -72 dBm, and bipolar 75-ohm balanced output with +23, +10, and 0 dBm switch selectable levels which are not specified in the TEMOD item.
E93	Replace with the TEMOD item if the requirement is not for battery operated and weight and size are not of critical importance. TEMOD item will not exceed 35 lbs.
E94	The IDS 1200 contains bias distortion measurement capabilities which are not available in the TEMOD item.
E95	The AYDIN 604M has a bit rate of 20 Mbps internal and 25 Mbps external where the TEMOD item has a bit rate capacity of 45 Mbps, provided the optional commercial DS-3 interface module is used.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I3	The salient technical characteristics of the potentially replaceable TMDE that exceed those of the TEMOD item are listed in the appropriate “E” code. These technical differences listed are the major differences in performance between the two items; other technical differences may exist which could prevent replaceability by the TEMOD item. Before a user adopts the TEMOD item as a replacement, a detailed spec comparison should be performed.
P4	Although these items do not have a LIN; they will be included on the BOIP and will be removed from the field.

4-49. TEST SET, RADIO TS-4317/GRM

LIN: T87468
Manufacturer: IFR, Systems, Inc.
BOIP: C029AA

NSN: 6625-01-309-2825
Model: IFR 1600
CAGE: 51190



SPECIFICATIONS

RF Signal Generator: 250 kHz to 999.9999 MHz

Frequency Accuracy: ± 5 PPM

RF Output Level: -127 to 0 dBm

Output Impedance: 50 ohms

AM: 0, 1 to 90%; 500 kHz to 999.999 MHz

FM: 0, ± 100 Hz to ± 25 kHz, up to 20 kbs Digital; 0, 1 to ± 20 kHz deviation

Oscilloscope: DC to 1.0 MHz

AF Signal Generator: 10 Hz to 40 kHz, .7 mV to 2.5 V RMS (150 ohms), and up to 3 V RMS (600 ohms), Digital .1 V to 5 V or 7 V for SINCGARS

AF Counter: 10 Hz to 40 kHz

Frequency Meter: 250 kHz to 999.9999 MHz

Power Meter: .2 mW to 200 W

Deviation Meter: FM carriers
FM Deviation Range: ± 100 kHz
FM Carrier Range: 250 kHz to 1 GHz
Modulation Meter:
Modulation Range: 1 to 100%
Carrier Range: 250 kHz to 1 GHz

Distortion Analyzer Range: 1 to 20%
Frequency: 770 Hz and 1 kHz

SINAD Range: 3 to 30 dB
Frequency: 770 Hz

Voltmeter:

AC Volts: .1 mV to 500 V, 50 Hz to 20 kHz
DC Volts: .1 mV to 2000 V

Current Meter: .01 mA to 20 A DC

Ohmmeter: .1 ohm to 20 M ohms

Spectrum Analyzer Dynamic Range: -95 to -30 dBm
Frequency Range: 250 kHz to 999.9999 MHz

Remote Control: IEEE-488 Interface

Dimensions: 7.4” H x 17” W x 22” D

Weight: 48 lbs

Manuals: DMWR 11-6625-3244
TM 9-6625-3244-24P
TM 11-6625-3244-12
TM 11-6625-3244-40

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

Designator	LIN	NSN	Condition Code
AN/GRM-114A	T87468	6625-01-144-4481	E104

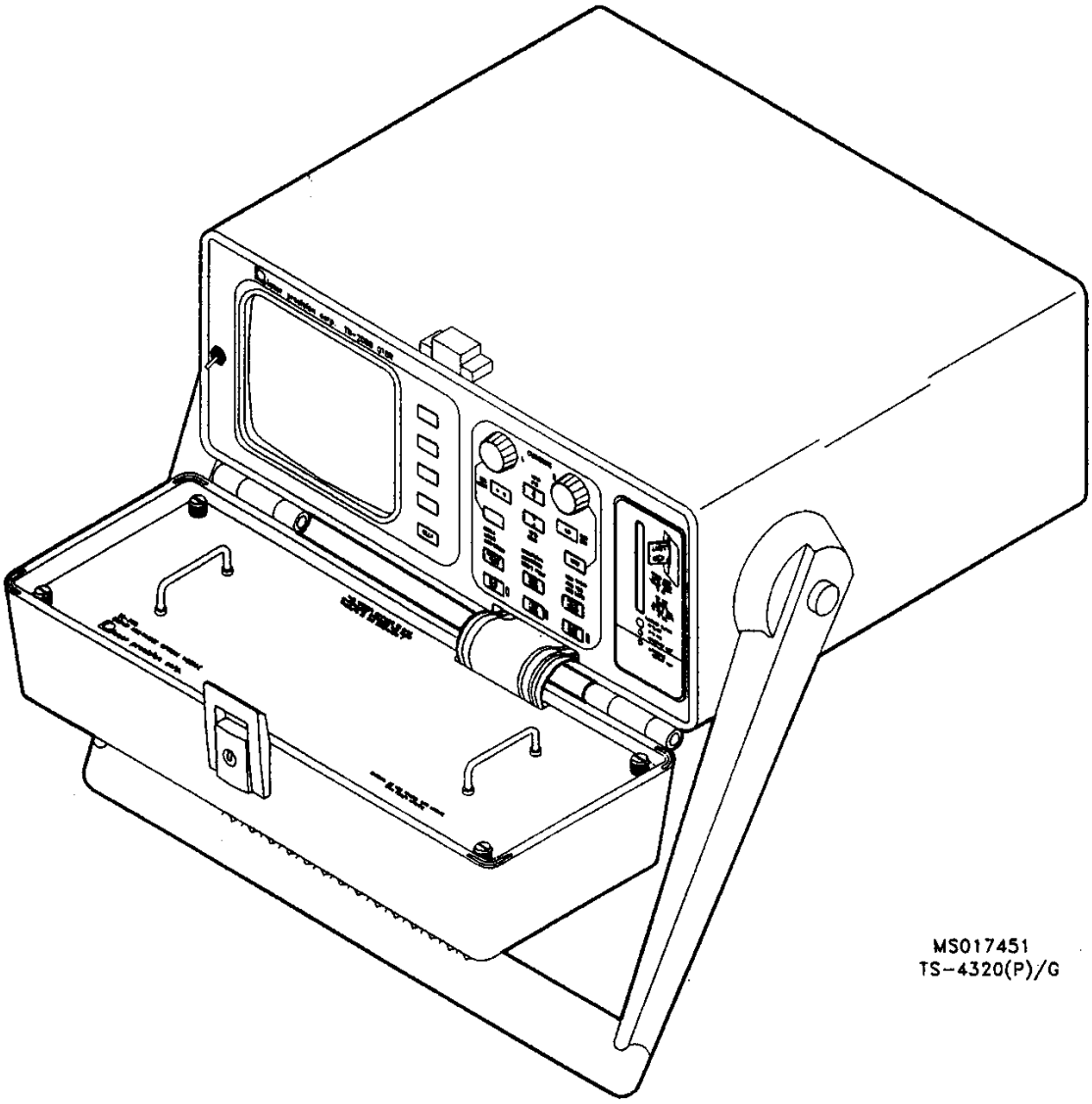
Condition Codes

Code	Condition
E104	The TS-4317/GRM is an enhancement of the AN/GRM-114A. This General Purpose test set functions to verify the performance characteristics of single channel radios. Advantages of the TS-4317/GRM over the AN/GRM-114A are that it is more reliable, easier to use with computer like menus, and allows the execution of radio performance tests with the touch of a button. It also requires less time to repair. The AN/GRM-114A's will not be removed from the field, but replaced by the TS-4317/GRM through attrition.

4-50. TEST SET, OPTICAL FIBER TS-4320(P)/G

LIN: T24009
Manufacturer: Laser Precision Corp
BOIP: PQ25AA

NSN: 6625-01-355-4087
Model: TD-2000C
CAGE: 51275



MS017451
TS-4320(P)/G

SPECIFICATIONS

Instrument Type: Optical Time Domain Reflectometer (OTDR); mainframe with laser plug-in modules

Wavelengths: 850, 1300 nanometers (multimode)
1310, 1550 nanometers (multimode)

Distance Range: > 120 km

Dead Zone: 4 to 1200 m, depending upon distance range, fiber type

Spatial Resolutions: 3 to 1180 m, depending upon distance range, fiber type

Dynamic Range: 5 to 26 dB, depending upon distance range, fiber type

Attenuation Resolution: 0.01 dB

Less Measurement Modes: Two-point loss, least squares approximation, loss per unit length (dB/km) automatic splice loss

Index of Refraction Compensation: 1.4000 to 1.6000

Display Modes: Real-time, averaging, recall & compare

Internal Data Storage: 24 fiber signatures

Removable Data Storage Media: Static RAM cards

Connector Type: ST

Interfaces: GPIB, RS-232

Power Requirements: 115/20 VAC ± 10%, 50/60/400 Hz or 12/24/28 VDC

Dimensions: 6.5” H x 16.3” W x 22.15” D

Weight: 32.5 lbs (14.74 kg)

Manuals: TM 11-6625-3271-12
TM 11-6625-3271-24P
TM 11-6625-3271-40
DMWR 11-6625-3271

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

NONE

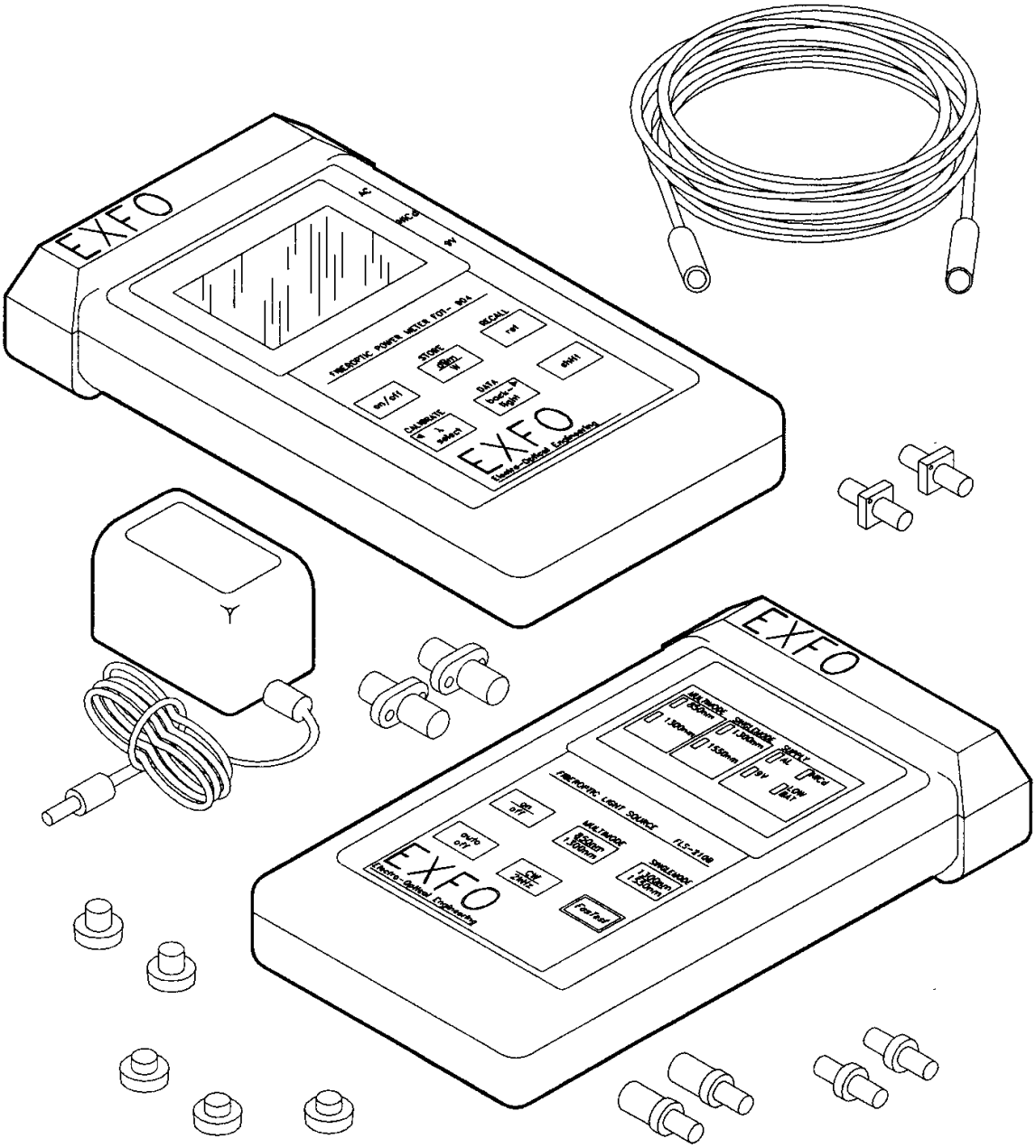
Condition Codes

Code	Condition
I14	This TEMOD item represents a new capability to the Army inventory and will not replace any existing items.

4-51. OPTICAL POWER TEST SET, TS-4358( )/G

LIN: T23357
Manufacturer: EXFO America Inc.
BOIP: P037AA

NSN: 6625-01-393-4152
Model: FOT-92A-ARMY, FLS-210B-ARMY
CAGE: 0L8C3



MS017452A
TS-4358( )/G

SPECIFICATIONS

Optical Power Meter:

Wavelength Range: 800-1600 nm
Measurement Range: +3 to -60 dBm
Readout Mode: dBm, dB, watts

Stabilized Light Source:

Output: 850 ± 30 nm, 1300 ± 30 nm multimode; 1300 ± 30 nm, 1550 ± 30 nm singlemode

Spectral Half Power Bandwidth: 75 nm at 850 nm;
175 nm at 1300, 1550 nm

Accessories:

Patchcords:
- 2 multimode FC/PC to AT&T Biconic
- 2 multimode FC/PC to FC/PC
- 2 single mode FC/PC to AT&T Biconic
- 2 single mode FC/PC to FC/PC

Hybrid Couplers:
- 2 FC to SMA 906
- 2 FC to ST

Fiber Optic Feed Through Connectors:
- 2 each of AT&T Biconic
- 2 each of ST
- 2 each of FC
- 2 each of SMA 906

Operating Power Requirements:
Rechargeable built-in NiCd battery
Disposable 9-volt alkaline battery
110/220 VAC, 50/60 Hz External AC/DC power adapter which also recharges the NiCd battery

Operating Temperature Range: -10 to +50 degrees C
Storage Temperature Range: -40 to +71 degrees C

Overall Dimensions:
Carrying Case (with equipment): 12” x 17” x 6.5”
Optical Power Meter: 4.75” x 8.75” x 2.25”
Stabilized Light Source: 4.75” x 8.75” x 2.25”

Weight:
Carrying Case: 13 lbs
Optical Power Meter: 2 lbs
Stabilized Light Source: 2 lbs

Manuals: TM 9-6650-906-12
TM 9-6650-906-24P
TM 9-6650-906-40

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

NONE

Condition Codes

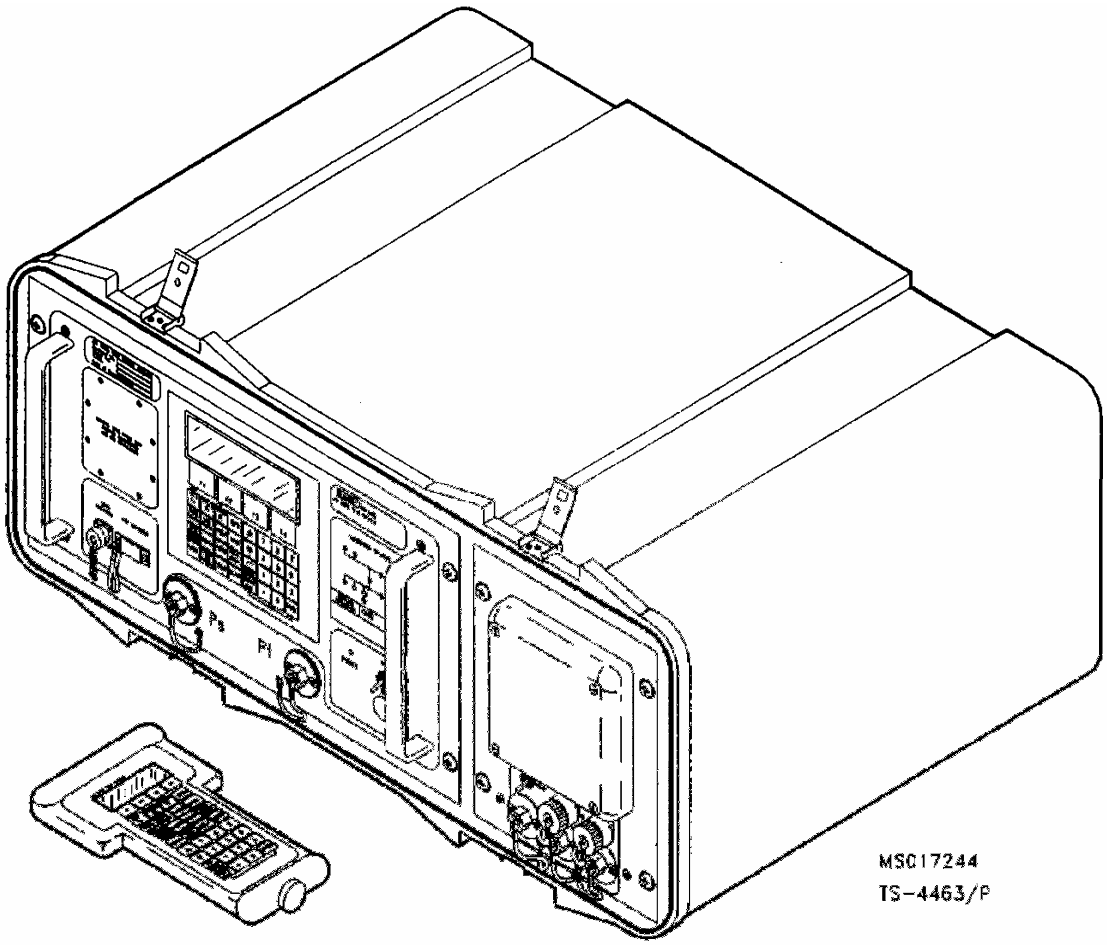
Code	Condition
E105	The TS-4335/G has a special test cable assembly which is necessary for it to interface with the Fiber Optic Cable Assembly CX-13295/G. This test cable assembly should be retained if a replacement by the TS-4358( )/G is done. The measurement capabilities of the TS-4358( )/G meet or exceed those of the TS-4335/G.

