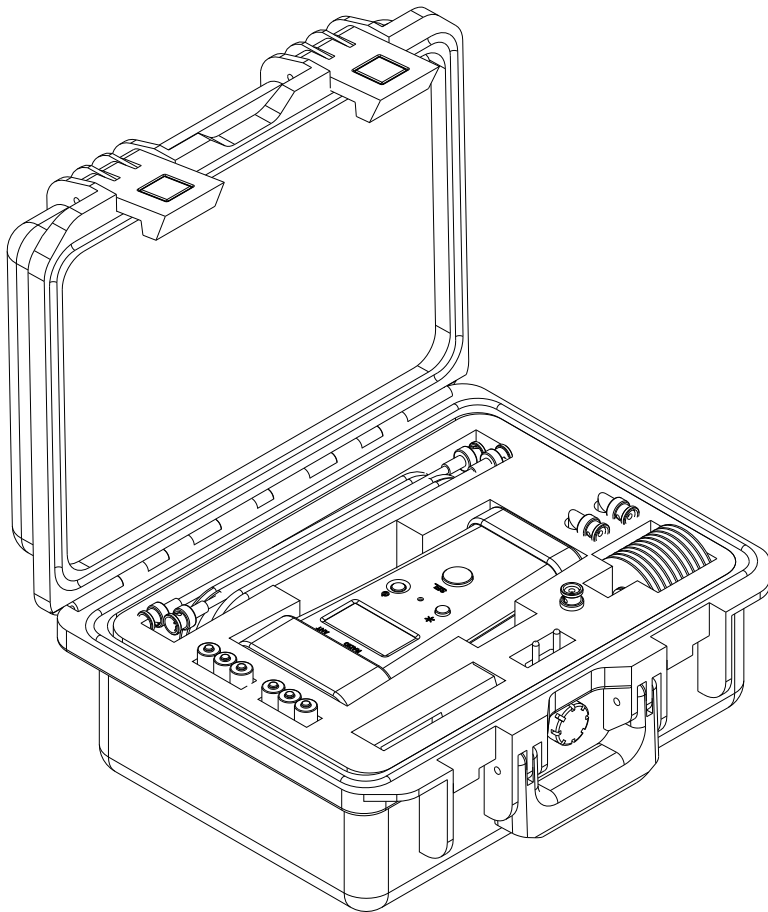


TM 9-6625-1697-10

TECHNICAL MANUAL

OPERATOR'S MANUAL
FOR

AN/PRM-36 RADIO TEST SET (NSN 6625-01-581-8105)



DISTRIBUTION STATEMENT A – Approved for public release, distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

10 NOVEMBER 2013

WARNING SUMMARY

WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation and maintenance of this equipment. Failure to observe these precautions could result in serious injury or death to personnel. Also included are explanations of safety and hazardous materials icons used within this technical manual.

FIRST AID

For information on first aid, refer to First Aid Field Manual FM 4-25.11.



ELECTRICAL – Electrical wire to arm with electricity symbol running through human body shows that shock hazard is present.

WARNING



When performing tests (Radio Transmitting) be sure to avoid contact with antenna, antenna connectors, or 50 Ω Termination to prevent possible electric shock. Failure to comply may result in injury or death to personnel.

CHANGE
NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 30 June 2014

TECHNICAL MANUAL
OPERATOR'S MANUAL
FOR
AN/PRM-36 RADIO TEST SET
(NSN 6625-01-581-8105) (EIC N/A)

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TM 9-6625-1697-10, 10 November 2013, is updated as follows:

1. File this sheet in front of the manual for reference.
2. This change is the result of new warnings that needed to included.
3. New or updated text is indicated by a vertical bar in the outer margin of the page.
4. Remove old pages and insert new pages as indicated below.

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i thru iv

Cover

Insert Pages

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5. Replace the following work packages with their revised version.

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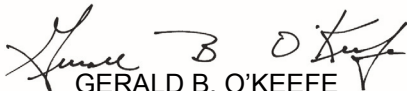
WP 0012

WP 0020

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

A handwritten signature in black ink, appearing to read "Gerald B. O'Keefe", is written over the printed name.

GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army

1403112

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HEADQUARTERS, DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 10 NOVEMBER 2013

TECHNICAL MANUAL
OPERATOR'S MANUAL
FOR
AN/PRM-36 RADIO TEST SET
(NSN 6625-01-581-8105)

**REPORTING ERRORS AND RECOMMENDING
IMPROVEMENTS**

You can improve this manual. If you find any mistakes or if you know of a way to improve these procedures, please let us know.

Mail your letter or DA Form 2028 (Recommended Changes 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. A reply will be furnished to you. You may also send in your comments electronically to our E-mail address: 2028@redstone.army.mil or by fax 256-842-6546/DSN 788-6546. For the World Wide Web use: <https://amcom2028.redstone.army.mil>. Instructions for sending an electronic 2028 can be found at the back of this manual.

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HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

Personnel shall familiarize themselves with the format and contents of this Technical Manual (TM) prior to operating this equipment and performing maintenance procedures. Learning how to use this TM will enable personnel to quickly locate information, gain necessary knowledge of the equipment, and shorten the time necessary to complete the required procedure.

These instructions provide the user with a general knowledge of the equipment, characteristics, and operating procedures of the AN/PRM-36 Radio Test Set (RTS). Troubleshooting and maintenance procedures are provided at crew/operator maintenance levels.

This manual contains a “References” Work Package (WP). Occasionally a different Technical Manual (TM) will be referenced in the text of this manual. A link will appear in parenthesis along with the manual that is referenced. The link lists the References WP in the manual. This will allow the user to see the TM number and the title.

TABLE OF CONTENTS

The Table of Contents provides a quick reference of each WP by title and WP number and lists each Figure and Table within that WP to assist in finding the required information.

WORK PACKAGE NUMBERS

The WP number is found in the upper right corner and bottom-center of every page.

INITIAL SETUP BLOCK

The Initial Setup block contains information vital for the completion of the WP. In some instances, it may contain the words “Not Applicable.”

The following is a list of items found in the initial setup block.

1. **TOOLS AND SPECIAL TOOLS:** These are all of the tools required to complete the tasks in the WP.
2. **MATERIALS/PARTS:** Any part to include oil, grease, or rags needed to complete the tasks in the WP.
3. **PERSONNEL REQUIRED:** Lists the number and Military Occupation Specialty (MOS) required to complete the WP.
4. **REFERENCES:** When the reference is in the same manual, it will only list the WP number. If the reference is in a different manual, it will list the TM number and list the References WP for additional information.
5. **EQUIPMENT CONDITION:** This is how the equipment needs to be configured before starting the work.

WARNINGS, CAUTIONS, AND NOTES

Read all WARNINGS, CAUTIONS, and NOTES before performing any procedure.

HOW TO USE THIS MANUAL – (Continued)

Warning, caution, and note headings and certain essential information are printed in BOLD type for clarity.

CHAPTER 1 GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION

Chapter 1 presents general information, as well as the characteristics, capabilities, and features of the AN/PRM-36 RTS. Also included in Chapter 1 is the AN/PRM-36 RTS theory of operation.

CHAPTER 2 OPERATOR INSTRUCTIONS

Chapter 2 provides operator instructions for powering on and off and operation of the standard functions of the AN/PRM-36 RTS.

CHAPTER 3 TROUBLESHOOTING PROCEDURES

Chapter 3 provides crew/operator level troubleshooting procedures for various malfunctions that may occur during equipment operation. The Troubleshooting Symptoms Index is a quick reference by WP of the common malfunctions/symptoms which you may find during the operation or maintenance of the equipment.

CHAPTER 4 PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Chapter 4 lists crew/operator-level PMCS that are performed before equipment operation, while it is being operated, and after the mission is completed. The PMCS table lists the item to be checked or serviced, the check or service procedure, and the criteria for determining whether the equipment being checked is ready for its mission.

CHAPTER 5 MAINTENANCE INSTRUCTIONS

Chapter 5 lists maintenance instructions the crew can perform on the equipment.

CHAPTER 6 SUPPORTING INFORMATION

Chapter 6 contains a References WP. The References WP lists the full names of all the field manuals, forms, military standards, technical bulletins, technical manuals, and other publications that are referenced in this manual. Chapter 6 also includes the Components of End Item (COEI) and Basic Issue Items (BII) lists, the Additional Authorization List (AAL), and the Expendable/Durable Items lists.

CHAPTER 1

**GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND
THEORY OF OPERATION**

FOR

AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 1

**GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND THEORY
OF OPERATION**

WORK PACKAGE INDEX

Title	WP Sequence No.
GENERAL INFORMATION	0001
EQUIPMENT DESCRIPTION AND DATA	0002
THEORY OF OPERATION	0003

OPERATOR INSTRUCTIONS

GENERAL INFORMATION

SCOPE

This manual contains instructions for operation, operator troubleshooting, and operator-performed maintenance on the AN/PRM-36 Radio Test Set (RTS).

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 750-8 WP 0022, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751 WP 0022, Functional Users Manual for The Army Maintenance Management Systems - Aviation (TAMMS-A); or AR 700-138 WP 0022, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your RTS needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you do not like about your equipment. Let us know why you do not like the design or performance. If you have Internet access, the easiest and fastest way to report problems or suggestions is to go to https://www.pdrep.csd.disa.mil/pdrep_files/accessforms/useraccess.htm, click on "Reporting Tools", under the PDREP Functionality and then click on "Product Quality Deficiency Report (PQDR)". The Internet form lets you choose to submit an EIR, a Product Quality Deficiency Report (PQDR), or a Warranty Claim Action (WCA). You may also submit your information using an SF Form 368 (Product Quality Deficiency Report). You can send your SF Form 368 WP 0022 via e-mail, regular mail, or facsimile using the addresses/facsimile numbers specified in DA PAM 750-8 WP 0022, TAMMS Users Manual. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

CPC of Army material is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

Corrosion specifically occurs with metals. It is an electrochemical process that causes the degradation of metals. It is commonly caused by exposure to moisture, acids, bases, or salts. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking.

Plastics, composites, and rubbers can also degrade. Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically UV) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking.

SF 368 WP 0022, Product Quality Deficiency Report should be submitted to the address specified in DA PAM 750-8 WP 0022, The Army Maintenance Management System (TAMMS) Users Manual.

GENERAL INFORMATION - (CONTINUED)**DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE**

Procedures for destruction of Army equipment to prevent enemy use can be found in TM 750-244-2 , Procedures for Destruction of Electronic Materiel to Prevent Enemy Use and TM 750-244-3 Procedures for Destruction of Equipment to Prevent Enemy Use.

