

MASTER COPY

DO NOT DESTROY

UNCLASSIFIED

16282

INSTRUCTION BOOK

for

**ANTENNA MULTICOUPLER
MODEL AMC-6-2/3**



THE TECHNICAL MATERIEL CORPORATION

MAMARONECK, N.Y.

OTTAWA, ONT.

PRINTED IN CANADA

UNCLASSIFIED

INSTRUCTION BOOK
for
ANTENNA MULTICOUPLER
MODEL AMC-6-2/3



THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N.Y. OTTAWA, ONT.

PRINTED IN CANADA

IN-10052

Issue Dat : JAN. 1964

In order that our equipment will always be up to date electrically and mechanically, we reserve the right to make, at any time, such design changes required to accomplish this objective.

COPYRIGHT REGISTERED, 1953

CHANGE NO. 1 AMC-6-2/3



INSTRUCTION BOOK CHANGE NOTICE

Date 9/30/65

Manual affected: Antenna Multicoupler, Model AMC-6-2/3 IN 10052

1. On page 16, add the following after last sentence in step c.:

For 115-volt operation, fuse F101 must be a 2-amp fuse;
for 23-volt operation, fuse F101 must be a 1-amp fuse.

2. On page 28, in Components Parts List,

- a. Change description of F101 to:

FUSE: cartridge, slow blow, 2 amp, (115 V operation)
(one fuse spare); or 1 amp, (230 V operation) (one fuse
spare).

- b. Change TMC part no. to:

FU-102-2 (115V)
FU-102-1 (230V)

SHOULD ADDITIONAL COPIES OF THIS CHANGE NOTICE BE REQUIRED, PLEASE CONTACT:

THE TECHNICAL MATERIEL CORP., 700 Fenimore Road, Mamaroneck, New York

Attn.: Director of Eng. Services.

TABLE OF CONTENTS

Section I — General Description

Paragraph	Title	Page
1.	Purpose	12
2.	Description of Unit	12

Section II — Theory of Operation

1.	General	13
2.	Circuit Analysis	13

Section III — Installation

1.	General	15
2.	Unpacking	15
3.	Installation	15

Section IV — Operation

1.	General	17
----	---------------	----

Section V — Maintenance

1.	Emergency	17
2.	Preventive Maintenance	17
3.	Corrective Maintenance	17

Section VI — Technical Specifications

Paragraph	Title	Page
1.	Frequency Range	20
2.	Gain	20
3.	Noise Factor	20
4.	Intermodulation Characteristics	20
5.	Harmonic Distortion	20
6.	Input Impedance Range Provided by T.M.C. Multicouplers	20
7.	Input Filter for the Broadcast-band	20
8.	Input Impedance Characteristics	20
9.	Available Outputs	20
10.	Isolation	21
11.	Uniformity of Output Signals	21
12.	Nominal Input Impedance	21
13.	Output Impedance Characteristics	21
14.	Primary Power Supply	21
15.	DC Power Supply	21
16.	Tube Complement	21
17.	Mounting	21
18.	Size and Weight	21
19.	Components and Construction	21

Section VII — Component Parts List ... 25

Section VIII — Illustrations

LIST OF ILLUSTRATIONS

Section I — General Description

Figure	Title	Page
1-1	Frontispiece, AMC 6-2	4
1-2	Front Angle View, AMC 6-3	5
1-3	Top View, AMC 6-2	6
1-4	Top View, AMC 6-3	7
1-5	Bottom View, (base cover plate removed), AMC 6-2	8
1-6	Bottom View, (base cover plate removed), AMC 6-3	9
1-7	Rear View, AMC 6-2	10
1-8	Rear View, AMC 6-3	11

Section II — Theory of Operation

2-1	Pre-amplifier Circuit	13
2-2	Distribution System	14
2-3	Typical Output Stage	14

Section III — Installation

Figure	Title	Page
3-1	Power Transformer Connections for 115 V Operation	16
3-2	Power Transformer Connections for 230 V Operation	16

Section V — Maintenance

5-1	Test Set Up for Gain Measurements ...	19
-----	---------------------------------------	----

Section VI — Technical Specifications

6-1	Frequency Response Characteristics ...	23
6-2	Intermodulation Characteristics	23
6-3	Input Impedance Characteristics	24
6-4	Output Impedance Characteristics	24

Section VIII — Illustrations

8-1	Pictorial Component Layout, 6-2	41
8-1A	Schematic Diagram, 6-3	42
8-2	Schematic Diagram, 6-2	43

LIST OF TABLES

Section V — Maintenance

Table	Title	Page
5-1	Tube Operating Voltages	18
5-2	Gain Test Points	19

Section VI — Technical Specifications

Table	Title	Page
6-1	Range of Input Impedances Provided by T.M.C. Multicouplers	22

