

ORGANIZATIONAL MAINTENANCE
RADIO SET AN/GRC-19

This copy is a reprint which includes current pages from Changes 1 through 6.
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DEPARTMENTS OF THE ARMY AND THE AIR FORCE
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TECHNICAL MANUAL
No. 116820-296-20

TECHNICAL ORDER
No. 31R2-2GRC19-32

DEPARTMENTS OF THE ARMY

AND THE AIR FORCE

WASHINGTON 25, D. C., .3 June 1960

RADIO SET AN/GRC-19

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* This manual supersedes so much of TM-11-274, 27 April 1954, including C1, 11 January 1956; C2, 27 July 1956; C3, 7 February 1957; and C4, 17 May 1957, as is applicable to the organizational maintenance of the equipment.

CHAPTER 1

MAINTENANCE INSTRUCTIONS

Section I. GENERAL

1. Scope

a. This manual covers second echelon maintenance of Radio Set AN/GRC-19. The operating instructions for this equipment are contained in TM 11-5820-295-10.

b. Second echelon maintenance of Radio Set AN/GRC-19 consists of the following:

- (1) Preventive maintenance (par. 3).
- (2) Visual inspection (par. 4).
- (3) Troubleshooting (par. 6).
- (4) Replacement of defective tubes (par. 6).
- (5) Replacement of defective dial lamps (par. 7).
- (6) Replacement of defective fuses (par. 8).

c. The differences between models of components of this set are not significant to second echelon personnel

d. Forward comments concerning this manual to the Commanding Officer, U. S. Army Signal Publications Agency, Fort Monmouth N. J.

Note. For applicable forms and records, see paragraph 2, TM 11-5820-295-10.

2. Tools, Materials, and Test Equipment Required

A list of parts normally stocked for unit repairman's maintenance is contained in TM 11-5820-295-20P. The tools, materials, and test equipment required for unit repairman's maintenance are listed below.

a. Tools.

- (1) Tool Equipment TE-1.
- (2) Seven-pin and nine-pin tube pullers (fig. 8 and 4) stored in both the receiver and the transmitter.

b. Materials.

- (1) Cleaning Compound (Fed. stock No. 7980-895-9542).
- (2) Cleaning cloth.
- (3) Fine sandpaper.
- (4) Gasket shellac

c. Test Equipment. The only test equipment required is Multimeter AN/URM-105.

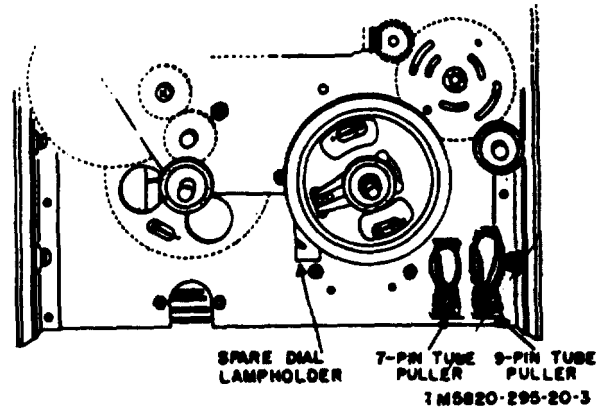


Figure 1. Gear plate, front pal removed, showing location of special tools supplied with receiver.

3. Preventive Maintenance

a. *DA Form 11-238.* DA Form 11-288 (fig. 2 and 8) is a preventive maintenance checklist to be used by the unit repairman. Items not applicable to the equipment are lined out in the figures. References in the item block in the figures are to the paragraph that contains additional maintenance information pertinent to the particular item. Additional preventive maintenance information concerning items 2, 8, 6, and 7 on DA Form 11-288 will be found in the preventive maintenance portion of TM 11-5820-295-10. Instructions for the use of the form appear on the form.

b. *Items.* The information shown in this subparagraph is supplementary to DA Form 11-238. The item numbers correspond to the ITEM numbers on the form. Do not remove any subchassis in the receiver or transmitter to inspect components.

Item	Maintenance procedures
8	Check Rope RP5, used to tie down whip antenna, for cuts or fraying. Check antenna guy wires for damage, if Antenna Group AN/GRA-12 is used.
9	Check Bag CW-206/GR for mildew tears, or fraying.

ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS		CONDITION	MAINTENANCE CHECK LIST FOR SIGNAL EQUIPMENT SOUND EQUIPMENT, RADIO, DIRECTION FINDING RADAR, CARRIER, RADIOSONDE AND TELEVISION (AR 750-625)	
26. INSPECT ANTENNA FOR ECCENTRICITIES, CORROSION, LOOSE FIT, DAMAGED INSULATORS AND REFLECTORS.		✓	EQUIPMENT NOMENCLATURE RADIO SET AN/6RC-19	
27. CHECK FOR NORMAL OPERATION.		✓		
28. REPAIRS SHIPING OR OPERING. REMOVE BATTERIES				
IF DEFICIENCIES NOTED ARE NOT CORRECTED DURING THE INSPECTION, INDICATE ACTION TAKEN FOR CORRECTION.			EQUIPMENT SERIAL NUMBER 0000	
			INSTRUCTIONS This form may be used for a period of one month by using the correct dates and weeks of the month. It is to be used as a Preventive Maintenance check list for Signal equipment in actual use, or for a check on equipment prior to issue. 1. For detailed Preventive Maintenance instructions see: a. The Technical Manual (in TM 11 series) for the equipment. (See DA Pamphlet Number 310-4) b. The Supply Bulletin (SB 11-100 series) for the equipment. (See DA Pamphlet Number 310-4) c. The Department of the Army Lubrication Order. (See DA Pamphlet Number 310-4) 2. The following action will be taken by either the Communications Officer/Chief for 1st echelon, or the Inspector for higher echelon: a. Enter Equipment Nomenclature and Serial Number. b. Strike out items that do not apply to the equipment. 3. Operator/Inspector will enter in the columns entitled CONDITION, on the proper line, a notation regarding the condition, using symbols specified under LEGEND. 4. After operator completes each daily inspection he will initial over the appropriate dates under "Daily Condition for Month", then return form to his supervisor.	
			TYPE OF INSPECTION	
			OPER- ATOR	2/3 ECH- ELON
	✓	27 Mar 1962	John Jmesberg	

DA FORM 11-238
MAY 57

REPLACES DA FORMS 11-238, 1 NOV 55; 11-239,
11-244, 11-245, 11-246, 11-249, 11-250, AND 11-251;
WHICH ARE OBSOLETE.

TM5820-295-20-1

Figure 3. DA Form 11-238, pages 1 and 2.