

TM 11-5985-284-15

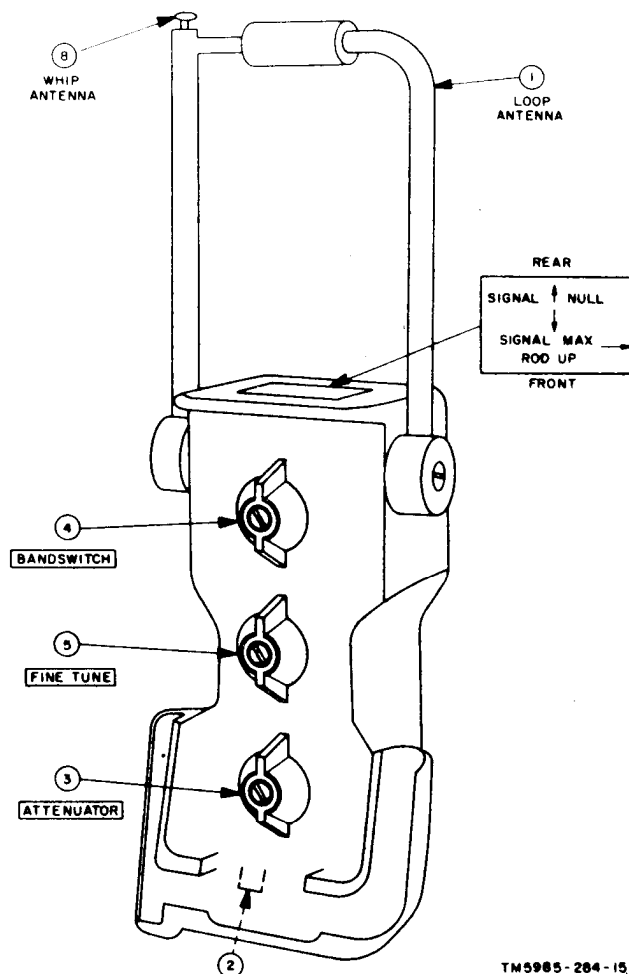
DEPARTMENT OF THE ARMY TECHNICAL MANUAL

**OPERATOR, ORGANIZATIONAL,
DS, GS, AND DEPOT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS
SPECIAL TOOLS LISTS
ANTENNA, LOOP AT-784/PRC**

(NSN 5820-00-086-7651)

This copy is a reprint which includes current
pages from Changes 1 through 5. Title
was changed by Change 5.

**HEADQUARTERS, DEPARTMENT OF THE ARMY
FEBRUARY 1967**



TM5985-284-15-1

Antenna AT-1082/PRC.

CONDENSED OPERATING INSTRUCTIONS

Caution: Use for reception only. Do not transmit. Whenever loop antenna is not in use, keep ATTENUATOR switch set in 0 position. Choose operating location free from obstructions.

To Operate

a. From Modulated Carrier Signal Source. The numbers of steps 1 through 5 and 8 below are the same as those on the illustration.

- (1) Swing loop antenna up from the case. Do not extend the whip.
- (2) Connect antenna cable from connector J1 (of AT-1082/PRC) to the antenna coaxial connector of the receiver. Set receiver volume control to maximum and squelch off.
- (3) Set the ATTENUATOR switch to position 0.
- (4) Set the BANDSWITCH to the desired frequency band.
- (5) Adjust FINE TUNE control to desired operating frequency within selected band.
- (6) Hold loop antenna at eye level and rotate until

signal is received. Adjust FINE TUNE (5) for maximum response. If response is too strong, advance ATTENUATOR (3) to higher number.

- (7) Rotating the loop will obtain two positions, 180° apart corresponding to SIGNAL NULL arrows, giving maximum signal response.
- (8) Extend the whip and note signal response in one position. Rotate the antenna one-half turn (180°) and note response in second position.
- (9) Orient the antenna to obtain stronger signal response. The SIGNAL MAX arrow (on the case) now points toward the transmitter.
- (10) Retract the whip. Rotate the antenna one-quarter turn (90°) to SIGNAL NULL position for sharp and accurate bearing indication.

b. From Unmodulated Carrier Signal Source. Operation procedure for direction finding from this source is the same as described above. However, the signal response sought in steps 6 through 9 is maximum quieting action of carrier over noise. NULL is defined as maximum noise obtained.

Operator's, Organizational, Direct Support, General Support
and Depot Maintenance Manual**ANTENNA, LOOP AT-784/PRC
(NSN 5820-00-086-7651)**

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*This manual supersedes TM 11-5820-496-20P, 13 March 1964, and TM 11-5820-496-35P, 24 July 1963.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes the components of Antenna, Loop AT-784/PRC (fig. 1-1), and covers their use, operator's maintenance, organizational maintenance, and basic functioning. It also contains the repair functions for this equipment which are to be accomplished by direct support, general support (DS and GS) and depot maintenance.

b. Throughout this manual, the term *sense whip antenna* refers to the telescoping portion of Antenna AT-1082/PRC and *loop* refers to the loop antenna in which the telescoping antenna is mounted.