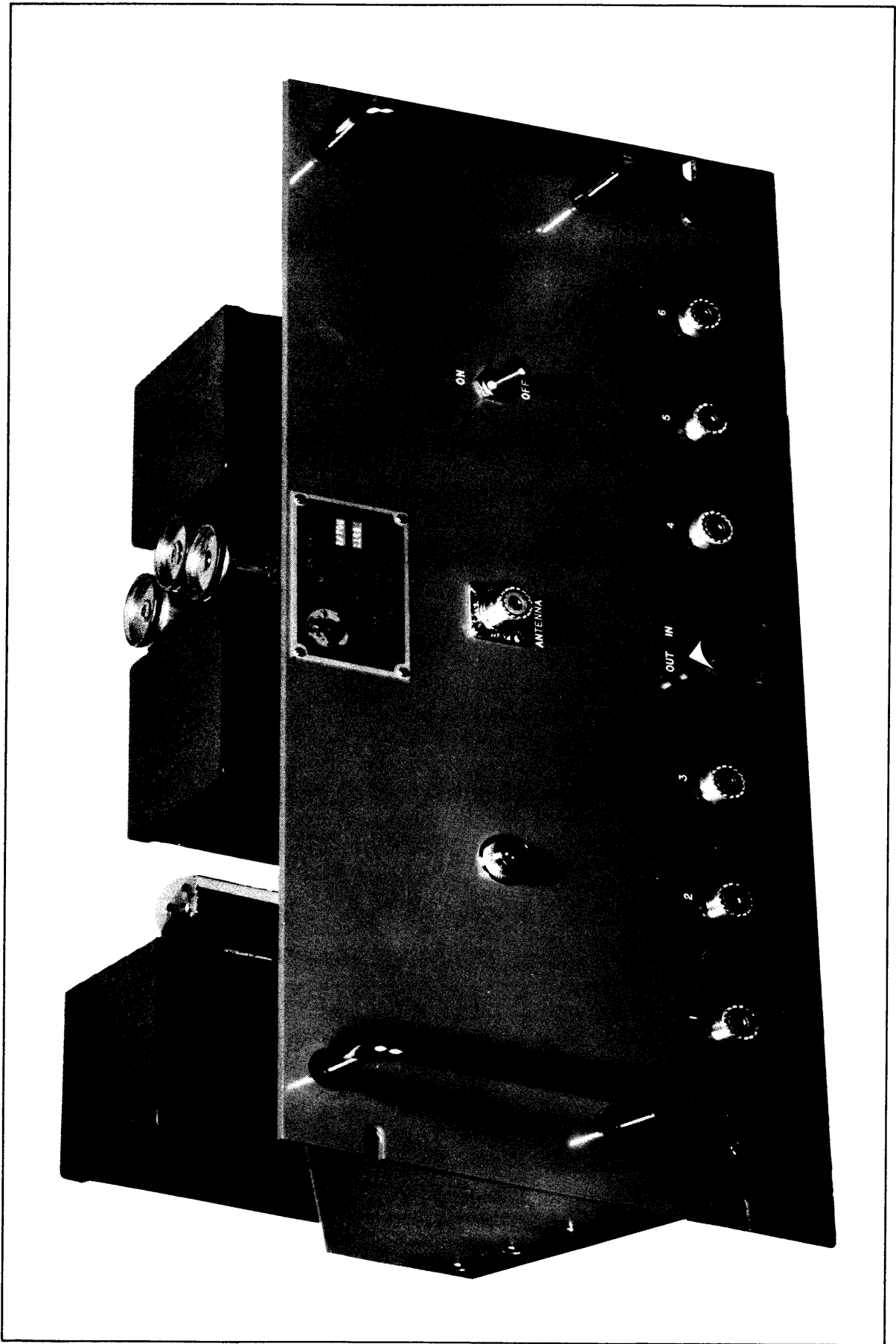


Figure 1-1 FRONTPIECE, AMC 6-2

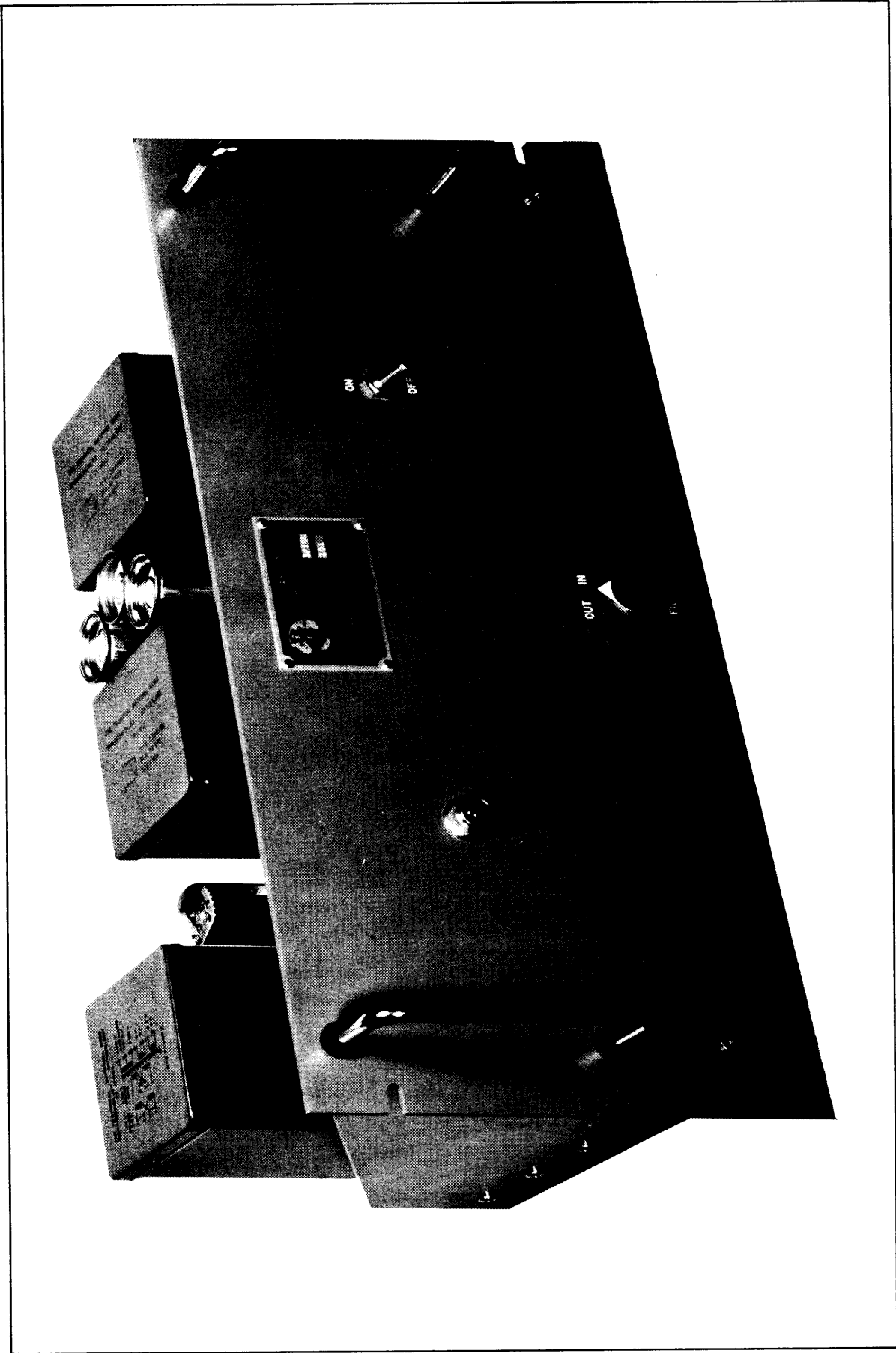
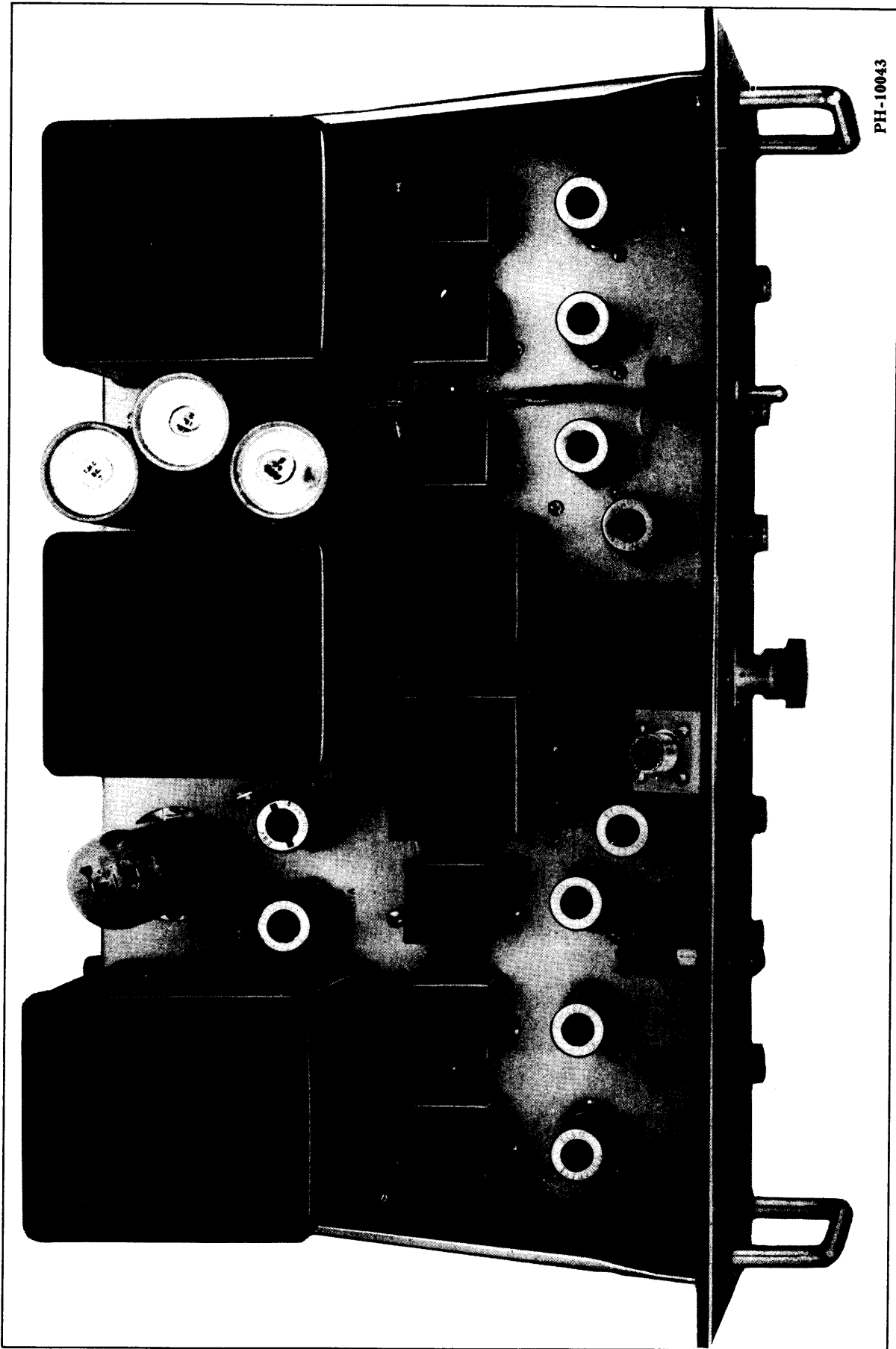
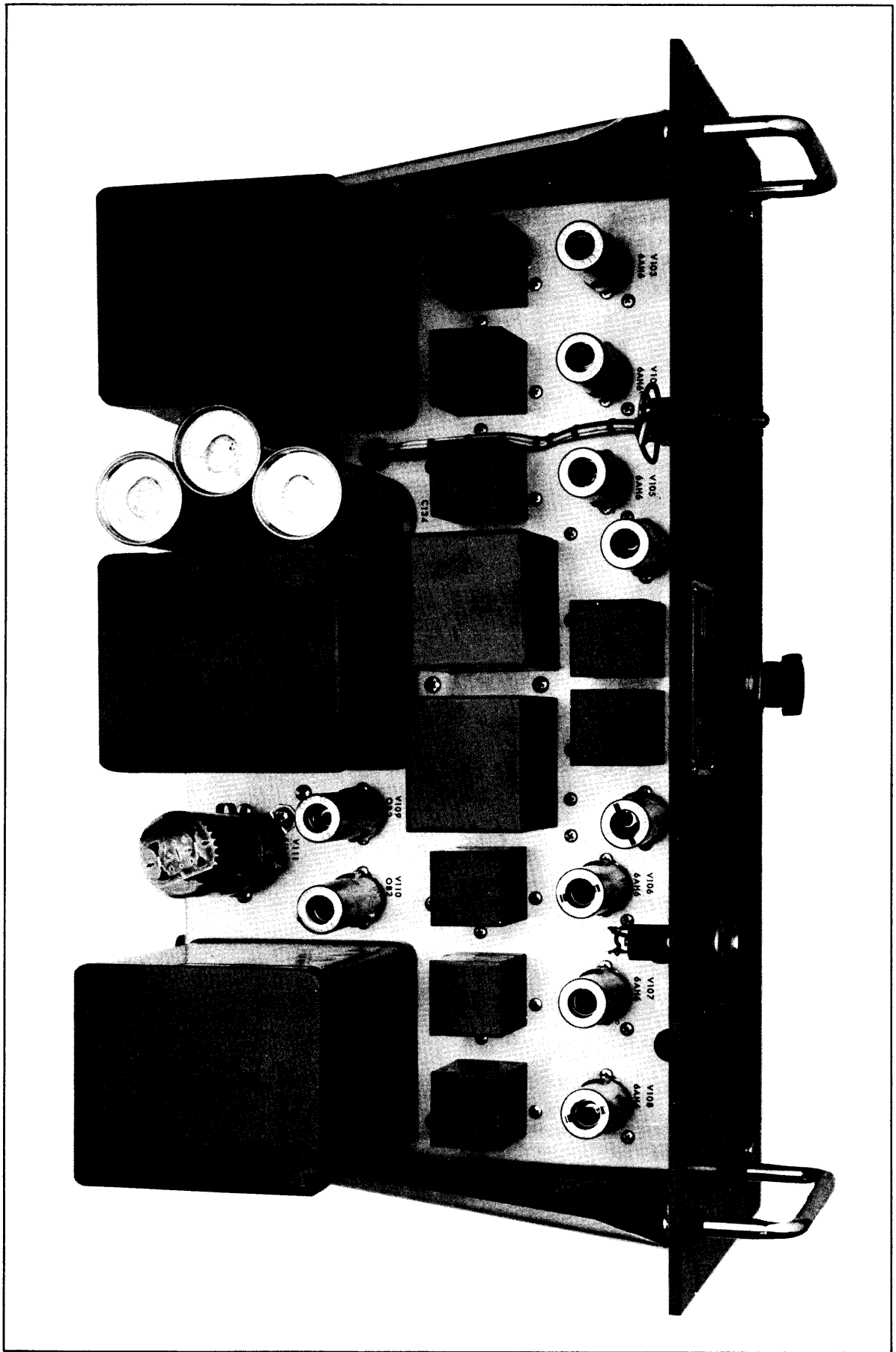


