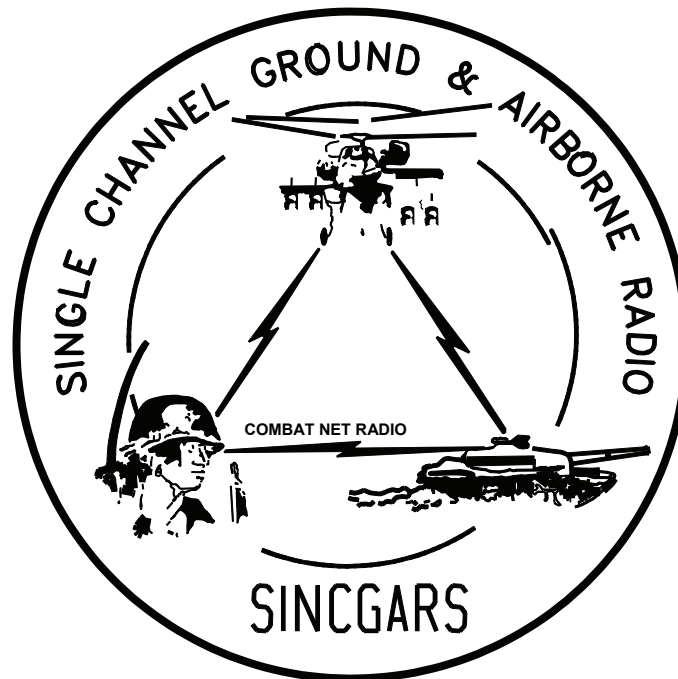


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TECHNICAL BULLETIN



**MAINTENANCE OF WIRING HARNESS, BRANCHED  
RECEIVER-TRANSMITTER (W2) (P/N A3249744-1)  
PART OF  
AN/GRM-122 AVIATION INTERMEDIATE MAINTENANCE  
(AVIM) ACCESSORY KIT,  
WITH  
MAINTENANCE KIT (NSN: 5895-01-524-5118)**

Approved for public release; distribution is unlimited.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**15 DECEMBER 2007**



**LIST OF EFFECTIVE PAGES**

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins 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 original and changed pages are:**

Original... 0 ..... 15 Dec 2007

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Technical Bulletin  
 No. 11-5821-360-30-1

HEADQUARTERS,  
 DEPARTMENT OF THE ARMY  
 Washington, D.C., 15 December 2007

**MAINTENANCE OF WIRING HARNESS, BRANCHED  
 RECEIVER-TRANSMITTER (W2) (P/N A3249744-1)  
 PART OF  
 AN/GRM-122 AVIATION INTERMEDIATE MAINTENANCE (AVIM) ACCESSORY KIT,  
 WITH  
 MAINTENANCE KIT (NSN: 5895-01-524-5118)**

**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 ([MONM-AMSELLEOPUBSCHG@conus.army.mil](mailto:MONM-AMSELLEOPUBSCHG@conus.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 CECOM Life Cycle Management Command (CECOM LCMC) and Fort Monmouth, ATTN: AMSEL-LC-LEO-E-ED, Fort Monmouth, NJ 07703-5006. The fax number is 732-532-1556, DSN 992-1556.

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**GENERAL INFORMATION.****SCOPE.**

This Technical Bulletin (TB) provides information and procedures to install a splice on Wiring Harness, Branched, Receiver-Transmitter (W2), part number (p/n) A3249744-1.

**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.**

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

**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. If you have Internet access, the easiest and fastest way to report problems or suggestions is to go to <https://aeps.ria.army.mil/aepspublic.cfm> (scroll down and choose the "Submit Quality Deficiency Report" bar). The Internet form lets you choose to submit an Equipment Improvement Recommendation (EIR), a Product Quality Deficiency Report (PQDR or a Warranty Claim Action (WCA). You may also submit your information using an SF 368 (Product Quality Deficiency Report). You can send your SF 368 via e-mail, regular mail, or facsimile using the addresses/facsimile numbers specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. We will send you a reply.





## 1. INTRODUCTION.

Maintenance Kit NSN 5895-01-524-5118 is used to install a splice on Wiring Harness, Branched, Receiver-Transmitter (W2), part number (p/n) A3249744-1, which is part of the AN/GRM-122 AVIM Accessory Kit (NSN 5895-01-436-0416).

## 2. PURPOSE OF INSTALLATION.

The splice (jumper wire) allows reprogrammability of RT-1478D using AN/GRM-122 with version 5.00 series or higher software.

## 3. PREPARATION FOR INSTALLATION.

Upon opening the kit, the contents should be inspected and compared with the list below to verify all items are included.