4-52. TESTER, PITOT AND STATIC SYSTEMS, TS-4463( )/P

LIN: T03597
Manufacturer: Druck
BOIP: R025AA

NSN: 4920-01-388-6790
Model: ADTS 405F
CAGE: 1CE49

(Management Transferred to B17 AMCOM – Redstone Arsenal, AL)



SPECIFICATIONS

Altitude Range: -1,500 to 50,000 ft

Altitude Rate (Rate of Climb): 0 to 6,000 ft/min

Decoded Altitude: -1,500 to 50,000 ft

Airspeed: 20 to 400 knots

Weight (max): 82 lbs

Altitude Stability: ± 3 ft or ± 0.02% of simulated altitude, whichever is greater

Airspeed Stability: ± 1 knot

Dimensions (max): 30” on any external dimension TBD

Operating Temperature: -23 to +52 degrees C

Power Requirements:
DC: -28 volts +8 to -12 volts
AC: 110-240 volts, 50-400 Hz

Display: Digital

Manuals: TM 43-4920-910-12
TM 43-4920-910-24P
TM 43-4920-910-40

Remarks: Tester has its own pressure-vacuum pump. A hand held remote unit shall provide the primary means of controlling the test set. The test set shall have the capability of testing for leakage on both the static and dynamic pneumatic outputs. The test set shall be capable of interfacing with an IEEE-488 control bus.

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
MIL-T-58078	W03735	4920-00-474-8311	-
REIC 340000	W03735	4920-00-475-7161	-
VPT7B	W03735	4920-00-618-7512	-
3400-003	W03735	4920-01-182-1972	-
9-2259	W03735	4920-00-691-2247	-
7365	W03735	4920-00-988-0206	-
680	W03735	4920-00-997-0028	-
10005071	W03735	4920-01-244-2146	-
S6-21312	W03735	4920-01-030-7569	-
TPS 2550-2	W03735	4920-00-718-6480	-
4500	W03735	4920-01-152-4622	-

Items Potentially Replaceable

NONE

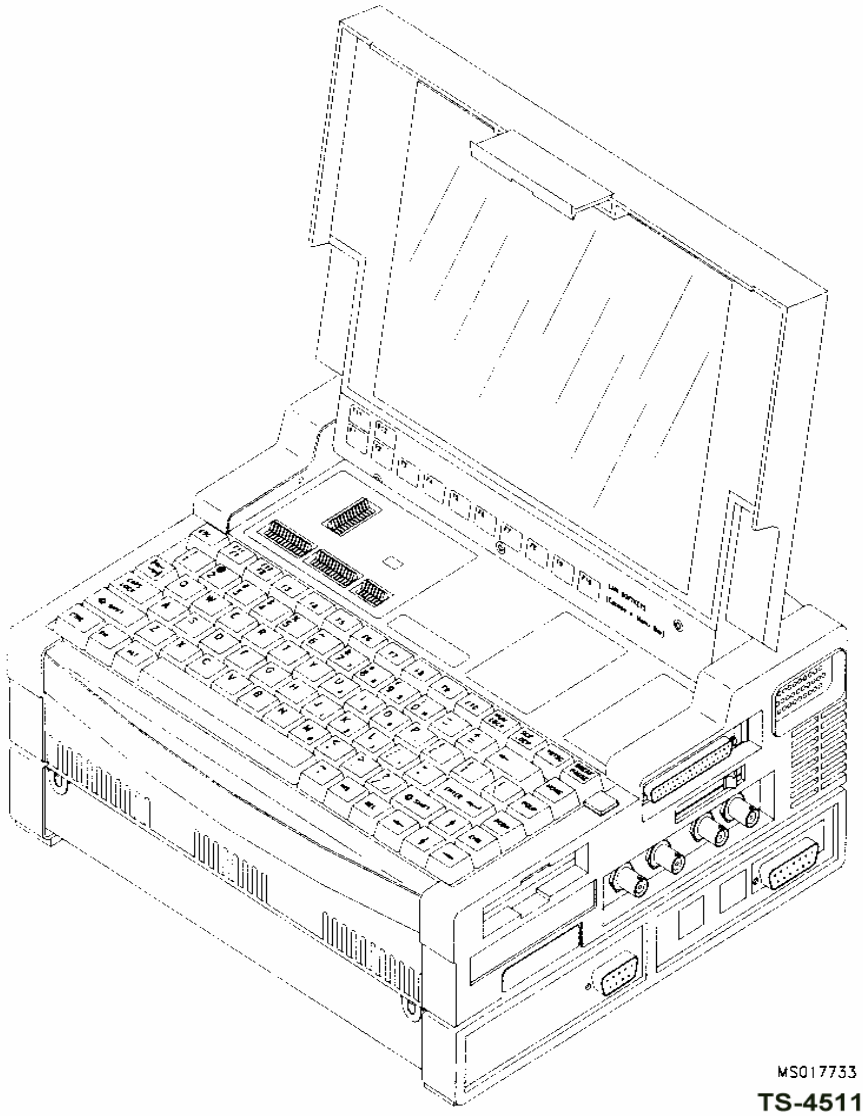
Condition Codes

NONE

4-53. LOCAL-WIDE AREA NETWORK ANALYZER, TS-4511/P

LIN: A55428
Manufacturer: Hewlett-Packard Co.
(formerly Hewlett-Packard)
BOIP: P072AA

NSN: 6625-01-465-1409
Model: Z4425A
CAGE: 15779



MS017733
TS-4511/P

SPECIFICATIONS

The TS-4511/P has the following interfaces:

Ethernet
- 10Base5 (DB15)
- 10Base2 (BNC)
- 10BaseT (RJ-45)

Token Ring
- STP (DB9)
- UTP (RJ-45)

Fast Ethernet
- 100BaseT (Two RJ-45)
- MII

FDDI
- Two Dual Fiber MIC

WAN
- V .35, V .24, V .11
- RS-232, RS-449, RS-530
- DS1 (TI) RJ-45
- DS1 (EI) BNC

ATM
- DS1 (RJ-45)
- DS3 (BNC)
- E1 (BNC)

Operating Power Requirements
- 115/230 VAC, 50/60 Hz, 220 VA

Operating Temperature Range
- +5 to +40 degrees C

Storage Temperature Range
- -20 to +60 degrees C

Weight/Size
- Two transit cases, each case, one man portable less than 40 pounds

Manuals:
- TM 43-6625-913-12
- TM 43-6625-913-24P
- TM 43-6625-913-40

Remarks: The TS-4511/P is a portable instrument able to perform network troubleshooting and analysis on both Local Area Networks (LAN) and Wide Area Networks (WAN). It can monitor and display LAN and WAN traffic, display statistics of network activity, and analyze protocol errors and link utilization. It can generate traffic of programmable frame size to test out networks or components of networks and also perform complete bit-error-rate (BERT) measurements.

Items Replaced and Removed from Field

NONE

Items Potentially Replaceable

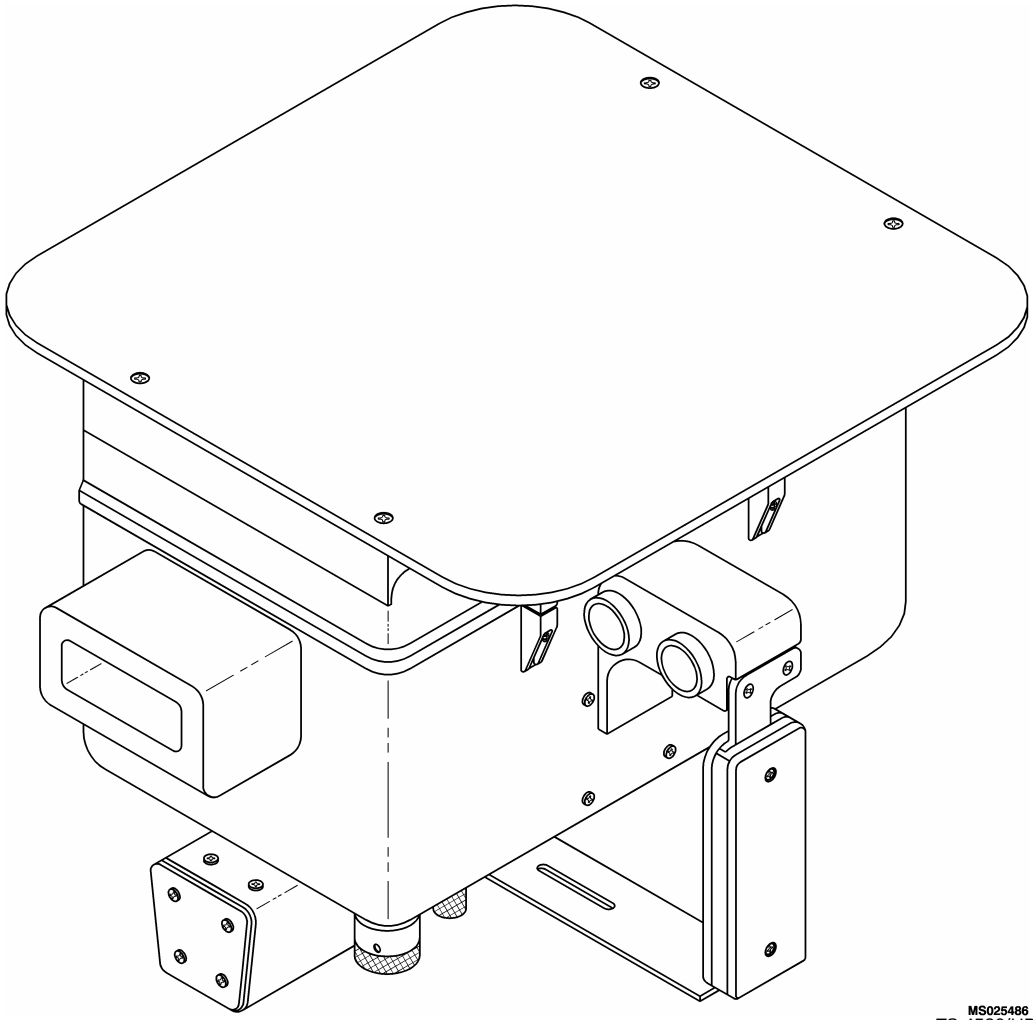
NONE

Condition Codes

NONE

4-54. RADAR TEST SET TS-4530/UPM

LIN: T99847
NSN: 6625-01-483-7194
Manufacturer: Goodrich (JcAir Test Systems)
Model: APM-424(V)3
BOIP: P123AA
CAGE: 41364



MS025486
TS-4530/UPM

SPECIFICATIONS

Modes of Operation (Transponder and Interrogator): 1, 2, 3/A, C, 4, and S

DOD AIMS Certification received on 23 Feb 04 stating that the TS-4530/UPM is in compliance with DOD AIMS 97-900 and DOD AIMS 97-1000 performance standards for MARK XII.

Note: The TS-4530/UPM is capable of upgrade to add IFF mode 5.

COMSEC Interface: Compatible with KIT-1C, KIR-1C, KIT-1A, or KIR-1A

Power Requirements:

Operating Modes:

Unit operates either from external DC input power or internal batteries.

Internal Battery Stick:

High Capacity Rapid Charge NiCad
7.2 VDC nominal (6 x 1.2 V commercial “C” size NiCad Cells)

External DC Input: 12 to 36 V dc input, 25 W maximum

Dimensions: 190 mm H x 292 mm W x 358 mm D
(7.5 in H x 11.5 in W x 14.1 in D)

Weight (with battery): 4.99 kg (<11 lbs)

Manuals: TB 9-6625-2355-35
TM 43-6625-916-12
TM 43-6625-916-24P
TM 43-6625-916-40
DMWR 43-6625-916

Items Replaced and Removed from Field

Designator	LIN	NSN	Condition Code
AN/APM-123(V)1	V99347	6625-00-948-0071	---
AN/APM-123(V)2	V99347	6625-00-948-0077	---
AN/APM-123(V)3	V99347	6625-00-948-0076	---
AN/APM-378	T49324	6625-00-134-1533	---
AN/APM-424(V)2	T49460	6625-01-152-6705	---

Items Potentially Replaceable

NONE

Condition Codes

NONE

Section II. REPLACED EQUIPMENT TO EQUIPMENT ITEM LIST

Equipment Replacement List

Designator	Replaced By	Condition Code
10005071	TS-4463/P()	TBD
1022C	SG-1288/G	P2, I1
102A	SG-1170	I1
106 TYPE 2	SG-1288/G	E25, I1
106 TYPE 2	SG-1171/U	P2, I1, E25
1062	SG-1206	I1, P2
107	SG-1288/G	E25, I1
107	SG-1171/U	P2, I1, E25
1107	SG-1219	P2, I1
111	AN/USM-486	I1, P2
112D	SG-1206	I1, P2
1200	TS-4281( )/G	I1, I3, E94
120A	AN/USM-488	I1, P2
120AR	AN/USM-488	I1, P2
121	AN/USM-490	E64,E77,I1,I3,P2,T5
1220A	AN/USM-488	I1, P2
125A	AN/USM-490	E65,E77,I1,I3,P2,T5
125B	AN/USM-490	E65,E77,I1,I3,P2,T5
126A	AN/USM-490	E66,E77,I1,I3,P2,T5
127C	AN/USM-490	E67,E77,I1,I3,P2,T5
128A	AN/USM-490	E68, E77, I1, I3, P2
129B	AN/USM-490	E69,E77,I1,I3,T1,T2
12B	AN/USM-485	I1, P2
1307A	SG-1288/G	I1, P2
1311A	SG-1288/G	I1, P2
1316	SG-1288/G	I1, P2
1402A	AN/USM-488	P2, P5, I1
1415A	TS-4165( )/G	I1, P2
1421A-C06	AN/USM-488	P2, P5, I1
1423A	AN/USM-488	P2, P5, I1
1502	TS-4165( )/G	I1, P1
160	AN/PSM-45	I1, P2
160B	AN/USM-488	I1, P2
1645A	TS-4281( )/G	I1, T4
1707A	AN/USM-488	I1
1709A	SG-1219	P2, I1
1710	SG-1219	P2, I1
1722A	OS-288	P1, I1
1725A	OS-288	P1, I1
1740A	AN/USM-488	I1, P2
175A	AN/USM-488	I1, P2
1805A	AN/USM-488	P2, P5, I1
1808A	AN/USM-488	P2, P5, I1
180A	AN/USM-488	I1, P2
180D	AN/USM-488	I1, P2
181A	OS-291/G	I1, E85, E86

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
181AR	OS-291/G	I1, E85, E86
1821F	AN/USM-488	P2, P5, I1
184A	OS-291/G	I1, E85, E86
2002A3-B3	SG-1206	I1, P2
200A	SG-1288/G	I1, P2
200CD	SG-1288/G	I1, P2
200J	SG-1288/G	I1, P2
201CRC60	SG-1288/G	I1, P2
202E	SG-1170	P2, I1
208A	SG-1288/G	I1, P2
211	AN/USM-488	I1, P2
212	AN/USM-488	I1
213	AN/USM-488	I1, P2
230	AN/PSM-45	I1
240A	SG-1206	I1, P2
260743	AN/PSM-45	P2, I1
2650A	SG-1219	P2, I1
281-2963003	AN/PSM-45	P2, I1
2918712A17	AN/PSM-45	I1
301B	AN/USM-490	E70,E77,I1,I3,T1,T2
302A	AN/USM-490	E39,E77,I1,I3,P2,T1,T2
303	AN/USM-486	P2, I1
303B	AN/USM-490	E71,E77,I1,I3,P2,T1,T2
305A	AN/USM-490	E72,E77,I1,I3,P2,T1,T2
310A	AN/USM-490	E40,E77,I1,I3,P2,T1,T2
312A	AN/USM-490	E41,E77,I1,I3,P2,T2
312BH55	AN/USM-490	E41,E77,I1,I3,P2,T2
323	AN/USM-488	I1, P2
326	AN/USM-488	I1, P2
3310A	SG-1288/G	E25,I1
3310A	SG-1171/U	P2, I1, E25
3310B	SG-1288/G	P2
339A	TS-4084/G	E88, I1
3400-0003	TS-4463/P()	TBD
3439A	AN/USM-486	I1, P2
3443A	AN/USM-486	I1, P2, P5
3444A	AN/USM-486	I1, P2, P5
3445A	AN/USM-486	I1, P2, P5
3465A	AN/USM-486	I1, P2
3469A	AN/USM-486	P2
3490A OPT 060	AN/USM-486	I1, P2
3551A	AN/USM-485	I1, P2
3551A-C01	AN/USM-485	I1, P2
3581A	AN/USM-490	E42,E77,I1,I3,P2,T2,T3
3581A-003	AN/USM-490	E42,E77,I1,I3,P2,T2,T3
3581A-C05	AN/USM-490	E42,E77,I1,I3,P2,T2,T3
3581C	AN/USM-490	E43,E77,I1,I3,P2,T2,T3
3581C-001	AN/USM-490	E43,E77,I1,I3,P2,T2,T3
3586B	AN/USM-490	E44,E77,I1,I3,P2,T2

