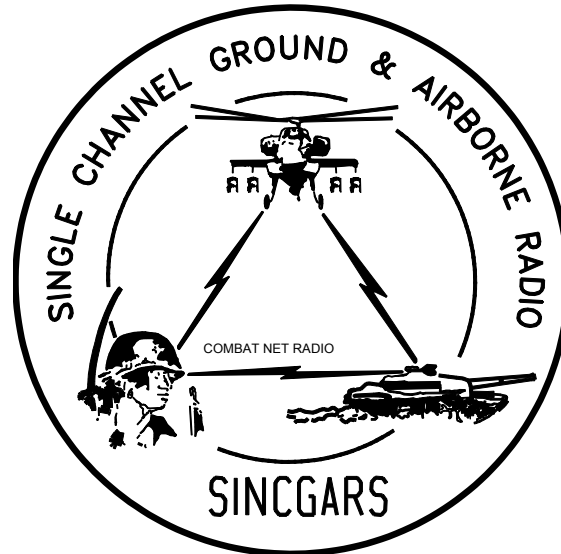

TECHNICAL BULLETIN



**MAINTENANCE KIT, ELECTRICAL (NSN 5935-01-524-9798)
FOR AM-7239E/VRC (NSN 5895-01-444-1218):
GPS CONNECTOR REMOVAL
TO ALLOW INSTALLATION OF
SINGGARS RT-1523A (NSN 5820-01-318-7990)**

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 OCTOBER 2006

LIST OF EFFECTIVE PAGES

NOTE: The portion of text affected by the changes is indicated by a vertical line in the outer margin of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for the original changed pages are:

Original: 0 01 October 2006

Page No.	*Change No.
Cover	0
A/B(Blank)	0
i - ii	0
1 - 4	0

*Zero in this column indicates an original page.

Technical Bulletin
 No. 11-5820-890-30-6

**HEADQUARTERS,
 DEPARTMENT OF THE ARMY
 Washington, D.C., 1 October 2006**

**MAINTENANCE KIT, ELECTRICAL (NSN 5935-01-524-9798)
 FOR AM 7239E/VRC (NSN 5895-01-444-1218):
 GPS CONNECTOR REMOVAL
 TO ALLOW INSTALLATION OF
 SINGARS RT-1523A (NSN 5820-01-318-7990)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. We'd prefer that you submit your recommended changes electronically, either by e-mail (AMSEL-LC-LEO-PUBS-CHG@mail1.monmouth.army.mil) or online (<http://edm.monmouth.army.mil/pubs/2028.html>). Alternatively, you may mail or fax your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) to: Commander, U.S. Army Communications-Electronics Life Cycle Management Command (C-E LCMC) and Fort Monmouth, ATTN: AMSEL-LC-LEO-E-ED, Fort Monmouth, NJ 07703-5006. The fax number is 732-532-3421, DSN 992-3421.

In any case, we will send you a reply.

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GENERAL INFORMATION:**SCOPE.**

This Technical Bulletin provides information and procedures for using Maintenance Kit, Electrical (NSN 5935-01-524-9798) to replace GPS Connector(s) 5J13 and 5J14 on AM-7239E/VRC (NSN 5895-01-444-1218) thereby allowing the mounting of SINGARS RT-1523A (NSN 5820-01-318-7990).

CONSOLIDATED INDEX OF ARMY PUBLICATIONS AND BLANK FORMS.

Refer to the latest issue of DA Pam 25-30 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

MAINTENANCE FORMS, RECORDS, AND REPORTS.

Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 750-8, as contained in Maintenance Management Update.

Reporting of Item and Packaging Discrepancies. Fill out and forward SF 364 (Supply Discrepancy Report (SDR)) as prescribed in AR 735-11-2.

DESTRUCTION OF ARMY ELECTRONICS MATERIEL.

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your equipment needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to: Commander, U. S. Army Communications-Electronics Life Cycle Management Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, New Jersey 07703-5006. We'll send you a reply.

1. **INTRODUCTION.** This Technical Bulletin provides information and procedures for using Maintenance Kit, Electrical (NSN 5935-01-524-9798) to replace GPS connector(s) 5A1J14 and 5A1J13 on AM-7239E/VRC to allow installation of SINGARS RT-1523A.