PREPARATION FOR STORAGE OR SHIPMENT

This section contains requirements and procedures for administrative storage of equipment that is issued to and in use by Army activities worldwide.

The requirements specified herein are necessary to maintain equipment in administrative storage in such a way as to achieve the maximum readiness condition.

Equipment that is placed in administrative storage should be capable of being readied to perform its mission within one 24-hour period or as otherwise may be prescribed by the approving authority. Before equipment is placed in administrative storage, a Preventive Maintenance Checks and Services (PMCS) should be completed and deficiencies corrected.

Report equipment in administrative storage as prescribed for all reportable equipment.

Perform inspections, maintenance services, and lubrication as specified herein.

Records and reports to be maintained for equipment in administrative storage are those prescribed by DA PAM 750-8 WP 0022 for equipment in use.

A 10 percent variance is acceptable on time used to determine the required maintenance actions.

Accomplishment of applicable PMCS, as mentioned throughout this chapter, will be on a semiannual basis.

DEFINITION OF ADMINISTRATIVE STORAGE

Equipment can be placed in administrative storage for short periods of time when a shortage of maintenance effort exists. Items should be ready for use within the time factors as determined by the directing authority. During the storage period, appropriate maintenance records will be kept.

STORAGE SITE

1. Select the best available site for administrative storage. Separate stored equipment from equipment in use. Conspicuously mark the area Administrative Storage.
2. Covered space is preferred.

STORAGE PLAN

1. Store equipment so as to provide maximum protection from the elements and to provide access for inspection, maintenance, and exercising. Anticipate removal or deployment problems and take suitable precautions.
2. Take into consideration environmental conditions, such as extreme heat or cold and high humidity. Take adequate precautions.

GENERAL INFORMATION - (CONTINUED)

3. Establish a fire plan and provide for adequate fire fighting equipment and personnel.

MAINTENANCE SERVICES AND INSPECTIONS

Prior to storage, perform the next scheduled PMCS WP 0016.

Inspect and approve the equipment prior to storage. Do not place nonmission-capable equipment in storage.

If storing equipment for 30 days or more, remove batteries WP 0021.

CORRECTIONS OF SHORTCOMINGS AND DEFICIENCIES

Correct all shortcomings and deficiencies prior to storage or obtain a deferment from the approving authority.

REMOVAL OF EQUIPMENT FROM ADMINISTRATIVE STORAGE**ACTIVATION**

Restore the equipment to normal operating condition by performing the PMCS WP 0016.

SERVICING

Resume the maintenance service schedule in effect at the commencement of storage or service the equipment before the scheduled dates in order to produce a staggered maintenance workload.

PREPARATION OF EQUIPMENT FOR SHIPMENT

Refer to FM 55-15 WP 0022 for additional instructions on processing, storage, and shipment of material.

Equipment that has been removed from storage for shipment does not have to be reprocessed if they will reach their destination within the administrative storage period. Reprocess only if inspection reveals any corrosion or if any anticipated in-transit weather conditions make it necessary.

When a piece of equipment is received and has already been processed for domestic shipment, as indicated on DD Form 1397 WP 0022, it does not have to be reprocessed for storage unless corrosion and deterioration are found during the inspection upon receipt. List on SF Form 364 WP 0022 all discrepancies found because of poor preservation packaging, packing, marking, handling, loading, storage, or excessive preservation. Repairs that cannot be handled by the receiving unit must have tags listing the needed repairs attached. A report of these conditions will be submitted by the unit commander for action by an ordnance maintenance unit.

LIST OF ABBREVIATIONS/ACRONYMS**Table 1. List of Abbreviations**

AAL	Additional Authorization List
AC	Alternating Current

GENERAL INFORMATION - (CONTINUED)

AEPS	Army Electronic Product Support
BII	Basic Issue Items
BIT	Built In Test
BNC	Bayonet Neill-Concelman
C	Celsius
CAGEC	Commercial and Government Entity Code
COEI	Components of End Item
CPC	Corrosion Prevention Control
DA	Department of the Army
dBm	Decibels per milli-watt
DC	Direct Current
DRS SSI	DRS Sustainment Systems, Inc.
EDRS	Electronic Deficiency Reporting System
EIR	Equipment Improvement Recommendation
F	Fahrenheit
FM	Frequency Modulation
Freq	Frequency
FWD Port	Forward Port
GHz	Giga Hertz
HZ	Hertz
IAW	In Accordance With
kg	Kilo-gram
kHz	Kilo Hertz
LCD	Liquid Crystal Display
LED	Light-emitting Diode
M	Male
mA	milli-Amp
Max	Maximum
MEAS	Measurement
MHz	Mega Hertz
MIL-PRF	Military Performance
Min	Minimum
MOS	Military Occupation Specialty
NiCad	Nickel Cadmium
NiMH	Nickel Metal Hydride
NSN	National Stock Number
PMCS	Preventive Maintenance Checks and Services
POC	Point of Contact
PQDR	Product Quality Deficiency Report
PWR	Power
QDR	Quality Deficiency Report
QTY	Quantity
REV Port	Reflected Port
RF	Radio Frequency
RPSTL	Repair Parts and Special Tools List
RTS	Radio Test Set

GENERAL INFORMATION - (CONTINUED)

SEL	Select
STIM	Stimulus
TAMMS	The Army Maintenance Management System
TM	Technical Manual
UUT	Unit Under Test
V	Volts
W	Watts
WARCO	Warranty Coordinators
WP	Work Package
±	Plus or Minus

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

EQUIPMENT DESCRIPTION AND DATA

CHARACTERISTICS, CAPABILITIES, AND FEATURES

The Radio Tester included in the Radio Test Set is a battery operated, lightweight portable test device used to provide quick diagnostics of many Frequency Modulated FM Receiver/Transmitter Communication Radios including the associated antenna. The Radio Tester has two functional modes; Measurement (MEAS) Mode, and Stimulus (STIM) Mode. Using these two functional modes, the Radio Tester and its accessories accurately test the following parameters of FM Receiver/Transmitter Radios operating over a frequency range of 30 MHz to 512 MHz:

IN MEASUREMENT MODE (RADIO TRANSMITTING):

- Frequency Measurement Accuracy
- Forward Power (received power at Radio Tester)
- Reverse Power (reflected power at antenna)

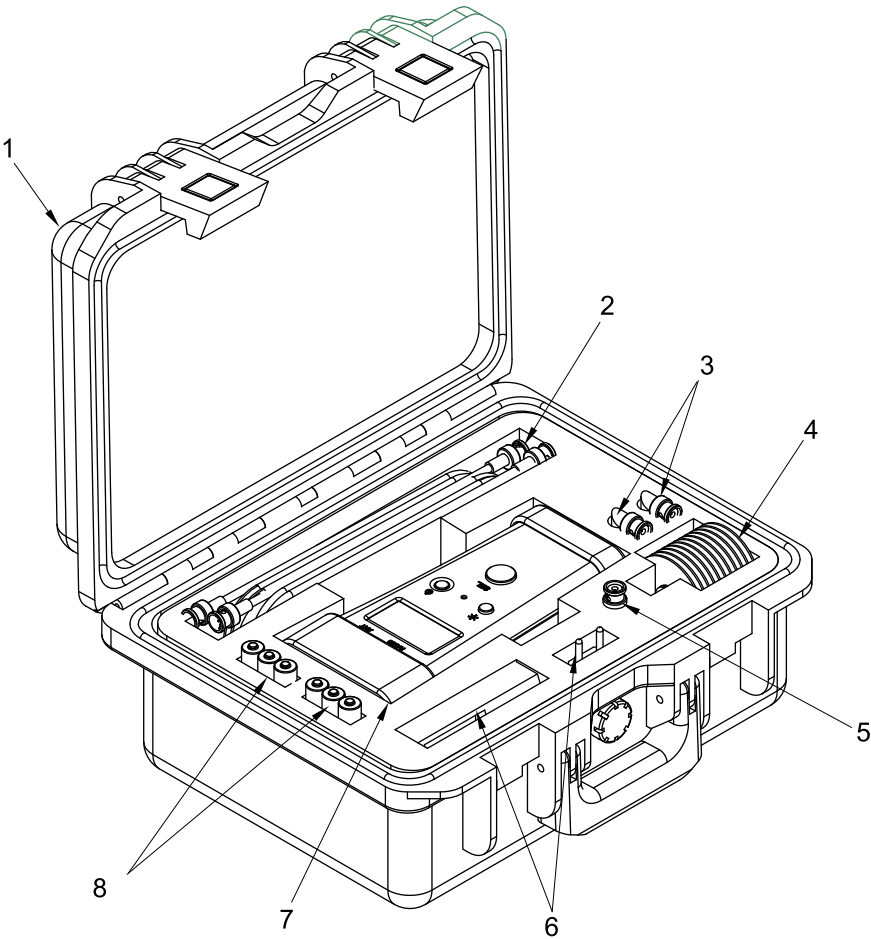
IN STIMULUS MODE (RADIO RECEIVING):

- Receiver Sensitivity
- Squelch Sensitivity

LOCATION AND DESCRIPTION OF COMPONENTS OF THE RADIO TEST SET

The Radio Test Set consists of the following:

EQUIPMENT DESCRIPTION AND DATA - (CONTINUED)



RTS00014

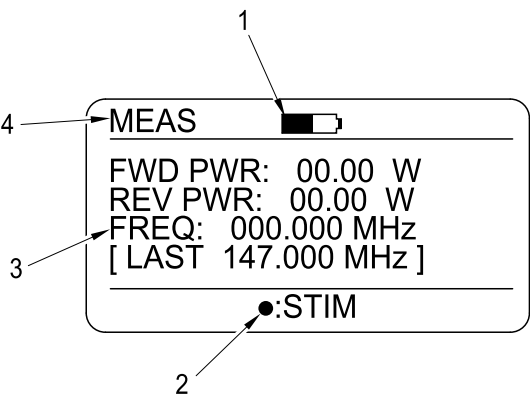
Figure 1. RTS Location of Components.

Table 1. RTS Description of Components.

1	Case, Transit, used to store and ship the Radio Test Set.
2	Cable, BNC Male, RG-58C/U, 48 Inch (2 ea) provides interconnection between the Radio Tester and the radio UUT.
3	Adapter, BNC(m) to BNC(f), 90 Deg. (2 ea) used as needed to complete test set ups.
4	Termination, RF, DC-1 GHz, 50W provides a dummy load for radio testing without an antenna.
5	Adapter, BNC(m) to BNC(m), Straight used as needed to complete test set ups.
6	Charger, Battery, AC (with 220V Adapter Plug) used to recharge NiMH rechargeable batteries.

