INSTRUCTION MANUAL

Clegg INTERCEPTOR B

VHF RECEIVER

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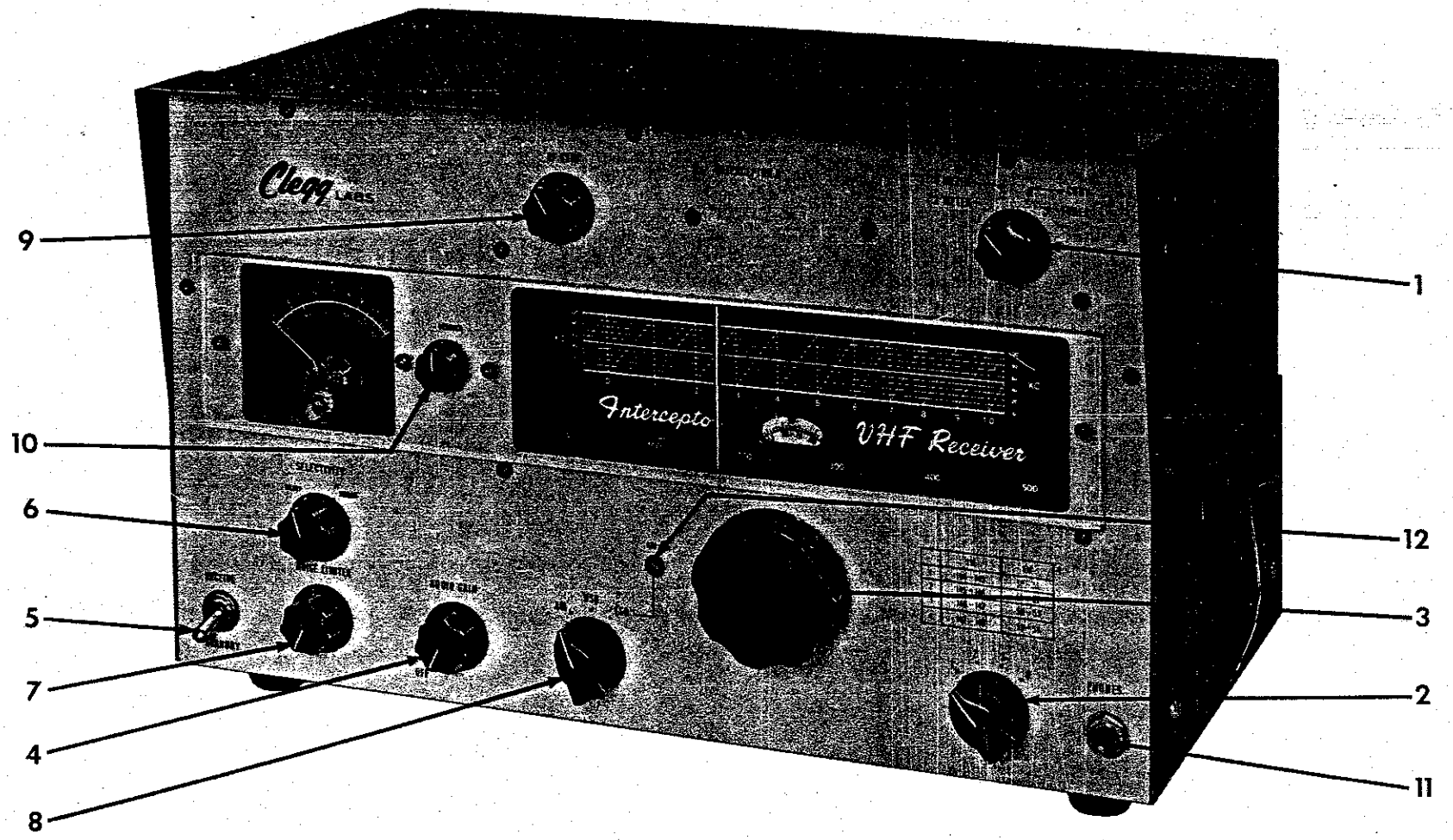
FIGURES

INTRODUCTION

The INTERCEPTOR "B", like all fine electronic instruments, takes a period of familiarization before even the experienced operator can fully realize its performance capabilities. However, unlike some of the VHF receiving systems introduced during recent years, the INTERCEPTOR "B" is engineered to a degree that permits even the inexperienced operator to achieve excellent performance within a few minutes after opening the packing box.

Being hams ourselves, we are well aware of the urge to put in the AC plug, connect the antenna and speaker, and start tuning. We even encourage this, but we request that after you do your initial tuning, after you have listened to the fine performance of the INTERCEPTOR "B", please, at least thumb through this manual so you can eventually appreciate the more subtle factors which provide the superior performance that has been built into this fine instrument.



Clegg INTERCEPTOR B VHF RECEIVER

Figure 1

I. DESCRIPTION

A. General

The INTERCEPTOR "B" is a dual conversion 50-54 mc receiver with a self-contained crystal controlled converter for 144 to 148 mc operation, and provisions for operation with external converters and adaptors of various types to permit extension of the tuning range to include the bands above, between, and below the amateur 6 and 2 meter bands. The INTERCEPTOR "B" is a one-package unit except for speaker (or headphones) and antenna.

B. Operating and Performance Features

1. Selectivity. Proper IF selectivity has been provided to permit optimum receiver performance on both AM and sideband. A switchable crystal lattice filter permits extremely sharp SSB or CW selectivity as well as providing 8 kc of Bandpass for strong local AM signals and net operation. Both a product detector for CW/SSB and an infinite impedance AM detector are provided.

2. "S" Meter. A calibrated meter furnishes reliable indication of received signal level, both in "S" units and relative db.

3. Frequency Coverage and Readout. The amateur 6 and 2 meter bands are covered by 8 separate, overlapping ranges of 1 megacycle each. A flywheel loaded, large scale slide-rule dial provides excellent frequency readout on all bands.

4. Noise Limiting. Separate noise limiters are provided for AM and SSB/CW operation. The AM noise limiter is of the automatic type. The SSB/CW limiter is equipped with adjustable threshold.

5. Freedom from Overload and Cross Modulation. The INTERCEPTOR "B" is unique and unprecedented in its extreme freedom from overload and cross modulation. Design in this respect has been refined to such a degree as to permit duplex operation. That is, simultaneous transmission and reception are possible, providing separate receiving and transmitting antennas are available and that the transmitter used is free of splatter components. Transmitter power may be up to several hundred watts if antenna separation is 60 feet or more. Transmitter frequency may be within 20 kc of received frequency. No other commercial VHF receiver or receiver-converter combination tested, has been able to match this type of performance.

6. Frequency Stability and Accuracy. Receiver frequency stability and calibration accuracy, matches or exceeds converter-receiver combinations costing substantially more than the INTERCEPTOR "B". This has been accomplished by employing crystal control for all high frequency oscillators except for the tuneable 8.8 to 9.8 mc oscillator. Design of the tuneable oscillator has been refined, both mechanically and electrically, so drift is negligible even for the exacting requirements of SSB and narrow bandwidth CW.

7. Audio. The audio amplifier provides more than adequate undistorted volume for use even under noisy room or field conditions.

8. Power Supply. The integral power supply is conservatively designed to provide trouble free operation under adverse conditions such as moderate variations in line voltage and abnormal temperatures.

C. Specifications

The Clegg INTERCEPTOR "B" is tailored to meet the exacting requirements of present day VHF communications employing AM, CW, single or double sideband.

Tuning Range:	49.95 to 54.1 and 143.95 to 148.1 mc.
IF Selectivity:	SHARP: 3.1 kc at 6 db -- 8 kc at 60 db. BROAD: 6 kc at 6 db -- 20 kc at 60 db.
Sensitivity:	.1 μv or better for 10 db S/N
Overload Characteristics:	Less than 5% cross modulation of a 1 μv signal by a 25 mv signal.
Dynamic Range:	Greater than 120 db.
Dial Calibration:	Readable to ±3 kc -- Resettable to 1 kc.
Drift:	Less than 100 cycles per hour after 15 min. warmup. Warmup drift less than 1 kc at room temperature.
Detector:	A. Infinite impedance detector B. Product detector for CW and sideband.
BFO:	Crystal controlled.

Sideband Selection:	Mode switch automatically shifts tuneable oscillator when switching from upper to lower sideband.
Spurious Responses:	Spurious responses, and image responses down at least 80 db. IF leakthrough down at least 90 db.
Crystal Lattice Filter:	Provides sharp skirt selectivity (3.1 kc) for reception of SSB and CW, and 6 kc for strong AM signals and network operation.
Noise Limiter:	Two full wave series types. A. Automatically biased on AM for clipping at 60% level. B. Manually adjustable threshold for SSB and CW operation.
"S" Meter:	A. Calibrated in decibels from 0 to 90 db. B. Calibrated in "S" units 1 to 9 and in db over 9. S9 factor adjusted to indicate 50 μv signal.

II. OPERATION

A. Unpacking

Carefully unpack receiver and retain carton and packing material. (Note any physical damage which may have been incurred during shipping. If such damage is discovered, notify the carrier who delivered the unit and at the same time, notify your distributor who will enter a concealed damage claim).

B. Panel Controls and Principal Functions (Refer to Figure 1)

Place INTERCEPTOR "B" on operating bench and take a brief period to locate the various controls:

#1 - "2 METER - 6 METER - CONV - TUNER" selector switch serves as band selector for 2 and 6 meters and also provides input positions for external converters for higher and lower bands.

#2 - Selects individual 1 megacycle portions of 2 and 6 meter bands.

Examples:

a. To tune signals between 145 and 146 mc, set #1 at 2 meter position and #2 at #2 position.

b. To tune signals between 147 and 148 mc, set #1 at 2 meter position and #2 at #4 position.

c. To tune signals between 50 and 51 mc, set #1 at 6 meter position and #2 at #1 position.

#3 - Main tuning dial manually tunes INTERCEPTOR "B" over any selected megacycle. Major calibration points every 100 kc, minor calibration points every 10 kc, readable to less than 3 kc. Vernier window opening permits reset to less than 1 kc.

#4 - AC ON - OFF and AUDIO GAIN (volume) control.

#5 - RECEIVE - STANDBY switch to disable receiver. (Switch has extra pole wired to accessory socket for control by transmitter or other equipment).

#6 - SELECTIVITY CONTROL - provides switchable selectivity. SHARP position provides maximum RF Bandpass of 3.1 kc for SUPERB reception of SSB and CW signals. BROAD position provides 6 kc RF Bandpass for best reception of loud local signals and AM net operation.

#7 - NOISE LIMITER - switches ANL in and out of circuit with AM-USB-LSB switch (#8) in AM position. Provides variable threshold limiting in SSB or CW positions.

#8 - AM - USB - LSB SELECTOR SWITCH - actuates diode detector in AM position and actuates BFO and product detector in either USB or LSB position.

#9 - RF GAIN control varies IF gain. Normally operated sufficiently below maximum clockwise position to provide $\emptyset$ db reading on S meter.

#10 - VERNIER - electrically provides ± 1 kc to frequency setting of main tuning dial for sideband or CW tuning ease.

#11 - PHONES - provides headphone reception. Automatically disables speaker when standard phone plug (PL-55) is inserted.

#12 - ADJ control - provides means of presetting local oscillator to automatically shift exact amount when changing from USB to LSB. Adjustment need only be reset when moving from one end of band to other. Since SSB activity is normally confined to a limited portion of any BAND, this control normally will require readjustment very infrequently.

C. Installation

1. Antenna. Connect suitable antenna to either 6 M or 2 M input coaxial receptacle at upper rear of unit. (As viewed from front panel, the right hand coaxial receptacle is the 2 meter input).

2. Speaker. Connect a good 3 or 4 ohm speaker to J-9 (speaker jack at rear of chassis).

D. Initial Operation

1. Set controls as follows:

#1 - Either 2 meter or 6 meter position
#2 - Position #1
#4 - OFF position
#5 - STANDBY
#6 - BROAD POSITION
#7 - OFF position
#8 - AM position
#9 - Set to about 3:00 o'clock

2. Insert AC plug in suitable source of 115 volts, 60 cycles.

3. Advance AUDIO GAIN, ON-OFF control #4 to about one quarter clockwise. Observe that panel lights come on. Wait a moment or two for tubes to heat.

4. Switch #5 to RECEIVE position. Adjust AUDIO GAIN #4 to comfortable level.

5. Tune Receiver across band with main tuning dial #3 until a phone signal is heard.

6. If ignition noise level is bothersome, switch ANL #7 to ON position.

7. Observe that when #6 is turned to SHARP position, either sideband of an AM station can be copied by moving main tuning control slightly higher or lower in setting. Under QRM conditions, the operator can select the sideband which is most QRM free merely by varying the tuning dial for best reception.

8. When receiving SSB or CW, turn selectivity switch (#6) to SHARP position and mode switch (#8) to USB position. This switches from diode to product detector and turns on the BFO.

   Under severe QRM or good DX conditions, the SHARP selectivity position will also provide vastly improved readability for weak AM signals.

9. To change from 2 meters to 6 meters or vice versa, simply switch to appropriate setting of band selector #1. Both 6 and 2 meter feed lines may be connected to their respective co-ax terminals without detrimental effect on either band. To tune different portions of the band, simply switch range control #2 to desired band segment.

10. To read frequency of received signal, or to tune in a signal at specific frequency, simply add reading of main tuning dial #3 to lower number indicated in panel chart.

    Examples:

    1. #1 set at 2 M
       #2 set at position #2
       #3 set at .1 mc

       Frequency is 145.1 mc; however if -

2. #1 is set at 6M and both other controls as above

   Frequency is 51.1 mc; or if -

3. #1 is set at 2M
   #2 is set at position #1
   #3 is set at .1 mc

   Frequency is then 144.1 mc.

11. Examination of main tuning dial #3 scale will quickly indicate that each of the diagonal lines is crossed by 9 horizontal lines. The effective length of the tuning dial is increased considerably in this manner. Each intersection of these lines represents a 10 kc calibration point. (The heavy, center horizontal line represents the 50 kc points).

12. Examination of the small vernier dial window will show that each division of this dial represents approximately 2 kc. Since it is possible to read this vernier to less than 1/2 a division, the receiver can always be reset to within 1 kc of any previously logged signal.

