

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS
(INCLUDING DEPOT REPAIR PARTS AND SPECIAL TOOLS LIST)

GENERATOR,
SIGNAL
AN/GRM-50C

HEADQUARTERS, DEPARTMENT OF THE ARMY

DECEMBER 1973

WARNING

HIGH VOLTAGE

is used in the operation of this equipment.

DEATH ON CONTACT

May result if personnel fail to observe safety precautions. Learn the areas of the equipment containing high voltage. Be careful not to contact high-voltage connections when installing or operating the equipment. Before working inside the equipment, turn power off and ground points of high potential before touching them.

WARNING

The fumes of TRICHLOROETHANE are toxic. Provide thorough ventilation whenever it is used; avoid prolonged or repeated breathing of vapor. Do not use near an open flame or hot surface; trichloroethane is nonflammable but heat converts the fumes to a highly toxic phosgene gas the inhalation of which could result in serious injury or death. Prolonged or repeated skin contact with trichloroethane can cause skin inflammation. When necessary, use gloves, sleeves and aprons which the solvent cannot penetrate.

CHANGE }
No. 1 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 8 August 1978

**Operator's Organizational, Direct Support,
and General Support Maintenance Manual
GENERATOR, SIGNAL AN/GRM-50C
(NSN 6625-00-003-3238)**

TM 11-6625-573-14-1, 7 December 1973, is changed as follows:

1. The title of the manual is changed as shown above.
2. "Generator, Signal SG-497C/GRM-50" is changed to "Generator, Signal SG-479C/GRM-50" throughout the manual.
3. New or changed material is indicated by a vertical bar.
4. Added or revised illustrations are indicated by a vertical bar before figure number and figure title.
5. Remove and insert pages as indicated in the page list below.

<i>Remove</i>	<i>Insert</i>
None	Place warning notice inside front cover
i and ii	i and ii
1-1 and 1-2	1-1 and 1-2.1
4-3	4-3, 4-4(blank)
A-1	A-1, A-2(blank)
B-1 through B-48	None
C-1 through C-4	C-1 through C-5
Index 1 and Index 2	Index 1 and Index 2

6. File this change sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

BERNARD W. ROGERS
General, United States Army
Chief of Staff

Official:

J.C. PENNINGTON
Brigadier General, United States Army
The Adjutant General

Distribution:

To be distributed in accordance with DA Form 12-51, Direct and General Support TM literature requirements for AN/GRC-106, AN/TRC-80 and AN/TRC-90.

TECHNICAL MANUAL }
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HEADQUARTERS
 DEPARTMENT OF THE ARMY
 WASHINGTON, DC, 7 December 1973

**OPERATOR'S, ORGANIZATIONAL DIRECT SUPPORT,
 AND GENERAL SUPPORT MAINTENANCE MANUAL
 GENERATOR, SIGNAL AN/GRM-50C
 (NSN 6625-00-003-3238)
 Current as of 6 April 1973**

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CHAPTER I INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual contains instructions for operator, organizational, direct support, and general support maintenance of Generator, Signal AN/GRM-50C. Also included is a discussion of the functioning of the signal generator.

1-2. Indexes of Publications

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

b. Refer to DA Pam 310-7 to determine whether there are Modification Work Orders (MWO'S) pertaining to the equipment.

1-3. Forms and Records

a. *Reports of Maintenance and Unsatisfactory Equipment.* Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

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 of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703. A reply will be furnished direct to you.

1-3.2. Reporting Equipment Improvement Recommendations (EIR)

EIR's will be prepared using DA Form 2407, Maintenance Request. Instructions for preparing EIR's are provided in TM 38-750, the Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

(fig 1-1)

Generator, Signal AN/GRM-50C is a portable signal generator that consists of Generator, Signal SG479C/GRM-50 and Dummy Load, Electrical DA-296A/GRM-50. It is used to generate radio frequency signals from 50 kHz to 65 MHz. The radio frequency output is continuously adjustable from 0.1 microvolt (-127 dBm) to 3 VOLTS rms (+23 dBm) into a 50-ohm load. The radio frequency output can be amplitude-modulated internally up to 95% at either 400 Hz or 1 kHz, and externally from dc to 20 kHz.

1-5. Technical Characteristics

a. *Generator, Signal SG-479C/GRM-50.*
 Frequency rang Continuously tunable from 50 kHz to 65 MHz in 7 overlapping bands, use-

	able to 80 MHz.
Frequency accuracy	1% accuracy over entire range with 0.01% accuracy at check points at 100-kHz intervals up to 6 MHz, and 1-MHz intervals up to the full range of the generator.
Frequency readout	3-digit "NIXIE" *display plus overrange CAL X100 switch provides increased resolution.
Frequency stability	At 1 volt or less output: 50 ppm or 5 Hz whichever is greater during a 10-minute period after a 2-hour warmup. Not more than 10

* Registered Burrough's Trademark.

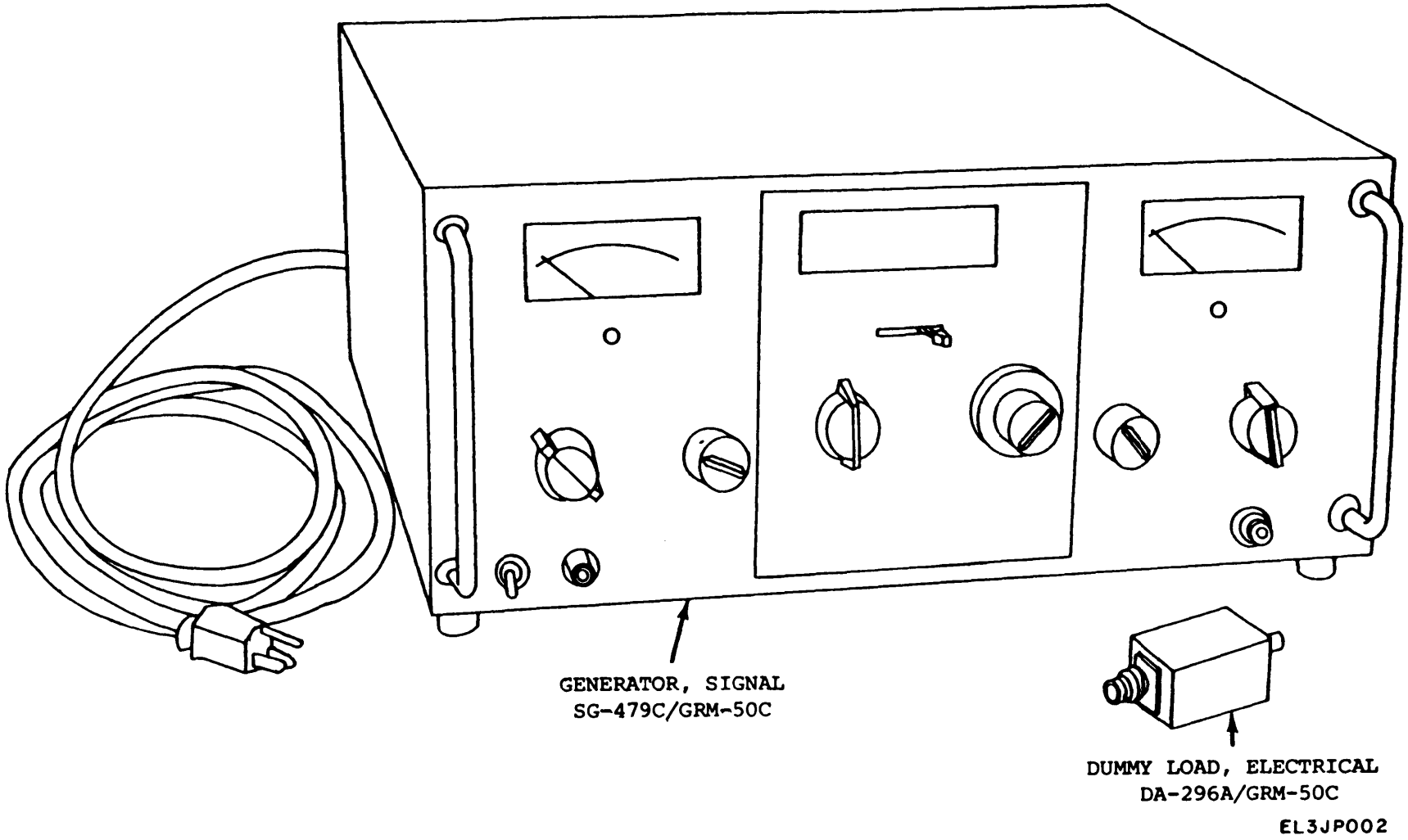


Figure 1-1. Generator, Signal AN/GRC-50C.

	minutes is required for stabilization after changing frequency.	Am hum and noise sidebands. At least 70 dB below carrier.
Resetability	Better than 0.15% after a 2-hour warmup.	Residual fm Less than 1 ppm or 20 Hz, whichever is greater.
Rf output:		Incidental fm with 30% 1 kHz am with outputs of 1 volt or less. Less than 25 ppm -100 Hz peak.
Level	Continuously adjustable from 0.1 uV (-127 dBm) to 3 V rms (+23 dBm) into 50-ohm resistive load.	Amplitude modulation:
Attenuator	dB with 10 dB per step plus continuously variable 18-dB calibrated vernier indicated on meter.	Range 0 to 96% on 1V range and below and 0 to at least 30% from 1 to 3 volts.
Monitor	Meter with three scales, 0 to 1 V rms, 0 to 3 V rms, and -15 to +3 dB referenced to 0 dBm, 50 ohms.	Meter accuracy . . . ±5% of full scale from 0 to 90% for modulating frequencies up to 10 kHz and ±10% of full scale for frequencies from 10 kHz to 20 kHz.
Accuracy	Within ±0.5 dB at any frequency.	Internal 400 to 1000 Hz (±5%).
Impedance	50 ohms, swr less than 1.2 on 0.3-V attenuation range and below.	Distortion On 1-volt range and below, less than 0.5% distortion for 30% modulation, and less than 3% distortion for 70% modulation.
Leakage	Permits receiver sensitivity measurements down to less than 1 microvolt.	External Dc to 20 kHz depending on carrier frequency. Maximum modulation
Spectral purity:		
Harmonics	Equal or less than 3%.	

frequency-30% modulation up to up to 0.06 of carrier frequency and 70% modulation up to 0.02 of carrier frequency, square wave modulation 0.003 of carrier frequency with a maximum of 3 kHz.

Distortion _____ On 1-volt range and below, less than 1% distortion for 30% modulation and less than 3% distortion for 70% modulation.

Level _____ 4.5 volts peaks into 1000 ohms for 95% modulation.
 Power requirements _ 115/230V ±10%, 50 to 400 Hz, 50 watts.

b. Dummy Load, Electrical DA-296A/GRM-50.
 output characteristics_____ 25 ohms for use into a high impedance.
 5 ohms (10:1 voltage division).
 IEEE Standard Dummy Antenna (driven from 10:1 voltage divider).

1-6. Items Comprising an Operable Equipment

FSN	Component
	Signal Generator SG 497C/GRM-50.
	Electrical Dummy Load DA-296A/GRM-50.

Quantity	Height	Dimensions (in.)		Depth	Weight
		Width			
1	7 7/16	16 7/8		18 3/8	30 lb
1	3 3/4	1 3/8		1 7/16	3 oz

1-7. Common Names of Components

The following chart lists the common names of components of Generator, Signal AN/GRM-50C.

Nomenclature	Common name
Generator, Signal SG-497C/GRM-50	Signal generator
Dummy Load, Electrical DA-296A/GRM-50	Termination

1-8. Description of Components

a. Generator, Signal SG-497C/GRM-50. The signal generator consists of a panel-chassis assembly, a bottom cover, and a top cover. The bottom cover has four protective feet. The top cover contains ventilating holes on both sides. All normal operating controls and the output connector are located on the front panel. Two meters are mounted on the front panel, a MODULATION meter indicating PERCENT MODULATION and an AMPLITUDE meter indicating VOLTS RMS and dBm. The rear panel contains the input power voltage selector and a fuse. The power cord is attached to the chassis and extends through a hole in the back of the chassis. The power cord plug is polarized with two flat contacts and one round contact (refer to the note in para 2-6).

b. Dummy Load, Electrical DA-296A/GRM-50. The termination is housed in an aluminum box with a male-type BNC connector on one end and a female-type BNC connector on

the other end. The termination has three output positions as follows:

- (1) 25 ohms for use into a high impedance.
- (2) 5 ohms (10:1 voltage division).
- (3) IEEE Standard Dummy Antenna (driven from 10:1 voltage divider).

1-9. Destruction of Army Materiel to Prevent Enemy Use

a. Authority for Destruction. The destruction procedures outlined in *b* below will be used to prevent the enemy from using or salvaging this equipment. Destruction of the equipment will be accomplished only upon order of the commander.

b. Methods of Destruction.

- (1) *Smash.* Smash the controls, coils, switches, printed circuit assemblies, capacitors, transformer, and meters.
- (2) *Cut.* Cut the power cord and chassis cable assemblies and harness wiring.

WARNING

Be extremely careful with explosives and incendiary devices. Use these items only when the need is urgent.

- (3) *Burn.* Burn cords and technical manuals.
- (4) *Bend.* Bend panel and cabinet.
- (5) *Dispose.* Bury or scatter the destroyed parts in slit trenches, foxholes, or throw them into streams.

CHAPTER 2

SERVICE UPON RECEIPT AND INSTALLATION

Section I. SERVICE UPON RECEIPT OF GENERATOR, SIGNAL AN/GRM-50C

2-1. UNPACKING

(fig. 2-1)

The signal generator is placed in a corrugated carton blocked in place by means of corrugated sheets and padding. The output termination and spares are wrapped and taped to the rear of the signal generator. An equipment manual is placed between one of the blocking sheets and the corrugated carton. A typical packaging is shown in figure 2-1. The corrugated carton dimensions are 22½ inches high, 21½ inches wide, 11" deep with a volume of 3.08 cubic feet and a weight of approximately 40 pounds.

2-2. Checking Unpacked Equipment

a. Inspect the equipment for damage incurred during shipment. If the equipment has been

damaged, report the damage on DD Form 6 (para 1-3).

b. Check the equipment against the component listing in paragraph 1-6 and the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of TM 38-750. The equipment should be placed in service even though a minor assembly or part that does not affect proper functioning is missing.

c. Check to see whether the equipment has been modified. (Equipment which has been modified will have the MWO number on the rear panel, near the nomenclature plate.) Check also to see whether all currently applicable MWO's have been applied. (Current MWO'S applicable to the equipment are listed in DA Pam 310-7.)

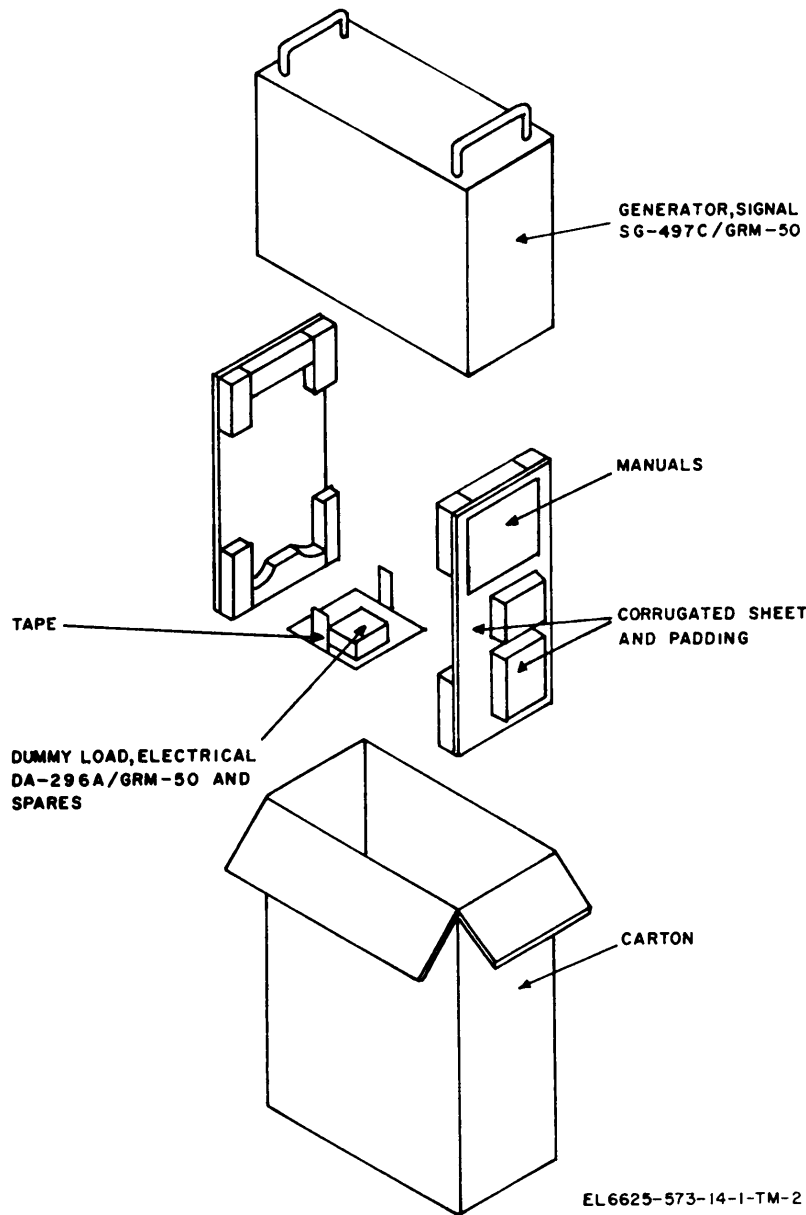


Figure 2-1. Generator, Signal AN/ARM-50C, packaging diagram.

Section II. INSTALLATION OF GENERATOR, SIGNAL AN/GRM-50C

2-3. Setting Input Power Selector Switch S8 (fig. 2-2)

The signal generator may be operated from two input voltages that are nominally 115 volts or 230 volts. For use with 115-volt input power, set the input selector switch to its 115 position. Figure 2-2 indicates this setting. For use with

230-volt input power, move the input power selector to the right to its 230 position.

2-4. Termination

Dummy Load, Electrical DA-296A/GRM-50 is a termination used with the signal generator to provide outputs other than the normal 50-ohm

output of the generator as follows:

- a. 25 ohms for use into a high impedance.
- b. 5 ohms (10:1 voltage division).
- c. IEEE Standard Dummy Antenna (driven from the 10:1 voltage divider).

2-5. Test Cable Assembly (Rf Cable)

(fig. 2-3)

When using the termination in conjunction with the generator, a special test cable is required. This cable is not supplied with the equipment. It may be fabricated from a length of single-conductor, shielded Radio Frequency Cable RG55/U with a type BNC male connector on each end. This cable should be as short as practical, allowing unstrained connections between the generator and the equipment under test.

2-6. Connections

(fig. 2-3)

Place the generator close to the equipment under test so that the test cable, and termination if required, will reach the equipment. Connect the power cable to the power source. See that line fuse F1, located on the rear panel, is not blown (fig. 2-2).

NOTE

The connector plug on the power cord has a round grounding terminal. If the ac power outlet will not accommodate this plug, use an adapter and connect the green lead to ground. If an adapter is not available, pull the grounding terminal out of the connector plug with a pair of pliers.

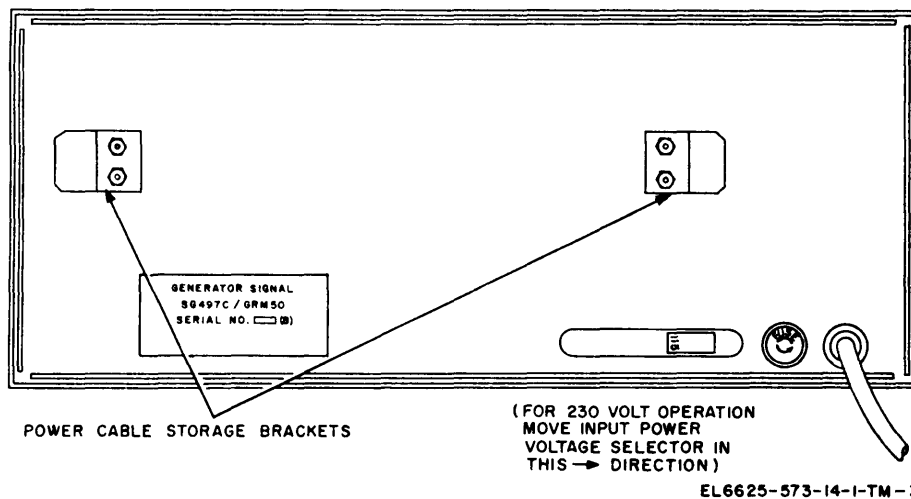


Figure 2-2. Generator, Signal SG-497C/GRM-50, rear panel.

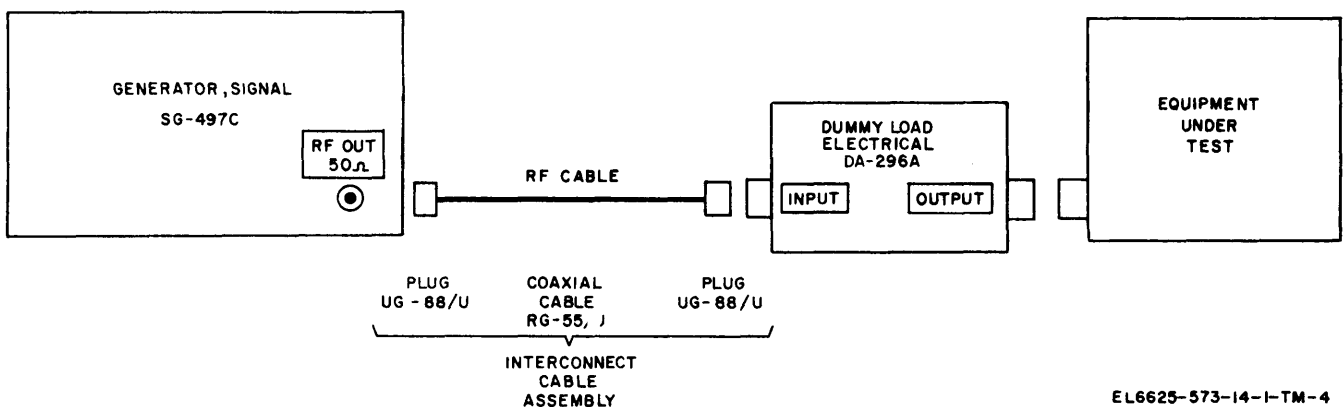


Figure 2-3. Connections when using Dummy Load, Electrical DA-296A/GRM-50.

2-7. Service Upon Receipt of Used or Reconditioned Equipment

a. Follow the instructions in paragraph 2-2 for unpacking and checking the equipment.

b. Check the used or reconditioned equipment for tags or other indications pertaining to changes in wiring of the equipment. If any

changes in wiring have been made, note the changes in this manual, preferably on the schematic diagram.

c. Check the operating controls for ease of rotation.

d. Perform the installation and connection procedures given in paragraphs 2-3 through 2-6.

CHAPTER 3

OPERATING INSTRUCTIONS

Section I. OPERATOR'S CONTROLS AND INDICATORS

NOTE

This section covers controls and indicators used by the operator; items used by maintenance personnel are covered in instructions for the appropriate maintenance category.

the RF OUT 50-ohm output connector. Doing so may cause damage to the signal generator.

3-1. General

CAUTION

Do not connect an rf or a dc source to

3-2. Controls and Their Uses

The following chart lists the controls and indicators of the signal generator and termination (figs. 3-1 and 3-2) and indicates what they do.

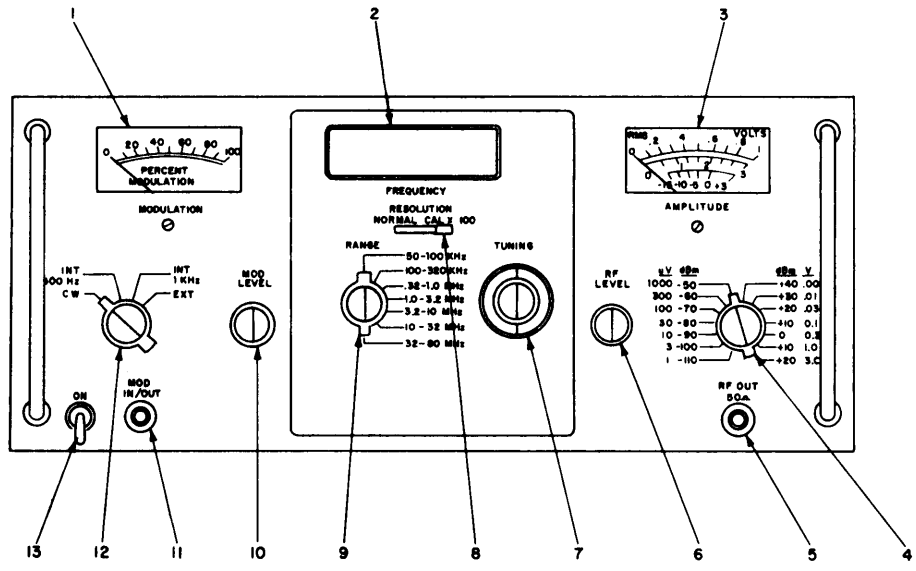
Figure
3-1
Index No.

Indicator
control

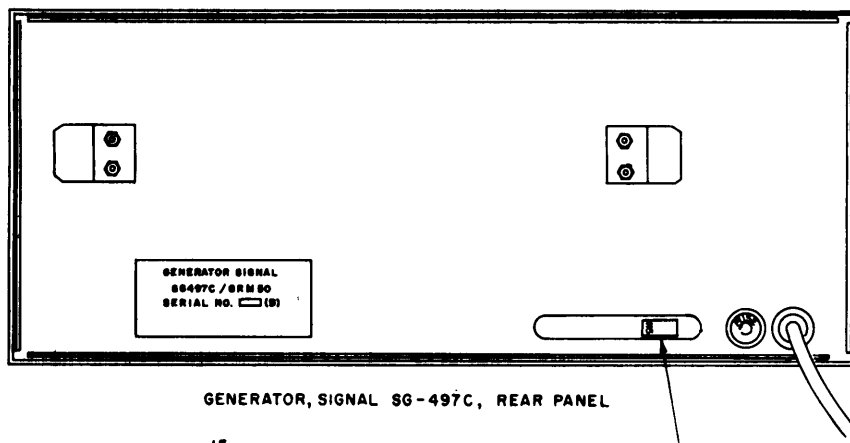
Function

1	MODULATION meter M1_____	A modulation meter calibrated from 0 to 100 percent in 2-percent graduations. Monitors percentage of modulation of carrier signal when modulated by internal 400-Hz and 1-kHz signals as well as external signals in the 20-Hz to 20-kHz range.																
2	FREQUENCY indicator _____	A frequency monitor providing a three-digit NIXIE* display.																
3	AMPLITUDE meter M2_____	An amplitude meter with three ranges calibrated in 0 to 1 V rms, 0 to 3 V rms, and -15 to +3 dBm into a 50-ohm load. Measures calibrated 50-ohm instrument output signal amplitude when the instrument is terminated in a 50-ohm resistive load.																
4	Attenuator selector _____	A 14-position selectable precision attenuator switch providing 10-dB attenuation per step. Marked - 110 to +20 dBm with corresponding voltage across 50 ohms also shown for monitor meter reading of full-scale voltage.																
5	RF OUT 50 Ω connector J7 _____	BNC connector provides calibrated rf output leveled or modulated signal from 50-ohm source up to 3-volt level.																
6	RF LEVEL control R8 _____	Provides means for adjusting the voltage level of the calibrated output signal from 10 to 100 percent of the value indicated by the amplitude level switch.																
7	TUNING control, capacitor C5 _____	Provides a means for selection of any frequency within any of the seven frequency ranges of the generator, with overlap beyond the nominal end frequencies of each ranges. This is a dual concentric coarse and fine control.																
8	RESOLUTION; NORMAL, CAL X100, switch S3.	Extends the resolution of the FREQUENCY display when set to CAL X100 as follows: <table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;"><i>Range</i></th> <th style="text-align: left;"><i>Resolution</i></th> </tr> </thead> <tbody> <tr> <td>50-100 kHz</td> <td>10Hz</td> </tr> <tr> <td>100-320 kHz</td> <td>10 Hz</td> </tr> <tr> <td>.32-1.0 MHz</td> <td>10 Hz</td> </tr> <tr> <td>1.0-3.2 MHz</td> <td>100 Hz</td> </tr> <tr> <td>3.2-10 MHz</td> <td>100 Hz</td> </tr> <tr> <td>10-32 MHz</td> <td>1 kHz</td> </tr> <tr> <td>32-80 MHz</td> <td>1 kHz</td> </tr> </tbody> </table>	<i>Range</i>	<i>Resolution</i>	50-100 kHz	10Hz	100-320 kHz	10 Hz	.32-1.0 MHz	10 Hz	1.0-3.2 MHz	100 Hz	3.2-10 MHz	100 Hz	10-32 MHz	1 kHz	32-80 MHz	1 kHz
<i>Range</i>	<i>Resolution</i>																	
50-100 kHz	10Hz																	
100-320 kHz	10 Hz																	
.32-1.0 MHz	10 Hz																	
1.0-3.2 MHz	100 Hz																	
3.2-10 MHz	100 Hz																	
10-32 MHz	1 kHz																	
32-80 MHz	1 kHz																	

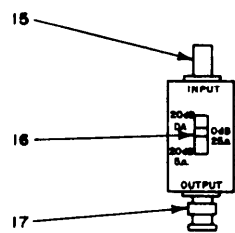
*Registered Burroughs Trademark.



GENERATOR, SIGNAL SG-497C, FRONT PANEL



GENERATOR, SIGNAL SG-497C, REAR PANEL



DUMMY LOAD, ELECTRICAL DA-296A

EL6625-573-14-1-TM-5

Figure 3-1. Generator, Signal SG-497C/GRM-50, controls and indicators.

Figure 3-1 index No.

Indicator control

Function

- 9 RANGE switch S1 ----- A frequency range selector switch providing seven positions, one for each of the ranges: 50 kHz to 100 kHz, 100 kHz to 320 kHz, .32 MHz to 1 MHz, 1 MHz to 3.2 MHz, 3.2 to MHz, 10 MHz to 32 MHz, 32 MHz to 80 MHz
- 10 MOD LEVEL control R7 ----- Provides means for adjusting percentage of carrier modulation. A

Figure 3-1 index No.

Indicator Control

Function

		single-turn continuous rotation control adjusts modulation depth from 0 to 95 percent.
11	MOD IN/OUT, BNC connector J2 -----	Provides internal 400-Hz and 1-kHz modulation waveform for external purposes when internal 400-Hz or 1-kHz modulation is selected by modulation selector. Accepts modulating signals dc to 20-kHz range, 4.5 volts peak, when modulation selector is at EXT.
12	Modulation selector CW, INT 400 Hz, INT 1 kHz, EXT, switch S2.	A four-position mode switch providing for capability of external modulation, 400 Hz internal, 1 kHz internal, or cw (no modulation) of carrier signal.
13	ON, switch S7-----	Power on-off switch energizes or deenergizes the instrument.
14	115/230 input voltage selector, switch S8.	A slide switch that allows operation with 115-volt or 230-volt primary power source.
15	INPUT, connector J1-----	Female-type BNC connector providing input to termination.
16	Termination selector, 20 dB DA, 0 dB 25 Ω , 20 dB 5 Ω , switch S1.	Selects output characteristic of termination as follows: 20 dB DA: IEEE Standard Dummy Antenna (driven from 10:1 voltage divider). 0 dB 25 Ω : For use into a high impedance. 20 dB 5 Ω : 5 ohms (10:1 voltage divider).
17	OUTPUT, connector J2-----	Male-type BNC connector providing output of termination.

Section II. OPERATION

3-3. Starting Procedure
(fig. 3-2)

Perform the starting procedures given below before using the operating procedure described in paragraph 34.

CAUTION

Do not connect the power cord to the ac outlet until input power selector switch S8 has been checked to be sure it is in its proper position for the input power voltage level (para 2-3).

a. Preliminary (figs. 3-1 and 3-2). Set the front panel controls as follows:

Control	Position
ON (power switch S7) -----	Off (down)
MODULATION -----	CW
RESOLUTION -----	NORMAL

b. Starting (fig. 3-2).

(1) Connect the signal generator to the device under test. Be sure that the RF OUT 50 Ω output is terminated in a 50-ohm resistive load.

(2) Set the power switch to ON. The FREQUENCY display will illuminate and indicate the frequency being generated. Also, the AMP-LITUDE meter point will move to the setting of the RF LEVEL control.

NOTE

For optimum signal generator operation, the attenuator selector and RF LEVEL control settings should be made such that meter readings in the range of 30 to 100 percent of full scale are obtained, except for meter readings below 0.3 μ V. Therefore, when using the

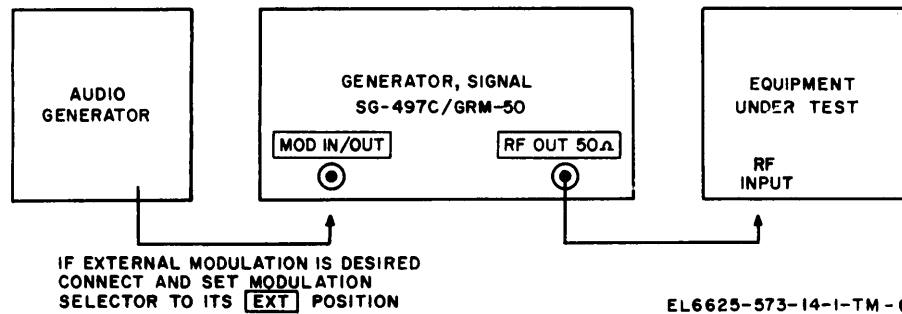


Figure 3-2. Generator, Signal SG-497C/GRM-50, connections for use.

generator, it is advisable to use the highest output signal level possible and to reset the attenuator selector for major step changes.

3-4. Operating Procedure

The operating procedures for the various operating modes of the generator are given below.

a. Cw Operation. In the cw mode of operation, the generator delivers an unmodulated rf output signal whose frequency and level are determined by the settings of the operating controls. To operate in the cw mode, proceed as follows:

(1) Perform the starting procedure given in paragraph 3-3.

(2) Set the RANGE selector at the desired band.

(3) Tune the generator to the desired frequency, using the TUNING control. Observe the frequency on the FREQUENCY display while tuning. For greater resolution and fine tuning of the frequency, set the RESOLUTION switch to CAL X100. Increased resolution is indicated in paragraph 3-2.

(4) Set the attenuator selector to the desired output level range.

(5) Set the RF LEVEL control to the desired output level as indicated on the AMPLITUDE meter.

(6) Recheck the indications on the FREQUENCY display and the AMPLITUDE meter, trim the generator controls if necessary.

b. Operation With Internal Modulation. In the internal modulation mode of operation, the output may be modulated by an internal 400-Hz or 1-kHz signal, depending upon the setting of the modulation selector switch. The output frequency, level, and depth (percentage) of modulation are determined by the settings of the operating controls. To operate with internal modulation, proceed as follows:

(1) Perform the starting procedure given in paragraph 3-3.

(2) Set the modulation selector to INT 400 Hz or INT 1 kHz, whichever is desired.

(3) Set the RANGE switch to the desired frequency band.

(4) Tune the generator to the desired frequency, using the TUNING control. Observe the frequency on the FREQUENCY display while tuning. For greater resolution and fine tuning

of the frequency, set the RESOLUTION switch to CAL X100. Increased resolution is indicated in paragraph 3-2.

(5) Set the attenuator selector to the desired output level range.

(6) Set the RF LEVEL control to the desired output level as indicated on the AMPLITUDE meter.

(7) Adjust the MOD LEVEL control until the desired percentage of modulation is indicated on the MODULATION meter.

(8) Recheck the indications on the FREQUENCY MHz display, MODULATION meter, and the AMPLITUDE meter; trim the generator controls if necessary.

(9) The selected 400-Hz or 1-kHz modulating signal is also available at the front panel MOD IN/OUT connector.

c. Operation With External Modulation (fig. 3-2). In the external mode of operation, the output may be modulated by an external modulation signal of dc to 20 kHz. The depth of modulation permitted is a function of the carrier frequency and the modulating signal frequency and is given in paragraph 1-5. To operate with external modulation, proceed as follows:

(1) Perform the turn-on procedure given in paragraph 3-3.

(2) Set the modulation selector to EXT.

(3) Connect an external modulation generator, with an output amplitude of 4.5 volts peak, to the front panel MOD IN/OUT connector.

(4) Set the RANGE switch to the desired frequency band.

(5) Tune the instrument to the desired frequency, using the TUNING control. Observe the frequency on the FREQUENCY display while tuning. For greater resolution and fine tuning of the frequency, set the RESOLUTION switch to CAL X100. Increased resolution is indicated in paragraph 3-2.

(6) Set the attenuator selector to the desired output level range.

(7) Set the RF LEVEL control to the desired output level as indicated on the AMPLITUDE meter.

(8) Adjust the MOD LEVEL control until desired percentage of modulation is indicated on the MODULATION meter.

(9) Recheck the indications on the FREQUENCY display, MODULATION meter, and the AMPLITUDE meter; trim the generator controls if necessary.

CHAPTER 4

OPERATOR AND ORGANIZATIONAL MAINTENANCE

4-1. Scope of Maintenance

The maintenance duties assigned to the operator and organizational repairman of Generator, Signal AN/GRM-50C are listed below together with a reference to the paragraphs covering the specific maintenance functions. The tools and test equipment required are listed in appendix C.

- a. Daily preventive maintenance checks and services (para 4-3).
- b. Weekly preventive maintenance checks and services (para 44).
- c. Monthly preventive maintenance checks and services (para 4-5).
- d. Quarterly preventive maintenance checks and services (para 4-6).
- e. Cleaning (para 4-7).
- f. Rustproofing and painting (para 4-8).
- g. Troubleshooting (para 4-9 and 4-10).

4-2. Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to assure that the equipment is serviceable.

a. *Systematic Care.* The procedures given in paragraphs 4-3 through 4-8 cover routine systematic care and cleaning essential to proper upkeep and operation of the equipment. Refer to paragraph 6-2 for disassembly and reassembly instructions necessary for preventive maintenance.

b. *Preventive Maintenance Checks and Services.* The preventive maintenance checks and services charts (para 4-3 through 4-6) 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 chart indicates what to check, how to check, and the normal conditions. 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 category of 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.

4-3. Operator's Daily preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>References</i>
1	Completeness_ _ _ _ _	See that the equipment is complete (appx C).	None.
2	Exterior surfaces_ _ _ _ _	Clean the exterior surfaces, including the panel and meter glasses (para 4-7). Check meter glasses for cracks.	None.
3	Connectors_ _ _ _ _	Check the tightness of all connectors	None.
4	Controls and indicators_ _ _ _ _	While making the operating checks (sequence No. 5 through 12), 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. Set front panel switches and controls as per para 3-3a.	None.
5	ON power switch_ _ _ _ _	Set the switch to ON. The FREQUENCY display should illuminate and indicate	(Para 3-36(2) .)

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>References</i>
		the frequency being generated. Also, the AMPLITUDE meter pointer will move to the setting of the RF LEVEL control.	
6	RANGE switch _____	Set the RANGE selector at the desired band.	(Para 3-4 a (2).)
7	TUNING control _____	Tune the generator to the desired frequency, using the TUNING control.	(Para 3--41 (3).)
8	RESOLUTION switch _____	For greater resolution and fine tuning of the frequency, set the RESOLUTION switch to CAL X100. Increased resolution is indicated in paragraph 3-2.	(Para 3-4 a (3).)
9	Attenuator selector _____	Set the attenuator selector to the desired output level range.	Para 3-4 a (4).
10	RF LEVEL control _____	Set the RF LEVEL control to the desired output level as indicated on the AMPLITUDE meter.	(Para 3-4 a (5).)
11	Modulation selector switch _____	Set the modulation selector to INT 400 Hz or INT 1 kHz.	(Para 3-4 b (2).)
12	MOD LEVEL control _____	Adjust the MOD LEVEL control until the desired percentage of modulation is indicated on the MODULATION meter.	(Para 3-4 b (7).)

4-4. Organizational Weekly Preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>References</i>
1	Cables _____	Inspect cords, cables, and wires for chafed, cracked, or frayed insulation. Replace connectors that are broken, arced, stripped, or worn excessively.	None.
2	Handles _____	Inspect handles for looseness. Replace or tighten as necessary.	None.
3	Metal surfaces _____	Inspect exposed metal surfaces for rust and corrosion. Touch up paint as required (para 4-8 b).	None.

4-5. Organizational Monthly Preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>References</i>
1	Transformer terminals-----	Inspect terminals on power transformer. There should be no evidence of dirt or corrosion.	None.
2	Resistors and capacitors_____	Inspect resistors and capacitors for cracks, blistering, or other defects.	None.
3	Printed circuit boards_____	Inspect for cracks, discoloring, blistering, or other defects.	None.
4	Interior_____	Clean interior of chassis and cabinet	None.

4-6. Organizational Quarterly Preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>Reference</i>
1	Publications_____	See that all publications are complete, serviceable, and current.	DA Pam 310-4.
2	Modifications _____	Check DA Pam 310-7 to determine if new TM 38-570 and DA Pam 310-7 applicable MWO'S have been published. All URGENT MWO'S must be applied immediately. All NORMAL MWO'S must be scheduled.	
3	Spare parts _____	Check all parts (operator and organizational) for general condition and	(Appx C).

Sequence
No.

Item to be inspected

Procedure

References

method of storage. There should be no evidence of overstock, and all shortages must be on valid requisitions.

4-7. Cleaning

Inspect the exterior of, Generator, Signal, AN/GRM-50C. The exterior surfaces should be free of dust, dirt, grease, and fungus.

a. Remove dust and loose dirt with a clean, soft cloth.

WARNING

The fumes of TRICHLOROETHANE are toxic. Provide thorough ventilation whenever it is used; avoid prolonged or repeated breathing of vapor. Do not use near an open flame or hot surface; trichloroethane is nonflammable but heat converts the fumes to a highly toxic phosgene gas the inhalation of which could result in serious injury or death. Prolonged or repeated skin contact with trichloroethane can cause skin inflammation. When necessary, use gloves, sleeves and aprons which the solvent cannot penetrate.

b. Remove grease, fungus, and ground-in dirt from the cases; use a cloth dampened (not wet) with trichloroethane.

c. Remove dust or dirt from connectors with a brush.

CAUTION

Do not press on the meter faces (glass) when cleaning; the meters may become damaged.

d. Clean the front panel, meter, and control knobs; use a soft, clean cloth. If necessary, dampen the cloth with water and mild soap.

4-8. Rustproofing and Painting

a. *Rustproofing.* When the finish on the AN/GRM-50C becomes badly scarred or damaged, rust and corrosion can be prevented by touching up the bare surfaces. Use No. 000 sandpaper to clean the surface down to the bare metal. Obtain a bright, smooth finish.

b. *Painting.* Remove rust and corrosion from metal surfaces by lightly sanding them with fine sandpaper. Brush two thin coats of paint on the bare metal to protect it from further corrosion. Refer to the applicable cleaning and refinishing practices specified in TB 746-10.

4-9. General Troubleshooting Information

Troubleshooting this equipment is based upon the operational check (para 4-3, sequence No. 5 through 12). To troubleshoot the equipment, perform all functions of the AN/GRM-50C operation (para 3-3 and 3-4) until an abnormal condition or result is observed. Note the abnormal condition or result, and refer to the troubleshooting chart (para 4-10). Perform the checks and corrective actions indicated in the troubleshooting chart. If the corrective measures indicated do not result in correction of the trouble, higher maintenance category repair is required.

4-10. Troubleshooting Chart

<i>Item No</i>	<i>Trouble symptom</i>	<i>Probable trouble</i>	<i>(Checks and corrective measures</i>
1	With the ON switch set to ON, the FREQUENCY display does not illuminate and the AMPLITUDE meter pointer does not deflect when RF LEVEL control is rotated clockwise.	a. Defective fuse b. Line cord or plug defective c. Input power voltage selector switch incorrectly set.	a. Replace fuse (fig. 2-2). b. Check line cord and plug. c. Check input power voltage selector switch for proper setting (fig. 2-2).

CHAPTER 5

FUNCTIONING OF EQUIPMENT

5-1. Block Diagram (fig. 5-1)

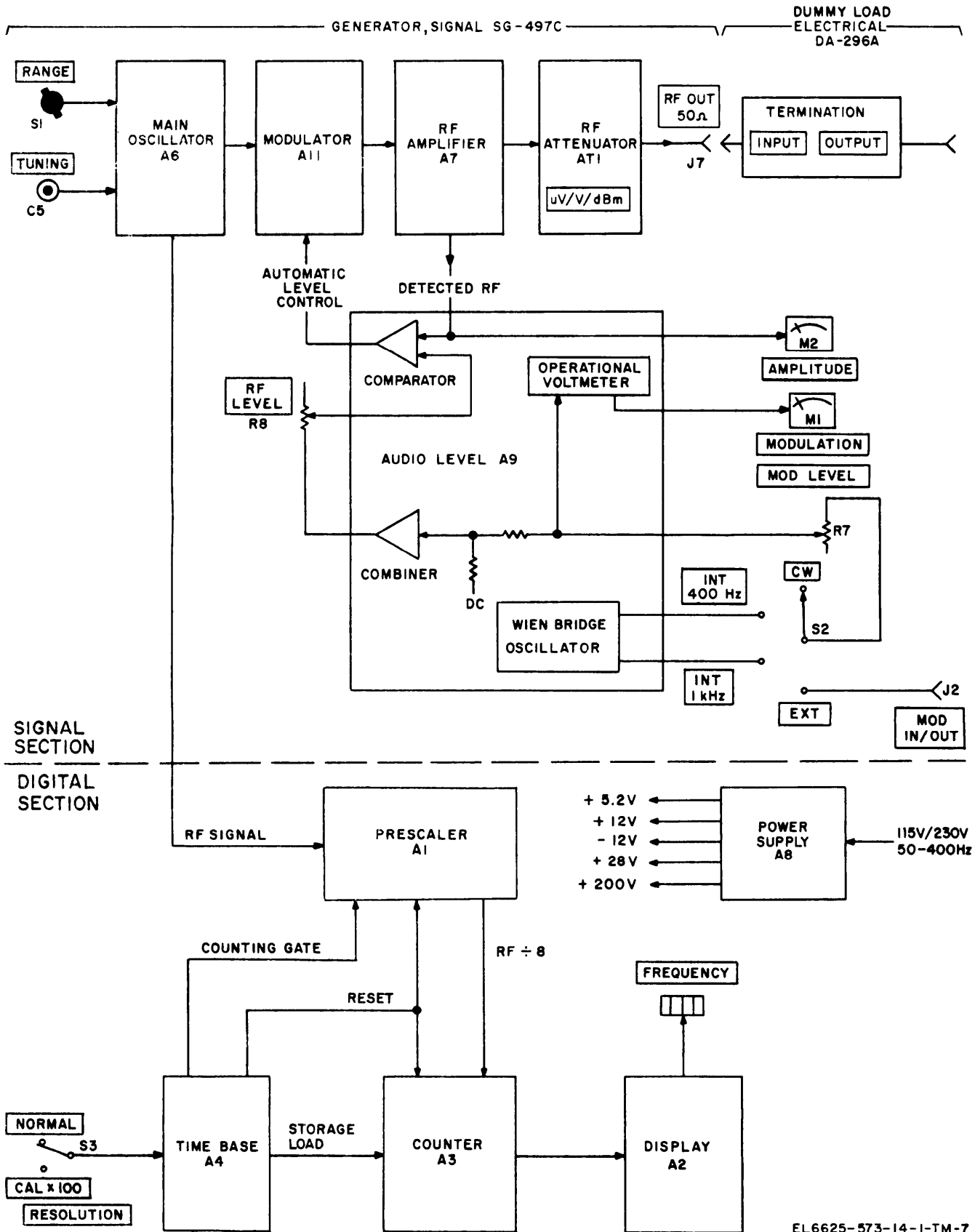
The signal generator provides accurate and stable frequencies from 50 kHz to 80 MHz. The signal generator produces a signal with harmonics that are at least 30 dB below the carrier. Noise and am. hum sidebands are 70 dB below the carrier, while residual fm is less than ± 1 ppm ± 20 Hz. The rf output is continuously adjustable from 0.1 microvolt (-127 dBm) to 3 volts rms ($+23$ dBm) into a 50-ohm load. A step attenuator provides 130 dB with 10 dB per step. A calibrated vernier provides an additional 18 dB of amplitude adjustment. Accuracy is within ± 0.5 dB at any frequency. The carrier can be amplitude-modulated internally or externally. Internal modulation is at 400 Hz or 1 kHz with a capability of 0 to 95 percent at output levels of 1 volt or less, and from 0 to 30 percent at output levels of 1 volt to 3 volts. External sine wave modulation capability extends from dc to 20 kHz, dependent upon the carrier frequency (f_c) as follows:

- 30 percent modulation up to 0.06 of f_c
- 70 percent modulation up to 0.02 of f_c

External square wave modulation frequency capability is 0.003 of f_c with a maximum of 3 kHz. Carrier envelope distortion with internal modulation is less than 0.5 percent at 30 percent modulation, and less than 3 percent at 70 percent modulation at an output level of 1 volt. Distortion with external modulation is less than 1 percent at 30 percent modulation, and less than 3 percent at 70 percent modulation at an output level of 1 volt. The percentage amplitude modulation, 0 to 100, is indicated on a front panel meter accurate to ± 5 percent of full-scale value from 0 to 90 percent, for modulating frequencies to 10 kHz and ± 10 percent of full scale for frequencies from 10 kHz to 20 kHz. In addition, the output frequency is monitored and displayed on a four-digit counter. The termination provides output impedances and voltage levels other than the normal 50-ohm output of the generator. Figure 5-1 is a block diagram for the SG-497C/GRM-50 and DA-296A/GRM-50. The

block diagram indicates the two major functional sections of the instrument, the Signal Section and the Digital Section. The rf signal is generated, modulated, and amplified in the Signal Section. The Digital Section measures the rf signal and displays its frequency. The Signal Section contains two oscillators, and hf oscillator for Bands 1 to 6 and a vhf oscillator for Band 7. The rf signal may be modulated by internal frequencies of 400 Hz and 1 kHz, or it may be modulated by an external signal with a frequency dc to 20 kHz. The rf signal, cw or modulated, is amplified by an rf amplifier and applied to the output through an attenuator. At the output of the rf amplifier is a detector which samples the output level. This level is compared with a reference level set by the RF LEVEL control. The error signal is applied to the modulator to maintain the output constant. Am. is also inserted into this leveling loop to obtain low am. distortion. The Digital Section contains a prescaler which accepts the rf signal from the oscillator in the Signal Section, divides it and applies it to a counter. The Digital Section also contains a 1-MHz crystal oscillator, frequency dividers, and logic circuitry which develop the time base and command signals used in the instrument. The generator has self-contained power supplies necessary for operating the internal circuitry. The termination is basically a voltage divider which provides three selectable output levels.

a. Main Oscillator, Assembly A6. The main oscillator assembly, figure FO-7, contains an hf and vhf oscillator, their respective leveling circuits, and an emitter follower output amplifier. The hf oscillator is of the Colpitts type and is used to generate the rf signal for the first 6 bands of the instrument, 50 kHz to 32 MHz. It consists of A6Q1, a dual gate FET, frequency determining components, emitter-follower A6Q3, and leveling circuit A6Q2, A6CR2, and A6CR3. The frequency determining components consist of variable capacitors IC5A and IC5B, varied by the front panel TUNING control, and a set of indicators switched in by the front panel



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Figure 5-1. Generator, Signal AN/GRM-50C, block diagram.