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
3586B-003, 004	AN/USM-490	E44,E77,I1,I3,P2,T2
3586C	AN/USM-490	E45,E77,I1,I3,P2,T2
3590A	AN/USM-490	E46,E77,I1,I3,T1,T2
3591A	AN/USM-490	E47,E77,I1,I3,T1,T2
3744A	SG-1206	I1, P2
3745A	AN/USM-490	E48, E77, I1, I3, T1
3780	TS-4281( )/G	I1, I3, E90
3A6	AN/USM-488	P2, P5, I1
3A7	AN/USM-488	P2, P5, I1
3A74	AN/USM-488	P2, P5, I1
3S2	AN/USM-488	P2, P5, I1
ET77	AN/USM-488	P2, P5, I1
418A1	TS-4281()/G	I1, I3, T4, E78
4204A	SG-1288/G	I1, P2
422 OPT 125B	AN/USM-488	P3, I1, E7
430B	AN/USM-491	P2, I1
4310AK	SG-1206	P2
432A-001	AN/USM-491	P2, I1
432A-E12	AN/USM-491	P2, I1
432B	AN/USM-491	P2, I1
432C	AN/USM-491	I1
434	OS-291/G	I1
435A	AN/USM-491	P2, I1
440C	AN/USM-491	P2, I1
450	AN/USM-491	I1, P2
4500	TS-4463/P()	TBD
453A	AN/USM-488	I1, P2
454-163D	OS-288	P1, I1
454A	OS-288	P1, I1
464	OS-291/G	I1
465B OPT 04/07	AN/USM-488	I1, P2
465DM40	AN/USM-488	I1, P2
465DM40 OPT 05	AN/USM-488	I1, P2
468	OS-291/G	I1
475A	OS-288	P1, I1
4935-003	AN/USM-485	I1, P1
4940A	AN/USM-608	I1, P4
4940A-003	AN/USM-608	I1, P4
4943A	AN/USM-608	I1
4945A-101	AN/USM-608	I1, P1
4945A-102	AN/USM-608	I1, P1
5000A	SG-1206	I1, P2
514AD	AN/USM-488	I1, P2
515	AN/USM-488	I1, P2
515A	AN/USM-488	I1, P2
516	AN/USM-488	I1, P2
520A	AN/USM-608	I1
520B2	AN/USM-608	I1
528	AN/PSM-45	P2, I1

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
531A	AN/USM-488	I1, P2
5354D	AN/USM-488	P2, P5, I1
5354T	AN/USM-488	P2, P5, I1
535A	AN/USM-488	I1, P2
536	AN/USM-488	I1, P2
5403D40	AN/USM-488	I1, P2
5441	OS-291/G	I1
547	AN/USM-488	I1, P2
555 MOD 21A/22A	AN/USM-488	I1, P2
556	AN/USM-488	I1, P2
5703S2127	AN/USM-486	I1, P2
581	AN/USM-488	I1, P2
5A18N	AN/USM-488	P2, P5, I1, T1
5A21N	AN/USM-488	P2, P5, I1, T6
5A26	AN/USM-488	P2, P5, I1, T6
5A48	AN/USM-488	P2, P5, I1, T1
5B10N	AN/USM-488	P2, P5, I1, T1
5B12N	AN/USM-488	P2, P5, I1, T1
5B42	AN/USM-488	P2, P5, I1, T1
600	AN/USM-486	I1, P2
604M	TS-4281( )/G	I1, P4, E95, I3
608CR	SG-1170	P2, E12, I1
608E	SG-1170	P2, E12, I1
61084D	SG-1206	I1, P2
610D	SG-1206	I1, P2
616B	SG-1219	P2, I1
618BR	SG-1219	P2, I1
622	AN/PSM-45	P2, I1
641B	SG-1206	I1, P2
641K	SG-1206	I1, P2
650	SG-1206	I1
651A	SG-1288/G	E25, I1
651A	SG-1171/U	P2, I1, E25
651AK53	SG-1206	I1, P2, M6
651B	SG-1288/G	P2, I1
652CK	SG-1206	I1, P2, M6
653CK-52	SG-1206	I1, P2, M6
6600	SG-1206	I1, P2
6625-00-117-2895	AN/PSM-45	P2
6625-00-239-9588	AN/PSM-45	-
6625-00-493-9321	AN/PSM-45	P2
6625-00-724-8582	AN/PSM-45	P2
666	AN/PSM-45	I1, P2
666 VOMA	AN/PSM-45	I1, P2
680	TS-4463/P()	TBD
691A	SG-1206	I1, P2
694C	SG-1206	I1, P2
7313	OS-291/G	I1, E85, E86
7365	TS-4463/P()	TBD

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
7403N	AN/USM-488	I1
7603	AN/USM-488	I1, P2
7603 OPT1	AN/USM-488	I1, P2
7613	OS-291/G	I1, E85, E86
7623	OS-291/G	I1, E85, E86
779	AN/PSM-45	I1
784	AN/USM-486	I1, P2
785	AN/PSM-45	I1
8000A	AN/USM-486	I1, P2
8000A01	AN/USM-486	I1, P2
8100A	AN/USM-486	I1, P2
8478B	AN/USM-491	E34, I1
8484A	AN/USM-491	E34, I1
8601A	SG-1206	I1
8620A	SG-1206	I1, P2, M7
820C	SG-1206	I1, P2, M7
86210B	SG-1206	I1, P2, M6
8621A	SG-1206	I1, P2, M6
86290A	SG-1206	I1, P2, M6
86320A	SG-1206	I1, P2, M6
86330A	SG-1206	I1, P2, M6
86341B	SG-1206	I1, P2, M6
86342A	SG-1206	I1, P2, M6
86350A	SG-1206	I1, P2, M6
8640B	SG-1207A/U	-
8690A	SG-1206	I1, P2, M7
8691A	SG-1206	I2, P2, M6
8692A	SG-1206	I1, P2, M6
8695A	SG-1206	I1, P2, M6
8696A	SG-1206	I1, P2
8697A	SG-1206	I1, P2
901	TS-4281( )/G	I1
9041	AN/USM-608	I1,T5,P3,E15,E17
9-2259	TS-4463/P()	TBD
945	AN/USM-488	I1, P2
AL-650	SG-1206	P2
AM-1839/USM	AN/USM-488	P5, T1
AM-1839B/USM	AN/USM-488	P5
AM-1841/USM	AN/USM-488	P5, T1
AM-1841A	AN/USM-488	P5, T1
AM-1842/USM	AN/USM-488	P5, T1
AM-1842A/USM	AN/USM-488	P5, T1
AM-2153	AN/USM-488	P2, P5
AM-3148/USM	AN/USM-488	P5
AM-3174/USM	AN/USM-488	P5
AM-3567/USM	AN/USM-488	P5
AM-3567A/USM	AN/USM-488	P5
AM-3568/USM	AN/USM-488	P5
AM-4030/U	AN/USM-488	P2, P5
AM-4031	AN/USM-488	P2, P5

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AM-4031A/U	AN/USM-488	P2, P5
AM-4032	AN/USM-488	P2, P5
AM-4455/U	AN/USM-488	P5, P2
AM-4610/U	AN/USM-488	P2, P5
AM-6199/U	AN/USM-488	P2, P5
AM-6447/USM	AN/USM-488	P2, P5
AM-6565/U	AN/USM-488	P2, P5
AM-6566/U	AN/USM-488	P2, P5
AM-6610/U	AN/USM-488	P2, P5
AM-6785/U	AN/USM-488	P2, P5, T6
AM-6786/U	AN/USM-488	P5, T1
AM-6880/U	AN/USM-488	P5, T7
AM-6948/U	AN/USM-488	P5, T1
AN/APM-123(V)1	TS-4530/UPM	-
AN/APM-123(V)2	TS-4530/UPM	-
AN/APM-123(V)3	TS-4530/UPM	-
AN/APM-239A	AN/UPM-155	-
AN/APM-245A	AN/UPM-155	-
AN/APM-305	AN/UPM-155	-
AN/APM-305A	AN/UPM-155	-
AN/APM-378	TS-4530/UPM	-
AN/APM-424(V)2	TS-4530/UPM	-
AN/GRM-114A	NONE	I5
AN/GRM-114B	NONE	I5
AN/GRM-50	AN/GRM-114A	P3, E56, E60
AN/GRM-50	SG-1144	E35, E82
AN/GRM-50	SG-1170	P3, E54, E82
AN/GRM-50A	AN/GRM-114A	P3, E56, E60
AN/GRM-50A	SG-1144	E35, E82
AN/GRM-50A	SG-1170	P3, E54, E82
AN/GRM-50B	AN/GRM-114A	P3, E56, E60
AN/GRM-50B	SG-1144	E35, E82
AN/GRM-50B	SG-1170	P3, E54, E82
AN/GRM-50C	AN/GRM-114A	P3, E56, E60
AN/GRM-50C	SG-1144	E35, E82
AN/GRM-50C	SG-1170	P3, E54, E82
AN/GSM-45	TS-4165()/G	P3, E87
AN/GSM-64	AN/GSM-64D	P1
AN/GSM-64A	AN/GSM-64D	P1
AN/GSM-64B	AN/GSM-64D	P1
AN/GSM-64C	AN/GSM-64D	P1
AN/GSM-64D	NONE	I5
AN/GTM-12	NONE	I5
AN/PPM-1	SG-1205(V)1/U	-
AN/PRM-15	AN/PSM-45	-
AN/PRM-35	NONE	I5
AN/PSM-3	AN/PSM-45	P2
AN/PSM-45	NONE	I9
AN/PSM-45A	NONE	I5
AN/PSM-45B	NONE	I5
AN/PSM-4A	AN/PSM-45	-
AN/PSM-4D	AN/PSM-45	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AN/PSM-6	AN/PSM-45	P3, E50
AN/PSM-6A	AN/PSM-45	P3, E50
AN/PSM-6B	AN/PSM-45	P3, E50
AN/PTM-3	AN/USM-485	P2
AN/PTM-8	AN/USM-485	-
AN/TPM-25A	AN/UPM-155	-
AN/TSM-16	AN/USM-459	-
AN/UPM-110	AN/USM-489(V)1	-
AN/UPM-15	SG-1205(V)1/U	-
AN/UPM-15A	SG-1205(V)1/U	-
AN/UPM-58	AN/USM-489(V)1	-
AN/UPM-60	SG-1219	-
AN/UPM-60A	SG-1219	-
AN/UPM-84	AN/USM-489(V)1	-
AN/UPM-84A	AN/USM-489(V)1	E26
AN/UPM-98	AN/UPM-155	-
AN/UPM-98A	AN/UPM-155	-
AN/UPM-98B	AN/UPM-155	-
AN/URM-213	NONE	I5
AN/URM-103	AN/GRM-114A	P3, E26, E60, E37
AN/URM-103	SG-1144	P3, E35, E36
AN/URM-103	SG-1170	P3, E54, E36
AN/URM-105	AN/PSM-45	-
AN/URM-105B	AN/PSM-45	-
AN/URM-105C	AN/PSM-45	-
AN/URM-120	AN/GRM-114A	P3, E56
AN/URM-120	AN/URM-213	-
AN/URM-120A	AN/GRM-114A	P3, E56
AN/URM-120A	AN/URM-213	-
AN/URM-120B	AN/URM-213	-
AN/URM-127	AN/GRM-114A	P3, E56, E58
AN/URM-127	SG-1288/G	-
AN/URM-149	SG-1207/U	-
AN/URM-149	SG-1207A/U	-
AN/URM-167	AN/URM-213	I3, P3, E98
AN/URM-170	SG-1219	P3, E33
AN/URM-180	TS-4084/G	P2
AN/URM-181	SG-1170	P2
AN/URM-182	AN/PRM-34	P3, T1, E1
AN/URM-182	AN/URM-213	T3, T5, I3, E97
AN/URM-182A	AN/PRM-34	P3, T1, E1
AN/URM-182A	AN/URM-213	T3, T5, I3, E97
AN/URM-184	TS-4084/G	-
AN/URM-184A	TS-4084/G	-
AN/URM-200	NONE	I5
AN/URM-206	NONE	I4
AN/URM-206	SG-1219	P3, E32
AN/URM-23	AN/URM-491	P3
AN/URM-25BD	SG-1144	E35, E102
AN/URM-25BD	SG-1170	P3, E54, E103
AN/URM-25D	SG-1144	E35, E102
AN/URM-25D	SG-1170	P3, E54, E103
AN/URM-25F	SG-1144	E35, E102

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AN/URM-25F	SG-1170	P3, E54, E103
AN/URM-25H	SG-1144	E35, E102
AN/URM-25H	SG-1170	P3, E54, E103
AN/URM-25J	SG-1144	E35, E102
AN/URM-25J	SG-1170	P3, E54, E102
AN/URM-26	SG-1170	-
AN/URM-26A	SG-1170	-
AN/URM-26B	SG-1170	-
AN/URM-26C	SG-1170	-
AN/URM-44	SG-1219	P3, E32
AN/URM-44A	AN/URM-206	-
AN/URM-44A	SG-1219	P3, E32
AN/URM-48	AN/GRM-114A	P3, E37
AN/URM-48	SG-1144	P3, E35, E36
AN/URM-48	SG-1170	P3, E54, E36
AN/URM-49	SG-1207/U	-
AN/URM-49	SG-1207A/U	-
AN/URM-49A	SG-1207/U	-
AN/URM-49A	SG-1207A/U	-
AN/URM-52	SG-1219	P3, E33
AN/URM-52A	SG-1219	P3, E32
AN/URM-52B	SG-1219	P3, E32
AN/URM-61	SG-1219	-
AN/URM-61A	SG-1219	-
AN/URM-64-1	SG-1207/U	-
AN/URM-64-1	SG-1207A/U	-
AN/URM-64-2	SG-1207/U	-
AN/URM-64-2	SG-1207A/U	-
AN/URM-64A1	SG-1207/U	-
AN/URM-64A1	SG-1207A/U	-
AN/URM-64A2	SG-1207/U	-
AN/URM-64A2	SG-1207A/U	-
AN/URM-70	SG-1170	-
AN/URM-79	AN/USM-459	-
AN/URM-80	AN/USM-459	-
AN/URM-81	AN/USM-459	-
AN/URM-85	AN/URM-200	-
AN/URM-98	AN/USM-491	-
AN/USM-105	AN/USM-488	P2
AN/USM-105A	AN/USM-488	P2
AN/USM-117	AN/USM-488	-
AN/USM-117A	AN/USM-488	-
AN/USM-117B	AN/USM-488	-
AN/USM-117C	AN/USM-488	-
AN/USM-123	AN/USM-486	E99, P3
AN/USM-140A	AN/USM-488	-
AN/USM-140B	AN/USM-488	-
AN/USM-140C	AN/USM-488	-
AN/USM-141	AN/USM-488	P2
AN/USM-151	AN/USM-488	P2
AN/USM-154	AN/USM-488	P2
AN/USM-161	AN/USM-491	-
AN/USM-164	AN/USM-488	P2