Figure 1-2 FRONT ANGLE VIEW, AMC 6-3



PH-10043

Figure 1-3 TOP VIEW, AMC 6-2



TOP VIEW, AMC 6-3

Figure 1-4

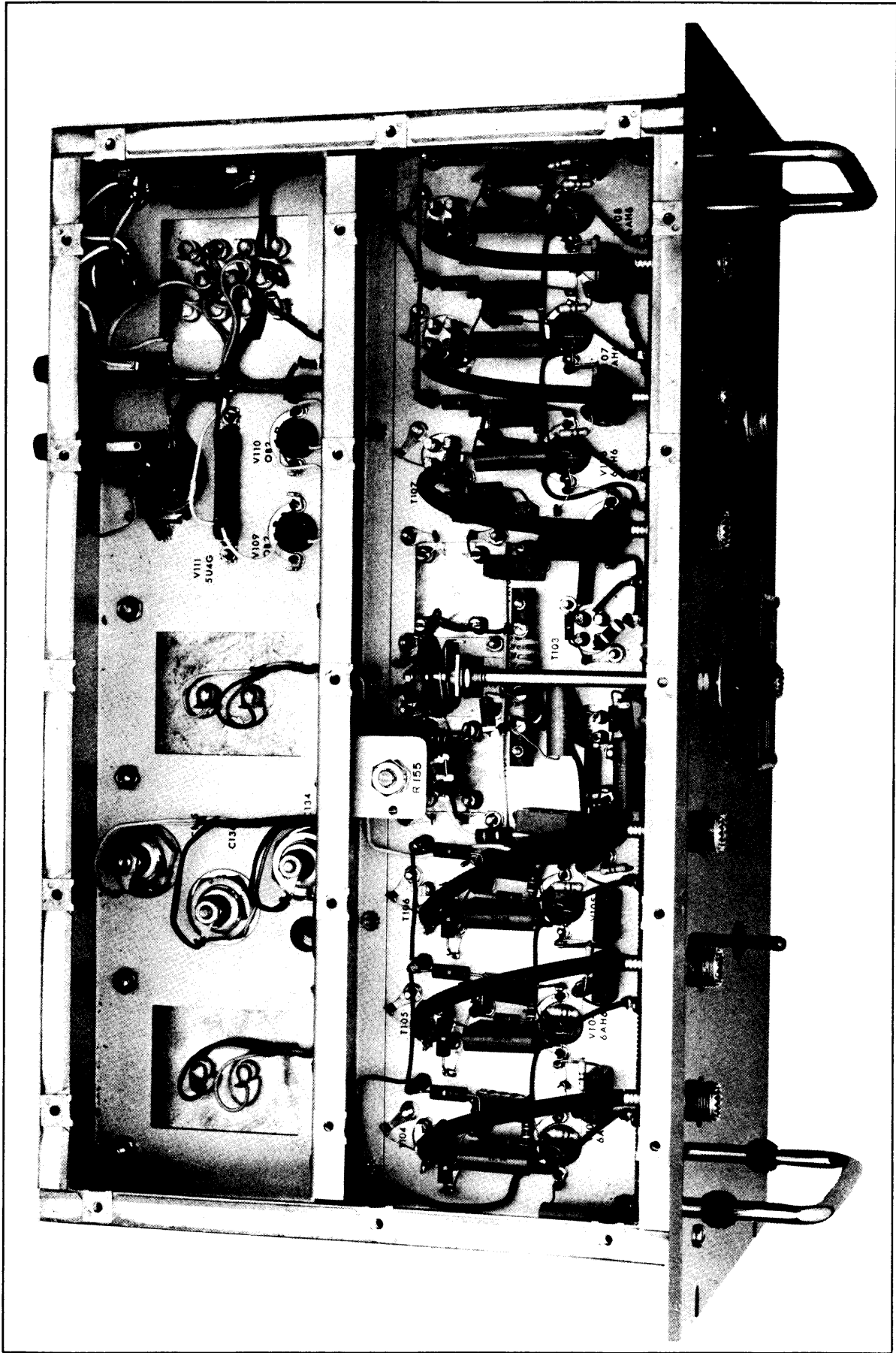


Figure 1-5 BOTTOM VIEW, (base cover plate removed), AMC 6-2

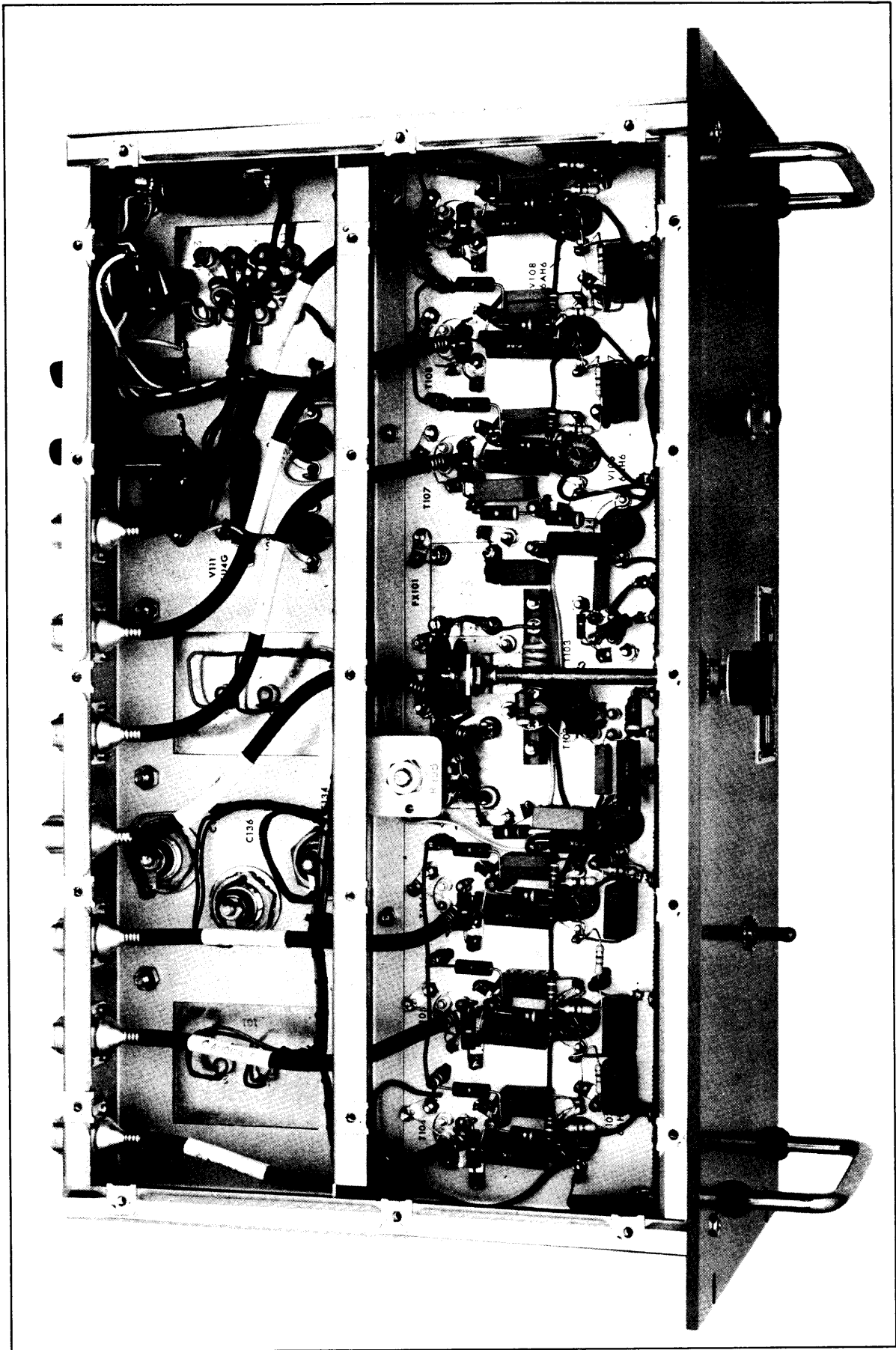


Figure 1-6 BOTTOM VIEW, (base cover plate removed), AMC 6-3

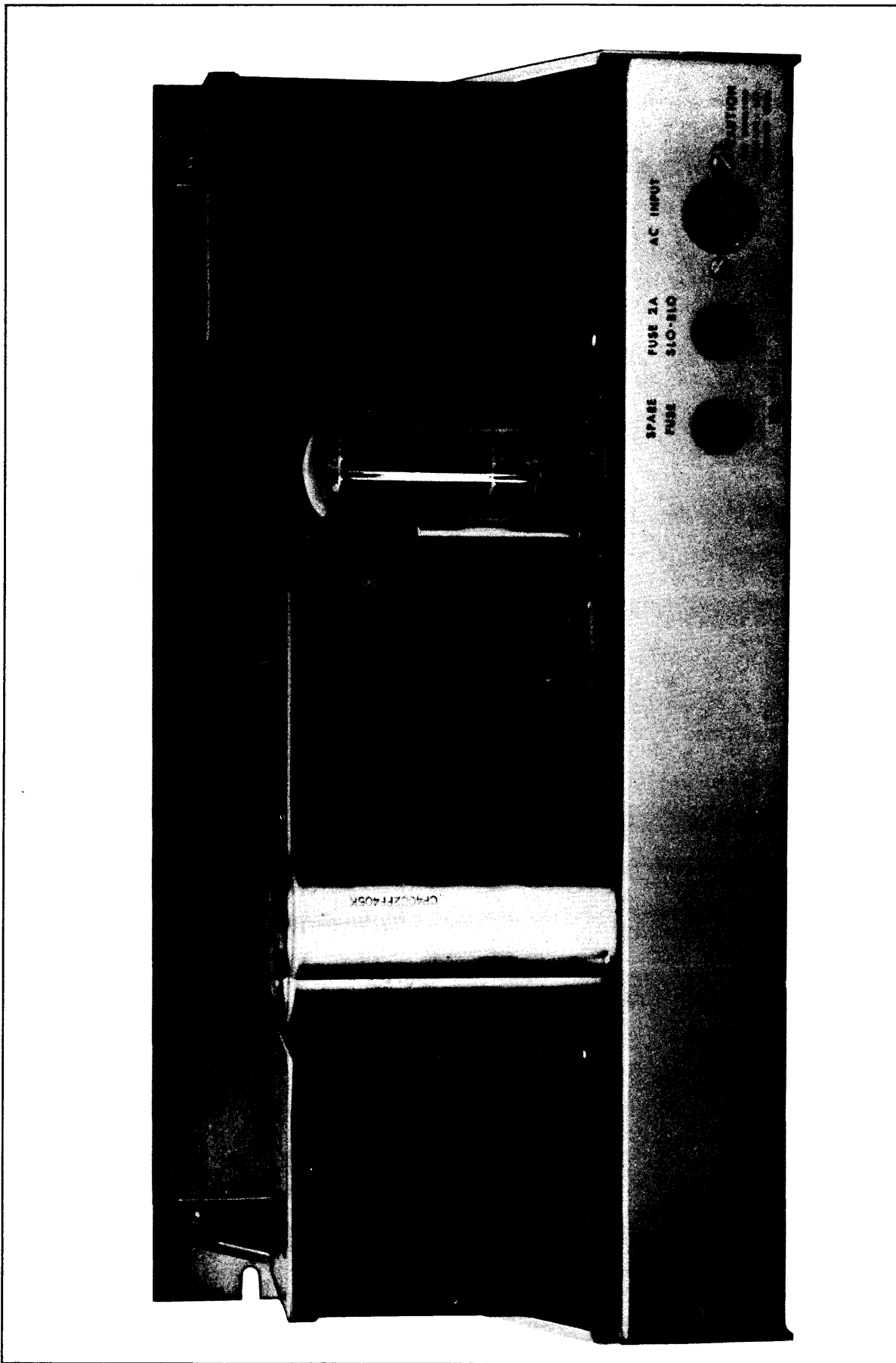


Figure 1-7 REAR VIEW, AMC 6-2

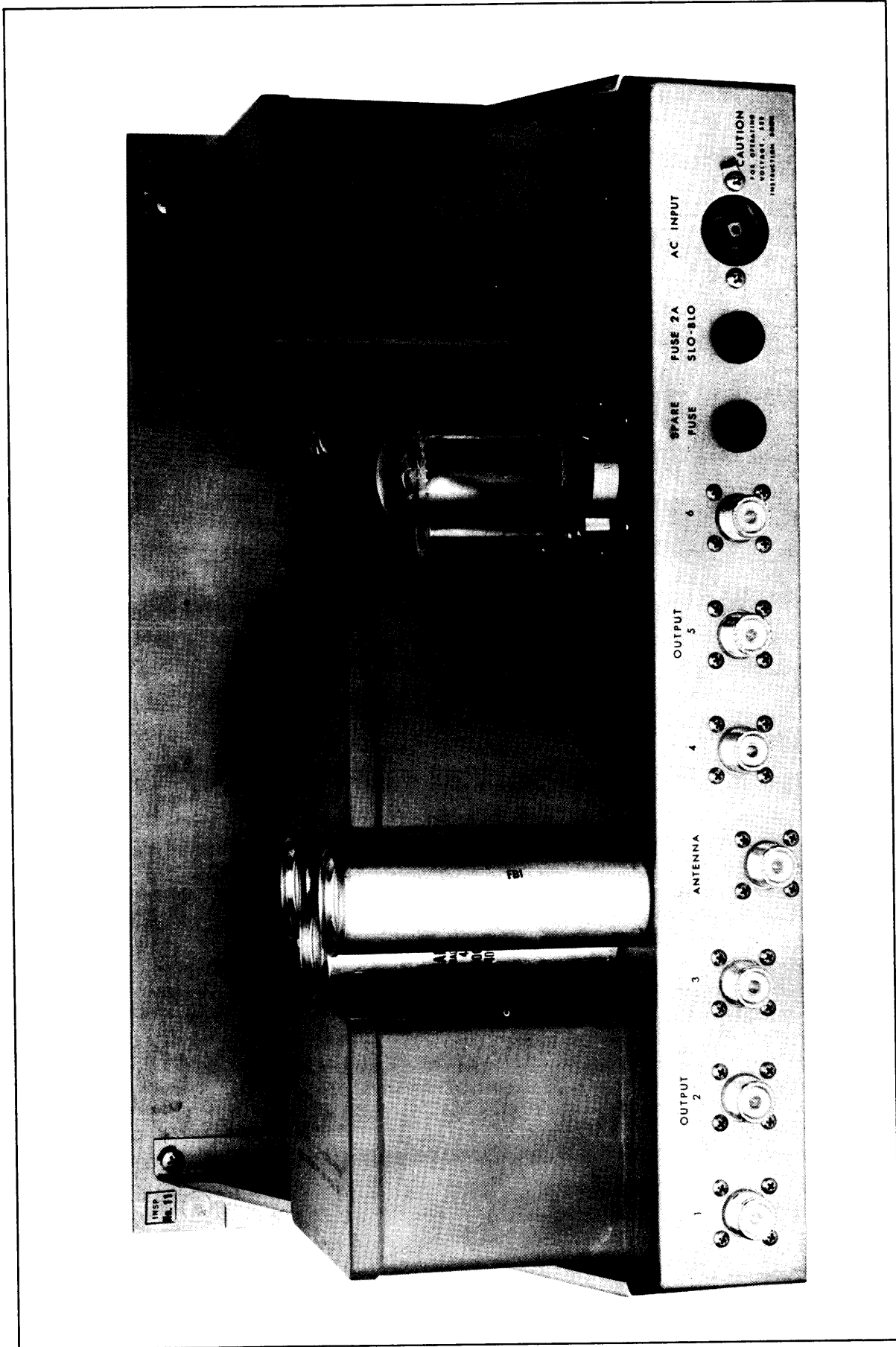


Figure 1-8 REAR VIEW, AMC 6-3

SECTION I GENERAL DESCRIPTION

1. PURPOSE

The Antenna Multicoupler, Model AMC 6-2, is a broad-band antenna coupling device normally installed at radio receiving stations where it is desirable to employ a common antenna for several communications receivers. The multicoupler allows six receivers to be independently operated over a band of 2 to 30 megacycles per second from a non-resonant type antenna. A range of models is available for use with antennas having impedances between 50 ohms and 600 ohms, balanced or unbalanced. All models have an output impedance of 75 ohms to match input impedances available at the antenna terminals of most receivers. When the equipment is used in a receiving system, it results in a general improvement in the noise-factor and a 10 decibel improvement in overall gain. Spurious response generated by the multicoupler is kept to a minimum and the design is such that a considerable reduction in the amplitude of signals re-radiated from receiver to receiver or receiver to the common antenna system is obtained.

2. DESCRIPTION OF UNIT

a. The Antenna Multicoupler, Model AMC 6-2, is a broad-band electronic amplifier with self-contained DC power supply. The unit is designed for operation from either a 115 V or 230 V, 60 cycles single phase source. The equipment is designed for unattended service.

b. The Model AMC 6-2 and AMC 6-3 is intended for rack mounting. It is provided with a standard rack panel (as shown in Figure 1-1) which measures $8\frac{3}{4}$ inches in height and 19 inches in width. The only front panel controls are the power ON/OFF switch and the FILTER IN/OUT switch. All coaxial jacks carrying RF signals to or from the unit are available on the front panel. (On special order, the unit can be supplied with the output jacks in the rear.) An additional coaxial jack is available immediately behind the front panel where a rear antenna connection is required. A chassis which mounts the main electrical components is shown in Figures 1-2 and 1-3. It is held securely to the front panel by side brackets and occupies a rack depth of 11 inches. The DC power supply occupies the rear half of the chassis while the broad-band amplifier circuit occupies the front half. Power to the unit enters a socket on the rear apron of the chassis as shown in Figure 1-4, while the main power fuse is located immediately to the left of this socket. Total weight of the unit is 49 pounds.

The Model AMC 6-3 is identical electrically with the Model AMC 6-2 but mechanically provides rear connections for antenna and output cables. The description of electrical circuits for the AMC 6-2 is completely applicable to the AMC 6-3.

SECTION II THEORY OF OPERATION

1. GENERAL

The Antenna Multicoupler is essentially a band-pass amplifier interposed between an antenna and the antenna terminals of conventional communication receivers. Impedances into and out of the amplifier are flat over the specified operating range to ensure high performance when operated in a receiving system. The amplifier consists of a low noise, two stage pre-amplifier, a distribution line, and six power amplifier stages. A low frequency cut off filter (effective in the broadcast-band) at the input of the amplifier can be switched out to extend its band-pass limits.

2. CIRCUIT ANALYSIS

a. The pre-amplifier is shown in Figure 2-1 and consists of two neutralized amplifier stages in cascade. Both stages employ the 6J4 triode tube in order to maintain a good noise figure.

A line section, DL101, terminated by R101 is used to provide a constant input resistance to the multicoupler over the pass-band of the equipment. This ensures proper termination of the antenna transmission line and guards against a degradation in noise factor or the generation of unusually high spurious signals in the receiving system. Transformer T101 is used to match the impedance of DL101 to the antenna transmission line. Filter FX101 is a low frequency cut-off filter that prevents high level signals in the broadcast region from reaching the grid of V101, which would result in the development of high spurious signals. Switch S101 is provided to allow the removal of the Broadcast-band Filter (FX101) from the circuit in order to extend the band-pass of the unit to frequencies below 2 megacycles per second. It should be noted that the input capacity of V101 forms part of the line section DL101. Signals which reach the junction of LA and LB therefore appear in amplified form across the plate load. The load itself consists of a line section composed of LG, LH, stray capacity, the input capacity of V102, and terminating resistor R104. In order to neutralize the first stage, part of the winding of T102 as well as capacitor C104 are required. V102 is neutralized in a manner similar to V101 and serves as a buffer stage between the output of V101 and the input of the distribution line. When the AMC 6-2 is used in a receiving system the noise factor is principally due to the performance of the pre-amplifier — this in turn is determined by the performance of V101 and to a lesser degree by V102.