EQUIPMENT DESCRIPTION AND DATA - (CONTINUED)

7	Radio Tester used to provide quick diagnostics of FM Receiver-Transmitter Radios.
8	Battery, NiMH, 1.25V, Size AA, Rechargeable High Capacity Type NH15 (6 ea) used to provide power to operate the Radio Tester (3 Spares).



RTS00034

Figure 2. Display Screen.

Table 2. Display Screen.

1	Battery Indicator displays status of battery power.
2	Inactive Test Mode displays test not currently being performed.
3	Unit Under Test (UUT) Data displays data sent and received from radio.
4	Active Test Mode displays test currently being performed.

EQUIPMENT DATA

Table 3. RTS Specifications

Performance:	MEASUREMENT MODE (Transmitter Test)	
	Frequency Range	30 - 512 MHz
	Frequency Accuracy	± 2 kHz
	Forward Power	1 to 50 W (0.1 to 50 W usable)
	Forward Power Accuracy	± 20%
	Maximum Input Power	60 W
	Reverse Power	1 W to 20 W (0.1 to 50 W usable)
	Reverse Power Accuracy	± 20%
	Measurement Resolution	500 Hz
	Display Resolution	1 kHz
	STIMULUS MODE (Receiver Test)	
	Output Carrier Frequency Range	30 - 512 MHz

EQUIPMENT DESCRIPTION AND DATA - (CONTINUED)

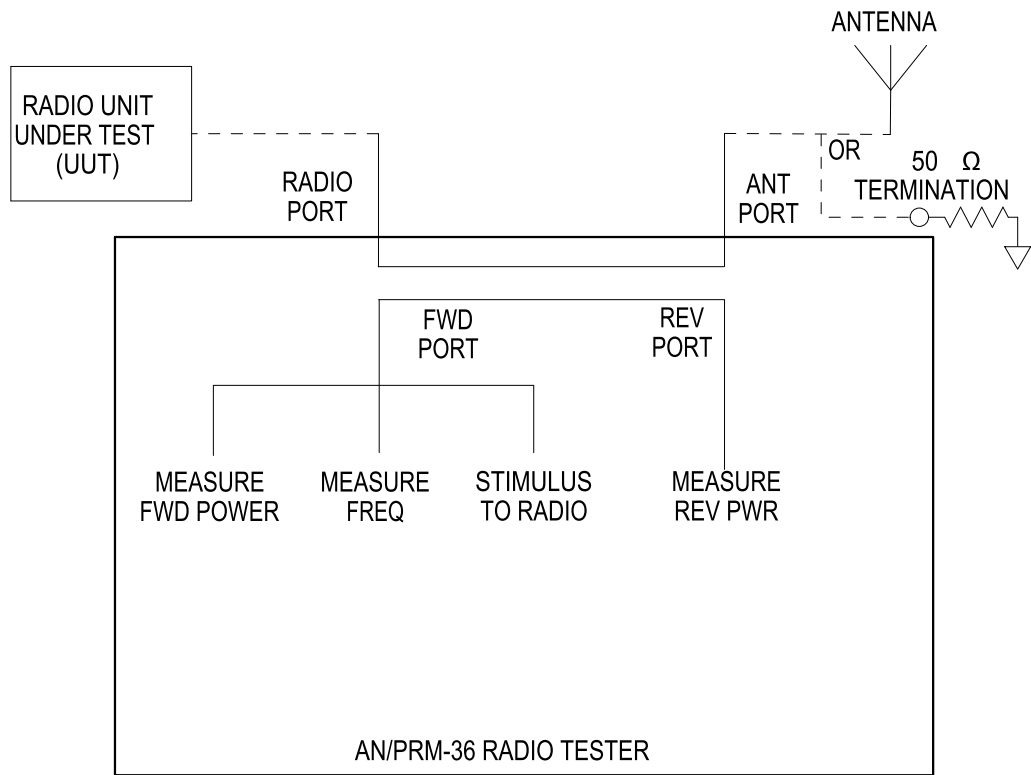
	Output Frequency Accuracy	± 2 kHz
	RF Modulation	
	Output Level	-97 dBm at Carrier Frequency
	Output Level Accuracy	± 3 dBm
	Tones	150 Hz Squelch Tone. 900 Hz Audio Tone.
	Tone Accuracy	± 2 Hz
	FM Deviation	Min. Composite: ± 1.75 kHz Max. Composite: ± 3.5 kHz (for each Carrier Frequency)
Operating Power:	DC Input Range	+3.9V to +4.2V dc
	Battery Type	1.25V Size AA Rechargeable, NiMH
	Current Draw (typical at 4.5V @ 25°C)	OFF < 1 mA; MEAS Mode < 60 mA; STIM Mode < 150 mA
	Battery Life (typical)	30 Hours
	Battery Charge Indicator (typical)	Full Charge = Full Indicator No Battery Charge = Empty Indicator
	Low Battery Warning	Visual indication of less than 12.5% of battery life remaining
	Auto Power Down	After 4 minutes of inactivity
	Fuse Protection	Internal Auto-Resetting fuse
	Reverse Battery Protection	Built in reverse battery protection
RF Connectors:	2 BNC (f) Connectors	For Radio and Antenna
Controls:	On / Off Power Button	
	Display Backlight Button	
	SEL Button for menu options	
Dimensions:	Radio Tester Overall Dimensions	8.4 x 3.8 x 2.0 in. (L x W x D) (213 x 97 x 51 mm)
	Weight (Radio Tester only)	< 1.5 lbs (< 0.7 kg)
	Weight (all components in Case)	7.5 lbs (3.4 kg)
Environment:	Operating Temperature	-4°F to 122°F (-20°C to 50°C)
	Operating Humidity	MIL-PRF-28800F, Section 3.8.2.3.2, Class 3
	Storage Temperature	-67°C to 185°F (-55°C to 85°C)
	Storage Humidity	100% (in Transit Case)
	Altitude	16,000 ft

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

THEORY OF OPERATION

Radio Tester



RTS00003

Figure 1. RTS Simplified Diagram.

The Radio Tester has two modes of testing the parameters of Frequency Modulated (FM) receiver-transmitter radios. The two modes are: a Measurement Mode for testing radio transmitting and a Stimulus mode for testing radio receiving.

In the Measurement Mode, the Unit Under Test (UUT) transmits Radio Frequency (RF) energy into the RADIO port on the Radio Tester. This energy is coupled, using a 4-port coupler, to the Forward Port (FWD Port) where Frequency and Forward Power from the UUT are measured and displayed. RF energy also continues along the internal coupler to the ANT port, and directed to an Antenna or 50 Ω Termination. Reflected RF energy from the Antenna or 50 Ω Termination is coupled into the Reverse/Reflected Port (REV Port) of the internal 4-port coupler where Reflected Power is measured and displayed.

THEORY OF OPERATION - (CONTINUED)

In the Stimulus Mode, the Radio Tester emits RF energy at the same frequency measured during Measurement Mode. This RF energy is coupled across the internal 4-way coupler out through the RADIO port and into the UUT. The emitted frequency and power level is displayed.

END OF WORK PACKAGE

CHAPTER 2
OPERATOR INSTRUCTIONS
FOR
AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 2

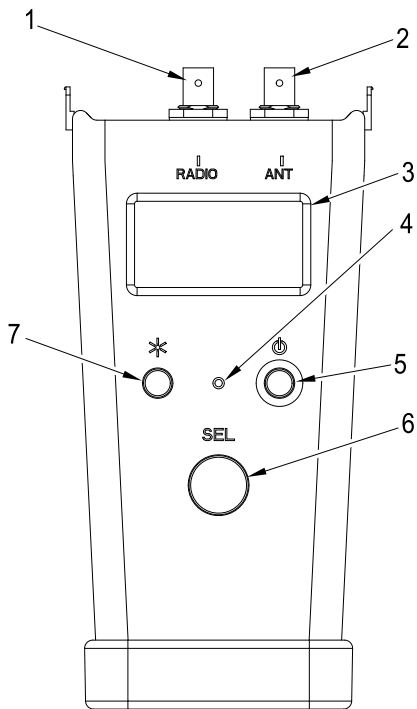
OPERATOR INSTRUCTIONS

WORK PACKAGE INDEX

Title	WP Sequence No.
DESCRIPTION AND USE OF OPERATORS CONTROLS AND INDICATORS 0004
POWER ON/OFF PROCEDURE. 0005
BUILT IN TEST CHECK (BIT) 0006
CHECKING BATTERY STATUS 0007
PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING .	. 0008
STIMULUS MODE (STIM) TESTING PROCEDURE 0009
MEASUREMENT MODE (MEAS) TESTING PROCEDURE 0010
OPERATE RADIO TEST SET (RTS) IN EXTREME COLD -4°F (-20°C) AND BELOW 0011
OPERATE RADIO TEST SET (RTS) IN EXTREME HEAT 122°F (50°C) AND ABOVE 0012

OPERATOR INSTRUCTIONS

DESCRIPTION AND USE OF OPERATORS CONTROLS AND INDICATORS



RTS00002

Figure 1. Radio Tester Features and Controls.

Table 1. Radio Tester Features And Controls.

KEY	CONTROL/INDICATOR	FUNCTION
1	Radio Connector (RADIO)	Connector for connecting cable between Radio Tester and Unit Under Test (UUT) Radio antenna connector.
2	Antenna Connector (ANT)	Connector for connecting UUT antenna or to 50 Ω Termination.
3	LCD Display	Readout display for all Radio Tester functions.
4	Manual Reset	Recessed hole for manual power reset of Radio Tester (next higher level maintenance only).
5	Power Button	Push button used to turn Radio Tester on and off.

DESCRIPTION AND USE OF OPERATORS CONTROLS AND INDICATORS -
(CONTINUED)

KEY	CONTROL/INDICATOR	FUNCTION
6	Selection Button (SEL)	Push button used to select measurement mode or stimulus mode testing.
7	Backlight Button	Push button used to illuminate display screen on Radio Tester.