E. "S" Meter Operation and Adjustment

The "S" meter system on the INTERCEPTOR "B" has been designed to have much more meaningful readings than those obtained by the various converters and communication receiver combinations previously available. (While some may regard the "S" meter indications as being "Scotch" - they nevertheless are accurate).

Two calibrated scales are furnished:

1. Calibrated from 0 - 90 db

2. Calibrated from 0 - S9 and db above S9.
   (S9 represents a signal intensity of approximately 50 microvolts)

The INTERCEPTOR "B" "S" meter can be calibrated by turning the RF GAIN control #9 to minimum. With antennas disconnected, set "S" meter ADJ at rear of chassis so that "S" meter reads ZERO. Advance RF GAIN #9 until "S" meter just moves up scale. At this point the "S" meter is calibrated for accurate reading of signal strength relative to receiver noise.

F. Accessory Connections

1. 10.7 mc accessory jack. (J8 at rear of chassis)

a) Useable for 10.7 mc panadaptor takeoff. Bandwidth, approximately 300 kc.

b) Useable with external tuneable converters for extending tuning range of INTERCEPTOR "B".

c) Useable with external fixed frequency converters to permit monitoring spot frequencies either within or outside of INTERCEPTOR "B" tuning range.

d) Permits INTERCEPTOR "B" to be used as tuneable converter, working into any other communications receiver that is capable of tuning 10.7 mc.

2. External Converter Jack. (Located between 6 M and 2 M antenna receptacle)

a) Useable with external crystal controlled converters for 220 mc, 432 mc, 1296 mc, etc.

b) Can also be used to convert your INTERCEPTOR "B" to magnificent low band reception through use of the Clegg Allbander 3 to 30 mc converter/speaker combination.

3. Multipurpose Receptacle (Marked AUXILIARY)

a) Furnishes both 6.3 V and 130 V for external converter or tuner.

b) Provision to control external transmitter from receiver standby - receive switch.

c) Provision to control receiver muting from external switch or relay.

d) AVC take-off for use with accessory tuners and converters.

G. SSB, DSB, and CW Operation

1. To receive either single sideband or double sideband signals on the INTERCEPTOR "B", it is necessary to switch the selectivity switch (#6) to SHARP position and the mode selector switch (#8) from the AM position to either USB (upper sideband) or LSB (lower sideband), and tune the main tuning dial (#3) for best intelligibility of the received signal.

2. Most 6 and 2 meter SSB stations are currently employing upper sideband and the USB position should thus be used.

3. Numerous double sideband, suppressed carrier stations are active in some areas. Either sideband of those stations can be selected by switching between the USB and LSB position.

4. Periodic (but infrequent) readjustment of the USB - LSB oscillator shift can be performed quite readily with the ADJ control (#11) provided:-

   Procedure is as follows:

   a) Tune in an AM phone signal in the portion of the band where SSB reception is desired (within 200 kc or less).

   b) Switch to USB position and tune main tuning dial for exact ZERO beat.

   c) Switch to LSB position and carefully adjust ADJ (#12) control to restore ZERO beat. Oscillator is now properly adjusted.

H. CW Operation

1. The INTERCEPTOR "B" is capable of superb CW reception on both 6 and 2 meters. General operating procedure is similar to other conventional receivers except that the BFO is crystal controlled. To receive CW signals, set mode selector switch (#8) in USB position and selectivity switch in SHARP position. From this point on, procedure is the same as with conventional receivers.

I. Muting Instructions

1. Provision is made for muting the INTERCEPTOR "B" receiver through the octal utility socket (J1) at the rear of the chassis.

2. When used with the Clegg Zeus transmitter, proceed as follows:

   a) Make up a 2 wire cable of convenient length and solder the receiver end leads to pins #5 and #8 of an octal plug (to match receiver J1). The opposite ends of the two wire cable should be soldered to pins #2 and #3 of the octal plug which matches J302 auxiliary octal socket at the rear of the ZEUS MOD/POWER SUPPLY chassis.

b) The leads from these two pins of J302 are connected to auxiliary contacts on relay K302 which are normally in closed position when not transmitting. When transmitting, the relay opens and muting of the receiver is accomplished.

3. When used with other transmitters, proceed as follows:

a) Follow the same steps outlined above at the receiver end. The opposite ends of the cable should be then soldered to any auxiliary relay contacts normally closed (during non-transmitting periods) such as the auxiliary contacts on the Dow-Key antenna relay.

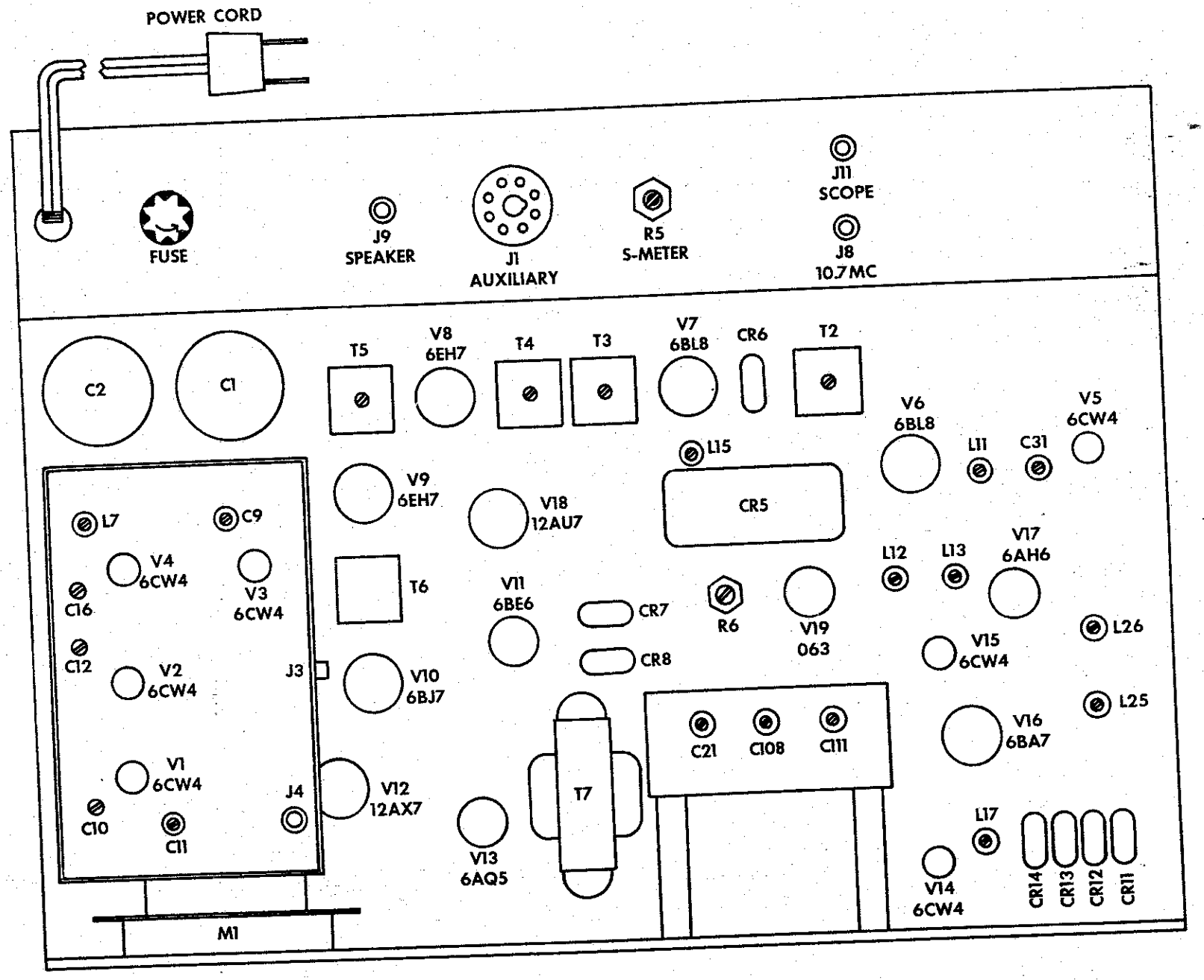


Figure 2. TOP VIEW OF CLEGG INTERCEPTOR "B" RECEIVER

SECTION IV

RECEIVER, INTERCEPTOR "B"

PARTS LIST

ITEM	DESCRIPTION	PART NUMBER
C1A	CAPACITOR, ELECTROLYTIC, 80 mfd, @ 350 V, 10 mfd @ 350 V, 20 mfd @ 250 V, 10 mfd @ 25 V	108-303
C1B	CAPACITOR, ELECTROLYTIC, 80 mfd, @ 350 V, 10 mfd @ 350 V, 20 mfd @ 250 V, 10 mfd @ 25 V	108-303
C1C	CAPACITOR, ELECTROLYTIC, 80 mfd, @350 V, 10 mfd @ 350 V, 20 mfd @ 250 V, 10 mfd @ 25 V	108-303
C1D	CAPACITOR, ELECTROLYTIC, 80 mfd, @ 350 V, 10 mfd @ 350 V, 20 mfd @ 250 V, 10 mfd @ 25 V	108-303
C2A	CAPACITOR, ELECTROLYTIC, 100 mfd @ 200 V, 50 mfd @ 200 V, 40 mfd @ 200 V	108-201
C2B	CAPACITOR, ELECTROLYTIC, 100 mfd @ 200 V, 50 mfd @ 200 V, 40 mfd @ 200 V	108-201
C2C	CAPACITOR, ELECTROLYTIC, 100 mfd @ 200 V, 50 mfd @ 200 V, 40 mfd @ 200 V	108-201
C3	CAPACITOR, CERAMIC DISC, 1000 pf	102-039
C4	CAPACITOR, CERAMIC DISC, 1000 pf	102-039
C5	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C6	CAPACITOR, CERAMIC DISC, 33 pf, NPO	100-118
C7	CAPACITOR, CERAMIC DISC, 47 pf, NPO	100-120
C8	CAPACITOR, CERAMIC DISC, 470 pf, JF	101-003
C9	CAPACITOR, TRIMMER, .5-5 pf	116-001
C10	CAPACITOR, TRIMMER, CERAMIC 1-4 pf, NPO	116-003
C11	CAPACITOR, TRIMMER, CERAMIC 1-4 pf, NPO	116-003
C12	CAPACITOR, TRIMMER, CERAMIC 1-4 pf, NPO	116-003
C13	CAPACITOR, MICA, 175 pf	103-005
C14	CAPACITOR, MICA, 175 pf	103-005
C15	CAPACITOR, CERAMIC DISC, 2.2 pf, NPO	100-104
C16	CAPACITOR, TRIMMER, CERAMIC 1-4 pf, NPO	116-003
C17	CAPACITOR, CERAMIC, DISC 100 pf, N 1500	100-801
C18	CAPACITOR, CERAMIC, DISC 4.7 pf, NPO	100-108
C19	CAPACITOR, CERAMIC, DISC 1.0 pf	100-100
C20	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C21	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C22	CAPACITOR, CERAMIC, DISC 150 pf, JF	101-000
C23	CAPACITOR, CERAMIC, DISC 4.7 pf, NPO	100-108
C24	CAPACITOR, CERAMIC, DISC .001 mfd	102-039
C25	CAPACITOR, TRIMMER, CERAMIC 3-12 pf	116-101
C26	CAPACITOR, CERAMIC, DISC 4.7 pf, NPO	100-108
C27	CAPACITOR, CERAMIC, DISC 4.7 pf, NPO	100-108
C28	CAPACITOR, CERAMIC, DISC 3.3 pf, NPO	100-106
C29	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C30	CAPACITOR, CERAMIC, DISC 470 pf, JF	101-003
C31	CAPACITOR, TRIMMER, .5-5 pf	116-001
C32	CAPACITOR, CERAMIC, DISC 470 pf, JF	101-003
C33	CAPACITOR, CERAMIC, DISC 2.2 pf, NPO	100-104
C34	CAPACITOR, CERAMIC, DISC 6.8 pf, NPO	100-110
C35	CAPACITOR, CERAMIC, DISC 1.0 pf, NPO	100-100
C36	CAPACITOR, CERAMIC, DISC 15 pf, NPO	100-114
C37	CAPACITOR, TRIMMER, .5-5 pf	116-001
C38	CAPACITOR, TRIMMER, .5-5 pf	116-001
C39	CAPACITOR, TRIMMER, .5-5 pf	116-001
C40	CAPACITOR, CERAMIC, DISC 470 pf, JF	101-003
C41	CAPACITOR, CERAMIC, DISC 150 pf, JF	101-000
C42	CAPACITOR, CERAMIC, DISC 22 pf, NPO	100-116
C43	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C44	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C45	CAPACITOR, CERAMIC, DISC 2200 pf	102-043
C46	CAPACITOR, CERAMIC, DISC 3.3 pf, NPO	100-106
C47	CAPACITOR, CERAMIC, DISC 100 pf, N 1500	100-801
C48	CAPACITOR, CERAMIC, DISC 15 pf, NPO	100-114
C49	CAPACITOR, CERAMIC, DISC 33 pf, NPO	100-118
C50	CAPACITOR, CERAMIC DISC, 22 pf, NPO	100-116
C51	CAPACITOR, CERAMIC DISC, 33 pf, NPO	100-118
C52	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C53	CAPACITOR, CERAMIC DISC, 27 pf, NPO	100-117
C54	CAPACITOR, CERAMIC DISC, 2.2 pf, NPO	100-104
C55	CAPACITOR, TRIMMER, CERAMIC 3-12 pf	116-101
C56	CAPACITOR, CERAMIC DISC, 47 pf, NPO	100-120
C57	CAPACITOR, CERAMIC DISC, 12 pf, NPO	100-113
C58	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C59	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C60	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C61	CAPACITOR, CERAMIC DISC, 4.7 pf, NPO	100-108
C62	CAPACITOR, CERAMIC DISC, 15 pf, NPO	100-114
C63	CAPACITOR, CERAMIC DISC, 15 pf, NPO	100-114
C64	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C65	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C66	CAPACITOR, CERAMIC DISC, 4.7 pf, NPO	100-108
C67	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C68	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C69	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C70	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C71	CAPACITOR, PAPER, 2 mfd, 200 V	105-105
C72	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C73	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C74		
C75	CAPACITOR, CERAMIC DISC, 220 pf, JF	101-001
C76	CAPACITOR, CERAMIC DISC, 33 pf, NPO	100-118
C77	CAPACITOR, CERAMIC DISC, 4.7 pf, NPO	100-108
C78	CAPACITOR, MYLAR, .047 mfd, 125 V	105-303
C79	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C80	CAPACITOR, CERAMIC DISC, 68 pf, NPO	100-122
C81	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C82	CAPACITOR, CERAMIC DISC, 100 pf, GMV	102-063
C83	CAPACITOR, CERAMIC DISC, 470 pf, JF	101-003
C84	CAPACITOR, CERAMIC DISC, 470 pf, JF	101-003
C85	CAPACITOR, CERAMIC DISC, 470 pf, JF	101-003
C86	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C87	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C88	CAPACITOR, MYLAR, .15 mfd, 125 V	105-305
C89	CAPACITOR, ELECTROLYTIC, 5 mfd, 30 V	107-005
C90	CAPACITOR, CERAMIC DISC, 470 pf, JF	101-003
C91	CAPACITOR, MYLAR, .15 mfd, 125 V	105-305
C92	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C93	CAPACITOR, CERAMIC DISC, .005 mfd	102-050
C94	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C95	CAPACITOR, CERAMIC DISC, 2.2 pf, 3 V	102-062
C96	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C97	CAPACITOR, CERAMIC DISC, 220 pf	102-025
C98	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C99	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C100	CAPACITOR, TRIMMER, .5-5 pf	116-001
C101	CAPACITOR, TRIMMER, .5-5 pf	116-001
C102	CAPACITOR, TRIMMER, .5-5 pf	116-001
C103	CAPACITOR, CERAMIC DISC, 4.7 pf, NPO	100-108
C104	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C105	CAPACITOR, CERAMIC DISC, .02 mfd	102-056
C106	CAPACITOR, SILVER MICA, 680 pf, (F)	103-109
C107	CAPACITOR, SILVER MICA, 680 pf, (F)	103-109
C108	CAPACITOR, VARIABLE AIR, 1.8-8.7 pf	110-104
C109	CAPACITOR, CERAMIC DISC, 75 pf, NPO	105-026
C110	CAPACITOR, CERAMIC DISC, 15 pf, N 750	105-040
C111	CAPACITOR, VARIABLE AIR, 1.8-8.7 pf	110-104
C112	CAPACITOR, VARIABLE AIR, 5-50 pf	110-113
C113	CAPACITOR, CERAMIC DISC, 22 pf, NPO	110-116
C114	CAPACITOR, CERAMIC DISC, 10 pf, NPO	100-012
C115	CAPACITOR, VARIABLE AIR, 3.4-55 pf	110-011
C116	CAPACITOR, CERAMIC DISC, 27 pf, NPO	100-117
C117	CAPACITOR, CERAMIC DISC, 15 pf, NPO	100-114
C118	CAPACITOR, CERAMIC DISC, 6.8 pf, NPO	100-110
C119	CAPACITOR, CERAMIC DISC, 4.7 pf, NPO	100-008
C120	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C121	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C122	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C123	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C124	CAPACITOR, CERAMIC DISC, 1.0 pf, NPO	100-100
C125	CAPACITOR, CERAMIC DISC, 2.2 pf, NPO	100-104
C126	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C127	CAPACITOR, CERAMIC DISC, 2200 pf	102-043
C128	CAPACITOR, CERAMIC DISC, .01 mfd	102-054