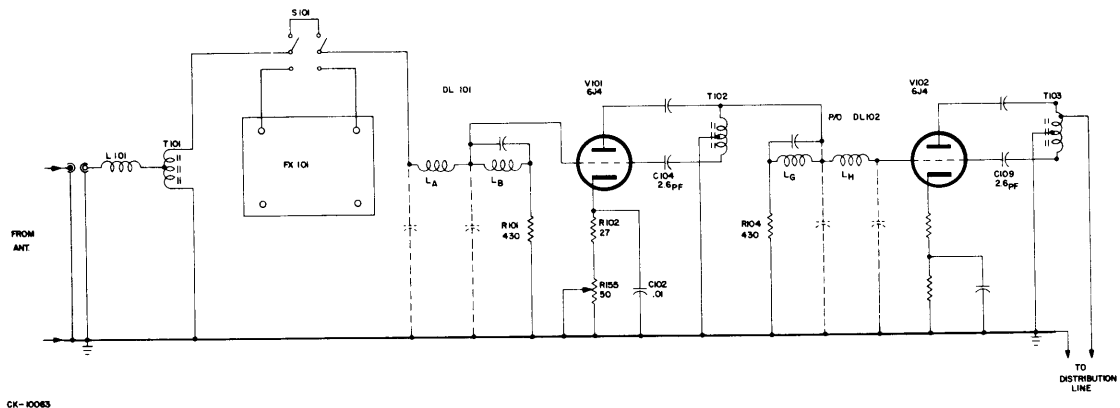


Figure 2-1. PRE-AMPLIFIER CIRCUIT

b. In order to provide multiple outputs for the operation of several receivers, the distribution system shown in Figure 2-2 is used. The output signals from the pre-amplifier are fed into the mid-section of an artificial line DL102. They are transmitted by the line to the terminating resistors, R108 and R145. Input to the final stages is obtained by tapping the line in a parallel manner. Capacity elements of the line are formed by the input capacity of the output tubes.

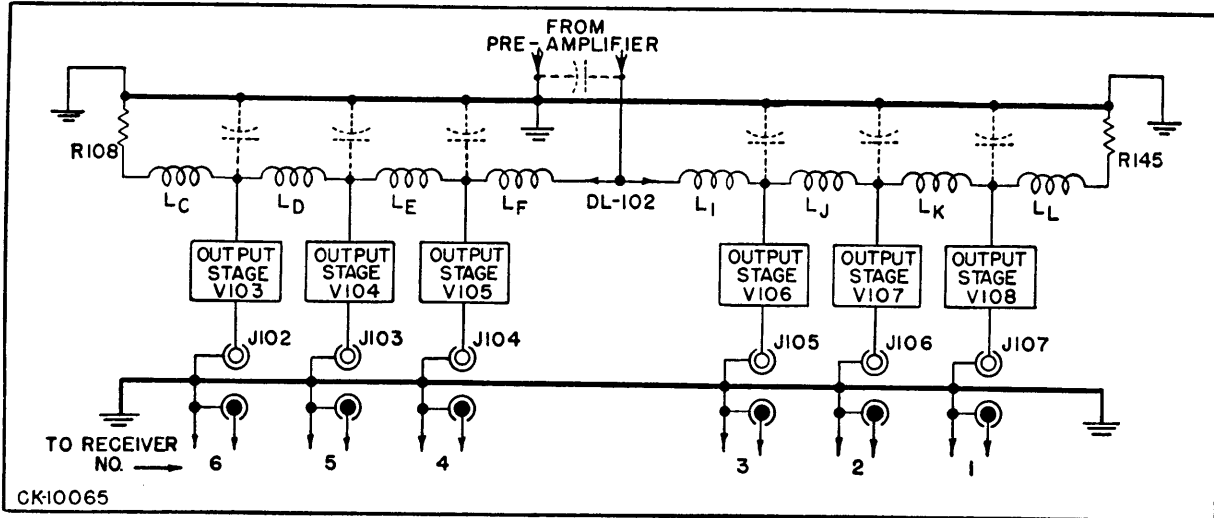


Figure 2-2. DISTRIBUTION SYSTEM

c. A typical output stage is shown in Figure 2-3. It employs a 6AH6 pentode type tube for isolation purposes. Cathode feedback resistor R135 is used to improve spurious signal response and to minimize the adverse gain effects in the tube as a result of aging. Transformer coupling is used between the plate circuit and the output jack.

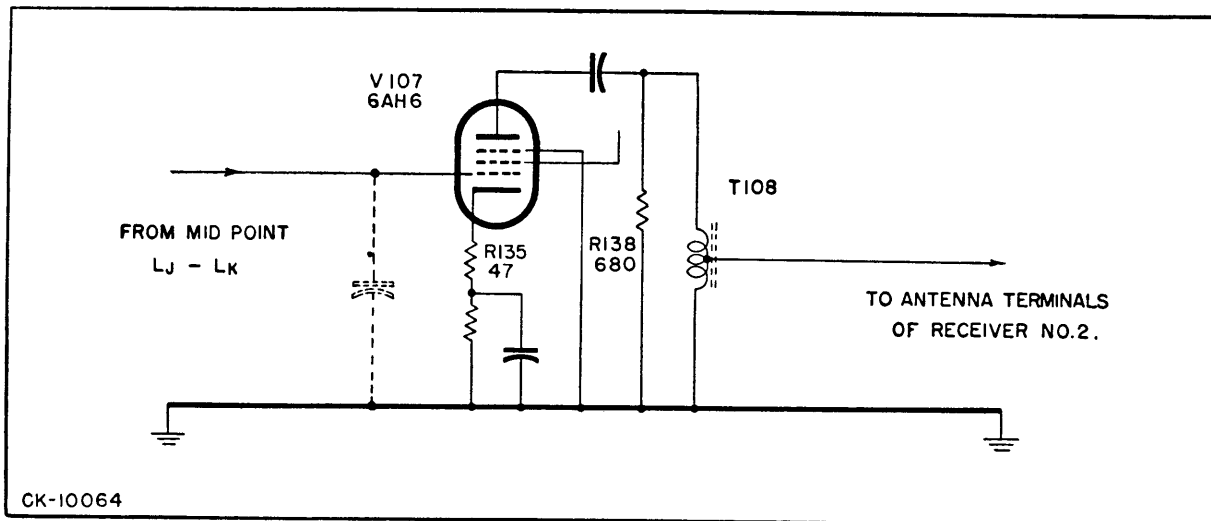


Figure 2-3. TYPICAL OUTPUT STAGE

d. The gain characteristics of individual tubes are adjusted throughout the amplifier so that the generation of spurious signals by the multicoupler is minimized. A low impedance distribution line assures a low standing wave ratio on the line and consequently little variation in the signal level between various output jacks. By using a low impedance line the internal decoupling efficiency of the multicoupler is also improved. Very high isolation between the output jack and the antenna jack is effected by the cascaded stages of the pre-amplifier.

e. The power supply circuit is of conventional design. (See Figure 8-2). A centre-tapped secondary winding applies an AC voltage to V111 which delivers fullwave rectified DC pulses to a capacitive type input filter. Gaseous voltage regulator tubes maintain the plate voltage to the pre-amplifier essentially constant for line voltage variations of 95 to 125 V. The primary of the power transformer is provided with two separate windings connected in parallel for 110 V operation and in series for 220 V operation.

SECTION III INSTALLATION

1. GENERAL

a. To obtain optimum performance from a receiving system using a multicoupler, it is necessary to have the nearest possible impedance match between the antenna and the input jack of the AMC 6-2 over the operating frequency range. The last significant figures in the model number of the multicoupler, such as AMC 6-2/200U, is indicative of the input impedance which in this case is 200 ohms unbalanced.

b. In some installations it may be required to operate more than six receivers from a common antenna. It is possible in this case to cascade multicouplers. The output jacks of the first multicoupler are connected to the input jacks of up to six multicouplers which in turn provide output for as many as 36 receivers. Cascading multicouplers in this way does not seriously affect their operating performance.

c. The spurious signal amplitude to be expected from two signals applied at the input of the multicoupler is shown in Figure 6-2. Every precaution has been taken in the design of the instrument to minimize intermodulation effects in the receiving system. At the low end of the band (where high level signals from local broadcast stations are likely) filter FX101 becomes effective. Sufficient attenuation is provided by the filter so that signals are reduced to a level where they are ineffective in the production of spurious signals. The filter may be switched out or in as desired. In some instances the location of the receiving station is such that excessive signals from a powerful local station may cause serious intermodulation effects in the receiving system. This, however, should not be troublesome for signals under 10,000 microvolts. Should it be found that signals of a higher order than 10,000 microvolts are causing serious intermodulation effects, additional filters may be inserted in the antenna transmission line. A suggested method of locating the frequency or determining the amplitude of interfering signals can be obtained by referring to the test set-up in Figure 5-1. First, disconnect the multicoupler from the circuit and connect the antenna lead together with test probe (P) to test point (2); set the signal generator to the unmodulated condition and turn the attenuator to zero. Tune the receiver until a strong signal is located and turn on the BFO switch; adjust the gain controls for a convenient reading on the output meter using the highest signal obtained on either side of zero beat as a reference voltage. Move the tuning dial until the signal disappears; adjust the frequency and attenuator controls of the signal generator until a voltage comparable with the reference voltage is obtained on the output meter. The signal generator setting in microvolts indicates the strength of the signal pick-up by the antenna while the first tuning dial position of the receiver indicates its frequency.

2. UNPACKING

a. The Antenna Multicoupler, Model AMC 6-2, is shipped in its individual shipping container and should be carefully unpacked. Seven coaxial plugs, TMC Part No. PL-259, are in a cloth bag tied to a handle of the unit. The power cord, wrapped in paper, is under the packing on top of the unit. A close visual inspection should be made to ascertain any physical damage due to rough handling during shipment.

3. INSTALLATION

a. Mount the multicoupler in a standard rack using four machine screws provided with cup type washers.

b. Connect one of the male type coaxial plugs to the antenna cable and insert this either into J101 marked ANTENNA on the front panel of the multicoupler or on the rear jack J109, as desired. Attach the remaining plugs to the ends of the 75 ohm single conductor coaxial cables which are to be connected to the antenna input terminals of the receivers. If the receiver input is greater than 75 ohms, it would be desirable to use an impedance matching transformer at the input to the receiver. TMC can supply transformers for this purpose. Insert the plugs into the output jacks on the front panel of the multicoupler. These are marked 1 to 6 for receiver identification purposes. Where less than six receivers

are employed, the unused output jacks of the AMC 6-2 and AMC 6-3 may be left open circuited as this does not affect the performance of the multicoupler. When attaching coaxial plugs to coaxial cable solder both the inner and outer conductor to ensure trouble free service.

c. With the power switch in the OFF position, connect the plug on the power cord to J108 and rotate it clockwise to ensure that it is locked in position. Plug the other end of the power cord into a 50/60 cycle power outlet. A tag indicating the AC voltage rating is attached to each unit supplied. A wiring schematic for 115 and 230 V operation is shown in Figure 3-1 and Figure 3-2 respectively.

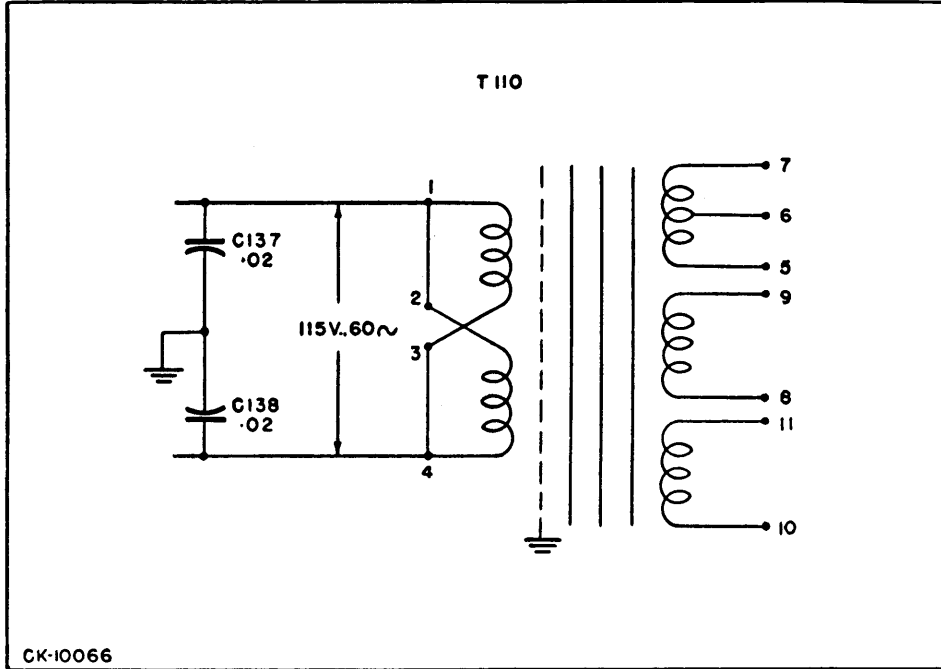
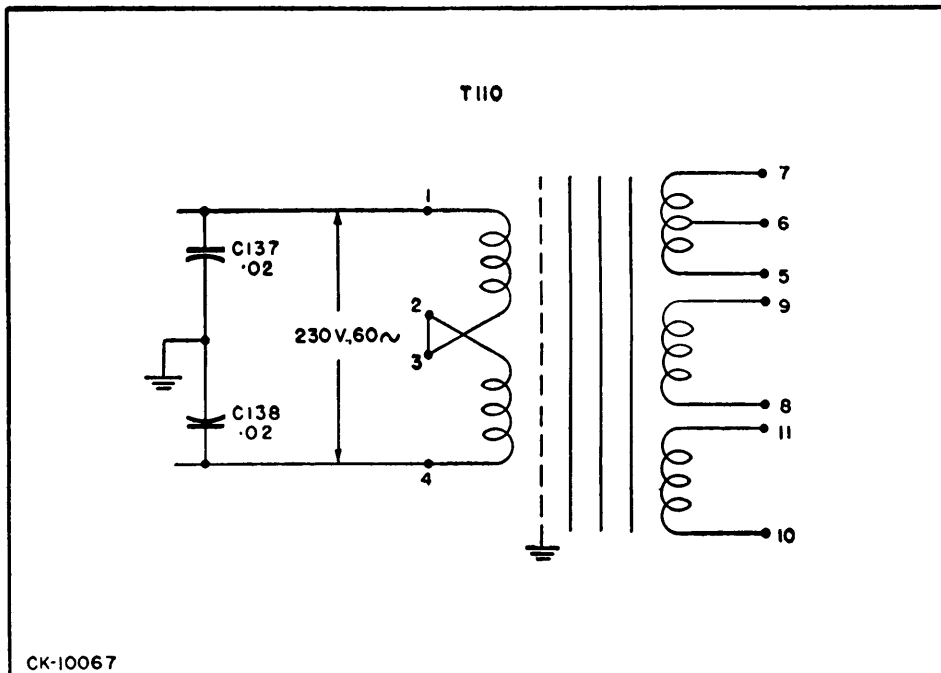


Figure 3-1. POWER TRANSFORMER CONNECTIONS FOR 115V OPERATION



Figur 3-2. POWER TRANSFORMER CONNECTIONS FOR 230V OPERATION

SECTION IV OPERATION

1. GENERAL

Power is supplied for operation of the unit by tripping the toggle switch on the front panel to the ON position. This condition is indicated by the illuminated pilot light on the front panel. Failure of the light indicates failure of the AC power line, a defective toggle switch, a burned out light, or a blown out primary power fuse.