2. **PREPARATION FOR INSTALLATION.** The contents of the kit shall be inspected and compared with the list below to verify all items are included. If your system contains two (2) GPS jacks on the AM-7239E/VRC - 5J13 and 5J14 you will need two (2) kits.

a. Maintenance Kit, Electrical (NSN 5935-01-524-9798) contains the following:

<u>Item</u>	<u>NSN</u>	<u>Reference Number</u>	<u>Quantity</u>
Plug, Protective-GPS Connector		A3210959-1	1
O-ring		A3271383-1	1
Screw	5305-00-225-6400	MS24693-C3	2
Tie Strap, Electrical	5975-00-727-5153	MS-3367-4-9	1

b. Tools/Supplies Required.

<u>Item</u>	<u>NSN</u>	<u>Reference Number</u>	<u>Quantity</u>
Tool Kit, TK-100/G	5180-00-605-0079	TK-100/G	1
Adhesive	8040-00-117-8510	3145 RTV Clear (3oz)	AR
Technical Bulletin		TB 11-5820-890-30-6	1

3. REMOVAL OF GPS CONNECTOR. Refer to TM 11-5820-890=30P-3 Figure 12 for an overall view of AM-7239E/VRC to aid in performing this procedure.



CAUTION



Static electricity can damage the AM-7239E/VRC. Use a grounded wrist strap when handling a module.

ITEM	ACTION
a. Protective Covers	Remove protective covers from 5A1J14 and 5A1J13.
b. Power Supply Heatsink	Use cross tip screwdriver. Fully loosen 22 captive screws securing Power Supply Heatsink to Power Supply Cover. Position Power Supply Heatsink on its side.
c. Connector (5A1W7P2)	Located on middle left side of the CCA-Interface(5A1A2), disconnect Sidehat Harness connector (5A1W7P2) from CCA-Interface connector (5A1A2J3).
d. Connector (5A1W5P1)	Located on bottom left side of the CCA-Interface (5A1A2), disconnect Wiring Harness connector (5A1W7P1) from CCA-Interface connector (5A1A2J6).
e. Connector (5A1W4P1)	Located on upper left side of the CCA-Interface (5A1A2), disconnect Control Monitor Harness Assembly connector (5A1W4P1) from CCA-Interface connector (5A1A2J5).
f. Connector (5A1W3P1)	Located on bottom right side of the CCA-Interface (5A1A2), disconnect Cable Assembly connector (5A1W3P1) from CCA-Interface connector (5A1A2J4).
g. Connector (5A1W6P1)	Located on middle right side of the CCA-Interface (5A1A2), disconnect J1 Wiring Harness connector (5A1W6P1) from CCA-Interface connector (5A1A2J1).
h. Connector (5A1W2P2)	Located on upper right side of the CCA-Interface (5A1A2), disconnect RT Power Supply Harness connector (5A1W2P2) from CCA-Interface connector (5A1A2J1).
i. Retaining Screws	Using crosstip screwdriver, remove and retain two (2) screws and flat washers securing CCA-Interface Reactors (5A1A2L1 and 5A1A2L2) to Power Supply Cover.
j. Retaining Screws	Using crosstip screwdriver, remove and retain four (4) screws securing CCA-Interface (5A1A2) to Power Supply Cover. Remove and retain CCA-Interface (5A1A2).
k. RF Cable (5A1W8P2)	Using needle nose pliers, remove RF Cable Assembly connector (5A1W8P2) from GPS-A connector (5A1J14).
l. GPS-A Connector (5A1J14)	Using crosstip screwdriver, remove and retain two (2) screws securing GPS-A Connector (5A1J14) to Powers Supply Cover. Remove and Retain GPS-A Connector and screws (2) in order to reverse procedure if needed in the future.
m. GPS-B Connector (5A1J13)	If required, repeat step l for GPS-B Connector (5A1J13).

4. INSTALLATION OF GPS CONNECTOR PLUG. Refer to TM 11-5820-890=30P-3 Figure 12 for an overall view of AM-7239E/VRC to aid in performing this procedure.