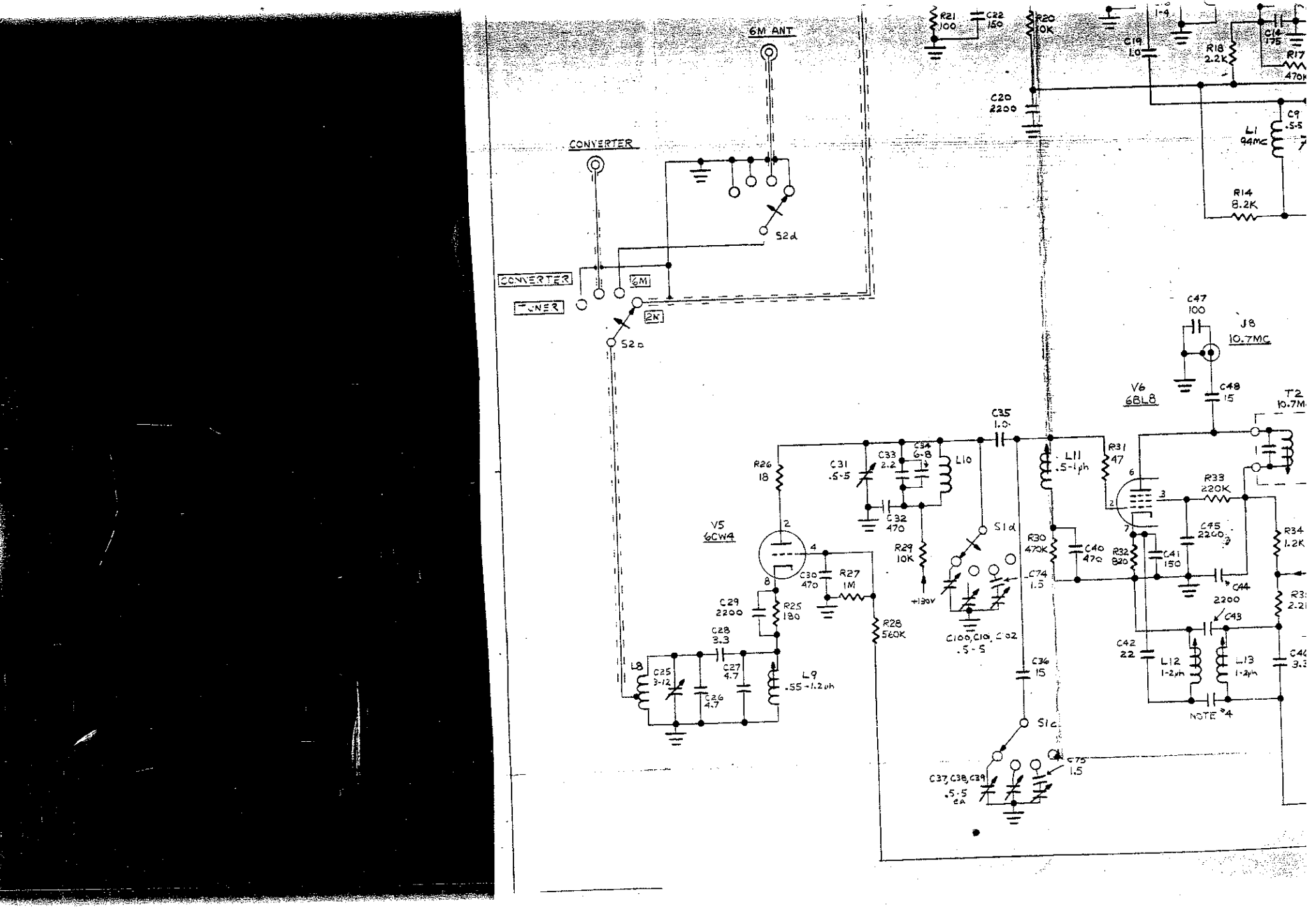
PARTS LIST (Cont'd.)

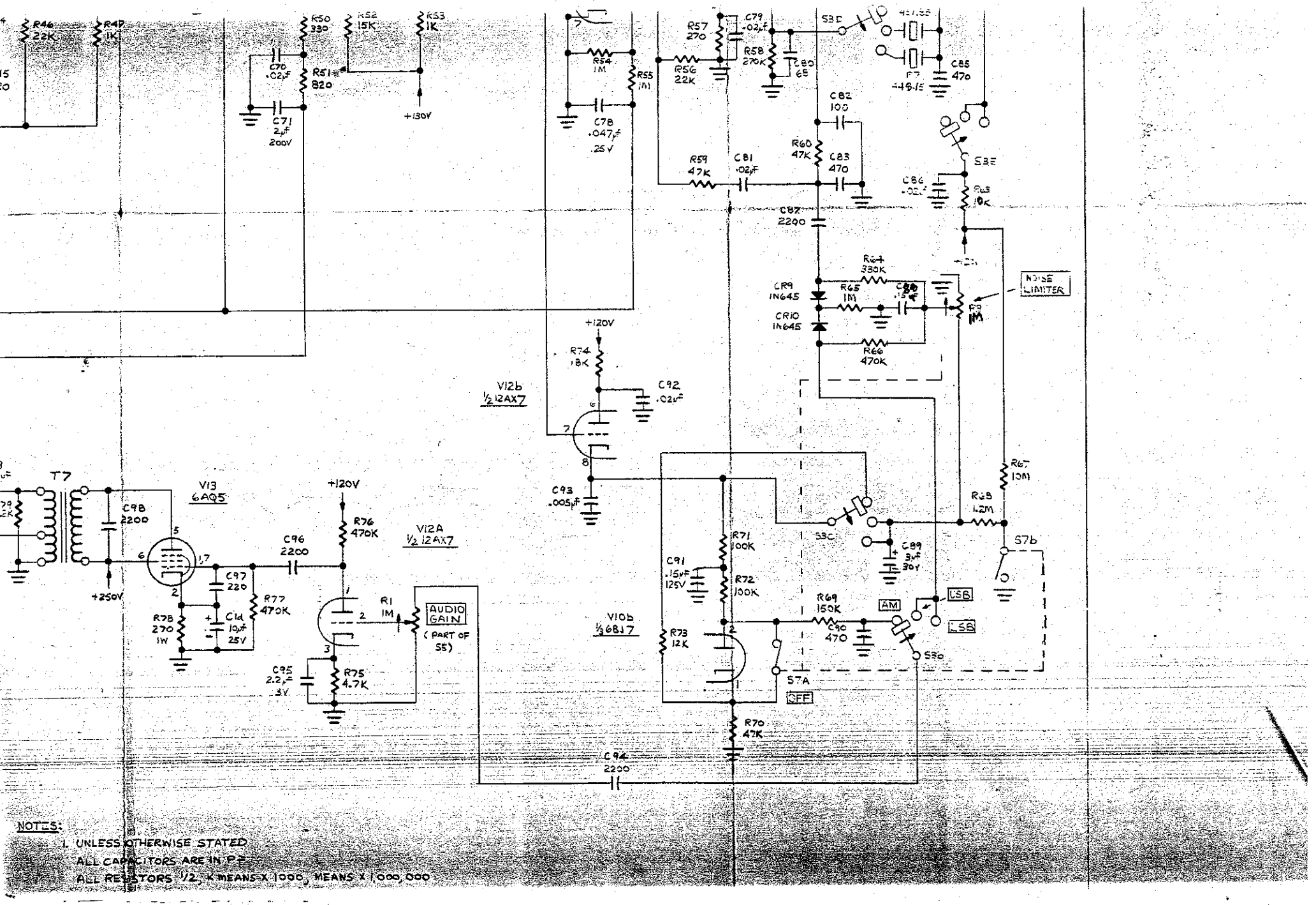
ITEM	DESCRIPTION	PART NUMBER
CR1	CRYSTAL DIODE, ED 3010	142-003
CR2	CRYSTAL DIODE, ED 3010	142-003
CR3	CRYSTAL DIODE, ED 3010	142-003
CR4	CRYSTAL DIODE, ED 3010	142-003
CR5	CRYSTAL FILTER, 10.7 mc, 3.5 K band-width	260-001
CR6	CRYSTAL, 11.1495 MC	250-002
CR7	CRYSTAL, 448.148 KC	259-000
CR8	CRYSTAL, 451.852 KC	259-002
CR9	CRYSTAL DIODE, 1N645	142-001
CR10	CRYSTAL DIODE, 1N645	142-001
CR11	CRYSTAL, 30.5 MC	250-003
CR12	CRYSTAL, 31.5 MC	250-004
CR13	CRYSTAL, 32.5 MC	250-005
CR14	CRYSTAL, 33.5 MC	250-006
CR15	CRYSTAL DIODE, IN645	142-001
CR16	CRYSTAL, VARICAP, IN3182	145-001
CR17	CRYSTAL, 94 MC	251-001
F1	FUSE, 1.5 Amp slow-blow	165-019
I1	INDICATOR LAMP #1847	150-101
I2	INDICATOR LAMP #1847	150-101
I3	INDICATOR LAMP #1847	150-101
L1	INDUCTOR, 5 T, 94 MC	191-007
L2	INDUCTOR, 5 T, #18, 1/4"	
L3	INDUCTOR, 5 T, #18, 1/4"	
L4	INDUCTOR, 4 T, #20, 1/8"	
L5	INDUCTOR, 5 T, #18, 1/4"	
L6	INDUCTOR, 7 T, #18, 1/4"	
L7	INDUCTOR, SLUG-TUNED, .5-1 uh	182-007
L8	INDUCTOR, 10 T	191-007
L9	INDUCTOR, SLUG-TUNED, .55-1.2 uh	182-012
L10	INDUCTOR, 6 T	191-007
L11	INDUCTOR, SLUG-TUNED, .5-1 uh	182-007
L12	INDUCTOR, SLUG-TUNED, 1-2 uh	182-004
L13	INDUCTOR, SLUG-TUNED, 1-2 uh	182-004
L14	INDUCTOR, SLUG-TUNED, 4-8 uh	182-009
L15	INDUCTOR, SLUG-TUNED, 4-8 uh	182-009
L16	INDUCTOR, SLUG-TUNED, 58 uh	190-008
L17	INDUCTOR, SLUG-TUNED, 1-2 uh	182-004
L18	INDUCTOR, 4 T, #22, 1/4"	
L19	INDUCTOR, 4 T, #22, 1/4"	
L20	INDUCTOR, 4 T, #22, 1/4"	
L21	INDUCTOR, SLUG-TUNED, 2.5-4.5 uh	182-006
L22	INDUCTOR, .75 mhy	190-007
L23	INDUCTOR, .75 mhy	190-007
L24	INDUCTOR, 7 uh	190-002
L25	INDUCTOR, SLUG-TUNED, 1-2 uh	182-004
L26	INDUCTOR, SLUG-TUNED, 1-2 uh	182-004
M1	METER, 1 ma	409-003

