

REP-693

SPECIFIC STANDARD
FOR
MULTIVIBRATOR-POWER SUPPLY 0-122/URM-18

PROJECT 4422D

31 May 1955

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SIGNAL CORPS ENGINEERING LABORATORIES
FORT MONMOUTH, N. J.

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SIGNAL CORPS ENGINEERING LABORATORIES
FORT MONMOUTH, NEW JERSEY

31 May 1955

Signal Corps Repair Standard #693 has been prepared under the supervision of PME Division and is published for the information and guidance of all concerned. Suggestions or criticisms relative to the form, contents, purpose, or use of this publication should be referred to Signal Corps Engineering Laboratories, Fort Monmouth, N. J., Attn: Chief, Maintenance Engineering Branch.

OFFICIAL:
MAX P. BUTLER
Capt, SigC
Adjutant

F. F. UHRHANE
Brigadier General, USA
Commanding

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PREFACE

Signal Corps Repair Standards (formerly Signal Corps Repaired Equipment Requirements) are prepared by the Maintenance Engineering Branch, Procurement-Maintenance Engineering Division, Signal Corps Engineering Laboratories, and cover various items of signal equipments which are subject to repair, test and inspection. These repair standards are documents which set forth the specific repair requirements and test standards to be applied to the individual equipments being repaired and tested.

Signal Corps Repair Standards are prepared for the specific use of the fifth echelon Signal Repair Shops in repairing and determining the quality and acceptability of repaired signal equipments covered by these standards. The use of Signal Corps Repair Standards is recommended as a guide and reference for any agency having occasion to repair, test or inspect an item of signal equipment for which a repair standard has been prepared.

Signal Corps Repair Standard No. REP-1001 is a general standard and is subsidiary to any individual standard prepared. No individual standard is to be considered complete in itself, but is to be used in conjunction with Signal Corps Repair Standard No. REP-1001, "General Standards for Repaired Signal Equipment."

Reports of any discrepancies or any other constructive comments bearing upon this repair standard are invited. A series of Comments and/or Notes pages will be found in the back of this standard which are designed to facilitate reporting any inaccuracies noted. All such reports or comments as well as requests for additional copies, should be addressed to:

COMMANDING OFFICER
Signal Corps Engineering Laboratories, SIGEL-PMM-3
Fort Monmouth, New Jersey.

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SPECIFIC STANDARD
FOR
MULTIVIBRATOR-POWER SUPPLY O-122/URM-18

I. STATEMENT COVERING APPLICABILITY

This Specific Standard covers inspection requirements to be used in determining the quality and acceptability of repaired Multivibrator-Power Supply O-122/URM-18.

II. APPLICABLE REFERENCES

A. Repair Standards: The following Repair Standards form a part of this Specific Standard only to the extent referenced:

Title	Number
Class "C" Receiver and Low Power Transmitter Vacuum Tubes	REP-242

B. Technical Publications: The following Technical Publications form a part of this Specific Standard only to the extent referenced:

Title	Number	Date
Frequency Calibrator Set AN/URM-18	TM 11-2665	1955

C. Modification Work Orders: All applicable Modification Work Orders pertaining to this equipment shall be performed.

III. TEST AND ADDITIONAL EQUIPMENT

A. Test Equipment

Equipment	Stock Number	Quan. Req.	REP
Multimeter TS-352/U	3F4325-352	1	420
Voltmeter ME-30A/U	---	1	-
Signal Generator AN/URM-25B	3F3901.2-25B	1	-

B. Additional Equipment

Equipment	Stock Number	Quan. Req.	REP
Transformer CN-16/U	2Z9957-39	1	-
Resistor, fixed 12 ohms 10 watts	RW29F120	2	-
Resistor, fixed 11,600 ohms 10 watts	RW34E113	1	-
Resistor, fixed 500 ohms 35 watts	RW34G501	1	-

Equipment	Stock Number	Quan. Req.	REP
Resistor, fixed 68 ohm 0.5 watt	3RN26801	1	--
Resistor, fixed 10,000 ohm 0.5 watt	3RN51006	1	--
Radio Receiver R-390/URR	2C4180-390	--	--
Radio Receiver R-220/URR	2C4180-220	--	--

IV. REQUIREMENTS

A. General Test Conditions: All test shall be conducted under the following conditions:

1. Tests should be performed at normal room temperature (70°F).
2. The input boltage shall be maintained at 115 v.
3. Connect the loads required in paragraph B(3) as close to the connector as possible.
4. The signals heard in paragraph B(2) are harmonics of the 100 kc signal from the signal generator and may not be exactly 100 kc, 10 kc, or 1 kc apart.

B. Electrical Requirements:

(1) The following voltages shall be available at the indicted terminals of the connector receptacles:

<u>connector, receptacle</u>	<u>terminal</u>	<u>load resistor</u>	<u>voltage</u>
J-101	9 to 10	6 ohms	6.3 v AC ±5%
	11 to 12	11,600 ohms	290 v DC ±5%
	8 and 12 to gnd	should show continuity	

<u>Connector, Receptacle</u>	<u>Terminal</u>	<u>Load Resistor</u>	<u>Voltage</u>
J-102	13 to 14	open circuit	4 v DC $\pm 5\%$
	15 to 16	500 ohms	115 v AC $\pm 5\%$
	when term 13 and 14 are shorted together.		
	15 to 16	500 ohms	less than 5 v AC

(2) Connect the Signal Generator AN/URM-25B high output to term 1 of J-103, set frequency for 100 kc and output for approximately 1.5 volts.

a. Couple Radio Receiver R-220/URR input loosely to J-1. With the BFO operating a signal should be heard at 100kc points to 50 mc.

b. Couple Radio Receiver R-390/URR input loosely to J2. With the BFO operating a signal should be heard at 10 kc points to 10 mc.

c. Couple Radio Receiver R-390/URR input loosely to J-3. With the BFO operating a signal should be heard at 10 kc ~~points to 10 mc.~~

(3) Connect Signal Generator AN/URM-25-B as in paragraph 2 above. Connect Voltmeter ME-30A/U to the output connectors with loads as indicted in the following table:

<u>Output Connector</u>	<u>Load</u>	<u>Minimum Voltage</u>
J1	65 ohms	.16
J2	65 ohms	.8
J3	10,000 ohms	13.0
J4	10,000 ohms	16.0
J5	10,000 ohms	13.0

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(1) On 11-11-19, the following work was done:
 Checked the water supply to the kitchen sink and found it to be satisfactory. The water pressure was found to be good. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly. The water supply to the bathroom sink was also checked and found to be satisfactory. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly.

(2) On 11-12-19, the following work was done:
 Checked the water supply to the kitchen sink and found it to be satisfactory. The water pressure was found to be good. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly. The water supply to the bathroom sink was also checked and found to be satisfactory. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly.

(3) On 11-13-19, the following work was done:
 Checked the water supply to the kitchen sink and found it to be satisfactory. The water pressure was found to be good. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly. The water supply to the bathroom sink was also checked and found to be satisfactory. The drain was also checked and found to be clear. The hot water heater was also checked and found to be operating properly.

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SIGNAL CORPS ON
REPAIR STANDARD

NO. REP -
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COMMENTS AND / OR NOTES

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