RANGE selector. The rf signal is applied to emitter-follower A6Q3 for distribution to other circuits of the instrument and to the oscillator leveling circuit. The rf signal is detected by means of A6CR2 and A6CR3 and applied to dc amplifier A6Q2. The output of A6Q2 is fed back to A6Q1, stabilizing the output of the oscillator. The oscillator output level is controlled by level cal adjustment A6R45 which determines the bias voltage for A6CR3 and, in turn, the output of A6Q2. In bands 1 through 6, the output of emitter follower A6Q3 is also routed through the normally closed contacts of A6K1 and applied to output emitter-follower A6Q4 and A6Q5. Emitter-follower A6Q4 supplies the rf signal to prescaler assembly A1 for digital processing. Emitter follower A6Q5 supplies the rf signal to Modulator-Assembly A10 for further processing. When the RANGE selector, 1S1, is indexed to band 7, which provides rf signals from 32 MHz to 80 MHz, the +12-volt supply is also switched from the hf oscillator circuitry to the vhf oscillator circuitry, and relay A6K1 is energized. The vhf oscillator is a Hartley oscillator and consists of A6Q6, frequency determining components 1C5C and A6L6; 1C5C is a section of the main tuning capacitor and controlled by the front panel TUNING control. The rf signal is applied to emitter-follower A6Q8 for distribution to other circuits of the instrument and to the leveling circuitry. The leveling circuitry consists of A6CR4, A6CR5, and dc amplifier A6Q7. The output of the dc amplifier is fed back to the base circuitry of A6Q6, stabilizing the output of the oscillator. The level of the vhf oscillator is adjusted by means of A6R46. The output of emitter-follower A6Q8 is also routed through the normally open contacts of energized relay A6K1 to output emitter-followers A6Q4 and A6Q5.

b. Modulator, Assembly A11. The modulator (fig. FO-11) accepts the output of the main oscillator, and applies it to one input of Differential Amplifier A11U1 while the other input remains fixed, A11Q1, in the emitter circuit of Differential Amplifier A11U1, functions as a constant current source. When a modulating signal is applied, the current availability from A11Q1 will vary in accordance with the modulating signal, keeping the outputs of Differential Amplifier A11U1 balanced. A11R22 optimizes the balance of the differential amplifier. The outputs of A11U1, which are balanced and out of phase, are applied to Differential Amplifier A11U2. The output of A11U2 is applied to emitter-follower

A11Q2 for application to rf Amplifier Assembly A7.

c. Audio Level Control, Assembly A9. This assembly (fig. FO-10) contains an audio oscillator and calibration circuits for front panel AMP-LITUDE and Modulation meters 1M2 and 1M1, respectively. Audio oscillator A9U1 is a Wien-bridge oscillator that generates the 400-Hz and 1-KHz signals used to provide internal modulation signals. The respective series and parallel resistive components are selected by front panel modulation selector 1S2 when set to INT 400 Hz and INT 1 kHz. Audio level control A9R3 adjusts the amplitude of the oscillator output, and A9DS1 stabilizes the oscillator output. The output of the audio oscillator is routed to front panel MOD LEVEL control 1R7 when the modulator selector is at INT 400 Hz or INT 1 kHz. When the modulation selector is at EXT, an external modulation signal is applied to the MOD LEVEL control. When the modulation selector is at CW, the input to the MOD LEVEL control is grounded. The output of the MOD LEVEL control is combined with a dc level at the input to A9U2, and the composite signal at the output of A9U2 is applied to front panel RF LEVEL control 1R8. The output of the RF LEVEL control is applied to one input of comparator A9U3. The other input to A9U3 is the detected rf from the rf Amplifier Assembly A7. The function of A9U3 is to detect difference between the levels set by the RF LEVEL and MOD LEVEL controls and the detected rf output. If there is a difference between these input signals, it will cause the output of A9U3, which controls the gain of the first differential amplifier in Modulator Assembly A11, to correct the rf output signal. The output of the MOD LEVEL control is also coupled through A9C8 to the operational voltmeter circuitry consisting of A9U4 and bridge elements A9CR2, A9CR3, A9R24, A9R30, and the front panel MODULATION meter. The detected rf used to stabilize the output is also used to drive the front panel AMP-LITUDE meter.

d. Rf Amplifier, Assembly A7. The output of Modulator Assembly A10 is amplified by the rf amplifier (fig. FO-8). The first stage is common-emitter amplifier, A7Q1, which drives a cascode amplifier comprised of A7Q2 and A7Q3. The output of the cascode amplifier is applied to the input of emitter-follower A7Q4 which drives two additional emitter-followers in parallel, A7Q5 and A7Q6. The output of emitter-followers A7Q5 and A7Q6 are connected to the input of output attenuator 1AT1. The output of emitter-

follower A7Q6 is also detected by A7CR1 and filtered by capacitor A7C22. When the RANGE MHz selector is in the three lowest frequency bands, an additional capacitor is connected across A7C22 with the value decreasing as the frequency of the band selected increases. This provides additional filtering for the lower radiofrequencies. The detected rf is applied to the leveling and AMPLITUDE meter circuitry on Audio Level Control, Assembly A9.

e. Prescaler, Assembly A1. The prescaler (fig. FO-3) accepts one output of the main oscillator and amplifies and shapes the signal by means of amplifiers A1Q1, A1Q2, A1Q3, A1Q4, and A1Q5. The amplifier output of A1Q5 is applied to the input of emitter-follower A1Q6 which drives A1U1, an integrated-circuit driver and counting gate. The output of counting gate A1U1, which is at the rf signal frequency, is now divided by 8 by means of three high-speed flip-flops, A1U2, A1U3 and A1U4. Each flip-flop divides its input frequency by 2. The output of A1U4, which is now the main oscillator frequency divided by 8, is applied to the base of A1Q7. Transistors A1Q7 and A1Q8 are connected as a differential amplifier switch which acts as an interface between the Emitter-Coupled Logic (ECL) devices of the Prescaler and the Transistor-Transistor Logic (TTL) devices of Counter Assembly A3. Two control signals are also applied to the Prescaler from Time Base Assembly A4. One signal, a high-logic level preset pulse is applied to dividers A1U2, A1U3, and A1U4 to insure their proper state prior to dividing. The other signal is a low-logic level counting gate applied to A1U1. As long as the counting gate is at its low-logic level, A1U1 is enabled and its input signal is passed on to A1U2. When the counting gate rises to its high-logic level, A1U1 inhibits any further signals from passing through it to A1U2. The time relationships of these signals and their durations depend upon the band of frequencies selected by the RANGE selector and are shown in figure 5-3.

f. Counter Assembly A3. The counter assembly (fig. FO-5) receives the divided rf signal from the prescaler. The input signal is applied to Logic Gate A3U8 which buffers it prior to application to counting circuitry A3U1 through A3U3. The counting circuitry consists of three decade counting elements, each yielding a division by 10. The counters are reset by the same reset signal applied to the prescaler. When the counting gate enables the prescaler, its output, the rf signal divided by 8, is applied to the counter circuitry. When the counter gate in-

hibits prescaler operation, the counting ceases and the counters remain in their resultant states which represent the frequency in a digital binary number representation. The output of each counter contains 4 bits of binary-coded-decimal (BCD) information from which the decimal display numbers will be decoded in Display A2. Associated with each counter is storage element A3U8 through A3U10. At the end of the counting period, a high-logic level storage load pulse, applied to the storage elements, transfers the digital frequency representation into the storage elements. The digital representation now resides in the storage elements and counting elements A3U1 through A3U3 may start another counting cycle. The function of the storage elements is to store the previous count which is routed to Display Assembly A2. The storage elements provide stable display information which is updated every counting cycle and eliminates the "rolling" of the display while the counters are enabled and counting.

g. Display, Assembly A2. The display (fig. FO-4) consists of four gas-filled display tubes. A2V1, A2V2, and A2V3 indicate digits 0-9 as required. A2V4 displays only the digit 1 when required. A2V3 normally displays the most significant digit while A2V2 and A2V1 display the succeeding least significant digits. A2V4 indicates the most significant digit, which will be a 1, at the high ends of the .32-1.0-MHz and the 3.2-10-MHz bands. Normally, A2V4 is blanked. Each display tube has associated with it a driver-decoder element. For A2V1 through A2V3, they are A2U1 through A2U3, respectively. The driver-decoders accept the 4-bit BCD information from the counter, convert the BCD information to decimal equivalents, and energize the decimal elements in their respective display tubes. The digit to be displayed is caused to illuminate by grounding its respective display tube element through the driver-decoders. An additional element incorporated into the display tubes will display a decimal point when energized. The decimal point in the FREQUENCY display is provided by grounding this element contained in the respective tube as follows:

<i>Range</i>	<i>Element grounded</i>
50-100 kHz -----	A2V1-13
100-320 kHz -----	A2V1-13
.32-1.0 MHz -----	A2V3-14
1.0-3.2 MHz -----	A2V2-14
3.2-10 MHz -----	A2V2-14
10-32 MHz -----	A2V1-14
32-80 MHz -----	A2V1-14

When the RESOLUTION switch is set to CAL

X100, A2V4 and all decimal points in the display are inhibited and will not illuminate.

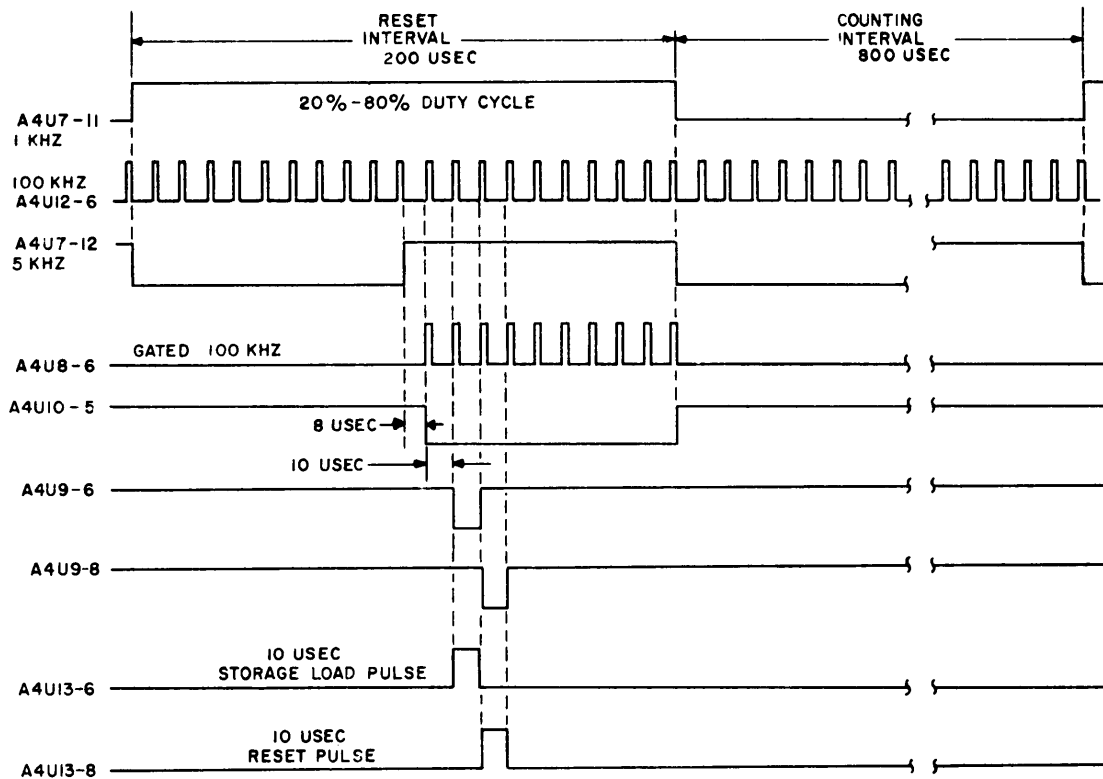
h. Time Base, Assembly A-4. The time base (figs. FO-6 and 5-2) generates the internal timing and control signals from a 1-MHz crystal oscillator. The crystal oscillator consists primarily of A4Y1, A4Q1, and A4Q2. The output of the oscillator goes to a portion of A4U1 for shaping and buffering prior to being sent to the rest of the time base circuitry. The 1-MHz output of A4U1-B goes to dividers A4U2 and A4U3, each of which divides its input frequency by 10, giving a total division at the output of A4U3 of 100. The output of A4U3 is 10 kHz and goes to A4U11-D. The 1-MHz output of A4U1-B also goes to A4U1-D. When the RESOLUTION switch is at NORMAL, the 1-MHz signal is gated through A4U1-D and A4U11-C to divider A4U4. When the RESOLUTION switch is at CAL X100, the 1-MHz signal is inhibited from going through A4U1-D and A4U11-C, and the 10-kHz signal at the input of A4U11-D is enabled to go to divider A4U4. The selection made by the RESOLUTION switch determines the basic signal to be used for time base signals 1 MHz or 10 kHz and appears at the output of A4U11-C. The basic time base frequency is now modified by the RANGE switch depending upon what band of frequencies is selected. The RANGE selector enables the proper logic element corresponding to the frequency band selected as follows:

<i>Frequency band selected</i>	<i>Logic element enabled</i>
50-100 kHz -----	A4U12-A
100-320 kHz -----	A4U12-A
.32-1.0 MHz -----	A4U12-A
1.0-3.2 MHz -----	A4U12-D
3.2-10 MHz -----	A4U12-D
10-32 MHz -----	A4U11-A
32-80 MHz -----	A4U11-A

The basic time base frequency for the bands of 10-32 MHz and 32-80 MHz is 1 MHz and is gated through A4U11-A, A4U11-B, A4U12-C, and A4U12-B. The basic time base frequency for the bands of 1.0-3.2 MHz and 3.2-10 MHz is 100 kHz and this is obtained from the output of A4U4, a divide-by 10 element. The input to A4U4 is the 1-MHz output of A4U11-C. The 100-kHz output of A4U4 is gated through A4U12-D, A4U11-B, A4U12-C, and A4U12-B. For the three remaining low frequency bands, the basic time base frequency is 10 kHz and is obtained by dividing the 100 kHz output of A4U4 by 10 by means of A4U5. The output of A4U5, which is 10 kHz, is gated through A4U12-A and A4U12-B. The basic time base frequency appears at the output of A4U12-B and may be 1 MHz, 100 kHz or 10

kHz as determined by the RANGE selector. The output of A4U12-B is routed to two circuit elements, A4U8-A and A4U6. A4U6 divides its input by 10 and its output goes to another divide-by 10 element, A4U7. The output of A4U7-11 is the input to A4U6 divided by 100 and has a 20-80 duty cycle. The output of A4U7-11 is at a positive high-logic level for 20 percent of its cycle and, at a low-logic level, for 80 percent of its cycle. The low-logic level is the counting gate which enables the Prescaler, Assembly A1, and may be 80 usec, 800 usec, or 8 msec in duration. During the 20 percent of the duty cycle when the logic level is high, the storage load and reset pulses are generated. Logic elements A4U9 and A4U10 form a shift register that is driven by logic element A4U8. When the output of A4U7-11 is at its high-logic level, it is applied to A4U10-4 and enables the shift register. The output of A4U7-11 also enables logic element A4U8 which receives two other inputs, one at the basic time base frequency applied to A4U8-1 and the basic time base frequency divided by 20 which is applied to A4U8-12. The input to A4U8-12 is obtained from A4U7-12 which is the output of A4U6 divided by 2. The output of A4U6 is the basic time base frequency divided by 10; therefore, the output of A4U7-12 is the basic time base frequency divided by 20. When A4U8 is enabled by A4U7-11 and the signal at A4U8-12 goes to its positive logic level, the input to A4U8-1 will be gated through A4U8 to the shift register. The shift register develops two pulses; a storage load and a reset. The storage load pulse and the reset pulse are inverted to positive-going pulses and buffered by logic elements A4U13-A and A4U13-B, respectively. The output logic levels of A4U13-A and A4U13-B are at their low state except during the storage load and reset intervals. The storage load pulse is distributed to the counter where it transfers the counter information into the counter storage. The reset pulse is distributed to the Prescaler and the Counter to reset the counting elements. Figure 5-2 illustrates the Time Base signals, their relationships, and time durations.

i. Power Supply, Assembly A8. The power supply (fig. FO-9) develops the regulated and unregulated voltages required by the instrument. The ac input voltages are supplied by the secondary windings of transformer 1T1. The primary circuit of 1T1 contains a selector switch, 1S8, which allows 1T1 to be energized from a 115-vac or 230-vac source. Secondary windings 16-17 supply a conventional voltage



NOTES:

1. VALUES OF TIME AND FREQUENCY INDICATED ARE FOR THE FOLLOWING POSITIONS OF THE RANGE SWITCH:
 - 1.0-3.2 MHZ , 3.2-10 MHZ
2. FOR THE FOLLOWING POSITIONS OF THE RANGE SWITCH, FREQUENCIES ARE $\div 10$, TIMES ARE $\times 10$:
 - 50-100 KHZ , 100-320 KHZ , .32-1.0 MHZ
3. FOR THE FOLLOWING POSITIONS OF THE RANGE SWITCH, FREQUENCIES ARE $\times 10$, TIMES ARE $\div 10$:
 - 10-32 MHZ , 32-80 MHZ

EL6625-573-14-1-TM-8

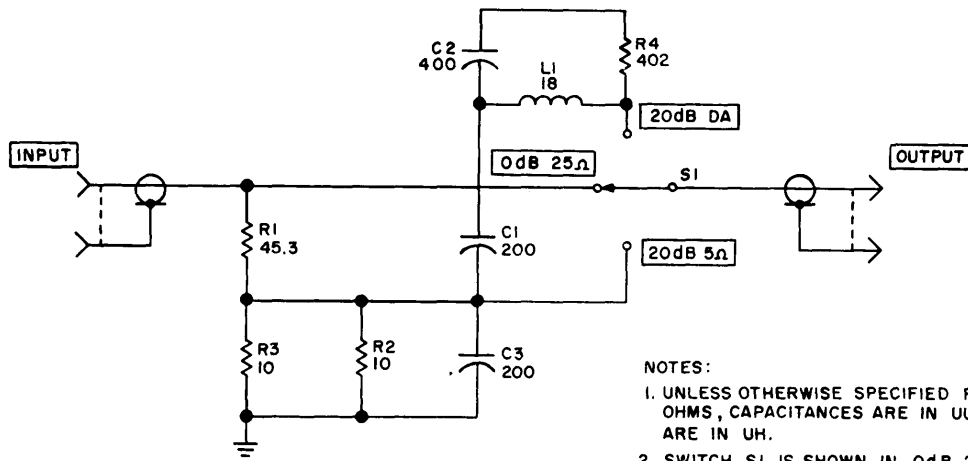
Figure 5-2. Generator, Signal SG-497/GRM-50, time base timing diagram.

doubler, consisting of A8CR12, A8CR13, A8C12, and A8C13, which develop +200 volts for use by the display. Secondary windings 6-8 with 7 as the grounded center tap, supply the +12-volt regulator and the -12-volt regulator. The +12-volt regulator circuit is a standard series regulator with current limiting and adjustment A8R11. The +12-volt regulator output provides the reference for -12-volt, +28-volt, and +5.2-volt regulators and, when A8R11 is set for the proper output of the +12-volt regulator, all

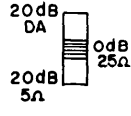
other regulators should supply their proper voltages. Secondary windings 9-5, with 7 as the grounded center tap, supply the +28-volt regulator. Secondary windings 10-12, with the return to center tap 11, supply the +5.2-volt regulator.

j. The overall wiring diagram for the signal generator is shown in figure FO-12.

k. The schematic diagram for the termination, Dummy Load, Electrical DA-296A/GRM-50, is shown in figure 5-3.



- NOTES:
1. UNLESS OTHERWISE SPECIFIED RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UUF, INDUCTANCES ARE IN UH.
 2. SWITCH S1 IS SHOWN IN 0dB 25Ω POSITION.



EL6625-573-14-1-1M-9

Figure 5-3. Dummy Load, Electrical DA-296A/GRM-50, schematic diagram.

CHAPTER 6

DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

Section I. GENERAL

6-1. General Precautions

Observe the following precautions carefully when servicing the generator:

a. Be careful when the cover or bottom plate is removed from the generator; dangerous voltages are exposed.

b. When servicing the generator, do not disturb the settings of any adjustments.

c. When changing an assembly, or cover, that is held by screws, always replace the lockwashers.

d. Careless replacement of an assembly often makes new faults inevitable. Note the following points:

(1) Before an assembly is unsoldered, note the position of the leads. Tag each lead removed from the assembly.

(2) Be careful not to damage leads or their connectors by pushing or pulling them improperly.

(3) When using a soldering iron to remove an assembly, be careful not to expose assembly parts to the heat of the iron.

(4) Do not allow drops of solder to fall into parts of the chassis because they may cause short circuits.

(5) A carelessly soldered connection may create new faults. It is important to make well-soldered joints because a poorly soldered joint is one of the most difficult faults to find.

(6) Replace assemblies in the circuit in exactly the same position occupied by the original assembly. Give particular attention to proper grounding and leaddress when replacing an assembly. Use the same ground as in the original wiring. Failure to observe these precautions may result in incorrect operation.

(7) Do not disturb any of the alignment adjustments. If an alignment adjustment is necessary to return the generator to operating status, higher maintenance category action is required.

6-2. Disassembly and Reassembly Instructions

Disassembly and reassembly instructions for

the generator are given in paragraphs 6-3 through 6-8. Assembly locations are shown in figures 7-1 and 7-2.

NOTE

Do not disassemble the instrument beyond the point at which the necessary maintenance or repair action can be accomplished.

6-3. Removal of Top Cover

The top cover is a U-shaped cover and is removed by removing six screws, with their respective flat washers and lockwashers, from the sides of the instrument.

6-4. Removal of Bottom Cover

The bottom cover is a flat plate. To remove the bottom cover, remove the nine screws with their respective flat washers and lockwashers.

6-5. Removal of Display Cover

Removal of this cover will allow access to the Display, Assembly A2. The display cover is removed by removing four screws and their respective lockwashers.

6-6. Removal of Oscillator Cover

CAUTION

Before removing this cover, rotate the TUNING control completely counterclockwise.

Removal of this cover will allow access to the Main Oscillator, Assembly A6, and chassis mounted tuning elements. This cover is removed by removing eight screws and their respective lockwashers located along the sides and rear lip of the cover.

6-7. Removal of Digital Cover

Removal of this cover will allow access to the Prescaler, Assembly A1; Counter, Assembly A3 and Time Base, Assembly A-4. To remove this cover, proceed as follows:

a. Remove four screws, 3/8" in length, with

their respective lockwashers, from front and rear lips of cover.

b. Remove 14 screws, 1/4" in length, with their respective lockwashers, from the side lips of the cover.

6-8. Removal of Rf Cover

Removal of this cover will allow access to the rf Amplifier, Assembly A7, and the Modulator, Assembly All. To remove this cover, proceed as follows:

a. Remove the rear panel power cable brackets by removing the four hex nuts and their respective lockwashers.

b. Remove six screws, 3/8" in length, running vertically on the rear panel with their respective lockwashers.

c. Remove eight screws, 3/8" in length, running across the rear panel, with their respective lockwashers. These screws retain a threaded bar which, in turn, retains the upper lip of the rf cover to the internal surface of the rear panel.

d. Remove 12 screws, 1/4" in length, with their respective lockwashers, from the bottom and side lips of the rf cover.

6-9. Voltage and Resistance Measurements

Normal voltage and resistance readings are given in figures 6-1 through 6-10. These figures are to be used in conjunction with the troubleshooting chart in paragraph 6-14. Part locations are given in figures 7-1 through 7-12.

6-10. Dc Resistances of Transformers and Coils

a. The dc resistance data table ((5) below) is provided as an aid to troubleshooting. When using the data, observe the following:

(1) Before making resistance measurements of the winding, determine that the faulty operation is due to a defective transformer or coil. To do this, follow the troubleshooting procedures (para 6-13) and make voltage and resistance checks (para 6-3 and figs. 6-3 through 6-12).

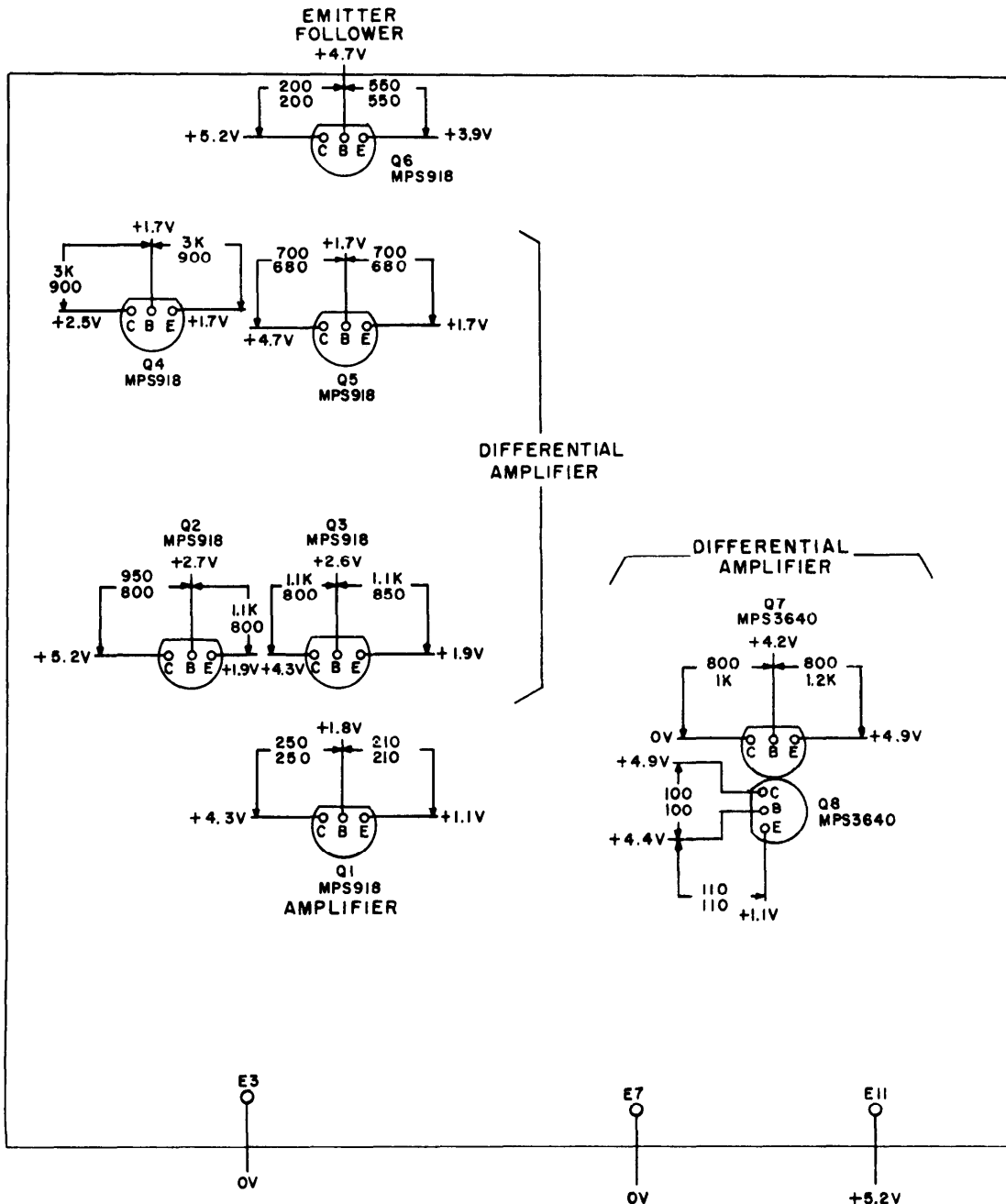
(2) Bear in mind that, due to rather broad winding tolerances during manufacture, resistances may vary from one transformer or coil to another; the chart values are typical average values.

(3) The normal resistance of replacement transformers and coils may differ greatly from the values given in the table.

(4) For oscillator coils 1L1 through 1L5, 1L7, and A6L6, a resistance reading will be obtained when the RANGE switch is in the position indicated next to the coil reference designation. The coils not associated with a particular frequency band are shorted out by the RANGE switch and will indicate a zero resistance reading.

(5) The dc resistances are as follows:

<i>Transformer or Coil</i>	<i>Terminals</i>	<i>Ohms</i>
1T1	1-2	12
	3-4	12
	5-6	0.6
	6-7	0.6
	7-8	0.6
	8-9	0.6
	10-11	0.2
	11-12	0.2
	16-17	13
1L7 (50-100 kHz)		200
1L1 (100-320 kHz)		50
1L2 (.32-1.0 MHz)		13
1L3 (1.0-3.2 MHz)		4
1L4 (3.2-10 MHz)		0.2
1L5 (10-32 MHz)		0
A6L6 (32-80 MHz)		0
A1L1		0.2
A1L2		0.8
A1L3		0.2
A1L4		0
A6K1		300
A6L7		2
A6L8		2
A6L9		2
A7L1		28
A7L2		0.2
A7L3		30
A7L4		30
A11L1		0.2
A11L2		0.2
A11L3		0.2
A11L4		0.1

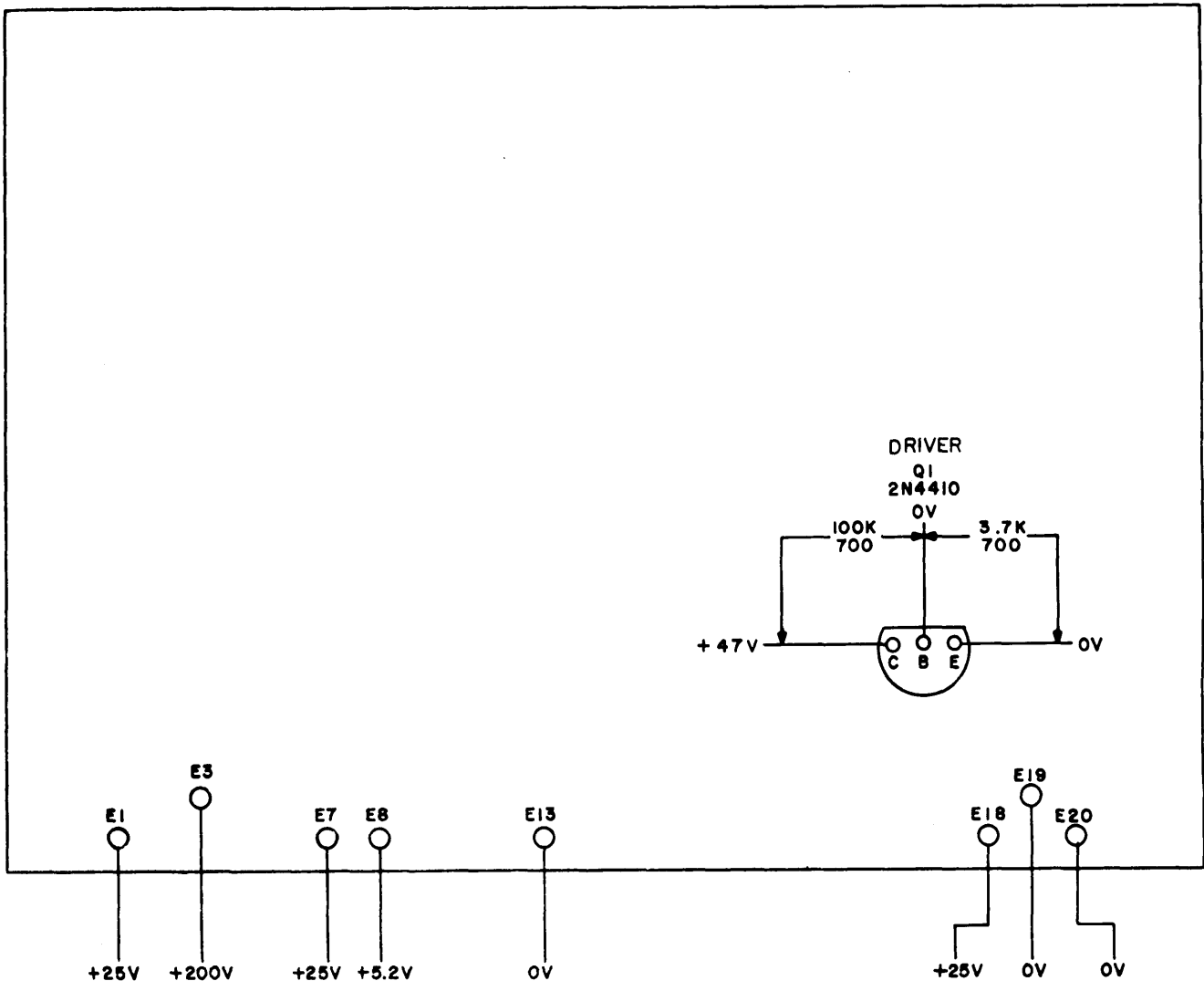


NOTES:

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - A) OUTPUT FREQUENCY IS 6MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT [CW] UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
4. PREFIX ALL REFERENCE DESIGNATIONS WITH A1.

EL6625-573-14-1-TM-10

Figure 6-1. Prescaler A1, voltage and resistance diagram.

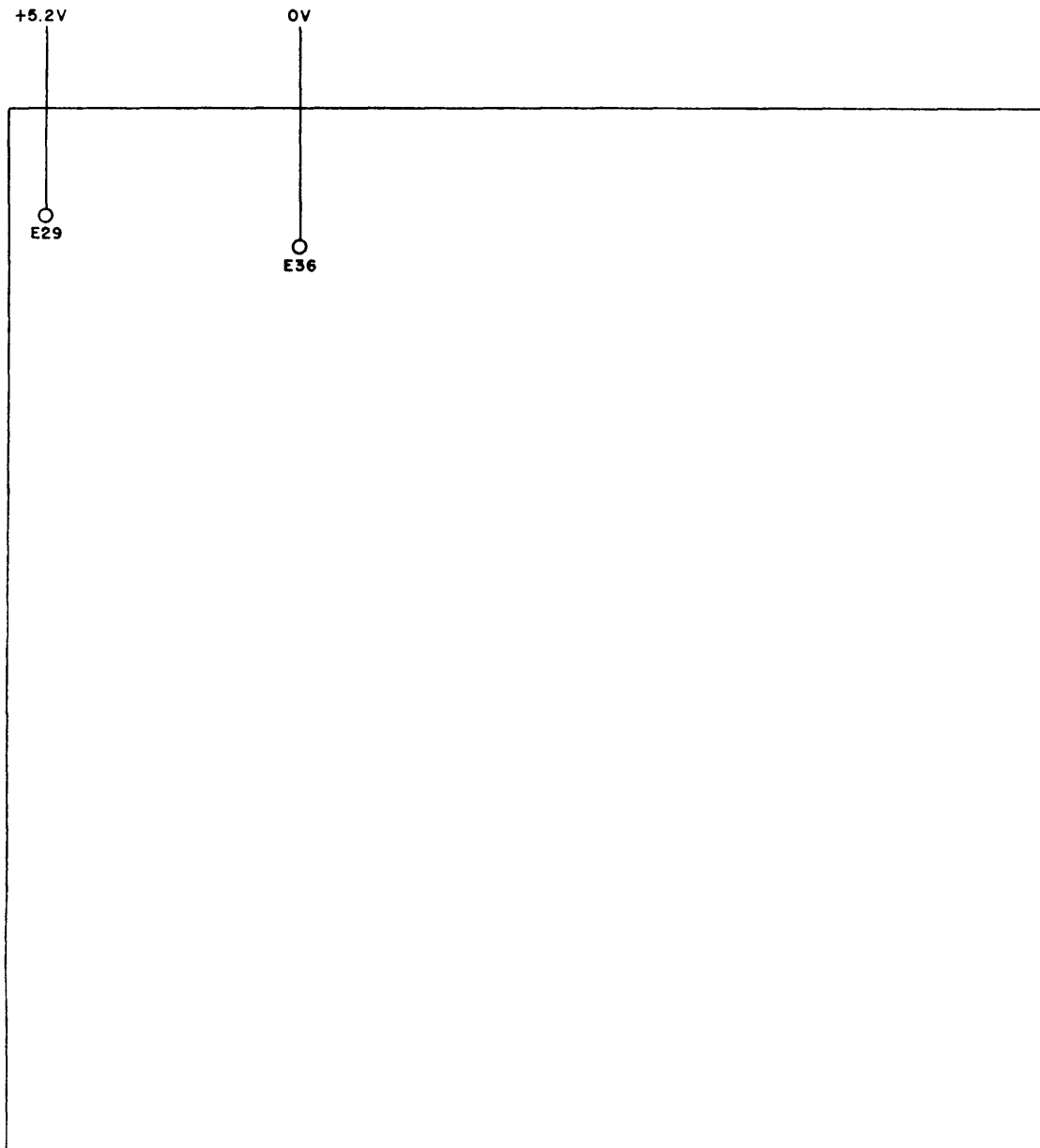


NOTES:

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - A) OUTPUT FREQUENCY IS 8MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
4. PREFIX ALL REFERENCE DESIGNATIONS WITH A2.

EL6625-573-14-1-TM-11

Figure 6-2. Display A2, voltage and resistance diagram.



NOTES:

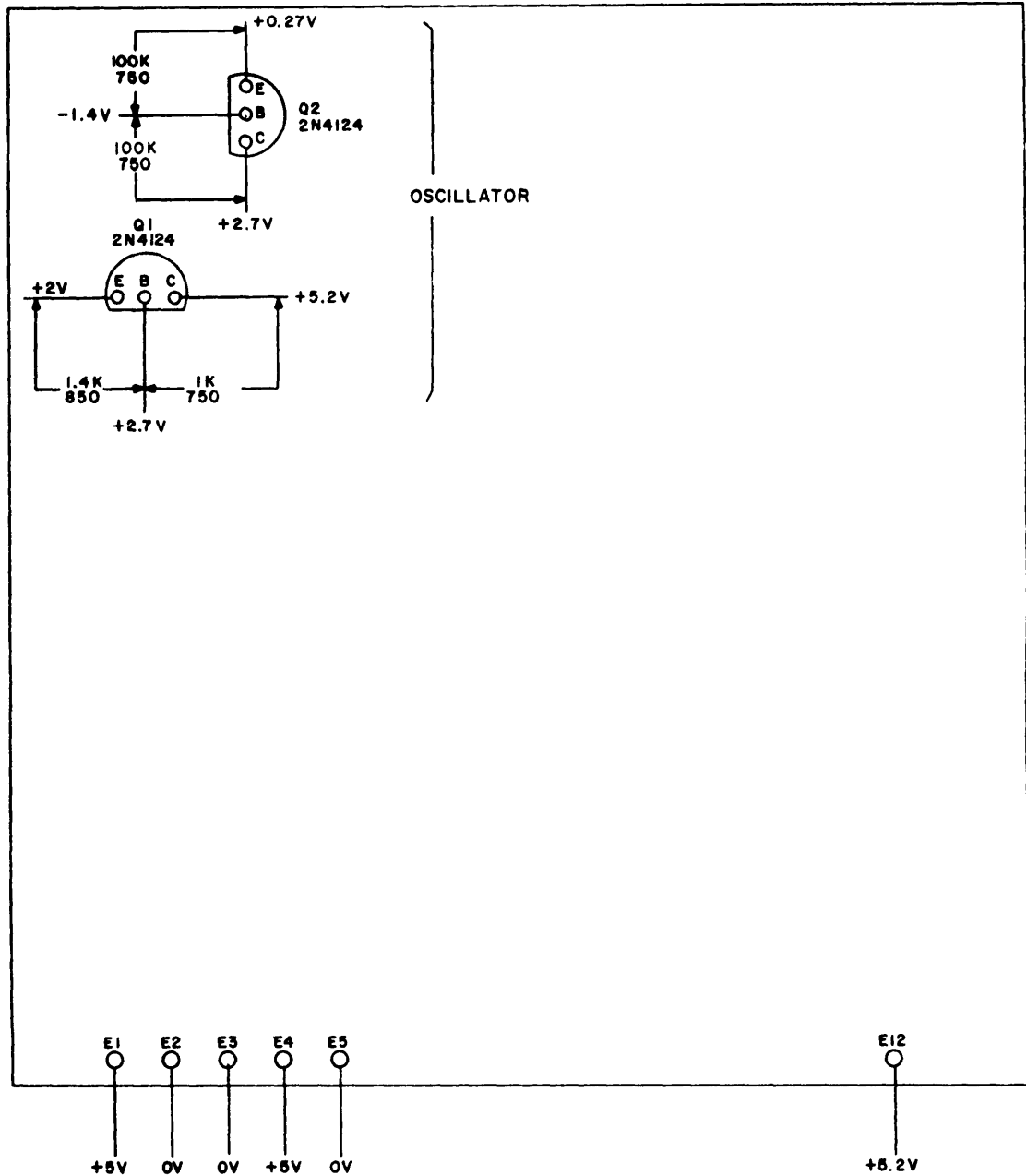
1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS.

- A) OUTPUT FREQUENCY IS 0MHZ UNLESS OTHERWISE NOTED.
- B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
- C) MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.

2. PREFIX ALL REFERENCE DESIGNATIONS WITH A3.

EL6625-573-14-1 TM 12

Figure 6-3. Counter A3, voltage and resistance diagram.

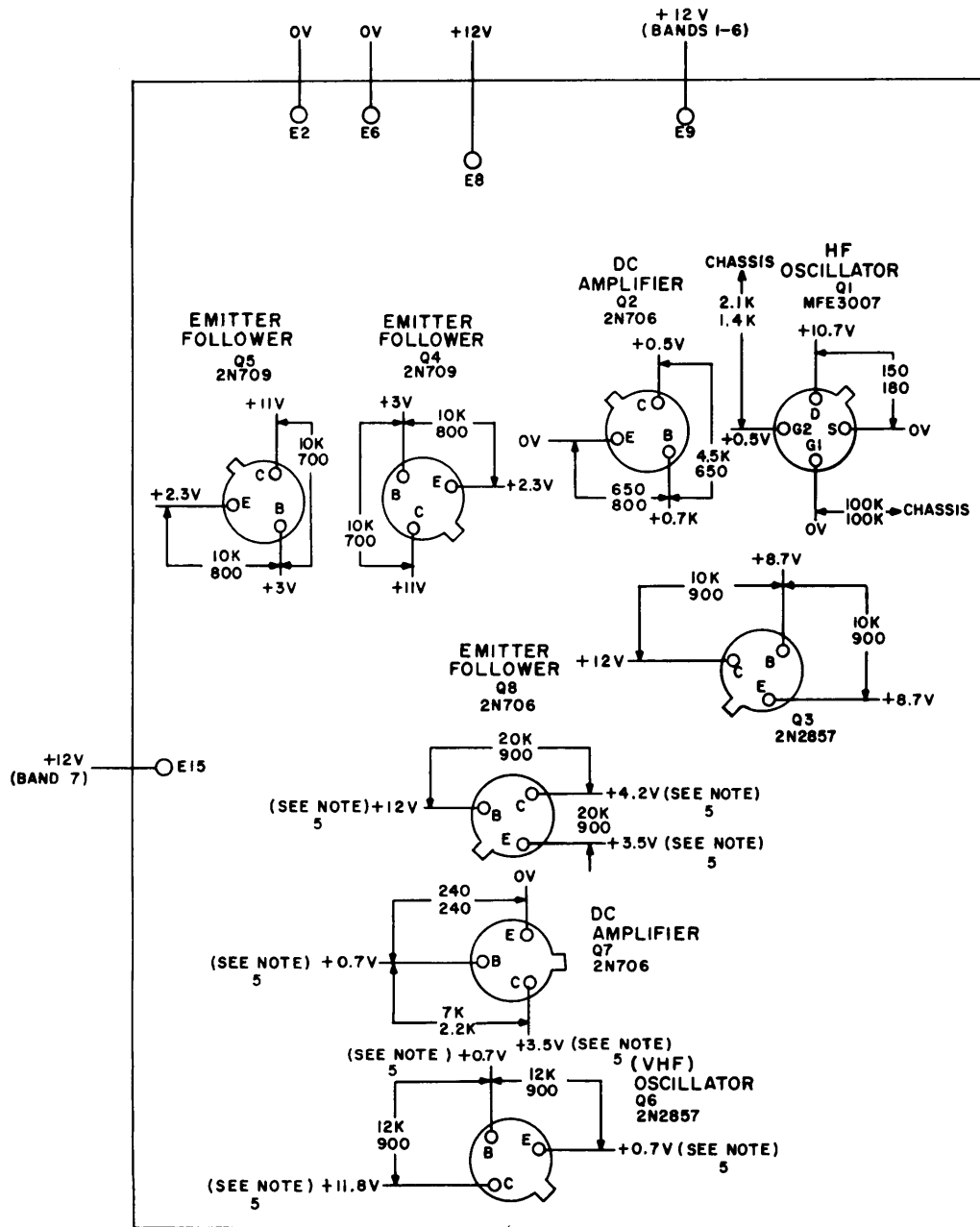


NOTES:

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - A) OUTPUT FREQUENCY IS 8-MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTOR LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
4. PREFIX ALL REFERENCE DESIGNATIONS WITH A 4.

EL6625-573-14-I-TM-13

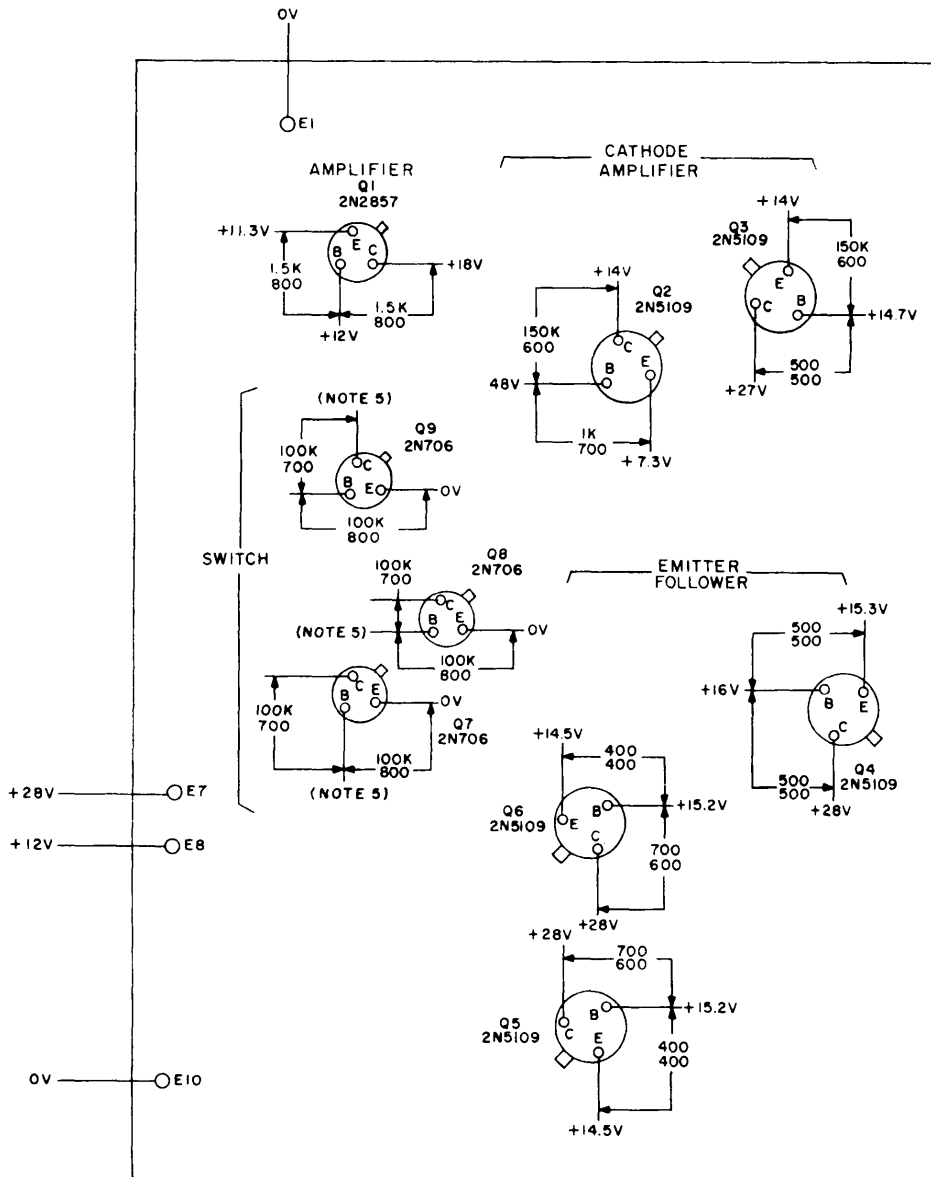
Figure 6-4. Time Base A4, voltage and resistance diagram.



- NOTES:**
- ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - OUTPUT FREQUENCY IS 8MHZ UNLESS OTHERWISE NOTED.
 - OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.
 - ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
 - WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R x 100.
 - PREFIX ALL REFERENCE DESIGNATIONS WITH A6.
 - RANGE** SWITCH SET TO **32-80 MHZ** POSITION FOR VOLTAGE MEASUREMENTS.