END OF WORK PACKAGE

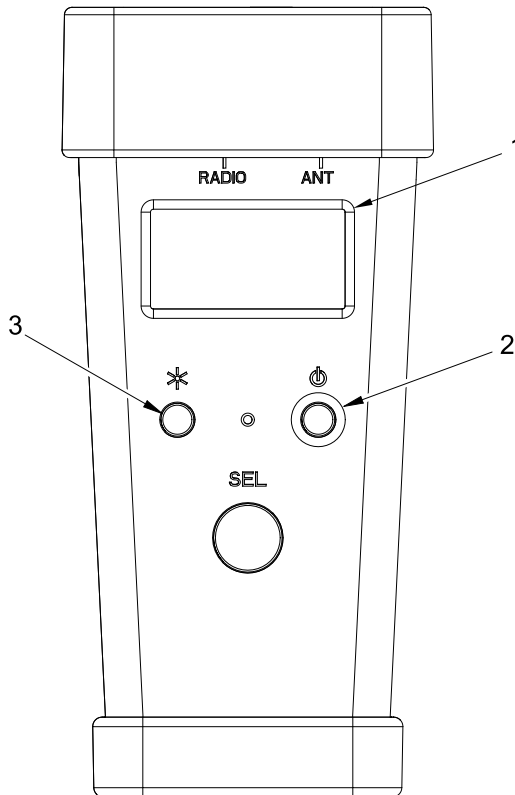
OPERATOR INSTRUCTIONS
POWER ON/OFF PROCEDURE

INITIAL SETUP:

Equipment Condition

Batteries installed (WP 0021)

POWER ON/OFF



RTS00025

Figure 1. Power On/Off.

POWER ON/OFF PROCEDURE - (CONTINUED)**NOTE**

While in STIM Mode, radio tester will switch to MEAS Mode after 30 seconds of inactivity. Radio tester will power off automatically after 4 more minutes of inactivity.

1. Press power button (Figure 1, Item 2) for minimum of 2 seconds until display screen (Figure 1, Item 1) displays manufactures logo.
2. Press the backlight button (Figure 1, Item 3) to turn display screen (Figure 1, Item 1) lighting on or off.

NOTE

BIT Check will fail if Radio Frequency (RF) Power from Unit Under Test (UUT) is on. Ensure RF Power from UUT is off.

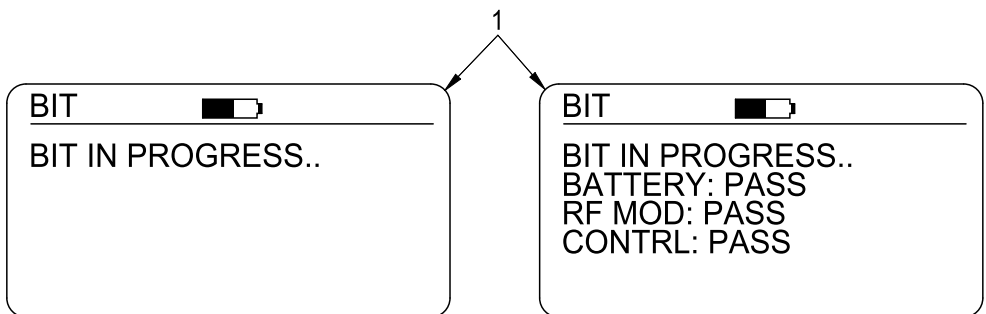
3. Press power button (Figure 1, Item 2) for minimum of 2 seconds until display screen (Figure 1, Item 1) turns off.

END OF TASK**END OF WORK PACKAGE**

OPERATOR INSTRUCTIONS**BUILT IN TEST CHECK (BIT)**

INITIAL SETUP:**Equipment Condition**

Radio Tester powered off (WP 0005)

BUILT IN TEST CHECK (BIT)

RTS00004

Figure 1. BIT Test.

NOTE

Ensure Radio Frequency (RF) power from a Radio Unit Under Test (UUT) is off, or else BIT Check will fail.

Radio Tester automatically starts BIT check after powering up in order to verify proper operation of the device. Upon completion of a passing BIT Check, "RF MOD: PASS" and "CONTRL: PASS" is displayed for 2 seconds, then the Radio Tester automatically switches to the Measurement Mode (MEAS).

1. Press power button WP 0004 for minimum of 2 seconds until display screen (Figure 1, Item 1) displays DRS Technologies.
2. Ensure BIT IN PROGRESS... is displayed on display screen (Figure 1, Item 1).

BUILT IN TEST CHECK (BIT) - (CONTINUED)**NOTE**

Radio Tester has a Built In Test (BIT) check to identify and isolate three types of internal unit failures.

When BIT check is completed, BATTERY: PASS, RF MOD: PASS, and CONTRL: PASS will display on display screen for 2 seconds before automatically switching to Measurement Mode (MEAS).

3. Ensure BIT passes all checks.
4. If BATTERY: FAIL is displayed on display screen (Figure 1, Item 1), refer to Troubleshooting Procedures, Chapter 3 Index.
5. If RF MOD: FAIL or CONTRL: FAIL are displayed on display screen (Figure 1, Item 1), notify next higher level maintenance.

END OF TASK**END OF WORK PACKAGE**

OPERATOR INSTRUCTIONS

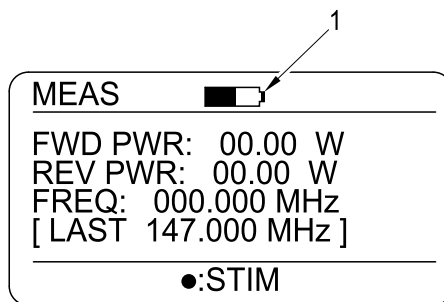
CHECKING BATTERY STATUS

INITIAL SETUP:

Equipment Condition

Radio Tester powered off (WP 0005)

CHECKING BATTERY STATUS



RTS00006

Figure 1. Battery Status Indicator.

NOTE

Battery Status Indicator is continuously displayed throughout all performance testing.

Full battery power strength is indicated by a dark battery status indicator and a low charge is represented by a light battery status indicator.

When the batteries are reduced to a charge level of 12.5% remaining battery life, battery status indicator will flash.

1. Verify battery status by viewing battery status indicator (Figure 1, Item 1).
2. If necessary, replace batteries WP 0021.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING**

INITIAL SETUP:

NOT APPLICABLE

MODE TEST PREPARATION**WARNING**

When performing tests (Radio Transmitting) be sure to avoid contact with antenna, antenna connectors or 50 Ω Termination to prevent possible electric shock. Failure to comply may result in injury or death to personnel.

NOTE

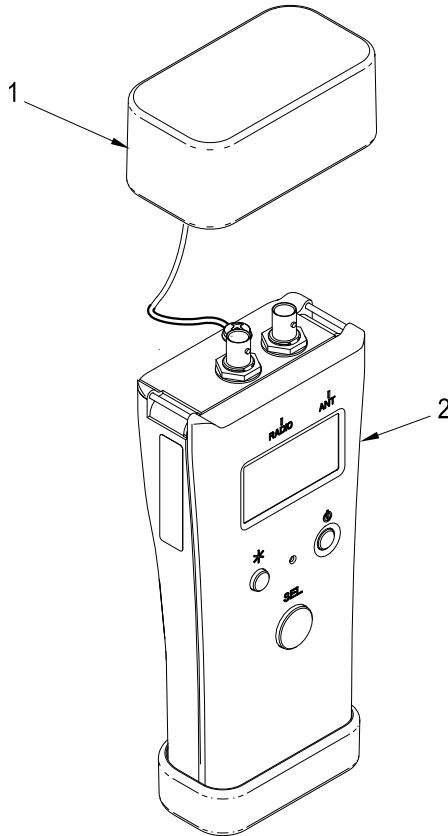
50 Ω termination may be connected to Radio Tester ANT port connector instead of an antenna during measurement test if desired.

Measurement (MEAS) mode test will allow the Radio Tester to measure the radio unit under test (UUT) transmitter output frequency, forward power received at Radio Tester RADIO port, and reverse power reflected from antenna. Stimulus (STIM) mode test will allow the Radio Tester to stimulate the radio UUT at Radio Tester ANT port with simultaneous complex two-tone 150 Hz and 900 Hz frequency modulated signals between 30 and 512 MHz. This test signal will verify radio UUT receiver squelch and sensitivity.

PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING -
(CONTINUED)

Measurement Setup Procedure Using Antenna

1. Push cover enclosure assembly (Figure 1, Item 1) to either side to release clip, lift, and remove from Radio Tester (Figure 1, Item 2).

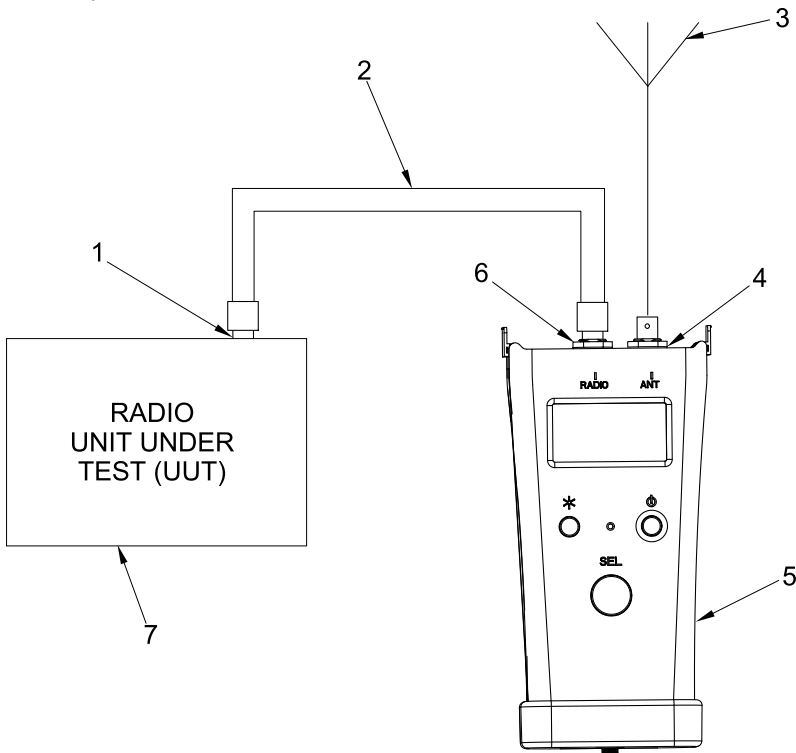


RTS00032

Figure 1. Cover Enclosure Assembly Removal.