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AN/USM-181	AN/USM-485	-
AN/USM-182	AN/USM-488	-
AN/USM-182A	AN/USM-488	-
AN/USM-184	AN/USM-488	-
AN/USM-186	AN/USM-488	P2
AN/USM-193	AN/USM-491	P2
AN/USM-196	AN/USM-488	P2
AN/USM-203	SG-1206	-
AN/USM-203A	SG-1206	-
AN/USM-205	SG-1288/G	E25
AN/USM-205	SG-1171/U	E25
AN/USM-205A	SG-1288/G	E25
AN/USM-205A	SG-1171/U	E25
AN/USM-207	AN/GRM-114A	P3, E56, E57
AN/USM-207	AN/USM-459	-
AN/USM-207A	AN/GRM-114A	P3, E56, E57
AN/USM-207A	AN/USM-459	-
AN/USM-212	SG-1144	P2, E35
AN/USM-212	SG-1170	P2, E54
AN/USM-213	SG-1207/U	-
AN/USM-213	SG-1207A/U	-
AN/USM-213A	SG-1207/U	-
AN/USM-213A	SG-1207A/U	-
AN/USM-215	AN/USM-488	P2
AN/USM-218	AN/USM-488	P2
AN/USM-218A	AN/USM-488	P2
AN/USM-219	SG-1206	-
CC OF: AN/USM-220	SG-1206	-
AN/USM-219	SG-1206	P2
CC OF: AN/USM-221	SG-1206	P2
AN/USM-219	SG-1206	-
CC OF: AN/USM-222	SG-1206	-
AN/USM-220	SG-1206	-
AN/USM-221	SG-1206	P2
AN/USM-222	SG-1206	-
AN/USM-223	AN/PSM-45	P3, E89
AN/USM-224	ME-545/G	P1
AN/USM-24	AN/USM-488	-
AN/USM-24C	AN/USM-488	-
AN/USM-33	ME-563U	TBD
AN/USM-254	AN/USM-488	P2
AN/USM-256	SG-1288/G	E25
AN/USM-256	SG-1171/U	P2, E25
AN/USM-259	TS-4084/G	P2
AN/USM-26	AN/USM-459	-
AN/USM-260	AN/USM-491	-
AN/USM-264	SG-1288/G	E25
AN/USM-264	SG-1171/U	P2, E25
AN/USM-265	ME-545/G	P2
AN/USM-265A	ME-545/G	P2
AN/USM-269	SG-1288/G	P2
AN/USM-272	SG-1144	P2, E35
AN/USM-272	SG-1170	P2, E54

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AN/USM-273	AN/USM-488	P2
AN/USM-274	SG-1206	P2
AN/USM-281	AN/USM-488	-
AN/USM-281A	AN/USM-488	-
AN/USM-281B	AN/USM-488	-
AN/USM-281C	AN/USM-488	-
AN/USM-281D	AN/USM-488	-
AN/USM-281E	AN/USM-488	-
AN/USM-296	AN/USM-488	-
AN/USM-296A	AN/USM-488	-
AN/USM-298	AN/URM-213	I12
AN/USM-303	AN/USM-486	-
AN/USM-303A	AN/USM-486	-
AN/USM-306(V)	AN/USM-490	I3, E72, E77, T1, T2
AN/USM-306(V)1	AN/USM-490	I3, E72, E77, T1, T2
AN/USM-308/V1	SG-1206	E3, M7
AN/USM-309(V)1	AN/USM-488	-
AN/USM-309(V)2	AN/USM-488	-
AN/USM-313	SG-1144	P2, E35
AN/USM-313	SG-1170	P2, E54
AN/USM-319	AN/USM-486	P2
AN/USM-319A	AN/USM-486	P2
AN/USM-32	AN/USM-488	-
AN/USM-337	AN/USM-486	-
AN/USM-343	AN/USM-485	P2
AN/USM-353(V)	AN/USM-488	P2
AN/USM-353(V)1	AN/USM-488	P2
AN/USM-354	AN/USM-488	P2
AN/USM-354(V)1	AN/USM-488	P2
AN/USM-355(V)	AN/USM-488	P2
AN/USM-355(V)1	AN/USM-488	P2
AN/USM-358	SG-1288/G	E25
AN/USM-358	SG-1171/U	P2, E25
AN/USM-364	AN/USM-488	P2
AN/USM-364(V)1	AN/USM-488	P2
AN/USM-364(V)2	AN/USM-488	P2
AN/USM-366	AN/USM-677	-
AN/USM-377	AN/USM-485	P2
AN/USM-391	AN/USM-485	P2
AN/USM-423	AN/USM-485	-
AN/USM-425(V)1	AN/USM-488	P2, P4
AN/USM-437 (V)	AN/USM-437	P1
AN/USM-437(V)1	AN/USM-437	P1
AN/USM-437A(V)1	NONE	I5
AN/USM-44	SG-1170	E12
AN/USM-44A	SG-1170	E12
AN/USM-44B	SG-1170	E12
AN/USM-44C	SG-1170	-
AN/USM-451	AN/PSM-51	P2
AN/USM-459	NONE	I8
AN/USM-459A	NONE	I5
AN/USM-47	SG-1219	-
AN/USM-48	SG-1219	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
AN/USM-483	OS-288	P1
AN/USM-485	NONE	I5
AN/USM-486	NONE	I5
AN/USM-488	NONE	I5
AN/USM-489(V)1	AN/USM-677	I5
AN/USM-489A	AN/USM-677	-
AN/USM-490	NONE	I5
AN/USM-491	NONE	I5
AN/USM-50	AN/USM-488	-
AN/USM-504	AN/USM-488	P2
AN/USM-507	AN/USM-488	P2
AN/USM-50A	AN/USM-488	-
AN/USM-50B	AN/USM-488	-
AN/USM-50C	AN/USM-488	-
AN/USM-608	NONE	I5
AN/USM-620	NONE	I5
AN/USM-677	NONE	I5
AN/USM-81	AN/USM-488	-
AN/USM-89	AN/USM-488	-
AN/USM-89B	AN/USM-488	-
AN404	SG-1206	I1, P2
B61014PB	AN/PSM-45	P2, I1
B61014R	AN/PSM-45	P2, I1
B61014U	AN/PSM-45	P2, I1
B61014W	AN/PSM-45	P2, I1
BEND1X 711N	AN/URM-213	I1
BIRD 612	AN/URM-213	P2, I1
BIRD 6156	AN/URM-213	P2, I1
CE-21A	AN/USM-490	E73,E77,I1,I3,P2,T2
CE-24A	AN/USM-490	E74,E77,I1,I3,P2,T2,T3
CE-70	AN/USM-490	E75,E77,I1,I3,P2,T2
CE-70/71	AN/USM-490	E75,E77,I1,I3,T1,T2
CE-70/71/72	AN/USM-490	E75,E77,I1,I3,T1,T2
CM-77A/USM	TD-1225A	P3, E18
CP-1033/U	AN/USM-459	-
CP-1101/U	AN/USM-485	P3, E19, T5
CP-772	AN/USM-459	-
CP-814	AN/GRM-114A	P3, E56, E57
CC OF: AN/USM-207	AN/GRM-114A	P3, E56, E57
CP-814	AN/USM-459	-
CC OF: AN/USM-207	AN/USM-459	-
CP-814A	AN/GRM-114A	P3, E56, E57
CC OF: AN/USM-207A	AN/GRM-114A	P3, E56, E57
CP-814A	AN/USM-459	-
CC OF: AN/USM-207A	AN/USM-459	-
CP-932/B	SG-1206	P2
CV-1921	AN/GRM-114A	P3, E56, E57
CC OF: AN/USM-207	AN/GRM-114A	P3, E56, E57
CV-1921	AN/USM-459	-
CC OF: AN/USM-207	AN/USM-459	-
CV-1921A	AN/GRM-114A	P3, E56, E57
CC OF: AN/USM-207A	AN/GRM-114A	P3, E56, E57

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CV-1921A	AN/USM-459	-
CC OF: AN/USM-207A	AN/USM-459	-
CV-2002	AN/USM-459	-
CV-2003/U	TD-1225A	-
CV-3059/U	TD-1225A	-
DA-75/U	AN/GRM-114A	P3, E56
DM501	AN/USM-486	I1
DT-255	AN/USM-491	-
CC OF: AN/USM-161	AN/USM-491	-
ELECTRO-IMPULSE		
DMP-3	AN/URM-213	P2, I1
F-1414/U	AN/USM-489(V)1	E28
F53A	SG-1288/G	P2, I1
F55A	SG-1288/G	E25, I1
F55A	SG-1171/U	P2, I1, E25
FG-501	SG-1288/G	E25, I1
FG-501	SG-1171/U	P2, I1, E25
FG-503	SG-1288/G	P2, I1
FR-114/U	AN/USM-459	-
CC OF: AN/TSM-16	AN/USM-459	-
FR-114A/U	AN/USM-459	-
CC OF: AN/TSM-16	AN/USM-459	-
FR-205/U	AN/USM-490	-
FR-209(V) 1/U	AN/USM-490	I3, E66, E77, T5
FR-210/U	AN/USM-490	I3, E69, E77, T1, T2
FR-211/U	AN/USM-490	I3, E73, E77
FR-38A/U	AN/USM-459	-
CC OF: AN/USM-26	AN/USM-459	-
FR-4/U	AN/USM-459	-
CC OF: AN/URM-79	AN/USM-459	-
FR-40/GSM-1	AN/USM-459	-
FR-5/U	AN/USM-459	-
CC OF: AN/URM-80	AN/USM-459	-
FR-6/U	AN/USM-459	-
CC OF: AN/URM-81	AN/USM-459	-
G486A	AN/USM-491	E34, I1
H486A	AN/USM-491	E34, I1
ID-1189	AN/PRM-34	P3, E2
IP-1018	AN/USM-620	-
IP-1018A/U	AN/USM-490	I3, E72, E77, T1, T2
CC OF: AN/USM-306(V)1	AN/USM-490	I3, E72, E77, T1, T2
IP-1216	AN/USM-620	M3
IP-1216(P)/GR	AN/USM-489(V)1	E28
K486A	AN/USM-491	E34, I1
L5XA	SG-1206	I1, P2, M6
L5XA1	SG-1206	I1, P2, M6
LT006	SG-1206	I1, P2
M486A	AN/USM-491	E34, I1
ME-11C	AN/URM-213	P2
ME-153/U	TS-4084/G	P2
ME-204	AN/URM-200	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/URM-85	AN/URM-200	-
ME-218	AN/GSM-64D	P1
CC OF: AN/GSM-64	AN/GSM-64D	P1
ME-218A	AN/GSM-64D	P1
CC OF: AN/GSM-64A	AN/GSM-64D	P1
ME-22/PCM	AN/USM-485	P3, T5, E21
ME-227/U	AN/USM-486	-
ME-227A/U	AN/USM-486	-
ME-231 FYQ5	AN/USM-486	P2
ME-250/U	AN/PSM-45	-
ME-258/U	AN/USM-486	-
CC OF: AN/USM-303	AN/USM-486	-
ME-26/U	AN/GRM-114A	P3, E56, E61
ME-26/U	AN/USM-486	P3, E8
ME-260/U	AN/USM-485	-
CC OF: AN/USM-181	AN/USM-485	-
ME-260B/U	AN/USM-485	P2
CC OF: AN/USM-377	AN/USM-485	P2
ME-260B/U	AN/USM-485	-
CC OF: AN/USM-423	AN/USM-485	-
ME-262/U	AN/USM-486	-
ME-269( )/GRM-58	ME-545/G	P2
ME-26A/U	AN/GRM-114A	P3, E56, E61
ME-26A/U	AN/USM-486	P3, E8
ME-26B/U	AN/GRM-114A	P3, E56, E61
ME-26B/U	AN/USM-486	P3, E8
ME-261C/U	AN/GRM-114A	P3, E56, E61
ME-26C/U	AN/USM-486	P3, E8
ME-26D/U	AN/GRM-114A	P3, E56, E61
ME-26D/U	AN/USM-486	P3, E8
ME-295/U	AN/USM-490	I3, E65, E77, T2
ME-297/U	AN/PSM-45	P3, E89
CC OF: AN/USM-223	AN/PSM-45	P3, E89
ME-30	AN/GRM-114A	P3, E56, E62
ME-30	AN/USM-486	P3, E9
ME-303A/U	AN/USM-486	E84
ME-30A/U	AN/GRM-114A	P3, E56, E62
ME-30A/U	AN/USM-486	P3, E9
ME-30B/U	AN/GRM-114A	P3, E56, E62
ME-30B/U	AN/USM-486	P3, E9
ME-30C/U	AN/GRM-114A	P3, E56, E62
ME-30C/U	AN/USM-486	P3, E9
ME-30D/U	AN/GRM-114A	P3, E56, E62
ME-30D/U	AN/USM-486	P3, E9
ME-30E/U	AN/GRM-114A	P3, E56, E62
ME-30E/U	AN/USM-486	P3, E9
ME-30F/U	AN/GRM-114A	P3, E56, E62
ME-30F/U	AN/USM-486	P3, E9
ME-314/U	ME-545/G	P1, E5

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
ME-316/FRM-16(V)	ME-545/G	P2
ME-318/U	ME-545/G	P1, E5
ME-318/U	ME-545/G	P1
CC OF: AN/USM-224	ME-545/G	P1
ME-328/USM-238	AN/PSM-45	P2
ME-336/URM	TS-4084/G	P2
ME-340/U	ME-545/G	P2
ME-340/U	ME-545/G	P2
CC OF: AN/USM-265	ME-545/G	P2
ME-340A/U	ME-545/G	P2
ME-376	AN/USM-486	P2
CC OF: AN/USM-319	AN/USM-486	P2
ME-376A	AN/USM-486	P2
CC OF: AN/USM-319A	AN/USM-486	P2
ME-378/U	AN/USM-490	I3, E63, E77, T3
ME-425/U	ME-545/G	-
ME-441	AN/USM-491	-
ME-444/U	ME-545/G	P3, T1, E6
ME-450	AN/USM-486	E105
ME-451/G	AN/USM-490	I3, E71, E77, T1, T2
ME-452U	ME-563U	TBD
ME-459/U	ME-545/G	-
ME-460V(1)/U	ME-545/G	P2
ME-462/U	ME-545/G	P2
ME-463/U	AN/GSM-64D	P6
ME-465/U	ME-545/G	P2
ME-48A/U	AN/PSM-45	-
CC OF: AN/PSM-4A	AN/PSM-45	-
ME-488/U	ME-563U	TBD
ME-489/U	ME-563U	TBD
ME-490/U	AN/USM-608	T5, P3, E15, E16
ME-492	AN/PSM-45	-
ME-497	AN/URM-213	-
ME-498	AN/GSM-64D	E102
ME-501/U	ME-545/G	P2
ME-506/U	ME-523( )/U	TBD
ME-51/UP	AN/USM-491	-
ME-511/U	ME-563U	TBD
ME-525/USM	ME-523( )/U	TBD
ME-525A/USM	ME-523( )/U	TBD
ME-545/G	NONE	I5
ME-57/U	AN/GRM-114A	P3, E56
ME-57A/U	AN/GRM-114A	P3, E56
ME-65A/U	ME-563U	TBD
ME-69	AN/URM-213	P2, I1, E98
ME-70	AN/PSM-45	P3, E50
CC OF: AN/PSM-6	AN/PSM-45	P3, E50
ME-70A	AN/PSM-45	P3, E50
CC OF: AN/PSM-6	AN/PSM-45	P3, E50

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
ME-70B	AN/PSM-45	P3, E50
CC OF: AN/PSM-6A	AN/PSM-45	P3, E50
ME-70C	AN/PSM-45	P3, E50
CC OF: AN/PSM-6B	AN/PSM-45	P3, E50
ME-71/FCC	AN/USM-485	P3, T5, E22
ME-77	AN/PSM-45	-
ME-77B/U	AN/PSM-45	-
CC OF: AN/URM-105B	AN/PSM-45	-
ME-77C/U	AN/PSM-45	-
CC OF: AN/URM-105C	AN/PSM-45	-
ME-82	AN/URM-213	-
MIL-T-58078	TS-4463/P()	TBD
MX-2330/G	AN/USM-488	P2, P5
MX-2330/G	AN/USM-488	-
CC OF: AN/USM-81	AN/USM-488	-
MX-2330A/G	AN/USM-488	-
CC OF: AN/USM-81	AN/USM-488	-
MX-2930A/USM-105	AN/USM-488	P2, P5
MX-2930B/USM	AN/USM-488	P2, P5
MX-2930C/USM	AN/USM-488	P2, P5
MX-2962/USM-105	AN/USM-488	P5
MX-2995/USM-117	AN/USM-488	P2, P5
MX-2996/USM-117	AN/USM-488	P2, P5
MX-3057/USM	AN/USM-488	P2, P5
MX-3078/USM	AN/USM-488	P2, P5
MX-3668	AN/USM-488	P2
CC OF: AN/USM-151	AN/USM-488	P2
MX-8364A	SG-1206	E3, M7
O-1306	SG-1206	-
CC OF: AN/USM-222	SG-1206	-
O-1307	SG-1206	-
CC OF: AN/USM-220	SG-1206	-
O-1307	SG-1206	P2
CC OF: AN/USM-221	SG-1206	P2
O-1307	SG-1206	-
CC OF: AN/USM-222	SG-1206	-
O-1308	SG-1206	-
CC OF: AN/USM-220	SG-1206	-
O-1308	SG-1206	P2
CC OF: AN/USM-221	SG-1206	P2
O-1309	SG-1206	-
CC OF: AN/USM-220	SG-1206	-
O-1310	SG-1206	-
CC OF: AN/USM-222	SG-1206	-
O-1637/U	SG-1206	P2
O-450/U	SG-1288/G	P2
O-850/U	SG-1288/G	E25
O-850/U	SG-1171/U	E25
OS-104B	AN/USM-488	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/USM-89	AN/USM-488	-
OS-104B	AN/USM-488	-
CC OF: AN/USM-89B	AN/USM-488	-
OS-106	AN/USM-488	-
CC OF: AN/USM-117	AN/USM-488	-
OS-106/USM-117	AN/USM-488	P2
OS-106C	AN/USM-488	-
CC OF: AN/USM-117C	AN/USM-488	-
OS-110	AN/USM-488	P2
OS-121A	AN/USM-488	-
CC OF: AN/USM-140A	AN/USM-488	-
OS-121A/USM-140	AN/USM-488	P2
OS-121B	AN/USM-488	-
CC OF: AN/USM-140B	AN/USM-488	-
OS-121C	AN/USM-488	-
CC OF: AN/USM-140C	AN/USM-488	-
OS-122	AN/USM-488	P2
CC OF: AN/USM-141	AN/USM-488	P2
OS-123/U	AN/USM-488	-
OS-124	AN/USM-488	P2
OS-132	AN/USM-488	P2
OS-155P/U	AN/USM-488	-
CC OF: AN/USM-182	AN/USM-488	-
OS-157	AN/USM-488	P2
CC OF: AN/USM-186	AN/USM-488	P2
OS-159(P)	AN/USM-488	P2
CC OF: AN/USM-196	AN/USM-488	P2
OS-170	AN/USM-488	P2
CC OF: AN/USM-215	AN/USM-488	P2
OS-172AP/USM-218	AN/USM-488	P2
OS-185/U	AN/USM-488	P2
CC OF: AN/USM-254	AN/USM-488	P2
OS-188/U	AN/USM-488	P2
CC OF: AN/USM-273	AN/USM-488	P2
OS-189(P)	AN/USM-488	-
CC OF: AN/USM-281	AN/USM-488	-
OS-189A(P)	AN/USM-488	-
CC OF: AN/USM-218A	AN/USM-488	-
OS-189AP/USM-281	AN/USM-488	P2
OS-193/PU	AN/USM-488	P2
OS-193P/U	AN/USM-488	P2
OS-193PA/U	AN/USM-488	P2, P5
OS-201(P)/USM-310	AN/USM-488	P2
OS-215P/U	AN/USM-488	P2
OS-220P/U	AN/USM-488	P2
OS-232/U	AN/USM-488	P2
OS-233	AN/USM-488	P2
OS-233A	AN/USM-488	P2
OS-233AP/U	AN/USM-488	P2