1-2. Indexes of Publications

a. *DA Pam 310-4*. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. *DA Pam 310-7*. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-3. Maintenance Forms, Records, and Reports

a. *Reports of Maintenance and Unsatisfactory Equipment*. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

b. *Report of Packaging and Handling Deficiencies*. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DLAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

1-3.1. Reporting Errors and Recommending Improvements

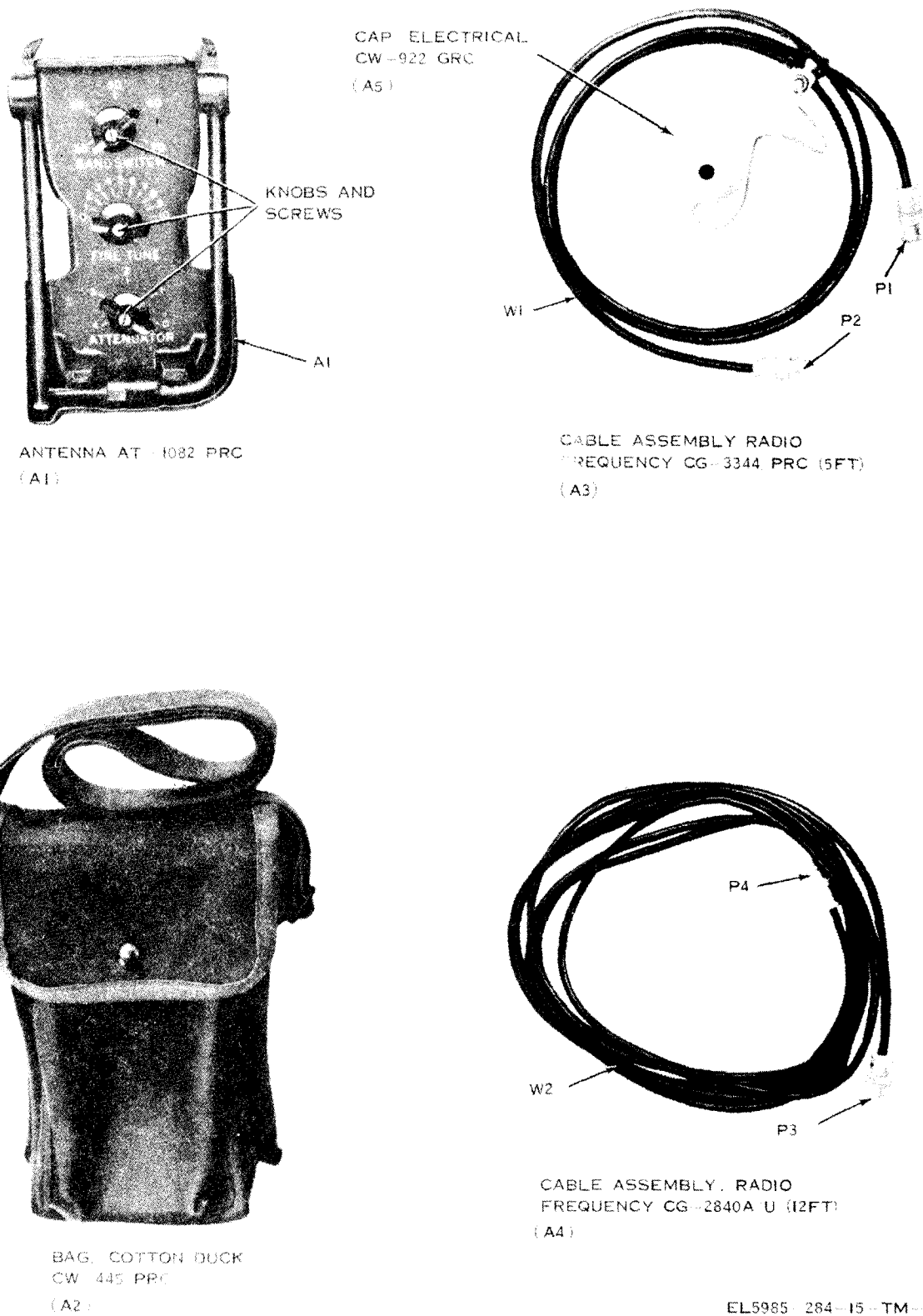
You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703.

1-3.2 Reporting Equipment Improvement Recommendations (EIR)

If your Antenna, Loop AT-784/PRC 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

1-3.3. Destruction of Army Electronics Materiel

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



EL5985-284-15-TM-2

Figure 1-1. Components comprising Antenna, Loop AT-784/PRC.