The switch marked FILTER IN/OUT should be switched to the IN position. This switch is moved to the OUT position only when an operator wishes to tune his receiver to frequencies below 2 megacycles per second.

The first preamplifier cathode bias potentiometer R155 has been adjusted at the factory for the best compromise between cross-modulation and gain. Should further adjustment be required set the potentiometer to obtain a resistance reading of approximately 50 ohms between pin 2 of V101 and ground.

SECTION V MAINTENANCE

1. EMERGENCY

a. **WARNING:** *Never replace a fuse with one of higher rating. If a fuse burns out immediately after replacement, DO NOT replace it a second time until the cause of failure has been corrected.*

b. In the event of a system failure as a result of weak or noisy signals in all receivers make a rough check of the antenna system by connecting the antenna lead-in directly to the antenna terminals of a receiver. If the fault disappears, check the pre-amplifier of the multicoupler for noisy or low emission tubes. When only one receiver in the system gives faulty performance, check the receiver itself or the particular output tube in the multicoupler that supplies signals to the receiver.

c. In the event of complete loss of signals check the antenna system as in paragraph (b). If signals are restored, check for a faulty multicoupler. The filaments of all tubes should be lit, and there should be a glow from the voltage regulator tubes V109 and V110 when the DC power supply voltage is normal.

d. Where failures are difficult to locate in a faulty multicoupler, replace it with a spare unit and apply trouble tracing techniques outlined under paragraph 3, Corrective Maintenance.

2. PREVENTIVE MAINTENANCE

Do not indiscriminately replace tubes in the multicoupler. When searching for faulty tubes replace a tube with a new one, but if there is not a definite improvement in performance of the equipment, replace the old tube in its original socket. In this way a tube which has passed a critical operating life is not replaced by a new one of indefinite life.

3. CORRECTIVE MAINTENANCE

a. **CAUTION:** *Whenever corrective maintenance is carried out on the multicoupler the usual precautions dealing with high voltage should be observed since the unit operates on voltages dangerous to yourself and to your test equipment.*

b. With a voltmeter, check voltages given in Table 5-1. Where abnormal readings are obtained for a particular tube either the tube itself or the electrical components immediately associated with the tube are at fault. For a pictorial layout of electrical components see Figure 8-1 and Figure 8-1A.

c. Faults which are difficult to locate by other means may be isolated by the test set up shown in Figure 5-1. The signal generator should be set for a modulated condition of 1000 cycles per second and a modulation depth of 30 per cent. Next set up the receiver gain controls for use as a fixed level detector. To do this connect test probe (P) to test point (3); set the signal generator attenuator to 100 μV ; turn the receiver audio gain control up, and with the BFO off adjust the manual RF gain control to a minimum value for a convenient voltage reading on the output meter. Connect test probe (P) to other test points and adjust ONLY the signal generator attenuator to obtain the same output meter reading as before. Record the attenuator settings in a table similar to Table 5-2. Ratios between the microvolt settings in this table can be used to locate quickly any circuit fault in the multicoupler.

EXAMPLE 1. Ratio 4 over 5 = 1.8 from table
 Ratio 4 over 5 = 1.0 for defective multicoupler
 Deduction: First stage gain is low due to poor tube (V101)

EXAMPLE 2. Ratio 5 over 6 = 1.8 from table
 Ratio 5 over 6 = 100 from defective multicoupler
 Deduction: Open circuit in LH

EXAMPLE 3. Ratio 2 over 1 = 2 from table
 Ratio 2 over 1 = 6 from defective multicoupler
 Deduction: Defective component in the input circuit of the pre-amplifier causing low input impedance.

TABLE 5-1. TUBE OPERATING VOLTAGES

Tube	Type	Function	Pin No. 1	Pin No. 2	Pin No. 3	Pin No. 4	Pin No. 5	Pin No. 6	Pin No. 7	Pin No. 8	Pin No. 9
V101	6J4	1st pre-amplifier	0	0.7	0	6.3*	-	-	110	-	-
V102	6J4	2nd pre-amplifier	0	1.25	0	6.3*	-	-	120	-	-
V103	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V104	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V105	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V106	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V107	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V108	6AH6	Power amplifier	0	0	0	6.3*	175	130	1.3	-	-
V109	OB2	Voltage Regulator	-	105	-	-	210	-	-	-	-
V110	OB2	Voltage Regulator	-	0	-	-	105	-	-	-	-
V111	5U4G	Rectifier	-	270	-	280*	-	280*	-	270	-

NOTE: (1) Voltages marked with an asterisk(*) are AC.
 (2) All voltage measured to ground with a voltmeter having a sensitivity of at least 20,000 ohms per volt.
 (3) Measurements made with AC power line voltage equal to either 115V or 230V depending upon the primary connections used on the power transformer.

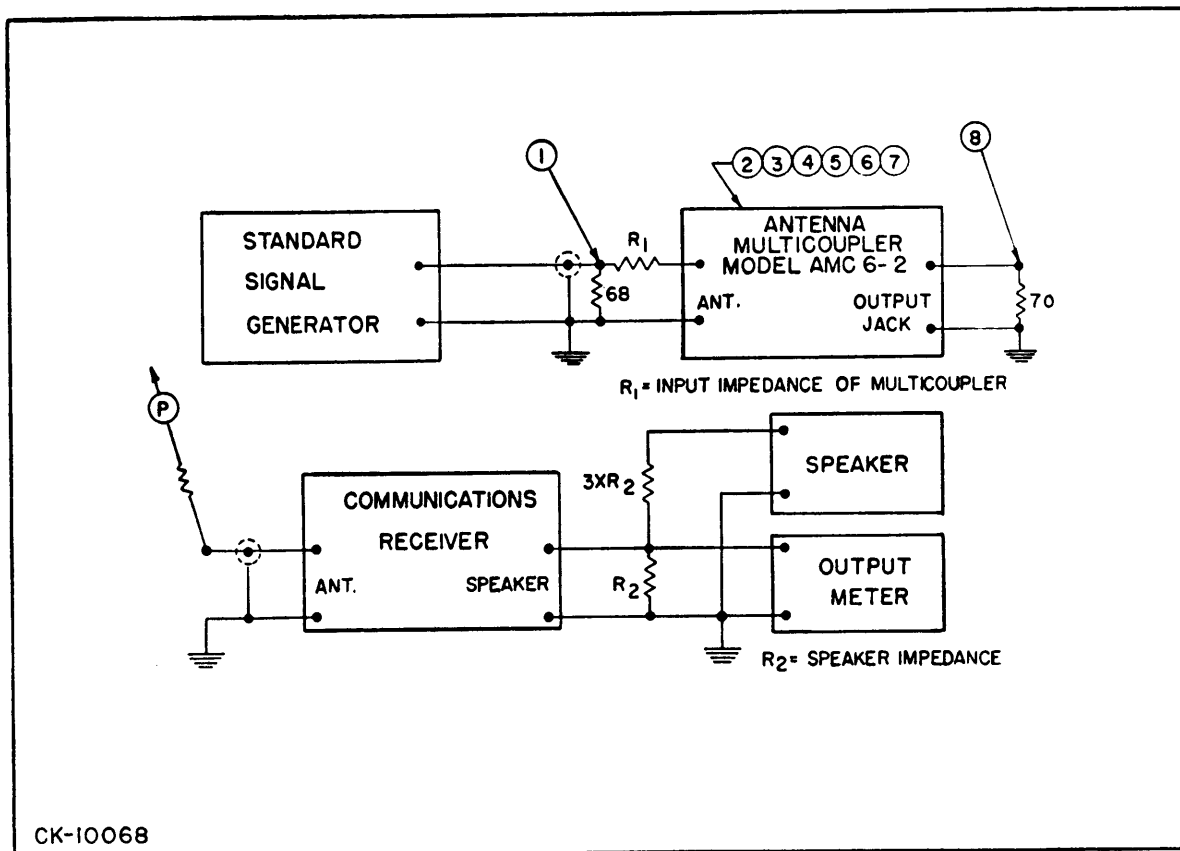


Figure 5-1. TEST SET UP FOR GAIN MEASUREMENTS

TABLE 5-2. GAIN TEST POINTS

Test Point	Location	Signal Generator Attenuator Setting - uv
1	Input — High Side of 68 ohm Resistor	70
2	Primary of T101 — Pin No. 1	135*
3	Secondary of T101 — Pin No. 3	100
4	Grid of V101 — Mid Point LA, LB	110
5	Plate Load V101 — Mid Point LG, LH	53
6	Grid of V102 — Pin No. 1	33
7	Grid of Output Tubes — V103 to V108	40
8	Output — High side of 70 ohm Resistor connected to jacks J102 to J107	70

NOTE: (1) Attenuator settings in table are for AMC 6-2/200U.

(2) S101 is in FILTER IN position.

(3) Test frequency is 15 mc/s.

(4) *For models other than AMC 6-2/200U, use figures given in Table 6-1.

SECTION VI
TECHNICAL SPECIFICATIONS

1. FREQUENCY RANGE:

2 to 30 mc/s

2. GAIN:

Nominal 10 db \pm 3 db, 2 to 30 mc/s. (FILTER IN condition). Measurements made under conditions of Series R equal to the input impedance of multicoupler. When used in a receiving system, the multicoupler provides a response as shown in Figure 6-1.

3. NOISE FACTOR:

The noise factor is less than 6. A system noise factor of less than 6.5 is obtained when the multicoupler and a communications receiver having an equivalent noise factor are used in combination.

4. INTERMODULATION CHARACTERISTICS:

1. The equivalent antenna voltage of an intermodulated signal will be down 55 db with respect to the level of either of two equal amplitude signals whose equivalent antenna voltages to produce the intermodulated signal are:

- a. 3500 uV for a 50 ohm antenna,
- b. 4200 uV for a 70 ohm antenna,
- c. 7100 uV for a 200 ohm antenna.

2. Points in the shaded area of Figure 6-2 indicate the maximum amplitudes of the spurious signals which result when any two equal amplitude signals lying in the pass-band are simultaneously applied to the input of the AMC 6-2/200U multicoupler.

5. HARMONIC DISTORTION:

Negligible under conditions shown in paragraph 4.

6. INPUT IMPEDANCE RANGE PROVIDED BY T.M.C. MULTICOUPLERS:

This is shown in Table 6-1.

7. INPUT FILTER FOR BROADCAST-BAND:

A filter is provided and may be inserted into the input of the multicoupler to provide an attenuation of not less than 35 db at frequencies below 1.5 mc/s with no appreciable change in the multicoupler characteristics in the 2.5 to 30 mc/s range. (See Figure 6-2.) Insertion loss at 2 mc/s: 3 db; between 2.5 to 30 mc/s: nil. By means of this filter, the increase in spurious response normally produced when the multicoupler is operated near powerful "broadcast" transmitters, is greatly reduced.

8. INPUT IMPEDANCE CHARACTERISTICS:

These are shown in Figure 6-3.

9. AVAILABLE OUTPUTS:

6 outputs on the AMC 6-2.

10. ISOLATION:

- a. Output to Output: More than 70 db down at 2.5 mc/s.
More than 45 db down at 28 mc/s.
- b. Output to Input: More than 80 db down at 2.5 mc/s.
More than 60 db down at 28 mc/s.

11. UNIFORMITY OF OUTPUT SIGNALS:

The minimum signal voltage from any one of the output jacks will not be less than 75 percent of the output voltage from any other jack.

12. NOMINAL INPUT IMPEDANCE:

See Table 6-1.