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
OS-233P/U	AN/USM-488	P2
OS-242/U	AN/USM-488	-
OS-245(P)/U	AN/USM-488	-
CC OF: AN/USM-281C	AN/USM-488	-
OS-252(P)/U	AN/USM-488	-
CC OF: AN/USM-296A	AN/USM-488	-
OS-261/U	AN/USM-488	P3, E79
OS-261/U	OS-303/G	-
OS-261A(V)1/U	AN/USM-488	P3, E79, E80
OS-261A(V)1/U	OS-303/G	-
OS-261B(V)1/U	AN/USM-488	P3, E79, E81
OS-261B/U	OS-303/G	-
OS-261C(V)1/U	AN/USM-488	P3, E79, E80, E81
OS-261C/U	OS-303/G	-
OS-262(P)/U	OS-303/G	-
OS-267(V)1/U	AN/USM-488	P2
OS-275(P)/U	OS-303/G	-
OS-275(P)A/U	OS-303/G	-
OS-288/G	OS-303/G	-
OS-291/G	OS-303/G	-
OS-303/G	NONE	I5
OS-34	AN/USM-488	-
CC OF: AN/USM-32	AN/USM-488	-
OS-5001/U	AN/USM-488	P2
OS-5010(P)/USM-508	AN/USM-488	-
OS-8/U	AN/USM-488	-
OS-82A	AN/USM-488	P2
CC OF: AN/USM-105A	AN/USM-488	P2
OS-8A	AN/USM-488	-
OS-8C	AN/USM-488	-
OS-8E	AN/USM-488	-
OS-8G	AN/USM-488	-
P486A	AN/USM-491	E35, I1
P486A	AN/USM-491	I1, E34
PT-1186	AN/USM-488	P2, P5
PL-1186A	AN/USM-488	P2, P5
PL-1187	AN/USM-488	P2, P5
PL-1187A/USM	AN/USM-488	P2, P5
PL-1239A/USM-308	SG-1206	M1, E4, M5
PL-1240/USM-308	SG-1206	P2
PL-1241A/USM-308	SG-1206	M1, E4, M5
PL-1241B/USM-308	SG-1206	M1, E4, M5
PL-1242/USM-308(V)	SG-1206	M1, E4, MS
PL-1243/USM-308(V)	SG-1206	M1, E4, MS
PL-1292	AN/USM-488	P2, P5
PL-1293	AN/USM-488	P2, P5
PL-1293/U	AN/USM-488	P5
PL-1304/USM-308(V)	SG-1206	M1, E4, M5
PL-1309	AN/USM-488	P2, P5
PL-1310	AN/USM-488	P2, P5

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
PL-1311/U	AN/USM-488	P2, P5
PL-1312/U	AN/USM-488	P2, P5
PL-1313/U	AN/USM-488	P5
PL-1320/U	TD-1225A	M1
PL-1332	AN/USM-488	P2, P5
PL-1336/U	AN/USM-488	P5
PL-1343/U	SG-1206	M6
PL-1344/U	AN/USM-486	P5
PL-1378	AN/USM-488	P2, P5
PL-1387	AN/USM-620	M3
PL-1388	AN/USM-620	M3
PL-1388/U	AN/USM-489(V)1	M2, E31
PL-1391	AN/USM-620	M4
PL-1392/U	AN/USM-489(V)1	M2, E27
PL-1399	AN/USM-620	M3
PL-1400/U	AN/USM-489(V)1	M2, E28
PL-1406/U	AN/USM-489(V)1	M2, E28
R422	AN/USM-488	I1, P2
R453A	AN/USM-488	I1, P2
R465	AN/USM-488	I1, P2
R465B	AN/USM-488	I1, P2
R486A	AN/USM-491	E34, I1
R5115	OS-291/G	I1
R5403D40	AN/USM-488	I1, P2
R7313	OS-291/G	I1, E85, E86
R7403N	AN/USM-488	I1, P2
R7603	AN/USM-488	I1, P2
REIC-340000	TS-4463/P()	TBD
RM15	AN/USM-488	I1, P2
RM31	AN/USM-488	I1, P2
RM31A	AN/USM-488	I1, P2
RM35A	AN/USM-488	I1, P2
RM504	AN/USM-488	I1, P2
RM545B	AN/USM-488	I1, P2
RM547	AN/USM-488	I1, P2
RM561	AN/USM-488	I1, P2
RM585A	AN/USM-488	I1, P2
SC502	AN/USM-488	I1, P2
	AN/GRM-114A	E56
	AN/PSM-45A	I10
	AN/USM-459A	I11
SG-1023	SG-1288/G	P2
SG-103	SG-1144	E35
CC OF: AN/URM-25F	SG-1144	E35
SG-103	SG-1170	P3, E54
CC OF: AN/URM-25F	SG-1170	P3, E54
SG-1032/U	SG-1288/G	P2
SG-1038/U	SG-1144	P2, E35
SG-1038/U	SG-1170	P2, E54

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
SG-106/U	SG-1288/G	E25
SG-106/U	SG-1171/U	P2, E25
SG-1093/U	SG-1207/U	P1, E51
SG-1102/U	SG-1288/G	E25
SG-1102/U	SG-1171/U	P2, E25
SG-1112(V)1/U	SG-1207/U	P1, E52
SG-1112(V)2/U	SG-1207/U	P1, E53
SG-1121(V)1/U	SG-1206	-
SG-1125	AN/USM-489	E30
SG-1128	SG-1288/G	E25
SG-1128	SG-1171/U	P3, E7, E25
SG-1133	SG-1288/G	-
SG-1133	SG-1171/U	E25
SG-1144	NONE	I6
SG-1144	SG-1170	P1, I6
SG-1144/U	SG-1207A/U	-
SG-1145/U	NONE	P2
CC OF: AN/URM-206	NONE	I4
SG-1145/U	SG-1219	P3, E32
CC OF: AN/URM-206	SG-1219	P3, E32
SG-117	SG-1170	-
CC OF: AN/URM-26B	SG-1170	-
SG-1170	NONE	I5
SG-1170/U	SG-1207A/U	-
SG-1171/U	NONE	I7
SG-1171/U	SG-1288/G	P1, I7
SG-1174/U	SG-1219	P3, E33
SG-12	SG-1170	P3, E54, E36
SG-12/U	AN/GRM-114A	P3, E37
SG-12/U	SG-1144	P3, E35, E36
SG-12/U	AN/GRM-114A	P3, E37
CC OF: AN/URM-48	AN/GRM-114A	P3, E37
SG-12/U	SG-1144	P3, E35, E36
CC OF: AN/URM-48	SG-1144	P3, E35, E36
SG-12/U	SG-1170	P3, E54, E36
CC OF: AN/URM-48	SG-1170	P3, E54, E36
SG-1205(V)1/U	NONE	I5
SG-1206	NONE	I5
SG-1207/U	NONE	I5
SG-1207/U	SG-1207A/U	-
SG-1219	NONE	I5
SG-1288/G	NONE	I5
SG-15/PCM	AN/USM-485	P3, T5, E83
SG-15/PCM	SG-1288/G	T3, P3, E83
SG-15/PCM	SG-1171/U	T3, E25, P3, E83
SG-155	SG-1207/U	-
CC OF: AN/URM-149	SG-1207/U	-
SG-20/U	SG-1144	P2, E35
SG-20/U	SG-1170	P2, E54
SG-227	SG-1206	-
CC OF: AN/USM-47	SG-1207	-
SG-227	SG-1219	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/USM-47	SG-1219	-
SG-228	SG-1219	-
CC OF: AN/USM-48	SG-1219	-
SG-297/U	AN/GRM-114A	P3, E56, E60, E37
CC OF: AN/URM-103	AN/GRM-114A	P3, E56, E60, E37
SG-297/U	SG-1144	P3, E35, E36
CC OF: AN/URM-103	SG-1144	P3, E35, E36
SG-297/U	SG-1170	P3, E54, E36
CC OF: AN/URM-103	SG-1170	P3, E54, E36
SG-298/U	SG-1288/G	E25
SG-298/U	SG-1171/U	E25, E101
SG-298A/U	SG-1288/G	E25
SG-298A/U	SG-1171/U	E25, E101
SG-299/U	SG-1288/G	E25
SG-299/U	SG-1171/U	E25
SG-299A/U	SG-1288/G	-
SG-299A/U	SG-1171/U	E25
SG-299B/U	SG-1288/G	E25
SG-299B/U	SG-1171/U	E25
SG-299C/U	SG-1288/G	-
SG-299C/U	SG-1171/U	E25
SG-299D/U	SG-1288/G	-
SG-299D/U	SG-1171/U	E25
SG-299E/U	SG-1288/G	-
SG-299E/U	SG-1171/U	E25
SG-3/U	SG-1170	-
CC OF: AN/URM-70	SG-1170	-
SG-309( )GRC-47	SG-1170	P2
SG-321/U	SG-1288/G	E25
SG-321/U	SG-1171/U	E25, E101
SG-321A/U	SG-1288/G	E25
SG-321A/U	SG-1171/U	E25, E101
SG-321B/U	SG-1288/G	E25
SG-321B/U	SG-1171/U	E25, E101
SG-336/U	SG-1206	-
SG-340A/G	SG-1207/U	-
SG-340A/G	SG-1207A/U	-
SG-343	SG-1205(V)1/U	-
CC OF: AN/URM-15A	SG-1205(V)1/U	-
SG-367	SG-1206	P2
SG-377	AN/GRM-114A	P3, E56, E58
CC OF: AN/URM-127	AN/GRM-114A	P3, E56, E58
SG-377	SG-1288/G	-
CC OF: AN/URM-127	SG-1288/G	-
SG-407/U	SG-1206	-
SG-45A	SG-1170	-
CC OF: AN/URM-26A	SG-1170	-
SG-479/U	AN/GRM-114A	P3, E56, E60
CC OF: AN/GRM-50	AN/GRM-114A	P3, E56, E60
SG-479/U	SG-1144	E35, E82

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/GRM-50	SG-1144	E35, E82
SG-479/U	SG-1170	P3, E54, E82
CC OF: AN/GRM-50	SG-1170	P3, E54, E82
SG-479A/U	AN/GRM-114A	P3, E56, E60
CC OF: AN/GRM-50A	AN/GRM-114A	P3, E56, E60
SG-479A/U	SG-1144	E35, E82
CC OF: AN/GRM-50A	SG-1144	E35, E82
SG-479A/U	SG-1170	P3, E54, E82
CC OF: AN/GRM-50A	SG-1170	P3, E54, E82
SG-479B/U	AN/GRM-114A	P3, E56, E60
CC OF: AN/GRM-50B	AN/GRM-114A	P3, E56, E60
SG-479B/U	SG-1144	E35, E82
CC OF: AN/GRM-50B	SG-1144	E35, E82
SG-479B/U	SG-1170	P3, E54, E82
CC OF: AN/GRM-50B	SG-1170	P3, E54, E82
SG-479C/U	AN/GRM-114A	P3, E56, E60
CC OF: AN/GRM-50C	AN/GRM-114A	P3, E56, E60
S-479C/U	SG-1144	E35, E82
CC OF: AN/GRM-50C	SG-1144	E35, E82
SG-479C/U	SG-1170	P3, E54, E82
CC OF: AN/GRM-50C	SG-1170	P3, E54, E82
SG-502	SG-1288/G	E25, I1
SG-502	SG-1171/U	P2, I1, E25
SG-510	SG-1288/G	P2
SG-543	SG-1288/G	P4
SG-543A/U	SG-1288/G	P4
SG-543A/U	AN/USM-485	-
CC OF: AN/USM-181	AN/USM-485	-
SG-543A/U	AN/USM-485	-
CC OF: AN/USM-377	AN/USM-485	P2
SG-543B/U	SG-1288/G	P4
SG-543B/U	AN/USM-485	-
CC OF: AN/USM-423	AN/USM-485	-
SG-543C	SG-1288/G	P4
SG-553/U	SG-1171/U	E25
CC OF: AN/USM-205	SG-1171/U	E25
SG-553/U	SG-1288/G	E25
CC OF: AN/USM-205	SG-1288/G	E25
SG-553A/U	SG-1171/U	E25
CC OF: AN/USM-205A	SG-1171/U	E25
SG-553A/U	SG-1288/G	E25
CC OF: AN/USM-205A	SG-1288/G	E25
SG-575	SG-1206	P2
SG-578/U	SG-1288/G	E25
SG-578/U	SG-1171/U	P2, E25
SG-590	SG-1171/U	E25
SG-590	SG-1288/G	E25
SG-593/USM-203	SG-1206	P2
SG-621	SG-1288/G	P2

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
SG-621A	SG-1288/G	P2
SG-632	SG-1288/G	E25
SG-632	SG-1171/U	E25
SG-632A/U	SG-1288/G	E25
SG-632A/U	SG-1171/U	E25
SG-632B/U	SG-1288/G	E25
SG-632B/U	SG-1171/U	E25
SG-644/U	SG-1207/U	-
CC OF: AN/USM-213	SG-1207/U	-
SG-644A/U	SG-1207/U	-
CC OF: AN/USM-213A	SG-1207/U	-
SG-668P/USM-219	SG-1206	-
SG-676/G	SG-1219	P2
SG-677/U	SG-1206	P1
SG-677A	SG-1206	P1
SG-681	SG-1206	-
SG-69	SG-1205(V)1/U	-
CC OF: AN/PPM-1	SG-120(V)1/U	-
SG-69/PPM-1	SG-1205(V)1/U	-
SG-71/FCC	SG-1288/G	-
SG-71A/FCC	SG-1288/G	-
SG-71B/FCC	SG-1288/G	-
SG-71C/FCC	SG-1288/G	-
SG-747/U	SG-1288/G	E25
SG-747/U	SG-1171/U	E25
SG-756	SG-1219	P3, E33
CC OF: AN/URM-170	SG-1219	P3, E33
SG-763/U	SG-1288/G	E25
SG-763/U	SG-1171/U	E25
SG-763/U	SG-1171/U	P3, E25
CC OF: AN/USM-264	SG-1171/U	P2, E25
SG-763/U	SG-1288/G	E25
CC OF: AN/USM-264	SG-1288/G	E25
SG-763A/U	SG-1288/G	E25
SG-764A/U	SG-1171/U	E25
SG-768/U	SG-1144	P2, E35
CC OF: AN/USM-272	SG-1144	P2, E35
SG-768/U	SG-1170	P2, E54
CC OF: AN/USM-272	SG-1170	P2, E54
SG-769/U	SG-1288/G	E25
SG-769/U	SG-1171/U	P2, E25
SG-770/U	SG-1288/G	E25
SG-770/U	SG-1171/U	P2, E25
SG-772/G	SG-1288/G	E25
SG-772/G	SG-1171/U	P2, E25
SG-800	SG-1219	P2
SG-837/U	SG-1288/G	P2
SG-85	SG-1144	E35
CC OF: AN/URM-25D	SG-1144	E35