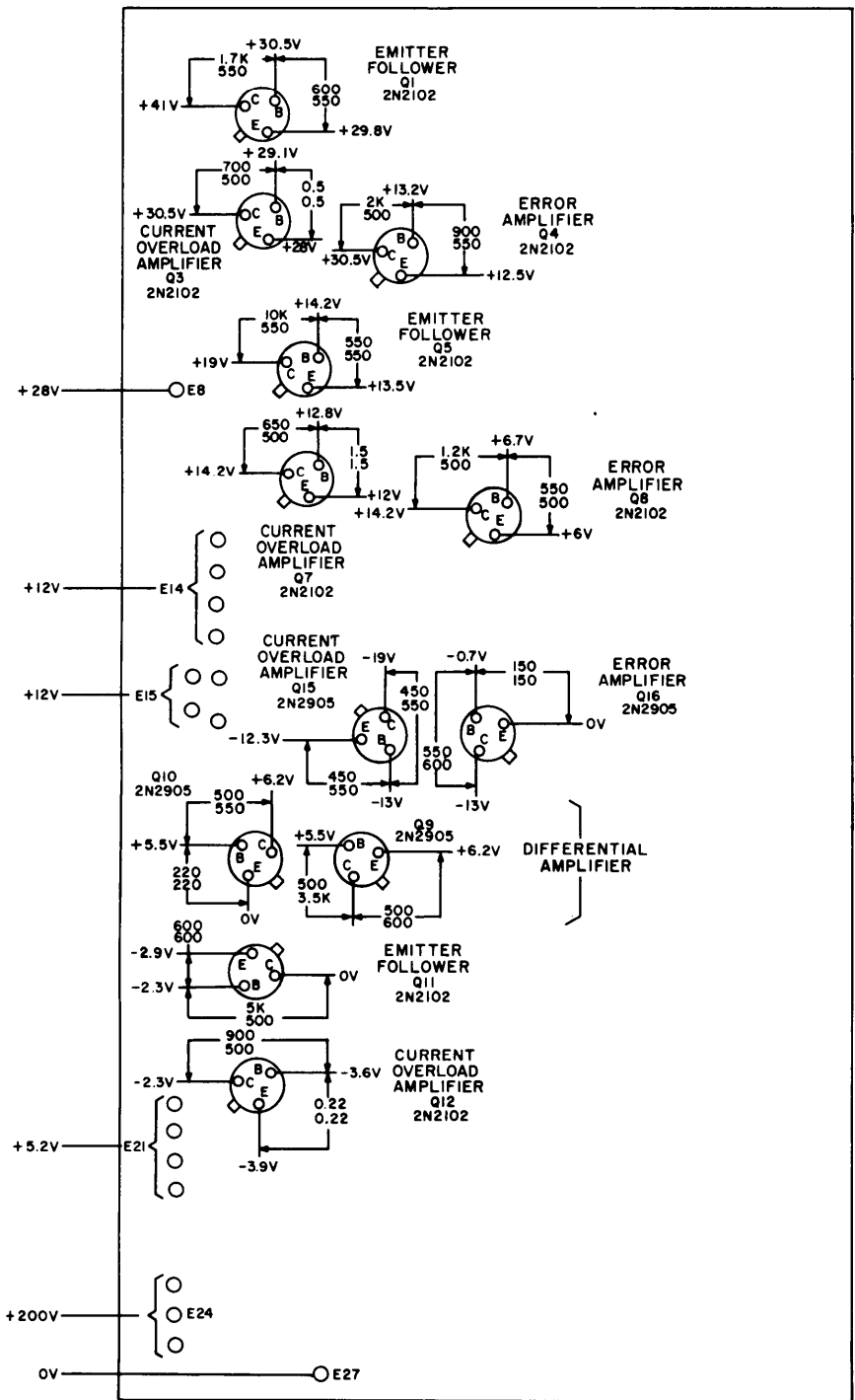
EL6625-573-14-1-TM-14

Figure 6-5. Oscillator, A6, voltage and resistance diagram.



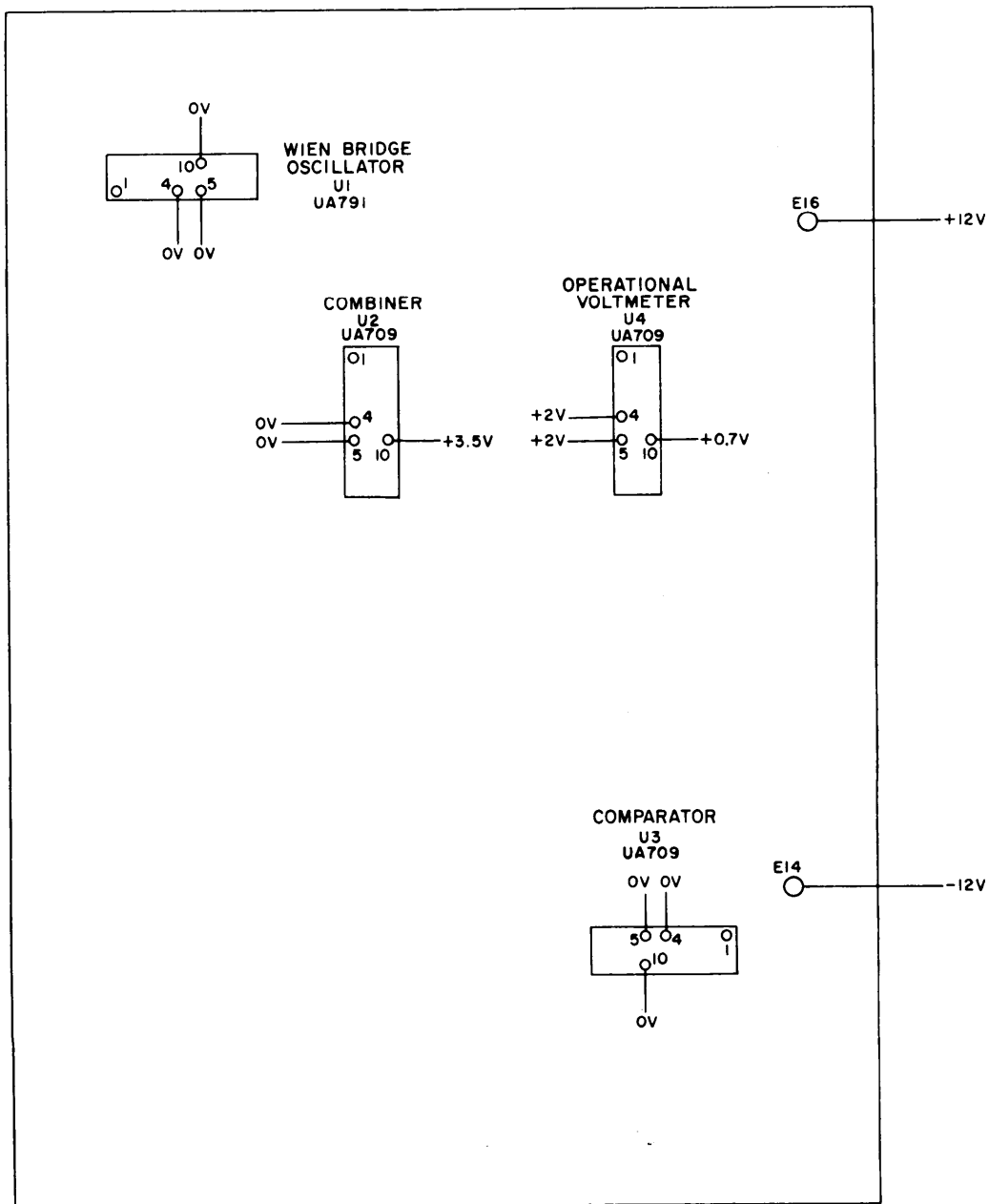
- NOTES:
- ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - OUTPUT FREQUENCY IS 8MHZ UNLESS OTHERWISE NOTED.
 - OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.
 - ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
 - WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
 - PREFIX ALL REFERENCE DESIGNATIONS WITH A7.
 - WHEN **RANGE** SWITCH IS PLACED IN **50-100 KHZ**, **100-320 KHZ**, OR **320-1.00 MHZ**, THE BASES AND COLLECTORS OF Q7, Q8, AND Q9 WILL READ +0.7V AND 0V RESPECTIVELY.
- EL6625-573-14-1-TM-15

Figure 6-6. Rf amplifier A7, voltage and resistance diagram.



- NOTES:
- ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS:
 - A) OUTPUT FREQUENCY IS 60MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT [CW] UNLESS OTHERWISE NOTED.
 - ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
 - WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
 - PREFIX ALL REFERENCE DESIGNATIONS WITH A8.
- EL6625-573-14-1-TM-16

Figure 6-7. Power supply A8, voltage and resistance diagram.

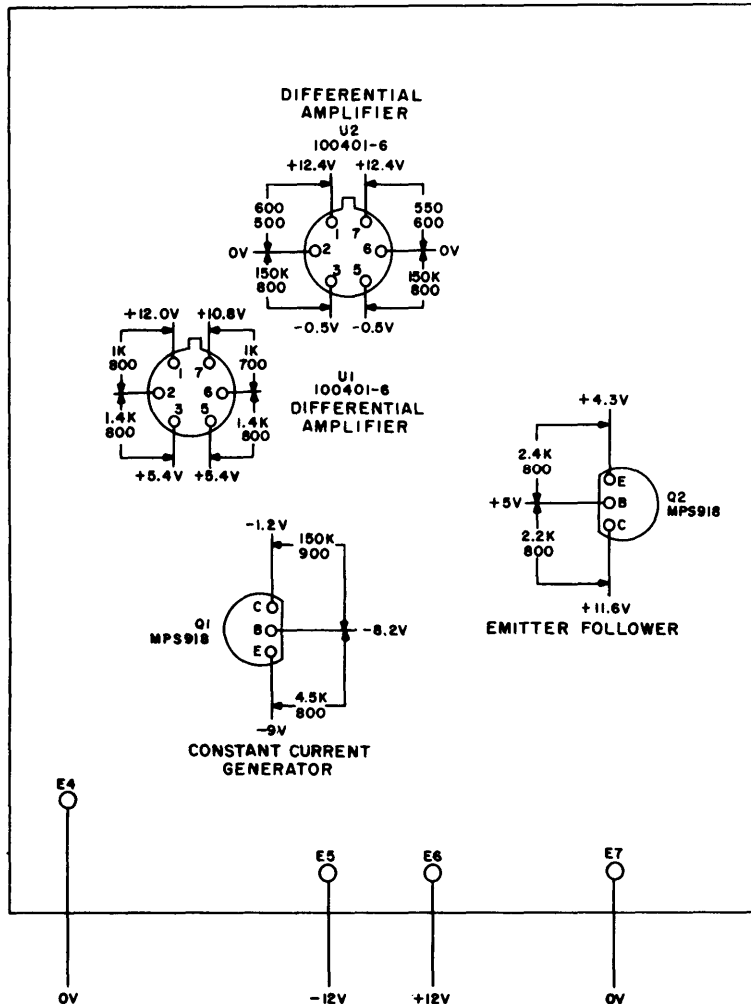


NOTES:

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - A) OUTPUT FREQUENCY IS 8MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT **[CW]** UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R x 100.
4. PREFIX ALL REFERENCE DESIGNATIONS WITH A 9.

EL6625-573-14-1-TM-17

Figure 6-8. Audio level A9, voltage and resistance diagram.

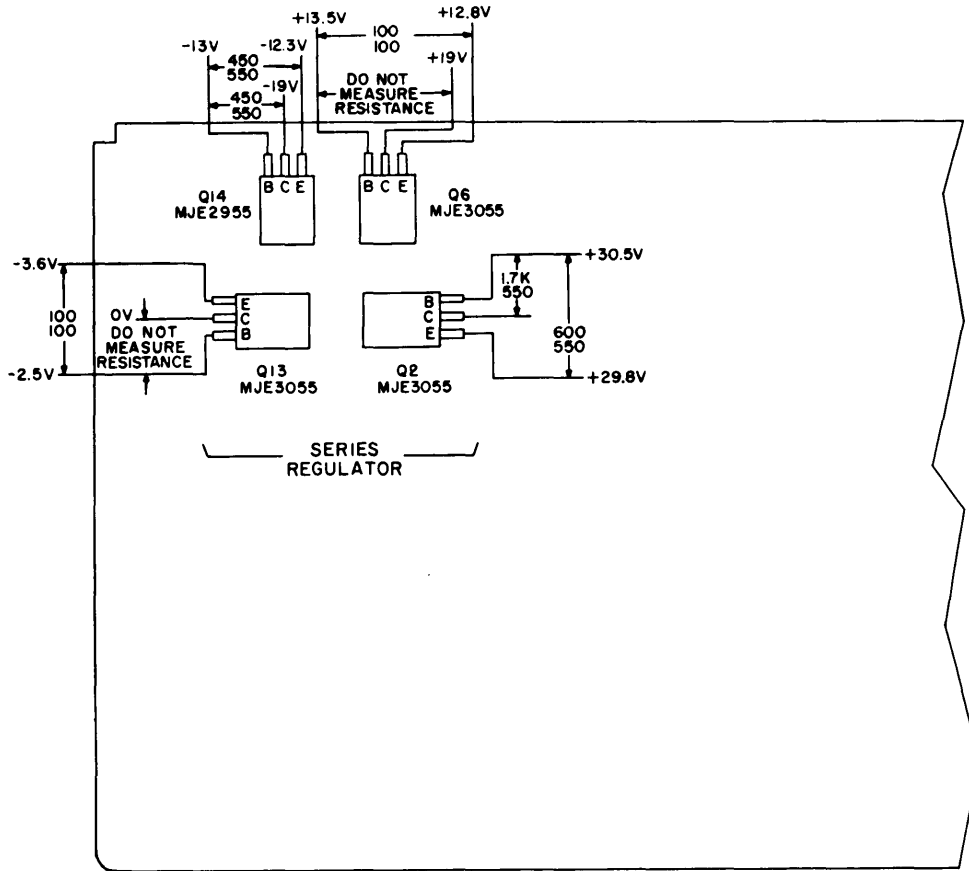


NOTES:

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS.
 - A) OUTPUT FREQUENCY IS 6MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 50 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT **CW** UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GEWRATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.
4. PREFIX ALL REFERENCE DESIGNATIONS WITH A11.

EL6625-573-14-1-TM-18

Figure 6-9. Modulator A11, voltage and resistance diagram.



NOTES :

1. ALL VOLTAGE MEASUREMENTS ARE FROM DESIGNATED TERMINAL TO CHASSIS USING MULTIMETER ME-26A/U, WITH GENERATOR CONTROLS SET AS FOLLOWS,
 - A) OUTPUT FREQUENCY IS 8MHZ UNLESS OTHERWISE NOTED.
 - B) OUTPUT TERMINATED INTO 80 OHM RESISTIVE LOAD AND OUTPUT LEVEL ADJUSTED FOR 1 VOLT RMS.
 - C) MODULATION SELECTOR SET AT **[CW]** UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE MEASUREMENTS ARE MADE WITH SUBASSEMBLYS INSTALLED IN MAIN GENERATOR ASSEMBLY AND WITH POWER OFF.
3. WHERE TWO RESISTANCE READINGS BETWEEN TERMINALS ARE GIVEN, THE TOP READING IS THE RESISTANCE MEASURED WITH THE NEGATIVE OHMMETER LEAD CONNECTED TO THE BASE ; THE BOTTOM READING IS THE RESISTANCE MEASURED WITH THE POSITIVE OHMMETER LEAD CONNECTED TO THE BASE. BE SURE TO CHECK THE ACTUAL POLARITY OF THE OHMMETER LEADS BEFORE MAKING MEASUREMENTS. OHMMETER RANGE USED IS R X 100.

EL6625-573-14-1-TM-19

Figure 6-10. Generator, Signal SG-497C/GRM-50, chassis voltage and resistance diagram.

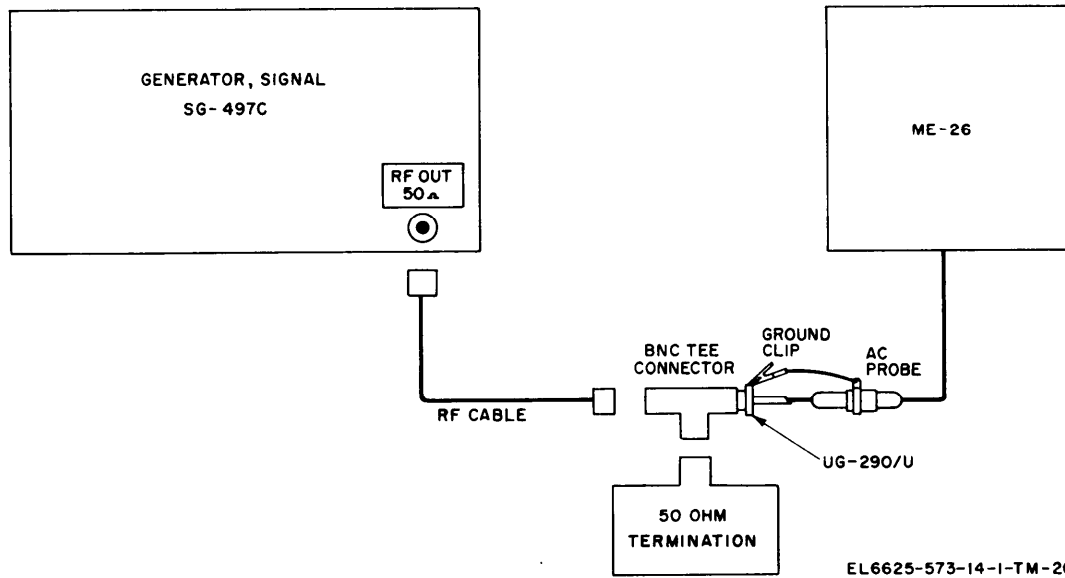


Figure 6-11. Test connections for rf signal output test.

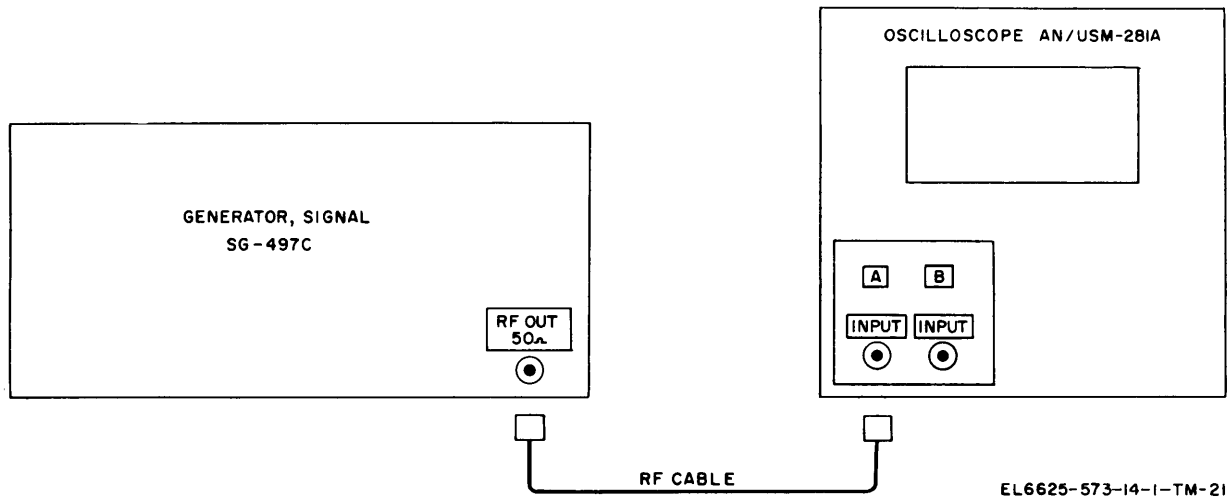


Figure 6-12. Test connections for modulation test.

Section II. TROUBLESHOOTING

6-11. Tools and Test Equipment

The items of test equipment required for direct support maintenance of Generator, Signal

AN/GRM-50C are listed below. Technical manuals and common names associated with each item are also listed.

Test equipment	Technical manual	Common name
Multimeter ME-26 A/U	TM11-6625-200-12	Multimeter
Oscilloscope AN-USM-281A	TM 11-6625-1703-15	Oscilloscope
BNCTEE UG-274/U		TEE connector
BNC Connector UG290/U		BNC connector

<i>Test equipment</i>	<i>Technical manual</i>	<i>Common name</i>
Termination, 50 ohms -----	Texscan TF-50 -----	50-ohm termination
Rf cables -----	Paragraph 2-5 -----	R f c a b l e

WARNING

Certain points throughout the chassis of the signal generator operate at 200 volts. Do not touch these points while power is being applied to the signal generator. Be very careful when handling or testing any part of the signal generator while it is connected to the power source.

6-12. General Instructions

Direct support and general support maintenance troubleshooting includes all the techniques outlined for organizational maintenance and any special or additional techniques required to isolate a defective part.

6-13. Organization of Troubleshooting Procedures

a. *General.* The first step in servicing a defective signal generator is to determine and evaluate the fault. Determining the fault involves knowing what operational characteristic of the signal generator is missing or has deteriorated to an unusable level. Evaluating the fault is to determine what functional areas of the signal generator might cause a fault of this nature. The second step is to localize the fault. Localization means tracing the fault to one of the major removable assemblies. Some faults, such as burned-out resistors, arcing, and shorted transformers, often can be located by sight, smell, and hearing. The majority of faults, however, must be isolated by signal tracing and by checking voltages and resistances.

b. *Fault Sectionalization, Localization and Isolation.* Listed in (1) through (3) below is a group of tests arranged to simplify and to reduce unnecessary work and to aid in tracing a trouble to a specific assembly. Follow the procedure in the sequence given. A service man must be careful to cause no further damage to the signal generator while it is being serviced.

(1) *Visual inspection.* The purpose of visual inspection is to locate any visible trouble. Through inspection alone, the repairman frequently may discover the trouble or determine the circuit in which the trouble exists. This inspection is valuable in avoiding additional damage to the signal generator which occurs through improper servicing methods and in forestalling future failures.

(2) *Troubleshooting chart.* The trouble symptoms listed in this chart (para 6-14) will aid greatly in locating troubles.

(3) *Intermittents.* In all these tests, the possibility of intermittent conditions should not be overlooked. If present, this type of trouble often may be made to appear by tapping or jarring the equipment. It is possible that some external connections may cause the trouble. Test wiring for loose connections and move wires and components with an insulated tool, such as a pencil or fiber rod. This may show where a faulty connection or component is located.

(4) *Resistor Induction, and capacitor color code diagrams.* Color code diagrams for resistors inductors, and capacitors (figs. FO-1 and FO-2) provide pertinent resistance, inductor, capacitance, voltage rating, and tolerance information.

6-14. Troubleshooting Chart

The following chart is supplied as an aid in locating trouble in the signal generator. It lists the symptoms which the repairman observes, either visually or audibly, while making tests. The chart also indicates how to sectionalize the trouble quickly to one of the major assemblies. After the trouble has been localized to a major assembly, voltage and resistance measurements ordinarily should be sufficient to verify the malfunction. Normal voltage and resistance readings are given in figures 6-1 through 6-10. Assembly locations are given in figures 7-1 and 7-2.

<i>Item No.</i>	<i>Malfunction</i>	<i>Probable cause</i>	<i>Corrective action</i>
1	With the ON switch set to ON, the FREQUENCY display does not illuminate and the AMPLITUDE meter pointer does not deflect when the RF LEVEL control is rotated clockwise.	a. Defective fuse F1 -----	a. Replace fuse, 3/4 amp, SLO-BLO type (fig. 2-2).

Item No.	Malfunction	Probable cause	Corrective action
		<p>b. Line cord or plug defective _____</p> <p>c. Input power selector switch S8 incorrectly set.</p> <p>d. Defective ON switch, S7_ _____</p> <p>e. Defective input power transformer T1.</p> <p>f. Defective Power Supply, Assembly A8, or assembly using output voltages developed by A8.</p>	<p>b. Check line cord and plug. Replace if defective.</p> <p>c. Check input power voltage selector switch for proper setting (para 2-3). Replace if defective.</p> <p>d. Check ON switch S7. Replace if defective.</p> <p>e. Check input power transformer T1 (para 6-4).</p> <p>f. Tag and disconnect output voltage distribution leads from A8 and check A8 and series regulator transistors Q1, Q3, Q6, and Q14 (mounted on inside of rear panel). Replace defective item. If A8 and the series regulators prove to be correct, trace and check power distribution leads to malfunctioning assembly by means of resistance measurements. Replace defective assembly.</p>
2	FREQUENCY display does not illuminate and AMPLITUDE meter indicates an output level.	+200V dc not getting to Display Assembly A2.	Check +200V dc output from Power Supply, Assembly A8.
3	FREQUENCY display illuminates but is static or erratic. AMPLITUDE meter indicates an output level.	If output of Oscillator, Assembly A6 going to the rf Amplifier, by means of cable W1, is stable and within the frequency band selected, as displayed on the oscilloscope, the digital section must be checked. If the output of the oscillator at this point is not stable, then the oscillator is at fault. If only one band is involved, chassis mounted components contributing to that band must be checked.	<p>a. If oscillator at output of W1 is erratic, replace oscillator A6.</p> <p>b. If oscillator output at W1 is stable, check output at W2. If output is erratic or does not exist, replace Oscillator A6. If output is stable and comparable to that at the output of W1, check digital section section as instructed below.</p> <p>c. Frequency output of Prescaler, Assembly A1, should be output of Oscillator A6 divided by 8 and stable. If not, check reset and counting gate inputs with oscilloscope for proper relationship and duration as shown in figure 5-2. If reset and counting gate signals are proper, replace Prescaler A2. If reset and counting gate signals are not proper, replace Time Base A4. If output of Prescaler is proper, continue as instructed below,</p> <p>d. With stable outputs from the Prescaler, observe the output of Counter A3 for the most significant bit which appears at A3E9, A3E10, A3E11, and A3E12. If these signals are stable and repetitive, indicating the same value counted each interval, replace Display A2. If the output of the Counter is not stable</p>

<i>Item No.</i>	<i>Malfunction</i>	<i>Probable cause</i>	<i>Corrective action</i>
4	FREQUENCY display indicates desired frequency but AMPLITUDE meter indicates no output and no output appears at the RF OUT 50-ohm connector.	An assembly in the signal section is malfunctioning. The AMPLITUDE meter and its associated circuitry would be suspected if there was an output at the RF OUT 50 ohm connector.	and repetitive, check with the oscilloscope the reset and storage load pulses from Time Base A4 for their proper relationship and duration as shown in figure 5-2. If these signals are proper, replace Counter A3. If these signals are not proper, replace Time Base A4. Check Oscillator A6 output at W1. If no output is seen, replace Oscillator A6. If signal is present, check for signal at output of Modulator All at A11E9. If signal is seen at A11E9, check for output signal at output of rf Amplifier A7 at A7E9. If output signal appears at A7E9, check rf Attenuator AT1 and replace if defective. If no signal is observed at A11E9, remove Automatic Leveling Control lead from A11E3, and ground A11E3. If no signal is observed at A11E9, replace Modulator. If a signal is observed, check for a positive dc voltage at A7E6 which is the leveling feedback signal from the rf Amplifier. If a dc level is not observed, replace the rf Amplifier. If a dc level is observed, replace Audio Level A9. Remove ground from A11E3 and reconnect Automatic Leveling Control lead.
5	With modulation selector at INT 400 Hz or INT 1 kHz, the MODULATION or Modulator All. If the output signal was being modulated, probable cause would be in MODULATION at the RF OUT 50 ohm connector.	With no output modulation present, probable cause is in Audio Level A9 replace Audio Level A9. If signal is present at A9E1, replace Modulator All.	Check for Wein Bridge output at A9E1. If signal is not present

Section III. DIRECT SUPPORT TESTING PROCEDURES

6-15. Physical Test and Inspection

a. *Test Equipment and Materials.* None.

b. *Test Connections and Conditions.* Remove the top and bottom covers of the signal generator (para 6-2).

c. *Procedure.*

<i>Step No.</i>	<i>Test equipment</i>	<i>Control settings</i>	<i>Equipment under test</i>	<i>Test procedures</i>	<i>Performance standard</i>
1	None	Controls may be in any position		<p>a. Inspect case and chassis for damage, missing parts, and condition of paint.</p> <p style="text-align: center;">NOTE</p> <p>Touchup painting is recommended instead of refinishing whenever practical; screwheads, receptacles, and other plated parts will not be painted or polished with abrasives.</p> <p>b. Inspect all controls and mechanical assemblies for loose or missing screws, bolts, and nuts.</p> <p>c. Inspect all connectors, sockets, receptacles, holder, and meter for looseness, damage, or missing parts.</p>	<p>a. No damage evident or parts missing. External surfaces intended to be painted will not show bare metal. Panel lettering will be legible.</p> <p>b. Screws, bolts, and nuts will be tight. None missing.</p> <p>c. No loose parts or damage. No missing parts.</p>
2	None	Controls may be in any position		<p>a. Rotate all panel controls throughout their limits of travel.</p> <p>b. Inspect dial stops for damage or bending, and for proper operation.</p>	<p>a. Controls will rotate freely without binding or excessive looseness.</p> <p>b. Stops will operate properly without evidence of damage.</p>

6-16. Rf Signal Output Test*a. Test Equipment and Materials.*

- (1) Multimeter.
- (2) TEE connector.
- (3) 50-ohm termination.
- (4) Rf cable (para 2-5).

b. Test Connections and Conditions. Connect equipment as shown in figure 6-11.

<i>Step No.</i>	<i>Test equipment</i>	<i>Control setting</i>	<i>Equipment under test</i>	<i>Test procedures</i>	<i>Performance standard</i>
1	a. Selector: AC-----	a. Modulation Selector: CW -----		a. Set ON switch to ON and allow a 5-minute stabilization period before proceeding.	Output voltage indicated on VTVM is +10 dBm \pm 0.5 dB or 7.707 volts rms \pm 0.04 volt.
	b. Range: 1V-----	b. Resolution: Normal -----		b. Adjust the TUNING control for an indication of approximately 10.5 MHz on the FREQUENCY display.	
		c. Range: 10-32 MHz -----		c. Set the RF LEVEL control for an indication of 0 dBm or 0.707 volt on the AMPLITUDE meter.	
		d. Attenuator Selector: dBm V +10 1.0			

6-17. Modulation Test

a. Test Equipment and Materials.

- (1) Oscilloscope.
- (2) Rf cable (para 2-5).

b. Test Connections and Conditions. Connect equipment as shown in figure 6-12.

c. Procedure.

Step No.	Test equipment	Control settings	Equipment under test	Test procedures	Performance standard
1	a. Main TIME/DIV control: 2 Msec/cm.	a. Modulation Selector: CW	-----	a. Set ON switch to ON and allow 2 5-minute stabilization period before proceeding.	The MODULATION meter should indicate a reading between 45 and 55 percent.
	b. Channel A VOLTS/DIV: 0.5 volt/div.	b. Resolution: Normal	-----	b. Adjust the TUNING control for an indication of approximately 10.5 MHz on the FREQUENCY display.	
	c. Channel A vernier VOLTS/DIV: CAL.	c. Range: 10-32 MHz	-----	c. Set the RF LEVEL control for an indication of 0 dBm.	
	d. Channel A input coupling switch: AC.	d. Attenuator Selector: dBm V +10 1.0	-----	d. Adjust oscilloscope to give a signal display which covers four vertical dimensions peak to peak.	
	e. Main trigger source switch: INT	-----	-----	e. Set the modulation selector to INT 1 kHz.	
				f. Adjust the MOD LEVEL control, while observing the oscilloscope, to achieve a modulated signal envelope that has a peak-to-peak maximum of six vertical divisions and a peak-to-peak minimum of two divisions.	

CHAPTER 7

GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section I. GENERAL

7-1. Maintenance Procedures

All maintenance procedures associated with the AN/GRM-50C can be performed at the general support maintenance category. These procedures are given in paragraphs 74 and 7-8. General support maintenance includes all the techniques outlined for direct and operator and organizational maintenance.

7-2. Tools and Test Equipment

The items of test equipment required for general support maintenance of Generator, Signal AN/GRM-50 are listed below. Technical manuals and common names associated with each item are also listed.

<i>Test equipment</i>	<i>Technical manual</i>	<i>Common name</i>
Digital Readout, Electronic Counter AN/USM-207.	TM 11-6625-700-10	Counter
Oscilloscope AN/USM-281A	TM 11-6625-1703-15	Oscilloscope
Multimeter ME-26A/U	TM 11-6625-200-15	Multimeter
Attenuator, Variable CU-796/U.	TM 11-5985-237-14P	Attenuator
BNC TEE UG274/U		TEE connector
BNC Connector UG-290/U		BNC connector
Rf cable	(para 2-5)	Rf cable
Termination, 50 ohms	Texscan TF-50	50 ohm termination

Section II. TROUBLESHOOTING

7-3. General Instructions

Troubleshooting at direct support involves isolation of a malfunction to a major replaceable assembly and replacement of that assembly. General support troubleshooting goes beyond the assembly level down to piece part replacement.

The troubleshooting chart (para 7-4) augments the chart of paragraph 6-14, assuming the faulty assembly has been isolated.

7-4. Troubleshooting Chart

(figs. 6-1-6-12 and 7-1-7-9)

<i>Item No.</i>	<i>Malfunction</i>	<i>Probable cause</i>	<i>Corrective action</i>
1	FREQUENCY display illuminates but is static or erratic. AMPLITUDE meter indicates an output level.	<p>a. Oscillator A6 is defective. Difficulty appears in six lower frequency bands.</p> <p>b. Difficulty appears in highest frequency band.</p> <p>c. Prescaler A1 is defective. Output frequency is not input frequency divided by eight.</p>	<p>a. For the six lower frequency bands, check A6Q1, A6Q2, A6Q3, A6K1, A6Q4, and A6Q5. Replace if defective.</p> <p>b. For the highest frequency band, 32-80 MHz, check A6Q6, A6Q7, A6Q8, A6K1, A6Q4, and A6Q5. Replace if defective.</p> <p>c (1) Check A1Q1, A2Q2, A2Q3, A2Q4, A2Q5, and A2Q6. Output frequency of A2Q6 should be the same as the input. Replace if defective.</p> <p>c (2) Check A1U1. Output frequency of A1U1 should be the same as the input. Replace if defective.</p> <p>c (3) Check A1U2, A1U3, and A1U4. Each stage should divide its output frequency by two. The</p>

Item No.	Malfunction	Probable cause	Corrective action
	d. Time base A-4 is defective. Counting gate, reset and storage load pulses do not exist or do not have proper relationships.		<p>output of A1U4 should be the input frequency divided by eight. If defective replace.</p> <p>c (4) Check A1Q7 and A1Q8. output frequency of A1Q8 should be the same as A1U4 which is the input to A1 divided by eight.</p> <p>d (1) Check oscillator section consisting of A4Y1, A4Q2, and A4Q1. Output of A4Q1 should be 1 MHz. Replace defective item.</p> <p>d (2) Check A4U1-A, -B, and -C for 1 MHz at output of A4U1-A. Replace if defective.</p> <p>d (3) Check A4U2 and A4U3. Each divides its input frequency by 10. Together they divide the input to A4U2 by 100. Output of A4U2 should be 100 kHz and A4U3 should be 10 kHz.</p> <p>d (4) Check NORMAL or CAL X100 selection. When A4U1-D is enabled, the output of A4U11-C should be 1 MHz. When A4U11-D is enabled, the output of A4U11-C should be 10 kHz.</p> <p>d (5) Check A4U4 and A4U5. Each divides its input frequency by 10. The output of A4U4 should be 100 kHz in NORMAL and 1 kHz in CAL X100. Replace if defective. The output of A4U5 should be 10 kHz in NORMAL and 100 Hz in CAL X100. Replace if defective.</p> <p>d (6) Check NORMAL time base selection for various frequency bands. With A4U11-A enabled, the output of A4U11-B, A4U12-C, and A4U12-B should be 1 MHz. With A4U12-D enabled, the outputs of A4U11-B, A4U12-C, and A-4U12-B should be 100 kHz. With A4U12-A enabled, the outputs of A4U11-B, A4U12-C, and A4U12-B should be 10 kHz. When checked in CAL X100, all the above output frequencies should be divided by 100. Replace if defective.</p> <p>d (7) Check A4U6. Output frequency should be input frequency divided by 10. Replace if defective.</p> <p>d (8) Check A4U7. Output frequency should be input frequency divided by five. Output frequency of A4U7-11 should be input frequency divided by 10. Replace if defective.</p> <p>d (9) Check A4U8 for operation in accordance with figure 5-2.</p>

<i>Item No.</i>	<i>Malfunction</i>	<i>Probable cause</i>	<i>Corrective action</i>
			Replace if defective.
			<i>d</i> (10) Check A4U9 for operation in accord ante with figure 5-2. Replace if defective.
			<i>d</i> (11) Check A4U13 for outputs which are complements of their inputs. Replace if defective.
		<i>e.</i> Counter board A3 is defective. BCD outputs of storage elements are incorrect or frequency dividers do not divide input frequency by 10.	<i>e</i> (1) Check A3U14-B and A3U14-C. Output frequency should be the same as input frequency. Replace if defective.
			<i>e</i> (2) Check A3U1, A3U2, and A3U3. Each divides its input frequency by 10. Replace if defective.
			<i>e</i> (3) Check A3U8, A3U9, and A3U10. Each stores the information, logic levels, transferred to it by its respective counting element during the storage load pulse. Replace if defective.
			<i>e</i> (4) Check A3U14-D and A3U14-A. A3U14-A supplies an inverted pulse to A3U7. A3U14-D is enabled when the FREQUENCY display requires the most significant "1" digit to be displayed. This only occurs in the .32-1.0-MHZ and 3.2-10-MHZ band. Replace if defective.
			<i>e</i> (5) Check A3U7. Output of A3E26 is at its high logic level at frequencies of 1 MHz or higher in the .32-1.0-MHZ band; or 10 MHz or higher in the 3.2-10-MHZ band.
		<i>f.</i> Display A2 is defective _ _ _ _ _	<i>f.</i> Check display tubes A2V1, A2V2, A2V3, and A2V4 and their respective drivers A2U1, A2U2, A2U3, and A2Q1. Replace if defective.
2	FREQUENCY display indicates desired frequency but AMPLITUDE meter indicates no output, and no output appears at the RF OUT 50-ohm connector.	<i>a.</i> Oscillator A6 is defective _ _ _ _ _	<i>a.</i> Check Oscillator A6 as in Item 1 above.
		<i>b.</i> Modulator All is defective _ _ _ _ _	<i>b</i> (1) Check A11Q1. Replace if defective.
			<i>b</i> (2) Check A11U1 and A4U2. Replace if defective.
			<i>b</i> (3) Check A11Q2. Replace if defective.
		<i>c.</i> Audio Level A9 is defective _ _ _ _ _	<i>c.</i> Check A9U3. Replace if defective.
		<i>d.</i> RF Amplifier A7 is defective _ _ _ _ _	<i>d</i> (1) Check A7Q1. Replace if defective.
			<i>d</i> (2) Check A7Q2 and A7Q3. Replace if defective.
			<i>d</i> (3) Check A7Q4. Replace if defective.
			<i>d</i> (4) Check A7Q5 and A7Q6. Replace if defective.
			<i>d</i> (5) Check A7CR1. Replace if defective.
3	With modulation selector at its INT 400 Hz or INT 1 kHz position, the MODULATION meter does not deflect when the MOD LEVEL control is rotated clockwise and no signal	<i>a.</i> Audio level A9 is defective _____	<i>a</i> (1) Check output of A9U1 and A9E1 for 400 Hz or 1 kHz as selected by the modulation selector. Replace if defective.
			<i>a</i> (2) Check A9U2. Replace if defective.

<i>Item No.</i>	<i>Malfunction</i>	<i>Probable cause</i>	<i>Corrective action</i>
	modulation is present at the RF OUT 50-ohm connector.	<i>a.</i> Modulator All is defective _ _ _ _ _ <i>b.</i>	<i>a</i> (3) Check A9U3. Replace if defective. Check A11Q1. Replace if defective.

Section III. GENERAL SUPPORT TESTING PROCEDURES

7-5. General

All direct support testing procedures may be performed at general support.

7-6. Cw Frequency Accuracy and Calibrator

a. Test Equipment and Materials.

- (1) Counter AN/USM-207.
- (2) Rf cable (para 2-5).

b. Test Connections and Conditions. Connect equipment as shown in figure 7-13.

c. Procedure.

Step No.

	<i>Test equipment</i>	<i>Control settings</i>	<i>Equipment under test</i>	<i>Test procedures</i>	<i>Performance standard</i>														
1	<ul style="list-style-type: none"> a. POWER: STBY _____ b. Allow at least 5-minute warmup _ _ c. POWER: TRACK _ _ _ _ _ d. DISPLAY: As desired _ _ _ _ _ e. SENSITIVITY: 100 V f. Time base switch: GATE TIME (SEC⁻¹) 10¹. g. FUNCTION: FREQ. 	<ul style="list-style-type: none"> a. Modulation selector: C-W _____ b. RESOLUTION: NORMAL _____ c. RANGE: 50-100 kHz _____ d. Output attenuator: dBm V 0 0.3 		<ul style="list-style-type: none"> a. Set ON switch to ON and allow 2 hours for stabilization. b. Set RF LEVEL control for 1 volt c. Adjust TUNING control for 0.75 kHz on FREQUENCY display. d. Repeat step c for the ranges and frequencies given below. At each of the frequencies on each band listed below, also set the RESOLUTION switch to CAL X100 and adjust the TUNING control for an indication of 000. <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">RANGE</th> <th style="text-align: left;">FREQUENCY</th> </tr> </thead> <tbody> <tr> <td>100-320 kHz</td> <td>200 kHz</td> </tr> <tr> <td>.32-1.0 MHz</td> <td>.600 MHz</td> </tr> <tr> <td>1.0-3.2 MHz</td> <td>2.00 MHz</td> </tr> <tr> <td>3.2-10 MHz</td> <td>6.00 MHz</td> </tr> <tr> <td>10-32 MHz</td> <td>20.0 MHz</td> </tr> <tr> <td>32-80 MHz</td> <td>50.0 MHz</td> </tr> </tbody> </table>	RANGE	FREQUENCY	100-320 kHz	200 kHz	.32-1.0 MHz	.600 MHz	1.0-3.2 MHz	2.00 MHz	3.2-10 MHz	6.00 MHz	10-32 MHz	20.0 MHz	32-80 MHz	50.0 MHz	<ul style="list-style-type: none"> a. Counter shall indicate frequency displayed on FREQUENCY display ±1%. b. Counter shall indicate frequencies displayed on FREQUENCY display ±1% when RESOLUTION switch is at NORMAL.
RANGE	FREQUENCY																		
100-320 kHz	200 kHz																		
.32-1.0 MHz	.600 MHz																		
1.0-3.2 MHz	2.00 MHz																		
3.2-10 MHz	6.00 MHz																		
10-32 MHz	20.0 MHz																		
32-80 MHz	50.0 MHz																		

7-7. Cw Frequency Range

- a. *Test Equipment and Materials.* None.
 b. *Test Connections and Conditions.* None.
 c. *Procedure.*

Step No.	Test equipment	Control settings	Equipment under test	Test procedures	Performance standard
1			a. Modulation selector: CW _ _ _ _	a. Set ON switch to ON and allow 2 hours for stabilization.	a. The FREQUENCY display shall indicate a frequency greater than 65 MHz.
			b. RESOLUTION: NORMAL _ _ _ _	b. Rotate the TUNING control to its maximum clockwise position.	
2			c. RANGE: 32-80 MHz _ _ _ _ _	c. Set the RANGE selector to its 50-100 kHz position.	b. The FREQUENCY display shall indicate a frequency less than 50 kHz.
				d. Rotate the TUNING control to its maximum counter-clockwise position.	

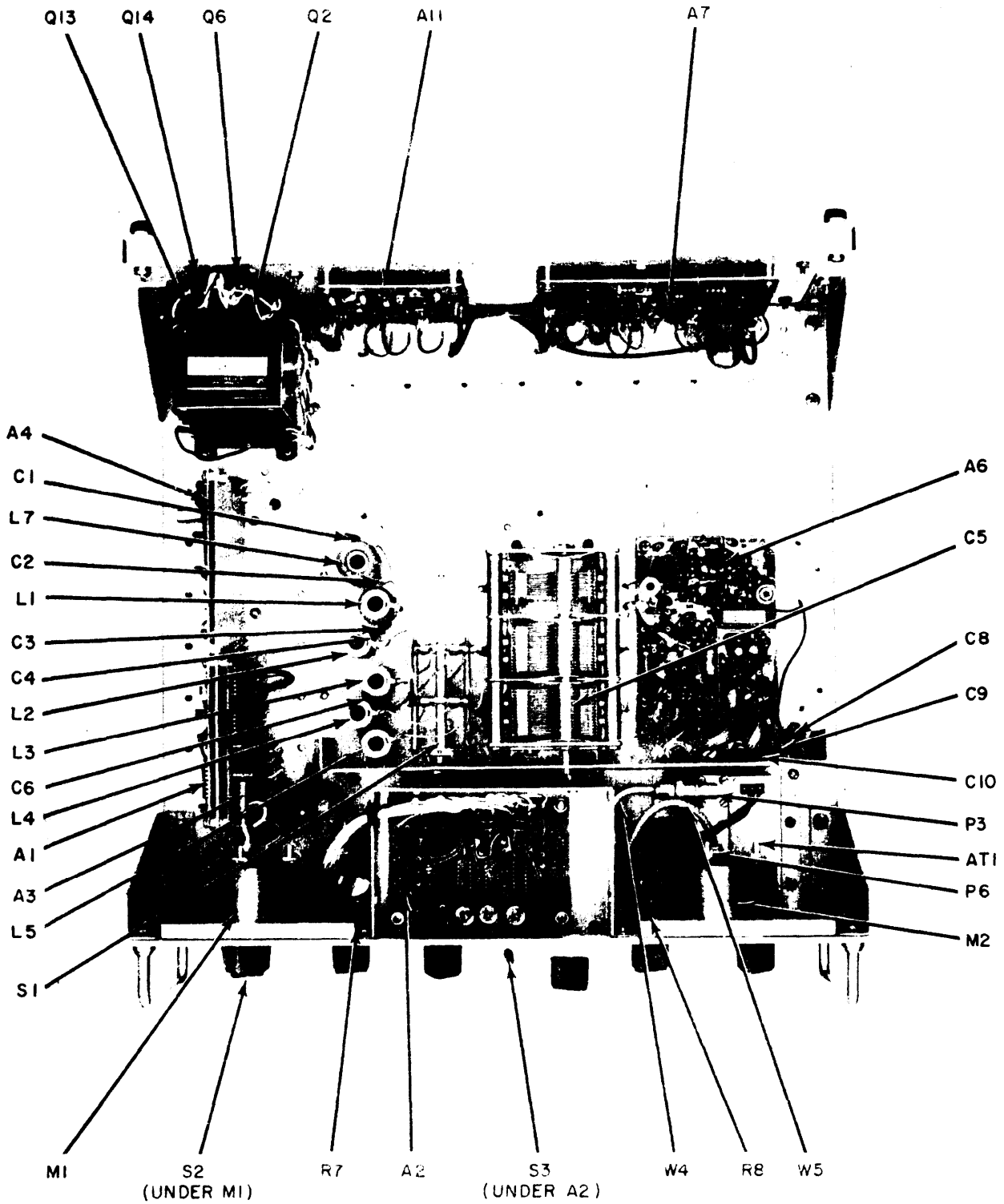
7-8. Output Level Accuracy and Range

- a. *Test Equipment and Materials.*
 (1) Attenuator.
 (2) Multimeter.
 (3) Rf cable (para 2-5).
 b. *Test Connections and Conditions.* Connect equipment as shown in figure 7-14.

c. *Procedure.*

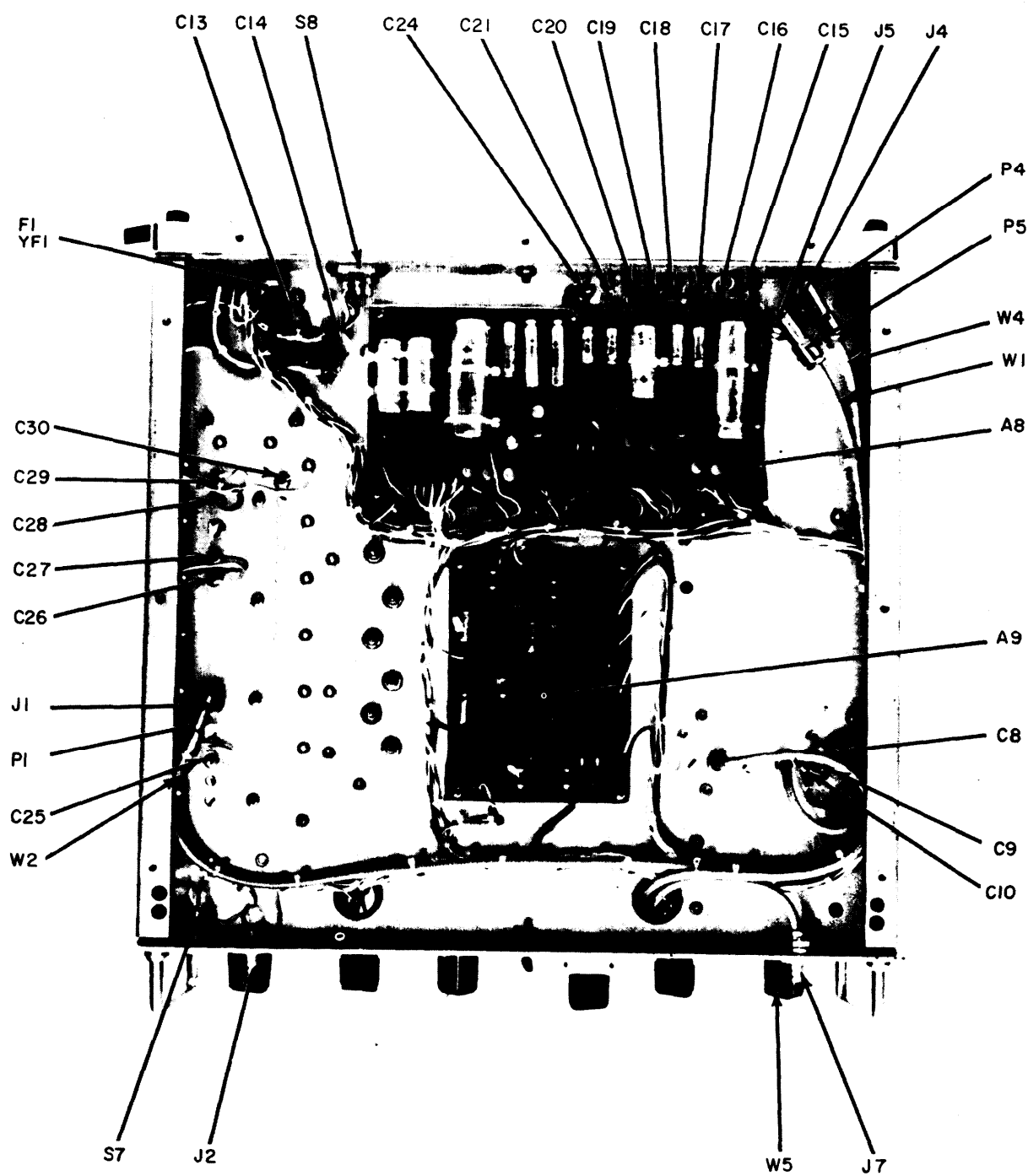
Step No.	Test equipment	Control settings	Equipment under test	Test procedures	Performance standard
1	a. SELECTOR AC _ _ _ _ _		a. Modulation selector: Cw	a. Set ON switch to ON and allow 2 hours for stabilization.	a. With use of the signal generator output attenuator and the external attenuator, the output level shall be with ± 0.5 dBm from 3.0 volts to +20 dBm to 1 volt (+13 dBm).
	b. RANGE: 3V		b. RESOLUTION: NORMAL	b. Adjust TUNING control for 100 on FREQUENCY display.	b. Output level shall decrease to at least 300 millivolts.
			c. RANGE: 100-320 kHz _ _ _ _	c. Set RF LEVEL control for 1-volt indication on AMPLITUDE meter.	c. With use of the signal generator output attenuator and the external attenuator the output level shall be within ± 0.5 dBm from 3.0 volts (+20 dBm) to 1 volt (+13 dBm).
			d. Output attenuator: dBm V +20 3.0	d. Rotate RF LEVEL control to its maximum counterclockwise position.	d. Output level shall decrease to at least 300 millivolts.
				e. Set RANGE selector to 1.0-3.2 MHZ.	e. With use of the signal generator output attenuator and the external attenuator, the output level shall be within ± 0.5 dBm from 3.0 volts (+20 dBm) to 1 volt (+13 dBm).
				f. Adjust TUNING control for 100 on FREQUENCY display.	
				g. Set RF LEVEL control for 1-volt indication on AMPLITUDE meter.	
				h. Rotate RF LEVEL control to its maximum counterclockwise position.	
				i. Set RANGE selector to 10-32 MHz.	