### a. Maintenance Kit contents.

<u>Item</u>	<u>NSN</u>	<u>Reference Number</u>	<u>Quantity</u>
Lead Assembly, Electrical - (W2) AVIM	NA	A3210997-1	1
Splice, Electrical	5940-00-271-7741	M81824/1-2	1
Plate, Self-Adhering Equip Maint Record	NA	ON014681-13	1

### b. Tools required.

<u>Item</u>	<u>NSN</u>	<u>Reference Number</u>	<u>Quantity</u>
Tool Kit	5180-00-605-0079	TK-100/G	1
Crimping Tool	5120-00-120-8721	GMT232	1
Heater, gun type, Elect	4940-00-785-1167	MIL-H-45193	1
Multimeter	6625-01-139-2512	AN/PSM-45	1

#### 4 INSTALLATION PROCEDURES.

a. Remove P1 connector housing. See Figure 1.

- (1) Using a flat tip screwdriver, remove connector lock knob.
- (2) Using a cross tip screwdriver, remove six screws, lock washers, flat washers, and one electrical cover.

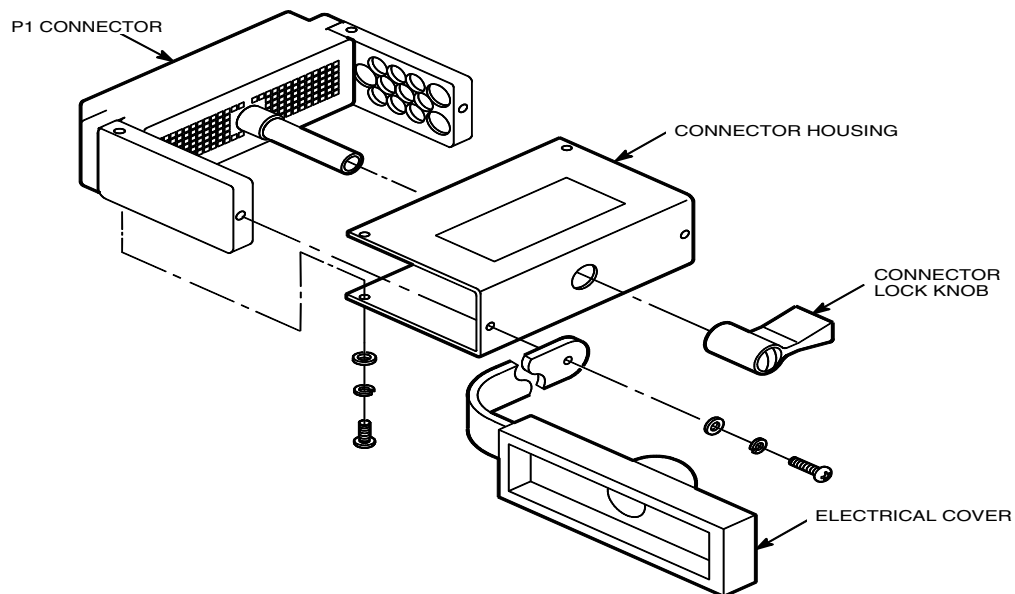


Figure 1. Disassembly/Assembly of W2P1 Connector Housing.

b. Locate and prepare wire for Electrical Lead Assembly

- (1) Locate wire (WHT/BRN/BLU) going to P1 pin H1. See figure 2.
- (2) Cut and strip wire (WHT/BRN/BLU).
  - (a) Cut and dress wire (WHT/BRN/BLU) far enough back to allow room for splice installation.
  - (b) Strip the two ends of the wire (WHT/BRN/BLU) for splice installation.

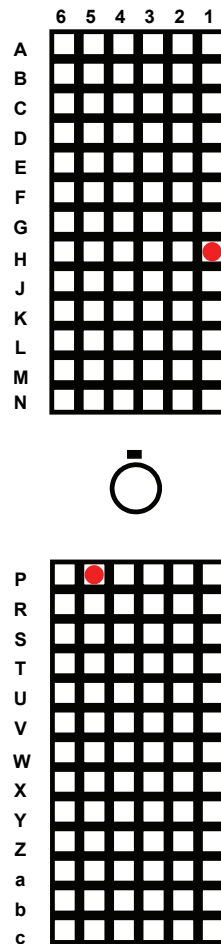
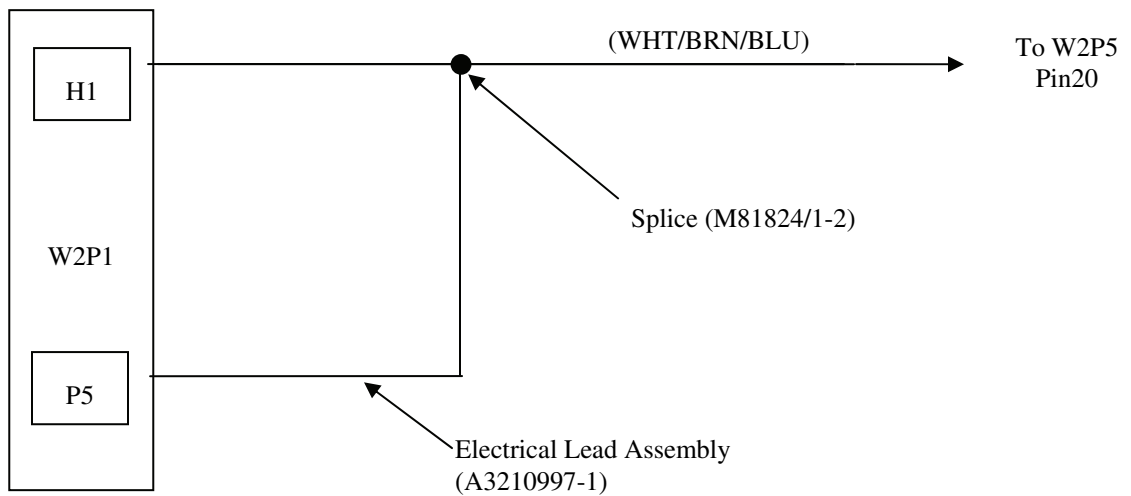