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
SG-85	SG-1170	P3, E54
CC OF: AN/URM-25D	SG-1170	P3, E54
SG-855	AN/USM-488	P2, P5, T1
SG-85B	SG-1144	E35
CC OF: AN/URM-25H	SG-1144	E35
SG-85B	SG-1170	P3, E54
CC OF: AN/URM-25H	SG-1170	P3, E54
SG-85C	SG-1144	E35
CC OF: AN/URM-25J	SG-1144	E35
SG-85C	SG-1170	P3, E54
CC OF: AN/URM-25J	SG-1170	P3, E54
SG-871/U	SG-1170	P2
CC OF: AN/URM-181	SG-1170	P2
SG-888	SG-1206	P2
SG-92/U	SG-1206	-
SG-92A	SG-1206	-
SG-944/U	AN/URM-206	-
SG-944/U	SG-1219	P3, E32
SG-967	SG-1288/G	-
SG-968/U	SG-1288/G	-
SG-969/U	SG-1170	-
SG-970/U	SG-1288/G	E25
SG-970/U	SG-1171/U	P2, E25
SG-972	SG-1206	P2
SG-975/U	SG-1170	P2
SG-982/U	SG-1288/G	P2
SG-984/U	SG-1288/G	E25
SG-984/U	SG-1171/U	P2, E25
SG-987	SG-1206	-
SG-990	SG-1206	-
SH-1	SG-1206	I1, P2, M6
SM-2000D	SG-1206	I1, P2
T912	OS-291/G	I1
T922	AN/USM-488	I1, P2
TA-885/U	AN/USM-485	-
TD-1085	AN/USM-488	P2, P5
TD-1086/U	AN/USM-488	P2, P5
TD-1159/U	AN/USM-488	P5
TD-1225A	NONE	I5
TD-1338	NONE	I5
TD-5037	AN/USM-488	P2, P5
TD-793A	AN/USM-488	P2, P5
TF-2330A	AN/USM-490	E76, E77, I1, I3
TP-52550-2	TS-4463/P()	TBD
TS-1011	AN/USM-489(V)1	-
CC OF: AN/UPM-84	AN/USM-489(V)1	-
TS-125/AP	AN/USM-491	-
TS-1285	AN/URM-213	-
TS-1285	AN/GRM-114A	P3, E56

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/URM-120	AN/GRM-114A	P3, E56
TS-1344/U	TS-4084/G	P2
TS-140/PCM	AN/USM-485	-
TS-155/UP	SG-1219	-
TS-155A/UP	SG-1219	-
TS-155B/UP	SG-1219	-
TS-155C/UP	SG-1219	-
TS-155E/UP	SG-1219	-
TS-1830/U	AN/USM-490	I3, E29, E39, E77, T2
TS-1830A/U	AN/USM-490	I3, E39, E77, T2
TS-1830D/U	AN/USM-490	I3, E39, E77, T2
TS-1833	TS-4165()/G	P3, E87
CC OF: AN/GSM-45	TS-4165()/G	P3, E87
TS-1856/U	TS-4084/G	P2
TS-186C/U	TD-1225A	-
TS-186D/UP	TD-1225A	-
TS-186E/UP	TD-1225A	-
TS-186F/UP	TD-1225A	-
TS-1916	AN/USM-489(V)1	E26
CC OF: AN/USM-84A	AN/USM-489(V)1	E26
TS-2082/U	AN/USM-491	P2
CC OF: AN/USM-193	AN/USM-491	P2
TS-2333/USM	AN/USM-490	I3, E40, E77, T1, T2
TS-2333A/USM	AN/USM-490	I3, E40, E77, T1, T2
TS-2394/G	TS-4084/G	-
TS-2395/G	AN/USM-608	P3, T5, E13, E15
TS-2465/U	TS-4084/G	P2
TS-2557/U	AN/USM-491	-
CC OF: AN/USM-260	AN/USM-491	-
TS-2557A	AN/USM-491	P2, E49, I2
TS-257/ARM	AN/PSM-45	-
TS-257/ARM	AN/PSM-45	P2
TS-26A/TSM	AN/PSM-45	-
TS-2609/U	AN/URM-213	T3, T5
TS-2609/U	AN/PRM-34	P3, T1, E1
CC OF: AN/URM-182	AN/PRM-34	P3, T1, E1
TS-2609A	AN/URM-213	T3, T5
TS-2669/GCM	AN/USM-608	P3, T5, E14, E15
TS-2669A/GCM	AN/USM-608	P3, T5, E14, E15
TS-2669B/GCM	AN/USM-608	P3, T5, E14, E15
TS-26A/TSM	AN/PSM-45	-
TS-2721/U	AN/USM-490	I3, E72, E77, T1, T2
TS-2947	TS-4084/G	-
CC OF: AN/URM-184	TS-4084/G	-
TS-2968/U	AN/USM-490	I3, E72, E77, T2
TS-297/U	AN/PSM-45	-
TS-3066(V)1/U	AN/USM-490	I3, E41, E77, T2
TS-3066(V)2/U	AN/USM-490	I3, E41, E77, T2
TS-3066(V)3/U	AN/USM-490	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
TS-312/FSM1	SG-1288/G	-
TS-312A/FSM1	SG-1288/G	-
TS-312B/FSM1	SG-1288/G	-
TS-3150	AN/USM-620	P2
TS-3156/U	AN/USM-485	P3, T2, E20
TS-3157/U	AN/USM-485	P3, T2, E23
TS-3170	AN/USM-620	-
TS-3170A	AN/USM-620	-
TS-3171/U	AN/USM-485	-
TS-3186/U	TS-4084/G	P2
TS-3237	AN/USM-620	-
TS-324/U	AN/USM-488	P2
TS-3329/U	AN/USM-485	-
TS-340/U	AN/USM-486	-
TS-3483/U	AN/USM-485	-
TS-352/U	AN/PSM-45	-
TS-352B/U	AN/PSM-45	-
TS-3546/U	AN/USM-491	P2
TS-3628(V)1/U	AN/USM-620	P2
TS-3641	TS-4281()/G	I3, E91, E93, T4
TS-3642	TS-4281()/G	I3, E91, E92
TS-3754/U	AN/URM-213	T3, T5
TS-3754/U	AN/PRM-34	P3, T1, E1
CC OF: AN/URM-182A	AN/PRM-34	P3, T1, E1
TS-3793	AN/USM-491	P1, E38
TS-382	SG-1288/G	-
TS-382A/U	SG-1288/G	-
TS-382B/U	SG-1288/G	-
TS-382C/U	SG-1288/G	-
TS-382D/U	SG-1288/G	-
TS-382E/U	SG-1288/G	-
TS-382F/U	SG-1288/G	-
TS-400	AN/USM-485	P2
TS-403A/U	SG-1219	-
TS-403A/U	SG-1219	-
CC OF: AN/URM-61	SG-1219	-
TS-403B/U	SG-1219	-
TS-403B/U	SG-1219	-
CC OF: AN/URM-61A	SG-1219	-
TS-4084/G	NONE	I5
TS-4165()/G	NONE	I5
TS-418B/U	SG-1207/U	-
CC OF: AN/URM-49	SG-1207/U	-
TS-418C/U	SG-1207/U	-
CC OF: AN/URM-49A	SG-1207/U	-
TS-419A/U	SG-1207/U	-
CC OF: AN/URM-64A1	SG-1207/U	-
TS-419U	SG-1207/U	-
TS-419U	SG-1207A/U	-
TS-421	SG-1288/G	-

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
TS-421A/U	SG-1288/G	-
TS-421C	SG-1288/G	-
TS-4281()/G	NONE	-
TS-433A	SG-1171/U	E25
TS-433A	SG-1288/G	E25
TS-452/U	SG-1206	-
TS-452A/U	SG-1206	-
TS-452B/U	SG-1206	-
TS-452C/U	SG-1206	-
TS-452D/U	SG-1206	-
TS-452E/U	SG-1206	-
TS-4530/UPM	NONE	I5
TS-497/URR	SG-1170	-
TS-497B/URR	SG-1170	-
TS-497C/URR	SG-1170	-
TS-505/U	AN/USM-486	-
TS-505A/U	AN/USM-486	-
TS-505B/U	AN/USM-486	-
TS-505C/U	AN/USM-486	-
TS-505D/U	AN/USM-486	-
TS-510/U	SG-1170	E12
TS-510/U	SG-1170	E12
CC OF: AN/USM-44	SG-1170	E12
TS-510A/U	SG-1170	E12
TS-510A/U	SG-1170	E12
CC OF: AN/USM-44A	SG-1170	E12
TS-510B/U	SG-1170	E12
TS-510B/U	SG-1170	E12
CC OF: AN/USM-44B	SG-1170	E12
TS-510C/U	SG-1170	-
TS-510C/U	SG-1170	-
CC OF: AN/USM-44C	SG-1170	-
TS-559/FT	AN/USM-485	-
TS-569/FT	AN/USM-485	P2
TS-585/U	AN/USM-486	P3, E24
TS-585A/U	AN/USM-486	P3, E24
TS-585B/U	AN/USM-486	P3, E24
TS-585C/U	AN/USM-486	P3, E24
TS-585D/U	AN/USM-486	P3, E24
TS-592A	SG-1205(V)1/U	-
CC OF: AN/UPM-15	SG-1205(V)1/U	-
TS-592A/URM-15	SG-1205(V)1/U	P2
TS-618/U	AN/PSM-45	-
CC OF: AN/PRM-15	AN/PSM-45	-
TS-621U	SG-1219	-
TS-622	SG-1219	P3, E32
CC OF: AN/URM-44	SG-1219	P3, E32
TS-622A	AN/URM-206	-
CC OF: AN/URM-44A	AN/URM-206	-
TS-622A	SG-1219	P3, E32

Equipment Replacement List – Continued

Designator	Replaced By	Condition Code
CC OF: AN/URM-44A	SG-1219	P3, E32
TS-723/U	AN/GRM-114A	P3, E56, E59
TS-723/U	TS-4084/G	-
TS-723A/U	AN/GRM-114A	P3, E56, E59
TS-723A/U	TS-4084/G	-
TS-723B/U	AN/GRM-114A	P3, E56, E59
TS-723B/U	TS-4084/G	-
TS-723C/U	AN/GRM-114A	P3, E56, E59
TS-723C/U	TS-4084/G	-
TS-723D/U	AN/GRM-114A	P3, E56, E59
TS-723D/U	TS-4084/G	-
TS-730/URM	AN/USM-491	P2
TS-743	SG-1219	-
CC OF: AN/UPM-60	SG-1219	-
TS-743A	SG-1219	-
CC OF: AN/UPM-60A	SG-1219	-
TTI-1103B	AN/USM-485	P2, I1
TTI-1110A	AN/USM-485	I1, P2
TTS-12A	AN/USM-485	I1, P2
TU0M3	AN/PSM-45	P2, I1
VPT7B	TS-4463/P()	TBD
WV77E	AN/PSM-45	P2, I1
X486A	AN/USM-491	E34, I1
X670	AN/USM-491	P2, I1
XR-1500	SG-1206	I1, P2

Section III. CONDITION CODES

Condition Codes Replacement Lists

Code	Condition
E1	The AN/PRM-34 replaces the AN/URM-182 and AN/URM-182A where it is used to test AN/VRC-12, AN/PRC-77 and AN/PRC-68 radios. Where the only application of the AN/URM-182 and AN/URM-182A is to test the above radios it should be removed from the field. Where the additional measurement capabilities of the AN/URM-182 and AN/URM-182A are required for other applications, the AN/URM-182 and AN/URM-182A should be retained.
E2	The ID-1189 is used with AN/PRT-4 and AN/PRR-9 radios. The ID-1189 should be removed from the field when the AN/PRT-4 and AN/PRR-9 radios are replaced by the AN/PRC-68 radio. This may occur concurrent with AN/PRM-34 fielding to the extent that AN/PRC-68 radios and AN/PRM-34 test sets are fielded concurrently.
E3	The MX-8364A and the AN/USM-308V1 are identical units.

Condition Codes Replacement Lists – Continued

Code	Condition
E4	This plug-in is used with mainframe MX-8364A, AN/USM-308V1 or HP 8690A.
E5	The ME-318/U, ME-314/U and the AN/USM-224 are identical units.
E6	The ME-444/U AC voltage range is 100 microvolts to 330 volts. The TEMOD replacement item's AC voltage range is 100 microvolts to 300 volts. The ME-444/U should be removed from the field and replaced by the TEMOD item when no measurement requirement exists above 300 volts.
E7	The SG-1128 has balanced output impedance, 135 and 600 ohm output impedances and has a calibrated output attenuator. The TEMOD item does not have any of these features. The SG-1128 will be purged by the TEMOD item where these features are not required. The only known user that requires these features is the Information Systems Command.
E8	The ME-26D measures AC voltages from approximately 50 mv to 300 volts rms at frequencies from 20 Hz to 700 MHz (different for other versions of ME-26's). The TEMOD item measures AC voltages from 10 mv to 750 volts rms at frequencies from 20 Hz to 50 kHz (3 db bandwidth is 200 kHz). With RF probe, TEMOD item measures voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Where the TEMOD items measurement capabilities do not satisfy the users measurement requirements, units should retain the ME-26. In all other cases where the TEMOD item satisfies the measurement requirement, the ME-26 should be removed from the field. Only known applications where problems have been reported is when the ME-26 is used to support the AN/GRC-106 and AN/GRC-50.
E9	The ME-30 measures voltages from approximately 100 µv to 300 volts rms at frequencies from 10 Hz to 4 MHz. The TEMOD item measures voltages from 10 mv to 750 volts rms at frequencies from 20 Hz to 50 kHz (3 db bandwidth is 200 kHz). With RF probe, TEMOD item measures voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Where the TEMOD items measurement capabilities do not satisfy the users measurement requirements units should retain the ME-30. In all other cases where the TEMOD item satisfies the measurement requirement the ME-30 will be removed from the field.
E10	In most applications the TEMOD item will be capable of replacing the PL-1392. The one technical characteristic of the PL-1392 that exceeds that of the TEMOD item is the maximum detected bandwidth: for the PL-1392 it is 3 MHz; for the TEMOD item it is 1 MHz.
E11	The AN/USM-207 and AN/USM-207A when used with converter CV-1921 and CV-1921A have an input sensitivity of 10 mv from 35 MHz to 500 MHz. The TEMOD item has an input sensitivity of 15 mV from 30 to 500 MHz. Units that require the additional 5 mV of sensitivity within this frequency range should retain authorization for their AN/USM-207/207A's.
E12	The AN/USM-44, AN/USM-44A, AN/USM-44B, TS-510/U, TS-510A/U and the TS-510B/U are various configurations of the Hewlett Packard Model 608. The TS-510's are the signal generators, while the AN/USM-44's are the signal generators with case and cables.
E13	The TS-2395 measures envelope delay from 300 Hz to 110 kHz for 56, 75, 135 and 600 ohm circuits. The TEMOD item measures envelope delay from 200 Hz to 100 kHz for 135, 600 and 900 ohm circuits.

Condition Codes Replacement Lists – Continued

Code	Condition
E14	The TS-2669 measures envelope delay from 100 Hz to 550 kHz for 75, 120, 135, 150, 600 and 900 ohm circuits. The TEMOD item measures envelope delay from 200 Hz to 110 kHz for 135, 600 and 900 ohm circuits.
E15	The TEMOD item measures envelope delay from 200 Hz to 100 kHz for 135, 600 and 900 ohm circuits in addition to the following: level, noise, impulse noise, non-linear distortion, jitter, hits, par, s/n and return loss.
E16	The ME-490 measures jitter and hits.
E17	The 9041 measures level and return loss. It also contains decade build-out capacitors.
E18	The TD-1225A(V)2 will not replace the CM-77A/USM in the maintenance support application for avionics radios AN/ARC-115, AN/ARC-116, AN/ARC-51, AN/ARC-164 and AN/ARC-186. (The CM-77A/USM has a down converter while the TEMOD item does not.) In all other applications the TD-1225A(V)2 replaces the CM-77A/USM.
E19	CP-1101 measures impulse noise only. TEMOD item performs the following measurements: level (transmit and receive), par, noise and noise to ground.
E20	TS-3156 measures level and noise. TEMOD item performs the following additional measurements: par, noise to ground and impulse noise.
E21	ME-22 measures level. TEMOD item performs the following additional measurements: transmit level, par, noise, noise to ground and impulse noise.
E22	ME-71 has a receive level range of -70 to +42 dBm from 20 to 500 kHz. TEMOD item has a level range of -40 to +10 dBm for both transmit and receive over the range 50 Hz to 110 kHz and performs the following additional measurements: noise, noise to ground, par and impulse noise.
E23	TS-3157 has a transmit and receive frequency range of 300 Hz to 3.5 kHz. The TEMOD item has a frequency range of 50 Hz to 110 kHz and performs the following additional measurements: noise, noise to ground, par and impulse noise.
E24	The TS-585 measures power from 0.2 milliwatts to 5 watts or -10 to +37 dBm with a variable input impedance from 2.5 to 20, 000 ohms. The TEMOD item measures dBm referenced to only 15 selectable impedances: 50, 75, 93, 110, 125, 135, 150, 250, 300, 500, 600, 800, 900, 1000 and 1200 ohms. Output is not displayed in watts. In applications that require a variable input impedance, the AN/USM-486 does not replace the TS-585.
E25	This item is being replaced by the SG-1171. The SG-1288 is also capable of replacing subject item. Units with SG-1171 will retain it as a standard LCC A item, while additional requirements will be satisfied by the SG-1288.
E26	Upper frequency limit of the AN/UPM-84A is 63 GHz. Upper frequency limit of the AN/USM-489 is 40GHz with mixer supplied (to 220 GHz with additional Tektronix mixers). If a unit is authorized an AN/UPM-84A and does not require a frequency range above 40 GHz then the AN/USM-489 can replace the AN/UPM-84A.