2. Ensure radio UUT (Figure 2, Item 7) is powered off.

PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING -
(CONTINUED)



RTS00007

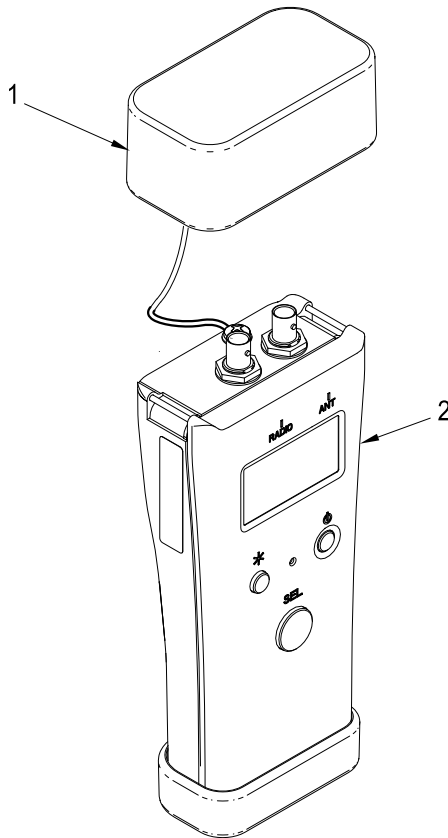
Figure 2. MEAS Preparation.

3. Disconnect radio UUT antenna (Figure 2, Item 3) from radio UUT (Figure 2, Item 7).
4. Connect radio UUT antenna (Figure 2, Item 3) to Radio Tester ANT port connector (Figure 2, Item 4) on Radio Tester (Figure 2, Item 5).
5. Using a 48 in. RG58 test cable (Figure 2, Item 2), connect radio UUT antenna port connector (Figure 2, Item 1) to Radio Tester RADIO port connector (Figure 2, Item 6) on Radio Tester (Figure 2, Item 5).

PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING -
(CONTINUED)

Measurement Setup Procedure Using 50 ohm Load

1. Push cover enclosure assembly (Figure 3, Item 1) to either side to release clip, lift, and remove from Radio Tester (Figure 3, Item 2).

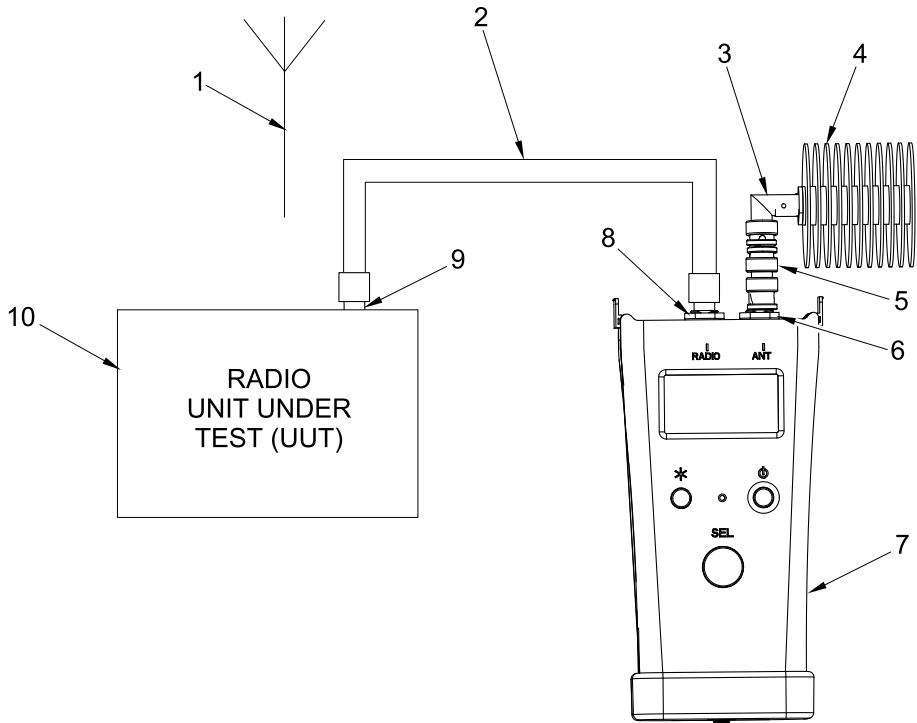


RTS00032

Figure 3. Cover Enclosure Assembly Removal.

2. Ensure radio UUT (Figure 4, Item 10) is powered off.

PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING - (CONTINUED)



RTS00035

Figure 4. MEAS Preparation.

3. Disconnect radio UUT antenna (Figure 4, Item 1) from radio UUT (Figure 4, Item 10).
4. Connect straight BNC adapter (Figure 4, Item 5) to Radio Tester ANT port connector (Figure 4, Item 6).
5. Connect 90 degree BNC adapter (Figure 4, Item 3) to straight BNC adapter (Figure 4, Item 5).
6. Connect 50 Ω termination (Figure 4, Item 4) to 90 degree BNC adapter (Figure 4, Item 3).
7. Using a 48 in. RG58 test cable (Figure 4, Item 2), connect radio UUT antenna port connector (Figure 4, Item 9) to Radio Tester RADIO port connector (Figure 4, Item 8) on Radio Tester (Figure 4, Item 7).

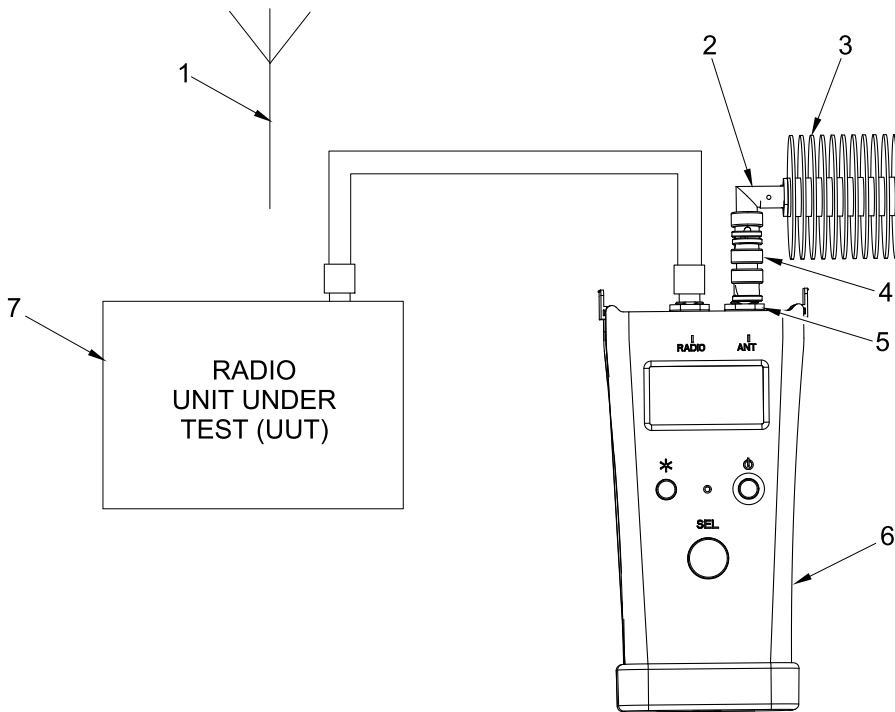
PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING - (CONTINUED)

Stimulus (STIM) Mode

NOTE

MEAS mode test must be completed prior to executing STIM mode test to allow Radio Tester to determine the radio UUT carrier frequency. Radio tester will display last frequency measurement made while in MEAS mode.

1. Perform MEAS mode test WP 0010.
2. Ensure radio UUT (Figure 5, Item 7) is not keyed.



RTS00045

Figure 5. STIM Preparation.

3. If radio UUT antenna (Figure 5, Item 1) was used for measurement test, perform Steps 4 through 7.
4. Disconnect radio UUT antenna (Figure 5, Item 1) from Radio Tester ANT port connector (Figure 5, Item 5) on Radio Tester (Figure 5, Item 6).
5. Connect straight BNC adapter (Figure 5, Item 4) to Radio Tester ANT port connector (Figure 5, Item 5).

PREPARATION FOR RADIO TEST SET (RTS) PERFORMANCE TESTING -
(CONTINUED)

6. Connect 90 degree BNC adapter (Figure 5, Item 2) to straight BNC adapter (Figure 5, Item 4).
7. Connect 50 Ω termination (Figure 5, Item 3) to 90 degree BNC adapter (Figure 5, Item 2)

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**STIMULUS MODE (STIM) TESTING PROCEDURE**

INITIAL SETUP:**Equipment Condition**

Radio tester prepared for STIM mode testing (WP 0008)

Bit test performed (WP 0006)

Battery status verified (WP 0007)

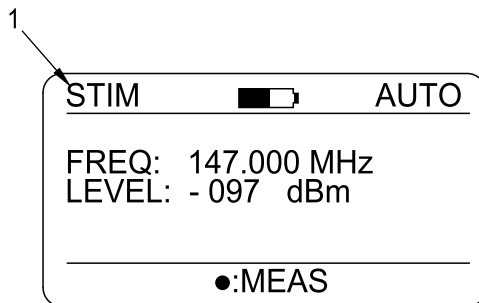
STIM TEST

1. Ensure radio unit under test (UUT) is powered on and tuned between 30 MHz to 512 MHz in accordance with appropriate UUT technical manual.

NOTE

When select button on Radio Tester is pressed a two-tone complex modulated FM signal will automatically transmit on the last carrier frequency at -97 dBm to radio UUT antenna port connector.

2. Press select button WP 0004 on Radio Tester to change mode to STIM (Figure 1, Item 1).



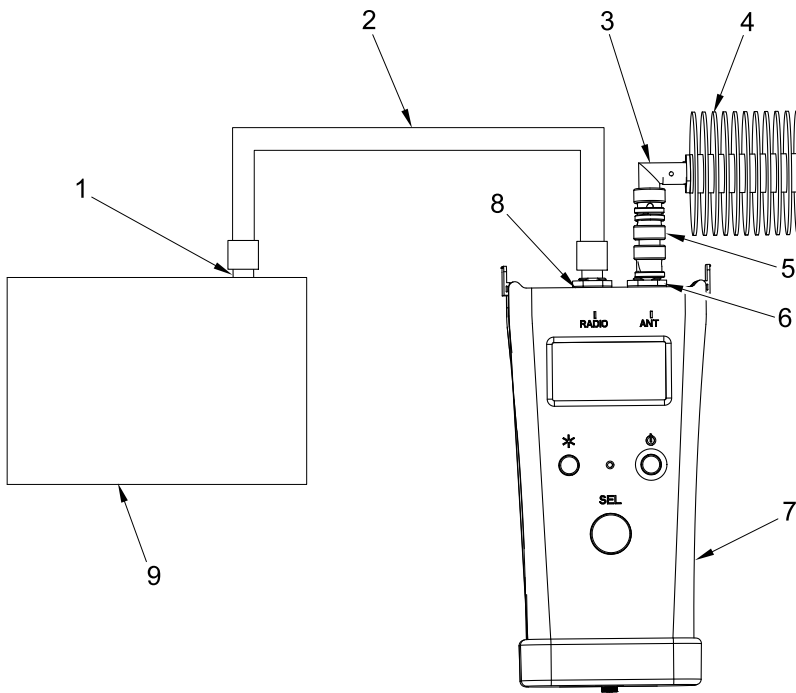
RTS00009

Figure 1. STIM Test Screen Display.