13. OUTPUT IMPEDANCE CHARACTERISTICS:

These are shown in Figure 6-4.

14. PRIMARY POWER SUPPLY:

115/230 volts, 60 cycle, 90 watts

15. DC POWER SUPPLY:

Self-contained in AMC 6-2

16. TUBE COMPLEMENT:

2 each 6J4 — RF pre-amplifiers
6 each 6AH6 — power amplifiers
1 each 5U4G — rectifier
2 each OB2 — voltage regulators

17. MOUNTING:

Standard 19 inch rack units.

18. SIZE AND WEIGHT:

AMC 6-2: 8¾ inches x 19 inches x 11 inches deep, 49 pounds

19. COMPONENTS AND CONSTRUCTION:

Equipment is manufactured in accordance with MIL specifications wherever practicable.

TABLE 6-1. RANGE OF INPUT IMPEDANCES PROVIDED BY T.M.C. MULTICOUPLERS

Model Number	Type of Input	Input Impedance	Number of Outputs	Cf Correction Factor for Figure 6-2 Use 1.0 unless otherwise stated	S.G. Settings for Table 5-2	
					Test Point	
					1	2
AMC 6-2/50B	Balanced	50 †	6			
AMC 6-2/50U	Unbalanced	50	6			
AMC 6-2/70B	Balanced	70 †	6		120	220
*AMC 6-2/70U	Unbalanced	70	6		120	220
AMC 6-2/200B	Balanced	200 †	6		70	135
AMC 6-2/200U	Unbalanced	200 †	6		70	135

*AMC 6-2/70U RCAF Reference 10EA/50473

† Nominally 70 ohms unbalanced. Adaptors to other impedances and/or balanced lines available on special order.

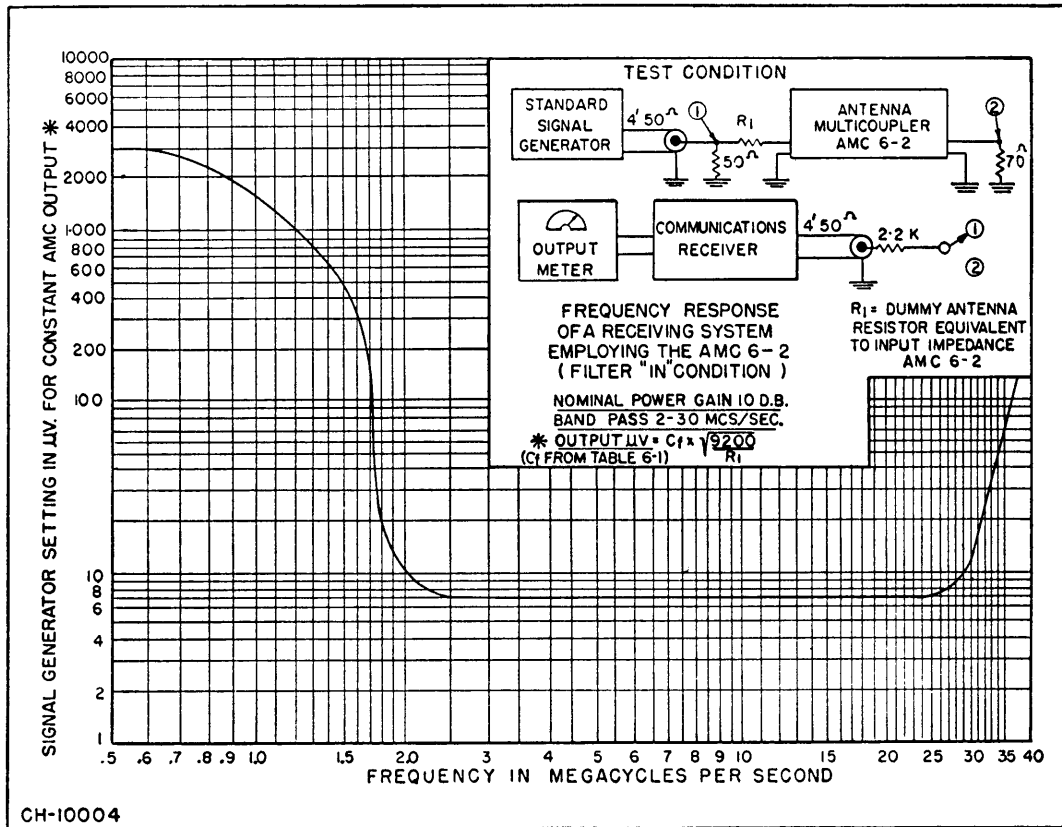


Figure 6-1. FREQUENCY RESPONSE CHARACTERISTICS

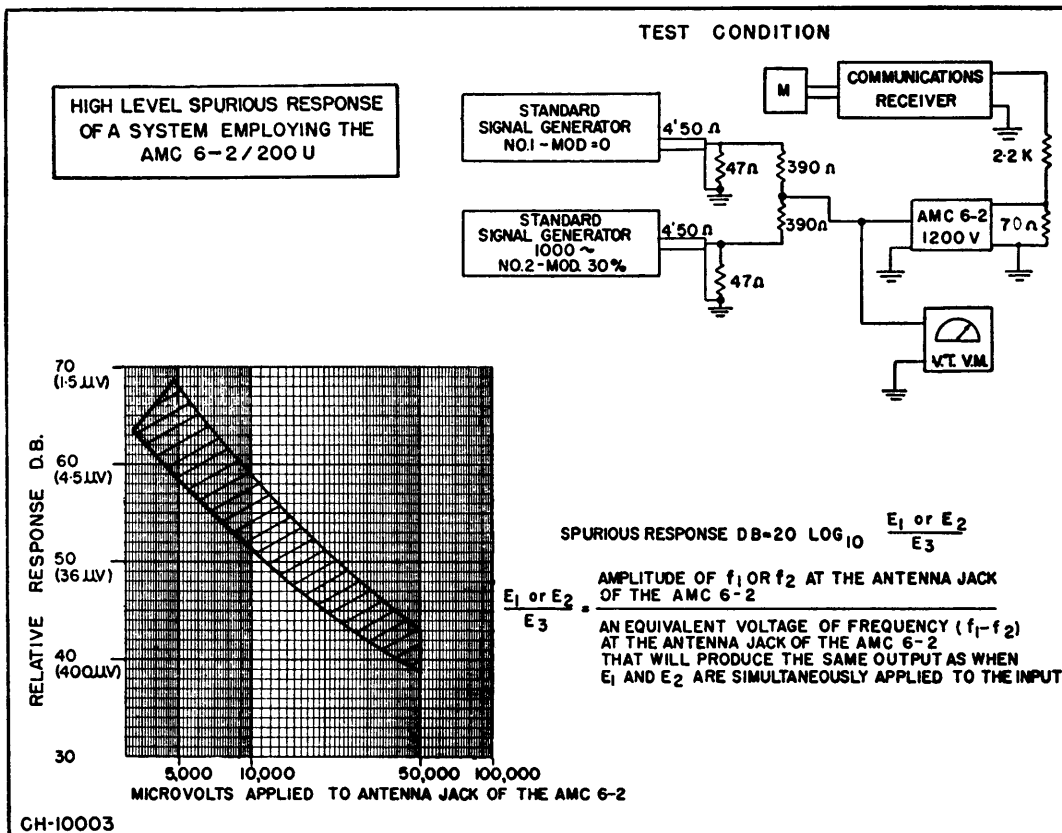


Figure 6-2. INTERMODULATION CHARACTERISTICS

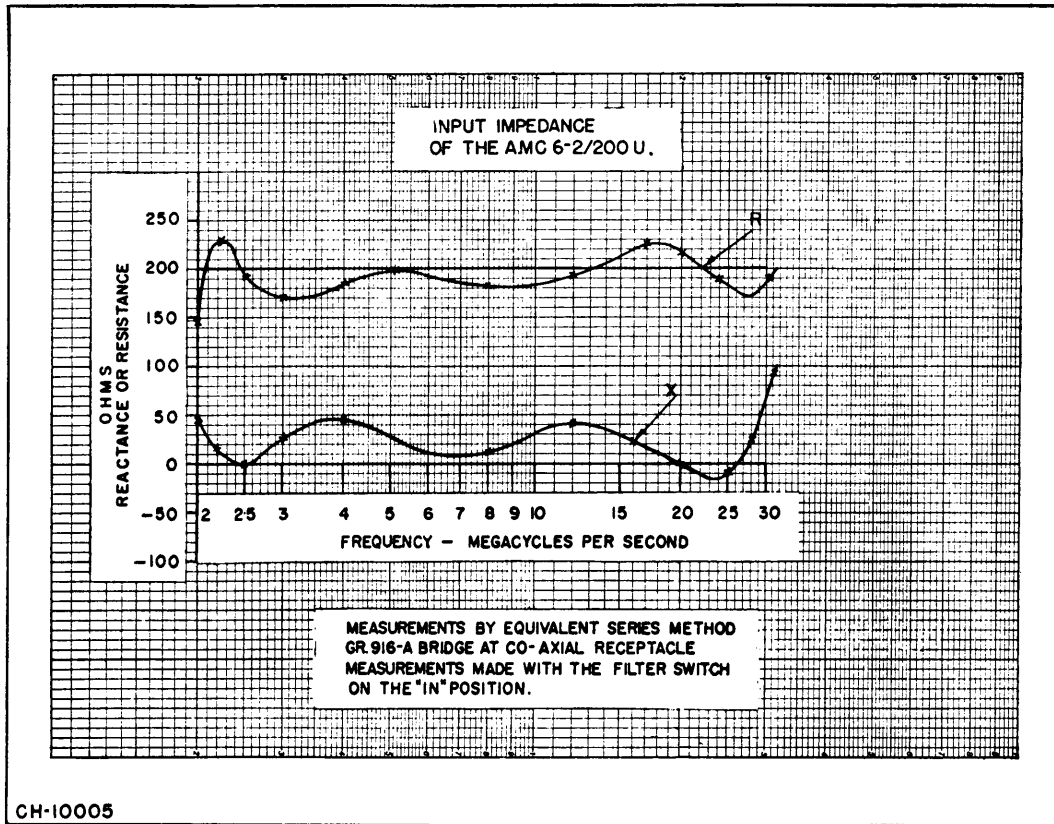


Figure 6-3. INPUT IMPEDANCE CHARACTERISTICS

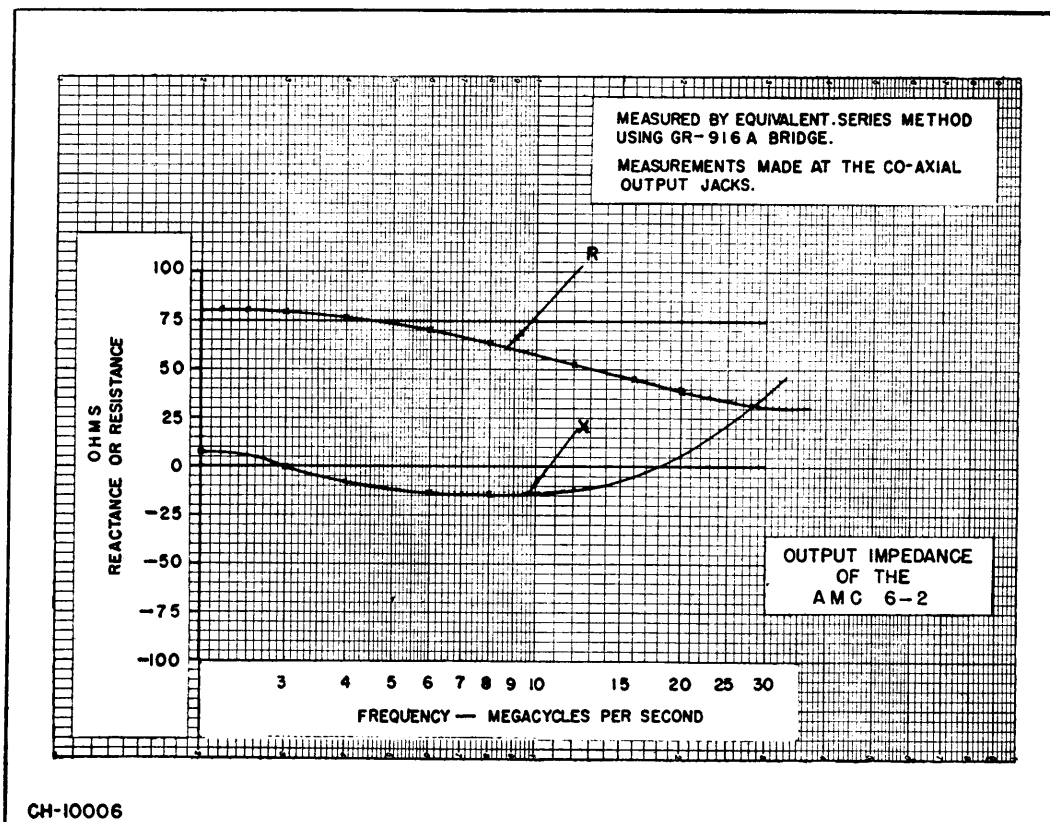


Figure 6-4. OUTPUT IMPEDANCE CHARACTERISTICS

SECTION VII

COMPONENT PARTS LIST — ANTENNA MULTICOUPLER, T.M.C. (CANADA) LIMITED — MODEL AMC 6-2

Ref. Symbol	Quan.	Description	Function	TMC Part No.
C101	1	CAPACITOR: fixed, ceramic, 10 μf , $\pm 0.5 \mu\text{f}$, 500 VDCW.	P/O Termination of Artificial Line Section	CC21SL100D
C102	1	CAPACITOR: fixed, mica, .01 μf , 500 VDCW.	Cathode Bypass	CM35B103K
C103	1	CAPACITOR: fixed, mica, .001 μf , 300 VDCW.	DC Plate Blocking	CM20B102K
C104	1	CAPACITOR: fixed, ceramic, 2.6 μf , $\pm .25 \mu\text{f}$, 500 VDCW.	Neutralizing Capacitor	CC21SL2R6C
C105	1	CAPACITOR: fixed, ceramic, 10 μf , $\pm 0.5 \mu\text{f}$, 500 VDCW.	P/O Termination of Artificial Line Section	CC21SL100D
C106	1	CAPACITOR: fixed, mica, .01 μf , 500 VDCW.	HT Bypass	CM35B103K
C107	1	CAPACITOR: fixed, mica, .01 μf , 500 VDCW.	Cathode Bypass	CM35B103K
C108	1	CAPACITOR: fixed, mica, .001 μf , 500 VDCW.	DC Plate Blocking	CM20B102K
C109	1	CAPACITOR: fixed, ceramic, 2.6 μf , $\pm .25 \mu\text{f}$, 500 VDCW.	Neutralizing Capacitor	CC21SL2R6C
C110	1	CAPACITOR: fixed, mica, .001 μf , 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C111	1	CAPACITOR: fixed, mica, .0051 μf , 500 VDCW.	Cathode Bypass	CM35B512K