ITEM	DESCRIPTION	PART NUMBER
R1	RESISTOR, VARIABLE, COMPOSITION, 1 meg (Part of S5)	245-001
R2	RESISTOR, VARIABLE, COMPOSITION, 10 K	241-003
R3	RESISTOR, VARIABLE, COMPOSITION, 1 meg (Part of S7)	245-001
R4	RESISTOR, VARIABLE, COMPOSITION, 5 K	241-004
R5	RESISTOR, VARIABLE, COMPOSITION, 10K	241-002
R6	RESISTOR, VARIABLE, COMPOSITION, 25 K	240-003
R7	RESISTOR, FIXED, COMPOSITION, 33 ohm, 10%, 1 W	225-330
R8	RESISTOR, FIXED, COMPOSITION, 270 ohm, 10%, 1 W	225-271
R9	RESISTOR, FIXED, COMPOSITION, 270 ohm, 10%, 1 W	225-271
R10	RESISTOR, FIXED, COMPOSITION, 180 ohm, 10%, 2 W	227-181
R11	RESISTOR, FIXED, COMPOSITION, 4.7 K, 10%, 1/2 W	223-472
R12	RESISTOR, FIXED, COMPOSITION, 3.3 K, 10%, 1 W	225-332
R13	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R14	RESISTOR, FIXED, COMPOSITION, 8.2 K, 10%, 1/2 W	223-822
R15	RESISTOR, FIXED, COMPOSITION, 100 ohm, 10%, 1/2 W	223-101
R16	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R17	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R18	RESISTOR, FIXED, COMPOSITION, 2.2 K, 10%, 1/2 W	223-222
R19	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R20	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R21	RESISTOR, FIXED, COMPOSITION, 100 ohm, 10%, 1/2 W	223-101
R22	RESISTOR, FIXED, COMPOSITION, 100 ohm, 10%, 1/2 W	223-101
R23	RESISTOR, FIXED, COMPOSITION, 180 ohm, 10%, 1/2 W	223-181
R24	RESISTOR, FIXED, COMPOSITION, 4.7 K, 10%, 1/2 W	223-472
R25	RESISTOR, FIXED, COMPOSITION, 180 ohm, 10%, 1/2 W	223-181
R26	RESISTOR, FIXED, COMPOSITION, 18 ohm, 10%, 1/2 W	223-180
R27	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R28	RESISTOR, FIXED, COMPOSITION, 560 K, 10%, 1/2 W	223-564
R29	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R30	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R31	RESISTOR, FIXED, COMPOSITION, 47 ohm, 10%, 1/2 W	223-470
R32	RESISTOR, FIXED, COMPOSITION, 820 ohm, 10%, 1/2 W	223-821
R33	RESISTOR, FIXED, COMPOSITION, 220 K, 10%, 1/2 W	223-224
R34	RESISTOR, FIXED, COMPOSITION, 1.2 K, 10%, 1/2 W	223-122
R35	RESISTOR, FIXED, COMPOSITION, 2.2 K, 10%, 1/2 W	223-222
R36	RESISTOR, FIXED, COMPOSITION, 1.2 meg, 10%, 1/2 W	223-125
R37	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R38	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R39	RESISTOR, FIXED, COMPOSITION, 4.7, 10%, 1/2 W	223-472
R40	RESISTOR, FIXED, COMPOSITION, 1 K, 10%, 1/2 W	223-102
R41	RESISTOR, FIXED, COMPOSITION, 22 K, 10%, 1/2 W	223-223
R42	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R43	RESISTOR, FIXED, COMPOSITION, 47 ohm, 10%, 1/2 W	223-470
R44	RESISTOR, FIXED, COMPOSITION, 47 ohm, 10%, 1/2 W	223-470
R45	RESISTOR, FIXED, COMPOSITION, 820 ohm, 10%, 1/2 W	223-821
R46	RESISTOR, FIXED, COMPOSITION, 22 K, 10%, 1/2 W	223-223
R47	RESISTOR, FIXED, COMPOSITION, 1 K, 10%, 1/2 W	223-102
R48	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R49	RESISTOR, FIXED, COMPOSITION, 180 ohm, 10%, 1/2 W	223-181
R50	RESISTOR, FIXED, COMPOSITION, 330 ohm, 10%, 1/2 W	223-331
R51	RESISTOR, FIXED, COMPOSITION, 820 ohm, 10%, 1/2 W	223-821
R52	RESISTOR, FIXED, COMPOSITION, 15 K, 10%, 1/2 W	223-153
R53	RESISTOR, FIXED, COMPOSITION, 1 K, 10%, 1/2 W	223-102
R54	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R55	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R56	RESISTOR, FIXED, COMPOSITION, 22 K, 10%, 1/2 W	223-223
R57	RESISTOR, FIXED, COMPOSITION, 270 ohm, 10%, 1/2 W	223-271
R58	RESISTOR, FIXED, COMPOSITION, 270 K, 10%, 1/2 W	223-274
R59	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R60	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R61	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R62	RESISTOR, FIXED, COMPOSITION, 8.2 K, 10%, 1/2 W	223-822
R63	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R64	RESISTOR, FIXED, COMPOSITION, 330 K, 10%, 1/2 W	223-334
R65	RESISTOR, FIXED, COMPOSITION, 1 meg, 10%, 1/2 W	223-105
R66	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R67	RESISTOR, FIXED, COMPOSITION, 10 meg, 10%, 1/2 W	223-106
R68	RESISTOR, FIXED, COMPOSITION, 1.2 meg, 10%, 1/2 W	223-125
R69	RESISTOR, FIXED, COMPOSITION, 150 K, 10%, 1/2 W	223-154
R70	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R71	RESISTOR, FIXED, COMPOSITION, 100 K, 10%, 1/2 W	223-104
R72	RESISTOR, FIXED, COMPOSITION, 100 K, 10%, 1/2 W	223-104
R73	RESISTOR, FIXED, COMPOSITION, 12 K, 10%, 1/2 W	223-123
R74	RESISTOR, FIXED, COMPOSITION, 18 K, 10%, 1/2 W	223-183
R75	RESISTOR, FIXED, COMPOSITION, 4.7 K, 10%, 1/2 W	223-472
R76	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R77	RESISTOR, FIXED, COMPOSITION, 470 K, 10%, 1/2 W	223-474
R78	RESISTOR, FIXED, COMPOSITION, 270 ohm, 10%, 1 W	225-171
R79	RESISTOR, FIXED, COMPOSITION, 8.2 K, 10%, 1/2 W	223-822
R80	RESISTOR, FIXED, COMPOSITION, 47 K, 10%, 1/2 W	223-473
R81	RESISTOR, FIXED, COMPOSITION, 33 K, 10%, 1/2 W	223-333

PARTS LIST (Cont'd.)

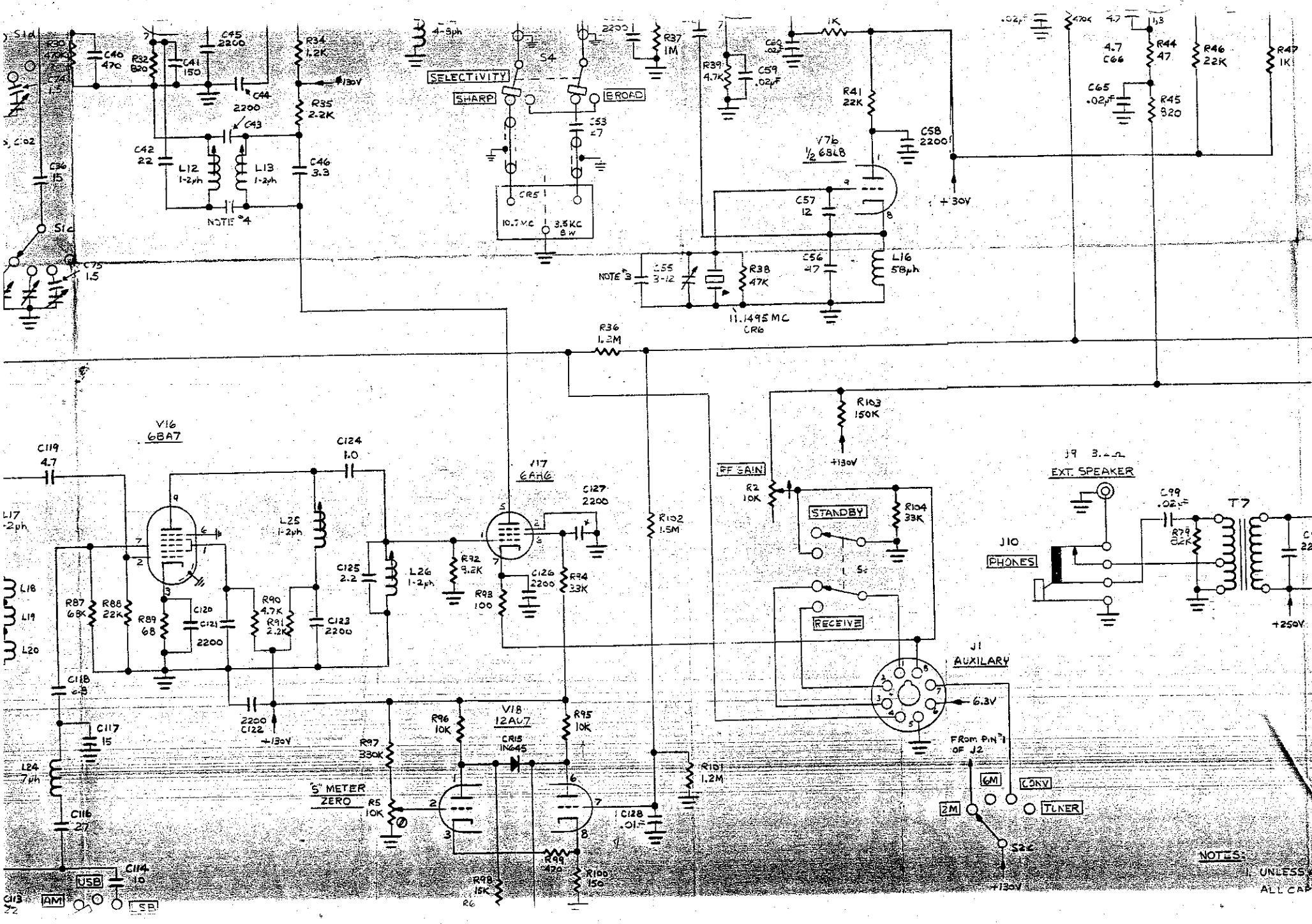
ITEM	DESCRIPTION	PART NUMBER
R82	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R83	RESISTOR, FIXED, COMPOSITION, 47 ohm, 10%, 1/2W	223-470
R84	RESISTOR, FIXED, COMPOSITION, 33 K, 10%, 1/2 W	223-333
R85	RESISTOR, FIXED, COMPOSITION, 1.8 K, 10%, 1/2 W	223-182
R86	RESISTOR, FIXED, COMPOSITION, 82 K, 10%, 1/2 W	223-823
R87	RESISTOR, FIXED, COMPOSITION, 68 K, 10%, 1/2 W	223-683
R88	RESISTOR, FIXED, COMPOSITION, 22 K, 10%, 1/2 W	223-223
R89	RESISTOR, FIXED, COMPOSITION, 68 ohm, 10%, 1/2 W	223-680
R90	RESISTOR, FIXED, COMPOSITION, 4.7 K, 10%, 1/2 W	223-472
R91	RESISTOR, FIXED, COMPOSITION, 2.2 K, 10%, 1/2 W	223-222
R92	RESISTOR, FIXED, COMPOSITION, 8.2 K, 10%, 1/2 W	223-822
R93	RESISTOR, FIXED, COMPOSITION, 100 ohm, 10%, 1/2 W	223-101
R94	RESISTOR, FIXED, COMPOSITION, 33 K, 10%, 1/2 W	223-333
R95	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R96	RESISTOR, FIXED, COMPOSITION, 10 K, 10%, 1/2 W	223-103
R97	RESISTOR, FIXED, COMPOSITION, 330 K, 10%, 1/2 W	223-334
R98	RESISTOR, FIXED, COMPOSITION, 15 K, 10%, 1/2 W	223-153
R99	RESISTOR, FIXED, COMPOSITION, 470 ohm, 10%, 1/2 W	223-471
R100	RESISTOR, FIXED, COMPOSITION, 150 ohm, 10%, 1/2 W	223-151
R101	RESISTOR, FIXED, COMPOSITION, 1.2 meg, 10%, 1/2 W	223-125
R102	RESISTOR, FIXED, COMPOSITION, 1.5 meg, 10%, 1/2 W	223-155
R103	RESISTOR, FIXED, COMPOSITION, 150 K, 10%, 1/2 W	223-154
R104	RESISTOR, FIXED, COMPOSITION, 33 K, 10%, 1/2 W	223-333
S1A	SWITCH, 4 pole, 5 position (1 position unused)	272-004
S1B	SWITCH, 4 pole, 5 position (1 position unused)	272-004
S1C	SWITCH, 2 wafers (Non-shorting)	272-004
S1D	SWITCH, 2 wafers (Non-shorting)	272-004
S2A	SWITCH, 4 pole, 4 position, 2 wafers (Non-shorting)	274-001
S2B	SWITCH, 4 pole, 4 position, 2 wafers (Non-shorting)	274-001
S2C	SWITCH, 4 pole, 4 position, 2 wafers (Non-shorting)	274-001
S2D	SWITCH, 4 pole, 4 position, 2 wafers (Non-shorting)	274-001
S3A	SWITCH, 6 pole (1 pole unused), 3 position, 1 wafer, (shorting)	276-001
S3B	SWITCH, 6 pole (1 pole unused), 3 position, 1 wafer, (shorting)	276-001
S3C	SWITCH, 6 pole (1 pole unused), 3 position, 1 wafer, (shorting)	276-001
S3D	SWITCH, 6 pole (1 pole unused), 3 position, 1 wafer, (shorting)	276-001
S3E	SWITCH, 6 pole (1 pole unused), 3 position, 1 wafer, (shorting)	276-001
S4A	SWITCH, 2 pole, 2 position, 1 wafer (shorting)	272-001
S4B	SWITCH, 2 pole, 2 position, 1 wafer (shorting)	272-001
S5	SWITCH, Part of R1	
S6	SWITCH, DPDT Toggle	283-001
S7A	SWITCH, Part of R3	
S7B	SWITCH, Part of R3	
T1	TRANSFORMER, POWER	601-008
T2	TRANSFORMER, IF 10.7 MC	602-002
T3	TRANSFORMER, IF 455 KC	602-001
T4	TRANSFORMER, IF 455 KC	602-001
T5	TRANSFORMER, IF 455 KC	602-001
T6	TRANSFORMER, IF 455 KC	602-001
T7	TRANSFORMER, AUDIO OUTPUT	603-003
V1	TUBE, 6CW4	216-020
V2	TUBE, 6CW4	216-020
V3	TUBE, 6CW4	216-020
V4	TUBE, 6CW4	216-020
V5	TUBE, 6CW4	216-020
V6	TUBE, 6BL8	216-012
V7	TUBE, 6BL8	216-012
V8	TUBE, 6EH7	216-023
V9	TUBE, 6EH7	216-023
V10	TUBE, 6BJ7	216-011
V11	TUBE, 6BE6	216-010
V12	TUBE, 12AX7	211-003
V13	TUBE, 6AQ5	216-006
V14	TUBE, 6CW4	216-020
V15	TUBE, 6CW4	216-020
V16	TUBE, 6BA7	216-029
V17	TUBE, 6AH6	216-002
V18	TUBE, 12AU7	211-002
V19	TUBE, 063	210-002