3. Verify the Radio UUT breaks squelch and a 900 Hz tone is heard in the speaker, headset, or handset.
4. Press select button WP 0004 on Radio Tester (Figure 2, Item 7) to switch to MEAS Mode as required.
5. Power off the Radio Tester WP 0005.

STIMULUS MODE (STIM) TESTING PROCEDURE - (CONTINUED)

6. Disconnect 50 Ω termination (Figure 2, Item 4) from 90 degree BNC adapter (Figure 2, Item 3).



RTS00008

Figure 2. Test Equipment.

7. Disconnect 90 degree BNC adapter (Figure 2, Item 3) from straight BNC adapter (Figure 2, Item 5).
8. Disconnect straight BNC adapter (Figure 2, Item 5) from Radio Tester ANT port connector (Figure 2, Item 6).
9. Remove RG58 test cable (Figure 2, Item 2) from radio UUT antenna port connector (Figure 2, Item 1) and Radio Tester RADIO port connector (Figure 2, Item 8).
10. Connect radio UUT antenna to radio UUT (Figure 2, Item 9).

END OF TASK**END OF WORK PACKAGE**

OPERATOR INSTRUCTIONS

MEASUREMENT MODE (MEAS) TESTING PROCEDURE

INITIAL SETUP:

Equipment Condition

Radio tester prepared for MEAS mode
testing (WP 0008)

Bit test performed (WP 0006)
Battery status verified (WP 0007)

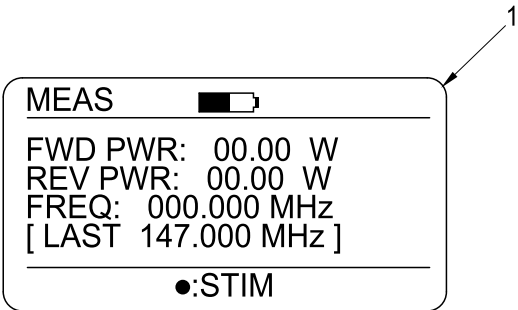
MEAS TEST

WARNING



When performing tests (Radio Transmitting) be sure to avoid contact with antenna, antenna connectors or 50 Ω Termination to prevent possible electric shock. Failure to comply may result in injury or death to personnel.

- 1. Tune radio unit under test (UUT) between 30 to 512 MHz.



RTS00005

Figure 1. MEAS Test Screen Display.

MEASUREMENT MODE (MEAS) TESTING PROCEDURE - (CONTINUED)**WARNING**

Excessive reverse power (over 60 Watts) is a sign of an open or shorted antenna or load. This is an indication of an abnormal condition that should be corrected prior to proceeding with test procedures. Failure to comply may result in injury or death to personnel.

NOTE

When radio UUT is keyed, Radio Tester will display measured output of Radio UUT frequency, forward power and reflected reverse power. Refer to Figure 1.

Last frequency measured will be display and remembered until battery power is lost.

2. Key radio UUT and observe Radio Tester display (Figure 1, Item 1).
3. Once measurement is complete, stop keying of the Radio UUT. Radio tester will continue to display last frequency measured.
4. If necessary, key radio UUT to repeat MEAS Test.
5. Perform STIM test WP 0009.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATE RADIO TEST SET (RTS) IN EXTREME COLD -4°F (-20°C) AND BELOW

INITIAL SETUP:NOT APPLICABLE

OPERATE RADIO TEST SET (RTS) IN EXTREME COLD -4°F (-20°C) AND BELOW**NOTE**

Rechargeable batteries are designed to operate and accept a charge from -4°F to +122°F (-20°C to +50°C). At low temperatures, they may operate, but will not accept a charge cycle.

Perform Step 1 only if temperature is -4°F (-20°C) or below.

1. Replace rechargeable batteries with non-rechargeable alkaline batteries WP 0021.

END OF TASK**END OF WORK PACKAGE**

OPERATOR INSTRUCTIONS

OPERATE RADIO TEST SET (RTS) IN EXTREME HEAT 122°F (50°C) AND ABOVE

INITIAL SETUP:

NOT APPLICABLE

OPERATE RADIO TEST SET (RTS) IN EXTREME HEAT 122°F (50°C) AND ABOVE**WARNING**

When exposed to extreme heat or rough handling, NiMH batteries may rupture, leaking corrosive material and/or emitting toxic fumes. If NiMH battery is ruptured or catches fire, personnel should leave the area immediately to avoid inhalation of battery fumes or exposure to battery electrolytes.

NOTE

Rechargeable batteries are designed to operate and accept a charge from -4°F to +122°F (-20°C to +50°C). At high temperatures, they may operate, but will not accept a charge cycle.

Perform Step 1 only if temperature is 122°F (50°C) or above.

1. Replace rechargeable batteries with non-rechargeable alkaline batteries WP 0021.

END OF TASK**END OF WORK PACKAGE**

CHAPTER 3
TROUBLESHOOTING PROCEDURES
FOR
AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 3

TROUBLESHOOTING PROCEDURES

WORK PACKAGE INDEX

Title	WP Sequence No.
RADIO TESTER DOES NOT POWER ON	0013
RADIO TESTER DOES NOT PASS BIT TEST	0014
NICKEL METAL HYDRIDE (NiMH) BATTERIES WILL NOT CHARGE	0015

OPERATOR INSTRUCTIONS

RADIO TESTER DOES NOT POWER ON

INITIAL SETUP:**References**

WP 0020

WP 0021

TROUBLESHOOTING PROCEDURE**SYMPTOM**

Radio tester does not power on.

MALFUNCTION

Batteries are not installed correctly.

CORRECTIVE ACTION

STEP 1. Remove battery cover from Radio Tester WP 0021 and ensure batteries are installed correctly.

MALFUNCTION

Battery power drained.

CORRECTIVE ACTION

STEP 1. Remove batteries from Radio Tester WP 0021.

STEP 2. Charge Nickel Metal Hydride (NiMH) batteries WP 0020 or discard alkaline batteries.

STEP 3. Install charged NiMH or new alkaline batteries in Radio Tester WP 0021.

- a. If NiMH batteries do not take a charge, replace NiMH batteries WP 0021.
- b. If Radio Tester does not power on with charged NiMH or new alkaline batteries, notify next higher level maintenance.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS
RADIO TESTER DOES NOT PASS BIT TEST

INITIAL SETUP:**References**

WP 0021

TROUBLESHOOTING PROCEDURE**SYMPTOM**

Radio tester does not pass BIT test.

MALFUNCTION

Unit Under Test (UUT) radio frequency (RF) is on.

CORRECTIVE ACTION

STEP 1. Turn RF from UUT off.

MALFUNCTION

Low battery fault exists.

CORRECTIVE ACTION

STEP 1. Replace batteries WP 0021.

MALFUNCTION

RF module fail or Controller fail fault exists.

CORRECTIVE ACTION

STEP 1. Notify next higher level maintenance.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS**NICKEL METAL HYDRIDE (NIMH) BATTERIES WILL NOT CHARGE**

INITIAL SETUP:**References**

WP 0020

WP 0021

TROUBLESHOOTING PROCEDURE**SYMPTOM**

NiMH batteries will not charge.

MALFUNCTION

NiMH Batteries not charged.

CORRECTIVE ACTION

STEP 1. Remove batteries from Radio Tester WP 0021.

NOTE

Rechargeable batteries are designed to operate and accept a charge from -4°F to +122°F (-20°C to +50°C). At low temperatures, they may operate, but will not accept a charge cycle.

STEP 2. Raise temperature of batteries to -4°F (-20°C).

STEP 3. Charge NiMH batteries WP 0020.

- a. If light-emitting diode (LED) indicator does not display green after 8 hours, replace batteries with known good batteries.
- b. If problem still exists, replace charger.

END OF WORK PACKAGE

CHAPTER 4
MAINTENANCE INSTRUCTIONS
FOR
AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 4

MAINTENANCE INSTRUCTIONS

WORK PACKAGE INDEX

Title	WP Sequence No.
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	0016
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - BEFORE	0017
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - DURING	0018
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - AFTER	0019

OPERATOR INSTRUCTIONS

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

PMCS INTRODUCTION

This section provides information to guide the AN/PRM-36 Radio Test Set (RTS) operator in performing required Preventive Maintenance Checks and Services (PMCS) functions. The PMCS tables contain checks and services necessary to ensure that the RTS is ready for operation. Using PMCS tables, perform maintenance at specified intervals.

EXPLANATION OF COLUMNS

- **Item Number Column.** Numbers in this column shall be used as a source of item numbers for the TM Number Column on DA Form 2404 WP 0022 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E WP 0022 (Equipment Inspection and Maintenance Worksheet (Automated)), in recording results of PMCS.
- **Interval Column.** The interval column tells you when to do a certain check or service. Semiannual PMCS must be performed every 6 months, and annual PMCS must be performed every 12 months.
- **Item to be Inspected Column.** This column tells you the item to be checked/serviced.
- **Procedure Column.** The procedure column of your PMCS table tells you how to do the required checks and services.
- **Not Fully Mission Capable If: Column.** This column tells you what faults will keep your AN/PRM-36 RTS from being capable of performing its primary mission. If you perform check and service procedures that show faults listed in this column, do not operate the AN/PRM-36 RTS. Follow standard operating procedures for maintaining the AN/PRM-36 RTS or reporting equipment failure.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES

- Do the BEFORE (B) PREVENTIVE MAINTENANCE just before operating equipment. Pay attention to the WARNINGS and CAUTIONS.
- Do the DURING (D) PREVENTIVE MAINTENANCE while equipment and/or its component systems are in operation. Pay attention to the WARNINGS and CAUTIONS.
- Do the AFTER (A) PREVENTIVE MAINTENANCE right after operating equipment. Pay attention to the WARNINGS and CAUTIONS.
- Do the WEEKLY (W) PREVENTIVE MAINTENANCE once a week. Pay attention to the WARNINGS and CAUTIONS.
- Do the MONTHLY (M) PREVENTIVE MAINTENANCE once a month. Pay attention to the WARNINGS and CAUTIONS.
- If something does not work, troubleshoot and notify the supervisor.
- Always do PREVENTIVE MAINTENANCE in the same order until it becomes a habit. Once practiced, problems can be spotted quickly.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - (CONTINUED)

- If something looks wrong and cannot be fixed right then, write it on DA Form 2404 WP 0022 or DA Form 5988-E WP 0022. If something seems seriously wrong, report it to Field Maintenance as soon as possible.
- When doing PREVENTIVE MAINTENANCE, take along the tools needed and a rag or two to make all the checks.