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
C112	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K
C113	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C114	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C115	1	CAPACITOR: fixed, mica, .0051 μ f, 500 VDCW.	Cathode Bypass	CM35B512K
C116	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K
C117	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C118	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C119	1	CAPACITOR: fixed, mica, .0051 μ f, 500 VDCW.	Cathode Bypass	CM35B512K
C120	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K
C121	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C122	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C123	1	CAPACITOR: fixed, mica, .0051 μ f, 500 VDCW.	Cathode Bypass	CM35B512K
C124	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
C125	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C126	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C127	1	CAPACITOR: fixed, mica, .0051 μ f, 500 VDCW.	Cathode Bypass	CM35B512K
C128	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K
C129	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C130	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Plate Decoupling Capacitor	CM20B102K
C131	1	CAPACITOR: fixed, mica, .0051 μ f, 500 VDCW.	Cathode Bypass	CM35B512K
C132	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	Screen Bypass	CM20B102K
C133	1	CAPACITOR: fixed, mica, .001 μ f, 500 VDCW.	DC Plate Blocking	CM20B102K
C134	1	CAPACITOR: fixed, cylindrical case, 4 μ f, 600 VDCW.	DC Power Supply Filter Capacitor	CP40C2FF405K
C135	1	CAPACITOR: fixed, cylindrical case, 4 μ f, 600 VDCW.	DC Power Supply Filter Capacitor	CP40C2FF405K
C136	1	CAPACITOR: fixed, cylindrical case, 4 μ f, 600 VDCW.	DC Power Supply Filter Capacitor	CP40C2FF405K
C137	1	CAPACITOR: fixed, duranite, oil filled, .02 μ f, 600 VDCW.	AC Line Filter Capacitor	CN—100—17

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
C138	1	CAPACITOR: fixed, duranite, oil filled, .02 μ f, 600 VDCW.	AC Line Filter Capacitor	CN-100-17
DL101	1	ARTIFICIAL LINE SECTION: composed of inductive elements LA, LB; capacity elements C101; input capacity V101; and stray capacity. Coils wound on $\frac{3}{8}$ in. bakelite tubing, $2\frac{3}{4}$ in. long (ref. TMC dwg. CF-10002).	Used to form a line section of constant impedance into the 1st pre-amplifier stage.	DL-10001
DL102	1	ARTIFICIAL LINE: Part 1: composed of inductive elements LG, LH; capacity elements C105, input capacity V102; and stray capacity. Part 2: composed of inductive elements Lc, Ld, Le, Lf, Ll, Lj, Lk, Ll; capacity elements due to input capacity of tubes V103-V108; and stray capacity. General: Coils wound on $\frac{3}{8}$ in. bakelite tubing $16\frac{1}{2}$ in. long (ref. TMC dwg. CF-10007).	Used to form a line section of constant impedance between 1st and 2nd pre-amplifier stages. Used to form a distribution system between output of 2nd pre-amplifier stage and the six output stages.	DL-10003
F101	2	FUSE: cartridge, slow blow, 2 amp, 250 V (one fuse spare).	Primary Power Fuse	FU-102 - 2
FX101	1	FILTER ASSEMBLY: low frequency cut-off filter non-repairable item; frequency response: 2 mc less than 2 db 1.5 mc greater than 25 db below 1 mc greater than 35 db.	High-pass Filter Assembly	FX-10002
I101	1	LAMP: incandescent, bayonet base, 6-8 V, 0.25 amp, T-3 $\frac{1}{4}$ bulb, maximum length $1\frac{3}{16}$ in.	Pilot Light	BI-101-44
J101	1	RECEPTACLE: coaxial type, single conductor.	Antenna Input Jack	SO-239

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	UMC Part No.
J102	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J103	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J104	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J105	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J106	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J107	1	RECEPTACLE: coaxial type, single conductor, (P/O assembly CA-10011).	Output Jack	SO-239
J108	1	RECEPTACLE: male twistlock, 250 V AC, 10 amp.	AC Power Receptacle	JJ-100
J109	1	RECEPTACLE: coaxial type, single conductor.	Antenna Input Jack	SO-239
L101	1	COIL: RF.	Compensating Inductor	A-10095
L102	1	CHOKER: filter, non-repairable item, inductance 10 H, at 30 V RMS 50/60 cps for 300 MA DC; winding resistance 90 ohms, 300 VDCW; oil filled hermetically sealed steel case.	P/O DC Power Supply Filter	TF-10010
L103	1	CHOKER: filter, non-repairable item, inductance 10 H at 30 V RMS 50/60 cps for 300 MA DC; winding resistance 90 ohms, 300 VDCW; oil filled hermetically sealed steel case.	P/O DC Power Supply Filter	TF-10010

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
R101	1	RESISTOR: fixed, film, 430 ohms, $\pm 1\%$, 1 W.	Artificial Line Terminating Resistor	RN-75-B4300F
R102	1	RESISTOR: fixed, composition, 27 ohms, $\pm 5\%$, 1W.	Cathode Bias Resistor	RC32GF270J
R103	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1 W.	Plate Resistor	RN-75-B6801F
R104	1	RESISTOR: fixed, film, 430 ohms, $\pm 1\%$, 1 W.	Artificial Line Terminating Resistor	RN-75-B4300F
R105	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, 1 W.	Cathode Feedback Resistor	RC32GF470J
R106	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, 1W.	Cathode Bias Resistor	RC32GF470J
R107	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1W.	Plate Resistor	RN-75-B6801F
R108	1	RESISTOR: fixed, film, 220 ohms, $\pm 1\%$, 1W.	Distribution Line Terminating Resistor	RN-75-B2200F
R109	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Decoupling Resistor	RC32GF681J
R110	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1W.	Plate Resistor	RN-75-B-6801F
R111	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Feedback Resistor	RC20GF470J
R112	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Bias Resistor	RC20GF470J
R113	1	RESISTOR: fixed, composition, 22,000 ohms, $\pm 5\%$, 1 watt.	P/O Screen Voltage Divider	RC32GF223J

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
R114	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Plate Load Resistor	RC32GF681J
R115	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Decoupling Resistor	RC32GF681J
R116	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1W.	Plate Resistor	RN-75-B6801F
R117	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Feedback Resistor	RC20GF470J
R118	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Bias Resistor	RC20GF470J
R119	1	RESISTOR: fixed, composition, 22,000 ohms, $\pm 5\%$, 1 watt.	P/O Screen Voltage Divider	RC32GF223J
R120	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Plate Load Resistor	RC32GF681J
R121	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Decoupling Resistor	RC32GF681J
R122	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1W.	Plate Resistor	RN-75-B6801F
R123	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Feedback	RC20GF470J
R124	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Bias Resistor	RC20GF470J
R125	1	RESISTOR: fixed, composition, 22,000 ohms, $\pm 5\%$, 1 watt.	P/O Screen Voltage Divider	RC32GF223J
R126	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Plate Load Resistor	RC32GF681J

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
R127	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Decoupling Resistor	RC32GF681J
R128	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1W.	Plate Resistor	RN-75-B6801F
R129	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Feedback	RC20GF470J
R130	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Bias Resistor	RC20GF470J
R131	1	RESISTOR: fixed, composition, 22,000 ohms, $\pm 5\%$, 1 watt.	P/O Screen Voltage Divider	RC32GF223J
R132	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Plate Load Resistor	RC32GF681J
R133	1	RESISTOR: fixed, composition, 680 ohms, $\pm 5\%$, 1W.	Decoupling Resistor	RC32GF681J
R134	1	RESISTOR: fixed, film, 6800 ohms, $\pm 1\%$, 1 W.	Plate Resistor	RN-75-B-6801F
R135	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Feedback	RC20GF470J
R136	1	RESISTOR: fixed, composition, 47 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	Cathode Bias	RC20GF470J
R137	1	RESISTOR: fixed, composition, 22,000 ohms, $\pm 5\%$, 1 watt.	P/O Screen Voltage Divider	RC32GF223J

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
R138	1	RESISTOR: fixed, composition, 680 ohms, \pm 5%, 1W.	Plate Load Resistor	RC32GF681J
R139	1	RESISTOR: fixed, composition, 680 ohms, \pm 5%, 1W.	Decoupling Resistor	RC32GF681J
R140	1	RESISTOR: fixed, film, 6800 ohms, \pm 1%, 1W.	Plate Resistor	RN-75-B-6801F
R141	1	RESISTOR: fixed, composition, 47 ohms, \pm 5%, $\frac{1}{2}$ watt.	Cathode Feedback	RC20GF470J
R142	1	RESISTOR: fixed, composition, 47 ohms, \pm 5%, $\frac{1}{2}$ watt.	Cathode Bias Resistor	RC20GF470J
R143	1	RESISTOR: fixed, composition, 22,000 ohms, \pm 5%, 1 watt.	P/O Screen Voltage Divider	RC32GF223J
R144	1	RESISTOR: fixed, composition, 680 ohms, \pm 5%, 1W.	Plate Load Resistor	RC32GF681J
R145	1	RESISTOR: fixed, film, 220 ohms, \pm 1%, 1W.	Distribution Line Terminating Resistor	RN-75-B-2200F
R146	1	RESISTOR: fixed, wire wound, vitreous enamel, 2000 ohms, \pm 10%, 10W.	Series Dropping Resistor	RW-109-28
R147	1	RESISTOR: fixed, composition, 100 ohms, \pm 5%, $\frac{1}{2}$ watt.	Compensating Resistor	RC20GF101J
R148	1	RESISTOR: fixed, composition, 47,000 ohms, \pm 5%, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J
R149	1	RESISTOR: fixed, composition, 47,000 ohms, \pm 5%, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J
R150	1	RESISTOR: fixed composition, 47,000 ohms, \pm 5%, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
R151	1	RESISTOR: fixed, composition, 47,000 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J
R152	1	RESISTOR: fixed, composition, 47,000 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J
R153	1	RESISTOR: fixed, composition, 47,000 ohms, $\pm 5\%$, $\frac{1}{2}$ watt.	P/O Screen Voltage Divider	RC20GF473J
R154	1	RESISTOR: fixed, composition, 1000 ohms, $\pm 10\%$, $\frac{1}{2}$ watt.	Plate Load Resistor	RC20GF102K
R155	1	RESISTOR: variable, composition, 50 ohms, $\pm 10\%$, 2 watt.	Bias Adjust	RV4LAYSA500A
S101	1	SWITCH: rotary, DPDT, shorting type, mycalex wafer, angle of throw 30%.	High-pass Filter Switch	SW-10004-1
S102	1	SWITCH: toggle, DPST, 1 amp, 250 V, 28 degrees.	Power Switch	ST-22K
T101	1	TRANSFORMER: See Supplement following Page 36.	Antenna Matching Transformer	TR-059
T102	1	TRANSFORMER: neutralizing, non-repairable item, broad band rf; input terminals 2-3 impedance 300 ohms unbalanced; output terminals 4-1 impedance 300 ohms unbalanced, terminals 1-3 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Neutralizing Transformer	TR-058
T103	1	TRANSFORMER: neutralizing and impedance matching, non-repairable item, broad band rf; input terminals 3-4 impedance 400 ohms unbalanced, output No. 1 terminals 2-4 impedance 400 ohms unbalanced, output No. 2 terminals 1-4 impedance 100 ohms unbalanced, terminal 4 ground; frequency range 2-30 mc/s; response less than 2 db below mid-band.	Neutralizing Transformer	TR-062

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
T104	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057
T105	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057
T106	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057
T107	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057
T108	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057
T109	1	TRANSFORMER: output, broad band rf, non-repairable item; input terminals 1-3 impedance 600 ohms unbalanced, output terminals 2-4 70 ohms unbalanced, terminals 3-4 ground; frequency range 2-30 mc/s; response less than 1 db below mid-band.	Output Matching Transformer	TR-057