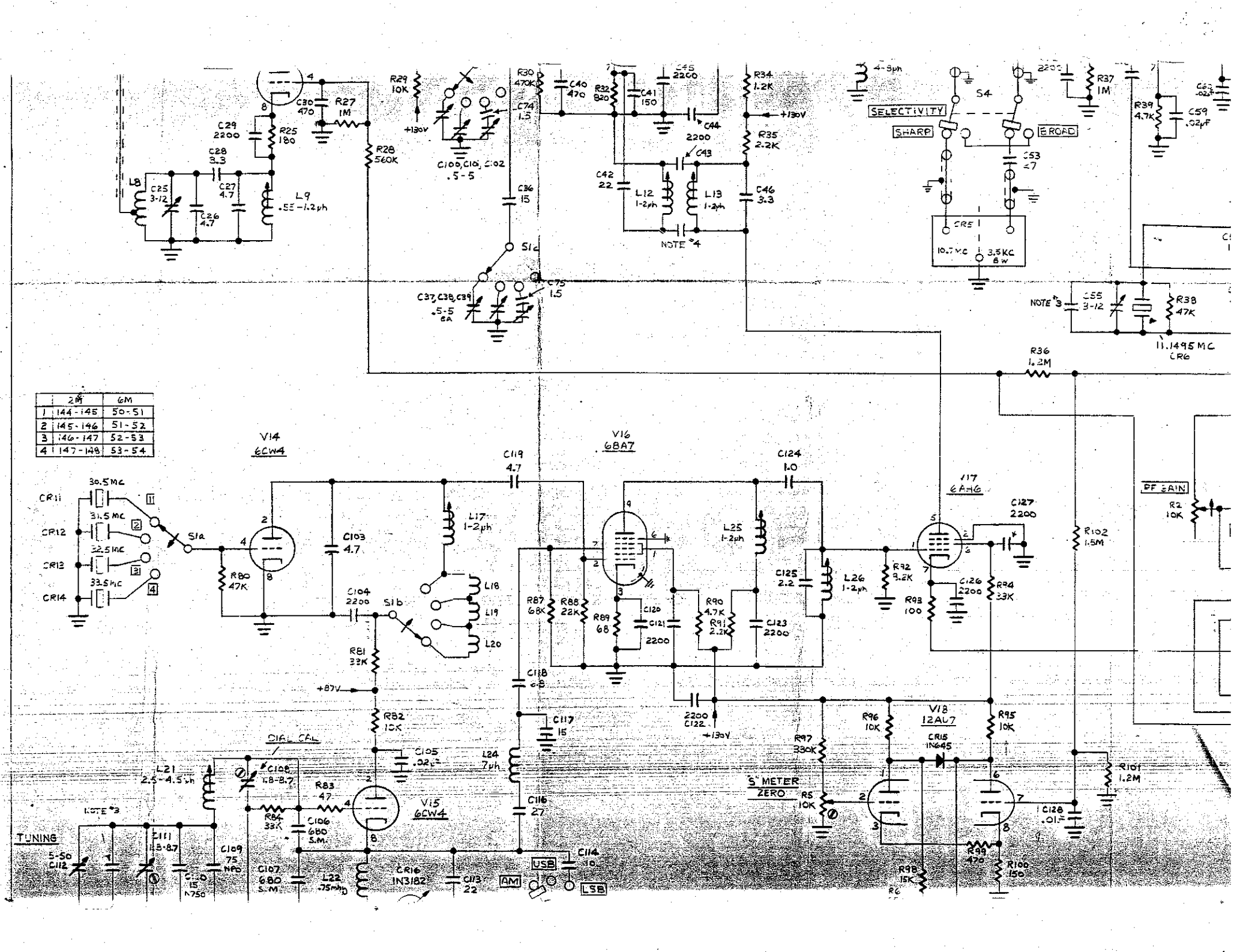

6M ANT
CONVERTER
S2d
CONVERTER
6M
TUNER
2M
S2c
R21 100
C22 150
R20 10K
C19 1.0
R18 2.2K
C14 175
R17 470K
C20 2200
C9 .5-5
L1 94MC
R14 8.2K
C47 100
J8 10.7MC
V6 6BL8
C48 15
T2 10.7M
C35 1.0
R26 18
C31 .5-5
C33 2.2
C34 6-8
L10
C32 470
V5 6CW4
R29 10K
+190V
S1d
R30 470K
C40 470
R31 47
L11 .5-1μh
R33 220K
C45 2200
R32 820
C41 150
C44
R34 1.2K
C74 1.5
C100, C101, C102 .5-5
C30 470
R27 1M
C29 2200
R25 180
R28 560K
C28 3.3
C25 3-12
C27 4.7
C26 4.7
L8
L9 .55-1.2μh
C36 15
S1c
C75 1.5
C37, C38, C39 .5-5 ea
C42 22
L12 1-2μh
L13 1-2μh
C43 2200
NOTE #4

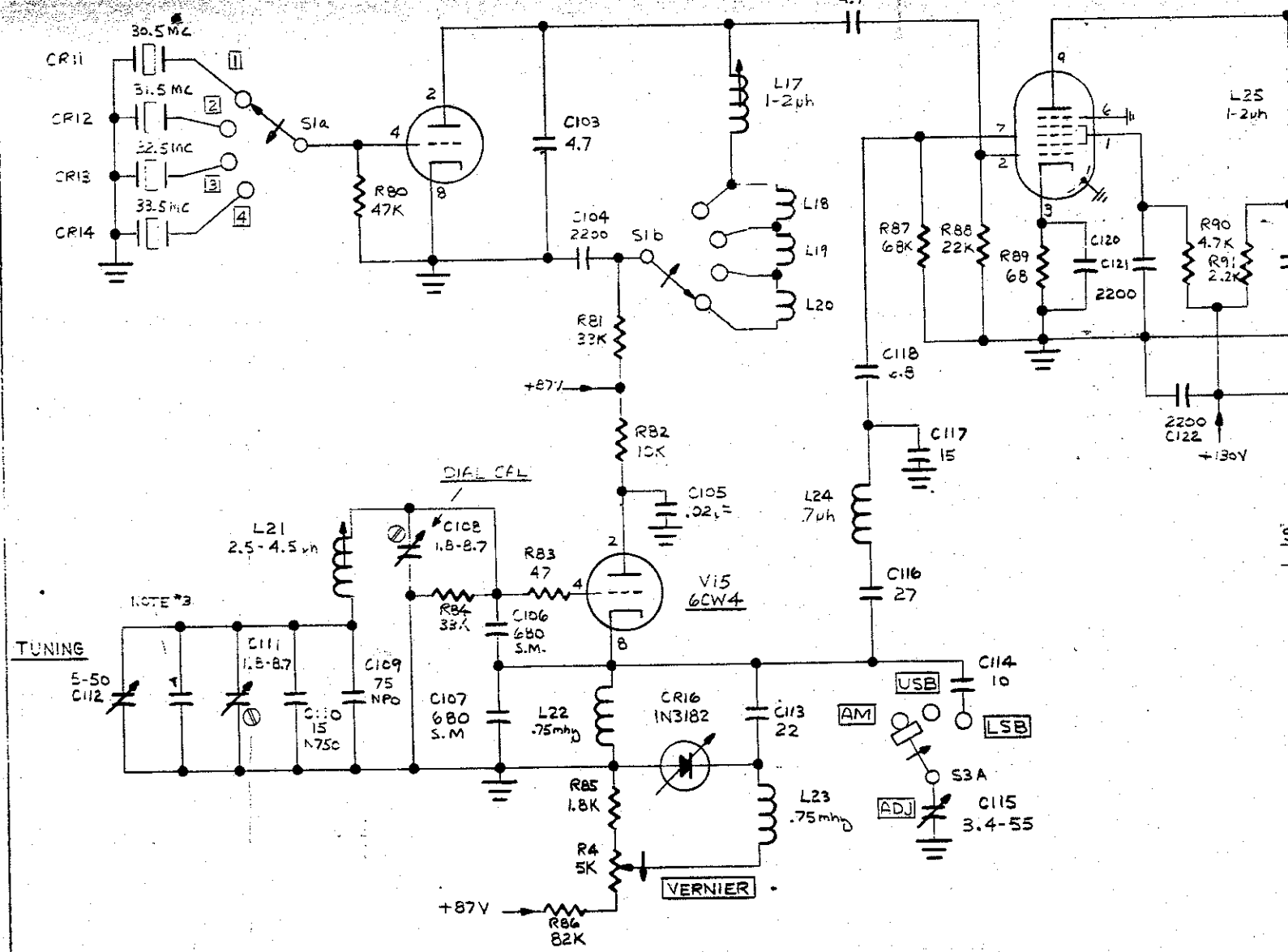


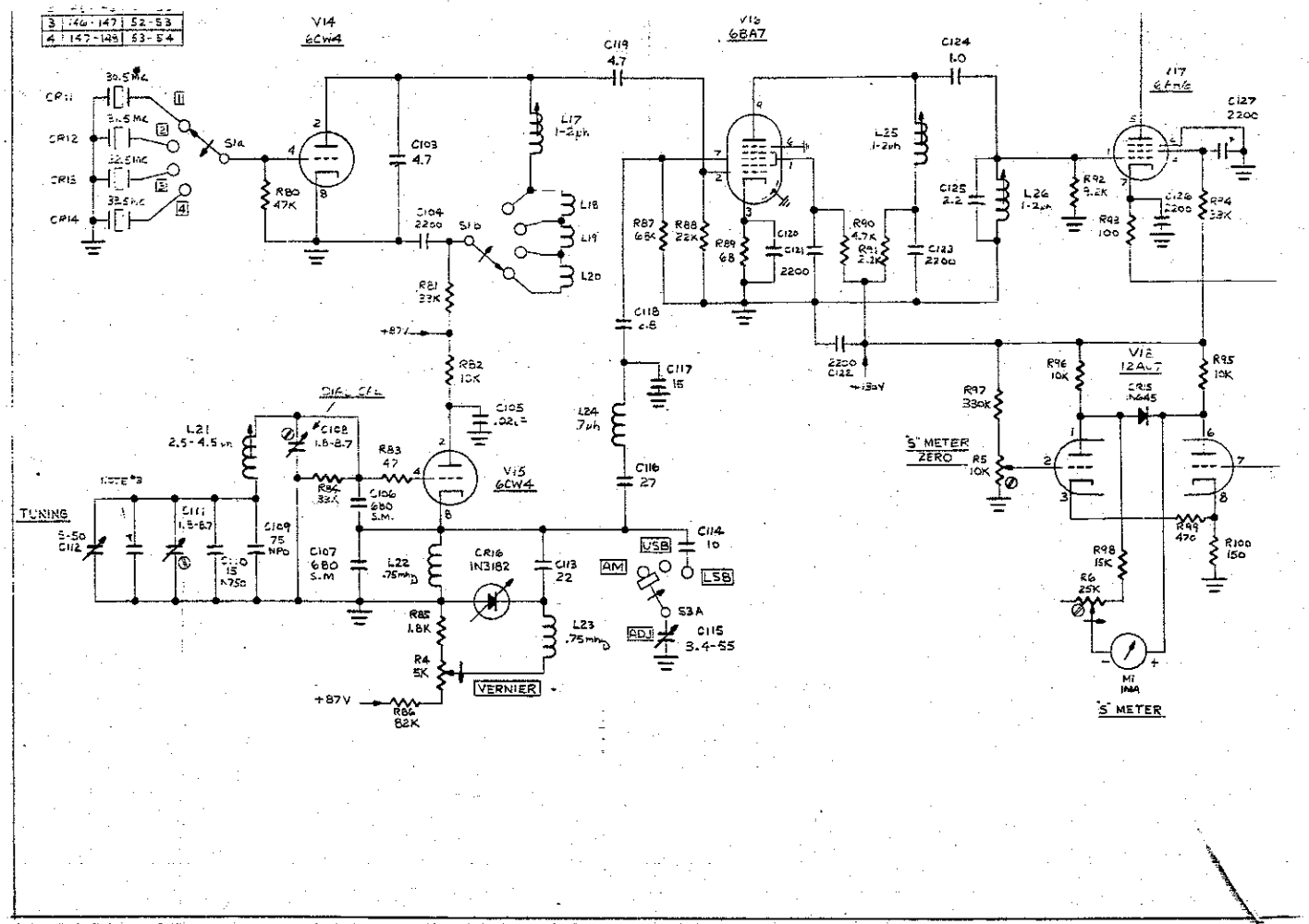
NOTES:

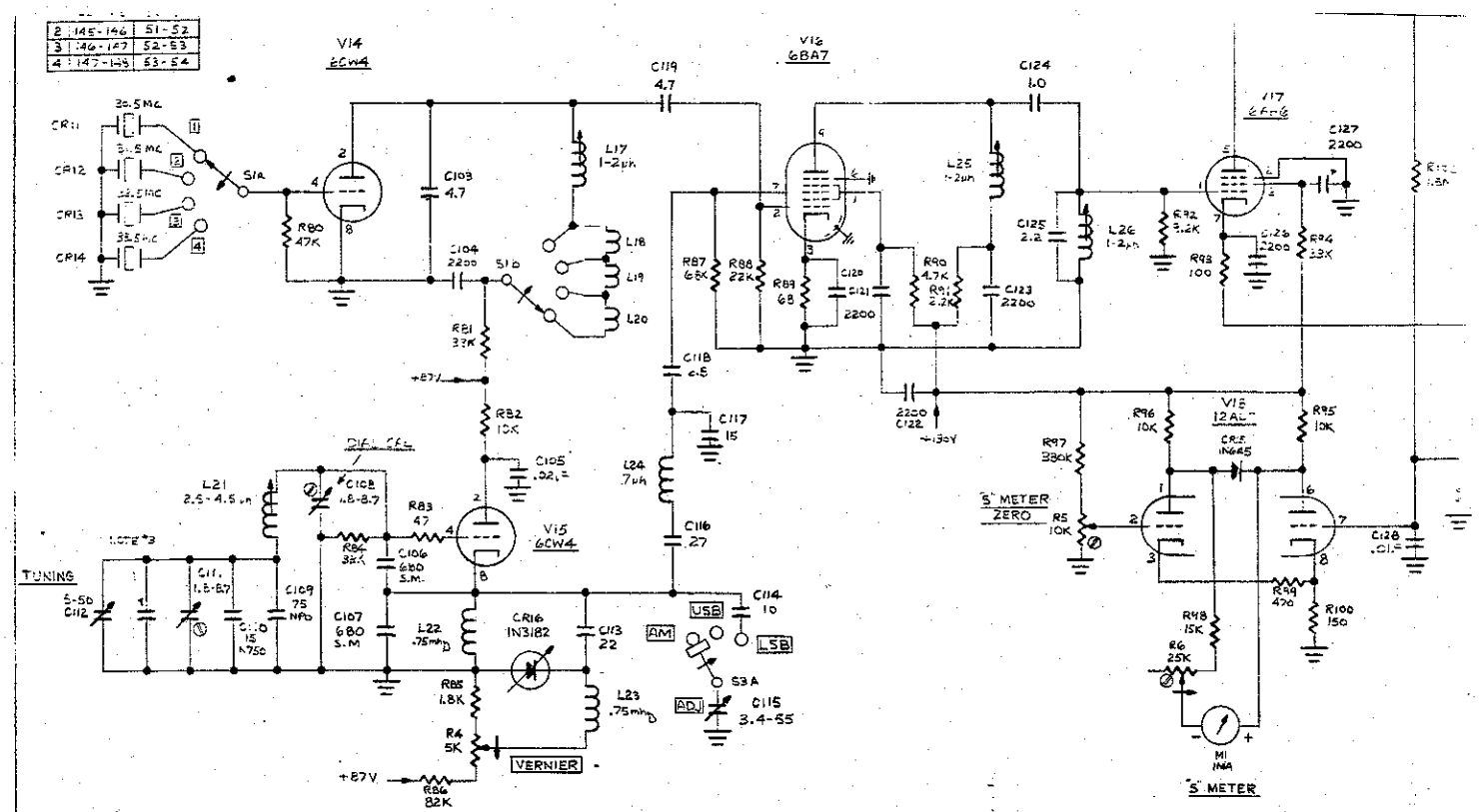
1. UNLESS OTHERWISE STATED
   ALL CAPACITORS ARE IN PF
   ALL RESISTORS 1/2, K MEANS X 1000, MEANS X 1,000,000

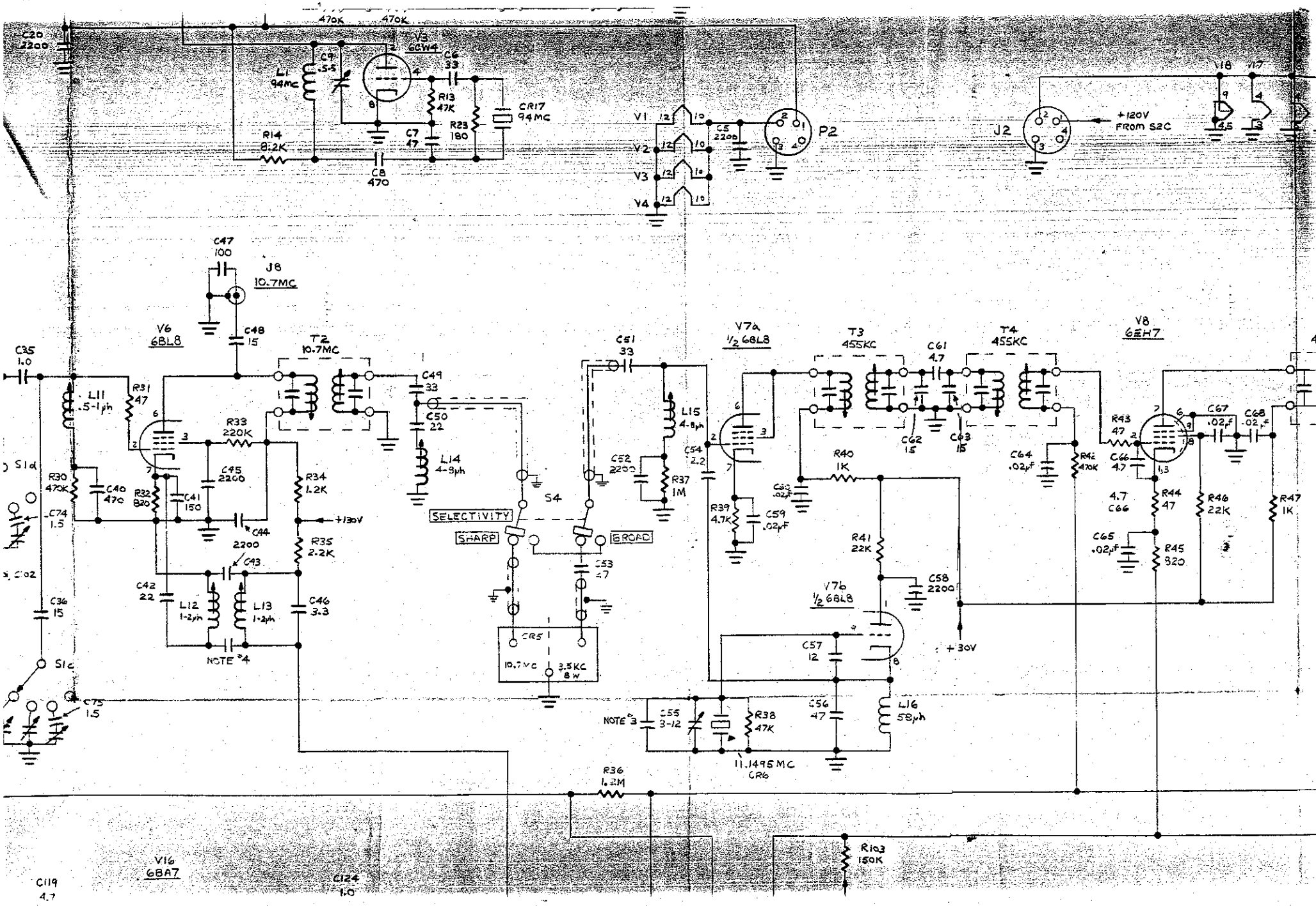

SELECTIVITY
SHARP
BROAD
S4
CR5
10.7 MC
3.5 KC BW
V7b
½ 6BA8
+130V
+30V
11.1495 MC
CR6
V16
6BA7
V17
6AH6
V18
12AU7
CR15
1N645
RF GAIN
STANDBY
RECEIVE
J9
EXT. SPEAKER
J10
PHONES
J1
AUXILARY
6.3V
+250V
FROM PIN 7 OF J2
6M
CONV
2M
TUNER
S2C
USB
AM
LSB
S" METER
ZERO
NOTE 3
NOTE 4
NOTES:
1. UNLESS
ALL CAP

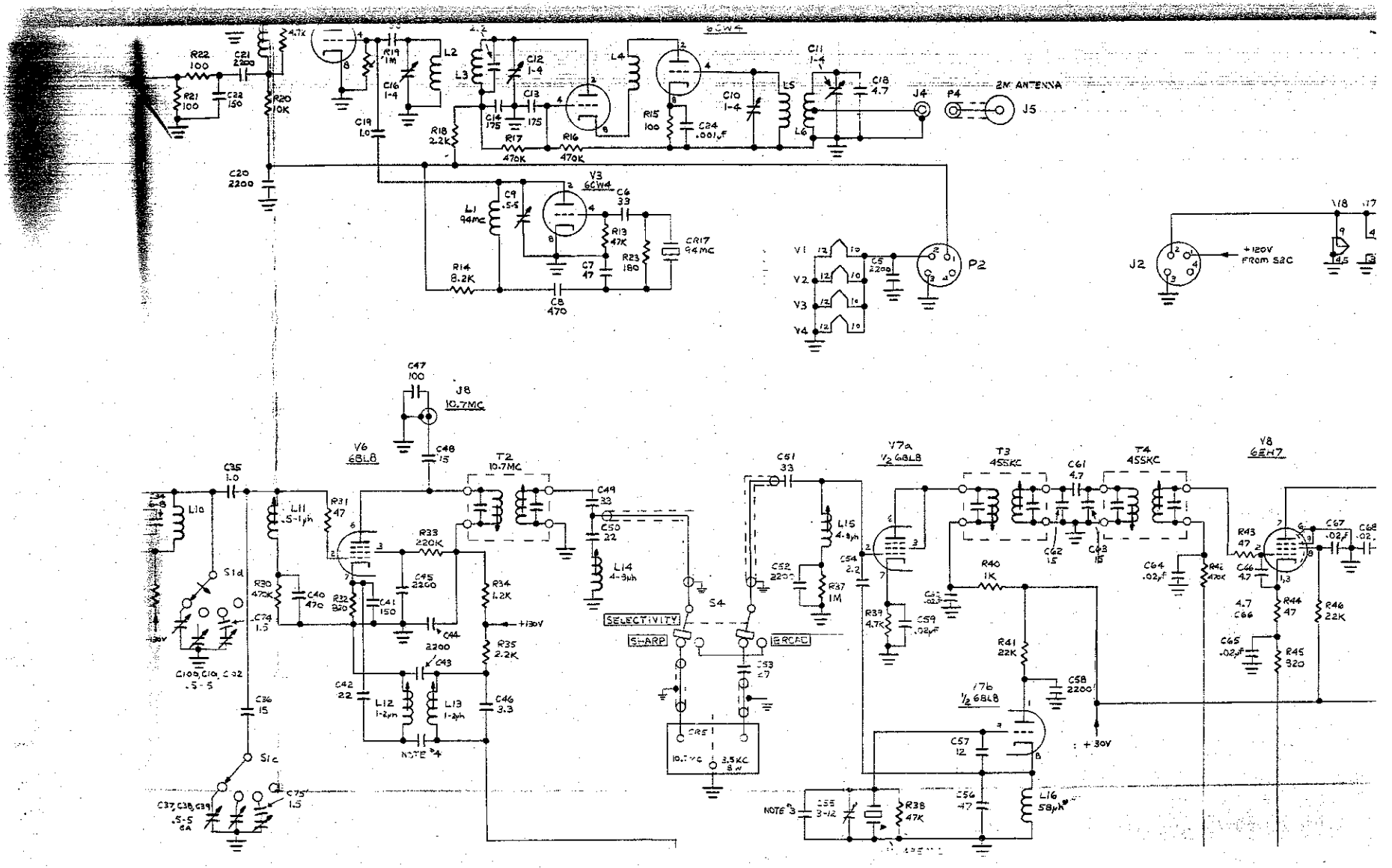

L8
C25 3-12
C26 4.7
C27 4.7
C28 3.3
C29 2200
R25 180
C30 470
R27 1M
R28 560K
L9 .55-1.2μh
R29 10K
+130V
C100, C101, C102 .5-5
C74 1.5
R30 470K
C40 470
R32 820
C41 150
C45 2200
C44 2200
R34 1.2K
R35 2.2K
C43
C42 22
L12 1-2μh
L13 1-2μh
C46 3.3
NOTE #4
S1c
C75 1.5
C37, C38, C39 .5-5
6A
4-8μh
S4
SELECTIVITY
SHARP
BROAD
CR5
10.7 MC
3.5KC BW
220Ω
R37 1M
R39 4.7K
C59 .02μF
C63 .02μF
NOTE #3
C55 3-12
R38 47K
11.1495 MC
CR6
R36 1.2M
R102 1.5M
RF GAIN
R2 10K
2M
6M
1 144-145 50-51
2 145-146 51-52
3 146-147 52-53
4 147-148 53-54
V14 6CW4
CR11 30.5 MC
CR12 31.5 MC
CR13 32.5 MC
CR14 33.5 MC
S1a
R80 47K
C103 4.7
C104 2200
S1b
L17 1-2μh
L18
L19
L20
C119 4.7
V16 6BA7
C124 1.0
L25 1-2μh
C125 2.2
L26 1-2μh
R87 68K
R88 22K
R89 68
C120
C121
2200
R90 4.7K
R91 2.2K
C123 2200
C118 6.8
C122 2200
+130V
V17 6AH6
C127 2200
R92 9.2K
R93 100
C126 2200
R94 33K
R81 33K
+87V
R82 10K
C105 .02
L24 7μh
C117 15
C116 27
V15 6CW4
R83 47
R84 33K
C106 680 S.M.
DIAL CAL
L21 2.5-4.5μh
C108 4.8-8.7
NOTE #3
TUNING
5-50
C112
C111 4.8-8.7
C109 75 NPO
C110 15 N750
C107 680 S.M.
L22 .75mh
CR16 IN3182
C113 22
USB
AM
LSB
C114 10
V18 12AU7
CR15 IN645
R96 10K
R97 330K
R95 10K
'S' METER ZERO
R5 10K
R101 1.2M
C128 .01
R99 470
R100 150
R98 15K
R6