GENERAL MAINTENANCE PROCEDURE

During PMCS, keep the following general maintenance procedures in mind:

- **Screws:** Check screws for obvious looseness, missing, bent, or broken condition. If any of these conditions are found, notify Field Maintenance.
- **Electrical Wires and Connectors:** Look for loose or broken electrical connectors. Make sure connectors are serviceable. If a connector is loose or bad, notify Field Maintenance.
- **Damage is defined as:** Any conditions that affect safety or would render the AN/PRM-36 RTS unserviceable per applicable procedure.

Listed below are the sections of the PMCS.

PMCS - BEFORE WP 0017

PMCS - DURING WP 0018

PMCS - AFTER WP 0019

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - BEFORE

INITIAL SETUP:

NOT APPLICABLE

Table 1. PMCS - Before.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	Before	Transit Case	1. Check transit case for loose, broken, or missing hardware and damage. 2. Check transit case interior and exterior for dirt and debris.	
2	Before	Radio Tester	1. Check Radio Tester for loose, broken, or missing hardware and damage. 2. Perform BIT Check WP 0006.	BIT Check fails.
3	Before	Cables	1. Check cables for cuts, kinks, or damaged connectors.	Cables are cut, kinked, or connectors are damaged.
4	Before	Radio Test Set (RTS) Components	1. Check RTS accessories for dirt, debris, and damage.	
5	Before	Battery Status	1. Check battery status for charge.	Batteries have no or low charge.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - DURING

INITIAL SETUP:

NOT APPLICABLE

Table 1. PMCS - During.

ITE-M NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	During	Battery Status	1. Check battery status for charge.	Batteries have no charge or low charge.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - AFTER

INITIAL SETUP:

NOT APPLICABLE

Table 1. PMCS - After.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	After	Transit Case	1. Check transit case for loose, broken, or missing hardware and damage. 2. Check transit case interior and exterior for dirt and debris.	
2	After	Radio Tester	1. Perform BIT Check WP 0006. 2. Check Radio Tester for loose, broken, or missing hardware and damage.	BIT Check fails.
3	After	Cables	1. Check cables for cuts, kinks, or damaged connectors.	Cables are cut, kinked, or connectors are damaged.
4	After	Radio Test Set (RTS) Components	1. Check RTS accessories for dirt, debris, and damage.	
5	After	Battery Status	1. Check battery status for charge.	Batteries have no charge or low charge.

END OF WORK PACKAGE

CHAPTER 5
MAINTENANCE INSTRUCTIONS
FOR
AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 5

MAINTENANCE INSTRUCTIONS

WORK PACKAGE INDEX

Title	WP Sequence No.
BATTERY CHARGING	0020
REPLACEMENT.	0021

OPERATOR INSTRUCTIONS**BATTERY CHARGING**

INITIAL SETUP:**Equipment Condition**

Batteries removed (WP 0021)

CAUTION

Do not charge alkaline batteries. Failure to comply may result in damage to equipment. The battery charger is not environmentally hardened and will incur damage if exposed to extreme temperatures, blowing sand, dust, and water. Battery charger should only be used in a climate controlled environment protected from the elements.

NOTE

Radio Test Set (RTS) is supplied with two sets of three rechargeable high capacity size AA Nickel Metal Hydride (NiMH) batteries. Alkaline batteries may also be used.

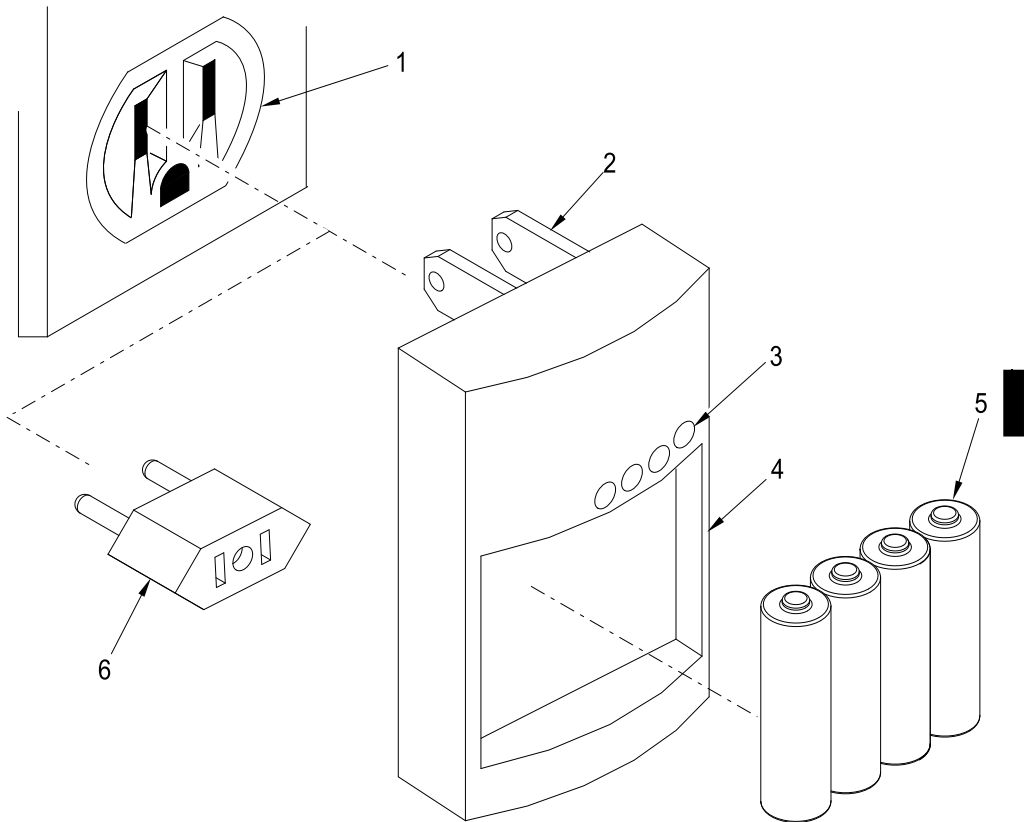
Battery charger is power by alternating current (AC).

NiMH Batteries will not charge if cold and must be warmed above -4°F (-20°C) prior to charging.

CHARGING BATTERIES

1. Remove charger (Figure 1, Item 4) from case.

BATTERY CHARGING - (CONTINUED)



RTS00027

Figure 1. AC Charging.

2. Install batteries (Figure 1, Item 5) in battery charger (Figure 1, Item 4).
3. Deploy electrical prongs (Figure 1, Item 2) of battery charger (Figure 1, Item 4).

CAUTION

If connecting to a 220 V AC electrical outlet, attach 220 V AC adapter to electrical prongs. Failure to comply may result in damage to equipment.

4. If connecting to 220 V AC source, attach 220 V adapter (Figure 1, Item 6) on electrical prongs (Figure 1, Item 2). Otherwise, skip to step 5.
5. Insert electrical prongs (Figure 1, Item 2) into AC electrical outlet (Figure 1, Item 1).

BATTERY CHARGING - (CONTINUED)**NOTE**

Battery is charged when LED indicator displays green.

Charging time for batteries is no more than 8 hours.

6. Visually check light-emitting diode (LED) indicators (Figure 1, Item 3).

END OF TASK**END OF WORK PACKAGE**

OPERATOR INSTRUCTIONS**REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

Screwdriver, Cross-tip

Equipment ConditionRadio Tester powered off (WP 0005)

REMOVAL**CAUTION**

Voltage range of acceptable size AA batteries is from 1.2V to 2.0V each. Single cell battery voltage must not exceed 2.0V. Failure to comply may result in damage to equipment.

Do not use 3V Lithium batteries in Radio Tester. Failure to comply may result in damage to equipment.

NOTE

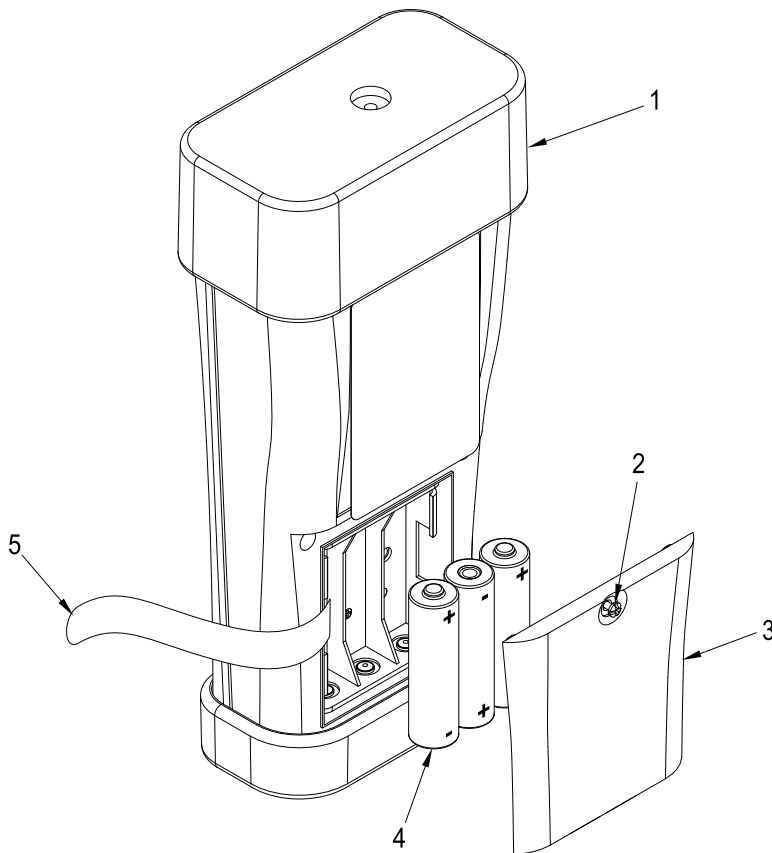
Radio Tester requires three AA batteries to operate.