Condition Codes Replacement Lists – Continued

Code	Condition
E27	Subject item is a plug in unit used with Tektronix 7000 series mainframes. If the 7000 series mainframe is used only with the PL-1392/U, then the mainframe shall be removed from the field with the PL-1392/u. If the mainframe is used with other plug-ins, then the unit shall retain the mainframe but still remove the PL-1392/U from the field.
E28	The AN/USM-489(V)1 can replace the IP-1216(P)/GR when used with the plug-in configurations listed below and when the SG-1125/U is not required to be used in conjunction with the PL-1406/U. Configurations replaceable by AN/USN-489(V)1: IP-1216/PL-1400 IP-1216/PL-1400/F-1414 IP-1216/PL-1406 IP-1216/PL-1406/PL-1400 IP-1216/PL-1406/PL-1400/F-1414
E29	Part of AN/GRM-32.
E30	Tracking generator used with the PL-1406/U.
E31	Plug-in IF section removed from the field only when unit does not have the PL-1387/U or the PL-1399/U.
E32	a) Units authorized an AN/URM-206 and/or an AN/URM-44 and/or an AN/URM-44A and/or an SG-944 in addition to any other item on the SG-1219's replacement list without condition codes will receive an SG-1219 (quantity received will be determined by a bench top analysis). Units authorized an AN/URM-206 only will retain it. b) Units authorized an AN/URM-44 and/or an AN/URM-44A and/or an SG-944 without having authorization for any other item on the SG-1219's replacement list without condition codes will receive an AN/URM-206. The AN/URM-206's removed from the field as a result of a) will be redistributed to those units described in b).
E33	Units authorized an SG-1174 and/or an AN/URM-52 and/or an AN/URM-170 in addition to any other item on the SG-1219's replacement list without condition codes will receive an SG-1219. Units authorized any combinations of the above mentioned three pieces of TMDE without having authorization for any other item on the SG-1219's replacement list without condition codes will not receive an SG-1219.
E34	This is a power sensor used with one of the power meters being replaced by the AN/USM-491. The power sensor shall be turned in with the power meter. No AN/USM-491 will be issued with the return of a power sensor alone.
E35	This item is also replaceable by the SG-1170. Issue SG-1144 until stock is exhausted. No additional procurements for SG-1144's are anticipated.
E36	Replaced by SG-1144 (or SG-1170, see E54) when used in all applications other than FM radio repair. When used to repair FM radios, the AN/GRM-114A can replace this item at bench positions designated for the AN/GRM-114A.
E37	Replaced by AN/GRM-114A only when used for FM radio repair. In all other cases this item is replaced by SG-1144.

Condition Codes Replacement Lists – Continued

Code	Condition
E38	Depending upon power sensor used with basic power meter, the TS-3793 may exceed the power range or frequency range of the AN/USM-491. The AN/USM-491 measures power from 100 nW to 1 W without any additional attenuators; with attenuator supplied, the AN/USM-491 can measure power to 5 watts at frequencies from 100 kHz to 18 GHz. An additional sensor not supplied with the AN/USM-491 but available from Army Inventory, will measure power from -30 dBm (µW) to +20 dBm (100 mW) at frequencies from 18 GHz to 26.5 GHz (sensor is Boonton #4200-SG). Before replacing the TS-3793 with the AN/USM-491, check power and frequency measurement requirements.
E39	HP-302A wave analyzer family: frequency range is 20 Hz to 50 kHz, with input amplitude range from 30 microvolts to 300 volts full scale. High input impedance from 100 kohms to 1 megohm. May be powered by 18 to 24 VDC battery source. Companion external sweep drive (HP-297A) available. TEMOD item frequency range is 50 Hz to 32.5 MHz, with input amplitude range from -120 to +20 dBm and input impedances of 75, 124, 135, 600 and 10 k ohms. TEMOD item cannot be powered by battery source. HP-302A family similar to TS-1830, A, C, D/U and TS-1827/U.
E40	HP-310A, B wave analyzer family: input impedance 10 k, 30 k and 100 kohms, with input amplitude range from 10 microvolts to 100 volts full scale; selectivity filter BW = 200, 1000, 3000 Hz. Companion external mechanical sweep drive (HP-297A) available. TEMOD item input impedances: 75, 124, 135, 600 and 10 k ohms; input amplitude range from -120 dbm to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing. HP-310A, B similar to TS-2333A/USM.
E41	HP-312A, B selective voltmeter family: input impedance 50 to 600 ohms; selectivity filter BW = 200, 1000, 3100 Hz. TEMOD item input impedances 75, 124, 135, 600 and 10 k ohms; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing. HP-312A, B similar to TS-3066(V)/U family.
E42	HP-3581A wave analyzer: frequency range is 15 Hz to 50 kHz; input impedance 1 megohm; input amplitude range 100 nanovolts to 30 volts full scale and -150 to +30 dBm or dbv; selectivity BW = 3, 10, 30, 100, 300 Hz; X-Y recorder outputs; Internal battery and charging circuit; portable. TEMOD item frequency range from 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 k ohms; input amplitude from -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E43	HP-3581C selective voltmeter: frequency range is 15 Hz to 50 kHz; input impedance 600, 900, 10 k, 1 megohm; input amplitude range is 100 nanovolts to 30 volts full scale and -150 dbm to +30 dbm or dBV; selectivity BW = 3, 10, 30, 100, 300 Hz; X-Y recorder outputs; sweep capability; Internal battery and charging circuit; portable. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 k ohms; input amplitude from -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E44	HP-3856B, 003, 004, selective level meter: similar to AN/USM-490 with different signal input connectors.

Condition Codes Replacement Lists – Continued

Code	Condition
E45	HP-3586C selective level meter: similar to AN/USM-490 with different signal input connectors; input impedance 50, 75, 600, 10 k ohms; selectivity filter BW = 20, 400, 3100 Hz; simplified front panel. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E46	HP-3590A wave analyzer family: frequency range is 20 Hz to 620 kHz; input impedance 100 kohms; input amplitude range 3 microvolts to 30 volts full scale; selectivity BW = 10, 100, 1000, 3100 Hz; X-Y recorder outputs; sweep capability; HP-3593A, 3594A, 3595A plug-in modules determine salient capabilities. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 k ohms; input amplitude from -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E47	HP-3591A selective voltmeter family: frequency range is 20 Hz to 620 kHz; input impedance 75, 135, 150, 600, 50 k ohms and 100 k ohms; input amplitude range is 3 microvolts to 30 volts full scale; selectivity BW = 10, 100, 1000, 3100 Hz; X-Y recorder outputs; used with HP-3594A plug-in. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600, 10 k ohms; input amplitude from -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E48	HP-3745A, 3745B selective level measuring sets: frequency range is 1 kHz to 25 MHz; input impedance 75, 124, 135/150 ohms; input amplitude range is -125 to +15 dBm; selectivity BW = 22, 3100, 4800 Hz; sweep capability; X-Y recorder outputs; 3745A designed for CCITT formats; 3745B designed for North American (Bell) formats. TEMOD item frequency range is 50 Hz to 32.5 MHz with input impedances of 75, 124, 135, 600 and 10 k ohms; input amplitude from -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; North American (Bell) format.
E49	This item is a HP-432A with option 002.
E50	The AN/PSM-6 series meters will be replaced by the AN/PSM-45 in all applications except where low temperature operation (below 0 degrees C) is required. Only known low temperature requirement is for MICOM: HAWK, -34 to +41 degrees C and AN/TSQ-73, -32 to +40 degrees C.
E51	This item is an HP-8640 which has a built in frequency counter from 20 Hz to 550 MHz. The TEMOD item does not have this capability. Replace with TEMOD item if counter is not required.
E52	This item is an HP-8640B w/opt 004 which is the avionics option. It also has a built in frequency counter. The TEMOD item has neither of these capabilities. If neither capability is required, replace with TEMOD item.
E53	This item is an HP-8640B w/opt 001 which is an internal variable audio oscillator from 20 Hz to 600 kHz. It also has an internal frequency counter. The TEMOD item has an internal modulation generator from 20 Hz to 100 kHz; it does not have frequency counting capabilities. Replace with TEMOD item if frequency counter and audio oscillator from 20 Hz to 600 kHz is not required.
E54	These items are also on the SG-1144's replacement list. If item has not already been replaced by the SG-1144, and supplies of the SG-1144 are depleted, replacement item is the SG-1170.

Condition Codes Replacement Lists – Continued

Code	Condition
E55	This meter has an AC frequency response to 3 MHz. The TEMOD item has a frequency response to 5 kHz. The TEMOD item shall replace the 850 for all applications below 5 kHz.
E56	The AN/GRM-114A is intended as an enhancement item of TMDE to be used to augment standard bench equipment for field FM and avionics radio repair. When authorized for such use, the TMDE at these bench positions (listed with condition code E56) will remove from the field all TMDE previously dedicated for such use and receive an AN/GRM-114A. Note that the replacement ratio of bench positions to AN/GRM-114A's will be 2:1; i.e., if there are four bench positions that have all or a portion of the TMDE listed with condition code E56, two benches will remove from the field all equipment and receive each an AN/GRM-114A; the other two benches will not receive any AN/GRM-114A's and retain their TMDE. Most of the TMDE retained will be replaced by other TEMOD items (see additional condition code listed with each TMDE).
E57	Replaced by AN/USM-459 in cases other than that described in E56.
E58	Replaced by SG-1288 in cases other than that described in E56.
E59	Replaced by TS-4084/G in cases other than that described in E56.
E60	Replaced by SG-1144 or SG-1170 in cases other than that described in E56 (also see condition codes E35, E36 and E54).
E61	Replaced by AN/USM-486 in cases other than that described in E56. Also see condition code E8.
E62	Replaced by AN/USM-486 in cases other than that described in E56. Also see condition code E9.
E63	Rycom 3131 selective voltmeter: input impedance 75, 135, 600 and 4 k ohms; input signal level -100 to +22 dBm; selectivity filter BW = 250, 2500 Hz; rack mounted and portable versions; contains rechargeable nicad batteries; p/o AN/TRC-90, 90A, 129, 129A, 132, 132A. Similar to ME-378/U. TEMOD item input impedance 75, 124, 135, 600 and 10 k ohms; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; not battery powered.
E64	Sierra 121 Carrier Frequency Voltmeter Family: input signal Level -70 to +42 dBm (245 microV to 97.5 V); input impedance 135, 600, 2.4 k ohms, 10 k ohms 20-pin input connector; selectivity filter BW = 100 Hz. TEMOD item input signal level -120 to +20 dBm; input impedance 75, 124, 135, 600 and 10 k ohms; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E65	Sierra 125 Frequency Selective Voltmeter Family: input impedance: 135, 600, 20 k ohms; input signal level -90 to +32 dBm; selectivity filter BW = 250, 2500 Hz; similar to ME-295/U. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.

Condition Codes Replacement Lists – Continued

Code	Condition
E66	Sierra 126A, B Frequency Selective Voltmeter families: input impedance 75, 135, 600, 5 k, 8.9 k, 39 k ohms dependent upon input plug-in modules; input signal amplitude -80 to +32 dBm (24.5 microV to 30 V); selectivity filter BW = 250, 2500 Hz; 50 M ohm high impedance probe available (Model 126B/PA); similar to FR-209(V)1/U. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; input signal amplitude -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; probe not provided.
E67	Sierra 127C Frequency Selective Voltmeter Family: input impedance 135, 600 ohms; input signal amplitude -70 to +22 dBm; selectivity filter BW = 100, 250, 500 Hz; portable; battery pack. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; input signal amplitude -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; not portable.
E68	Sierra 128A Frequency Selective Voltmeter Family (with Model 128PA probe assemblies): input impedance 75, 135, 600, 8 k, 13 k, 100 k ohms; input signal amplitude -100 to +32 dBm (3 microV to 30 V); selectivity filter BW = 250, 3100 Hz; may be operated by 24-28V external DC source; similar to FR-205/U. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; input signal amplitude -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; AC power only.
E69	Sierra 129B Frequency Selective Voltmeter Family: input impedance 600, 100 k ohms; input signal level -90 to +50 dBm (30 microV to 300 V F.S.); selectivity filter BW = 10, 100 Hz; self-contained rechargeable batteries; tracking generator; similar to FR-210/U. TEMOD item input impedance 75, 124, 135, 600 and 10 k ohms; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E70	Sierra 301A, B Wave Analyzer Family: Frequency range 20 Hz to 100 kHz; input signal level -90 to +50 dBm (30 microV to 300 V F.S.); input impedance 600, 100 k ohms; selectivity filter BW = 10, 100 Hz; self-contained batteries; tracking generator. TEMOD item frequency range 50 Hz to 32.5 MHz; input signal level -120 to +20 dBm; input impedance 75, 124, 135, 600 and 10 k ohms; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E71	Sierra 303A, B Frequency Selective Levelmeter Family: input impedance 75, 135, 600, 2.1 k, 3.8 k, 16 k ohms; input signal level -100 to +22 dBm (10 microV to 10 V); selectivity filter BW = 80 and 2300 or 3100 Hz; rechargeable internal batteries; portable; four preselected pilot frequencies; similar to ME-451/G. TEMOD item input impedance 75, 124, 135, 600 and 10 k ohms; input signal level -120 to +20 dBm: selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.

Condition Codes Replacement Lists – Continued

Code	Condition
E72	Sierra 305A, 3055 Transmission Measurement System (305AL Level Meter TS-2968/U, 305AT Tuning Unit, 360 Spectrum Display Unit; may also contain 305AG tracking signal generator, 230A-233A passive and active probes): Frequency range: 1 kHz to 33.5 MHz; input impedance 50, 75, 135, 2 k, 4 k, 100 k ohms depending upon probe; input signal level -109 dBm to +22 dBm; spectrum display calibrated in frequency and amplitude; selectivity filter BW = 250, 3100 Hz; similar to Test Set, Radio AN/USM-306, AN/USM-306(V)1, TS-2721/U. TEMOD item frequency range 50 Hz to 32.5 MHz; input impedance 75, 124, 135, 600 and 10 k ohm; no probe supplied; input signal level -120 to +20 dBm, selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing.
E73	Cushman CE-21Selective Levelmeter: 75, 124, 135, 600, 10 k, 20 k, 100 k ohms; model 211A bridging probe; input signal level -110 to 19 dBm; selectivity filter BW = 200, 2300 Hz and C-MSG weighing; similar to FR-211/U. TEMOD item input impedance 75, 124, 135, 600 and 10 k ohms; no probe supplied; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100, C-MSG weighing.
E74	Cushman CE-24A Selective Levelmeter: input impedance 75, 124, 135, 150, 600, 10 k, 20 k ohms; input signal level -120 to +12 dBm; selectivity filter BW = 45, 2300 Hz; portable; internal rechargeable batteries. TEMOD item input impedance 75, 124, 135, 600, 10 k ohms; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz and C-MSG weighing; cannot be powered by battery source.
E75	Cushman CE-70 Frequency Selective Levelmeter: input impedance 75, 124, 135, 600, 10 k ohms; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100, C-MSG weighing.
E76	Marconi TF2330A Wave Analyzer: Frequency Range 20 Hz to 76 kHz; input signal level 30 microV to 300 V F.S.; selectivity filter BW = 7 Hz. TEMOD item frequency range is 50 Hz to 32.5 MHz; input signal level -120 to +20 dBm; selectivity filter BW = 20, 400, 3100 Hz, C-MSG weighing.
E77	All makes/models contain signal input connectors and corresponding input impedance different than those of the TEMOD item (AN/USM-490); impedances may be specified for unbalanced, balanced, terminating or bridging conditions. Typically, wave analyzer input impedances are greater than those for selective level meters.
E78	Item is battery operated; TEMOD item is not. Replace with TEMOD item if battery operation is not required.
E79	The OS-261 series has a bandwidth to 200 MHz while the TEMOD item has a bandwidth to 100 MHz. If users do not require a bandwidth above 100 MHz, the replacement for the OS-261 series is the AN/USM-488. Units that do not require the bandwidth of the OS-261 series should take action to change their authorization documents to reflect authorization for the AN/USM-488.
E80	Item has an external battery option (Tektronix model 475 with option 07).
E81	Item has an EMC option (Tektronix model 475 with option 04).