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
T110	1	TRANSFORMER: power, non-repairable item; primary 115/230 volts, 50/60 cycle, single phase; secondary #1 (terminals 5, 6, 7): 300 volts, 300 ma DC, centre tapped, secondary #2 (terminals 8, 9): 300 volts, 3 amp; secondary #3 (terminals 10, 11): 300 volts, 4 amp; electrostatic shield provided; hermetically sealed steel case, 4 1/2 inches long, 3 3/8 inches wide, 4 1/2 inches high excluding terminal; 11 ceramic turret type terminals, 1/2 inch high located on mtg. end; Row 2: terminals 2, 5, 8 located on centre line parallel to 4 1/2 inch side dimension, terminal 5 in exact centre of mtg. end, 1/2 inch between centres; two rows of terminals: Row 1: (terminals 1, 4, 7, 10 and Row 3: 3, 6, 9, 11) run parallel to Row 2 with 1/2 inch spacing between centres, 1/2 inch centres between rows; terminal 4 in Row 1 and terminal 6 in Row 3 are located midway between terminals 2 and 5; reading perpendicularly, Row 1 is to the left of Row 2; mtg. by 4 studs 10-32 x 1/2 inch located one in each corner, 3 3/8 inches between centres along 4 1/2 inch dimension, 2 3/4 inches between centres along 3 3/8 inch dimension; finish TMC grey.	Power Transformer	TF-10008
V101	1	TUBE: electron, 6J4, UHF amplifier triode, receiving type, 7 pin miniature.	1st Pre-amplifier	6J4
V102	1	TUBE: electron, 6J4, UHF amplifier, triode, receiving type, 7 pin miniature.	2nd Pre-amplifier	6J4
V103	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6
V104	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6
V105	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6
V106	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
V107	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6
V108	1	TUBE: electron, 6AH6, miniature 7 pin pentode, receiving type.	Power Amplifier Tube	6AH6
V109	1	TUBE: electron, OB2, miniature 7 pin voltage regulator.	Voltage Regulator	OB2
V110	1	TUBE: electron, OB2, miniature 7 pin voltage regulator.	Voltage Regulator	OB2
V111	1	TUBE: electron, 5U4GB, rectifier, octal, receiving type.	Rectifier	5U4GB
XF101, 2	2	HOLDER: fuse, extractor post type; length 2 9/64 in., cap width 11/16 in., depth 17/64 in.	Fuse Holder	FH-10001-1
XI101	1	LIGHT: indicator, with red frosted lens, miniature bayonet base.	Pilot Light Socket	TS-106-1
XV101	1	SOCKET: tube, 7 pin miniature, moulded thermo-setting plastic insulation.	V101 Socket	TS-102-PO1
XV102	1	SOCKET: tube, 7 pin miniature, moulded thermo-setting plastic insulation.	V102 Socket	TS-102-PO1
XV103	1	SOCKET: tube, 7 pin miniature, moulded thermo-setting plastic insulation.	V103 Socket	TS-102-PO1

COMPONENT PARTS LIST—Continued

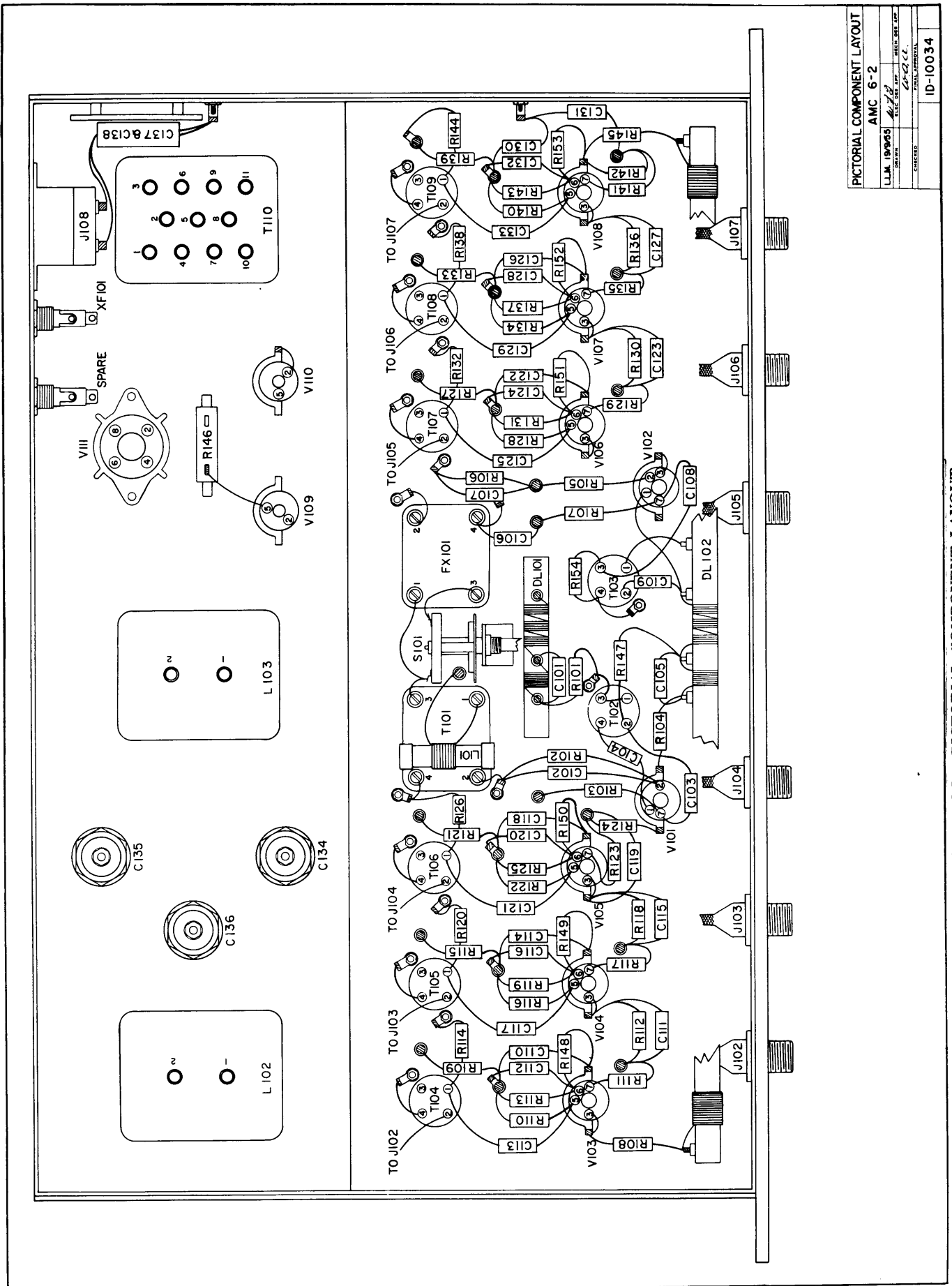
Ref. Symbol	Quan.	Description	Function	TMC Part No.
XV104	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V104 Socket	TS-102-PO1
XV105	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V105 Socket	TS-102-PO1
XV106	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V106 Socket	TS-102-PO1
XV107	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V107 Socket	TS-102-PO1
XV108	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V108 Socket	TS-102-PO1
XV109	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V109 Socket	TS-102-PO1
XV110	1	SOCKET: tube, 7 pin miniature, moulded thermosetting plastic insulation.	V110 Socket	TS-102-PO1
XV111	1	SOCKET: tube, octal, moulded thermosetting plastic insulation.	V111 Socket	TS-101-PO1
	1	PLUG: coaxial type, single conductor, brass, silver plated; mates with receptacle SO-239. (J101) (also J109 on Model AMC 6-2/75U)	P/O Antenna Cable	PL-259

COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.	
	6	PLUG: coaxial type, single conductor, brass, silver plated; mates with receptacle SO-239. (J102-J107).	P/O Receiver Connecting Cable	PL-259	
	8	SHIELD: tube, brass, nickel plated.	Shield V101-V108	TS-102-U02	
	2	SHIELD: tube, brass, nickel plated.	Shield V109, V110	TS-102-U03	

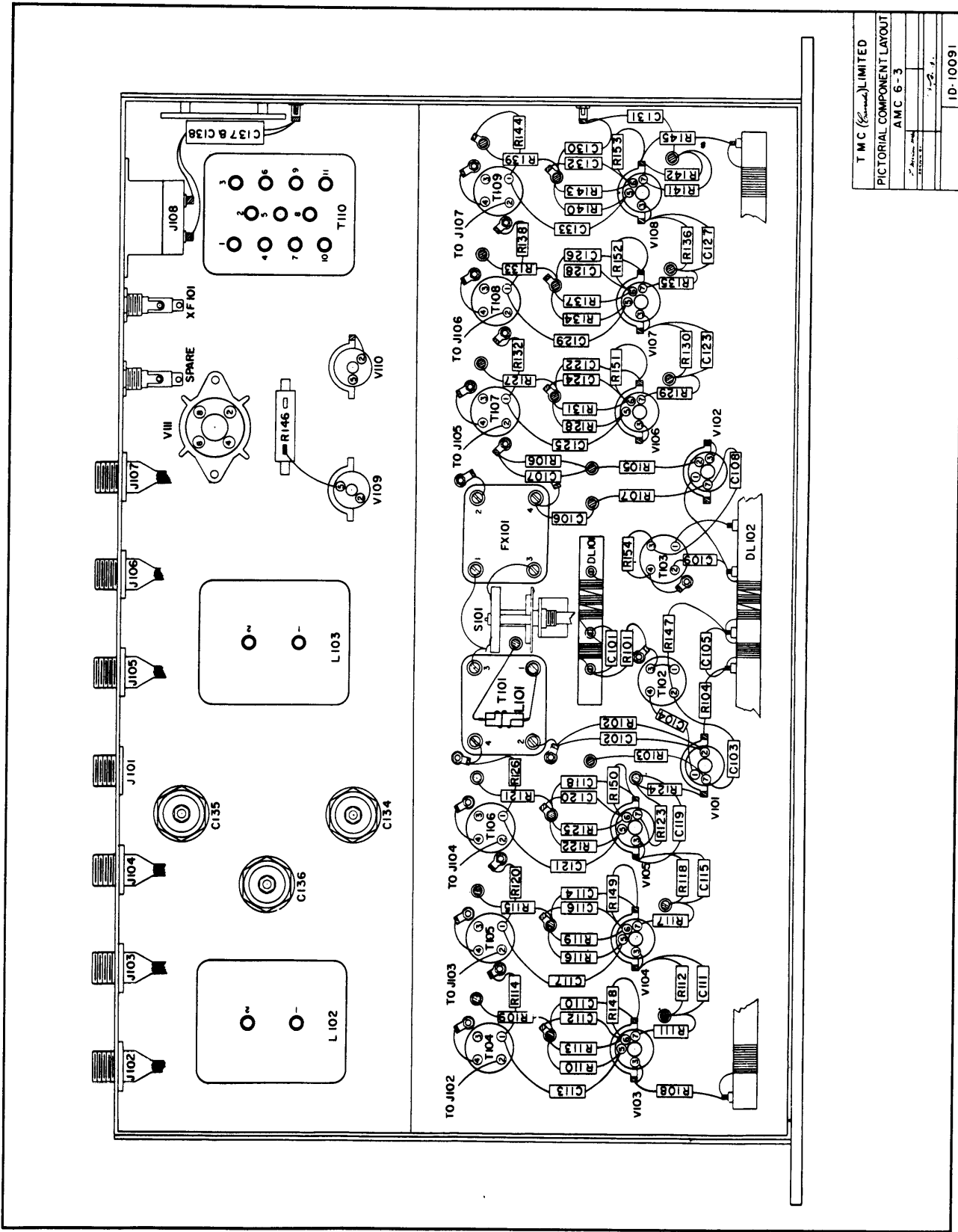
COMPONENT PARTS LIST—Continued

Ref. Symbol	Quan.	Description	Function	TMC Part No.
	1	<p>CABLE ASSEMBLY: consisting of the following: (Cornish Wire Co. reference for complete assembly: No. 1628, BLACK) Female twist-lock plug.</p> <p>Male non-polarized plug.</p>	AC Line Cord	CA-103-72
	6	<p>Cable, two conductor, rubber covered, Cornish Wire Co. type 16/30-SJ, length 6 ft. ea 1</p> <p>ASSEMBLY: output coaxial lead consisting of: Connector Receptacle, coaxial, Amphenol type 83-1R ea 1</p> <p>Hood, Amphenol type UG-177/U (ea 1)</p> <p>Outer Ferrule, for coaxial cable, ea. 2</p> <p>Inner Ferrule for coaxial cable</p>	Output Coaxial Lead	<p>CA-10124</p> <p>SO-239</p> <p>MS-10097</p> <p>CU-101-4</p> <p>CU-101-3</p> <p>RG-59/U</p>
	1	<p>INPUT COAXIAL CABLE: length 10 1/2"</p> <p>For use on multicoupler AMC 6-2/75U ea 1</p> <p>For use on multicoupler AMC 6-2/200 ea 1</p>	Input Coaxial Lead	<p>RG-11/U</p> <p>RG-114/U</p>



PICTORIAL COMPONENT LAYOUT	
AMC 6-2	
LJM 194945	REV. DES. BY
DATE 11/27/52	DESIGNED BY C.C.C.
CHECKED BY	FINAL APPROVAL
ID-10034	

Figure 8-1. PICTORIAL COMPONENT LAYOUT



T M C (Kornell) LIMITED
PICTORIAL COMPONENT LAYOUT
AMC 6-3
REV. 1
10091

FIGURE 8-1A SCHEMATIC DIAGRAM AMC 6-3