Step No.	Test equipment	Control settings	Equipment under test	Test procedures	Performance standard
				<ul style="list-style-type: none"> j. Adjust TUNING control for 10.0 on FREQUENCY display. k. Set RF LEVEL control for 1 volt on AMPLITUDE meter. l. Rotate RF LEVEL control to its maximum counterclockwise position. m. Set RANGE selector to 32-80 MHz. n. Adjust TUNING control for 32.0 on FREQUENCY display. o. Set RF LEVEL control for 1 volt on AMPLITUDE meter. p. Rotate RF LEVEL control to its maximum counterclockwise position. q. Adjust TUNING control for 65.0 on FREQUENCY display. r. Set RF LEVEL control for 1 volt on AMPLITUDE meter. s. Rotate RF LEVEL control to its maximum counterclockwise position. 	<ul style="list-style-type: none"> f. Output level shall decrease to at least 300 millivolts. g. With use of the signal generator output attenuator and the external attenuator, the output level shall be within ± 0.5 dBm from 3.0 volts (+20 dBm) to 1 volt (+13 dBm). h. Output level shall decrease to at least 300 millivolts. i. With use of the signal generator output attenuator and the external attenuator, the output level shall be within ± 0.5 dBm from 3 volts (+20 dBm) to 1 volt (+13 dBm). j. Output level shall decrease to at least 300 millivolts.



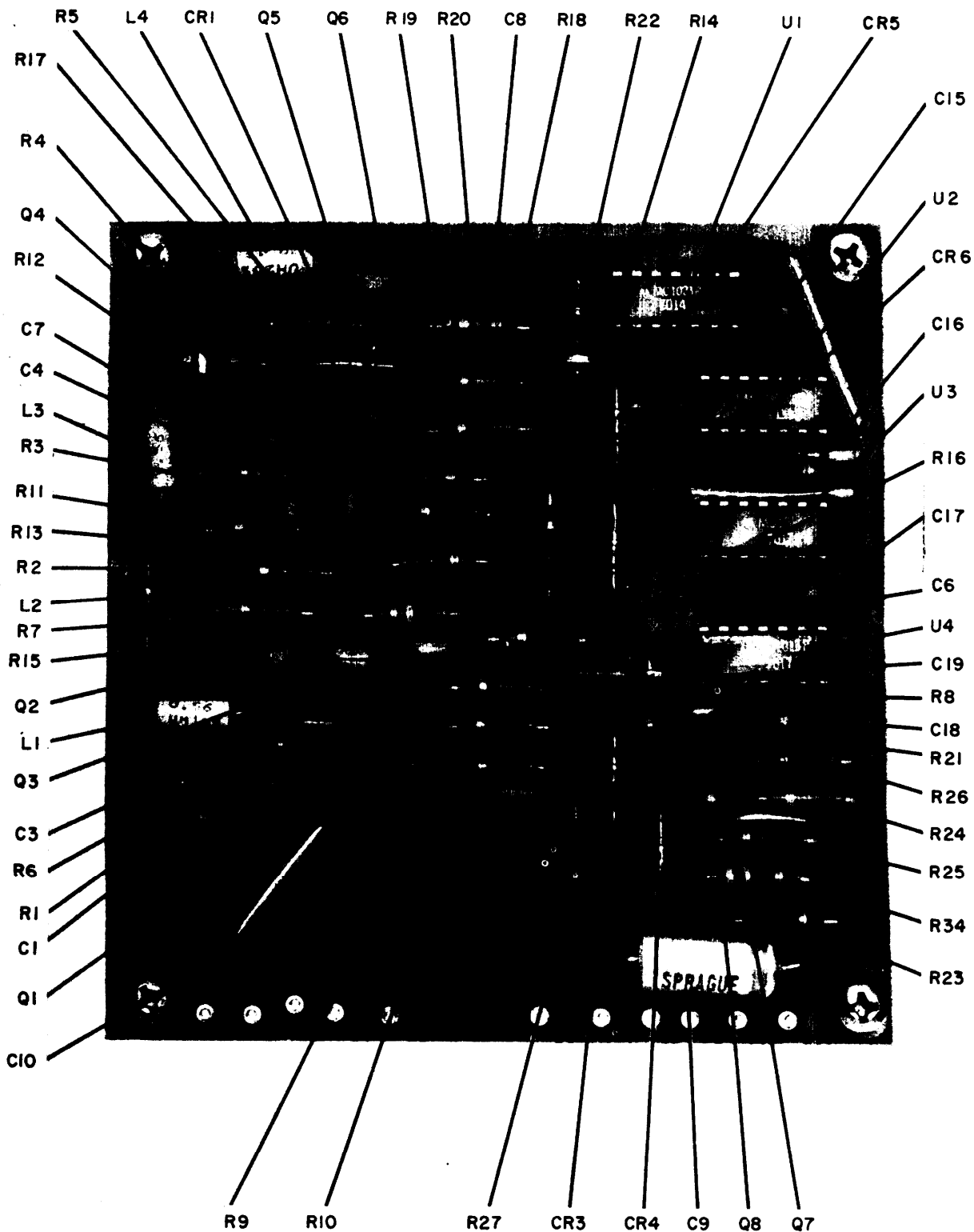
TM11-6625-573-14-1-22

Figure 7-1. Generator Signal SG-497C/GRM-50, assembly parts location diagram, cover removed, top view.



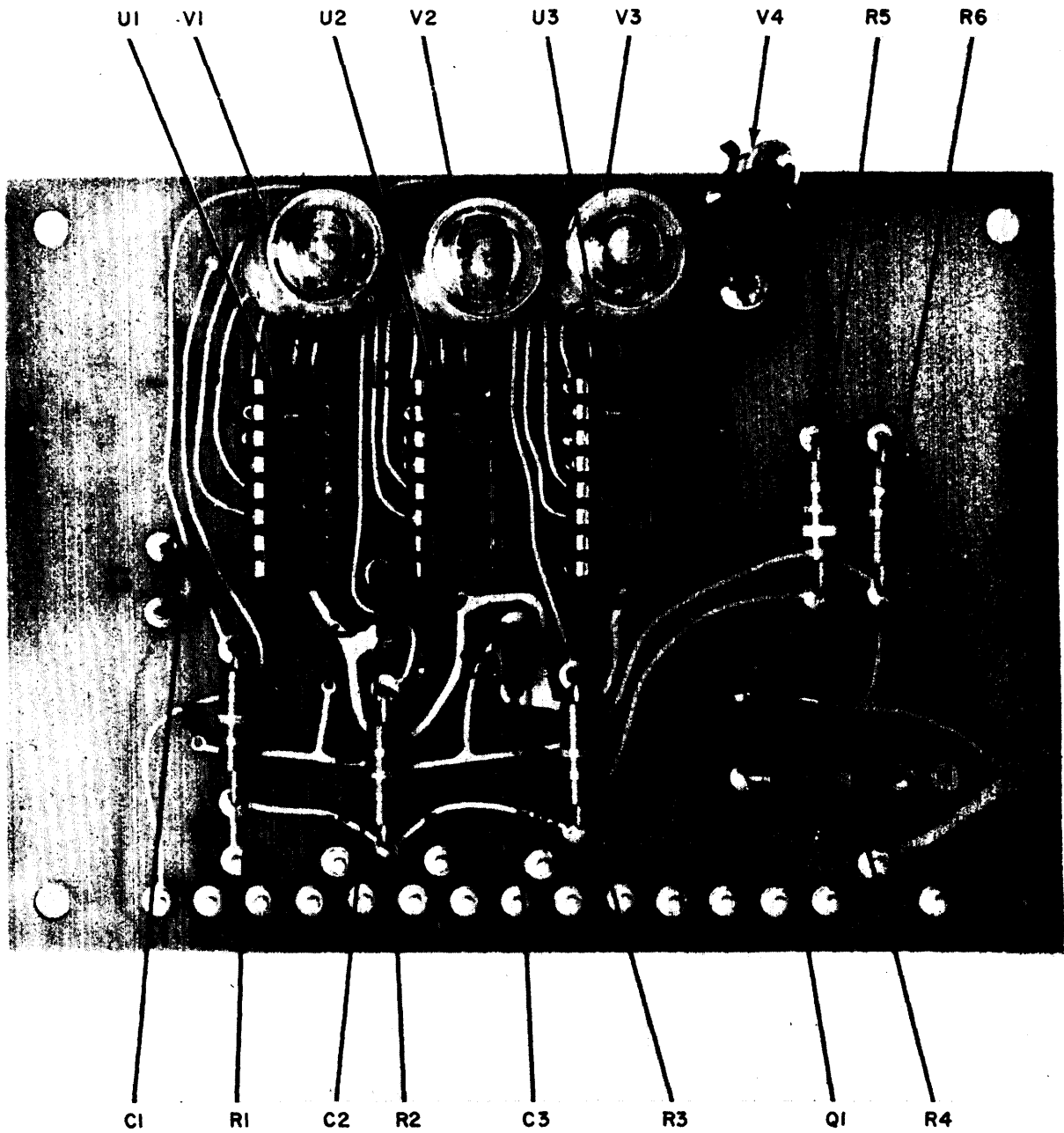
TM11-6625-573-14-1-23

Figure 7-2. Generator, Signal SG-497C/GRM-50, assembly parts location diagram, cover removed, bottom view.



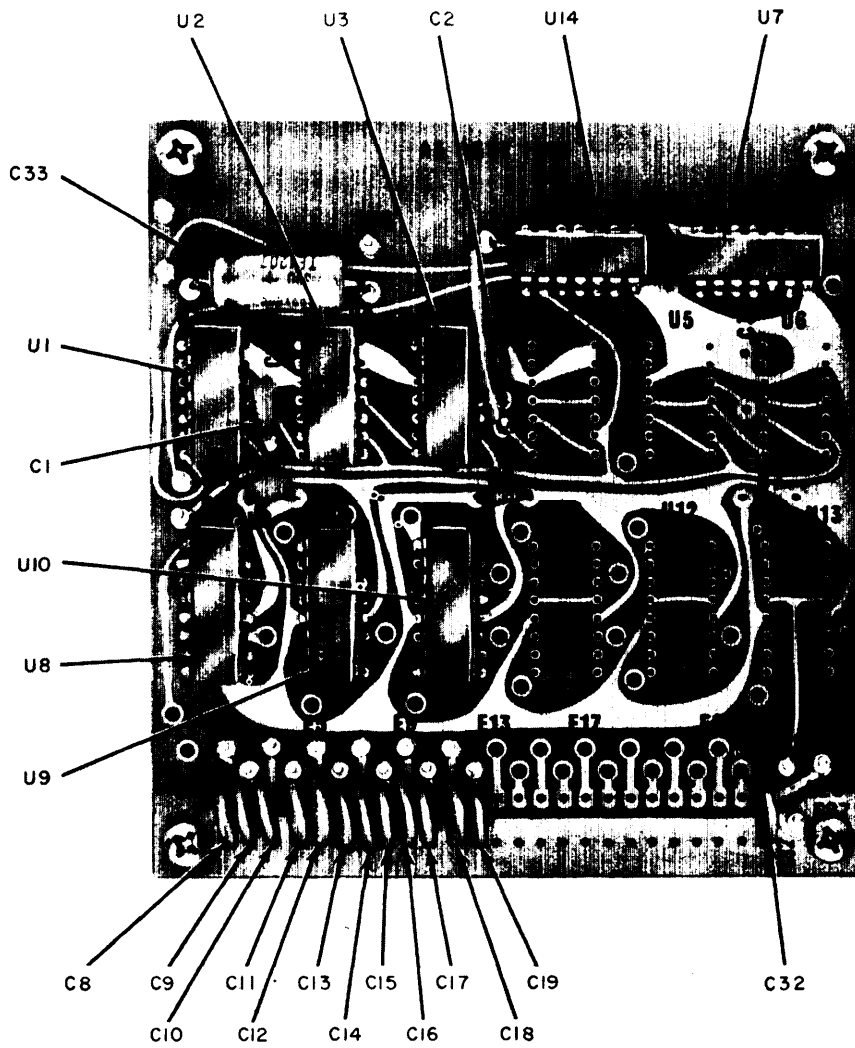
TM11-6625-573-14-1-24

Figure 7-3. Prescaler A1, parts location diagram.



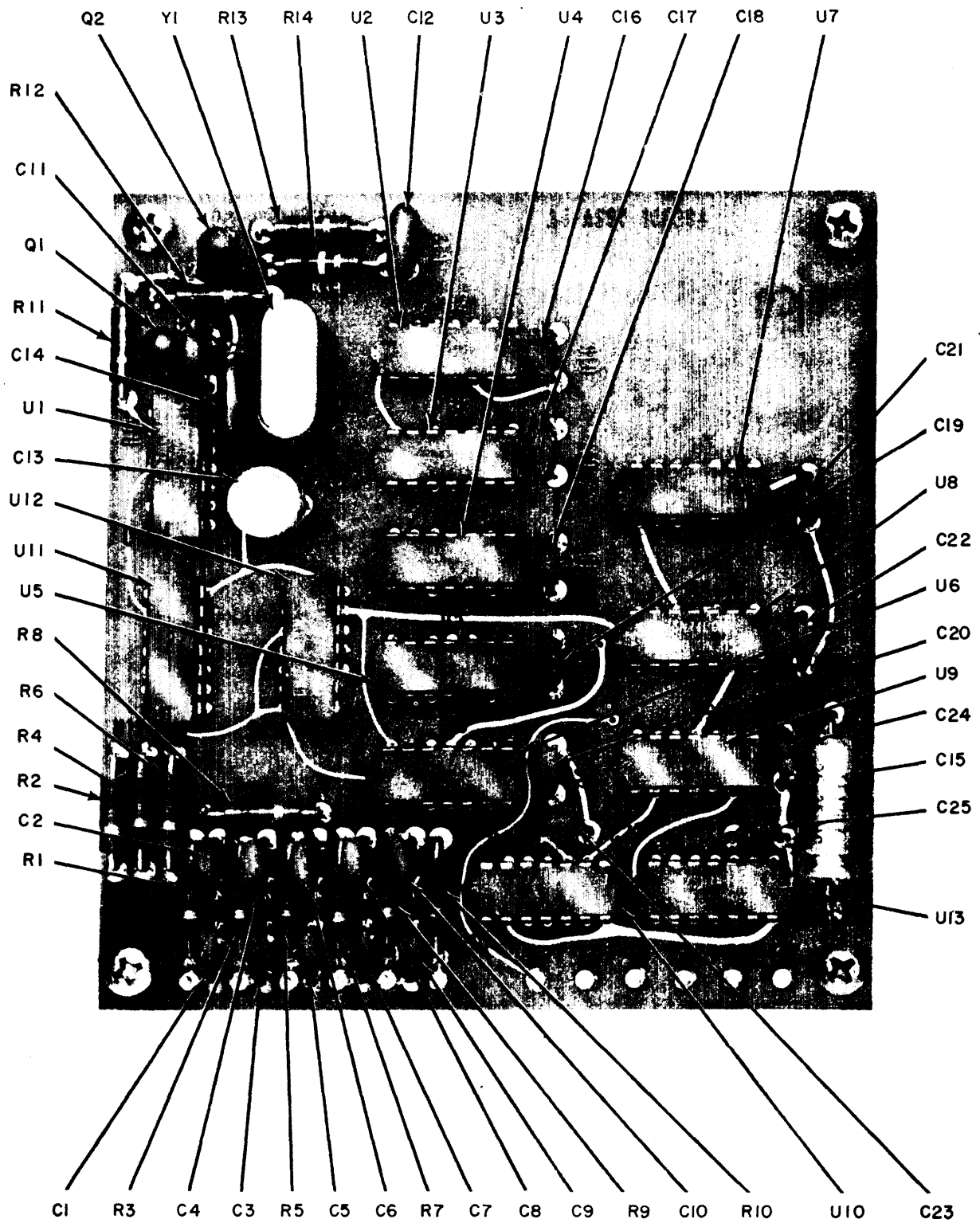
TM 11-6625-573-14-1-25

Figure 7-4. Display A2, parts location diagram.



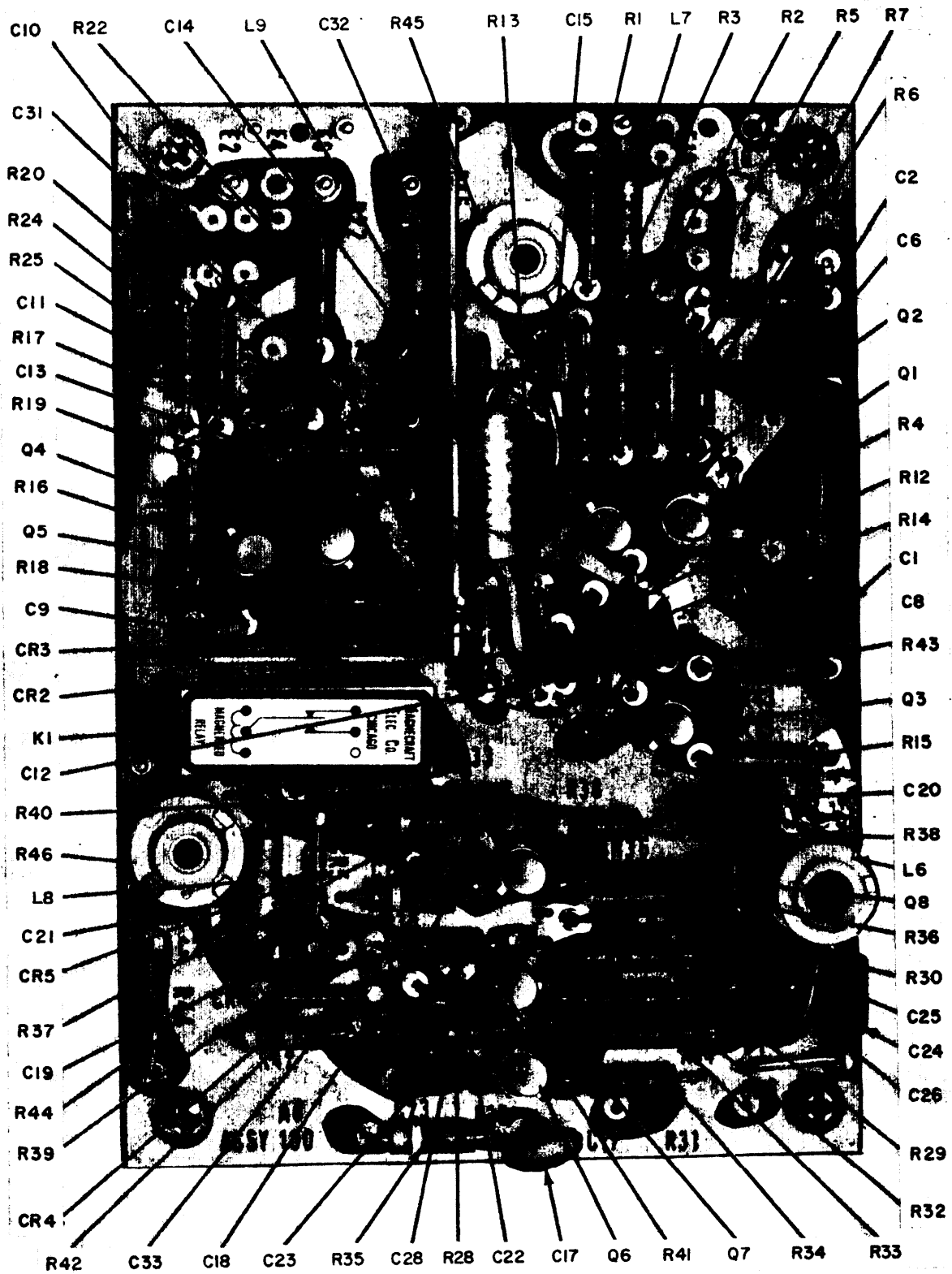
TM11-6625-573-14-1-26

Figure 7-5. Counter A3, parts location diagram.



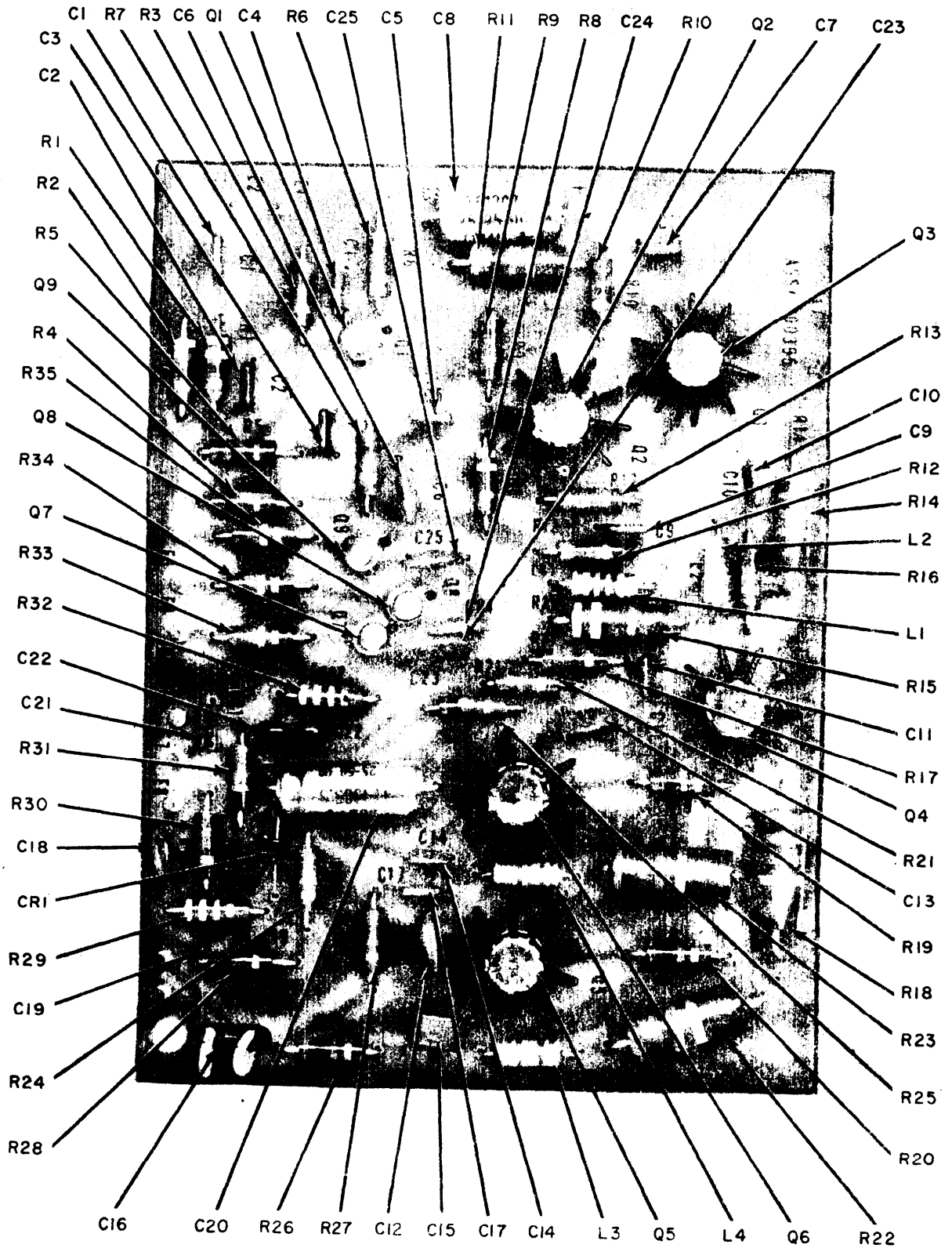
TM11-6625-573-14-1-27

Figure 7-6. Time base A4, parts location diagram.



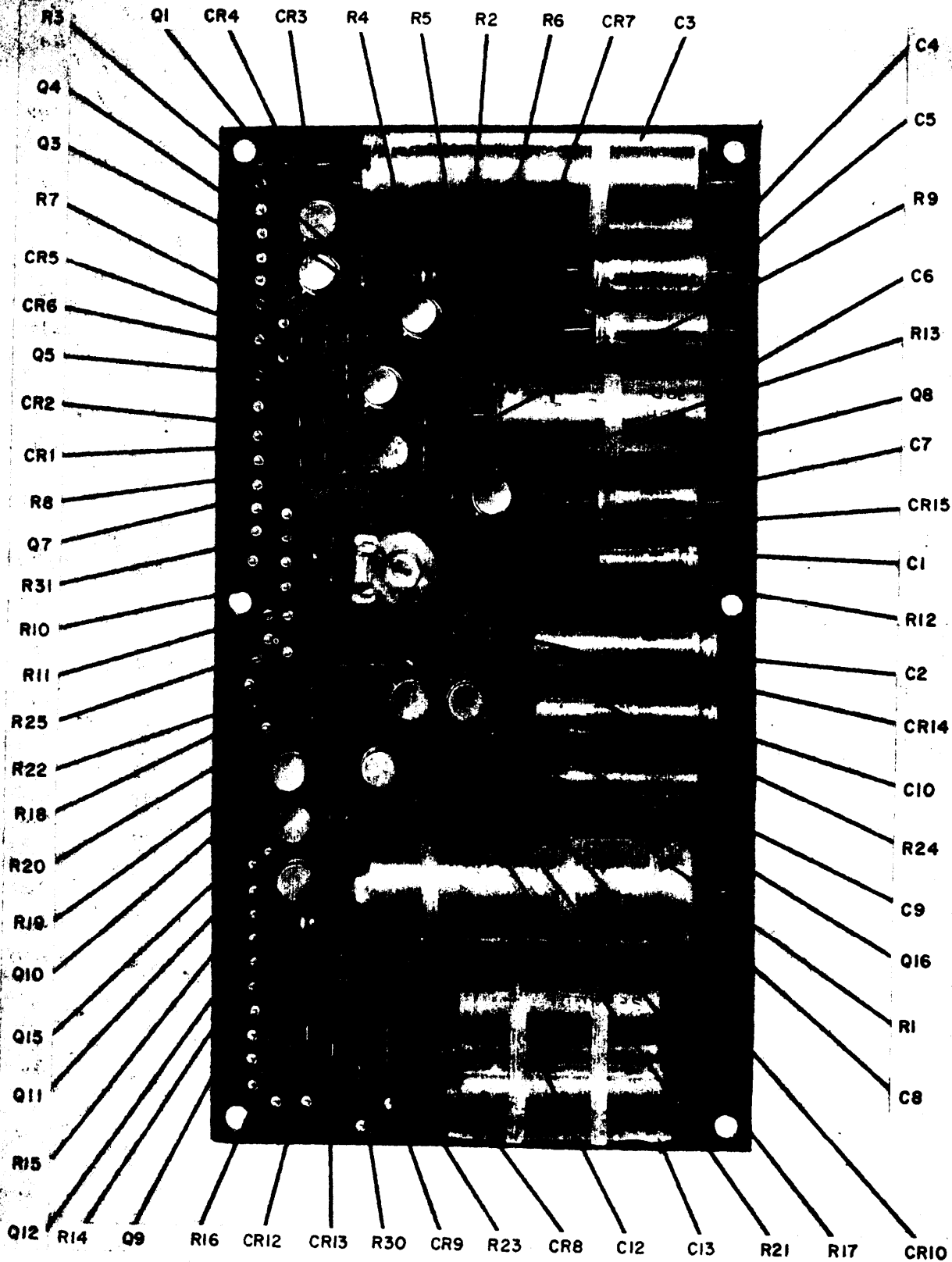
TM11-6625-573-14-1-28

Figure 7-7. Oscillator A6, parts location diagram.



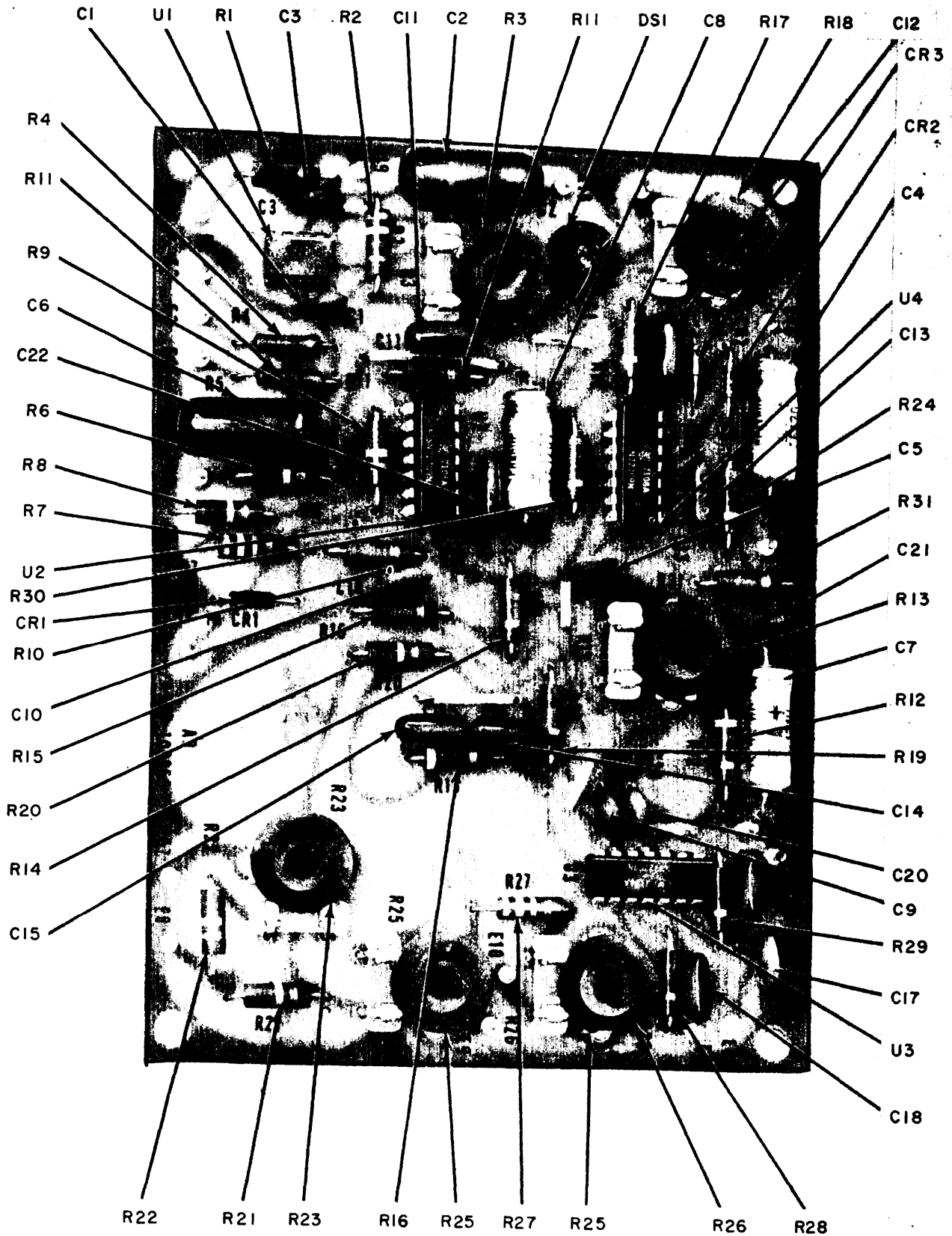
TM11-6625-573-14-1-29

Figure 7-8. Rf amplifier A7, parts location diagram.



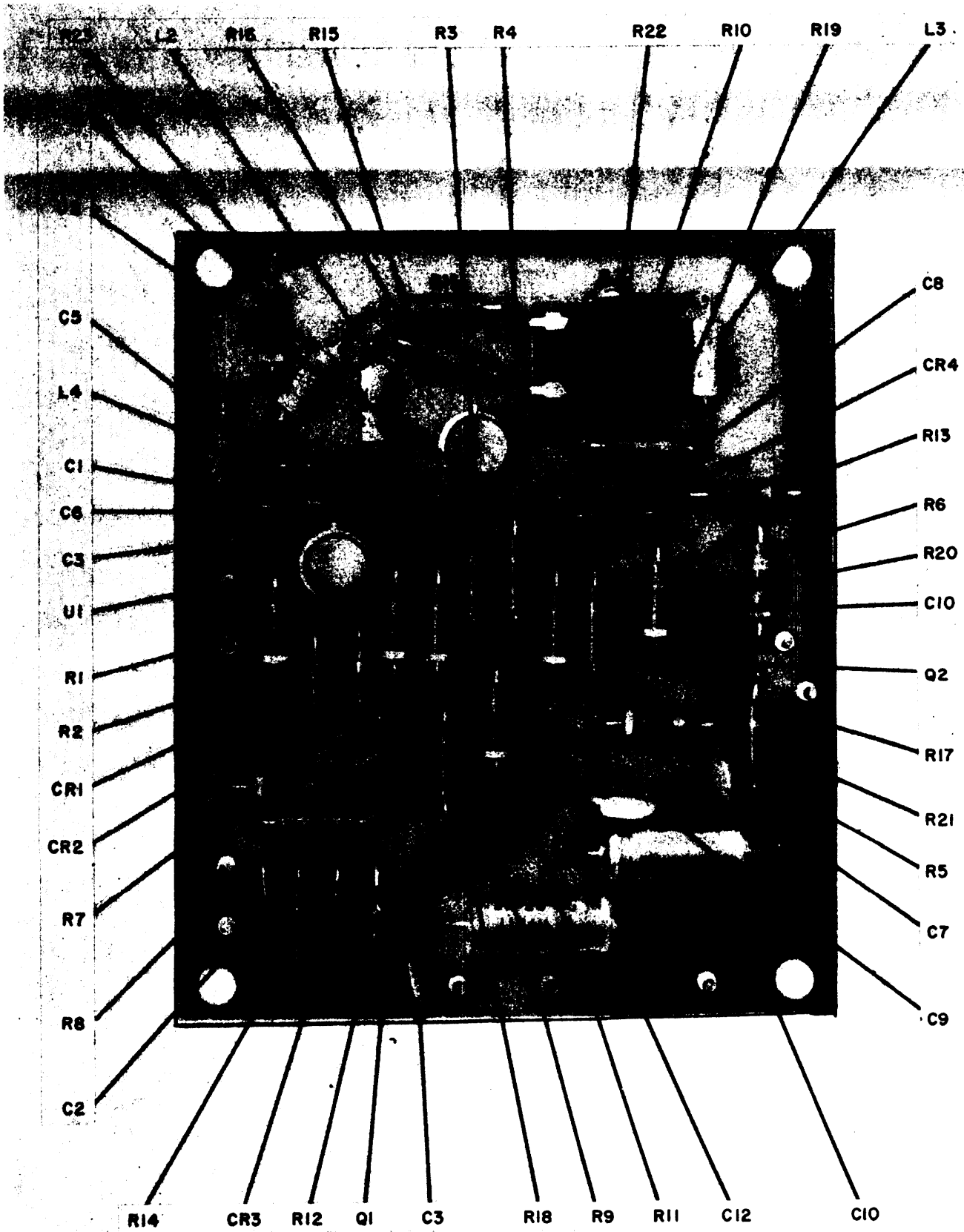
TM11-6625-573-14-1-30

Figure 7-9. Power supply A8, parts location diagram.



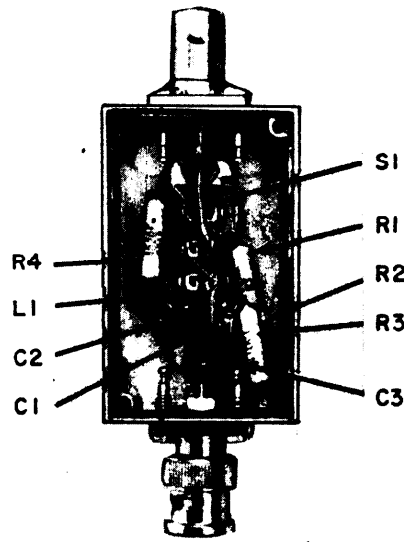
TM11-6625-573-14-1-31

Figure 7-10. Audio level A9, parts location diagram.



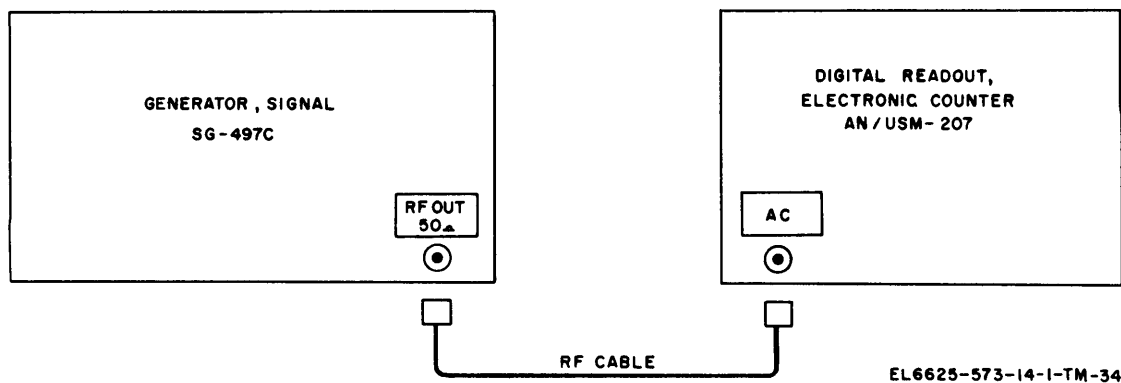
TM11-6625-573-14-1-32

Figure 7-11. Modulator A11, parts location diagram.



TM11-6625-573-14-1-33

Figure 7-12. Dummy Load, Electrical DA-296A/GRM-50, location diagram.



EL6625-573-14-1-TM-34

Figure 7-13. Test connections for cw frequency accuracy and calibration test.

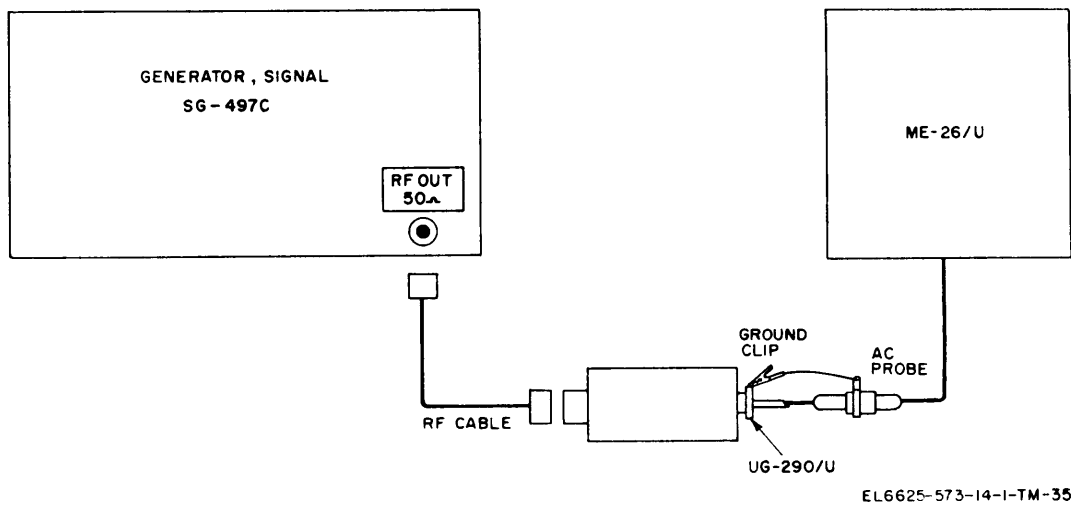


Figure 7-14. Test connections for output level accuracy and range test.

APPENDIX A REFERENCES

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7,8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310-7	U.S. Army Index of Modification Work Orders.
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment Including Camouflage Pattern Painting of Electrical Equipment Shelters.
TM 11-5985-237-14P	Operator's, Organizational, DS and GS Maintenance Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tools): Attenuator, Variable CN-7961/U.
TM 11-6625-200-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Multimeters ME-26A/U, ME-26B/U, ME-26C/U, and ME-26D/U.
TM 11-6625-573-24P-1	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Generator, Signal AN/GRM-50C.
TM 11-6625-700-10	Operator's Manual: Digital Readout, Electronic Counter AN/USM-207.
TM 11-6625-1703-15	Operator, Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tool Lists: Oscilloscope AN/USM-281A.
TM 38-750	The Army Maintenance Management System (TAMMS).

APPENDIX B

ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT

MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

Section I. INTRODUCTION

B-1. Scope

This appendix lists repair parts required for the performance of organizational, direct support, general support, and depot maintenance of the AN/GRM-50C.

B-2. General

This repair parts list is divided into the following sections:

a. Repair Parts List—Section II. A list of repair parts authorized at the organizational level for the performance of maintenance.

b. Special Tools List —Section III. Not applicable.

c. Repair Parts List —Section IV. A list of repair parts authorized at the direct support, general support, and depot levels for the performance of maintenance. The list also includes parts which must be removed for the replacement of the authorized parts.

d. Special Tools List —Section V. Not applicable.

e. Index—Federal Stock Number and Reference Number Cross Reference to Figure and Item Number or Reference Designation—Section VI. A list of Federal stock numbers in ascending numerical sequence, followed by a list of reference numbers appearing in ascending alphanumeric sequence, cross-referenced to the illustration figure number and reference designation.

f. Index-Reference Designation Cross Reference to Page Number—Section VII. A list of reference designations cross-referenced to page numbers.

B-3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings:

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) *Source code.* Source codes are assigned to support item to indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code Format as follows:

<i>Code</i>	<i>Definition</i>
PA	—Item procured and stocked for anticipated or known usage.
PB	—Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems.
PC	—Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD	—Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfitting. Not subject to automatic replenishment.
PE	—Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF	—Support equipment which will not be stocked but which will be centrally procured on demand.
PG	—Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time.

<i>Code</i>	<i>Definition</i>
KD	—An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF	—An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
KB	—Item included in both a depot overhaul/repair kit and a maintenance kit.
MO	—Item to be manufactured or fabricated at organizational level.
MF	—Item to be manufactured or fabricated at direct support maintenance level.
MH	—Item to be manufactured or fabricated at general support maintenance level.
MD	—Item to be manufactured or fabricated at depot maintenance level.
AO	—Item to be assembled at organizational level.
AF	—Item to be assembled at direct support maintenance level.
AH	—Item to be assembled at general support maintenance level.
AD	—Item to be assembled at depot maintenance level.
XA	—Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB	—Item is not procured or stocked. If not available through salvage, requisition.
XD	—Support item that is not stocked. When required, item will be procured through normal supply channels.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA, XD, and aircraft support items as restricted by AR 700-42.

(2) *Maintenance code.* Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code Format as follows:

(a) *Use (third position).* The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance

code entered in the third position indicates one of the following levels of maintenance.

<i>Code</i>	<i>Application/Explanation</i>
C	—Crew or operator maintenance performed within organizational maintenance.
O	—Support item is removed, replaced, used at the organizational level.
I	—Support item is removed, replaced, used by the direct support element of intergrated direct support maintenance.
F	—Support item is removed, replaced, used at the direct support level.
H	—Support item is removed, replaced, used at the general support level.
D	—Support items that are removed, replaced, used at depot, mobile depot, Specialized Repair Activity only.

NOTE

Codes "I" and "F" will be considered the same by direct support units.

(b) *Repair (fourth position).* The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

<i>Code</i>	<i>Application/Explanation</i>
O	—The lowest maintenance level capable of complete repair of the support item is the organizational level.
F	—The lowest maintenance level capable of complete repair of the support item is direct support level.
H	—The lowest maintenance level capable of complete repair of the support item is
D	—The lowest maintenance level capable of complete repair of the support item is the depot level, performed by (enter applicable activity) depot, mobile depot, or Specialized Repair Activity.
L	—Repair restricted to designated Specialized Repair Activity.
Z	—Nonrepairable. No repair is authorized.
B	—No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.
	(3) <i>Recoverability code.</i> Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items.

The recoverability code is entered in the fifth position of the Uniform SMR Code Format as follows:

<i>Recoverability code</i>	<i>Definition</i>
Z	—Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in position three.
O	—Repairable item. When uneconomically repairable, condemn and dispose at organizational level.
F	—Repairable item. When uneconomically repairable, condemn and dispose at the direct support level.
H	—Repairable item. When uneconomically repairable, condemn and dispose at the general support level.
D	—Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L	—Repairable item. Repair, condemnation, and disposal not authorized below depot Specialized Repair Activity level.
A	—Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manual/directive for specific instructions.
	<i>b. Federal Stock Number.</i> Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.
	<i>c. Description.</i> Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.
	<i>d. Unit of Measure (U/M).</i> Indicates the standard of basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation; e.g., ea, in, pr, etc. When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.
	<i>e. Quantity Incorporated in Unit.</i> Indicates the quantity of the item used in the equipment. Subsequent appearances of the same item in the

same assembly are indicated by the letters "REF."

f. 15-Day Organizational Maintenance Allowances.

(1) The repair parts indicated by an asterisk in the allowance columns represent those authorized for use at the organizational category, and will be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

(2) Major Army commanders are authorized to approve reduction in the range of support items authorized for use in units within their commands. Recommendations for increase in range of items authorized for use will be forwarded to Commander, US Army Electronics Command, ATTN: AMSEL-MA-C, Fort Monmouth, NJ 07703.

g. 30-Day DS/GS Maintenance Allowances. The repair parts indicated by asterisk entries in separate allowance columns for DS and GS represent those authorized for use at that category of maintenance to be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

h. 1-Year Allowances Per 100 Equipment/Contingency Planning Purposes. Column intentionally left blank.

i. Depot Maintenance Allowance Per 100 Equipments. This column indicates opposite the first appearance of each item the total quantity authorized for depot maintenance of 100 equipments.

j. Illustration.

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown.

(2) *Item number or reference designation.* Indicates the reference designation used to identify the item in the illustration.

B-4. Special Information

Not applicable.

B-5. Location of Repair Parts

a. This appendix contains two cross reference indexes (see VI and VII) to be used to locate a repair part when either the Federal stock number, reference number (manufacturer's part number), or reference designation is known. The first column in each index is prepared in numerical or alphanumeric sequence in ascending order. Where a Federal stock number is not listed, refer to the reference number (manufacturer's part numbers) immediately following the Federal stock number.

b. When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (see VI) and locate the Federal stock number. The FSN is cross-referenced to the applicable figure and reference designation.

(2) When the reference designation is determined, refer to the reference designation index (see VII). The reference designations are listed in alphanumeric ascending order and are cross referenced to the page number on which they appear in the repair parts lists)sec II and

IV). Refer to the page number noted in the index and locate the reference designation in the repair parts lists (col 7b or 10 b).

c. When the reference designation is known, follow the procedures given in *b* (2) above.

d. When neither the FSN, reference number, nor reference designation is known, identify the part in the illustration and follow directions given in *c* above, or scrutinize column 3 of the repair parts lists (see II and IV).

B-6. Abbreviations

Not applicable.