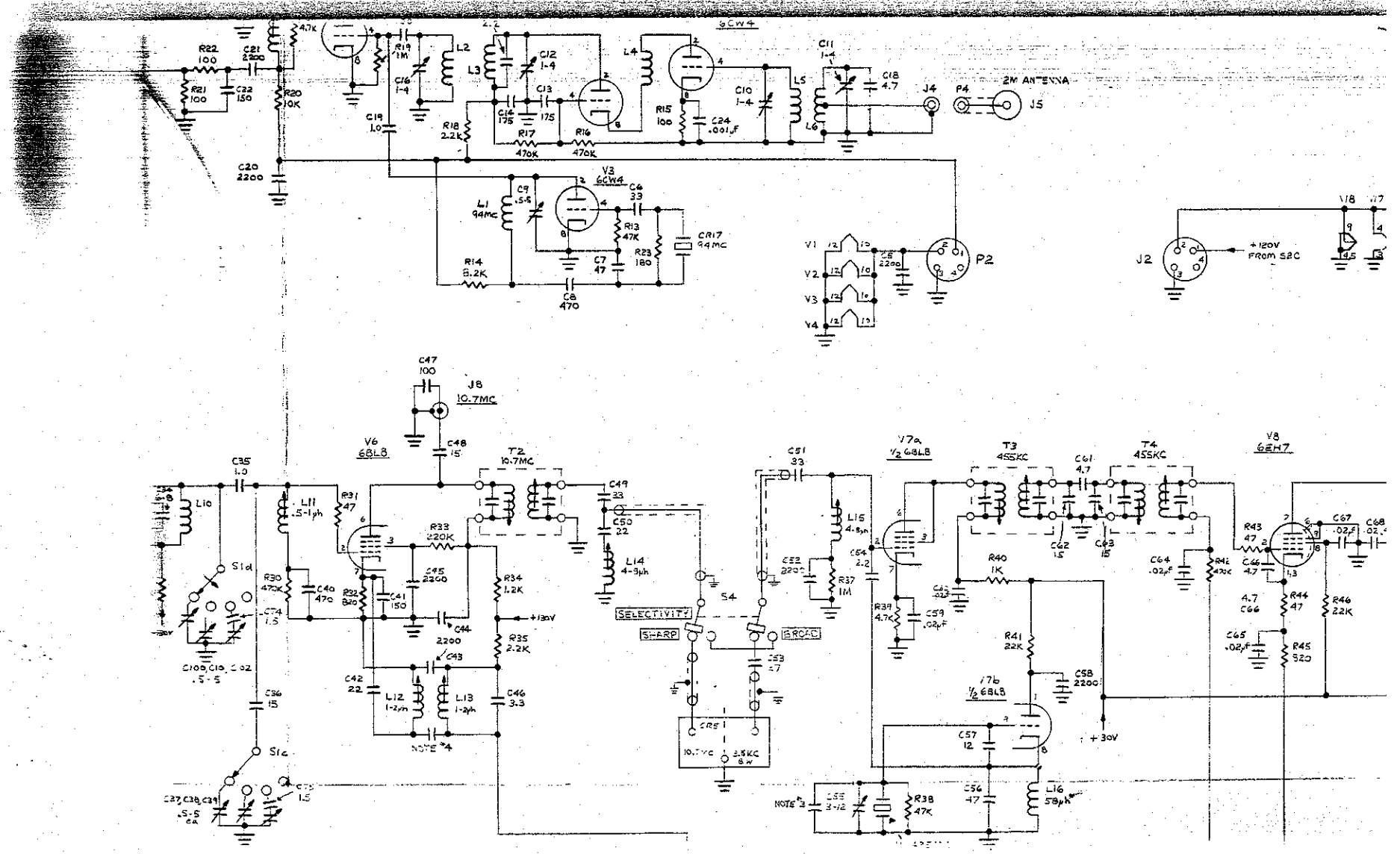

30.5 MC
CR11
31.5 MC
CR12
32.5 MC
CR13
33.5 MC
CR14
S1a
S1b
R80 47K
C103 4.7
C104 2200
L17 1-2μh
L18
L19
L20
R81 33K
+87V
R82 10K
C105 .02
DIAL CAL
C108 1.8-8.7
L21 2.5-4.5 μh
R83 47
R84 33K
C106 680 S.M.
V15 6CW4
NOTE *3
TUNING
C112 5-50
C111 1.8-8.7
C110 15 N750
C109 75 NPO
C107 680 S.M
L22 .75mhD
CR16 IN3182
C113 22
R85 1.8K
R4 5K
VERNIER
R86 82K
+87V
C118 .8
C117 15
L24 .7μh
C116 27
USB
AM
LSB
C114 10
S3A
ADJ
C115 3.4-55
L25 1-2μh
R87 68K
R88 22K
R89 68
C120
C121 2200
R90 4.7K
R91 2.2K
2200 C122
+130V

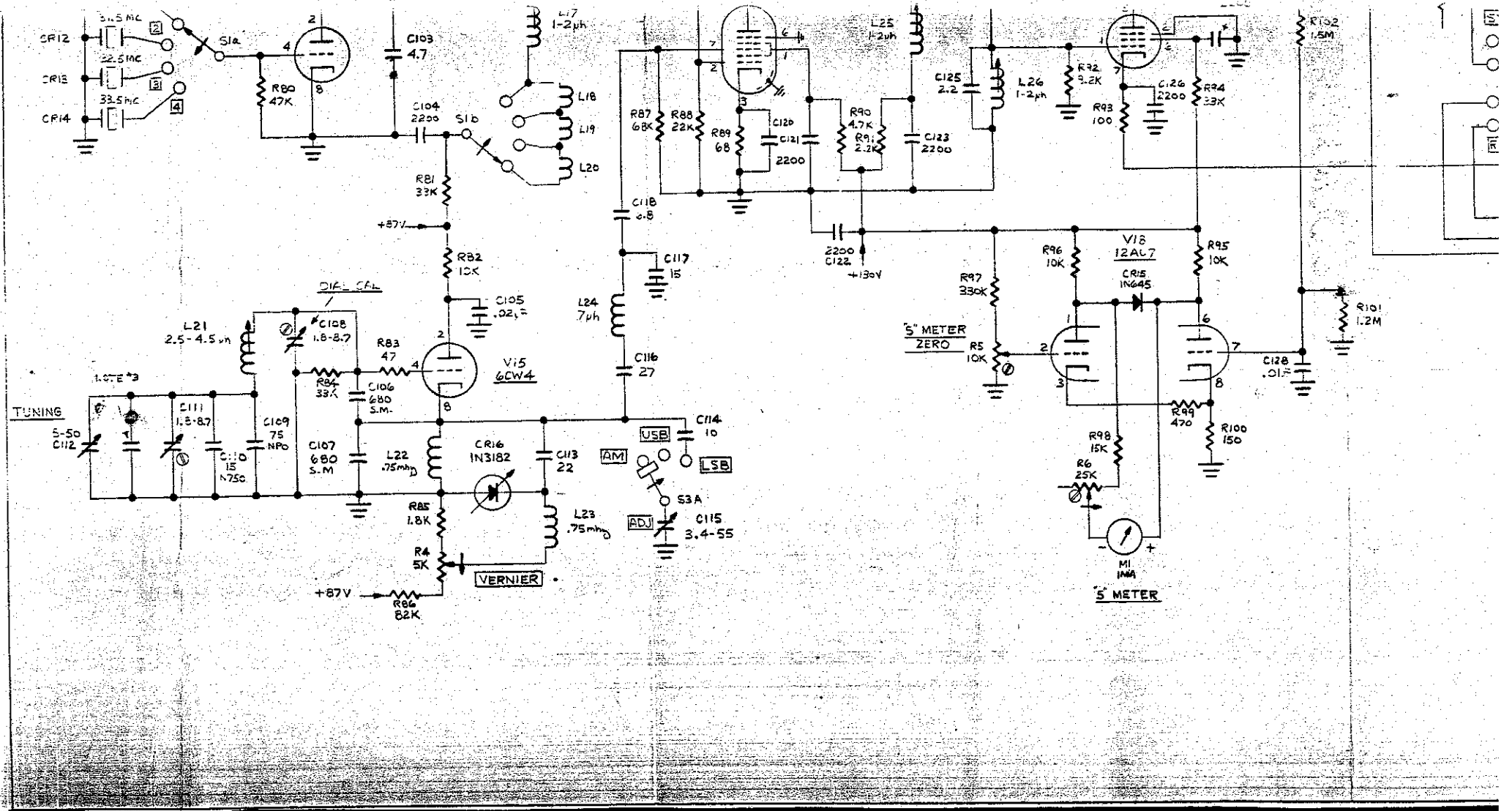

3 | 140 - 147 | 52 - 53
4 | 147 - 148 | 53 - 54
V14
6CW4
30.5 MC
CR11
CR12
CR13
CR14
SW a
R80 47K
C103 4.7
C104 2200
SW b
L17 1-2μh
L18
L19
L20
C119 4.7
V12
6BA7
C124 1.0
L25 1-2μh
C125 2.2
L26 1-2μh
R87 68K
R88 22K
R89 68
C120
C121 2200
R90 4.7K
R91 2.2K
C123 2200
C118 .68
C117 15
2200 C122
+13V
R81 33K
+87V
R82 10K
C105 .02μf
L24 .7μh
C116 27
V15
6CW4
L21 2.5-4.5 μh
C108 1.8-8.7
R83 47
R84 33K
C106 680 S.M.
C107 680 S.M.
L22 .75mh
CR16 IN3182
C113 22
C114 10
USB
AM
LSB
S3A
ADJ
C115 3.4-55
R85 1.8K
R4 5K
VERNIER
+87V
R86 82K
TUNING
C112
C111 1.8-8.7
C110 15
C109 75 NPD
NOTE #3
V17
6AL6
C127 220C
C126 220C
R92 9.2K
R94 33K
R93 100
V18
12AU7
CR15 1N645
R96 10K
R95 10K
R97 330K
R5 10K
'S' METER ZERO
R99 470
R100 150
R98 15K
R6 25K
M1 1MA
'S' METER

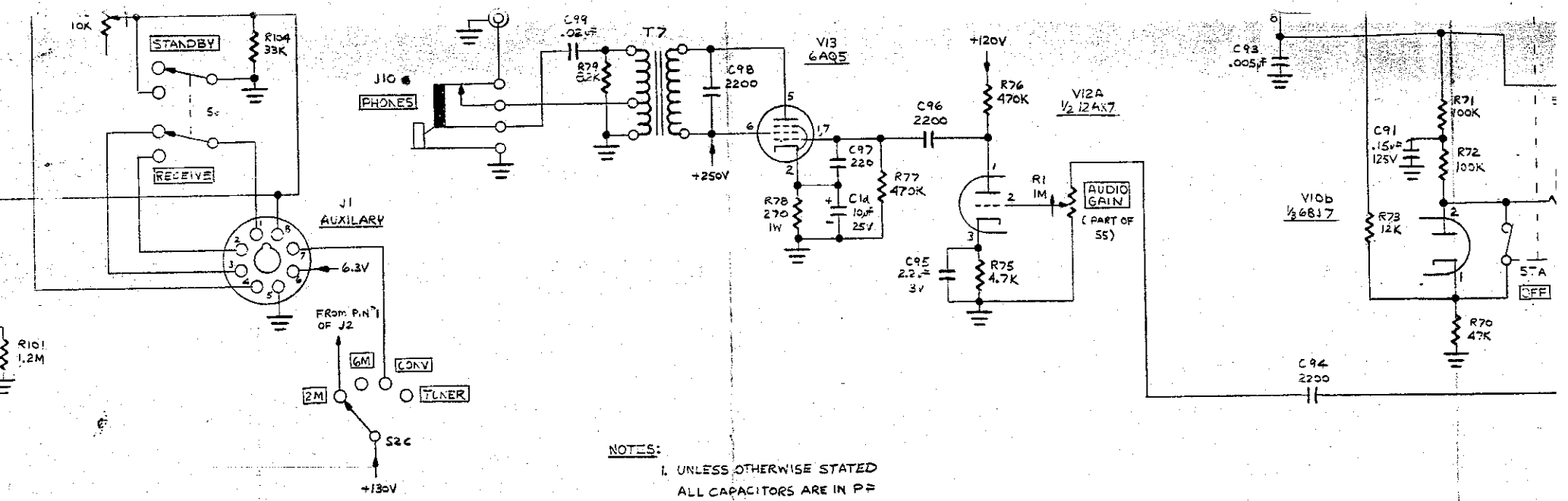

2 | 145-146 | 51-52
3 | 146-147 | 52-53
4 | 147-148 | 53-54
V14 6CW4
V16 6BA7
V17 6FM6
V15 6CW4
V18 12AL7
CR11
CR12
CR13
CR14
38.5MC
S1A
S1B
C119 4.7
C124 1.0
C127 2200
C104 2200
C108 4.7
L17 1-2μh
L18
L19
L20
L25 1-2μh
L26 1-2μh
C125 2.2
C123 2200
C126 2200
R80 47K
R81 33K
R82 10K
R87 68K
R88 22K
R89 68
R90 4.7K
R91 2.2K
R92 3.2K
R93 100
R94 33K
R95 10K
R96 10K
R97 330K
R98 15K
R99 470
R100 150
R5 10K
R6 25K
R4 5K
R84 82K
R85 1.8K
C118 .05
C117 15
C116 .27
C114 10
C115 3.4-55
C105 .02μF
C106 680 S.M.
C107 680 S.M.
C109 75 NPO
C110 15 N750
C111 1.8-8.7
C112 5-50
C113 22
C122 2200
C128 .01
L21 2.5-4.5μh
L22 .75mhD
L23 .75mhD
L24 .7μh
CR16 IN3182
CR15 IN645
R83 47
R86 33K
TUNING
VERNIER
USB
LSB
AM
ADJ
S3A
+87V
+135V
"S" METER ZERO
M1 1MA
"S" METER


C20 .2200
470K
470K
V3 6CW4
C9 .5-5
L1 94MC
C6 33
R13 47K
R23 180
CR17 94MC
R14 8.2K
C7 47
C8 470
V1
V2
V3
V4
C5 2200
P2
J2
+120V FROM S2C
V18
V17
C47 100
J8 10.7MC
C48 15
V6 6BL8
T2 10.7MC
C35 1.0
L11 .5-1μh
R31 47
R33 220K
C49 33
C50 22
L14 4-8μh
R30 470K
C40 470
R32 820
C41 150
C45 2200
R34 1.2K
+130V
C74 1.5
C44 2200
C43
R35 2.2K
C42 22
L12 1-2μh
L13 1-2μh
C46 3.3
NOTE #4
C36 15
S1c
C75 1.5
S1d
C102
SELECTIVITY
SHARP
BROAD
S4
C51 33
C52 2200
L15 4-8μh
R37 1M
CR5
10.7MC
3.5KC BW
C53 47
V7a 1/2 6BL8
C54 2.2
R39 4.7K
C59 .02μF
C63 .02μF
R40 1K
T3 455KC
C61 4.7
C62 15
C63 15
T4 455KC
V8 6EH7
C64 .02μF
R42 470K
R43 47
C66 4.7
C67 .02μF
C68 .02μF
R44 47
R46 22K
R47 1K
C65 .02μF
R45 820
R41 22K
C58 2200
V7b 1/2 6BL8
C57 12
+30V
C55 3-12
NOTE #3
R38 47K
C56 47
L16 58μh
11.1495 MC
CR6
R36 1.2M
R103 150K
V16 6BA7
C119 4.7
C124 1.0


