

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

OPERATOR AND ORGANIZATIONAL PREVENTIVE MAINTENANCES, CHECKS AND SERVICES FOR GENERATOR, SIGNAL SG-297()/URM-103

Headquarters, Department of the Army, Washington, D.C.

17 December 1963

1. Scope. This bulletin covers operator's and or-
ganizational preventive maintenance for Gen-
erator, Signal SG-297()/URM-103. Through-
out this bulletin, Generator, Signal SG-297()/
URM-103 will be referred to as the signal
generator.

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

3. Forms and Records. *a. Reports of Main-
tenance and Unsatisfactory Equipment.* Use
equipment forms and records in accordance
with instructions in TM 38-750.

*b. Report of Damaged or Improper Ship-
ment.* Fill out and forward DD Form 6
(Report of Damaged or Improper Shipment)
as prescribed in AR 700-58 (Army),
NAVSANDA Publication 378 (Navy), and
AFR 71-4 (Air Force).

*c. Reporting of Equipment Bulletin Improve-
ments.* The direct reporting, by the individual
user, of errors, omissions, and recommenda-
tions for improving this equipment bulletin is
authorized and encouraged. DA Form 2028
(Recommended Changes to DA Technical Man-
ual Parts Lists or Supply Manual 7, 8, or 9)
will be used for reporting these improvements.
DA Form 2028 will be completed in triplicate,
using pencil, pen, or typewriter, and forwarded
by the individual using the bulletin. The orig-
inal and one copy will be forwarded direct to:

Commanding Officer, U.S. Army Electronics
Materiel Support Agency, ATTN: SELMS-
MP, Fort Monmouth, N. J. 07703. One
information copy will be furnished to the indi-
vidual's immediate supervisor (officer, noncom-
missioned officer, supervisor, etc.).

4. Scope of Maintenance. The maintenance
duties assigned to the operator and organiza-
tional repairman of the equipment are listed
below, together with a reference to the para-
graphs covering the specific maintenance func-
tions.

a. Daily preventive maintenance checks and
services (par. 7).

b. Weekly preventive maintenance checks
and services (par. 8).

c. Monthly preventive maintenance checks
and services (par. 9).

d. Quarterly preventive maintenance checks
and services (par. 10).

e. Cleaning (par. 11).

f. Touchup painting (par. 12).

5. Preventive Maintenance. Preventive main-
tenance is the systematic care, servicing, and
inspection of equipment to prevent the occur-
rence of trouble, to reduce downtime, and to as-
sure that the equipment is serviceable.

a. Systematic Care. The procedures given in
paragraphs 7 through 11 cover routine sys-
tematic care and cleaning essential to proper
upkeep and operation of the equipment.

b. Preventive Maintenance Checks and Services. The preventive maintenance checks and services charts (pars. 7 through 10) outline functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat-serviceable condition; that is, in good general (physical) condition and in good operating condition. To assist operators in maintaining combat serviceability, the charts indicate what to check, how to check, and what the normal conditions are; the *References* column lists the illustrations, paragraphs, or manuals that contain detailed repair or replacement procedures. If the defect cannot be remedied by performing the corrective actions listed, higher echelon

maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirements set forth in TM 38-750.

6. Preventive Maintenance Checks and Services Periods. Preventive maintenance checks and services of the equipment are required daily, weekly, monthly, and quarterly.

a. Paragraph 7 specifies the checks and services that must be accomplished daily (or at least once each week if the equipment is maintained in standby condition).

b. Paragraphs 8, 9, and 10 specify *additional* checks and services that must be performed on a weekly, monthly, and quarterly basis, respectively.

7. Daily Preventive Maintenance Checks and Services Chart.

Sequence No.	Item		References
1	Completeness -----	See that the equipment is complete -----	Instruction book furnished with equipment.
2	Exterior surfaces -----	Clean the exterior surfaces, including the panel and meter glasses (par. 11). Check all meter glasses and indicator lenses for cracks.	None.
3	Connectors -----	Check the tightness of all connectors -----	None.
4	Controls and indicators-----	While making the operating checks (sequence No. 5), observe that the mechanical action of each knob, dial, and switch is smooth and free of external or internal binding, and that there is no excessive looseness. Also, check the meters for sticking or bent pointers.	None.
5	Operation -----	Operate the equipment according to the equipment performance checklist given in the instruction book furnished with the equipment.	None.

8. Weekly Preventive Maintenance Checks and Services Chart.

Sequence No.		Procedure	References
1	Cables -----	Inspect cables and wires for chafed, cracked, or frayed insulation. Replace connectors that are broken, arced, stripped, or worn excessively.	None.
2	Handles and latches -----	Inspect handles, latches, and hinges for looseness. Replace or tighten as necessary.	None.
3	Metal surfaces -----	Inspect exposed metal surfaces for rust and corrosion. Touch up paint as required (par. 13).	None.

9. Monthly Preventive Maintenance Checks and Services Chart.

Sequence No.	Item	Procedure	References
1	Pluckout items -----	Inspect seating of pluckout items -----	None.
2	Transformer terminals----	Inspect the terminals on the power transformer. There should be no evidence of dirt or corrosion.	None.
3	Resistors and capacitors----	Inspect the resistors and capacitors for cracks, blistering, or other detrimental defects.	None.