(Next printed page is B-5)

SECTION II REPAIR PARTS LIST

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION Reference Number & Mfr Code	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW				(7) ILLUSTRATIONS	
					(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
	6625-005-3238	SIGNAL GENERATOR AN/GRM-50C (This item is nonexpendable)								
PAOZZ	6240-880-8699	LAMP, INCANDESCENT: 1869 (71744)	EA	1	*	*	*	*	7-10	A1A9DS1
PAOZZ	5920-755-3235	FUSE, CARTRIDGE: 3/4 MDL (75915)	EA	1	*	*	*	*	7-2	A1F1

SECTION IV REPAIR PARTS LIST

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS		
					USABLE ON CODE	(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50			(c) 51-100	(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
	6625-003-3238	SIGNAL GENERATOR AN/GRM-50C (This item is nonexpendable)													
PADZZ	6625-762-3786	SIGNAL GENERATOR SSG-79C/GRM-50 100441 (33013)	EA	1							*			A1	
PAHZZ	6625-883-2452	ATTENUATOR: 100337 (33013)	EA	1				*	*	*	*	7-1		A1A1	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	91										A1A1H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	117										A1A1H4	
PAHZZ		AUDIO LEVEL BOARD ASSEMBLY: 100355 (33013)	EA	1				*	*	*	*	7-10		A1A9	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1A9H4	
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	45										A1A9H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1A9H4	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	1				*	*	*	*	7-10		A1A9C17	
PAHZZ	5910-168-1026	CAPACITOR, FIXED ELECTROLYTIC: 1MD2-104 (72136)	EA	2				*	*	*	*	7-10		A1A9C2	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	3				*	*	*	*	7-10		A1A9C4	
PAHZZ	5910-168-1026	CAPACITOR, FIXED ELECTROLYTIC: 1MD2-104 (72136)	EA	REF				*	*	*	*	7-10		A1A9C6	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	REF				*	*	*	*	7-10		A1A9C7	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	REF				*	*	*	*	7-10		A1A9C8	
PAHZZ	5910-712-8687	CAPACITOR, FIXED MICA: DM15-471J (72136)	EA	1				*	*	*	*	7-10		A1A9C11	
PAHZZ	5910-689-9648	CAPACITOR, FIXED MICA: DM15-102J (72136)	EA	1				*	*	*	*	7-10		A1A9C12	
PAHZZ	5910-649-2912	CAPACITOR, FIXED MICA: DM15-470J (72136)	EA	1				*	*	*	*	7-10		A1A9C13	
PAHZZ	5910-995-0614	CAPACITOR, FIXED MICA: DM15-221J (72136)	EA	2				*	*	*	*	7-10		A1A9C14	
PAHZZ	5910-995-0614	CAPACITOR, FIXED MICA: DM15-221J (72136)	EA	REF				*	*	*	*	7-10		A1A9C15	
PAHZZ	5910-814-6354	CAPACITOR, FIXED MICA: DM15-200J (72136)	EA	1				*	*	*	*	7-10		A1A9C18	
PAHZZ	5910-702-8057	CAPACITOR, FIXED MICA: DM15-331J (72136)	EA	2				*	*	*	*	7-10		A1A9C19	
PAHZZ	5910-702-8057	CAPACITOR, FIXED MICA: DM15-331J (72136)	EA	REF				*	*	*	*	7-10		A1A9C21	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	7				*	*	*	*	7-10		A1A9C1	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-10		A1A9C3	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-10		A1A9C5	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-10		A1A9C9	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-10		A1A9C10	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF					
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-10	A1A9C21	
XBHZZ		GROMMET: Z231 (76385)	EA	1									A1A9MP1	
PAHZZ	5962-138-1486	INTEGRATED CIRCUIT: U6A77413Z (13715)	EA	1				*	*	*	*	7-10	A1A9U1	
PAHZZ	5962-460-5746	INTEGRATED CIRCUIT: U6E7709393 (13715)	EA	3				*	*	*	*	7-10	A1A9U2	
PAHZZ	5962-460-5746	INTEGRATED CIRCUIT: U6E7709393 (13715)	EA	REF				*	*	*	*	7-10	A1A9U3	
PAHZZ	5961-460-5746	INTEGRATED CIRCUIT: U6E7709393 (13715)	EA	REF				*	*	*	*	7-10	A1A9U4	
PAOZZ	6240-880-8699	LAMP, INCANDESCENT: 1869 (71744)	EA	1	*	*	*	*	*	*	*	7-10	A1A9DS1	
XBHZZ		PRINTED CIRCUIT BOARD: 100333 (33013)	EA	1									A1A9MP2	
XBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	19									A1A9MP2H19	
PAHZZ	5905-192-0344	RESISTOR, FIXED, COMPOSITION: RCR20GF101J (81349)	EA	1				*	*	*	*	7-10	A1A9R1	
PAHZZ	5905-192-3971	RESISTOR, FIXED, COMPOSITION: RC20GF331J (81349)	EA	1				*	*	*	*	7-10	A1A9R2	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	2				*	*	*	*	7-10	A1A9R6	
PAHZZ	5905-279-3497	RESISTOR, FIXED, COMPOSITION: RC20GF393J (81349)	EA	2				*	*	*	*	7-10	A1A9R7	
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	2				*	*	*	*	7-10	A1A9R8	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	REF				*	*	*	*	7-10	A1A9R9	
PAHZZ	5905-195-6791	RESISTOR, FIXED, COMPOSITION: RC20GF681J (81349)	EA	1				*	*	*	*	7-10	A1A9R10	
PAHZZ	5905-279-1757	RESISTOR, FIXED, COMPOSITION: RC20GF152J (81349)	EA	3				*	*	*	*	7-10	A1A9R11	
PAHZZ	5905-279-3504	RESISTOR, FIXED, COMPOSITION: RC20GF472J (81349)	EA	2				*	*	*	*	7-10	A1A9R12	
PAHZZ	5905-195-6453	RESISTOR, FIXED, COMPOSITION: RC20GF562J (81349)	EA	1				*	*	*	*	7-10	A1A9R14	
PAHZZ	5905-279-1880	RESISTOR, FIXED, COMPOSITION: RC20GF272J (81349)	EA	2				*	*	*	*	7-10	A1A9R15	
PAHZZ	5905-279-3504	RESISTOR, FIXED, COMPOSITION: RC20GF472J (81349)	EA	REF				*	*	*	*	7-10	A1A9R16	
PAHZZ	5905-279-1757	RESISTOR, FIXED, COMPOSITION: RC20GF152J (81349)	EA	REF				*	*	*	*	7-10	A1A9R17	
PAHZZ	5905-192-0390	RESISTOR, FIXED, COMPOSITION: RC20GF105J (81349)	EA	1				*	*	*	*	7-10	A1A9R19	
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	REF				*	*	*	*	7-10	A1A9R20	
PAHZZ	5905-279-2616	RESISTOR, FIXED, COMPOSITION: RC20GF153J (81349)	EA	2				*	*	*	*	7-10	A1A9R21	
PAHZZ	5905-279-2616	RESISTOR, FIXED, COMPOSITION: RC20GF153J (81349)	EA	REF				*	*	*	*	7-10	A1A9R22	
PAHZZ	5905-279-3503	RESISTOR, FIXED, COMPOSITION: RC20GF682J (81349)	EA	2				*	*	*	*	7-10	A1A9R24	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5905-279-3497	RESISTOR, FIXED, COMPOSITION: RC20GF393J (81349)	EA	REF				*	*	*	*	7-10	A1A9R27	
PAHZZ	5905-279-3517	RESISTOR, FIXED, COMPOSITION: RC20GF510J (81349)	EA	1				*	*	*	*	7-10	A1A9R28	
PAHZZ	5905-279-1757	RESISTOR, FIXED, COMPOSITION: RC20GF152J (81349)	EA	REF				*	*	*	*	7-10	A1A9R29	
PAHZZ	5905-279-3503	RESISTOR, FIXED, COMPOSITION: RC20GF682J (81349)	EA	REF				*	*	*	*	7-10	A1A9R30	
PAHZZ	5905-279-1880	RESISTOR, FIXED, COMPOSITION: RC20GF272J (81349)	EA	REF				*	*	*	*	7-10	A1A9R31	
PAHZZ	5905-969-5846	RESISTOR, FIXED, FILM: RN60D3921F (81349)	EA	1				*	*	*	*	7-10	A1A9R4	
PAHZZ	5905-969-5852	RESISTOR, FIXED, FILM: RN60D1581F (81349)	EA	1				*	*	*	*	7-10	A1A9R5	
PAHZZ		RESISTOR, VARIABLE: U201-500 OHMS (71450)	EA	1				*	*	*	*	7-10	A1A9R3	
PAHZZ	5905-564-7313	RESISTOR, VARIABLE: U201-100 OHMS (71450)	EA	1				*	*	*	*	7-10	A1A9R13	
PAHZZ	5905-148-2520	RESISTOR, VARIABLE: U201-10K (71450)	EA	4				*	*	*	*	7-10	A1A9R18	
PAHZZ	5905-148-2520	RESISTOR, VARIABLE: U201-10K (71450)	EA	REF				*	*	*	*	7-10	A1A9R23	
PAHZZ	5905-148-2520	RESISTOR, VARIABLE: U201-10K (71450)	EA	REF				*	*	*	*	7-10	A1A9R25	
PAHZZ	5905-148-2520	RESISTOR, VARIABLE: U201-10K (71450)	EA	REF				*	*	*	*	7-10	A1A9R26	
PAHZZ	5961-752-6121	SEMICONDUCTOR DEVICE, DIODE: 1N753A (81349)	EA	1				*	*	*	*	7-10	A1A9CR1	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE, DIODE: 1N914 (81349)	EA	2				*	*	*	*	7-10	A1A9CR2	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE, DIODE: 1N914 (81349)	EA	REF				*	*	*	*	7-10	A1A9CR3	
XBHZZ		BALL, DRIVE: 100361 (33013)	EA	1									A1MP2	
XBHZZ		BALL, DRIVE: 4511DAF (10539)	EA	1									A1MP1	
XBHZZ		SCREW, MACHINE: MS51957-13 (96906)	EA	14									A1MP1H2	
XBHZZ		SPACER: 9222A140 (06540)	EA	2									A1MP1H2	
XBHZZ		SPACER: 8085A-0040 (06540)	EA	2									A1MP1H2	
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	50									A1MP1H2	
XBHZZ		BAR, TAPPING: 100237 (33013)	EA	1									A1MP2	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF									A1MP2H8	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1MP2H8	
XBHZZ		BRACKET, DIGITAL: 100302 (33013)	EA	1									A1MP3	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF									A1MP3H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1MP3H4	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
XBHZZ		BRACKET, NIXIE: 100309 (33013)	EA	1										A1MP4
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	30										A1MP4H4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1MP4H4
XBHZZ		BRACKET, SWITCH: 100301 (33013)	EA	1										A1MP5
XBHZZ		BUSHING: SR6P4 (28520)	EA	1										A1MP6
PAHZZ		CABLE ASSEMBLY SPECIAL PURPOSE: 100403W1 (33013)	EA	1				*	*	*		*	7-2	A1W1
PAHZZ	6145-681-7849	CABLE, RADIO FREQUENCY: RG55U (81349)	EA	1				*	*	*		*		A1W1W1
PAHZZ	5935-786-0076	CONNECTOR, PLUG ELECTRICAL: 28P101-2 (24931)	EA	1				*	*	*		*	7-2	A1W1P5
PAHZZ		CABLE ASSEMBLY SPECIAL PURPOSE: 100403W2 (33013)	EA	1				*	*	*		*	7-2	A1W2
PAHZZ	6145-681-7849	CABLE, RADIO FREQUENCY: RG55U (81349)	EA	1				*	*	*		*		A1W2W1
PAHZZ	5935-786-0076	CONNECTOR, PLUG ELECTRICAL: 28P101-2 (24931)	EA	1				*	*	*		*	7-2	A1W2P1
PAHZZ		CABLE ASSEMBLY SPECIAL PURPOSE: 100403W4 (33013)	EA	1				*	*	*		*	7-2	A1W4
PAHZZ	6145-681-7849	CABLE, RADIO FREQUENCY: RG55U (81349)	EA	1				*	*	*		*		A1W4W1
PAHZZ	5935-786-0076	CONNECTOR, PLUG ELECTRICAL: 28P101-2 (24931)	EA	1				*	*	*		*	7-1	A1W4P3
PAHZZ	5935-786-0122	CONNECTOR, PLUG ELECTRICAL: 28P129-2 (24931)	EA	1				*	*	*		*	7-2	A1W4P4
PAHZZ		CABLE, ASSEMBLY SPECIAL PURPOSE: 100403W5 (33013)	EA	1				*	*	*		*	7-1	A1W5
PAHZZ	6145-681-7849	CABLE, RADIO FREQUENCY: RG55U (81349)	EA	1				*	*	*		*		A1W5W1
PAHZZ	5935-786-0122	CONNECTOR, PLUG ELECTRICAL: 28P129-2 (24931)	EA	1				*	*	*		*	7-1	A1W5P6
PAHZZ	5935-786-0068	CONNECTOR RECEPTACLE ELECT: 28JS128-1 (24931)	EA	1				*	*	*		*	7-2	A1W5J7
PAHZZ		CABLE ASSEMBLY SPECIAL PURPOSE: 100403W6 (33013)	EA	1				*	*	*		*		A1W6
PAHZZ	6145-606-8237	CABLE, RADIO FREQUENCY: RG174U (81349)	EA	1				*	*	*		*		A1W6W1
PAHZZ	5935-786-0067	CONNECTOR, RECEPTACLE ELECT: 28JS127-1 (24931)	EA	1				*	*	*		*	7-2	A1W6J5
PAHZZ		CABLE, ASSEMBLY SPECIAL PURPOSE: 100403W7 (33013)	EA	1				*	*	*		*		A1W7
PAHZZ	6145-606-8237	CABLE, RADIO FREQUENCY: RG174U (81349)	EA	1				*	*	*		*		A1W7W1
PAHZZ	5935-786-0067	CONNECTOR, RECEPTACLE ELECT: 28JS127-1 (24931)	EA	1				*	*	*		*	7-2	A1W7J4
PAHZZ	6150-189-7395	CABLE ASSEMBLY POWER: 17409S (70903)	EA	1				*	*	*		*		A1W10
PAHZZ	5910-577-1138	CAPACITOR, FIXED CERAMIC: DD103 (71590)	EA	2				*	*	*		*	7-2	A1C13
PAHZZ	5910-577-1138	CAPACITOR, FIXED CERAMIC: DD103 (71590)	EA	REF				*	*	*		*	7-2	A1C14

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO., OR REFERENCE DESIGNATION
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	17				*	*	*	*	7-2	A1C8	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C9	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C10	
PAHZZ	5910-247-7947	CAPACITOR, FIXED FEEDTHRU: 2425-001X5U0-101AA (72982)	EA	1				*	*	*	*	7-2	A1C15	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C16	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C17	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C18	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C19	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C20	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C21	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C22	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C24	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C25	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C26	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C27	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C28	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C29	
PAHZZ	5910-135-8527	CAPACITOR, FIXED FEEDTHRU: 2499-003X5S0152M (72982)	EA	REF				*	*	*	*	7-2	A1C30	
PAHZZ	5910-713-1978	CAPACITOR, FIXED MICA: DM15-680J (72136)	EA	1				*	*	*	*	7-1	A1C1	
PAHZZ	5910-056-7976	CAPACITOR, FIXED MICA: DM15-271J (72136)	EA	1				*	*	*	*	7-1	A1C2	
PAHZZ	5910-712-8656	CAPACITOR, FIXED MICA: DM15-100J (72136)	EA	1				*	*	*	*	7-1	A1C3	
PAHZZ	5910-902-0031	CAPACITOR, FIXED MICA: DM15-050J (72136)	EA	1				*	*	*	*	7-1	A1C4	
PAHZZ	5910-974-5589	CAPACITOR, FIXED MICA: DM15-030J (72136)	EA	1				*	*	*	*	7-1	A1C6	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	1				*	*	*	*		A1C42	
PAHZZ	5910-828-1129	CAPACITOR, VARIABLE: 100044 (33013)	EA	1				*	*	*	*	7-1	A1C5	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF									A1C5H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1C5H4	
XBHZZ		CHASSIS: 100288 (33013)	EA	1									A1MP7	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5950-004-7723	COIL, RADIO FREQUENCY: 100159L1 (33013)	EA	1				*	*	*	*	7-1	A1L1	
PAHZZ	5950-004-0158	COIL, RADIO FREQUENCY: 100159L2 (33013)	EA	1				*	*	*	*	7-1	A1L2	
PAHZZ	5950-004-0159	COIL RADIO FREQUENCY: 100159L3 (33013)	EA	1				*	*	*	*	7-1	A1L3	
PAHZZ	5950-004-0160	COIL, RADIO FREQUENCY: 100159L4 (33013)	EA	1				*	*	*	*	7-1	A1L4	
PAHZZ	5950-004-0161	COIL, RADIO FREQUENCY: 100159L5 (33013)	EA	1				*	*	*	*	7-1	A1L5	
PAHZZ	5950-004-0162	COIL, RADIO FREQUENCY: 100159L7 (33013)	EA	1				*	*	*	*	7-1	A1L7	
PAHZZ	5935-163-3759	CONNECTOR, RECEPTACLE, ELECT: 28JR124-2 (24931)	EA	1				*	*	*	*		A1J1	
PAHZZ	5935-163-3758	CONNECTOR, RECEPTACLE ELECT: 28JR103-1 (24931)	EA	1				*	*	*	*		A1J2	
PAHZZ	6625-004-8792	COUNTER BOARD ASSEMBLY: 100378 (33013)	EA	1				*	*	*	*	7-5	A1A3	
XBHZZ		SCREW, MACHINE: MS51957-26 (96906)	EA	20									A1A3H4	
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF									A1A3H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1A3H4	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	13				*	*	*	*	7-5	A1A3C8	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C9	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C10	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C11	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C12	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C13	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C14	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C15	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C16	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C17	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C18	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C19	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-5	A1A3C32	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	1				*	*	*	*	7-5	A1A3C33	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	5				*	*	*	*	7-5	A1A3C1	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-5	A1A3C2	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		*	7-10	A1A3C4
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		*	7-10	A1A3C5
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		*	7-10	A1A3C6
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	3				*	*	*		*	7-5	A1A3U1
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*		*	7-5	A1A3U2
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*		*	7-5	A1A3U3
PAHZZ	5962-106-4287	INTEGRATED CIRCUIT: SN7474N (01295)	EA	1				*	*	*		*	7-5	A1A3U7
PAHZZ	5962-011-2761	INTEGRATED CIRCUIT: SN7475N (01295)	EA	3				*	*	*		*	7-5	A1A3U8
PAHZZ	5962-011-2761	INTEGRATED CIRCUIT: SN7475N (01295)	EA	REF				*	*	*		*	7-5	A1A3U9
PAHZZ	5962-011-2761	INTEGRATED CIRCUIT: SN7475N (01295)	EA	REF				*	*	*		*	7-5	A1A3U10
PAHZZ	5962-865-4625	INTEGRATED CIRCUIT: SN7400N (01295)	EA	1				*	*	*		*	7-5	A1A3U14
XBHZZ		PRINTED CIRCUIT BOARD: 100330 (33013)	EA	1									7-5	A1A3MP1
XBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	21										A1A3MP1B21
XBHZZ		COUPLER: 5610 (10539)	EA	2										A1MP8
XBHZZ		COUPLER: 5610 (10539)	EA	REF										A1MP9
XBHZZ		COVER, AMPLIFIER: 100306 (33013)	EA	1										A1MP10
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1MP10H18
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP10H18
XBHZZ		COVER, NIXIE: 100310 (33013)	EA	1										A1MP11
XBHZZ		SCREW, MACHINE: MS51957-13 (96906)	EA	REF										A1MP11B4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1MP11B4
XBHZZ		COVER, DIGITAL: 100305 (33013)	EA	1										A1MP12
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1MP12H18
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP12H18
XBHZZ		COVER, OSCILLATOR: 100043 (33013)	EA	1										A1MP13
XBHZZ		SCREW, MACHINE: MS51957-26 (96906)	EA	REF										A1MP13B4
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP13H4
XBHZZ		COVER, WRAP: 100308 (33013)	EA	1										A1MP14

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1MP14H6
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1MP14H6
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP14H6
PAHZZ	6625-004-0974	DISPLAY BOARD ASSEMBLY: 100385 (33013)	EA	1				*	*	*		*	7-4	A1A2
XBHZZ		SCREW, MACHINE: MS51957-13 (96906)	EA	REF										A1A2H4
XBHZZ		WASHER, FLAT: MS15795-804 (96906)	EA	4										A1A2H4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1A2H4
XBHZZ		BRACKET, TUBE: B10-293 (33013)	EA	1										A1A2MP1
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	4										A1A2MP1H4
XBHZZ		SCREW, MACHINE: MS51957-14 (96906)	EA	4										A1A2MP1H4
XBHZZ		WASHER, FLAT: MS15795-804 (96906)	EA	4										A1A2MP1H4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	4										A1A2MP1H4
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	3				*	*	*		*	7-4	A1A2C1
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		*	7-4	A1A2C2
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		*	7-4	A1A2C3
PAHZZ	5960-477-1203	ELECTRON TUBE: B5750S (83594)	EA	3				*	*	*		*	7-4	A1A2V1
PAHZZ	5960-477-1203	ELECTRON TUBE: B5750S (83594)	EA	REF				*	*	*		*	7-4	A1A2V2
PAHZZ	5960-477-1203	ELECTRON TUBE: B5750S (83594)	EA	REF				*	*	*		*	7-4	A1A2V3
PAHZZ	6240-139-5367	ELECTRON TUBE: A261 (74276)	EA	1				*	*	*		*	7-4	A1A2V4
PAHZZ	5962-448-9876	INTEGRATED CIRCUIT: SN74141N (01295)	EA	3				*	*	*		*	7-4	A1A2U1
PAHZZ	5962-448-9876	INTEGRATED CIRCUIT: SN74141N (01295)	EA	REF				*	*	*		*	7-4	A1A2U2
PAHZZ	5962-448-9876	INTEGRATED CIRCUIT: SN74141N (01295)	EA	REF				*	*	*		*	7-4	A1A2U3
XBHZZ		PRINTED CIRCUIT BOARD: 100372 (33013)	EA	1										A1A2MP2
XBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	20										A1A2MP2H20
PAHZZ	5905-279-3500	RESISTOR, FIXED, COMPOSITION: RC20GF183J (81349)	EA	3				*	*	*		*	7-4	A1A2R1
PAHZZ	5905-279-3500	RESISTOR, FIXED, COMPOSITION: RC20GF183J (81349)	EA	REF				*	*	*		*	7-4	A1A2R2
PAHZZ	5905-279-3500	RESISTOR, FIXED, COMPOSITION: RC20GF183J (81349)	EA	REF				*	*	*		*	7-4	A1A2R3
PAHZZ	5905-279-1876	RESISTOR, FIXED, COMPOSITION: RC20GF222J (81349)	EA	1				*	*	*		*	7-4	A1A2R4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCV	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5905-279-3497	RESISTOR, FIXED, COMPOSITION: RC20GF393J (81349)	EA	1				*	*	*		*	7-4	A1A2R5
PAHZZ	5905-249-3661	RESISTOR, FIXED, COMPOSITION: RC20GF683J (81349)	EA	1				*	*	*		*	7-4	A1A2R6
PAHZZ	5961-452-1496	TRANSISTOR: 2N4410 (81349)	EA	1				*	*	*		*	7-4	A1A2Q1
XBHZZ		FOOT, REAR: 2192 (83330)	EA	4										A1MP15
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1MP15H4
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	20										A1MP15H4
XBHZZ		SCREW, MACHINE: MS51957-61 (96906)	EA	8										A1MP15H4
XBHZZ		SPACER, REAR: 100335 (33013)	EA	4										A1MP15H4
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP15H4
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	23										A1MP15H4
XBHZZ		FOOT, RUBBER: 698 (70485)	EA	4										A1MP16
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF										A1MP16H4
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP16H4
PAOZZ	5920-755-3235	FUSE, CARTRIDGE: 3/4MDL (75915)	EA	1	*	*	*	*	*	*		*	7-2	A1F1
PAHZZ	5920-939-4637	FUSEHOLDER: HKP (71400)	EA	1				*	*	*		*	7-2	A1XF1
XBHZZ		INSULATOR, BUSHING: SB625-8 (28520)	EA	1										A1MP17
XBHZZ		GROMMET: 2148 (83330)	EA	1										A1MP18
XBHZZ		GROMMET: 5711C (76385)	EA	1										A1MP19
XBHZZ		BUSHING, SNAP: SB1000-12 (28520)	EA	2										A1MP20
XBHZZ		BUSHING, SNAP: SB1000-12 (28520)	EA	REF										A1MP21
XBHZZ		GUSSET, FRONT, LEFT: 100299 (33013)	EA	1										A1MP22
XBHZZ		NUT, PLAIN, HEXAGON: MS35650-304 (96906)	EA	13										A1MP22H4
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	17										A1MP22H4
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP22H4
XBHZZ		GUSSET, REAR, RIGHT: 100286R (33013)	EA	1										A1MP23
XBHZZ		NUT, PLAIN, HEXAGON: MS35650-304 (96906)	EA	REF										A1MP23H4
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	REF										A1MP23H4
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP23H4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
XBHZZ		GUSSET, REAR, LEFT: 100286L (33013)	EA	1										A1MP24
XBHZZ		NUT, PLAIN, HEXAGON: MS35650-304 (96906)	EA	REF										A1MP24H4
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	REF										A1MP24H4
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP24H4
XBHZZ		GUSSET, FRONT, RIGHT: 100300 (33013)	EA	1										A1MP25
XBHZZ		NUT, PLAIN, HEXAGON: MS35650-304 (96906)	EA	REF										A1MP25H4
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	REF										A1MP25H2
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP25H4
XBHZZ		HANDLE: SS4 (08730)	EA	2										A1MP26
XBHZZ		FERRULE: SSF (08730)	EA	4										A1MP26H2
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	REF										A1MP26H2
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP26H2
XBHZZ		HANDLE: SS4 (08730)	EA	REF										A1MP27
XBHZZ		FERRULE: SSF (08730)	EA	REF										A1MP27H2
XBHZZ		SCREW, MACHINE: MS51957-63 (96906)	EA	REF										A1MP27H2
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1MP27H2
XBHZZ		KNOB: MS91528-2D2B (96906)	EA	2										A1MP28
XBHZZ		KNOB: MS91528-2D2B (96906)	EA	REF										A1MP29
XBHZZ		KNOB: 100438 (33013)	EA	3										A1MP30
XBHZZ		KNOB: 100438 (33013)	EA	REF										A1MP31
XBHZZ		KNOB: 100438 (33013)	EA	REF										A1MP32
XBHZZ		KNOB: 100365 (33013)	EA	1										A1MP33
XBHZZ		SCREW, MACHINE: MS51957-11 (96906)	EA	2										A1MP33H2
XBHZZ		KNOB: MS91528-2N2B (96906)	EA	1										A1MP34
FAHZZ	6625-004-8793	MAIN OSCILLATOR ASSEMBLY: 100431 (33013)	EA	1				*	*	*		*	7-7	A1A6
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1A6H4
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1A6H4
XBHZZ		WASHER, LOCK: MS35338-138 (96906)	EA	REF										A1A6H4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE UN CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5910-134-0628	CAPACITOR, FIXED CERAMIC: CM05BX473K (81349)	EA	1				*	*	*	*	7-7	A1A6C10	
PAHZZ	5910-066-5008	CAPACITOR, FIXED CERAMIC: CE102 (71590)	EA	3				*	*	*	*	7-7	A1A6C17	
PAHZZ	5910-066-5008	CAPACITOR, FIXED CERAMIC: CE102 (71590)	EA	REF				*	*	*	*	7-7	A1A6C18	
PAHZZ	5910-066-5008	CAPACITOR, FIXED CERAMIC: CE102 (71590)	EA	REF				*	*	*	*	7-7	A1A6C33	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	1				*	*	*	*	7-7	A1A6C14	
PAHZZ	5910-851-3328	CAPACITOR, FIXED MICA: DM15-821J (72136)	EA	1				*	*	*	*	7-7	A1A6C1	
PAHZZ	5910-712-8656	CAPACITOR, FIXED MICA: DM15-100J (72136)	EA	1				*	*	*	*	7-7	A1A6C2	
PAHZZ	5910-044-4138	CAPACITOR, FIXED MICA: DM15-060J (72136)	EA	2				*	*	*	*	7-7	A1A6C6	
PAHZZ	5910-584-7588	CAPACITOR, FIXED MICA: CM05FD101G03 (81349)	EA	2				*	*	*	*	7-7	A1A6C20	
PAHZZ	5910-044-4138	CAPACITOR, FIXED MICA: DM15-060J (72136)	EA	REF				*	*	*	*	7-7	A1A6C24	
PAHZZ	5910-984-7588	CAPACITOR, FIXED MICA: CM05FD101G03 (81349)	EA	REF				*	*	*	*	7-7	A1A6C25	
PAHZZ	5910-702-8057	CAPACITOR, FIXED MICA: DM15-331J (72136)	EA	1				*	*	*	*	7-7	A1A6C26	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	6				*	*	*	*	7-7	A1A6C8	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-7	A1A6C9	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-7	A1A6C11	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-7	A1A6C12	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	7				*	*	*	*	7-7	A1A6C13	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C15	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-7	A1A6C19	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C21	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C22	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C23	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C28	
PAHZZ	5910-752-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-7	A1A6C31	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*	*	7-7	A1A6C32	
PAHZZ	5950-159-7521	COIL, RADIO FREQUENCY: 2307-104 (99800)	EA	3				*	*	*	*	7-7	A1A6L7	
PAHZZ	5950-159-7521	COIL, RADIO FREQUENCY: 2307-104 (99800)	EA	REF				*	*	*	*	7-7	A1A6L8	
PAHZZ	5950-159-7521	COIL, RADIO FREQUENCY: 2307-104 (99800)	EA	REF				*	*	*	*	7-7	A1A6L9	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTYCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5950-767-1599	COIL, SOLENOID: 100368 (33013)	EA	1				*	*	*		7-7	A1A6L6	
PAHZZ	6625-004-0975	PRINTED CIRCUIT BOARD: 100158 (33013)	EA	1				*	*	*			A1A6MP1	
PAHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	7				*	*	*			A1A6MP1H7	
PAHZZ	5945-159-7493	RELAY, RESONANT REED: W104MPGX2 (94696)	EA	1				*	*	*		7-7	A1A6K1	
PAHZZ	5905-279-1880	RESISTOR, FIXED, COMPOSITION: RC20GF272J (81349)	EA	2				*	*	*		7-7	A1A6R1	
PAHZZ	5905-254-9201	RESISTOR, FIXED, COMPOSITION: RC20GF473J (81349)	EA	5				*	*	*		7-7	A1A6R2	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	4				*	*	*		7-7	A1A6R3	
PAHZZ	5905-195-6761	RESISTOR, FIXED, COMPOSITION: RC20GF104J (81349)	EA	1				*	*	*		7-7	A1A6R4	
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	2				*	*	*		7-7	A1A6R5	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	1				*	*	*		7-7	A1A6R6	
PAHZZ	5905-279-3519	RESISTOR, FIXED, COMPOSITION: RC20GF220J (81349)	EA	2				*	*	*		7-7	A1A6R12	
PAHZZ	5905-254-9201	RESISTOR, FIXED, COMPOSITION: RC20GF473J (81349)	EA	REF				*	*	*		7-7	A1A6R13	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	4				*	*	*		7-7	A1A6R14	
PAHZZ	5905-171-1999	RESISTOR, FIXED, COMPOSITION: RC20GF821J (81349)	EA	1				*	*	*		7-7	A1A6R15	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	REF				*	*	*		7-7	A1A6R16	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	REF				*	*	*		7-7	A1A6R17	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*		7-7	A1A6R18	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	5				*	*	*		7-7	A1A6R19	
PAHZZ	5905-171-2006	RESISTOR, FIXED, COMPOSITION: RC20GF271J (81349)	EA	2				*	*	*		7-7	A1A6R20	
PAHZZ	5905-279-1894	RESISTOR, FIXED, COMPOSITION: RC20GF820J (81349)	EA	1				*	*	*		7-7	A1A6R22	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*		7-7	A1A6R24	
PAHZZ	5905-171-2006	RESISTOR, FIXED, COMPOSITION: RC20GF271J (81349)	EA	REF				*	*	*		7-7	A1A6R25	
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	1				*	*	*		7-7	A1A6R28	
PAHZZ	5905-171-1998	RESISTOR, FIXED, COMPOSITION: RC20GF333J (81349)	EA	1				*	*	*		7-7	A1A6R29	
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	REF				*	*	*		7-7	A1A6R30	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*		7-7	A1A6R32	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*		7-7	A1A5R33	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					1-20	21-50	51-100	1-20	21-50	51-100				
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	REF				*	*	*		*	7-7	A1A6R34
PAHZZ	5905-279-1890	RESISTOR, FIXED, COMPOSITION: RC20GF391J (81349)	EA	2				*	*	*		*	7-7	A1A6R35
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*		*	7-7	A1A6R36
PAHZZ	5905-254-9201	RESISTOR, FIXED, COMPOSITION: RC20GF473J (81349)	EA	REF				*	*	*		*	7-7	A1A6R37
PAHZZ	5905-254-9201	RESISTOR, FIXED, COMPOSITION: RC20GF473J (81349)	EA	REF				*	*	*		*	7-7	A1A6R38
PAHZZ	5905-279-1890	RESISTOR, FIXED, COMPOSITION: RC20GF391J (81349)	EA	REF				*	*	*		*	7-7	A1A6R39
PAHZZ	5905-279-3519	RESISTOR, FIXED, COMPOSITION: RC20GF220J (81349)	EA	REF				*	*	*		*	7-7	A1A6R40
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*		*	7-7	A1A6R41
PAHZZ	5905-254-9201	RESISTOR, FIXED, COMPOSITION: RC20GF473J (81349)	EA	REF				*	*	*		*	7-7	A1A6R42
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*		*	7-7	A1A6R43
PAHZZ	5905-279-1880	RESISTOR, FIXED, COMPOSITION: RC20GF272J (81349)	EA	REF				*	*	*		*	7-7	A1A6R44
PAHZZ		RESISTOR, VARIABLE: ER251U (01121)	EA	2				*	*	*		*	7-7	A1A6R45
PAHZZ		RESISTOR, VARIABLE: ER251U (01121)	EA	REF				*	*	*		*	7-7	A1A6R46
PAHZZ	5961-912-4907	SEMICONDUCTOR, DEVICE, DIODE: 1N82AG (81349)	EA	4				*	*	*		*	7-7	A1A6CR2
PAHZZ	5961-912-4907	SEMICONDUCTOR, DEVICE, DIODE: 1N82AG (81349)	EA	REF				*	*	*		*	7-7	A1A6CR3
PAHZZ	5961-912-4907	SEMICONDUCTOR, DEVICE, DIODE: 1N82AG (81349)	EA	REF				*	*	*		*	7-7	A1A6CR4
PAHZZ	5961-912-4907	SEMICONDUCTOR, DEVICE, DIODE: 1N82AG (81349)	EA	REF				*	*	*		*	7-7	A1A6CR5
XBHZZ		SHIELD: 100081 (33013)	EA	1									7-7	A1A6MP2
PAHZZ	5961-163-3689	TRANSISTOR: MPE3007 (04713)	EA	1				*	*	*		*	7-7	A1A6Q1
PAHZZ	5961-842-6937	TRANSISTOR: 2N706 (81349)	EA	2				*	*	*		*	7-7	A1A6Q2
PAHZZ		TRANSISTOR: 2N2857 (81349)	EA	3				*	*	*		*	7-7	A1A6Q3
PAHZZ		TRANSISTOR: 2N709 (81349)	EA	2				*	*	*		*	7-7	A1A6Q4
PAHZZ		TRANSISTOR: 2N709 (81349)	EA	REF				*	*	*		*	7-7	A1A6Q5
PAHZZ		TRANSISTOR: 2N2857 (81349)	EA	REF				*	*	*		*	7-7	A1A6Q6
PAHZZ	5961-842-6937	TRANSISTOR: 2N706 (81349)	EA	REF				*	*	*		*	7-7	A1A6Q7
PAHZZ		TRANSISTOR: 2N2857 (81349)	EA	REF				*	*	*		*	7-7	A1A6Q8
PAHZZ		METER: 100290 (33013)	EA	1				*	*	*		*		A1M1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
XBHZZ		BRACKET, METER: 100298 (33013)	EA	8										A1M1H4
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	REF										A1M1H4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1M1H4
PAHZZ		METER: 100291 (33013)	EA	1				*	*	*		*	7-1	A1M2
XBHZZ		BRACKET, METER: 100298 (33013)	EA	REF										A1M2H4
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	REF										A1M2H4
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1M2H4
XBHZZ		MODULATOR BOARD ASSEMBLY: 100396 (33013)	EA	1									7-11	A1A11
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF										A1A11H4
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1A11H4
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1A11H4
PAHZZ	5910-006-1267	CAPACITOR, FIXED CERAMIC: SF6108 (95121)	EA	1				*	*	*		*	7-11	A1A11C1
PAHZZ	5910-068-4475	CAPACITOR, FIXED CERAMIC: CK103 (71590)	EA	3				*	*	*		*	7-11	A1A11C3
PAHZZ	5910-068-4475	CAPACITOR, FIXED CERAMIC: CK103 (71590)	EA	REF				*	*	*		*	7-11	A1A11C7
PAHZZ	5910-068-4475	CAPACITOR, FIXED CERAMIC: CK103 (71590)	EA	REF				*	*	*		*	7-11	A1A11C9
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	2				*	*	*		*	7-10	A1A11C11
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	REF				*	*	*		*	7-11	A1A11C12
PAHZZ	5910-995-0614	CAPACITOR, FIXED MICA: DM15-221J (72136)	EA	1				*	*	*		*	7-11	A1A11C2
PAHZZ	5910-713-1978	CAPACITOR, FIXED MICA: DM15-680J (72136)	EA	1				*	*	*		*		A1A11C13
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	2				*	*	*		*	7-11	A1A11C5
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-11	A1A11C6
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-050-651-474M (72982)	EA	2				*	*	*		*	7-11	A1A11C8
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-050-651-474M (72982)	EA	REF				*	*	*		*	7-11	A1A11C10
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	3				*	*	*		*	7-11	A1A11L1
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	REF				*	*	*		*	7-11	A1A11L2
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	REF				*	*	*		*	7-11	A1A11L3
PAHZZ	5950-972-3919	CHOKE: WEEDUCTOR-27 (72259)	EA	1				*	*	*		*	7-11	A1A11L4
XBHZZ		PRINTED CIRCUIT BOARD: 100373 (33013)	EA	1										A1A11MP1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					XBHZZ		PIN, PRINTED CIRCUIT: 100260 (33013)	EA	9					
PAHZZ	5962-933-8613	INTEGRATED, CIRCUIT: 100401 (33013)	EA	2				*	*	*	*	7-11		A1A11U1
PAHZZ	5962-933-8613	INTEGRATED CIRCUIT: 100401 (33013)	EA	REF				*	*	*	*	7-11		A1A11U2
PAHZZ	5905-252-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	5				*	*	*	*	7-11		A1A11R1
PAHZZ	5905-252-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	REF				*	*	*	*	7-11		A1A11R2
PAHZZ	5905-195-5571	RESISTOR, FIXED, COMPOSITION: RC20GF680J (81349)	EA	2				*	*	*	*	7-11		A1A11R3
PAHZZ	5905-195-5571	RESISTOR, FIXED, COMPOSITION: RC20GF680J (81349)	EA	REF				*	*	*	*	7-11		A1A11R4
PAHZZ	5905-252-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	REF				*	*	*	*	7-11		A1A11R5
PAHZZ	5905-252-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	REF				*	*	*	*	7-11		A1A11R6
PAHZZ	5905-279-3504	RESISTOR, FIXED, COMPOSITION: RC20GF472J (81349)	EA	1				*	*	*	*	7-11		A1A11R7
PAHZZ	5905-192-3971	RESISTOR, FIXED, COMPOSITION: RC20GF331J (81349)	EA	1				*	*	*	*	7-11		A1A11R8
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	3				*	*	*	*	7-11		A1A11R9
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	REF				*	*	*	*	7-11		A1A11R10
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	REF				*	*	*	*	7-11		A1A11R11
PAHZZ	5905-279-1876	RESISTOR, FIXED, COMPOSITION: RC20GF222J (81349)	EA	2				*	*	*	*	7-11		A1A11R12
PAHZZ	5905-279-1876	RESISTOR, FIXED, COMPOSITION: RC20GF222J (81349)	EA	REF				*	*	*	*	7-11		A1A11R13
PAHZZ	5905-190-8880	RESISTOR, FIXED, COMPOSITION: RC20GF122J (81349)	EA	1				*	*	*	*	7-11		A1A11R14
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	2				*	*	*	*	7-11		A1A11R15
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-11		A1A11R16
PAHZZ	5905-171-1999	RESISTOR, FIXED, COMPOSITION: RC20GF821J (81349)	EA	2				*	*	*	*	7-11		A1A11R17
PAHZZ	5905-171-1999	RESISTOR, FIXED, COMPOSITION: RC20GF821J (81349)	EA	REF				*	*	*	*	7-11		A1A11R18
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	2				*	*	*	*	7-11		A1A11R19
PAHZZ	5905-252-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	REF				*	*	*	*	7-11		A1A11R20
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-11		A1A11R21
PAHZZ		RESISTOR, VARIABLE: U201-250 (71450)	EA	1				*	*	*	*	7-11		A1A11R22
PAHZZ	5961-767-1599	SEMICONDUCTOR DEVICE, DIODE: 100402 (33013)	EA	2				*	*	*	*	7-11		A1A11CR1
PAHZZ	5961-767-1599	SEMICONDUCTOR DEVICE, DIODE: 100402 (33013)	EA	REF				*	*	*	*	7-11		A1A11CR2
PAHZZ		SEMICONDUCTOR DEVICE, DIODE: 1N702A (81349)	EA	1				*	*	*	*	7-11		A1A11CR3

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC 1M UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PFR 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a)	(b)
					1-20	21-50	51-100	1-20	21-50	51-100			FIG NO.	ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5961-752-6121	SEMICONDUCTOR DEVICE, DIODE: 1N753A (81349)	EA	1				*	*	*		*	7-11	A1A11CR4
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	2				*	*	*		*	7-11	A1A11Q1
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*		*	7-11	A1A11Q2
XBHZZ		PANEL, BACK: 100444 (33013)	EA	1										A1MP35
XBHZZ		PANEL, FRONT: 100311 (33013)	EA	1										A1MP36
XBHZZ		PLATE, BOTTOM: 100307 (33013)	EA	1										A1MP37
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1MP37H9
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1MP37H9
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1MP37H9
XBHZZ		POWER SUPPLY BOARD ASSEMBLY: 100343 (33013)	EA	1									7-9	A1A8
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF										A1A8H6
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1A8H6
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1A8H6
PAHZZ		CAPACITOR, FIXED ELECTROLYTIC: 39D107G016DC4 (56289)	EA	2				*	*	*		*	7-9	A1A8C1
PAHZZ	5910-005-7039	CAPACITOR, FIXED ELECTROLYTIC: 30D207G025DH4 (56289)	EA	2				*	*	*		*	7-9	A1A8C2
PAHZZ	5910-786-0147	CAPACITOR, FIXED ELECTROLYTIC: 39D707G050GP4 (56289)	EA	1				*	*	*		*	7-9	A1A8C3
PAHZZ	5910-442-4911	CAPACITOR, FIXED ELECTROLYTIC: 39D506G050EE4 (56289)	EA	2				*	*	*		*	7-9	A1A8C4
PAHZZ	5910-442-4911	CAPACITOR, FIXED ELECTROLYTIC: 39D506G050EE4 (56289)	EA	REF				*	*	*		*	7-9	A1A8C5
PAHZZ	5910-838-8450	CAPACITOR, FIXED ELECTROLYTIC: 39D457G025FJ4 (56289)	EA	1				*	*	*		*	7-9	A1A8C6
PAHZZ		CAPACITOR, FIXED ELECTROLYTIC: 39D107G016DC4 (56289)	EA	REF				*	*	*		*	7-9	A1A8C7
PAHZZ	5910-893-1762	CAPACITOR, FIXED ELECTROLYTIC: 39D388G015HP4 (56289)	EA	1				*	*	*		*	7-9	A1A8C8
PAHZZ	5910-945-1789	CAPACITOR, FIXED ELECTROLYTIC: 30D207G012DF4 (56289)	EA	1				*	*	*		*	7-9	A1A8C9
PAHZZ	5910-005-7039	CAPACITOR, FIXED ELECTROLYTIC: 30D207G025DH4 (56289)	EA	REF				*	*	*		*	7-9	A1A8C10
PAHZZ	5910-089-3853	CAPACITOR, FIXED ELECTROLYTIC: 39D506F150FJ4 (56289)	EA	2				*	*	*		*	7-9	A1A8C12
PAHZZ	5910-089-3853	CAPACITOR, FIXED ELECTROLYTIC: 39D506F150FJ4 (56289)	EA	REF				*	*	*		*	7-9	A1A8C13
XBHZZ		PIN, PRINTED, CIRCUIT: 100260 (33013)	EA	45										A1A8MP1H45
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	5				*	*	*		*	7-9	A1A8R1
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	2				*	*	*		*	7-9	A1A8R2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*		*	7-9	A1A8R3
PAHZZ	5905-171-2004	RESISTOR, FIXED, COMPOSITION: RC20GF223J (81349)	EA	1				*	*	*		*	7-9	A1A8R7
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*		*	7-9	A1A8R8
PAHZZ	5905-828-4925	RESISTOR, FIXED, COMPOSITION: RC20GF1R5J (81349)	EA	REF				*	*	*		*	7-9	A1A8R9
PAHZZ	5905-279-3506	RESISTOR, FIXED, COMPOSITION: RC20GF332J (81349)	EA	2				*	*	*		*	7-9	A1A8R10
PAHZZ	5905-279-3503	RESISTOR, FIXED, COMPOSITION: RC20GF682J (81349)	EA	1				*	*	*		*	7-9	A1A8R12
PAHZZ	5905-279-1876	RESISTOR, FIXED, COMPOSITION: RC20GF222J (81349)	EA	1				*	*	*		*	7-9	A1A8R13
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	1				*	*	*		*	7-9	A1A8R15
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*		*	7-9	A1A8R16
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	REF				*	*	*		*	7-9	A1A8R17
PAHZZ	5905-279-3506	RESISTOR, FIXED, COMPOSITION: RC20GF332J (81349)	EA	REF				*	*	*		*	7-9	A1A8R20
PAHZZ	5905-279-1880	RESISTOR, FIXED, COMPOSITION: RC20GF272J (81349)	EA	1				*	*	*		*	7-9	A1A8R21
PAHZZ	5905-781-7123	RESISTOR, FIXED, COMPOSITION: RC20GF2R7J (81349)	EA	1				*	*	*		*	7-9	A1A8R22
PAHZZ	5905-171-1998	RESISTOR, FIXED, COMPOSITION: RC20GF333J (81349)	EA	1				*	*	*		*	7-9	A1A8R23
PAHZZ	5905-195-6761	RESISTOR, FIXED, COMPOSITION: RC20GF104J (81349)	EA	1				*	*	*		*	7-9	A1A8R30
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*		*	7-9	A1A8R31
PAHZZ	5905-709-2956	RESISTOR, FIXED, FILM: RN60D1822F (81349)	EA	1				*	*	*		*	7-9	A1A8R5
PAHZZ	5905-988-2319	RESISTOR, FIXED, FILM: RN60D1502F (81349)	EA	1				*	*	*		*	7-9	A1A8R6
PAHZZ	5905-952-2146	RESISTOR, FIXED, FILM: RN60D5111F (81349)	EA	1				*	*	*		*	7-9	A1A8R18
PAHZZ	5905-969-5846	RESISTOR, FIXED, FILM: RN60D3921F (81349)	EA	1				*	*	*		*	7-9	A1A8R19
PAHZZ	5905-078-8293	RESISTOR, FIXED, FILM: RN60D1821F (81349)	EA	1				*	*	*		*	7-9	A1A8R24
PAHZZ	5905-988-2280	RESISTOR, FIXED, FILM: RN60D2001F (81349)	EA	1				*	*	*		*	7-9	A1A8R25
PAHZZ		RESISTOR, FIXED, WIREWOUND: BWH-.51 (75042)	EA	1				*	*	*		*	7-9	A1A8R4
PAHZZ	5905-764-2603	RESISTOR, FIXED, WIREWOUND: BWH-.22 (75042)	EA	1				*	*	*		*	7-9	A1A8R14
PAHZZ		RESISTOR, VARIABLE: U201-5K (71450)	EA	1				*	*	*		*	7-9	A1A8R11
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	10				*	*	*		*	7-9	A1A8CR1
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*		*	7-9	A1A8CR2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF					
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR4	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR5	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR6	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR7	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR8	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR9	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4002 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR10	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4004 (81349)	EA	2				*	*	*	*	7-9	A1A8CR12	
PAHZZ		SEMICONDUCTOR, DEVICE, DIODE: 1N4004 (81349)	EA	REF				*	*	*	*	7-9	A1A8CR13	
PAHZZ	5961-842-9864	SEMICONDUCTOR, DEVICE, DIODE: 1N914 (81349)	EA	1				*	*	*	*	7-9	A1A8CR14	
PAHZZ	5961-752-6121	SEMICONDUCTOR, DEVICE, DIODE: 1N753A (81349)	EA	1				*	*	*	*	7-9	A1A8CR15	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	8				*	*	*	*	7-9	A1A8Q1	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q3	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q4	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q5	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q7	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q8	
PAHZZ	5961-949-1440	TRANSISTOR: 2N2905 (81349)	EA	4				*	*	*	*	7-9	A1A8Q9	
PAHZZ	5961-949-1440	TRANSISTOR: 2N2905 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q10	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q11	
PAHZZ		TRANSISTOR: 2N2102 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q12	
PAHZZ	5961-949-1440	TRANSISTOR: 2N2905 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q15	
PAHZZ	5961-949-1440	TRANSISTOR: 2N2905 (81349)	EA	REF				*	*	*	*	7-9	A1A8Q16	
PAHHZ	6625-004-8794	PRESALER ASSEMBLY, PC BOARD: 100415 (33013)	EA	1				*	*	*	*	7-3	A1A1	
XBHZZ		SCREW, MACHINE: MS51957-26 (96906)	EA	REF									A1A1H4	
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF									A1A1H4	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF					
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DT-1207 (56289)	EA	1				*	*	*		7-3	A1A1C9	
PAHZZ	5910-683-3152	CAPACITOR, FIXED MICA: DM15-681J (72136)	EA	1				*	*	*		7-3	A1A1C19	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	6				*	*	*		7-3	A1A1C1	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		7-3	A1A1C3	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		7-3	A1A1C4	
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-050-651-474M (72982)	EA	2				*	*	*		7-3	A1A1C5	
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-050-651-474M (72982)	EA	REF				*	*	*		7-3	A1A1C6	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		7-3	A1A1C7	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		7-3	A1A1C8	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		7-3	A1A1C10	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	4				*	*	*		7-3	A1A1C15	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		7-3	A1A1C16	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		7-3	A1A1C17	
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*		7-3	A1A1C18	
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	2				*	*	*		7-3	A1A1L1	
PAHZZ	5950-916-3940	CHOKE: DECIDUCTOR1-0 (72259)	EA	1				*	*	*		7-3	A1A1L2	
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	REF				*	*	*		7-3	A1A1L3	
PAHZZ	5950-087-5795	CHOKE: WEEDUCTOR-33 (72259)	EA	1				*	*	*		7-3	A1A1L4	
PAHZZ	5962-138-1478	INTEGRATED CIRCUIT: MC1023P (04713)	EA	1				*	*	*		7-3	A1A1U1	
PAHZZ	5962-117-8726	INTEGRATED CIRCUIT: MC1027P (04713)	EA	1				*	*	*		7-3	A1A1U2	
PAHZZ	5962-450-8830	INTEGRATED CIRCUIT: MC1013P (04713)	EA	2				*	*	*		7-3	A1A1U3	
PAHZZ	5962-450-8830	INTEGRATED CIRCUIT: MC1013P (04713)	EA	REF				*	*	*		7-3	A1A1U4	
XBHZZ		PRINTED CIRCUIT BOARD: 100320 (33013)	EA	1									A1A1MP1	
XBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	8									A1A1MP1H	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	9				*	*	*		7-3	A1A1R1	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*		7-3	A1A1R2	
PAHZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION: RC20GF103J (81349)	EA	1				*	*	*		7-3	A1A1R3	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCV	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITER NO. OR REFERENCE DESIGNATION
					PAHZZ	5905-279-1890	RESISTOR, FIXED, COMPOSITION: RC20GF391J (81349)	EA	1					
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R5	
PAHZZ	5905-279-3514	RESISTOR, FIXED, COMPOSITION: RC20GF181J (81349)	EA	1				*	*	*	*	7-3	A1A1R6	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R7	
PAHZZ	5905-252-5434	RESISTOR, FIXED, COMPOSITION: RC20GF121J (81349)	EA	1				*	*	*	*	7-3	A1A1R8	
PAHZZ	5905-279-3521	RESISTOR, FIXED, COMPOSITION: RC20GF150J (81349)	EA	3				*	*	*	*	7-3	A1A1R9	
PAHZZ	5905-299-1541	RESISTOR, FIXED, COMPOSITION: RC20GF151J (81349)	EA	2				*	*	*	*	7-3	A1A1R10	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	2				*	*	*	*	7-3	A1A1R11	
PAHZZ	5905-279-3521	RESISTOR, FIXED, COMPOSITION: RC20GF150J (81349)	EA	REF				*	*	*	*	7-3	A1A1R12	
PAHZZ	5905-279-3521	RESISTOR, FIXED, COMPOSITION: RC20GF150J (81349)	EA	REF				*	*	*	*	7-3	A1A1R13	
PAHZZ	5905-299-1541	RESISTOR, FIXED, COMPOSITION: RC20GF151J (81349)	EA	REF				*	*	*	*	7-3	A1A1R14	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J	EA	REF				*	*	*	*	7-3	A1A1R15	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R16	
PAHZZ	5905-299-1971	RESISTOR, FIXED, COMPOSITION: RC20GF822J (81349)	EA	1				*	*	*	*	7-3	A1A1R17	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R18	
PAHZZ	5905-195-6800	RESISTOR, FIXED, COMPOSITION: RC20GF561J (81349)	EA	1				*	*	*	*	7-3	A1A1R19	
PAHZZ	5905-192-3971	RESISTOR, FIXED, COMPOSITION: RC20GF331J (81349)	EA	2				*	*	*	*	7-3	A1A1R20	
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	2				*	*	*	*	7-3	A1A1R21	
PAHZZ	5905-192-3973	RESISTOR, FIXED, COMPOSITION: RC20GF471J (81349)	EA	REF				*	*	*	*	7-3	A1A1R22	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R23	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	1				*	*	*	*	7-3	A1A1R24	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R25	
PAHZZ	5905-195-5571	RESISTOR, FIXED, COMPOSITION: RC20GF680J (81349)	EA	1				*	*	*	*	7-3	A1A1R26	
PAHZZ	5905-279-3513	RESISTOR, FIXED, COMPOSITION: RC20GF221J (81349)	EA	REF				*	*	*	*	7-3	A1A1R27	
PAHZZ	5905-192-3971	RESISTOR, FIXED, COMPOSITION: RC20GF331J (81349)	EA	REF				*	*	*	*	7-3	A1A1R28	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE, DIODE: 1N914 (81349)	EA	5				*	*	*	*	7-3	A1A1R29	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE, DIODE: 1N914 (81349)	EA	REF				*	*	*	*	7-3	A1A1R30	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE DIODE: 1N914 (81349)	EA	REF				*	*	*	*	7-3	A1A1R31	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SFR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					1-20	21-50	51-100	1-20	21-50	51-100				
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE DIODE: 1N914 (81349)	EA	REF				*	*	*	*	7-3	A1A1CR5	
PAHZZ	5961-842-9864	SEMICONDUCTOR DEVICE DIODE: 1N914 (81349)	EA	REF				*	*	*	*	7-3	A1A1CR6	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	6				*	*	*	*	7-3	A1A1Q1	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*	*	7-3	A1A1Q2	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*	*	7-3	A1A2Q3	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*	*	7-3	A1A1Q4	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*	*	7-3	A1A1Q5	
PAHZZ	5961-762-2277	TRANSISTOR: MPS918 (04713)	EA	REF				*	*	*	*	7-3	A1A1Q6	
PAHZZ	5961-946-6635	TRANSISTOR: MPS3640 (04713)	EA	2				*	*	*	*	7-3	A1A1Q7	
PAHZZ	5961-946-6635	TRANSISTOR: MPS3640 (04713)	EA	REF				*	*	*	*	7-3	A1A1Q8	
XBHZZ		RADIO FREQUENCY AMPLIFIER ASSY: 100395 (33013)	EA	1								7-8	A1A7	
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF									A1A7H4	
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF									A1A7H4	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1A7H4	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	3				*	*	*	*	7-8	A1A7C12	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-8	A1A7C13	
PAHZZ	5910-280-8393	CAPACITOR, FIXED CERAMIC: DD102 (71590)	EA	REF				*	*	*	*	7-8	A1A7C18	
PAHZZ	5910-407-2465	CAPACITOR, FIXED CERAMIC: CP332 (71590)	EA	1				*	*	*	*	7-8	A1A7C23	
PAHZZ	5910-450-3016	CAPACITOR, FIXED CERAMIC: CF182 (71590)	EA	1				*	*	*	*	7-8	A1A7C24	
PAHZZ	5910-066-5008	CAPACITOR, FIXED CERAMIC: CE102 (71590)	EA	1				*	*	*	*	7-8	A1A7C25	
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	1				*	*	*	*	7-8	A1A7C8	
PAHZZ	5910-463-9490	CAPACITOR, FIXED ELECTROLYTIC: 30D256C050CC4 (56289)	EA	1				*	*	*	*	7-8	A1A7C20	
PAHZZ	5910-936-7405	CAPACITOR, FIXED MICA: CM05CD150J03 (81349)	EA	1				*	*	*	*	7-8	A1A7C16	
PAHZZ		CAPACITOR, FIXED MICA: DM15-391J (72136)	EA	1				*	*	*	*	7-8	A1A7C22	
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-050-651-474M (72982)	EA	3				*	*	*	*	7-8	A1A7C1	
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	11				*	*	*	*	7-8	A1A7C2	
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-100-651-474M (72982)	EA	REF				*	*	*	*	7-8	A1A7C3	
PAHZZ	5910-401-2969	CAPACITOR, FIXED MYLAR: 8131-100-651-474M (72982)	EA	REF				*	*	*	*	7-8	A1A7C4	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY GS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CATGORY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C5
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C6
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C7
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C9
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-6	A1A7C10
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C11
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C14
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C15
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C17
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	1				*	*	*		*	7-8	A1A7C19
PAHZZ	5910-450-8592	CAPACITOR, FIXED MYLAR: 8131-100-651-104M (72982)	EA	REF				*	*	*		*	7-8	A1A7C21
PAHZZ	5950-767-1725	CHOKE: 2307-225 (99800)	EA	1				*	*	*		*	7-8	A1A7L1
PAHZZ	5950-855-5959	CHOKE: WEEDUCTOR-56 (72259)	EA	1				*	*	*		*	7-8	A1A7L2
PAHZZ	5950-767-1727	CHOKE: 2307-275 (99800)	EA	2				*	*	*		*	7-8	A1A7L3
PAHZZ	5950-767-1727	CHOKE: 2307-275 (99800)	EA	REF				*	*	*		*	7-8	A1A7L4
PAHZZ	5961-871-9538	HEATSINK: NF207 (05820)	EA	5										A1A7MP2
PAHZZ	5961-871-9538	HEATSINK: NF207 (05820)	EA	REF										A1A7MP3
PAHZZ	5961-871-9538	HEATSINK: NF207 (05820)	EA	REF										A1A7MP4
PAHZZ	5961-871-9538	HEATSINK: NF207 (05820)	EA	REF										A1A7MP5
PAHZZ	5961-871-9538	HEATSINK: NF207 (05820)	EA	REF										A1A7MP6
KBHZZ		PRINTED CIRCUIT BOARD: 100375 (33013)	EA	1										A1A7MP1
KBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	10										A1A7MP1H10
PAHZZ	5905-195-3546	RESISTOR, FIXED, COMPOSITION: RC20GF390J (81349)	EA	1				*	*	*		*	7-8	A1A7R1
PAHZZ	5905-195-4018	RESISTOR, FIXED, COMPOSITION: RC20GF470J (81349)	EA	1				*	*	*		*	7-8	A1A7R2
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	6				*	*	*		*	7-8	A1A7R3
PAHZZ	5905-279-175	RESISTOR, FIXED, COMPOSITION: RC20GF52J (81349)	EA	2				*	*	*		*	7-8	A1A7R4
PAHZZ	5905-279-3514	RESISTOR, FIXED, COMPOSITION: RC20GF181J (81349)	EA	1				*	*	*		*	7-8	A1A7R5
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*		*	7-8	A1A7Rc