Figure 2. W2P1 Connector Diagram.

c. Electrical Lead Assembly

- (1) Locate stripped wire (WHT/BRN/BLU), P1 side.
- (2) Slide insulation sleeving on wire. (WHT/BRN/BLU), P1 side.
- (3) Crimp electrical splice to stripped wire. (WHT/BRN/BLU), P1 side
- (4) Install Electrical Lead Assembly.
  - (a) Strip Wire of Electrical Lead Assembly for splice.
  - (b) Place stripped wire ends of the electrical Lead Assembly and wire (WHT/BRN/BLU) into uncrimped end of the splice.
- (5) Crimp uncrimped end of the splice
- (6) Slide insulation sleeving over splice and heat shrink.
- (7) Locate and install Electrical Lead Assembly pin. See figure 3.
  - (a) Locate connector P1 pin P5.
  - (b) Install Electrical Lead Assembly pin into connector P1 pin P5.
  - (c) Gently pull on wire to ensure it is properly seated.



### Figure 3. Electrical Lead Assembly Pin Installation

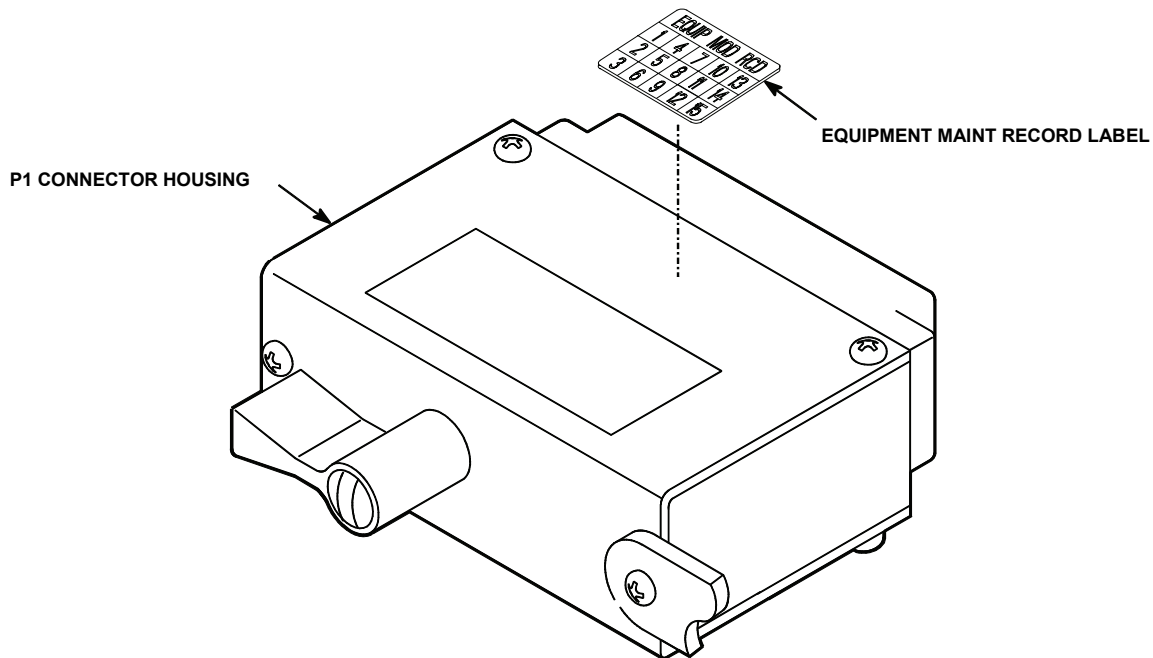
d. Test.

Using a multimeter, check resistance between the following points and ensure the following readings are obtained:

<u>FROM</u>	<u>TO</u>	<u>READING</u>
P1 pin H1	P1 pin P5	< 5 Ohms
P1 pin H1	P5 pin 20	< 5 Ohms

e. Install P1 connector housing.

- (1) Using a cross tip screwdriver, install six screws, lock washers, flat washers, and one electrical cover.
- (2) Using a flat tip screwdriver, install connector lock knob



**Figure 4. Equipment Maintenance Record Plate Location.**

f. Install equipment maintenance record label as shown in figure 4.



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