CAUTION



Static electricity can damage the AM-7239E/VRC. Use a grounded wrist strap when handling a module.

ITEM	ACTION
a. GPS Connector Plug	Obtain GPS Connector Plug and o-ring from the kit. Coat GPS Connector Plug groove with adhesive and let stand for 2 minutes. Install o-ring to GPS Connector Plug.
b. GPS Connector Plug	Position GPS Connector Plug into GPS-A Connector (5A1J14) mounting hole and using torque screwdriver, secure GPS Plug using two (2) screws in kit. Torque screws to 8 to 10 in/lbs.
c. RF Cable (5A1W8)	Shrink-wrap end of RF Cable Assembly (5A1W8) to prevent from possible electrical shorting of electrical components.
d. RF Cable (5A1W8)	Obtain tie-strap from kit. Coil RF Cable Assembly (5A1W8) and fasten using tie-strap to Cable Assembly (5A1W4) (See Figure 1).
e. CCA-Interface (5A1A2)	Install CCA-Interface (5A1A2) to Power Supply Cover using crosstip screwdriver to install four (4) retained screws.
f. Retaining Screws	Using crosstip screwdriver, install two (2) screws and flat washers securing CCA-Interface Reactors (5A1A2L1 and 5A1A2L2) to Power Supply Cover.
g. Connector (5A1W2P2)	Located on upper right side of the CCA-Interface (5A1A2), connect RT Power Supply Harness Connector (5A1W2P2) to CCA-Interface Connector (5A1A2J1).
h. Connector (5A1W6P1)	Located on middle right side of the CCA-Interface (5A1A2), connect J1 Wiring Harness Connector (5A1W6P1) to CCA-Interface Connector (5A1A2J1).
i. Connector (5A1W3P1)	Located on bottom right side of the CCA-Interface (5A1A2), connect Cable Assembly connector (5A1W3P1) to CCA-Interface connector (5A1A2J4).
j. Connector (5A1W4P1)	Located on upper left side of the CCA-Interface (5A1A2), connect Control Monitor Harness Assembly Connector (5A1W4P1) to CCA-Interface Connector (5A1A2J5).
k. Connector (5A1W5P1)	Located on bottom left side of the CCA-Interface (5A1A2), connect Wiring Harness Connector (5A1W7P1) to CCA-Interface Connector (5A1A2J6).
l. Connector (5A1W7P2)	Located on middle left side of the CCA-Interface(5A1A2), connect Sidehat Harness Connector (5A1W7P2) to CCA-Interface Connector (5A1A2J3).
m. Power Supply Heatsink	Use torque screwdriver torque 22 captive screws securing Power Supply Heatsink to Power Supply Cover to 8 to 10 in/lbs.