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*	*	7-8	A1A7R7	
PAHZZ	5905-279-3506	RESISTOR, FIXED, COMPOSITION: RC20GF332J (81349)	EA	1				*	*	*	*	7-8	A1A7R8	
PAHZZ	5905-279-1757	RESISTOR, FIXED, COMPOSITION: RC20GF152J (81349)	EA	REF				*	*	*	*	7-8	A1A7R9	
PAHZZ	5905-190-8883	RESISTOR, FIXED, COMPOSITION: RC20GF100J (81349)	EA	4				*	*	*	*	7-8	A1A7R10	
PAHZZ	5905-279-2643	RESISTOR, FIXED, COMPOSITION: RC32GF101J (81349)	EA	1				*	*	*	*	7-8	A1A7R11	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*	*	7-8	A1A7R12	
PAHZZ	5905-195-554	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*	*	7-8	A1A7R13	
PAHZZ	5905-299-2051	RESISTOR, FIXED, COMPOSITION: RC32GF471J (81349)	EA	1				*	*	*	*	7-8	A1A7R14	
PAHZZ	5905-279-2642	RESISTOR, FIXED, COMPOSITION: RC32GF391J (81349)	EA	1				*	*	*	*	7-8	A1A7R15	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	6				*	*	*	*	7-8	A1A7R16	
PAHZZ	5905-190-8883	RESISTOR, FIXED, COMPOSITION: RC20GF100J (81349)	EA	REF				*	*	*	*	7-8	A1A7R17	
PAHZZ	5905-256-0412	RESISTOR, FIXED, COMPOSITION: RC42GF181J (81349)	EA	1				*	*	*	*	7-8	A1A7R18	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-8	A1A7R19	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-8	A1A7R20	
PAHZZ	5905-190-8883	RESISTOR, FIXED, COMPOSITION: RC20GF100J (81349)	EA	REF				*	*	*	*	7-8	A1A7R21	
PAHZZ	5905-171-1975	RESISTOR, FIXED, COMPOSITION: RC42GF151J (81349)	EA	2				*	*	*	*	7-8	A1A7R22	
PAHZZ	5905-171-1975	RESISTOR, FIXED, COMPOSITION: RC42GF151J (81349)	EA	REF				*	*	*	*	7-8	A1A7R23	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-8	A1A7R24	
PAHZZ	5905-190-8883	RESISTOR, FIXED, COMPOSITION: RC20GF100J (81349)	EA	REF				*	*	*	*	7-8	A1A7R25	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-8	A1A7R26	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-8	A1A7R27	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	REF				*	*	*	*	7-8	A1A7R28	
PAHZZ	5905-171-1998	RESISTOR, FIXED, COMPOSITION: RC20GF333J (81349)	EA	2				*	*	*	*	7-8	A1A7R29	
PAHZZ	5905-279-2019	RESISTOR, FIXED, COMPOSITION: RC20GF512J (81349)	EA	1				*	*	*	*	7-8	A1A7R30	
PAHZZ	5905-252-5434	RESISTOR, FIXED, COMPOSITION: RC20GF121J (81349)	EA	1				*	*	*	*	7-8	A1A7R31	
PAHZZ	5905-171-1998	RESISTOR, FIXED, COMPOSITION: RC20GF333J (81349)	EA	REF				*	*	*	*	7-8	A1A7R32	
PAHZZ	5905-279-3502	RESISTOR, FIXED, COMPOSITION: RC20GF123J (81349)	EA	3				*	*	*	*	7-8	A1A7R33	
PAHZZ	5905-279-3502	RESISTOR, FIXED, COMPOSITION: RC20GF123J (81349)	EA	REF				*	*	*	*	7-8	A1A7R34	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAHZZ	5905-279-3502	RESISTOR, FIXED, COMPOSITION: RC20GF123J (81349)	EA	REF				*	*	*	*	7-8	A1A7R35	
PAHZZ	5961-160-5062	SEMICONDUCTOR DEVICE DIODE: HP5082-2811 (28480)	EA	1				*	*	*	*	7-8	A1A7CR1	
PAHZZ		TRANSISTOR: 2N2857 (81349)	EA	1				*	*	*	*	7-8	A1A7Q1	
PAHZZ	5961-412-0650	TRANSISTOR: 2N5109 (81349)	EA	5				*	*	*	*	7-8	A1A7Q2	
PAHZZ	5961-412-0650	TRANSISTOR: 2N5109 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q3	
PAHZZ	5961-412-0650	TRANSISTOR: 2N5109 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q4	
PAHZZ	5961-412-0650	TRANSISTOR: 2N5109 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q5	
PAHZZ	5961-412-0650	TRANSISTOR: 2N5109 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q6	
PAHZZ	5961-842-6937	TRANSISTOR: 2N706 (81349)	EA	3				*	*	*	*	7-8	A1A7Q7	
PAHZZ	5961-842-6937	TRANSISTOR: 2N706 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q8	
PAHZZ	5961-842-6937	TRANSISTOR: 2N706 (81349)	EA	REF				*	*	*	*	7-8	A1A7Q9	
PAHZZ	5905-190-8881	RESISTOR, FIXED, COMPOSITION: RC20GF182J (81349)	EA	1				*	*	*	*		A1R1	
PAHZZ	5905-279-1876	RESISTOR, FIXED, COMPOSITION: RC20GF222J (81349)	EA	1				*	*	*	*		A1R2	
PAHZZ	5905-969-5852	RESISTOR, FIXED, FILM: RN60D1581F (81349)	EA	1				*	*	*	*		A1R3	
PAHZZ	5905-969-5846	RESISTOR, FIXED, FILM: RN60D3921F (81349)	EA	1				*	*	*	*		A1R4	
PAHZZ	5905-920-6984	RESISTOR, VARIABLE: CMU5021 (44655)	EA	2				*	*	*	*	7-1	A1R7	
PAHZZ	5905-920-6984	RESISTOR, VARIABLE: CMU5021 (44655)	EA	REF				*	*	*	*	7-1	A1R8	
XBHZZ		SHAFT: 100356 (33013)	EA	1									A1MP38	
XBHZZ		SHIELD, OSCILLATOR: 100303 (33013)	EA	1									A1MP39	
XBHZZ		SCREW, MACHINE: MS51957-28 (96906)	EA	REF									A1MP39H6	
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF									A1MP39H6	
XBHZZ		STRIP, EDGE: 100297 (33013)	EA	1									A1MP40	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	REF									A1MP40H4	
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF									A1MP40H4	
PAHZZ	5930-005-7038	SWITCH, LEVER: 100366 (33013)	EA	1				*	*	*	*		A1S3	
XBHZZ	5305-777-6039	SCREW, MACHINE: MS51959-12 (96906)	EA	2									A1S3H2	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	REF									A1S3H2	
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF									A1S3H2	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OR MEAS.	(5) QTY INC IN UNIT	(6) 30-DAY GS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CMT30Y	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO. (b) ITEM NO. OR REFERENCE DESIGNATION	
					(a)	(b)	(c)	(a)	(b)	(c)				
					1-20	21-50	51-100	1-20	21-50	51-100				
PAHZZ	5930-004-7750	SWITCH, ROTARY: 212-242-53-5 (71450)	EA	1				*	*	*		*	7-1	A1S1
PAHZZ	5930-164-9713	SWITCH, ROTARY: 272226-N2C (76854)	EA	1				*	*	*		*		A1S1R
PAHZZ	5930-537-7006	SWITCH, ROTARY: PA1013 (71590)	EA	1				*	*	*		*		A1S2
PAHZZ	5930-764-0861	SWITCH, SLIDE: 100407 (33013)	EA	1				*	*	*		*		A1S8
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-244 (96906)	EA	REF										A1S8H2
XBHZZ		SCREW, MACHINE: MS51957-15 (96906)	EA	2										A1S8H2
XBHZZ		WASHER, LOCK: MS35338-135 (96906)	EA	REF										A1S8H2
PAHZZ	5930-764-0860	SWITCH, TOGGLE: 15-123 (31356)	EA	1				*	*	*		*	7-2	A1S7
XBHZZ		TERMINAL, LUG: 1410-4 (83330)	EA	1										A1MP41
XBHZZ		TERMINAL LUG: 5749-91-1 (17117)	EA	1										A1MP42
XBHZZ		TERMINAL LUG: 1410-6 (83330)	EA	4										A1MP43
XBHZZ		TERMINAL LUG: 1410-6 (83330)	EA	REF										A1MP44
XBHZZ		TERMINAL LUG: 761 (79963)	EA	3										A1MP45
XBHZZ		TERMINAL LUG: 761 (79963)	EA	REF										A1MP46
XBHZZ		TERMINAL LUG: 761 (79963)	EA	REF										A1MP47
XBHZZ		TERMINAL LUG: 1410-6 (83330)	EA	REF										A1MP48
XBHZZ		TERMINAL LUG: 1410-6 (83330)	EA	REF										A1MP49
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	6										A1MP50
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	REF										A1MP51
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	REF										A1MP52
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	REF										A1MP53
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	REF										A1MP54
XBHZZ		TERMINAL LUG: 1410-10 (83330)	EA	REF										A1MP55
XBHZZ		TERMINAL LUG: 1410-14 (83330)	EA	3										A1MP56
XBHZZ		TERMINAL LUG: 1410-14 (83330)	EA	REF										A1MP57
XBHZZ		TERMINAL LUG: 1410-14 (83330)	EA	REF										A1MP58
XBHZZ		TERMINAL LUG: 1497 (83330)	EA	4										A1MP59
XBHZZ		TERMINAL LUG: 1497 (83330)	EA	REF										A1MP60

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
XBHZZ		TERMINAL LUG: 1497 (83330)	EA	REF										A1MP61
XBHZZ		TERMINAL LUG: 1497 (83330)	EA	REF										A1MP62
PAHZZ	6625-004-8795	TIME BASE BOARD ASSEMBLY: 100394 (33013)	EA	1				*	*	*	*	7-6		A1A4
XBHZZ		SCREW, MACHINE: MS51957-26 (96906)	EA	REF										A1A4H4
XBHZZ		WASHER, FLAT: MS15795-806 (96906)	EA	REF										A1A4H4
XBHZZ		WASHER, LOCK: MS35338-136 (96906)	EA	REF										A1A4H4
PAHZZ	5910-827-1211	CAPACITOR, FIXED ELECTROLYTIC: 30DTE1207 (56289)	EA	1				*	*	*	*	7-6		A1A4C15
PAHZZ	5910-067-5697	CAPACITOR, FIXED MICA: CM05ED270G03 (72136)	EA	1				*	*	*	*	7-6		A1A4C12
PAHZZ	5910-712-8687	CAPACITOR, FIXED MICA: DM15-471J (72136)	EA	1				*	*	*	*	7-6		A1A4C14
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	20				*	*	*	*	7-6		A1A4C1
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C3
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C4
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C5
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C6
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C7
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C8
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C9
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C10
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C11
PAHZZ	5910-400-1579	CAPACITOR, VARIABLE: 538-011-15-60D (72982)	EA	1				*	*	*	*	7-6		A1A4C13
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C16
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C17
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C18
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C19
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C20
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C21
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C22
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6		A1A4C23

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF					
PAHZZ	5910-052-7505	CAPACITOR, FIXED MYLAR: 5835-000Y5U203Z (72982)	EA	REF				*	*	*	*	7-6	A1A4C25	
PAHZZ	5955-166-9746	CRYSTAL: 100145 (33013)	EA	1				*	*	*	*	7-6	A1A4Y1	
PAHZZ	5962-865-4625	INTEGRATED CIRCUIT: SN7400N (01295)	EA	4				*	*	*	*	7-6	A1A4U1	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	6				*	*	*	*	7-6	A1A4U2	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*	*	7-6	A1A4U3	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*	*	7-6	A1A4U4	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*	*	7-6	A1A4U5	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*	*	7-6	A1A4U6	
PAHZZ	5962-102-7519	INTEGRATED CIRCUIT: SN7490N (01295)	EA	REF				*	*	*	*	7-6	A1A4U7	
PAHZZ	5962-865-4625	INTEGRATED CIRCUIT: SN7400N (01295)	EA	REF				*	*	*	*	7-6	A1A4U8	
PAHZZ	5962-106-4287	INTEGRATED CIRCUIT: SN7474N (01295)	EA	2				*	*	*	*	7-6	A1A4U9	
PAHZZ	5962-106-4287	INTEGRATED CIRCUIT: SN7474N (01295)	EA	REF				*	*	*	*	7-6	A1A4U10	
PAHZZ	5962-865-4625	INTEGRATED CIRCUIT: SN7400N (01295)	EA	REF				*	*	*	*	7-6	A1A4U11	
PAHZZ	5962-865-4625	INTEGRATED CIRCUIT: SN7400N (01295)	EA	REF				*	*	*	*	7-6	A1A4U12	
PAHZZ	5962-865-4627	INTEGRATED CIRCUIT: SN7440N (01295)	EA	1				*	*	*	*	7-6	A1A4U13	
XBHZZ		PRINTED CIRCUIT BOARD: 100369 (33013)	EA	1									A1A4MP1	
XBHZZ		PIN, PRINTED CIRCUIT BOARD: 100260 (33013)	EA	12									A1A4MP1H21	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	11				*	*	*	*	7-6	A1A4R1	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R2	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R3	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R4	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R5	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R6	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R7	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R8	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R9	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R10	

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) SNR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1 YR ALW PER EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS	
					(a)	(b)	(c)	(a)	(b)	(c)			(a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
					1-20	21-50	51-100	1-20	21-50	51-100				
PAHZZ	5905-171-2006	RESISTOR, FIXED, COMPOSITION: RC20GF271J (81349)	EA	1				*	*	*	*	7-6	A1A4R11	
PAHZZ	5905-195-6806	RESISTOR, FIXED, COMPOSITION: RC20GF102J (81349)	EA	1				*	*	*	*	7-6	A1A4R12	
PAHZZ	5905-106-9344	RESISTOR, FIXED, COMPOSITION: RCR20G101JS (81349)	EA	REF				*	*	*	*	7-6	A1A4R13	
PAHZZ	5905-195-6761	RESISTOR, FIXED, COMPOSITION: RC20GF104J (81349)	EA	1				*	*	*	*	7-6	A1A4R14	
PAHZZ		TRANSISTOR: 2N4124 (81349)	EA	2				*	*	*	*	7-6	A1A4Q1	
PAHZZ		TRANSISTOR: 2N4124 (81349)	EA	REF				*	*	*	*	7-6	A1A4Q2	
PAHZZ	5950-767-1597	TRANSFORMER, POWER, STEP-DOWN: 100032 (33013)	EA	1				*	*	*	*	7-1	A1T1	
XBHZZ		SCREW, MACHINE: MS51957-45 (96906)	EA	4									A1T1H4	
XBHZZ		WASHER, LOCK: MS35338-137 (96906)	EA	4									A1T1H4	
PAHZZ	5961-497-4280	TRANSISTOR: MJE3055 (04713)	EA	3				*	*	*	*	7-1	A1Q2	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-264 (96906)	EA	4									A1Q2H1	
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF									A1Q2H1	
PAHZZ	5961-497-4280	TRANSISTOR: MJE3055 (04713)	EA	REF				*	*	*	*	7-1	A1Q6	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-264 (96906)	EA	REF									A1Q6H1	
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF									A1Q6H1	
PAHZZ	5961-497-4280	TRANSISTOR: MJE3055 (04713)	EA	REF				*	*	*	*	7-1	A1Q13	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-264 (96906)	EA	REF									A1Q13H1	
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF									A1Q13H1	
PAHZZ	5961-237-2382	TRANSISTOR: MJE2955 (04713)	EA	1				*	*	*	*	7-1	A1Q14	
XBHZZ		NUT, PLAIN, HEXAGON: MS35649-264 (96906)	EA	REF									A1Q14H1	
XBHZZ		SCREW, MACHINE: MS51957-30 (96906)	EA	REF									A1Q14H1	
XBHZZ		WINDOW, NIXIE: 100317 (33013)	EA	1									A1MP49	
PAHZZ	6625-762-3872	DUMMY LOAD ELECT DA-296A/GRM-50 100448 (33013)	EA	1				*	*	*	*	7-12	A2	
PAHZZ	5910-686-6652	CAPACITOR, FIXED CERAMIC: DD201 (71590)	EA	1				*	*	*	*	7-12	A2C1	
PAHZZ	5910-678-8154	CAPACITOR, FIXED CERAMIC: DD401 (71590)	EA	2				*	*	*	*	7-12	A2C2	
PAHZZ	5910-678-8154	CAPACITOR, FIXED CERAMIC: DD401 (71590)	EA	REF				*	*	*	*	7-12	A2C3	
PAHZZ		CHOKE: DD180 (72259)	EA	1				*	*	*	*	7-12	A2L1	
XBHZZ		HOUSING: 100447 (33013)	EA	1								7-12	A2MP1	

**SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION**

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION	FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5305-777-6039		A1S3H2	5905-192-3973	7-3	A1A1R21
5905-078-8293	7-9	A1A8R24	5905-192-3973	7-3	A1A1R22
5905-079-6523	7-12	A2R1	5905-192-3973	7-7	A1A6R5
5905-106-9344	7-3	A1A1R24	5905-192-3973	7-7	A1A6R34
5905-106-9344	7-6	A1A4R1	5905-192-3973	7-11	A1A11R9
5905-106-9344	7-6	A1A4R2	5905-192-3973	7-11	A1A11R10
5905-106-9344	7-6	A1A4R3	5905-192-3973	7-11	A1A11R11
5905-106-9344	7-6	A1A4R4	5905-195-5546	7-8	A1A7R1
5905-106-9344	7-6	A1A4R5	5905-195-5571	7-3	A1A1R26
5905-106-9344	7-6	A1A4R6	5905-195-5571	7-11	A1A1R3
5905-106-9344	7-6	A1A4R7	5905-195-5571	7-11	A1A11R4
5905-106-9344	7-6	A1A4R8	5905-195-6453	7-10	A1A9R14
5905-106-9344	7-6	A1A4R9	5905-195-6761	7-6	A1A4R14
5905-106-9344	7-6	A1A4R10	5905-195-6761	7-7	A1A6R4
5905-106-9344	7-6	A1A4R13	5905-195-6761	7-9	A1A8R30
5905-106-9344	7-7	A1A6R19	5905-195-6791	7-10	A1A9R10
5905-106-9344	7-7	A1A6R24	5905-195-6800	7-3	A1A1R19
5905-106-9344	7-7	A1A6R32	5905-195-6806	7-3	A1A1R11
5905-106-9344	7-7	A1A6R33	5905-195-6806	7-3	A1A1R15
5905-106-9344	7-7	A1A6R36	5905-195-6806	7-6	A1A4R12
5905-106-9344	7-8	A1A7R16	5905-195-6806	7-7	A1A6R6
5905-106-9344	7-8	A1A7R19	5905-195-6806	7-8	A1A7R3
5905-106-9344	7-8	A1A7R20	5905-195-6806	7-8	A1A7R6
5905-106-9344	7-8	A1A7R24	5905-195-6806	7-8	A1A7R7
5905-106-9344	7-8	A1A7R26	5905-195-6806	7-8	A1A7R12
5905-106-9344	7-8	A1A7R27	5905-195-6806	7-8	A1A7R13
5905-106-9344	7-10	A1A9R1	5905-195-6806	7-8	A1A7R28
5905-106-9344	7-11	A1A11R15	5905-195-6906	7-9	A1A8R1
5905-106-9344	7-11	A1A11R16	5905-195-6806	7-9	A1A8R3
5905-148-2520	7-10	A1A9R18	5905-195-6806	7-9	A1A8R8
5905-148-2520	7-10	A1A9R23	5905-195-6806	7-9	A1A8R16
5905-148-2520	7-10	A1A9R25	5905-195-6806	7-9	A1A8R31
5905-148-2520	7-10	A1A9R26	5905-249-3661	7-4	A1A2R6
5905-171-1975	7-8	A1A7R22	5905-252-4018	7-8	A1A7R2
5905-171-1975	7-8	A1A7R23	5905-252-4018	7-11	A1A11R1
5905-171-1998	7-7	A1A6R29	5905-252-4018	7-11	A1A11R2
5905-171-1998	7-8	A1A7R29	5905-252-4018	7-11	A1A11R5
5905-171-1998	7-8	A1A7R32	5905-252-4018	7-11	A1A11R6
5905-171-1998	7-9	A1A8R23	5905-252-4018	7-11	A1A11R20
5905-171-1999	7-7	A1A6R15	5905-252-5434	7-3	A1A1A8
5905-171-1999	7-11	A1A11R17	5905-252-5434	7-8	A1A7R31
5905-171-1999	7-11	A1A11R18	5905-254-9201	7-7	A1A6R2
5905-171-2004	7-7	A1A6R3	5905-254-9201	7-7	A1A6R13
5905-171-2004	7-7	A1A6R16	5905-254-9201	7-7	A1A6R37
5905-171-2004	7-7	A1A6R17	5905-254-9201	7-7	A1A6R38
5905-171-2004	7-7	A1A6R30	5905-254-9201	7-7	A1A6R42
5905-171-2004	7-9	A1A8R7	5905-256-0412	7-8	A1A7R18
5905-171-2004	7-10	A1A9R6	5905-279-1757	7-8	A1A7R4
5905-171-2004	7-10	A1A9R9	5905-279-1757	7-8	A1A7R9
5905-171-2006	7-6	A1A4R11	5905-279-1757	7-10	A1A9R11
5905-171-2006	7-7	A1A6R20	5905-279-1757	7-10	A1A9R17
5905-171-2006	7-7	A1A6R25	5905-279-1757	7-10	A1A9R29
5905-185-8510	7-3	A1A1R3	5905-279-1876	7-4	A1A2R4
5905-185-8510	7-7	A1A6R28	5905-279-1876	7-9	A1A8R13
5905-185-8510	7-9	A1A8F2	5905-279-1876	7-11	A1A11R12
5905-185-8510	7-9	A1A8R17	5905-279-1876	7-11	A1A11R13
5905-185-8510	7-10	A1A9R8	5905-279-1876		A1R2
5905-185-8510	7-10	A1A9R20	5905-279-1880	7-7	A1A6R1
5905-190-8880	7-11	A1A11R14	5905-279-1880	7-7	A1A6R44
5905-190-8881		A1R1	5905-279-1880	7-9	A1A8R21
5905-190-8883	7-8	A1A7R10	5905-279-1880	7-10	A1A9R15
5905-190-8883	7-8	A1A7R17	5905-279-1880	7-10	A1A9R31
5905-190-8883	7-8	A1A7R21	5905-279-1890	7-3	A1A1R4
5905-190-8883	7-8	A1A7R25	5905-279-1890	7-7	A1A6R35
5905-192-0390	7-10	A1A9R19	5905-279-1890	7-7	A1A6R39
5905-192-3971	7-3	A1A1R20	5905-279-1894	7-7	A1A6R22
5905-192-3971	7-3	A1A1R34	5905-279-2019	7-8	A1A7R30
5905-192-3971	7-10	A1A9R2	5905-279-2616	7-10	A1A9R21
5905-192-3971	7-11	A1A11R8	5905-279-2616	7-10	A1A9R22

**SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)**

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION	FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5905-279-2642	7-8	ALA7R15	5910-044-4138	7-7	ALA6C24
5905-279-2643	7-8	ALA7R11	5910-052-7505	7-3	ALA1C15
5905-279-3497	7-4	ALA2R5	5910-052-7505	7-3	ALA1C16
5905-279-3497	7-10	ALA9R7	5910-052-7505	7-3	ALA1C17
5905-279-3497	7-10	ALA9R27	5910-052-7505	7-3	ALA1C18
5905-279-3500	7-4	ALA2R1	5910-052-7505	7-4	ALA2C1
5905-279-3500	7-4	ALA2R2	5910-052-7505	7-4	ALA2C2
5905-279-3500	7-4	ALA2R3	5910-052-7505	7-4	ALA2C3
5905-279-3502	7-8	ALA7R33	5910-052-7505	7-5	ALA3C1
5905-279-3502	7-8	ALA7R34	5910-052-7505	7-5	ALA3C2
5905-279-3502	7-8	ALA7R35	5910-052-7505	7-6	ALA4C1
5905-279-3503	7-9	ALA8R12	5910-052-7505	7-6	ALA4C3
5905-279-3503	7-10	ALA9R24	5910-052-7505	7-6	ALA4C4
5905-279-3503	7-10	ALA9R30	5910-052-7505	7-6	ALA4C5
5905-279-3504	7-10	ALA9R12	5910-052-7505	7-6	ALA4C6
5905-279-3504	7-10	ALA9R16	5910-052-7505	7-6	ALA4C7
5905-279-3504	7-11	ALA11R7	5910-052-7505	7-6	ALA4C8
5905-279-3506	7-8	ALA7R8	5910-052-7505	7-6	ALA4C9
5905-279-3506	7-9	ALA8R10	5910-052-7505	7-6	ALA4C10
5905-279-3506	7-9	ALA8R20	5910-052-7505	7-6	ALA4C11
5905-279-3513	7-3	ALA1R1	5910-052-7505	7-6	ALA4C16
5905-279-3513	7-3	ALA1R2	5910-052-7505	7-6	ALA4C17
5905-279-3513	7-3	ALA1R5	5910-052-7505	7-6	ALA4C18
5905-279-3513	7-3	ALA1R7	5910-052-7505	7-6	ALA4C19
5905-279-3513	7-3	ALA1R16	5910-052-7505	7-6	ALA4C20
5905-279-3513	7-3	ALA1R18	5910-052-7505	7-6	ALA4C21
5905-279-3513	7-3	ALA1R23	5910-052-7505	7-6	ALA4C22
5905-279-3513	7-3	ALA1R25	5910-052-7505	7-6	ALA4C23
5905-279-3513	7-3	ALA1R27	5910-052-7505	7-6	ALA4C24
5905-279-3513	7-7	ALA6R14	5910-052-7505	7-6	ALA4C25
5905-279-3513	7-7	ALA6R18	5910-052-7505	7-7	ALA6C8
5905-279-3513	7-7	ALA6R41	5910-052-7505	7-7	ALA6C9
5905-279-3513	7-7	ALA6R43	5910-052-7505	7-7	ALA6C11
5905-279-3513	7-9	ALA8R15	5910-052-7505	7-7	ALA6C12
5905-279-3513	7-11	ALA11R19	5910-052-7505	7-7	ALA6C19
5905-279-3513	7-11	ALA11R21	5910-052-7505	7-7	ALA6C31
5905-279-3514	7-3	ALA1R6	5910-052-7505	7-8	ALA7C19
5905-279-3514	7-8	ALA7R5	5910-052-7505	7-10	ALA3C4
5905-279-3517	7-10	ALA9R28	5910-052-7505	7-10	ALA3C5
5905-279-3519	7-7	ALA6R12	5910-052-7505	7-10	ALA3C6
5905-279-3519	7-7	ALA6R40	5910-052-7505	7-10	ALA9C1
5905-279-3521	7-3	ALA1R9	5910-052-7505	7-10	ALA9C3
5905-279-3521	7-3	ALA1R12	5910-052-7505	7-10	ALA9C5
5905-279-3521	7-3	ALA1R13	5910-052-7505	7-10	ALA9C9
5905-299-1541	7-3	ALA1R10	5910-052-7505	7-10	ALA9C10
5905-299-1541	7-3	ALA1R14	5910-052-7505	7-10	ALA9C20
5905-299-1971	7-3	ALA1R17	5910-052-7505	7-10	ALA9C21
5905-299-2051	7-8	ALA7R14	5910-056-7976	7-1	A1C2
5905-564-7313	7-10	ALA9R13	5910-066-5008	7-7	ALA6C17
5905-709-2956	7-9	ALA8R5	5910-066-5008	7-7	ALA6C18
5905-764-2603	7-9	ALA8R14	5910-066-5008	7-7	ALA6C33
5905-781-7123	7-9	ALA8R22	5910-066-5008	7-8	ALA7C25
5905-828-4925	7-9	ALA8R9	5910-067-5697	7-6	ALA4C12
5905-920-6984	7-1	A1R7	5910-068-4475	7-11	ALA11C3
5905-920-6984	7-1	A1R8	5910-068-4475	7-11	ALA11C7
5905-952-2146	7-9	ALA8R18	5910-068-4475	7-11	ALA11C9
5905-969-5846	7-9	ALA8R19	5910-089-3853	7-9	ALA8C12
5905-969-5846	7-10	ALA9R4	5910-089-3853	7-9	ALA8C13
5905-969-5846		A1R4	5910-134-0628	7-7	ALA6C10
5905-969-5852	7-10	ALA9R5	5910-135-8527	7-2	A1C8
5905-969-5852		A1R3	5910-135-8527	7-2	A1C9
5905-978-7113	7-12	A2R2	5910-135-8527	7-2	A1C10
5905-978-7113	7-12	A2R3	5910-135-8527	7-2	A1C16
5905-988-2280	7-9	ALA8R25	5910-135-8527	7-2	A1C17
5905-988-2319	7-9	ALA8R6	5910-135-8527	7-2	A1C18
5905-993-2264	7-12	A2R4	5910-135-8527	7-2	A1C19
5910-005-7039	7-9	ALA8C2	5910-135-8527	7-2	A1C20
5910-005-7039	7-9	ALA8C10	5910-135-8527	7-2	A1C21
5910-006-1267	7-11	ALA11C1	5910-135-8527	7-2	A1C22
5910-044-4138	7-7	ALA6C6	5910-135-8527	7-2	A1C24

SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
 TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION	FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5910-135-8527	7-2	A1C25	5910-678-8154	7-12	A2C3
5910-135-8527	7-2	A1C26	5910-683-3152	7-3	A1A1C19
5910-135-8527	7-2	A1C27	5910-686-6652	7-12	A2C1
5910-135-8527	7-2	A1C28	5910-689-9648	7-10	A1A9C12
5910-135-8527	7-2	A1C29	5910-702-8057	7-7	A1A6C26
5910-135-8527	7-2	A1C30	5910-702-8057	7-10	A1A9C19
5910-168-1026	7-10	A1A9C2	5910-702-8057	7-10	A1A9C21
5910-168-1026	7-10	A1A9C6	5910-712-8656	7-1	A1C3
5910-247-7947	7-2	A1C15	5910-712-8656	7-7	A1A6C2
5910-280-8393	7-5	A1A3C8	5910-712-8687	7-6	A1A4C14
5910-280-8393	7-5	A1A3C9	5910-712-8687	7-10	A1A9C11
5910-280-8393	7-5	A1A3C10	5910-713-1978	7-1	A1C1
5910-280-8393	7-5	A1A3C11	5910-713-1978		A1A11C13
5910-280-8393	7-5	A1A3C12	5910-786-0147	7-9	A1A8C3
5910-280-8393	7-5	A1A3C13	5910-814-6354	7-10	A1A9C18
5910-280-8393	7-5	A1A3C14	5910-827-1211	7-3	A1A1C9
5910-280-8393	7-5	A1A3C15	5910-827-1211	7-5	A1A3C33
5910-280-8393	7-5	A1A3C16	5910-827-1211	7-6	A1A4C15
5910-280-8393	7-5	A1A3C17	5910-827-1211	7-7	A1A6C14
5910-280-8393	7-5	A1A3C18	5910-827-1211	7-8	A1A7C8
5910-280-8393	7-5	A1A3C19	5910-827-1211	7-10	A1A9C4
5910-280-8393	7-5	A1A3C32	5910-827-1211	7-10	A1A9C7
5910-280-8393	7-8	A1A7C12	5910-827-1211	7-10	A1A9C8
5910-280-8393	7-8	A1A7C13	5910-827-1211	7-10	A1A11C11
5910-280-8393	7-8	A1A7C18	5910-827-1211	7-11	A1A11C12
5910-280-8393	7-10	A1A9C17	5910-828-1129	7-1	A1C5
5910-400-1579	7-6	A1A4C13	5910-838-8450	7-9	A1A8C6
5910-401-2969	7-3	A1A1C5	5910-851-3328	7-7	A1A6C1
5910-401-2969	7-3	A1A1C6	5910-893-1762	7-9	A1A8C8
5910-401-2969	7-8	A1A7C1	5910-902-0031	7-1	A1C4
5910-401-2969	7-8	A1A7C3	5910-936-7405	7-8	A1A7C16
5910-401-2969	7-8	A1A7C4	5910-945-1789	7-9	A1A8C9
5910-401-2969	7-11	A1A11C8	5910-974-5589	7-1	A1C6
5910-401-2969	7-11	A1A11C10	5910-984-7588	7-7	A1A6C20
5910-407-2465	7-8	A1A7C23	5910-984-7588	7-7	A1A6C25
5910-442-4911	7-9	A1A8C4	5910-995-0614	7-10	A1A9C14
5910-442-4911	7-9	A1A8C5	5910-995-0614	7-10	A1A9C15
5910-450-3016	7-8	A1A7C24	5910-995-0614	7-11	A1A11C2
5910-450-8592	7-3	A1A1C1	5920-755-3235	7-2	A1F1
5910-450-8592	7-3	A1A1C3	5920-939-4637	7-2	A1XF1
5910-450-8592	7-3	A1A1C4	5930-004-7750	7-1	A1S1
5910-450-8592	7-3	A1A1C7	5930-005-7038		A1S3
5910-450-8592	7-3	A1A1C8	5930-007-3827	7-12	A2S1
5910-450-8592	7-3	A1A1C10	5930-164-9713		A1S1R
5910-450-8592	7-7	A1A6C13	5930-537-7006		A1S2
5910-450-8592	7-7	A1A6C15	5930-764-0860	7-2	A1S7
5910-450-8592	7-7	A1A6C21	5930-764-0861		A1S8
5910-450-8592	7-7	A1A6C22	5935-163-3758		A1J2
5910-450-8592	7-7	A1A6C23	5935-163-3759		A1J1
5910-450-8592	7-7	A1A6C28	5935-786-0067	7-2	A1W6J5
5910-450-8592	7-7	A1A6C32	5935-786-0067	7-2	A1W7J4
5910-450-8592	7-8	A1A7C2	5935-786-0068	7-2	A1W5J7
5910-450-8592	7-8	A1A7C5	5935-786-0076	7-1	A1W4P3
5910-450-8592	7-8	A1A7C6	5935-786-0076	7-2	A1W1P5
5910-450-8592	7-8	A1A7C7	5935-786-0076	7-2	A1W2P1
5910-450-8592	7-8	A1A7C9	5935-786-0122	7-1	A1W5P6
5910-450-8592	7-8	A1A7C10	5935-786-0122	7-2	A1W4P4
5910-450-8592	7-8	A1A7C11	5945-159-7493	7-7	A1A6K1
5910-450-8592	7-8	A1A7C14	5950-004-0158	7-1	A1L2
5910-450-8592	7-8	A1A7C15	5950-004-0159	7-1	A1L3
5910-450-8592	7-8	A1A7C17	5950-004-0160	7-1	A1L4
5910-450-8592	7-8	A1A7C21	5950-004-0161	7-1	A1L5
5910-450-8592	7-11	A1A11C5	5950-004-0162	7-1	A1L7
5910-450-8592	7-11	A1A11C6	5950-004-7723	7-1	A1L1
5910-450-8592		A1C42	5950-087-5795	7-3	A1A1L4
5910-463-9490	7-8	A1A7C20	5950-159-7521	7-7	A1A6L7
5910-577-1138	7-2	A1C13	5950-159-7521	7-7	A1A6L8
5910-577-1138	7-2	A1C14	5905-159-7521	7-7	A1A6L9
5910-649-2912	7-10	A1A9C13	5950-767-1597	7-1	A1T1
5910-678-8154	7-12	A2C2	5950-767-1598	7-7	A1A6L6

SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION	FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION	
5950-767-1725	7-8	A1A7L1	5962-011-2761	7-5	A1A3U9	
5950-767-1727	7-8	A1A7L3	5962-011-2761	7-5	A1A3U10	
5950-767-1727	7-8	A1A7L4	5962-102-7519	7-5	A1A3U1	
5950-855-5959	7-3	A1A1L1	5962-102-7519	7-5	A1A3U2	
5950-855-5959	7-3	A1A1L3	5962-102-7519	7-5	A1A3U3	
5950-855-5959	7-8	A1A7L2	5962-102-7519	7-6	A1A4U2	
5950-855-5959	7-11	A1A11L1	5962-102-7519	7-6	A1A4U3	
5950-855-5959	7-11	A1A11L2	5962-102-7519	7-6	A1A4U4	
5950-855-5959	7-11	A1A11L3	5962-102-7519	7-6	A1A4U5	
5950-916-3940	7-3	A1A1L2	5962-102-7519	7-6	A1A4U6	
5950-972-3919	7-11	A1A11L4	5962-102-7519	7-6	A1A4U7	
5955-166-9746	7-6	A1A4Y1	5962-106-4287	7-5	A1A3U7	
5960-477-1203	7-4	A1A2V1	5962-106-4287	7-6	A1A4U9	
5960-477-1203	7-4	A1A2V2	5962-106-4287	7-6	A1A4U10	
5960-477-1203	7-4	A1A2V3	5962-117-8726	7-3	A1A1U2	
5961-160-5062	7-8	A1A7CR1	5962-138-1478	7-3	A1A1U1	
5961-163-3689	7-7	A1A6Q1	5962-138-1486	7-10	A1A9U1	
5961-237-2382	7-1	A1Q14	5962-448-9876	7-4	A1A2U1	
5961-412-0650	7-8	A1A7Q2	5962-448-9876	7-4	A1A2U2	
5961-412-0650	7-8	A1A7Q3	5962-448-9876	7-4	A1A2U3	
5961-412-0650	7-8	A1A7Q4	5962-450-8830	7-3	A1A1U3	
5961-412-0650	7-8	A1A7Q5	5962-450-8830	7-3	A1A1U4	
5961-412-0650	7-8	A1A7Q6	5962-460-5746	7-10	A1A9U2	
5961-452-1496	7-4	A1A2Q1	5962-460-5746	7-10	A1A9U3	
5961-497-4280	7-1	A1Q2	5962-460-5746	7-10	A1A9U4	
5961-497-4280	7-1	A1Q6	5962-865-4625	7-5	A1A3U14	
5961-497-4280	7-1	A1Q13	5962-865-4625	7-6	A1A4U1	
5961-752-6121	7-9	A1A8CR15	5962-865-4625	7-6	A1A4U8	
5961-752-6121	7-10	A1A9CR1	5962-865-4625	7-6	A1A4U11	
5961-752-6121	7-11	A1A11CR4	5962-865-4625	7-6	A1A4U12	
5961-762-2277	7-3	A1A1Q1	5962-865-4627	7-6	A1A4U13	
5961-762-2277	7-3	A1A1Q2	5962-933-8613	7-11	A1A11U1	
5961-762-2277	7-3	A1A1Q3	5962-933-8613	7-11	A1A11U2	
5961-762-2277	7-3	A1A1Q4	6145-606-8237		A1W6W1	
5961-762-2277	7-3	A1A1Q5	6145-606-8237		A1W7W1	
5961-762-2277	7-3	A1A1Q6	6145-681-7849		A1W1W1	
5961-762-2277	7-11	A1A11Q1	6145-681-7849		A1W2W1	
5961-762-2277	7-11	A1A11Q2	6145-681-7849		A1W4W1	
5961-767-1599	7-11	A1A11CR1	6145-681-7849		A1W5W1	
5961-767-1599	7-11	A1A11CR2	6150-189-7395		A1W10	
5961-842-6937	7-7	A1A6Q2	6240-139-5367	7-4	A1A2V4	
5961-842-6937	7-7	A1A6Q7	6240-880-8699	7-10	A1A9DS1	
5961-842-6937	7-8	A1A7Q7	6625-004-0974	7-4	A1A2	
5961-842-6937	7-8	A1A7Q8	6625-004-0975		A1A6MP1	
5961-842-6937	7-8	A1A7Q9	6625-004-8792	7-5	A1A3	
5961-842-9864	7-3	A1A1CR1	6625-004-8793	7-7	A1A6	
5961-842-9864	7-3	A1A1CR3	6625-004-8794	7-3	A1A1	
5961-842-9864	7-3	A1A1CR4	6625-004-8795	7-6	A1A4	
5961-842-9864	7-3	A1A1CR5	6625-762-3786		A1	
5961-842-9864	7-3	A1A1CR6	6625-762-3872	7-12	A2	
5961-842-9864	7-9	A1A8CR14	6625-883-2452	7-1	A1AT1	
5961-842-9864	7-10	A1A9CR2				
5961-842-9864	7-10	A1A9CR3				
5961-871-9538		A1A7MP2	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
5961-871-9538		A1A7MP3	A261	74276	7-4	A1A2V4
5961-871-9538		A1A7MP4	BWH-. 22	75042	7-9	A1A8R14
5961-871-9538		A1A7MP5	BWH-. 51	75042	7-9	A1A8R4
5961-871-9538		A1A7MP6	B10-293	33013		A1A2MP1
5961-912-4907	7-7	A1A4CR5	B5750S	83594	7-4	A1A2V1
5961-912-4907	7-7	A1A6CR2	B5750S	83594	7-4	A1A2V2
5961-912-4907	7-7	A1A6CR3	B5750S	83594	7-4	A1A2V3
5961-912-4907	7-7	A1A6CR4	CE102	71590	7-7	A1A6C17
5961-946-6635	7-3	A1A1Q7	CE102	71590	7-7	A1A6C18
5961-946-6635	7-3	A1A1Q8	CE102	71590	7-7	A1A6C33
5961-949-1440	7-9	A1A8Q9	CE102	71590	7-8	A1A7C25
5961-949-1440	7-9	A1A8Q10	CF182	71590	7-8	A1A7C24
5961-949-1440	7-9	A1A8Q15	CF332	71590	7-8	A1A7C23
5961-949-1440	7-9	A1A8Q16	CK06BX473K	81349	7-7	A1A6C10
5962-011-2761	7-5	A1A3U8				

SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
CK103	71590	7-11	A1A11C3	MJE3055	04713	7-1	A1Q13
CK103	71590	7-11	A1A11C7	MPS3640	04713	7-3	A1A1Q7
CK103	71590	7-11	A1A11C9	MPS3640	04713	7-3	A1A1Q8
CMU5021	44655	7-1	A1R7	MPS918	04713	7-3	A1A1Q1
CMU5021	44655	7-1	A1R8	MPS918	04713	7-3	A1A1Q2
CM05CD150J03	81349	7-8	A1A7C16	MPS918	04713	7-3	A1A1Q3
CM05ED270G03	72136	7-6	A1A4C12	MPS918	04713	7-3	A1A1Q4
CM05FD101G03	81349	7-7	A1A6C20	MPS918	04713	7-3	A1A1Q5
CM05FD101G03	81349	7-7	A1A6C25	MPS918	04713	7-3	A1A1Q6
DD102	71590	7-5	A1A3C8	MPS918	04713	7-11	A1A11Q1
DD102	71590	7-5	A1A3C9	MPS918	04713	7-11	A1A11Q2
DD102	71590	7-5	A1A3C10	MS15795-804	96906		A1A2H4
DD102	71590	7-5	A1A3C11	MS15795-804	96906		A1A2MP1H4
DD102	71590	7-5	A1A3C12	MS15795-806	96906		A1MP14H6
DD102	71590	7-5	A1A3C13	MS15795-806	96906		A1MP37H9
DD102	71590	7-5	A1A3C14	MS15795-806	96906		A1A1H4
DD102	71590	7-5	A1A3C15	MS15795-806	96906		A1A3H4
DD102	71590	7-5	A1A3C16	MS15795-806	96906		A1A4H4
DD102	71590	7-5	A1A3C17	MS15795-806	96906		A1A6H4
DD102	71590	7-5	A1A3C18	MS15795-806	96906		A1A7H4
DD102	71590	7-5	A1A3C19	MS15795-806	96906		A1A8H6
DD102	71590	7-5	A1A3C32	MS15795-806	96906		A1A9H4
DD102	71590	7-8	A1A7C12	MS15795-806	96906		A1A11H4
DD102	71590	7-8	A1A7C13	MS35338-135	96906		A1M1H4
DD102	71590	7-8	A1A7C18	MS35338-135	96906		A1M2H4
DD102	71590	7-10	A1A9C17	MS35338-135	96906		A1MP1H2
DD103	71590	7-2	A1C13	MS35338-135	96906		A1MP4H4
DD103	71590	7-2	A1C14	MS35338-135	96906		A1MP11H4
DD180	72259	7-12	A2L1	MS35338-135	96906		A1MP40H4
DD201	71590	7-12	A2C1	MS35338-135	96906		A1S3H2
DD401	71590	7-12	A2C2	MS35338-135	96906		A1S8H2
DD401	71590	7-12	A2C3	MS35338-135	96906		A1A2H4
DECIDUCTOR1-0	72259	7-3	A1A11L2	MS35338-135	96906		A1A2MP1H4
DM15-030J	72136	7-1	A1C6	MS35338-135	96906		A2S1H2
DM15-050J	72136	7-1	A1C4	MS35338-136	96906		A1AT1H4
DM15-060J	72136	7-7	A1A6C6	MS35338-136	96906		A1C5H4
DM15-060J	72136	7-7	A1A6C24	MS35338-136	96906		A1MP2H8
DM15-100J	72136	7-1	A1C3	MS35338-136	96906		A1MP3H4
DM15-100J	72136	7-7	A1A6C2	MS35338-136	96906		A1MP10H18
DM15-102J	72136	7-10	A1A9C12	MS35338-136	96906		A1MP12H18
DM15-200J	72136	7-10	A1A9C18	MS35338-136	96906		A1MP13H4
DM15-221J	72136	7-10	A1A9C14	MS35338-136	96906		A1MP14H6
DM15-221J	72136	7-10	A1A9C15	MS35338-136	96906		A1MP15H4
DM15-221J	72136	7-11	A1A11C2	MS35338-136	96906		A1MP16H4
DM15-271J	72136	7-1	A1C2	MS35338-136	96906		A1MP37H9
DM15-331J	72136	7-7	A1A6C26	MS35338-136	96906		A1MP39H6
DM15-331J	72136	7-10	A1A9C19	MS35338-136	96906		A1A1H4
DM15-331J	72136	7-10	A1A9C21	MS35338-136	96906		A1A3H4
DM15-391J	72136	7-8	A1A7C22	MS35338-136	96906		A1A4H4
DM15-470J	72136	7-10	A1A9C13	MS35338-136	96906		A1A6H4
DM15-471J	72136	7-6	A1A4C14	MS35338-136	96906		A1A7H4
DM15-471J	72136	7-10	A1A9C11	MS35338-136	96906		A1A8H6
DM15-680J	72136	7-1	A1C1	MS35338-136	96906		A1A9H4
DM15-680J	72136		A1A11C13	MS35338-136	96906		A1A11H4
DM15-681J	72136	7-3	A1A1C19	MS35338-137	96906		A1T1H4
DM15-821J	72136	7-7	A1A6C1	MS35338-138	96906		A1MP15H4
ER251U	01121	7-7	A1A6R45	MS35338-138	96906		A1MP22H4
ER251U	01121	7-7	A1A6R46	MS35338-138	96906		A1MP23H4
HKP	71400	7-2	A1XF1	MS35338-138	96906		A1MP24H4
HP5082-2811	28480	7-8	A1A7CR1	MS35338-138	96906		A1MP25H4
MC1013P	04713	7-3	A1A1U3	MS35338-138	96906		A1MP26H2
MC1013P	04713	7-3	A1A1U4	MS35338-138	96906		A1MP27H2
MC1023P	04713	7-3	A1A1U1	MS35649-244	96906		A1M1H4
MC1027P	04713	7-3	A1A1U2	MS35649-244	96906		A1M2H4
MFE3007	04713	7-7	A1A6Q1	MS35649-244	96906		A1MP4H4
MJE2955	04713	7-1	A1Q14	MS35649-244	96906		A1MP40H4
MJE3055	04713	7-1	A1Q2	MS35649-244	96906		A1S3H2
MJE3055	04713	7-1	A1Q6				

SECTION VI INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE
TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
MS35649-244	96906		A1S8H2	RCR20G101JS	81349	7-6	A1A4R8
MS35649-244	96906		A1A2MP1H4	RCR20G101JS	81349	7-6	A1A4R9
MS35649-244	96906		A2S1H2	RCR20G101JS	81349	7-6	A1A4R10
MS35649-264	96906		A1Q2H1	RCR20G101JS	81349	7-6	A1A4R13
MS35649-264	96906		A1Q6H1	RCR20G101JS	81349	7-7	A1A6R19
MS35649-264	96906		A1Q13H1	RCR20G101JS	81349	7-7	A1A6R24
MS35649-264	96906		A1Q14H1	RCR20G101JS	81349	7-7	A1A6R32
MS35650-304	96906		A1MP22H4	RCR20G101JS	81349	7-7	A1A6R33
MS35650-304	96906		A1MP23H4	RCR20G101JS	81349	7-7	A1A6R36
MS35650-304	96906		A1MP24H4	RCR20G101JS	81349	7-8	A1A7R16
MS35650-304	96906		A1MP25H4	RCR20G101JS	81349	7-8	A1A7R19
MS51957-11	96906		A1MP33H2	RCR20G101JS	81349	7-8	A1A7R20
MS51957-13	96906		A1MP1H2	RCR20G101JS	81349	7-8	A1A7R24
MS51957-13	96906		A1MP11H4	RCR20G101JS	81349	7-8	A1A7R26
MS51957-13	96906		A1A2H4	RCR20G101JS	81349	7-8	A1A7R27
MS51957-13	96906		A2S1H2	RCR20G101JS	81349	7-10	A1A9R1
MS51957-14	96906		A1A2MP1H4	RCR20G101JS	81349	7-11	A1A11R15
MS51957-15	96906		A1S8H2	RCR20G101JS	81349	7-11	A1A11R16
MS51957-26	96906		A1MP13H4	RC20GF1R5J	81349	7-9	A1A8R9
MS51957-26	96906		A1A1H4	RC20GF100J	81349	7-8	A1A7R10
MS51957-26	96906		A1A3H4	RC20GF100J	81349	7-8	A1A7R17
MS51957-26	96906		A1A4H4	RC20GF100J	81349	7-8	A1A7R21
MS51957-28	96906		A1AT1H4	RC20GF100J	81349	7-8	A1A7R25
MS51957-28	96906		A1C5H4	RC20GF102J	81349	7-3	A1A1R11
MS51957-28	96906		A1MP2H8	RC20GF102J	81349	7-3	A1A1R15
MS51957-28	96906		A1MP3H4	RC20GF102J	81349	7-6	A1A4R12
MS51957-28	96906		A1MP10H18	RC20GF102J	81349	7-7	A1A6R6
MS51957-28	96906		A1MP12H18	RC20GF102J	81349	7-8	A1A7R3
MS51957-28	96906		A1MP14H6	RC20GF102J	81349	7-8	A1A7R6
MS51957-28	96906		A1MP15H4	RC20GF102J	81349	7-8	A1A7R7
MS51957-28	96906		A1MP37H9	RC20GF102J	81349	7-8	A1A7R12
MS51957-28	96906		A1MP39H6	RC20GF102J	81349	7-8	A1A7R13
MS51957-28	96906		A1A6H4	RC20GF102J	81349	7-8	A1A7R28
MS51957-28	96906		A1A8H6	RC20GF102J	81349	7-9	A1A8R1
MS51957-28	96906		A1A9H4	RC20GF102J	81349	7-9	A1A8R3
MS51957-30	96906		A1MP15H4	RC20GF102J	81349	7-9	A1A8R8
MS51957-30	96906		A1MP16H4	RC20GF102J	81349	7-9	A1A8R16
MS51957-30	96906		A1Q2H1	RC20GF102J	81349	7-9	A1A8R31
MS51957-30	96906		A1Q6H1	RC20GF103J	81349	7-3	A1A1R3
MS51957-30	96906		A1Q13H1	RC20GF103J	81349	7-7	A1A6R28
MS51957-30	96906		A1Q14H1	RC20GF103J	81349	7-9	A1A8R2
MS51957-30	96906		A1A7H4	RC20GF103J	81349	7-9	A1A8R17
MS51957-30	96906		A1A11H4	RC20GF103J	81349	7-10	A1A9R8
MS51957-45	96906		A1T1H4	RC20GF103J	81349	7-10	A1A9R20
MS51957-61	96906		A1MP15H4	RC20GF104J	81349	7-6	A1A4R14
MS51957-63	96906		A1MP22H4	RC20GF104J	81349	7-7	A1A6R4
MS51957-63	96906		A1MP23H4	RC20GF104J	81349	7-9	A1A8R30
MS51957-63	96906		A1MP24H4	RC20GF105J	81349	7-10	A1A9R19
MS51957-63	96906		A1MP25H2	RC20GF121J	81349	7-3	A1A1R8
MS51957-63	96906		A1MP26H2	RC20GF121J	81349	7-8	A1A7R31
MS51957-63	96906		A1MP27H2	RC20GF122J	81349	7-11	A1A11R14
MS51959-12	96906		A1S3H2	RC20GF123J	81349	7-8	A1A7R33
MS91528-2D2B	96906		A1MP28	RC20GF123J	81349	7-8	A1A7R34
MS91528-2D2B	96906		A1MP29	RC20GF123J	81349	7-8	A1A7R35
MS91528-2N2B	96906		A1MP34	RC20GF150J	81349	7-3	A1A1R9
NF207	05820		A1A7MP2	RC20GF150J	81349	7-3	A1A1R12
NF207	05820		A1A7MP3	RC20GF150J	81349	7-3	A1A1R13
NF207	05820		A1A7MP4	RC20GF151J	81349	7-3	A1A1R10
NF207	05820		A1A7MP5	RC20GF151J	81349	7-3	A1A1R14
NF207	05820		A1A7MP6	RC20GF152J	81349	7-8	A1A7R4
PA1013	71590		A1S2	RC20GF152J	81349	7-8	A1A7R9
RCR20G101JS	81349	7-3	A1A1R24	RC20GF152J	81349	7-10	A1A9R11
RCR20G101JS	81349	7-6	A1A4R1	RC20GF152J	81349	7-10	A1A9R17
RCR20G101JS	81349	7-6	A1A4R2	RC20GF152J	81349	7-10	A1A9R29
RCR20G101JS	81349	7-6	A1A4R3	RC20GF153J	81349	7-10	A1A9R21
RCR20G101JS	81349	7-6	A1A4R4	RC20GF153J	81349	7-10	A1A9R22
RCR20G101JS	81349	7-6	A1A4R5	RC20GF181J	81349	7-3	A1A1R6
RCR20G101JS	81349	7-6	A1A4R6	RC20GF181J	81349	7-8	A1A7R5
RCR20G101JS	81349	7-6	A1A4R7	RC20GF182J	81349		A1R1

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REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
RC20GF183J	81349	7-4	AlA2R1	RC20GF471J	81349	7-7	AlA6R34
RC20GF183J	81349	7-4	AlA2R2	RC20GF471J	81349	7-11	AlA11R9
RC20GF183J	81349	7-4	AlA2R3	RC20GF471J	81349	7-11	AlA11Ri0
RC20GF2R7J	81349	7-9	AlA8R22	RC20GF471J	81349	7-11	AlA11R11
RC20GF220J	81349	7-7	AlA6R12	RC20GF472J	81349	7-10	AlA9R12
RC20GF220J	81349	7-7	AlA6R40	RC20GF472J	81349	7-10	AlA9R16
RC20GF221J	81349	7-3	AlA1R1	RC20GF472J	81349	7-11	AlA11R7
RC20GF221J	81349	7-3	AlA1R2	RC20GF473J	81349	7-7	AlA6R2
RC20GF221J	81349	7-3	AlA1R5	RC20GF473J	81349	7-7	AlA6R13
RC20GF221J	81349	7-3	AlA1R7	RC20GF473J	81349	7-7	AlA6R37
RC20GF221J	81349	7-3	AlA1R16	RC20GF473J	81349	7-7	AlA6R38
RC20GF221J	81349	7-3	AlA1R18	RC20GF473J	81349	7-7	AlA6R42
RC20GF221J	81349	7-3	AlA1R23	RC20GF510J	81349	7-10	AlA9R28
RC20GF221J	81349	7-3	AlA1R25	RC20GF512J	81349	7-8	AlA9R30
RC20GF221J	81349	7-3	AlA1R27	RC20GF561J	81349	7-3	AlA1R19
RC20GF221J	81349	7-7	AlA6R14	RC20GF562J	81349	7-10	AlA9R14
RC20GF221J	81349	7-7	AlA6R18	RC20GF680J	81349	7-3	AlA1R26
RC20GF221J	81349	7-7	AlA6R41	RC20GF680J	81349	7-11	AlA11R3
RC20GF221J	81349	7-7	AlA6R43	RC20GF680J	81349	7-11	AlA11R4
RC20GF221J	81349	7-9	AlA8R15	RC20GF681J	81349	7-10	AlA9R10
RC20GF221J	81349	7-11	AlA11R19	RC20GF682J	81349	7-9	AlA8R12
RC20GF221J	81349	7-11	AlA11R21	RC20GF682J	81349	7-10	AlA9R24
RC20GF222J	81349	7-4	AlA2R4	RC20GF682J	81349	7-10	AlA9R30
RC20GF222J	81349	7-9	AlA8R13	RC20GF683J	81349	7-4	AlA2R6
RC20GF222J	81349	7-11	AlA11R12	RC20GF820J	81349	7-7	AlA6R22
RC20GF222J	81349	7-11	AlA11R13	RC20GF821J	81349	7-7	AlA6R15
RC20GF222J	81349		AlR2	RC20GF821J	81349	7-11	AlA11R17
RC20GF223J	81349	7-7	AlA6R3	RC20GF821J	81349	7-11	AlA11R18
RC20GF223J	81349	7-7	AlA6R16	RC20GF822J	81349	7-3	AlA1R17
RC20GF223J	81349	7-7	AlA6R17	RC32GF101J	81349	7-8	AlA7R11
RC20GF223J	81349	7-7	AlA6R30	RC32GF391J	81349	7-8	AlA7R15
RC20GF223J	81349	7-9	AlA8R7	RC32GF471J	81349	7-8	AlA7R14
RC20GF223J	81349	7-10	AlA9R6	RC42GF151J	81349	7-8	AlA7R22
RC20GF223J	81349	7-10	AlA9R9	RC42GF151J	81349	7-8	AlA7R23
RC20GF271J	81349	7-6	AlA4R11	RC42GF181J	81349	7-8	AlA7R18
RC20GF271J	81349	7-7	AlA6R20	RG174U	81349		AlW6W1
RC20GF271J	81349	7-7	AlA6R25	RG174U	81349		AlW7W1
RC20GF272J	81349	7-7	AlA6R1	RG55U	81349		AlW1W1
RC20GF272J	81349	7-7	AlA6R44	RG55U	81349		AlW2W1
RC20GF272J	81349	7-9	AlA8R21	RG55U	81349		AlW4W1
RC20GF272J	81349	7-10	AlA9R15	RG55U	81349		AlW5W1
RC20GF272J	81349	7-10	AlA9R31	RN60D1502F	81349	7-9	AlA8R6
RC20GF331J	81349	7-3	AlA1R20	RN60D1581F	81349	7-10	AlA9R5
RC20GF331J	81349	7-3	AlA1R34	RN60D1581F	81349		AlR3
RC20GF331J	81349	7-10	AlA9R2	RN60D1821F	81349	7-9	AlA8R24
RC20GF331J	81349	7-11	AlA11R8	RN60D1822F	81349	7-9	AlA8R5
RC20GF332J	81349	7-8	AlA7R8	RN60D2001F	81349	7-9	AlA8R25
RC20GF332J	81349	7-9	AlA8R10	RN60D3921F	81349	7-9	AlA8R19
RC20GF332J	81349	7-9	AlA8R20	RN60D3921F	81349	7-10	AlA9R4
RC20GF333J	81349	7-7	AlA6R29	RN60D3921F	81349		AlR4
RC20GF333J	81349	7-8	AlA7R29	RN60D5111F	81349	7-9	AlA8R18
RC20GF333J	81349	7-8	AlA7R32	RN65D10R0F	81349	7-12	A2R2
RC20GF333J	81349	7-9	AlA8R23	RN65D10R0F	81349	7-12	A2R3
RC20GF390J	81349	7-8	AlA7R1	RN65D4020F	81349	7-12	A2R4
RC20GF391J	81349	7-3	AlA1R4	RN65D45R3F	81349	7-12	A2R1
RC20GF391J	81349	7-7	AlA6R35	SB1000-12	28520		AlMP20
RC20GF393J	81349	7-4	AlA2R5	SB1000-12	28520		AlMP21
RC20GF393J	81349	7-10	AlA9R7	SB625-8	28520		AlMP17
RC20GF393J	81349	7-10	AlA9R27	SF6108	95121	7-11	AlA11C1
RC20GF470J	81349	7-8	AlA7R2	SN7400N	01295	7-5	AlA3U14
RC20GF470J	81349	7-11	AlA11R1	SN7400N	01295	7-6	AlA4U1
RC20GF470J	81349	7-11	AlA11R2	SN7400N	01295	7-6	AlA4U8
RC20GF470J	81349	7-11	AlA11R5	SN7400N	02195	7-6	AlA4U11
RC20GF470J	81349	7-11	AlA11R6	SN7400N	01295	7-6	AlA4U12
RC20GF470J	81349	7-11	AlA11R20	SN74141N	01295	7-4	AlA2U1
RC20GF471J	81349	7-3	AlA1R21	SN74141N	01295	7-4	AlA2U2
RC20GF471J	81349	7-3	AlA1R22	SN7440N	01295	7-6	AlA2U3
RC20GF471J	81349	7-7	AlA6R5	SN7474N	01295	7-5	AlA3U7

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REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
SN7474N	01295	7-6	1A4U9	1N914	81349	7-9	1A8CR14
SN7474N	01295	7-6	1A4U10	1N914	81349	7-10	1A9CR2
SN7475N	01295	7-5	1A3U8	1N914	81349	7-10	1A9CR3
SN7475N	01295	7-5	1A3U9	100032	33013	7-1	1A1T1
SN7475N	01295	7-5	1A3U10	100043	33013		1AMP13
SN7490N	01295	7-5	1A3U1	100044	33013	7-1	1A1C5
SN7490N	01295	7-5	1A3U2	100081	33013	7-7	1A6MP2
SN7490N	01295	7-5	1A3U3	100145	33013	7-6	1A4Y1
SN7490N	01295	7-6	1A4U2	100158	33013		1A6MP1
SN7490N	01295	7-6	1A4U3	100159L1	33031	7-1	1A1L1
SN7490N	01295	7-6	1A4U4	100159L2	33013	7-1	1A1L2
SN7490N	01295	7-6	1A4U5	100159L3	33013	7-1	1A1L3
SN7490N	01295	7-6	1A4U6	100159L4	33013	7-1	1A1L4
SN7490N	01295	7-6	1A4U7	100159L5	33013	7-1	1A1L5
SR6P4	28520		1AMP6	100159L7	33013	7-1	1A1L7
SSF	08730		1AMP26H2	100237	33013		1AMP2
SSF	08730		1AMP27H2	100260	33013		1A1AMP1H8
SS4	08730		1AMP26	100260	33013		1A2MP2H20
SS4	08730		1AMP27	100260	33013		1A3MP1H21
SW423	22753	7-12	A2S1	100260	33013		1A4MP1H21
U201-10K	71450	7-10	1A9R18	100260	33013		1A6MP1H7
U201-10K	71450	7-10	1A9R23	100260	33013		1A7MP1H10
U201-10K	71450	7-10	1A9R25	100260	33013		1A8MP1H45
U201-10K	71450	7-10	1A9R26	100260	33013		1A9MP2H19
U201-1000HMS	71450	7-10	1A9R13	100260	33013		1A11MP1H9
U201-250	71450	7-11	1A11R22	100286L	33013		1AMP24
U201-5K	71450	7-9	1A8R11	100286R	33013		1AMP23
U201-5000HMS	71450	7-10	1A9R9	100288	33013		1AMP7
U6A7741393	13715	7-10	1A9U1	100290	33013		1A1M1
U6E7709393	13715	7-10	1A9U2	100291	33013	7-1	1A1M2
U6E7709393	13715	7-10	1A9U3	100297	33013		1AMP40
U6E7709393	13715	7-10	1A9U4	100298	33013		1A1M4
WEEDUCTOR-27	72259	7-11	1A11L4	100298	33013		1A1M2H4
WEEDUCTOR-33	72259	7-3	1A1L4	100299	33013		1AMP22
WEEDUCTOR-56	72259	7-3	1A1L1	100300	33013		1AMP25
WEEDUCTOR-56	72259	7-3	1A1L3	100301	33013		1AMP5
WEEDUCTOR-56	72259	7-8	1A7L2	100302	33013		1AMP3
WEEDUCTOR-56	72259	7-11	1A11L1	100303	33013		1AMP39
WEEDUCTOR-56	72259	7-11	1A11L2	100305	33013		1AMP12
WEEDUCTOR-56	72259	7-11	1A11L3	100306	33013		1AMP10
W104MPGX2	94696	7-7	1A6K1	100307	33013		1AMP37
Z231	76385		1A9MP1	100308	33013		1AMP14
1MD2-104	72136	7-10	1A9C2	100309	33013		1AMP4
1MD2-104	72136	7-10	1A9C6	100310	33013		1AMP11
1N4002	81349	7-9	1A8CR1	100311	33013		1AMP36
1N4002	81349	7-9	1A8CR2	100317	33013		1AMP49
1N4002	81349	7-9	1A8CR3	100320	33013		1A1AMP1
1N4002	81349	7-9	1A8CR4	100330	33013	7-5	1A3MP1
1N4002	81349	7-9	1A8CR5	100333	33013		1A9MP2
1N4002	81349	7-9	1A8CR6	100335	33013		1AMP15H4
1N4002	81349	7-9	1A8CR7	100337	33013	7-1	1A1T1
1N4002	81349	7-9	1A8CR8	100343	33013	7-9	1A1A8
1N4002	81349	7-9	1A8CR9	100355	33013	7-10	1A1A9
1N4002	81349	7-9	1A8CR10	100356	33013		1AMP38
1N4004	81349	7-9	1A8CR12	100361	33013		1AMP2
1N4004	81349	7-9	1A8CR13	100365	33013		1AMP33
1N702A	81349	7-11	1A11CR3	100366	33013		1A1S3
1N753A	81349	7-9	1A8CR15	100368	33013		1A1A6L6
1N753A	81349	7-10	1A9CR1	100369	33013	7-6	1A4MP1
1N753A	81349	7-11	1A11CR4	100372	33013		1A2MP2
1N82AG	81349	7-7	1A6CR2	100373	33013		1A11AMP1
1N82AG	81349	7-7	1A6CR3	100375	33013		1A7MP1
1N82AG	81349	7-7	1A6CR4	100378	33013	7-5	1A1A3
1N82AG	81349	7-7	1A6CR5	100385	33013	7-4	1A1A2
1N914	81349	7-3	1A1CR1	100394	33013	7-6	1A1A4
1N914	81349	7-3	1A1CR3	100395	33013	7-8	1A1A7
1N914	81349	7-3	1A1CR4	100396	33013	7-11	1A1A11
1N914	81349	7-3	1A1CR5	100401	33013	7-11	1A1A11U1
1N914	81349	7-3	1A1CR6	100401	33013	7-11	1A1A11U2

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REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
100402	33013	7-11	A1A11CR1	2N709	81349	7-7	A1A6Q5
100402	33013	7-11	A1A11CR2	212-242-53-5	71450	7-1	A1S1
100403W1	33013	7-2	A1W1	2148	83330		A1MP18
100403W2	33013	7-2	A1W2	2192	83330		A1MP15
100403W4	33013	7-2	A1W4	2307-104	99800	7-7	A1A6L7
100403W5	33013	7-1	A1W5	2307-104	99800	7-7	A1A6L8
100403W6	33013		A1W6	2307-104	99800	7-7	A1A6L9
100403W7	33013		A1W7	2307-225	99800	7-8	A1A7L1
100407	33013		A1S8	2307-275	99800	7-8	A1A7L3
100415	33013	7-3	A1A1	2307-275	99800	7-8	A1A7L4
100431	33013	7-7	A1A6	2425-001X5UO-101AA			
100438	33013		A1MP30		72982	7-2	A1C15
100438	33013		A1MP31	2499-003X5S0152M			
100438	33013		A1MP32		72982	7-2	A1C8
100441	33013		A1	2499-003X5S0152M			
100444	33013		A1MP35		72982	7-2	A1C9
100447	33013	7-12	A2MP1	2499-003X5S0152M			
100448	33013	7-12	A2		72982	7-2	A1C10
1410-10	83330		A1MP50	2499-003X5S0152M			
1410-10	83330		A1MP51		72982	7-2	A1C16
1410-10	83330		A1MP52	2499-003X5S0152M			
1410-10	83330		A1MP53		72982	7-2	A1C17
1410-10	83330		A1MP54	2499-003X5S0152M			
1410-10	83330		A1MP55		72982	7-2	A1C18
1410-14	83330		A1MP56	2499-003X5S0152M			
1410-14	83330		A1MP57		72982	7-2	A1C19
1410-14	83330		A1MP58	2499-003X5S0152M			
1410-4	83330		A1MP41		72982	7-2	A1C20
1410-6	83330		A1MP43	2499-003X5S0152M			
1410-6	83330		A1MP44		72982	7-2	A1C21
1410-6	83330		A1MP48	2499-003X5S0152M			
1410-6	83330		A1MP49		72982	7-2	A1C22
1497	83330		A1MP59	2499-003X5S0152M			
1497	83330		A1MP60		72982	7-2	A1C24
1497	83330		A1MP61	2499-003X5S0152M			
1497	83330		A1MP62		72982	7-2	A1C25
15-123	31356	7-2	A1S7	2499-003X5S0152M			
17409S	70903		A1W10		72982	7-2	A1C26
1869	71744	7-10	A1A9DS1	2499-003X5S0152M			
2N2102	81349	7-9	A1A8Q1		72982	7-2	A1C27
2N2102	81349	7-9	A1A8Q3	2499-003X5S0152M			
2N2102	81349	7-9	A1A8Q4		72982	7-2	A1C28
2N2102	81349	7-9	A1A8Q5	2499-003X5S0152M			
2N2102	81349	7-9	A1A8Q7		72982	7-2	A1C29
2N2102	81349	7-9	A1A8Q8	2499-003X5S0152M			
2N2102	81349	7-9	A1A8Q11		72982	7-2	A1C30
2N2102	81349	7-9	A1A8Q12	272226-N2C	76854		A1S1R
2N2857	81349	7-7	A1A6Q3	28JR103-1	24931		A1J2
2N2857	81349	7-7	A1A6Q6	28JR124-2	24931		A1J1
2N2857	81349	7-7	A1A6Q8	28JS127-1	24931	7-2	A1W6J5
2N2857	81349	7-8	A1A7Q1	28JS127-1	24931	7-2	A1W7J4
2N2905	81349	7-9	A1A8Q9	28JS128-1	24931	7-2	A1W5J7
2N2905	81349	7-9	A1A8Q10	28P101-2	24931	7-1	A1W4P3
2N2905	81349	7-9	A1A8Q15	28P101-2	24931	7-2	A1W1P5
2N2905	81349	7-9	A1A8Q16	28P101-2	24931	7-2	A1W2P1
2N4124	81349	7-6	A1A4Q1	28P129-2	24931	7-1	A1W5P6
2N4124	81349	7-6	A1A4Q2	28P129-2	24931	7-2	A1W4P4
2N4410	81349	7-4	A1A2Q1	3/4MDL	75915	7-2	A1F1
2N5109	81349	7-8	A1A7Q2	30DTE1207	56289	7-3	A1A1C9
2N5109	81349	7-8	A1A7Q3	30DTE1207	56289	7-5	A1A3C33
2N5109	81349	7-8	A1A7Q4	30DTE1207	56289	7-6	A1A4C15
2N5109	81349	7-8	A1A7Q5	30DTE1207	56289	7-7	A1A6C14
2N5109	81349	7-8	A1A7Q6	30DTE1207	56289	7-8	A1A7C8
2N706	81349	7-7	A1A6Q2	30DTE1207	56289	7-10	A1A9C4
2N706	81349	7-7	A1A6Q7	30DTE1207	56289	7-10	A1A9C7
2N706	81349	7-8	A1A7Q7	30DTE1207	56289	7-10	A1A9C8
2N706	81349	7-8	A1A7Q8	30DTE1207	56289	7-10	A1A11C11
2N706	81349	7-8	A1A7Q9	30DTE1207	56289	7-11	A1A11C12
2N709	81349	7-7	A1A6Q4	30D207G012DF4	56289	7-9	A1A8C9

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REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.
30D207G025DH4	56289	7-9	1A1A8C2	8085A-0440	06540		A1MP1H2
30D207G025DH4	56289	7-9	1A1A8C10	8131-050-651-474M	72982	7-3	A1A1C5
30D256G050CC4	56289	7-8	1A1A7C20	8131-050-651-474M	72982	7-3	A1A1C6
39D107G016DC4	56289	7-9	1A1A8C1	8131-050-651-474M	72982	7-8	A1A7C1
39D107G016DC4	56289	7-9	1A1A8C7	8131-050-651-474M	72982	7-8	A1A7C3
39D388G015HP4	56289	7-9	1A1A8C8	8131-050-651-474M	72982	7-8	A1A7C4
39D457G025FJ4	56289	7-9	1A1A8C6	8131-050-651-474M	72982	7-11	A1A11C8
39D506F150FJ4	56289	7-9	1A1A8C12	8131-050-651-474M	72982	7-11	A1A11C10
39D506F150FJ4	56289	7-9	1A1A8C13	8131-100-651-104M	72982	7-3	A1A1C1
39D506G050EE4	56289	7-9	1A1A8C4	8131-100-651-104M	72982	7-3	A1A1C3
39D506G050EE4	56289	7-9	1A1A8C5	8131-100-651-104M	72982	7-3	A1A1C4
39D707G050GP4	56289	7-9	1A1A8C3	8131-100-651-104M	72982	7-3	A1A1C7
4511DAF	10539		A1MP1	8131-100-651-104M	72982	7-3	A1A1C8
538-011-15-60D	72982	7-6	A1A4C13	8131-100-651-104M	72982	7-3	A1A1C10
5610	10539		A1MP8	8131-100-651-104M	72982	7-7	A1A6C13
5610	10539		A1MP9	8131-100-651-104M	72982	7-7	A1A6C15
5711C	76385		A1MP19	8131-100-651-104M	72982	7-7	A1A6C21
5749-91-1	17117		A1MP42	8131-100-651-104M	72982	7-7	A1A6C22
5835-000Y5U203Z	72982	7-3	A1A1C15	8131-100-651-104M	72982	7-7	A1A6C23
5835-000Y5U203Z	72982	7-3	A1A1C16	8131-100-651-104M	72982	7-7	A1A6C28
5835-000Y5U203Z	72982	7-3	A1A1C17	8131-100-651-104M	72982	7-7	A1A6C32
5835-000Y5U203Z	72982	7-3	A1A1C18	8131-100-651-104M	72982	7-8	A1A7C2
5835-000Y5U203Z	72982	7-4	A1A2C1	8131-100-651-104M	72982	7-8	A1A7C5
5835-000Y5U203Z	72982	7-4	A1A2C2	8131-100-651-104M	72982	7-8	A1A7C6
5835-000Y5U203Z	72982	7-4	A1A2C3	8131-100-651-104M	72982	7-8	A1A7C7
5835-000Y5U203Z	72982	7-5	A1A3C1	8131-100-651-104M	72982	7-8	A1A7C9
5835-000Y5U203Z	72982	7-5	A1A3C2	8131-100-651-104M	72982	7-8	A1A7C10
5835-000Y5U203Z	72982	7-6	A1A4C1	8131-100-651-104M	72982	7-8	A1A7C11
5835-000Y5U203Z	72982	7-6	A1A4C3	8131-100-651-104M	72982	7-8	A1A7C14
5835-000Y5U203Z	72982	7-6	A1A4C4	8131-100-651-104M	72982	7-8	A1A7C15
5835-000Y5U203Z	72982	7-6	A1A4C5	8131-100-651-104M	72982	7-8	A1A7C17
5835-000Y5U203Z	72982	7-6	A1A4C6	8131-100-651-104M	72982	7-8	A1A7C21
5835-000Y5U203Z	72982	7-6	A1A4C7	8131-100-651-104M	72982	7-11	A1A11C5
5835-000Y5U203Z	72982	7-6	A1A4C8	8131-100-651-104M	72982	7-11	A1A11C6
5835-000Y5U203Z	72982	7-6	A1A4C9	8131-100-651-104M	72982		A1C42
5835-000Y5U203Z	72982	7-6	A1A4C10	9222A140	06540		A1MP1H2
5835-000Y5U203Z	72982	7-6	A1A4C11				
5835-000Y5U203Z	72982	7-6	A1A4C16				
5835-000Y5U203Z	72982	7-6	A1A4C17				
5835-000Y5U203Z	72982	7-6	A1A4C18				
5835-000Y5U203Z	72982	7-6	A1A4C19				
5835-000Y5U203Z	72982	7-6	A1A4C20				
5835-000Y5U203Z	72982	7-5	A1A4C21				
5835-000Y5U203Z	72982	7-6	A1A4C22				
5835-000Y5U203Z	72982	7-6	A1A4C23				
5835-000Y5U203Z	72982	7-6	A1A4C24				
5835-000Y5U203Z	72982	7-6	A1A4C25				
5835-000Y5U203Z	72982	7-7	A1A6C8				
5835-000Y5U203Z	72982	7-7	A1A6C9				
5835-000Y5U203Z	72982	7-7	A1A6C11				
5835-000Y5U203Z	72982	7-7	A1A6C12				
5835-000Y5U203Z	72982	7-7	A1A6C19				
5835-000Y5U203Z	72982	7-7	A1A6C31				
5835-000Y5U203Z	72982	7-8	A1A7C19				
5835-000Y5U203Z	72982	7-10	A1A3C4				
5835-000Y5U203Z	72982	7-10	A1A3C5				
5835-000Y5U203Z	72982	7-10	A1A3C6				
5835-000Y5U203Z	72982	7-10	A1A9C1				
5835-000Y5U203Z	72982	7-10	A1A9C3				
5835-000Y5U203Z	72982	7-10	A1A9C5				
5835-000Y5U203Z	72982	7-10	A1A9C9				
5835-000Y5U203Z	72982	7-10	A1A9C10				
5835-000Y5U203Z	72982	7-10	A1A9C20				
5835-000Y5U203Z	72982	7-10	A1A9C21				
698	7-485		A1MP16				
761	79963		A1MP45				
761	79963		A1MP46				
761	79963		A1MP47				

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A1AT1H4	B-6	A1MP16	B-14	A1Q14H1	B-33
A1C1	B-10	A1MP16H4	B-14	A1R1	B-29
A1C2	B-10	A1MP17	B-14	A1R2	B-29
A1C3	B-10	A1MP18	B-14	A1R3	B-29
A1C4	B-10	A1MP19	B-14	A1R4	B-29
A1C5	B-10	A1MP20	B-14	A1R7	B-29
A1C5H4	B-10	A1MP21	B-14	A1R8	B-29
A1C6	B-10	A1MP22	B-14	A1S1	B-30
A1C8	B-10	A1MP22H4	B-14	A1S1R	B-30
A1C9	B-10	A1MP23	B-14	A1S2	B-30
A1C10	B-10	A1MP23H4	B-14	A1S3	B-29
A1C13	B-9	A1MP24	B-15	A1S3H2	B-29
A1C14	B-9	A1MP24H4	B-15	A1S7	B-30
A1C15	B-10	A1MP25	B-15	A1S8	B-30
A1C16	B-10	A1MP25H2	B-15	A1S8H2	B-30
A1C17	B-10	A1MP25H4	B-15	A1T1	B-33
A1C18	B-10	A1MP26	B-15	A1T1H4	B-33
A1C19	B-10	A1MP26H2	B-15	A1W1	B-9
A1C20	B-10	A1MP27	B-15	A1W1P5	B-9
A1C21	B-10	A1MP27H2	B-15	A1W1W1	B-9
A1C22	B-10	A1MP28	B-15	A1W2	B-9
A1C24	B-10	A1MP29	B-15	A1W2P1	B-9
A1C25	B-10	A1MP30	B-15	A1W2W1	B-9
A1C26	B-10	A1MP31	B-15	A1W4	B-9
A1C27	B-10	A1MP32	B-15	A1W4P3	B-9
A1C28	B-10	A1MP33	B-15	A1W4P4	B-9
A1C29	B-10	A1MP33H2	B-15	A1A4W1	B-9
A1C30	B-10	A1MP34	B-15	A1W5	B-9
A1C42	B-10	A1MP35	B-21	A1W5J7	B-9
A1F1	B-5, B-14	A1MP36	B-21	A1W5P6	B-9
A1J1	B-11	A1MP37	B-21	A1W5W1	B-9
A1J2	B-11	A1MP37H9	B-21	A1W6	B-9
A1L1	B-11	A1MP38	B-29	A1W6J5	B-9
A1L2	B-11	A1MP39	B-29	A1W6W1	B-9
A1L3	B-11	A1MP39H6	B-29	A1W7	B-9
A1L4	B-11	A1MP40	B-29	A1W7J4	B-9
A1L5	B-11	A1MP40H4	B-29	A1W7W1	B-9
A1L7	B-11	A1MP41	B-30	A1W10	B-9
A1M1	B-18	A1MP42	B-30	A1XF1	B-14
A1M1H4	B-19	A1MP43	B-30	A1A1	B-23
A1M2	B-19	A1MP44	B-30	A1A1C1	B-24
A1M2H4	B-19	A1MP45	B-30	A1A1C2	B-24
A1MP1	B-8	A1MP46	B-30	A1A1C3	B-24
A1MP1H2	B-8	A1MP47	B-30	A1A1C4	B-24
A1MP2	B-8	A1MP48	B-30	A1A1C5	B-24
A1MP2H8	B-8	A1MP49	B-30	A1A1C6	B-24
A1MP3	B-8	A1MP50	B-30	A1A1C7	B-24
A1MP3H4	B-8	A1MP51	B-30	A1A1C8	B-24
A1MP4	B-9	A1MP52	B-30	A1A1C9	B-24
A1MP4H4	B-9	A1MP53	B-30	A1A1C10	B-24
A1MP5	B-9	A1MP54	B-30	A1A1C15	B-24
A1MP6	B-9	A1MP55	B-30	A1A1C16	B-24
A1MP7	B-10	A1MP56	B-30	A1A1C17	B-24
A1MP8	B-12	A1MP57	B-30	A1A1C18	B-24
A1MP9	B-12	A1MP58	B-30	A1A1C19	B-24
A1MP10	B-12	A1MP59	B-30	A1A1CR1	B-25
A1MP10H18	B-12	A1MP60	B-30	A1A1CR3	B-25
A1MP11	B-12	A1MP61	B-31	A1A1CR4	B-26
A1MP11H4	B-12	A1MP62	B-31	A1A1CR5	B-26
A1MP12	B-12	A1Q2	B-33	A1A1CR6	B-26
A1MP12H18	B-12	A1Q2H1	B-33	A1A1H4	B-23
A1MP13	B-12	A1Q6	B-33	A1A1L1	B-24
A1MP13H4	B-12	A1Q6H1	B-33	A1A1L2	B-24
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A1A1Q3	B-26	A1A3C6	B-12	A1A4R10	B-32
A1A1Q4	B-26	A1A3C8	B-11	A1A4R11	B-33
A1A1Q5	B-26	A1A3C9	B-11	A1A4R12	B-33
A1A1Q6	B-26	A1A3C10	B-11	A1A4R13	B-33
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A1A1R8	B-25	A1A3C32	B-11	A1A4U9	B-32
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A1A1R11	B-25	A1A3MP1	B-12	A1A4U12	B-32
A1A1R12	B-25	A1A3MP1H21	B-12	A1A4U13	B-32
A1A1R13	B-25	A1A3U1	B-12	A1A4Y1	B-32
A1A1R14	B-25	A1A3U2	B-12	A1A6	B-15
A1A1R15	B-25	A1A3U3	B-12	A1A6C1	B-16
A1A1R16	B-25	A1A3U7	B-12	A1A6C2	B-16
A1A1R17	B-25	A1A3U8	B-12	A1A6C6	B-16
A1A1R18	B-25	A1A3U9	B-12	A1A6C8	B-16
A1A1R19	B-25	A1A3U10	B-12	A1A6C9	B-16
A1A1R20	B-25	A1A3U14	B-12	A1A6C10	B-16
A1A1R21	B-25	A1A4	B-31	A1A6C11	B-16
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A1A1R34	B-25	A1A4C8	B-31	A1A6C19	B-16
A1A1U1	B-24	A1A4C9	B-31	A1A6C20	B-16
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APPENDIX C MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations for AN/GRM-50C. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

C-2. Maintenance Function

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. Adjust. To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment or system.

h. Replace. The act of substituting a serviceable like type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, re-machining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipments/components.

C-3. Column Entries.

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the noun names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a "worktime" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance func-

tion at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "worktime" figures will be shown for each category. The number of task-hours specified by the "worktime" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. Subcolumns of column 4 are as follows:

- C - Operator/Crew
- O - Organizational
- F - Direct Support
- H - General Support
- D - Depot

e. Column 5, Tools and Equipment. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains an alphabetic code which leads to the remark in section IV, Remarks, which is pertinent to the item opposite the particular code.

C-4. Tool and Test Equipment Requirements (sec III)

a. Tool or Test Equipment Reference Code. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance functions.

b. Maintenance Category. The codes in this column indicate the maintenance category allocated the tool or test equipment.

c. Nomenclature. This column lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.

d. National/NATO Stock Number. This column lists the National/NATO stock number of the specific tool or test equipment.

e. Tool Number. This column lists the manufacturer's part number of the tool followed by the Federal Supply Code for manufacturers (5-digit) in parentheses.

C-5. Remarks (see IV)

a. Reference Code. This code refers to the appropriate item in section II, column 6.

b. Remarks. This column provides the required explanatory information necessary to clarify items appearing in section II.

SECTION II MAINTENANCE ALLOCATION CHART
FOR

GENERATOR, SIGNAL AN/GRM-50C

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQPT.	(6) REMARKS
			C	O	F	H	D		
00	GENERATOR, SIGNAL AN/GRM-50C	Inspect		0.2					A B
		Test		0.3					
		Service	0.2			0.4		1 thru 9	
		Adjust				0.6		11	
		Repair				1.2		1 thru 10	
		Rebuild		0.3				10	
01	GENERATOR, SIGNAL SG-479C/GRM-50	Test				0.4		1 thru 10	C
		Adjust				0.6		1 thru 10	
		Repair				1.2		10	
		Rebuild					2.0	1 thru 10	
02	DUMMY LOAD, DA-296A/GRM-50	Repair				0.5		10	

SECTION III TOOL AND TEST EQUIPMENT REQUIREMENTS
FOR

GENERATOR, SIGNAL AN/GRM-50C

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
1	H,D	ANALYZER, SPECTRUM TS-723D/U	6625-00-668-9418	
2	H,D	ATTENUATOR, VARIABLE CN-796/U	5985-00-087-2547	
3	H,D	GENERATOR, SIGNAL AN/URM-25D	6625-00-649-5193	
4	H,D	GENERATOR, SIGNAL AN/URM-127	6625-00-783-5965	
5	H,D	MULTIMETER AN/USM-223	6625-00-999-7465	
6	H,D	MULTIMETER ME-26D/U	6625-00-913-9781	
7	H,D	OSCILLOSCOPE AN/USM-281A	6625-00-228-2201	
8	H,D	TEST SET, TRANSISTOR TS-1836C/U	6625-00-159-2263	
9	H,D	VOLTMETER, ELECTRONIC ME-30E/U	6625-00-643-1670	
10	H,D	TOOL KIT, ELECTRONIC EQUIPMENT TK-100/G	5180-00-605-0079	
11	O	TOOLS AND TEST EQUIPMENT AVAILABLE TO THE ORGANIZATIONAL REPAIR TECHNICIAN BECAUSE OF THE ASSIGNED MISSION.		

SECTION IV. REMARKS

REFERENCE CODE	REMARKS
<p>A</p> <p>B</p> <p>C</p>	<p>VISUAL ONLY.</p> <p>SIMPLE OPERATIONAL CHECKS</p> <p>REPAIR BY REPLACEMENT OF LAMPS AND FUSES (ETC.).</p>

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*U.S. GOVERNMENT PRINTING OFFICE: 1978-765096/894

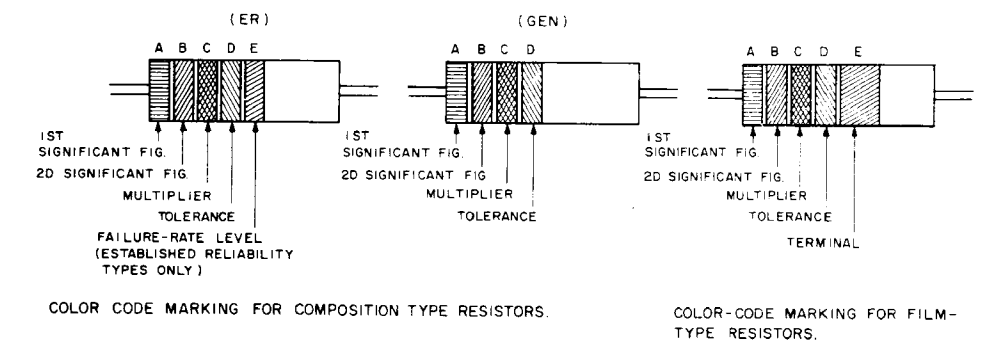
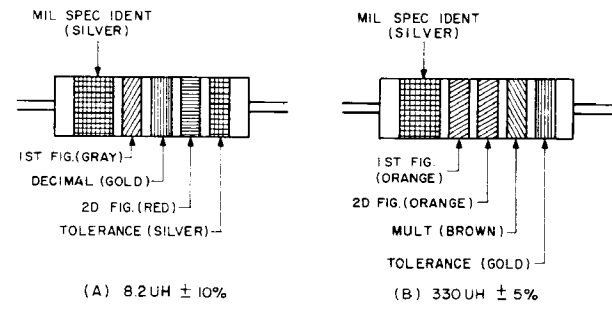
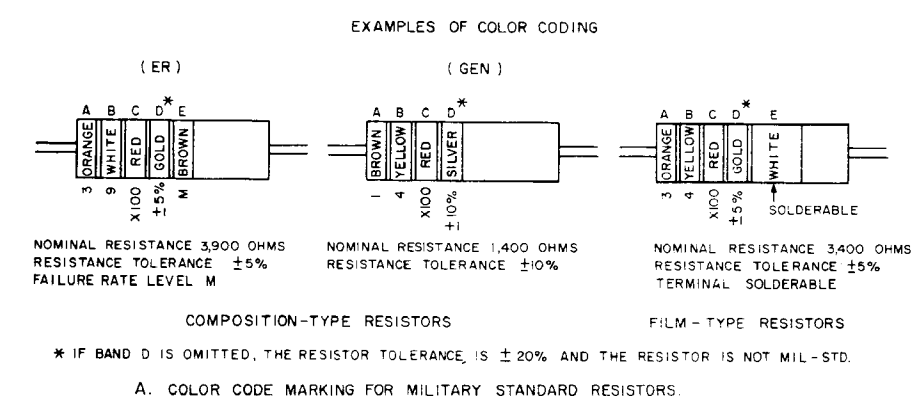


TABLE 1
COLOR CODE FOR COMPOSITION TYPE AND FILM TYPE RESISTORS

BAND A	BAND B	BAND C	BAND D	BAND E
COLOR	FIRST SIGNIFICANT FIGURE	COLOR	SECOND SIGNIFICANT FIGURE	COLOR
BLACK	0	BLACK	0	BLACK
BROWN	1	BROWN	1	BROWN
RED	2	RED	2	RED
ORANGE	3	ORANGE	3	ORANGE
YELLOW	4	YELLOW	4	YELLOW
GREEN	5	GREEN	5	GREEN
BLUE	6	BLUE	6	BLUE
PURPLE (VIOLET)	7	PURPLE (VIOLET)	7	PURPLE (VIOLET)
GRAY	8	GRAY	8	GRAY
WHITE	9	WHITE	9	WHITE

COLOR	MULTIPLIER	COLOR	RESISTANCE TOLERANCE (PERCENT)	COLOR	FAILURE RATE LEVEL	TERM.
BLACK	1	BROWN	±10 (COMP TYPE ONLY)	BROWN	M=0	
BROWN	10	RED	±2	RED	P=0.1	
RED	100	ORANGE	±3	ORANGE	R=0.01	
ORANGE	1,000	YELLOW	±5	YELLOW	S=0.001	
YELLOW	10,000	SILVER	±10	SILVER		SOLDERABLE
GREEN	100,000	GOLD	±5	GOLD		
BLUE	1,000,000	RED	±2 (NOT APPLICABLE TO ESTABLISHED RELIABILITY)	RED		
PURPLE (VIOLET)						
GRAY		SILVER	0.01	SILVER		
WHITE		GOLD	0.1	GOLD		

BAND A — THE FIRST SIGNIFICANT FIGURE OF THE RESISTANCE VALUE (BANDS A THRU D SHALL BE OF EQUAL WIDTH.)
 BAND B — THE SECOND SIGNIFICANT FIGURE OF THE RESISTANCE VALUE.
 BAND C — THE MULTIPLIER (THE MULTIPLIER IS THE FACTOR BY WHICH THE TWO SIGNIFICANT FIGURES ARE MULTIPLIED TO YIELD THE NOMINAL RESISTANCE VALUE.)
 BAND D — THE RESISTANCE TOLERANCE.
 BAND E — WHEN USED ON COMPOSITION RESISTORS, BAND E INDICATES ESTABLISHED RELIABILITY FAILURE-RATE LEVEL (PERCENT FAILURE PER 1,000 HOURS) ON FILM RESISTORS, THIS BAND SHALL BE APPROXIMATELY 1/12 TIMES THE WIDTH OF OTHER BANDS, AND INDICATES TYPE OF TERMINAL RESISTANCES IDENTIFIED BY NUMBERS AND LETTERS (THESE ARE NOT COLOR CODED).
 SOME RESISTORS ARE IDENTIFIED BY THREE OR FOUR DIGIT ALPHA-NUMERIC DESIGNATORS. THE LETTER R IS USED IN PLACE OF A DECIMAL POINT WHEN FRACTIONAL VALUES OF AN OHM ARE EXPRESSED. FOR EXAMPLE:
 2R7 = 2.7 OHMS 10R0 = 10.0 OHMS



COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES. AT A, AN EXAMPLE OF THE CODING FOR AN 8.2UH CHOKES IS GIVEN. AT B, THE COLOR BANDS FOR A 330UH INDUCTOR ARE ILLUSTRATED.