Condition Codes Replacement Lists – Continued

Code	Condition
E82	The AN/GRM-50 series has an output of +22.5 dBm (3 volts) into 50 ohms. The SG-1144 and the SG-1170 both have output voltages of +13 dBm (1 volt) into 50 ohms; the AN/GRM-114A, 0 dBm (0.1 volts) into 50 ohms. Where the AN/GRM-50 series is used to support AM radios with high output power that require 3 volts RMS stimulus to drive audio circuitry (such as the AN/GRC-106), units will retain the AN/GRM-50's. Units that do not require output voltages above +13 dBm for testing end systems such as the AN/VRC-12 and AN/PRC-77 radios should purge the AN/GRM-50's with the SG-1144 or SG-1170 or AN/GRM-114A (also see E36, E37, E54).
E83	This item is on the replacement list of AN/USM-485, SG-1288 and SG-1171. If item is used for telephone testing applications, replace with AN/USM-485. If used for general purpose applications, replace with SG-1288 or SG-1171 (see condition code E25).
E84	This item is a Hewlett Packard model 410C. It can measure DC voltages to 1500 volts; AC voltages of 0.5 to 300 volts from 20 Hz to 700 MHz. The AN/USM-486 can measure DC voltages to 1000 volts; AC voltages to 750 volts from 20 Hz to 50 kHz (3 db bandwidth is 200 kHz). With an RF probe, it can measure voltages from 100 kHz to 500 MHz with an input level from 0.25 volts to 30 volts rms. Use AN/USM-486 where the additional measurement capabilities of the HP-410C are not required. Otherwise, retain HP-410C.
E85	This item will NOT be replaced by the OS-291/G if it is used with any of the following plug-in modules: LIN / DESIGNATOR / NSN P11091 / AM-6881/U / 6625-00-478-0594 P11459 / PL-1391/U / 6625-01-015-6587 A54416 / AM-6787/U / 6625-00-489-6449 C29900 / PL-1407/U / 6625-00-392-2604 J59775 / TD-1161/U / 6625-00-489-6450 - / AM-6786/U / 6625-00-478-0597 - / PL-1392/U / 6625-00-558-2324 - / TD-1160(P)/U / 6625-00-004-1644 - / TEKTRONIX 7CT1N / 6625-00-548-8190 - / TEKTRONIX 7D13 / 6625-00-517-6880 - / TEKTRONIX 7D13A / 6625-01-175-4241 - / TEKTRONIX 7L14 / 6625-01-120-2082 - / TEKTRONIX 7M11 / 6625-00-364-7806 - / AN/USM-310(V) / 6625-00-253-3788 - / HP-1809A / 6625-01-017-8561 - / HP-8557A / 6625-01-096-3693 - / OQ-330/GSM / 6625-01-071-4293 - / HP-8559A / 6625-01-096-0347 - / HP-8755B / 6625-01-095-8095
E86	This item will not be replaced by the OS-291/G if the user requires a stored single shot response faster than 70 ns risetime.

Condition Codes Replacement Lists – Continued

Code	Condition
E87	The AN/GSM-45 can perform the following tests: continuity, RF attenuation and insulation breakdown. The range of the instrument in the RF attenuation test is 0 to -102 db. The TEMOD item can perform the continuity test and the RF attenuation test using a different technique. The TEMOD item has a range in the RF attenuation test of 0 to -50 db. The TEMOD item does not measure insulation breakdown. If the user requires an insulation breakdown test or an RF attenuation test from -50 to -102 db, the TS-4165 does not replace the AN/GSM-45. In all other cases, replace the AN/GSM-45 with the TS-4165.
E88	The HP-339A has a built in audio oscillator while the TEMOD item does not. Replace the 339A with the TEMOD item if the audio oscillator is not required.
E89	The AN/USM-223 will be replaced by the AN/PSM-45 in all applications except where it is used to perform maintenance on the UH-60A Black Hawk. UH-60A Black Hawk maintenance requires a meter that measures “smoothness during rotation of various potentiometers as well as linear voltage readings. In these cases, the Simpson 260-7 series, NSN 6625-01-092-1198 will be used in lieu of the AN/PSM-45.
E90	The HP-3780 bit range is from 1 Kbps to 50 Mbps where the TS-4281()/G’s bit rate is from 75 bps to 13 Mbps.
E91	The TS-3641 and TS-3642 both have a TTL impedance of 150 ohms input/output where as the TS-4281()/G has a TTL impedance of 75 ohms for both the unbalanced output and the unbalanced input along with an auxiliary interface with a 50 ohm TTL output.
E92	The TS-3642 specifies bipolar 75 ohm unbalanced input with -25 to -30 dBm, bipolar 75 ohm balanced input with +5 to -15 dBm, bipolar 75 ohm unbalanced output with -72 dBm, and bipolar 75 ohm balanced output with +23, +10, and 0 dBm switch selectable levels which are not specified in the TEMOD item.
E93	Replace with the TEMOD item if the requirement is not for battery operated and weight and size are not of critical importance. TEMOD item will not exceed 35 lbs.
E94	The IDS 1200 contains bias distortion measurement capabilities which are not available in the TEMOD item.
E95	The AYDIN 604M has a bit rate of 20 Mbps internal and 25 Mbps external where the TEMOD item has a bit rate capacity of 13 Mbps.
E96	Not used.
E97	The AN/URM-182 and AN/URM-182A are very small light, and rugged instruments used primarily with mobile, airborne and pack-carried transmitters and transceivers. The AN/PRM-34 replaced the AN/URM-182, and AN/URM-182A in certain cases (see cc: E1).
E98	The upper frequency limit of the TEMOD item is 1000 MHz with the elements supplied. Other elements can be ordered if there is a need above 1000 MHz.

Condition Codes Replacement Lists – Continued

Code	Condition
E99	This item is a Simpson Model 269 analog volt-ohm-ampere meter. It can measure DC voltages to 4000 volts, AC voltages to 800 volts, and DC current to 8 amps. The AN/USM-486 can measure DC voltages to 6000 volts with high voltage probe, AC voltages to 750 volts, and DC current to 2 amps. Use the AN/USM-486 where the additional AC voltage and DC current to 2 amps. Use the AN/USM-486 where the additional AC voltage and DC current capabilities are not required. Otherwise, retain the AN/USM-123.
E100	This item is replaced by the TEMOD item when used as a function generator only.
E101	The SG-1171/U will replace this item in all applications except where it is used to perform AH-1 SCAS testing. These units will retain this item until the SG-1288/U is fielded.
E102	The AN/GSM-64D can potentially replace the ME-498. The AN/GSM-64D does not measure above 1000 volts AC and the ME-498 measures up to 1200 volts AC. Units not requiring measurements over 1000 volts DC should use the AN/GSM-64D.
E103	The SG-1170/U will replace this item for all applications except where it is used to support testing of the AN/ARN-83. These units will retain this item.
E104	The AN/GRM-114B is an enhancement of the AN/GRM-114A. The AN/GRM-114B is the Army's next generation radio test set used for field support of single channel and SINCGARS frequency hopping radios. It will be used to verify radio performance characteristics and troubleshoot at the Direct Support (DS) level of maintenance. The AN/GRM-114B consists of two components. The General Purpose test functions to verify the performance characteristics of single channel radios and the Special Purpose test functions to verify the performance characteristics unique to the SINCGARS radios. In terms of improved operational effectiveness, the AN/GRM-114B will execute SINCGARS radio performance tests in three minutes instead of the current 25 minutes. Advantages of the AN/GRM-114B over the AN/GRM-114A are that it is more reliable, easier to use with computer like menus, and allows the execution of radio performance tests with the touch of a button. It also requires less time to repair. The AN/GRM-114A's will not be removed from the field, but replaced by the AN/GRM-114B through attrition.
E105	This item is a Simpson analog volt-ohm-ampere meter. It can measure DC voltages to 5000 volts, AC voltages to 5000 volts, DC current to 10 Amps and decibels -20 to +4.9 dbm. The AN/USM-486 can measure DC voltages to 6000 volts, AC voltages to 750 volts, and DC current to 2 Amps. Use the AN/USM-486 where the additional AC voltage, DC current and decibels measurements capabilities of the ME-450 are not required. Otherwise, retain the ME-450.
E106	This item should be removed from the field and replaced by the ME-563/U when this item is used to measure amps only.
I1	No type designator assigned. Commercial make and model number appears in Type Designator column.
I2	This item is part of the AN/USM-260.

Condition Codes Replacement Lists – Continued

Code	Condition
I3	The salient technical characteristics of the potentially replaceable TMDE that exceed those of the TEMOD item are listed in the appropriate "E" code. These technical differences listed are the major differences in performance between the two items; other technical differences may exist which could prevent replaceability by the TEMOD item. Before a user adopts the TEMOD item as a replacement, a detailed spec comparison should be performed.
I4	This is a TEMOD item; however, under certain conditions it may be replaced by another TEMOD item. See condition code E32.
I5	This is a TEMOD item; therefore, there is no replacement.
I6	This is a TEMOD item; however, no additional procurements of SG-1144's are anticipated. Use SG-1170 as replacement (i.e., SG-1144 will not be purged by SG-1170; additional requirements for SG-1144's will be satisfied with SG-1170's).
I7	This is a TEMOD item; however, additional requirements for SG-1171's will be satisfied with SG-1288's. (The SG-1288 will not remove the SG-1171 from the field.)
I8	This is a TEMOD item. Stock is depleted for this item, substitute item is the AN/USM-459A. The AN/USM-459A will not purge the AN/USM-459.
I9	This is a TEMOD item. Stock is depleted for the AN/PSM-45, substitute item is the AN/PSM-45A. The AN/PSM-45A will not purge the AN/PSM-45.
I10	The AN/PSM-45A was procured to satisfy shortages of the AN/PSM-45. The AN/PSM-45A will not replace the AN/PSM-45, it will be issued to users who require the AN/PSM-45. The AN/PSM-45 and the AN/PSM-45A are functionally equivalent. The AN/PSM-45A can replace all items replaced by the AN/PSM-45.
I11	The AN/USM-459A was procured to satisfy shortages of the AN/USM-459. The AN/USM-459A will not replace the AN/USM-459, it will be issued to users who require the AN/USM-459. The AN/USM-459 and the AN/USM-459A are functionally equivalent. The AN/USM-459A can replace, all items replaced by the AN/USM-459.
I12	The AN/USM-298 has two plug-in elements included with it, the ranges that are covered by these elements are covered by the new item. Although the characteristics of the AN/USN-298 state that it covers from 1000-2300 MHz the plug-in elements supplied only cover up to 1000 MHz.
I13	The AN/PSM-45B was procured to satisfy shortages of the AN/PSM-45A. The AN/PSM-45B will not replace/purge the AN/PSM-45A. The AN/PSM-45B and AN/PSM-45A are functionally equivalent. The AN/PSM-45B can replace all items replaced by the AN/PSM-45A.
I14	This TEMOD item represents a new capability to the Army inventory and will not replace any existing items.
I15	The AN/USM-486A was procured to satisfy shortages of the AN/USN-486. The AN/USM-486A will not replace the AN/USM-486, it will be issued to users who require the AN/USM-486. The AN/USM-486A and the AN/USM-486 are functionally equivalent. The AN/USM-486A can replace all items replaced by the AN/USM-486.

Condition Codes Replacement Lists – Continued

Code	Condition
M1	Item is a plug-in module technically replaceable by TEMOD item but only when used with the mainframe/end item that is being replaced by TEMOD item.
M2	Item is a plug-in module that is functional only when used with a mainframe.
M3	The IP-1216 is a mainframe that requires plug-ins to operate. The AN/USM-620 will replace the IP-1216 only when the IP-1216 is used with the PL-1388 plug-in and either or both of the following plug-ins: PL-1387, PL-1399.
M4	The PL-1391 is a plug-in for an oscilloscope mainframe, the Tektronix 7603. The AN/USM-620 will replace the PL-1391 plug-in.
M5	Replace plug-in and mainframe with SG-1206.
M6	Item is a plug-in that can be used with several mainframes. Do not replace plug-in alone with SG-1206. Replace plug-in and mainframe with SG-1206.
M7	Item is a mainframe. Do not replace mainframe aloe with SG-1206. Replace mainframe and plug-ins (if plug-ins are listed on SG-1206 replacement listed) with SG-1206.
P1	Item will not be removed from the field at this time; however, item is replaceable by TEMOD item. This item will be LCC B (if type classified) and is technically suitable for retention against authorizations for the standard TEMOD LCC A item. (i.e., Objective is to fill shortages with suitable item pending availability of LCC A item.)
P2	Item does not have a LIN; however, item is capable of being replaced by TEMOD item and will eventually be removed from the field by attrition. Unit should take action to update authorization documents to include TEMOD item. (i.e., Objective is to get MTOE's/TDA's updated.) Following formal authorization and requisition, the TEMOD item will be issued.
P3	Item removed from the field in certain applications; see applicable "E" code/s.
P4	Although these items do not have a LIN, they will be included on the BOIP and will be removed from the field.
P5	Plug in removed only when mainframe is removed from the field.
P6	Item replaced by TEMOD item and will be removed from the field by attrition only.
T1	Items capabilities exceed those of TEMOD item, however, depending upon measurement requirement. (i.e., Some functions in replaced item not found in TEMOD item.)
T2	TEMOD item is technically similar and may be substituted depending upon measurement requirement. (i.e., Some functions in replaced item not found in TEMOD item.)
T3	Configuration of TEMOD item may not be compatible with configuration of existing TMDE and end system. (i.e., This is a form/fit/size issue not one of performance.)
T4	TEMOD item cost is substantially greater than target replacement item. Replacement determined by economics.
T5	TEMOD item measurement capabilities greatly exceed those of target replacement item.

Condition Codes Replacement Lists – Continued

Code	Condition
T6	The AM-6785 is a Tektronix Model 7A26 plug-in used in the series 7000 mainframes. The 7A26 has a bandwidth of 200 MHz while the TEMOD item has a bandwidth of 100 MHz. Units that do not require the bandwidth of the AM-6785 and are using a non-storage mainframe should use the AN/USM-488. Units that require 200 MHz bandwidth and are using a non-storage oscilloscope should use the OS-288/G.
T7	The AM-6880 is a Tektronix Model 7A18, 7A18A Dual Trace Amplifier plug-in used in the series 7000 mainframes. The 7A18, 7A18A has a bandwidth of 75 MHz while the TEMOD has a bandwidth of 100 MHz.

GLOSSARY

The following glossary defines terms as they are used in this manual.

2AD	2nd Armored Division
91D	9th Infantry Division
ADEA	Army Development and Employment Agency
AMC	Army Materiel Command
ARNG	Army National Guard
ASL	Authorized Stockage List
ATST	Area TMDE Support Team
BOIP	Basis of Issue Plan
BTA	Bench Top Analysis
CAGE	Commercial and Government Entity
CC	Calibratable Component
DOL	Director of Logistics
DRMO	Defense Reutilization and Marketing Office
EI/MRL	End Item Materiel Requirements List
FSC	Federal Supply Class
FSCM	Federal Supply Code to Manufacturer
FUE	First Unit Equipped
FY	Fiscal Year
GPETE	General Purpose Electronic Test Equipment
IMRF	Instrument Master Record File
LIN	Line Item Number
LOA	Letter of Authority
LRFBS	Letter Request for Bid Samples
MACOM	Major Command
MFA	Materiel Fielding Agreement
MFP	Materiel Fielding Plan
MMC	Materiel Management Center
MOC	Management of Change
MON	Memorandum of Notification
MOS	Military Occupational Specialty
MRL	Materiel Requirements List
MTOE	Modified Table of Organization and Equipment

NDI	Non-Developmental Item
NETP	New Equipment Training Plan
NLT	No Later Than
NSN	National Stock Number
PCC	Provisioning Control Code
PCCN	Provisioning Contract Control Number
PLL	Prescribed Load List
PM	Project/Product Manager
QQPRI	Qualitative/Quantitative Personnel Requirements Information
SOP	Standing Operating Procedures
SSA	Supply Support Activity
SSN	Standard Study Number
TCMD	Transportation Control Movement Document
TDA	Table of Distribution and Allowance
TEMOD	Test Equipment Modernization
TMDE	Test, Measurement and Diagnostic Equipment
TMM	TMDE Materiel Manager
TOE	Table of Organization and Equipment
TPF	Total Package Fielding
TRADOC	U.S. Army Training and Doctrine Command
USAR	U.S. Army Reserve
USATA	U.S. Army TMDE Activity

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:

SANDRA R. RILEY
Administrative Assistant to the
Secretary of the Army
0429511

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These are the instructions for sending an electronic 2028

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

From: "Whomever" <whomever@wherever.army.mil>
To: 2028@redstone.army.mil

Subject: DA Form 2028

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

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS 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	DATE	TITLE
TM 9–1005–433–24	16 Sep 2002	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.

** Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE
MSG, Jane Q. Doe, SFC	788–1234	

TO: (*Forward direct to addressee listed in publication)*	**FROM:** (*Activity and location) (Include ZIP Code)*	**DATE**
Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM–MMC–MA–NP Redstone Arsenal, AL 35898	MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	8/30/02

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE

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

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

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
MSG, Jane Q. Doe, SFC	788–1234	

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PART 1 – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE

ITEM NO.	PAGE NO.	PARA–GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON

** Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE

TO: (*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)*	**DATE**

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PART 1 – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE

ITEM NO.	PAGE NO.	PARA–GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON

** Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE

TO: (*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)*	**DATE**

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE

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

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

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25–30; the proponent agency is ODISC4.	Use Part II (*reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/ Supply Manuals (SC/SM)	DATE
TO: (*Forward to proponent of publication or form)(Include ZIP Code)* Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	FROM: (*Activity and location)(Include ZIP Code)*	

PART 1 – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE

ITEM NO.	PAGE NO.	PARA–GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON

** Reference to line numbers within the paragraph or subparagraph.*

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PIN: 046514-000