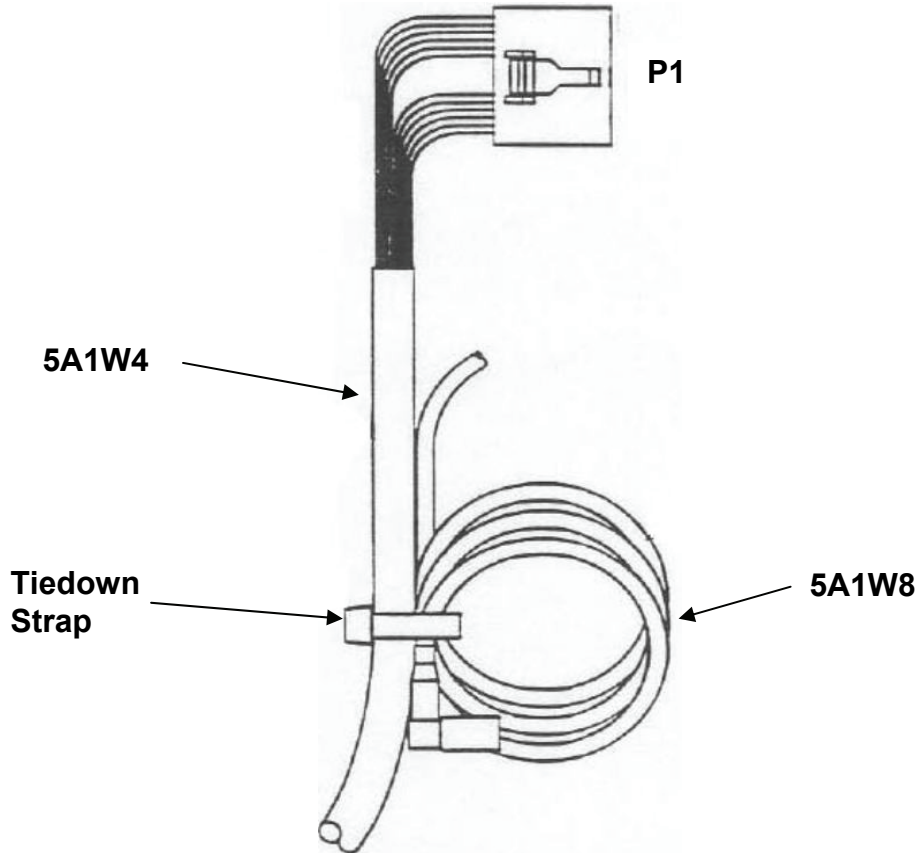


Figure 1. RF Cable Assembly (5A1W8)

5. VERIFICATION OF AM-7239E.

If the GPS-A or GPS-B connectors (5A1J14 and 5A1J13) are removed, the AM-7239E/VRC will fail all AN/GRM-122 tests under LIT 813 (GPS checks). These are the last series of tests performed in the go chain. These tests consist of Logic Level throughput and continuity checks between 5A1J12, 5A1J13, 5A1J14, and 5A1J15.

- a. After completion, run the AM-7239E/VRC on the GRM-122. When prompted to connect test cable connectors to 5A1J13 and 5A1J14, disregard and proceed with the test.
- b. Disregard all failures reported under LIT 813 (GPS Checks).
- c. Return AM-7239E/VRC to service.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM)	DATE 8/30/02
TO: (<i>Forward to proponent of publication or form</i>)(<i>Include ZIP Code</i>) Commander, U.S. Army C-E LCMC ATTN: AMSEL-LC-LEO-E-ED-P FORT MONMOUTH, NJ 07703-5000						FROM: (<i>Activity and location</i>)(<i>Include ZIP Code</i>) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	
PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 11-4940-355-12						DATE 16 Sep 2002	TITLE Organizational, Direct Support, And General Support Maintenance Manual for Machine Gun, .50 Caliber M3P and M3P Machine Gun Electrical Test Set Used On Avenger Air Defense Weapon System
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON	
1	WP0005 PG 3		2			Test or Corrective Action column should identify a different WP number.	
<i>* Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 788-1234		SIGNATURE	

EXAMPLE

TO: (Forward direct to addressee listed in publication) Commander, U.S. Army C-E LCMC ATTN: AMSEL-LC-LEO-E-ED-P FORT MONMOUTH, NJ 07703-5000	FROM: (Activity and location) (Include ZIP Code) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	DATE 8/30/02
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PART II - REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

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

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

EXAMPLE

TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 788-1234	SIGNATURE
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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
For use of this form, see AR 310-1; the proponent agency is the US Army Adjutant General Center.							
TO: (<i>Forward to proponent of publication or form</i>) (<i>Include ZIP Code</i>)						FROM: (<i>Activity and location</i>) (<i>Include ZIP Code</i>)	
PART I - 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 <i>(Exact wording of recommended change must be given)</i>	
<i>* Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

TO: <i>(Forward to proponent of publication or form) (Include ZIP Code)</i>	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
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PART II- REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION/FORM NUMBER			DATE		TITLE			
PAGE NO.	COLM NO.	LINE NO.	FEDERAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPROTED	RECOMMENDED ACTION

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

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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By Order of the Secretary of the Army:

Official:

A handwritten signature in black ink that reads "Joyce E. Morrow". The signature is written in a cursive style with a large, stylized initial "J".

JOYCE E. MORROW

*Administrative Assistant to the
Secretary of the Army*

0628301

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

PIN: 083631-000