TABLE 2
COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES

COLOR	SIGNIFICANT FIGURE	MULTIPLIER	INDUCTANCE TOLERANCE (PERCENT)
BLACK	0	1	
BROWN	1	10	1
RED	2	100	2
ORANGE	3	1,000	3
YELLOW	4		
GREEN	5		
BLUE	6		
VIOLET	7		
GRAY	8		
WHITE	9		
NONE			20
SILVER			10
GOLD			5

MULTIPLIER IS THE FACTOR BY WHICH THE TWO COLOR FIGURES ARE MULTIPLIED TO OBTAIN THE INDUCTANCE VALUE OF THE CHOKE COIL.

CAPACITORS, FIXED, VARIOUS-DIELECTRICS, STYLES CM, CN, CY, AND CB

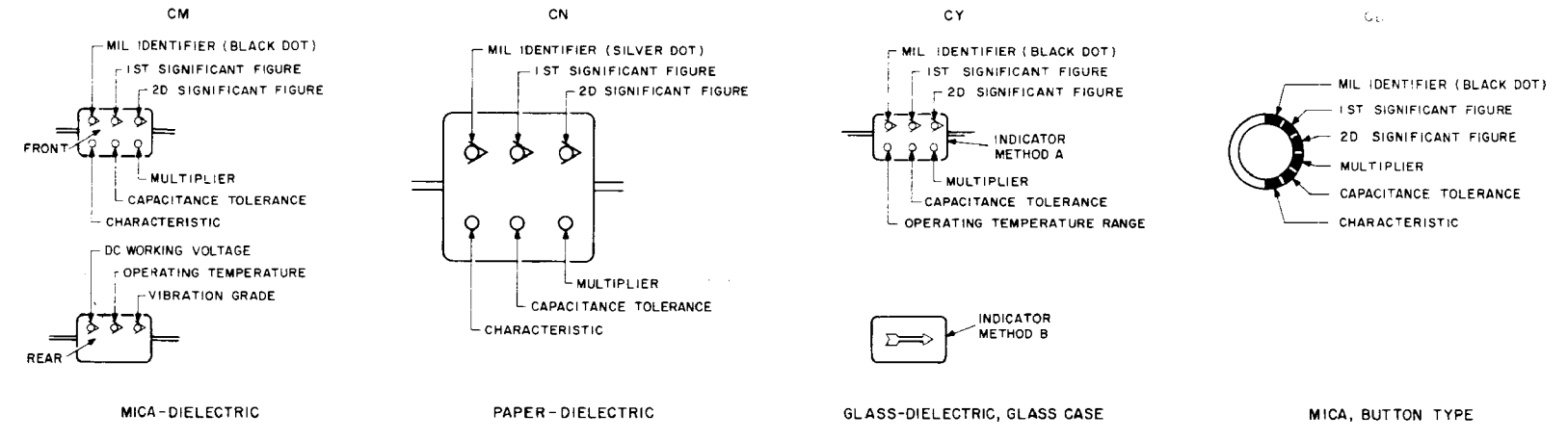


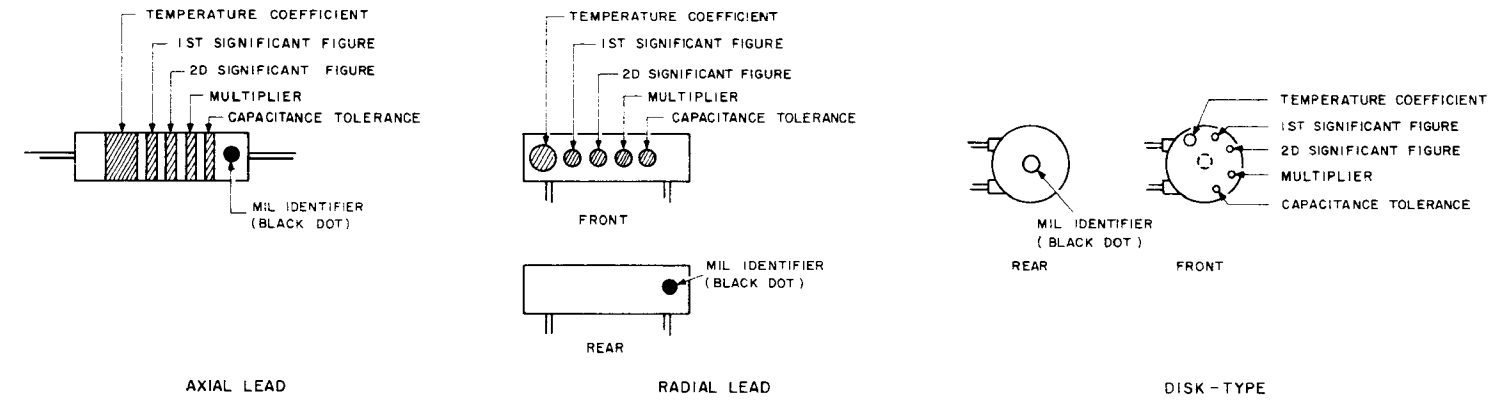
TABLE 3 — FOR USE WITH STYLES CM, CN, CY AND CB

COLOR	MIL ID	1ST SIG FIG	2D SIG FIG	MULTIPLIER	CAPACITANCE TOLERANCE	CHARACTERISTIC	DC WORKING VOLTAGE	OPERATING TEMP RANGE	VIBRATION GRADE
BLACK	CM, CY, CB	0	0	1	±20% ±20%	A		-55° to +70°C	10-55Hz
BROWN		1	1	10		B			
RED		2	2	100	±2% ±2%	C		-55° to +85°C	
ORANGE		3	3	1,000	±30%	D	300		
YELLOW		4	4	10,000		E		-55° to +125°C	10-2,000Hz
GREEN		5	5		±5%	F	500		
BLUE		6	6					-55° to +150°C	
PURPLE (VIOLET)		7	7						
GRAY		8	8						
WHITE		9	9						
GOLD				0.1	±5% ±5%				
SILVER	CN			0.01	±10% ±10% ±10%				

TABLE 4 — TEMPERATURE COMPENSATING, STYLE CC

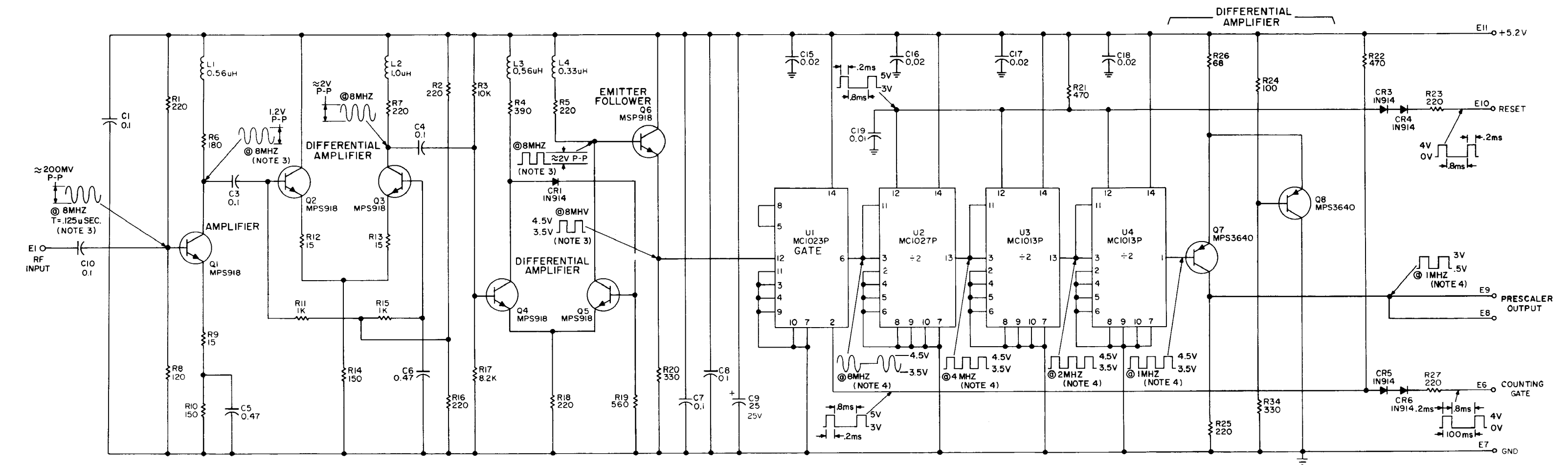
COLOR	TEMPERATURE COEFFICIENT*	1ST SIG FIG	2D SIG FIG	MULTIPLIER	CAPACITANCE TOLERANCE	MIL ID
BLACK	0	0	0	1	±20% UUF	CC
BROWN	-30	1	1	10	±1%	
RED	-80	2	2	100	±2%	±0.25 UUF
ORANGE	-150	3	3	1,000		
YELLOW	-220	4	4			
GREEN	-330	5	5		±5%	±0.5 UUF
BLUE	-470	6	6			
PURPLE (VIOLET)	-750	7	7			
GRAY		8	8	0.01*		
WHITE		9	9	0.1*	±10%	
GOLD	+100			0.1	±10 UUF	
SILVER				0.01		

1. THE MULTIPLIER IS THE NUMBER BY WHICH THE TWO SIGNIFICANT (SIG) FIGURES ARE MULTIPLIED TO OBTAIN THE CAPACITANCE IN UUF.
 2. LETTERS INDICATE THE CHARACTERISTICS DESIGNATED IN APPLICABLE SPECIFICATIONS: MIL-C-5, MIL-C-25D, MIL-C-11272B, AND MIL-C-10950C RESPECTIVELY.
 3. LETTERS INDICATE THE TEMPERATURE RANGE AND VOLTAGE-TEMPERATURE LIMITS DESIGNATED IN MIL-C-11015D.
 4. TEMPERATURE COEFFICIENT IN PARTS PER MILLION PER DEGREE CENTIGRADE.
 * OPTIONAL CODING WHERE METALLIC PIGMENTS ARE UNDESIRABLE.



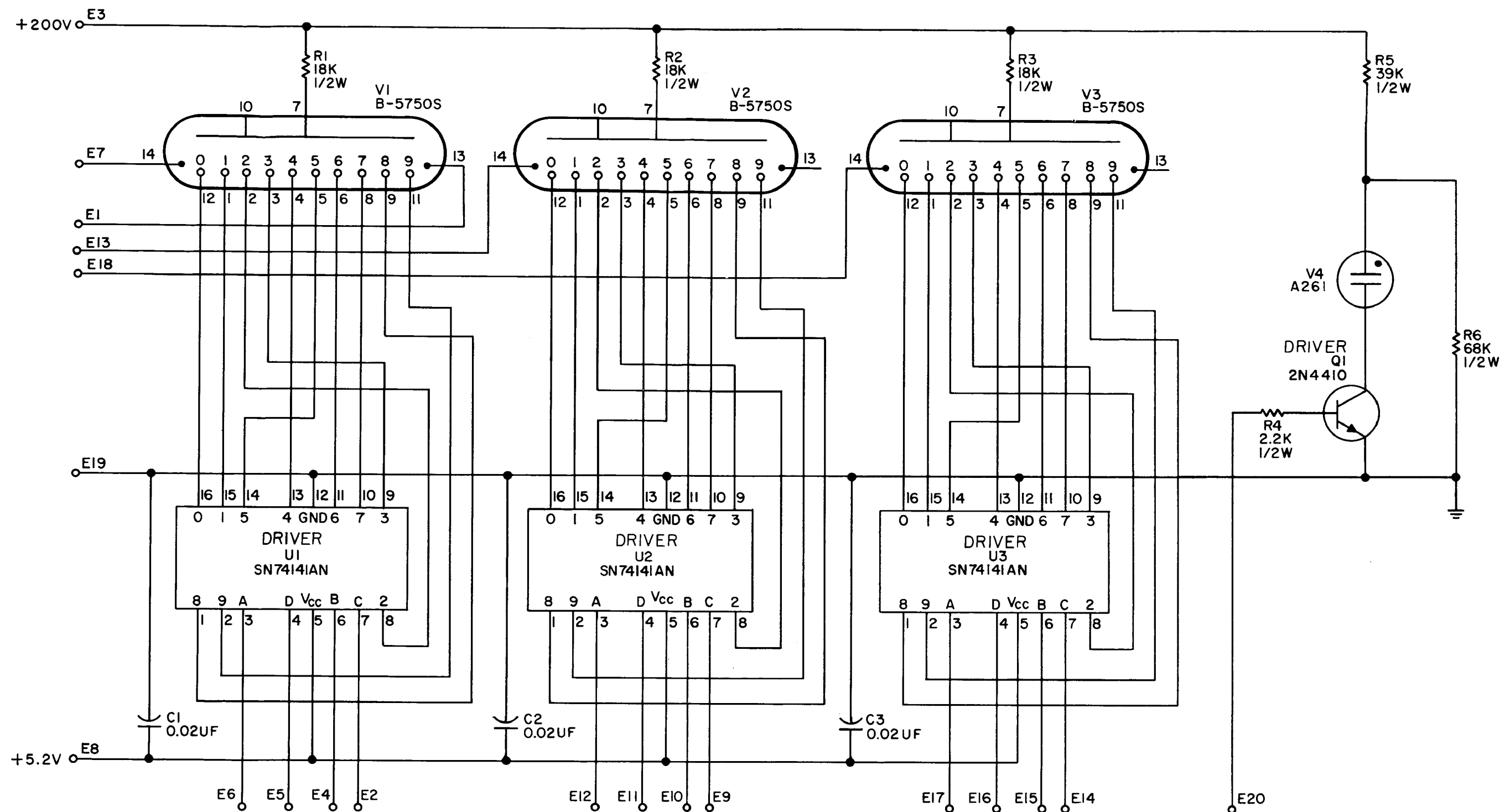
C. COLOR CODE MARKING FOR MILITARY STANDARD CAPACITORS.

Figure FO-1. Color code marking for resistors, inductors, and capacitors.



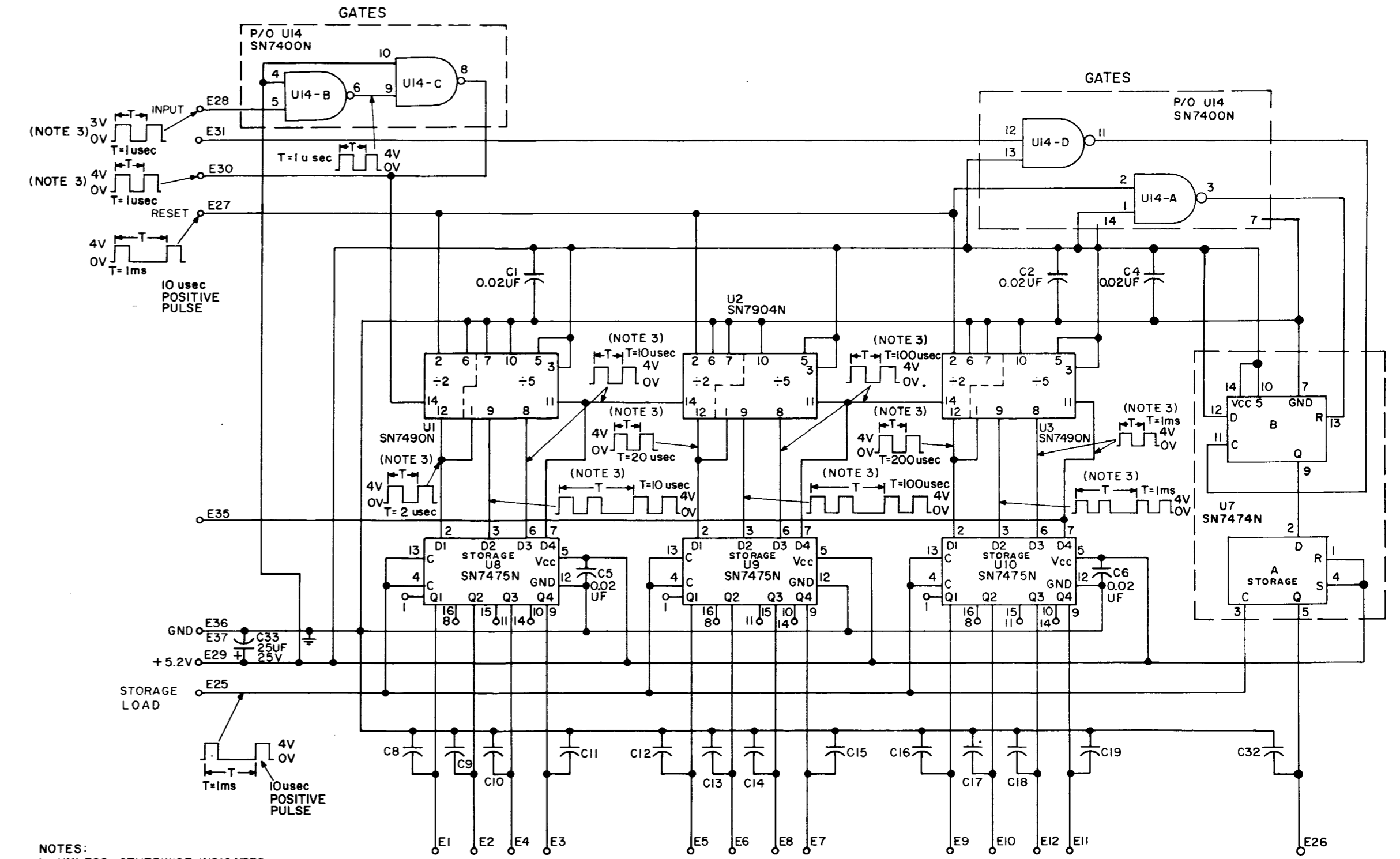
- NOTES:
1. UNLESS OTHERWISE INDICATED RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF, INDUCTANCES ARE IN UH.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH AI.
 3. WAVEFORMS ARE A-C COUPLED.
 4. WAVEFORMS ARE AT FREQUENCY INDICATED AND HAVE 0.2 MILLI-SECOND BLANKING EVERY 1 MILLI-SECOND.

Figure FO-2. Prescaler A1, schematic diagram.



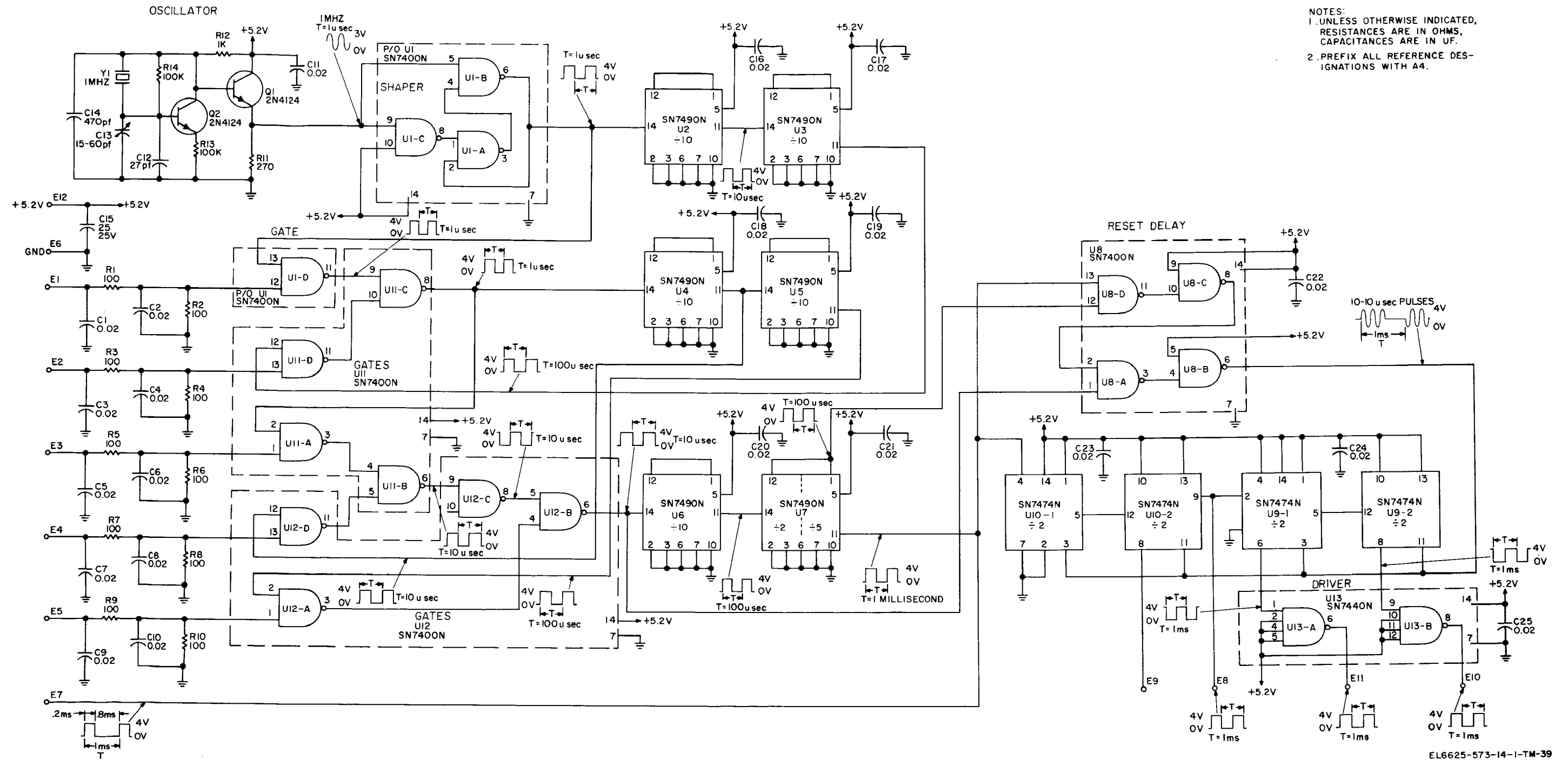
- NOTES:
1. UNLESS OTHERWISE SPECIFIED RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A2.

Figure FO-3. Display A2, schematic diagram.



- NOTES:
1. UNLESS OTHERWISE INDICATED CAPACITANCES ARE IN UF.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A3.
 3. GENERATOR SET FOR 8.00 MHZ WAVE FORMS HAVE .2 MILLISECONDS BLANKING EVERY 1 MILLISECOND.
 4. ALL UNVALUED CAPACITORS ARE 0.001UF.

Figure FO-4. Counter A3, schematic diagram.



NOTES:
 1. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A4.

Figure FO-5. Time base A4, schematic diagram.

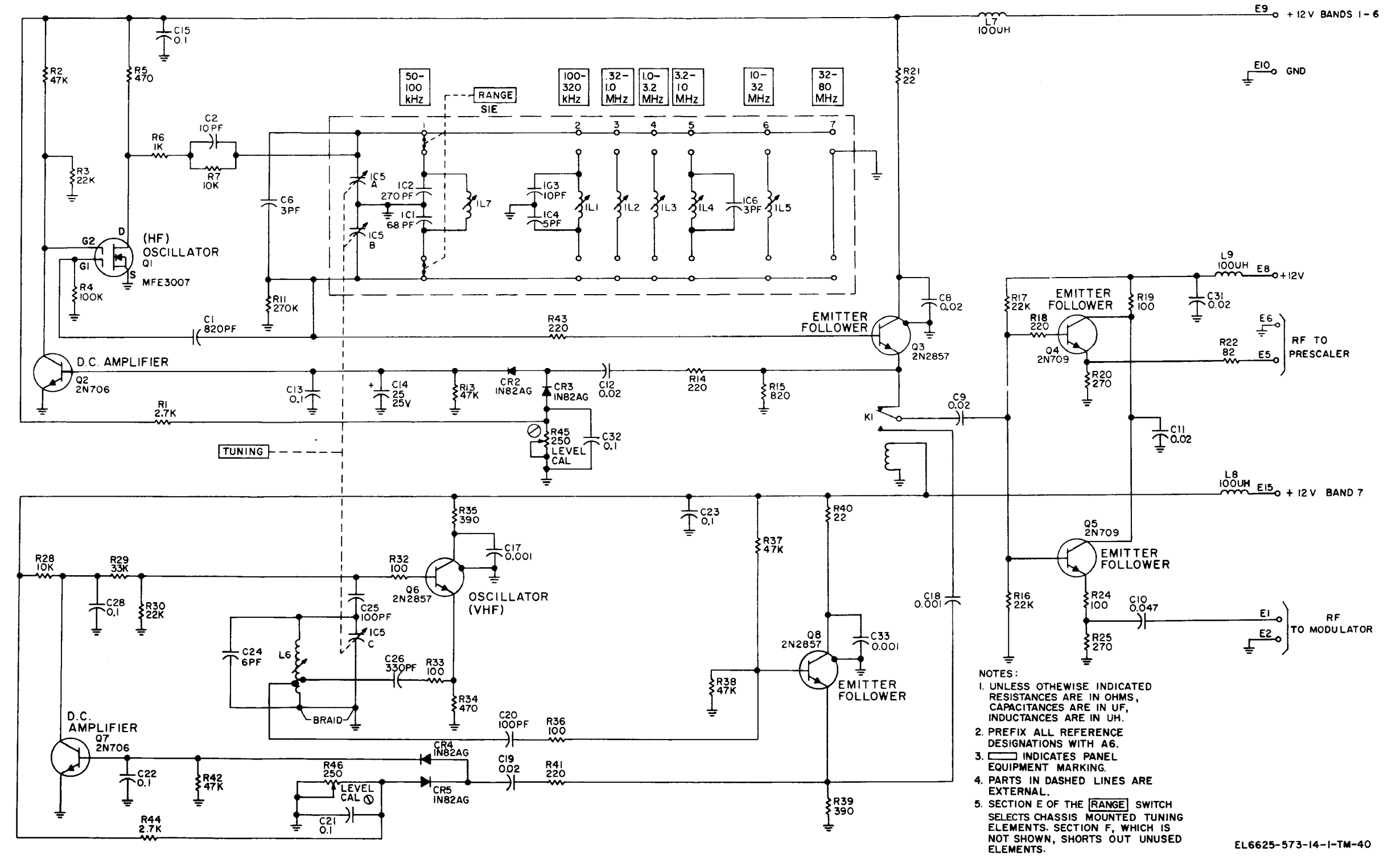
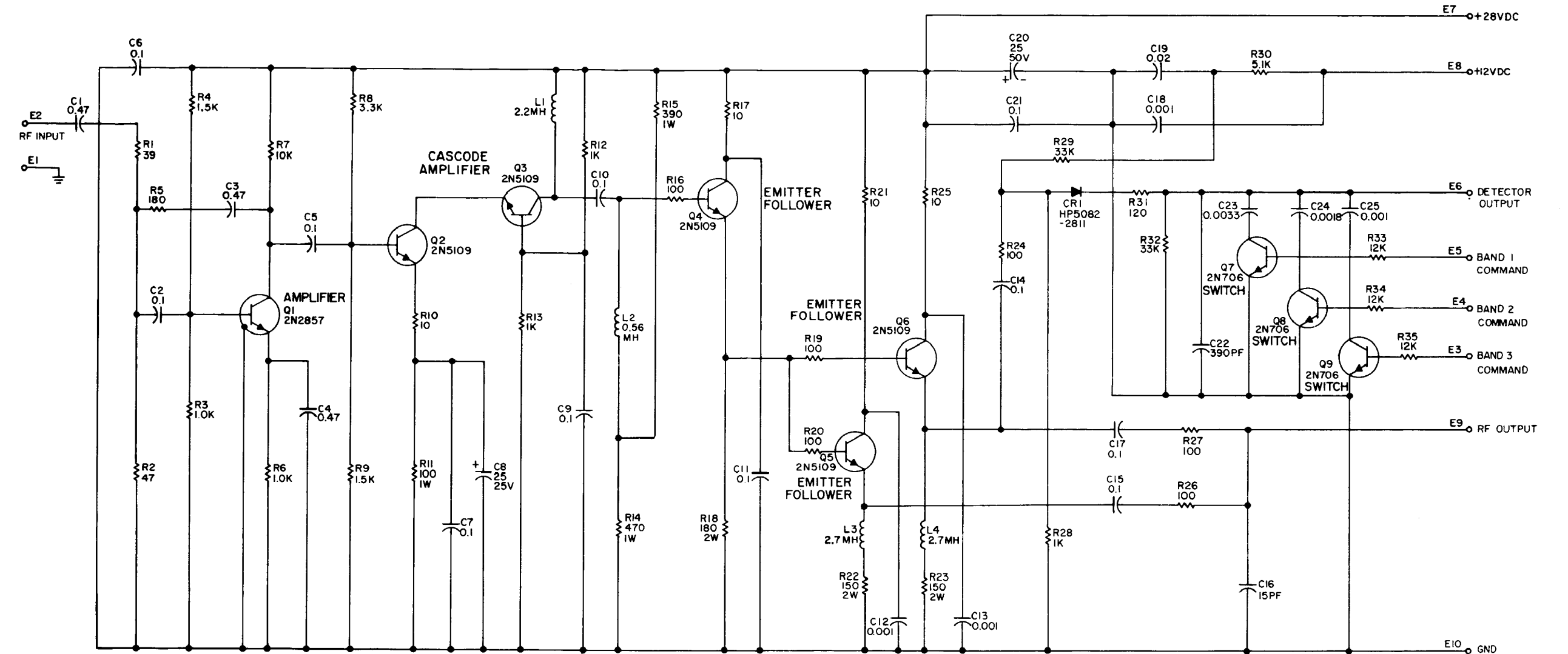


Figure FO-6. Oscillator A6, schematic diagram.



NOTES:
 1. UNLESS OTHERWISE INDICATED
 RESISTANCES ARE IN OHMS,
 CAPACITANCES ARE IN UF,
 INDUCTANCES ARE IN UH.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A7.

Figure FO-7. Rf amplifier A7, schematic diagram.

- NOTES:
 1. UNLESS OTHERWISE INDICATED RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A8.
 3. PARTS IN DASHED LINES ARE EXTERNAL.

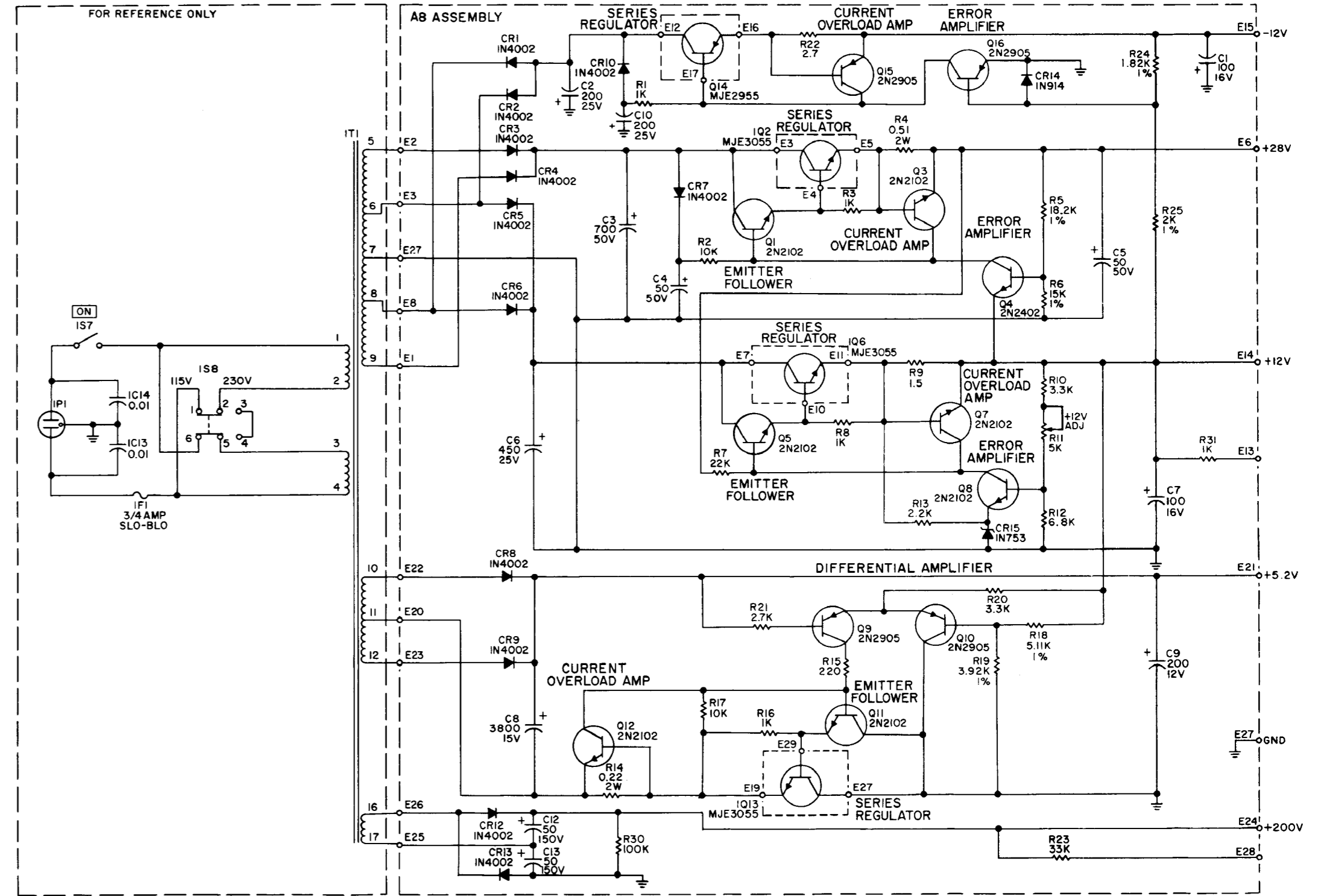
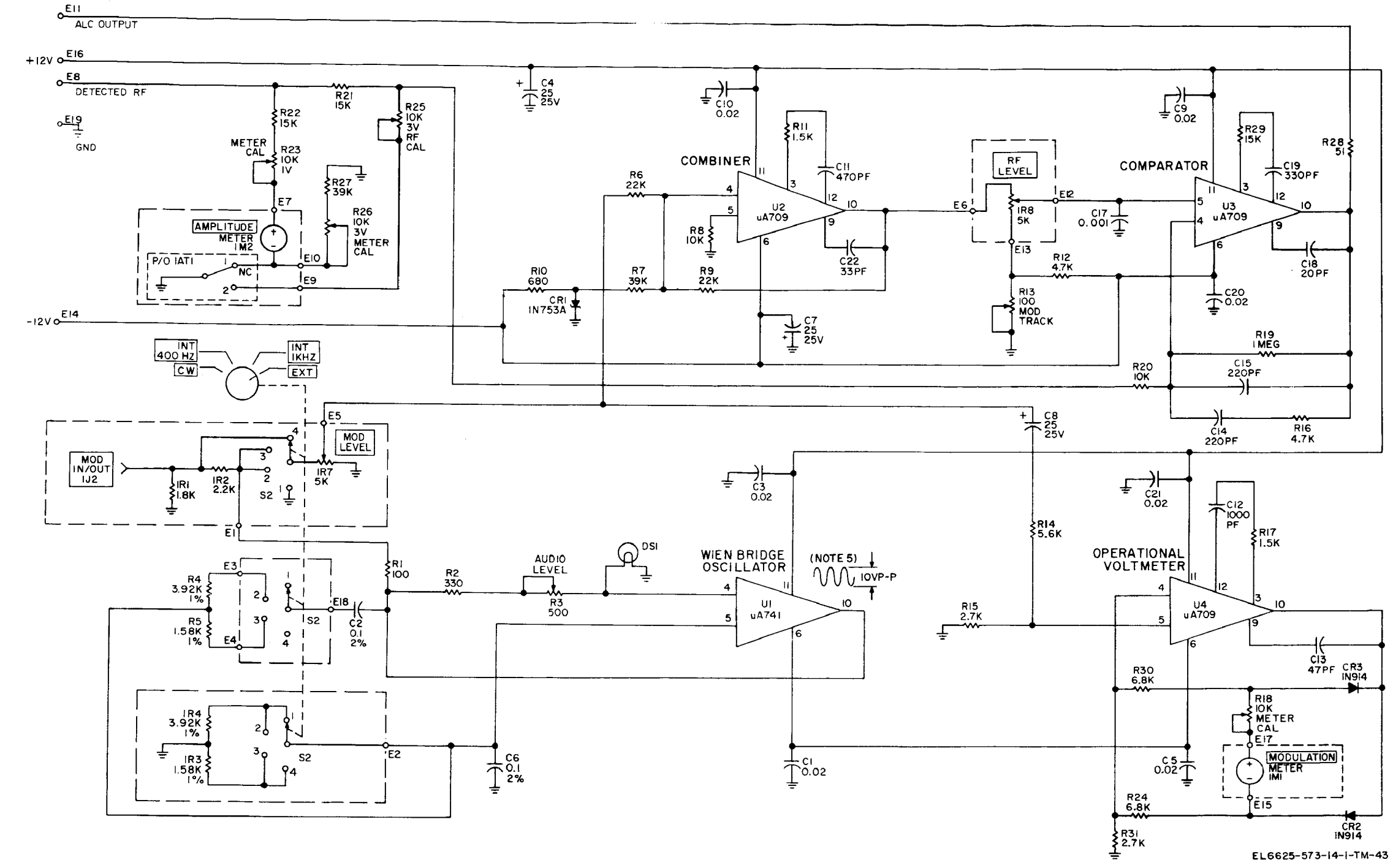


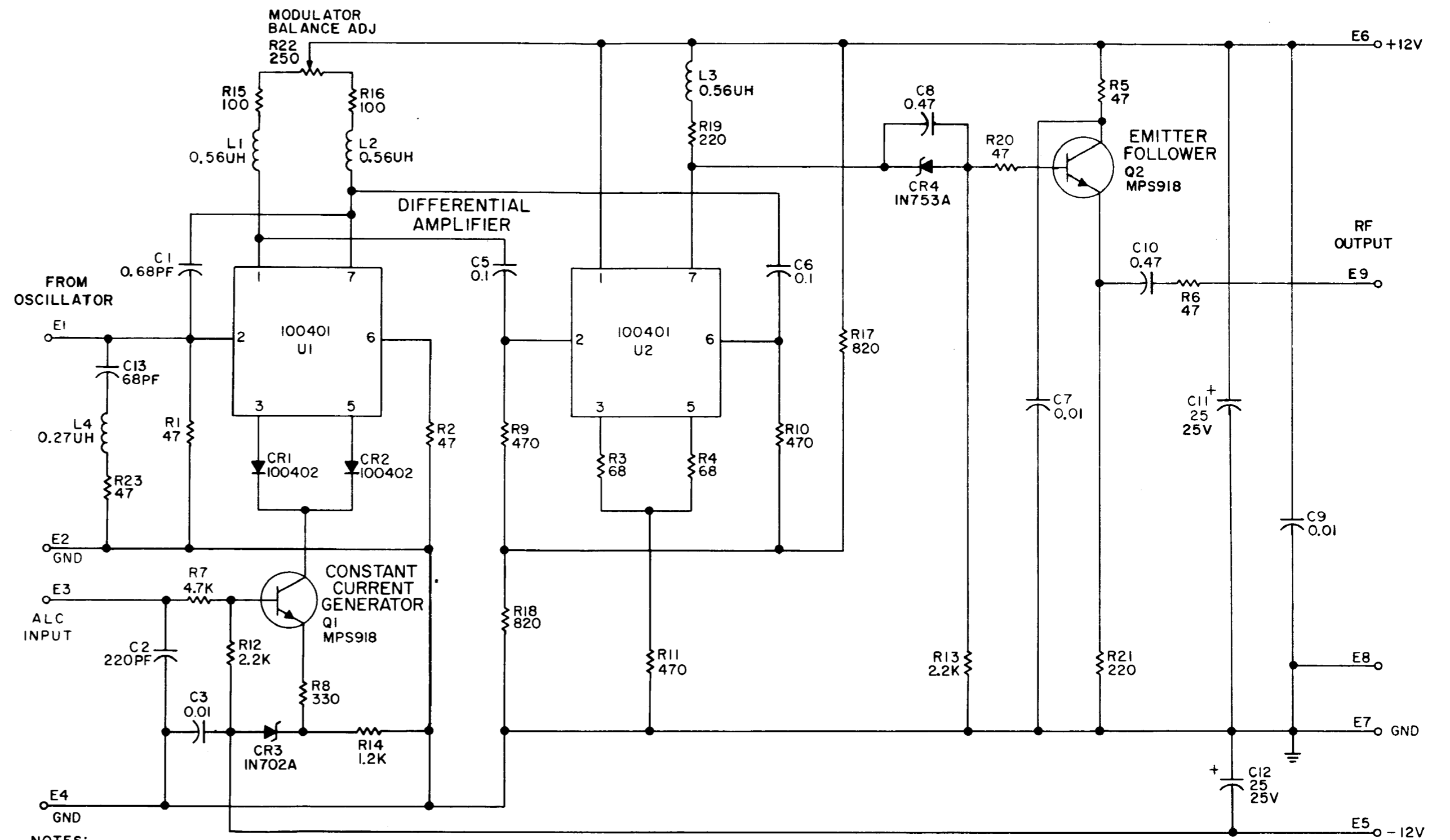
Figure FO-8. Power supply A8, schematic diagram.

- NOTES:
 1. UNLESS OTHERWISE INDICATED RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A9.
 3. INDICATES PANEL EQUIPMENT MARKINGS.
 4. PARTS IN DASHED LINES ARE EXTERNAL.
 5. WITH MODE SWITCH IN INT 1KHZ POSITION ONLY.



EL6625-573-14-1-TM-43

Figure FO-9. Audio level A9, schematic diagram.



NOTES:
 1. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF, INDUCTANCES ARE IN UH.
 2. PREFIX ALL REFERENCE DESIGNATIONS WITH A11.

Figure FO-10. Modulator A11, schematic diagram.

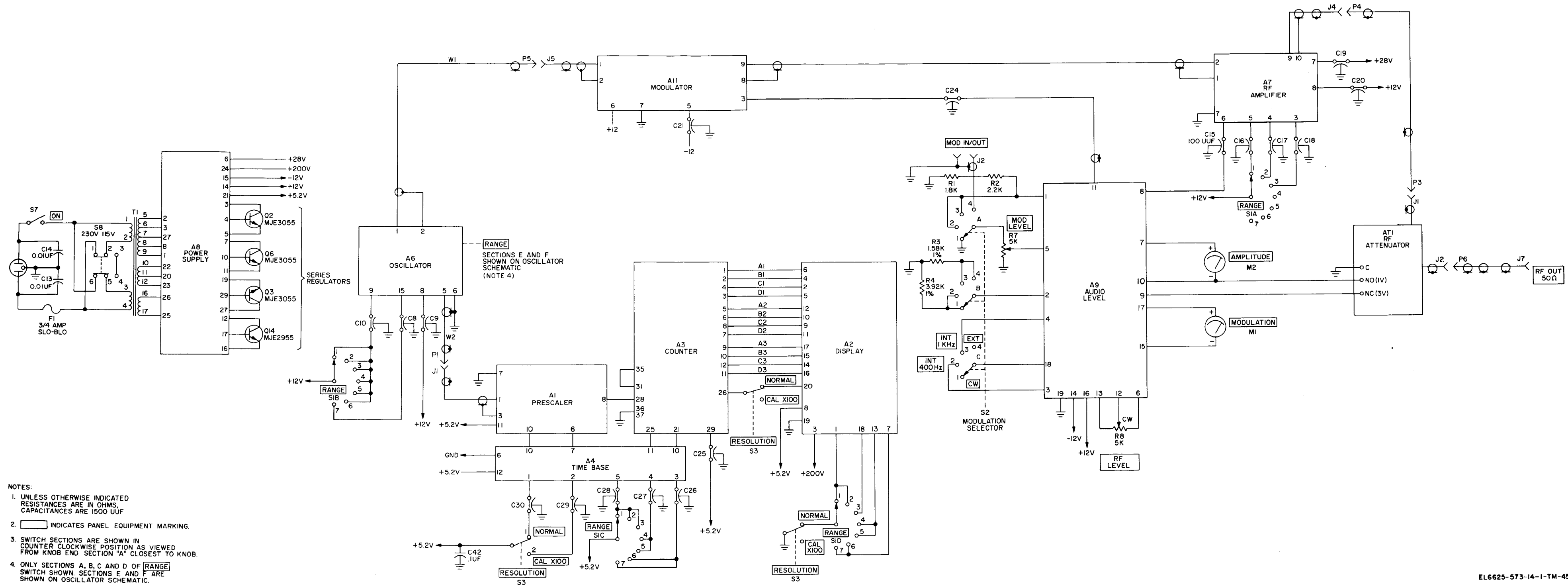


Figure FO-11. Generator, Signal SG-497C/GRM-50, assembly schematic diagram.

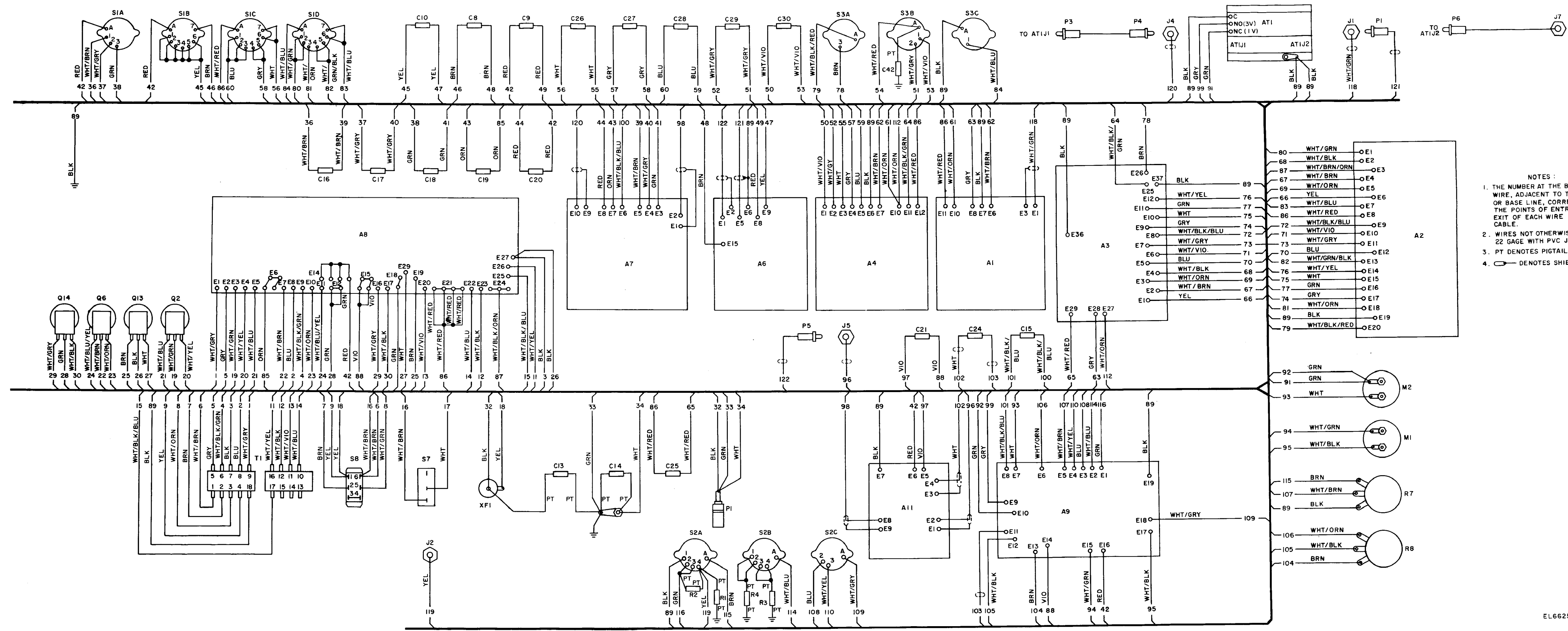


Figure FO-12. Generator, Signal SG-497C/GRM-50, assembly wiring diagram.

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