Radio Test Set (RTS) is supplied with two sets of three rechargeable high capacity size AA Nickel Metal Hydride (NiMH) batteries. Alkaline batteries may also be used.

RTS will also operate using NiCad (Nickel Cadmium) batteries; however, NiCad batteries are not recommended since they require hazardous material disposal.

1. Using cross-tip screwdriver, loosen screw (Figure 1, Item 2) and remove battery cover (Figure 1, Item 3) from Radio Tester (Figure 1, Item 1).

REPLACEMENT - (CONTINUED)



RTS00028

Figure 1. Battery Removal.

NOTE

Note position of batteries prior to removal.

2. Pull ribbon (Figure 1, Item 5) to remove three batteries (Figure 1, Item 4) from Radio Tester (Figure 1, Item 1).
3. If necessary, recharge batteries WP 0020.

END OF TASK

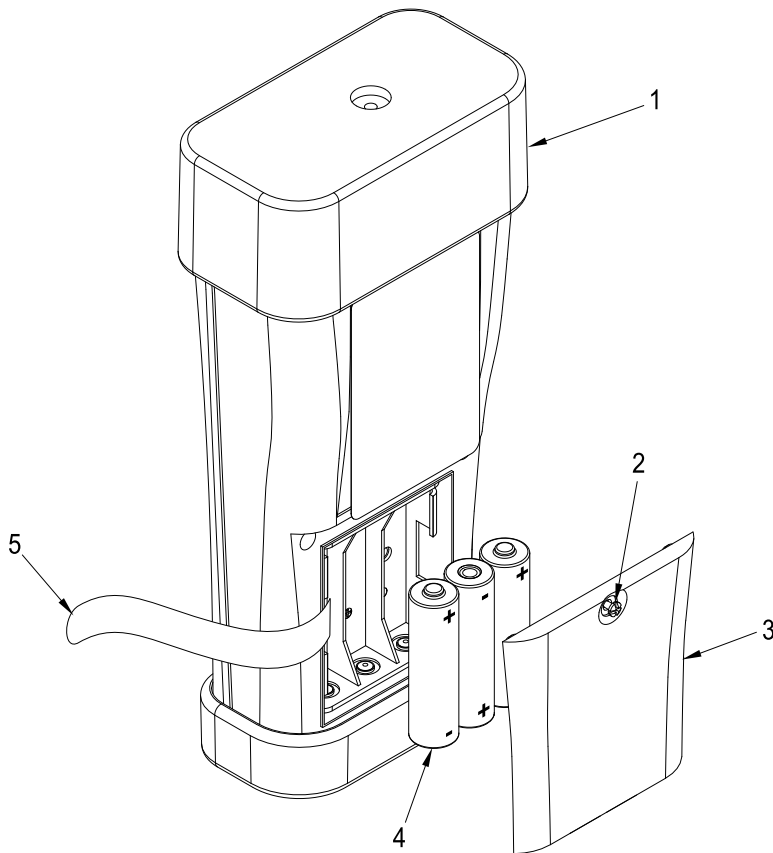
REPLACEMENT - (CONTINUED)

INSTALLATION**NOTE**

Ensure all three batteries to be installed are fully charged and of the same type.

Ensure batteries are positioned as noted prior to removal.

1. Position ribbon (Figure 2, Item 5) across battery compartment and install three batteries (Figure 2, Item 4) in Radio Tester (Figure 2, Item 1).



RTS00028

Figure 2. Battery Installation.

2. Using cross-tip screwdriver, install battery door (Figure 2, Item 3) on Radio Tester (Figure 2, Item 1) with screw (Figure 2, Item 2).

END OF TASK

REPLACEMENT - (CONTINUED)

FOLLOW-ON MAINTENANCE

1. Power on Radio Tester WP 0005.
2. Perform Built In Test (BIT) check WP 0006.
3. Power off Radio Tester WP 0005.

END OF TASK

END OF WORK PACKAGE

CHAPTER 6
SUPPORTING INFORMATION
FOR
AN/PRM-36 RADIO TEST SET (RTS)

CHAPTER 6

SUPPORTING INFORMATION

WORK PACKAGE INDEX

Title	WP Sequence No.
REFERENCES	0022
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS	0023
ADDITIONAL AUTHORIZATION LIST	0024
EXPENDABLE AND DURABLE ITEMS LIST	0025

OPERATOR INSTRUCTIONS**REFERENCES**

SCOPE

This section lists the all publication indexes, forms, field manuals, technical bulletins, technical manuals, and other publications referenced in this manual and which apply to the operation and operator maintenance of the AN/PRM-36 Radio Test Set (RTS).

ARMY REGULATION

AR 700-138 Army Logistics Readiness and Sustainability

DEPARTMENT OF ARMY PAMPHLETS (DA PAM)

DA PAM 738-751 Functional Users Manual for the Army
Maintenance Management Systems - AVIATION
(TAMMS-A)
DA Pam 750-8 The Army Maintenance Management System
(TAMMS) Users Manual

FORMS

DA Form 2028 Recommended Changes to Publications and
Blank Forms
DA Form 5988-E Equipment Inspection and Maintenance
(Electronic) Worksheet
SF Form 368 Product Quality Deficiency Report

FIELD MANUALS

FM 55-15 Transportation Reference Data
FM 4-25.11 First Aid

TECHNICAL PUBLICATIONS

CTA 50-970 Expendable/Durable Items (Except Medical,
Class V, Repair Parts, and Heraldic Items)
CTA 8-100 Army Medical Department Expendable/Durable
Items
TM 750-244-2 Procedures for Destruction of Electronic Materiel
to Prevent Enemy Use
TM 750-244-3 Procedures for Destruction of Equipment to
Prevent Enemy Use
TM 9-6625-1697-10 Technical Operator Manual for AN/PRM-36 Radio
Test Set
TM 9-6625-1697-23&P Maintenance Technical Manual for AN/PRM-36
Radio Test Set

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

INTRODUCTION**Scope**

This work package lists COEI and BII for the AN/PRM-36 Radio Test Set to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists:

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the AN/PRM-36 Radio Test Set. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII) These essential items are required to place the AN/PRM-36 Radio Test Set in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the AN/PRM-36 Radio Test Set during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation Of Columns In The COEI List And BII List

Below is an explanation of columns found in the tabular listings:

Column (1) Illus Number. Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (4) Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. Usable On Code for the AN/PRM-36 Radio Test Set is RAE.

Column (5) U/I. Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

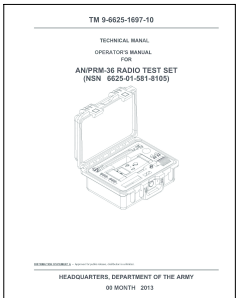
Column (6) Qty Rqr. Indicates the quantity required.

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS -
(CONTINUED)

Table 1. Components of End Item

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER (NSN)	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	6625-01-621-3672	CASE, TRANSIT: 350043-001 (0ZUC7)	RAE	EA	1
2	6625-01-621-3733	TESTER, RADIO: 900858-001 (98255)	RAE	EA	1
3	5995-00-724-4232	CABLE ASSEMBLY: 2249-C-48 (05276)	RAE	EA	2
4	5935-01-507-1731	ADAPTER, CONNECTOR: PE9085 (53919)	RAE	EA	2
5	6625-01-621-3761	TERMINATION, RF: 50T-334-1.0 B F (61162)	RAE	EA	1
6	5935-01-109-6079	ADAPTER, BNC (m) to BNC (m): 3533 (05276)	RAE	EA	1
7	6130-01-621-5665	CHARGER, BATTERY: XP-555NB (56NS8)	RAE	EA	1
8	6140-01-537-5244	CELL, BATTERY: NH15 (83740)	RAE	EA	6

Table 1. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
	 <p>TM 9-6625-1697-10</p> <p>TECHNICAL MANUAL OPERATOR'S MANUAL FOR AN/PRM-36 RADIO TEST SET (NSN 6625-01-551-8105)</p> <p>HEADQUARTERS, DEPARTMENT OF THE ARMY 60 MONTH 2013</p> <p>RTS00033</p>	TM 9-6625-1697-10: ()	RAE	EA	1

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

ADDITIONAL AUTHORIZATION LIST

INTRODUCTION

Scope

This work package lists additional items you are authorized for the support of the AN/PRM-36 RTS.

General

This list identifies items that do not have to accompany the AN/PRM-36 RTS and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

Explanation Of Columns In The AAL

Column (1) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (3) Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. Usable On Codes for the AN/PRM-36 Radio Test Set are not applicable.

Column (4) U/I. Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (1).

Column (5) Qty Recm. Indicates the quantity recommended.

Table 1. Additional Authorization List

(1) NATIONAL STOCK NUMBER (NSN)	(2) DESCRIPTION, PART NUMBER/(CAGEC)	(3) USABLE ON CODE	(4) U/I	(5) QTY RECM
	AN/PRM-36 Operator Net Training 938005 (98255)	RAE	EA	1

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

Scope

This work package lists expendable and durable items that you will need to operate and maintain the AN/PRM-36 RTS. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), CTA 50-909, Field and Garrison Furnishings and Equipment or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation Of Columns In The Expendable/Durable Items List

Column (1) Item No. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid (WP 0098, item 5)).

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item.
(O = Operator)

Column (3) National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) Item Name, Description, Part Number/(CAGEC). This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (5) U/I. Unit of Issue (U/I) code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

Table 1. Expendable and Durable Items

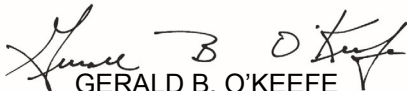
(1) ITEM NUM- BER	(2) LEVEL	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, PART NUMBER AND (CAGEC)	(5) U/I
01	O	7920-00-205-1711	Rag, Wiping 7920-00-205-1711 (64067)	BE

END OF WORK PACKAGE

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

A handwritten signature in black ink, appearing to read "Gerald B. O'Keefe". The signature is fluid and cursive, with the first name "Gerald" being the most prominent.

GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army

1326108

Distribution:

Initially published in electronic media only. When funds become available, this publication will be distributed in accordance with the initial distribution number (IDN) 258020, requirements for TM 9-6625-1697-10.

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.

The Metric System and Equivalents

Linear Measure

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

Weights

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

Liquid Measure

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

Square Measure

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

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. Inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. Inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

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

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius °C temperature
----	------------------------	----------------------------	------------------------