6CW4
R22 100
C21 2200
R21 100
C22 150
R20 10K
4.7K
R19 1M
C16 1-4
L2
L3
C12 1-4
C14 175
C13 175
R18 2.2K
R17 470K
R16 470K
L4
L5
C10 1-4
C11 1-4
C18 4.7
R15 100
C24 .001μF
J4
P4
2M ANTENNA
J5
C19 1.0
C20 2200
V3 6CW4
L1 94mc
C9 .5-5
C4 33
R13 47K
CR17 94MC
R23 180
C7 47
R14 8.2K
C8 470
V1
V2
V3
V4
C5 2200
P2
J2
+120V FROM S2C
V18
V17
J8 10.7MC
C47 100
C48 15
V6 6BL8
T2 10.7MC
C35 1.0
L10
L11 .5-1μh
R31 47
R33 220K
R30 470K
C40 470
R32 820
C41 150
C45 2200
C44 2200
C43
R34 4.2K
R35 2.2K
+130V
C42 22
L12 1-2μh
L13 1-2μh
C46 3.3
NOTE #4
C49 33
C50 22
L14 4-9μh
S1d
S1c
C74 1.5
C75 1.5
C36 15
C109, C110, C102 .5-5
C37, C38, C39 .5-5 6A
SELECTIVITY
SHARP
BROAD
S4
CR51
10.7MC 3.5KC 8.2K
C61 33
L15 4-9μh
C52 220
C54 2.2
R37 1M
R39 4.7K
C59 .05μF
V7a 1/2 6BL8
T3 455KC
C62 15
C63 15
T4 455KC
C61 4.7
C64 .02μF
C60 .02μF
R40 1K
R41 22K
C58 2200
V7b 1/2 6BL8
C57 12
+30V
C55 3-12
NOTE #3
R38 47K
C56 47
L16 58μh
V8 6EM7
R43 47
C67 .02μF
C68 .02μF
C66 4.7
C46 4.7
R44 47
R46 22K
C65 .02μF
R45 320


6CW4
2M ANTENNA
J4
P4
J5
V3 6CW4
P2
J2
+120V FROM S2C
J8 10.7MC
V6 6BL8
T2 10.7MC
V7a ½ 6BL8
T3 455KC
T4 455KC
V8 6EM7
V7b ½ 6BL8
SELECTIVITY
SHARP
BROAD
+130V
+30V
NOTE #4
NOTE #3

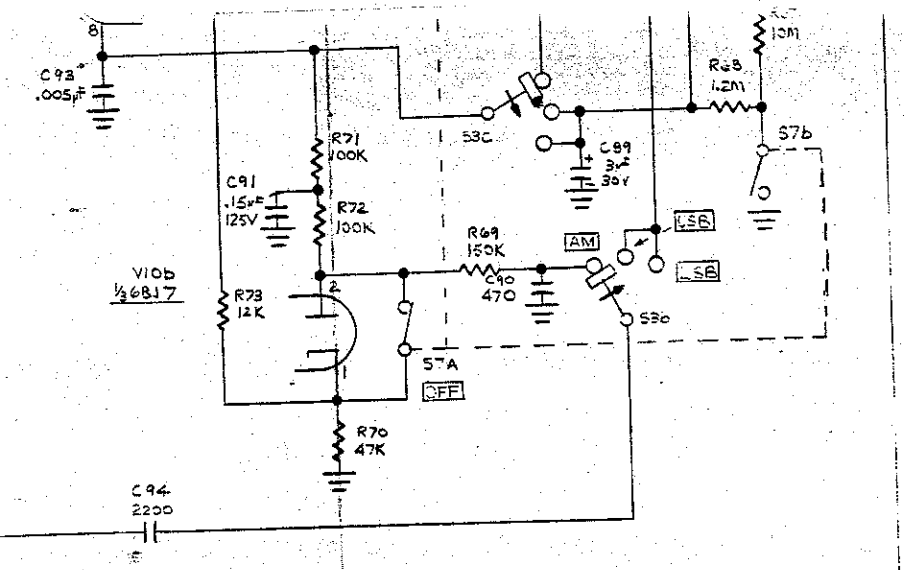

CR12
CR13
CR14
3.5 MC
22.5 MC
33.5 MC
S1a
R80 47K
C103 4.7
C104 2200
S1b
L17 1-2μh
L18
L19
L20
R81 33K
+87V
R82 10K
C105 .02μF
DIAL CAL
L21 2.5-4.5 μh
C108 1.8-8.7
R83 47
R84 33K
C106 680 S.M.
V15 6CW4
NOTE *3
TUNING
5-50 C112
C111 1.8-8.7
C109 75 NPO
C110 15 N750
C107 680 S.M.
L22 .75mh
CR16 IN3182
C113 22
R85 1.8K
R4 5K
VERNIER
L23 .75mh
+87V
R86 82K
C118 6.8
C117 15
L24 7μh
C116 27
C114 10
USB
AM
LSB
S3A
ADJ
C115 3.4-55
R87 68K
R88 22K
R89 68
C120
C121
2200
R90 4.7K
R91 2.2K
C123 2200
L25 1-2μh
C125 2.2
L26 1-2μh
2200 C122
+130V
R92 9.2K
R93 100
C126 2200
R94 33K
R102 1.5M
R96 10K
V18 12AU7
CR15 IN645
R95 10K
R97 330K
"S" METER ZERO
R5 10K
R101 1.2M
C128 .01μF
R99 470
R100 150
R98 15K
R6 25K
M1 1MA
"S" METER



NOTES:

1. UNLESS OTHERWISE STATED
   ALL CAPACITORS ARE IN PF
   ALL RESISTORS 1/2, K MEANS X 1000, MEANS X 1,000,000
2. ▭ INDICATES FRONT PANEL FACILITY
3. FACTORY SELECTED + ADDED
4. LEADS TWISTED TO ADD
5. S1 IS SHOWN IN THE "1" POSITION
   S2 " " " " "2M "
   S3 " " " " "AM "
   S4 " " " " "SHARP"
   S5 " " " " "OFF "
   S6 " " " " "STANDBY "
   S7 " " " " "NOISE LIMITER OFF POSITION

REVISIONS		
NO	DATE	BY
A		
B		
C		
D		
E		

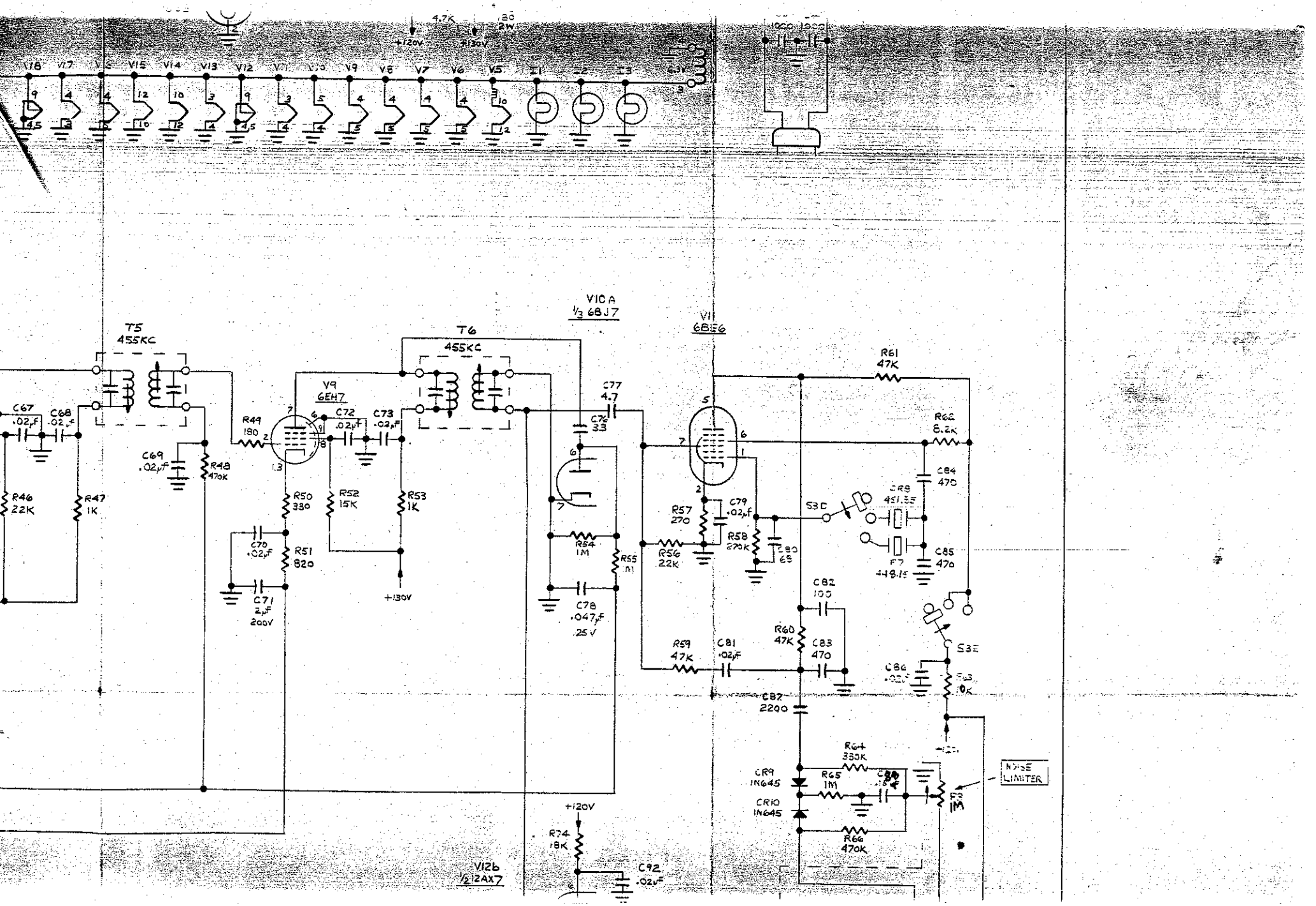


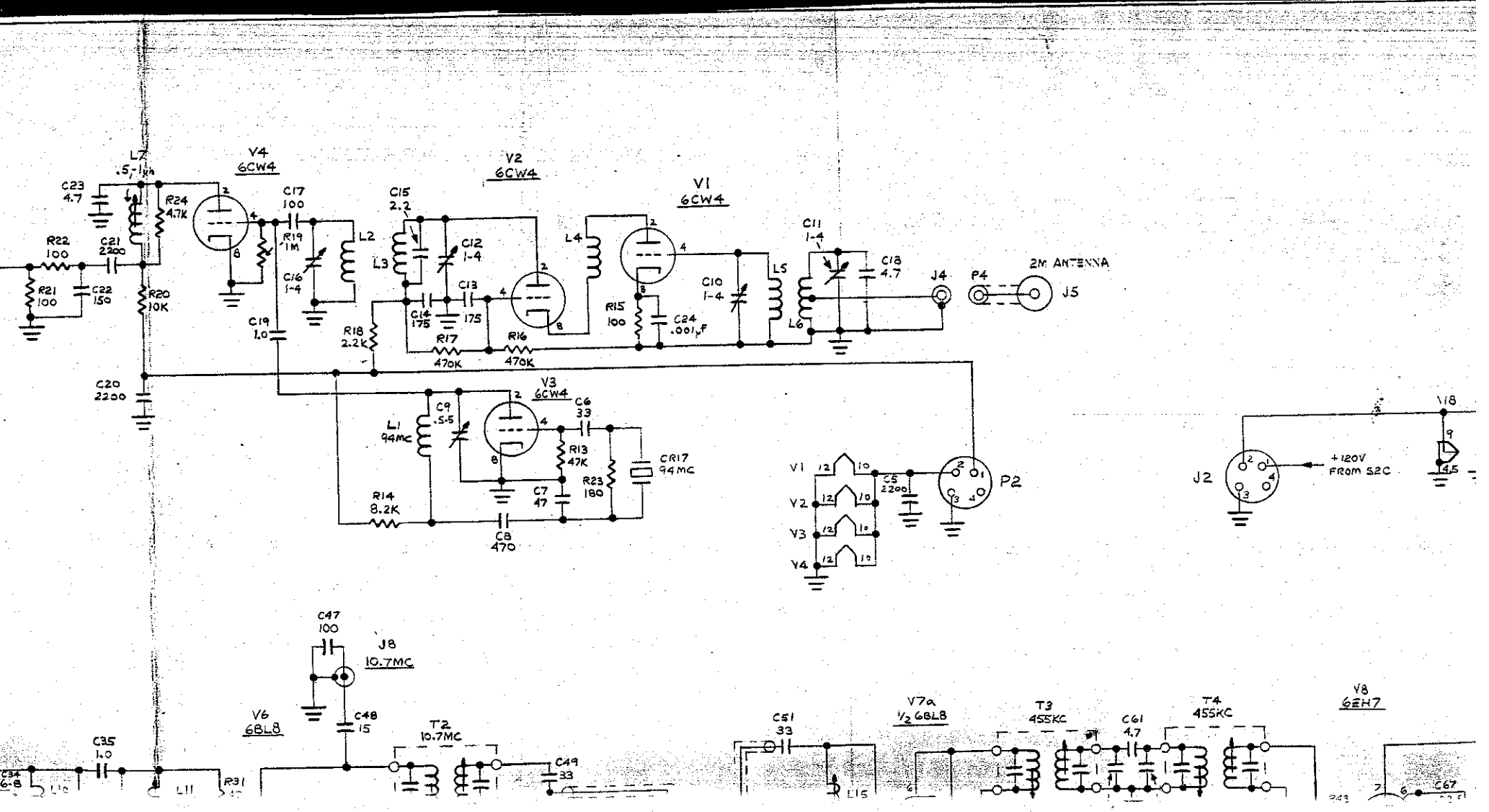
REVISIONS			
NO	DATE	BY	
A			
B			
C			
D			
E			

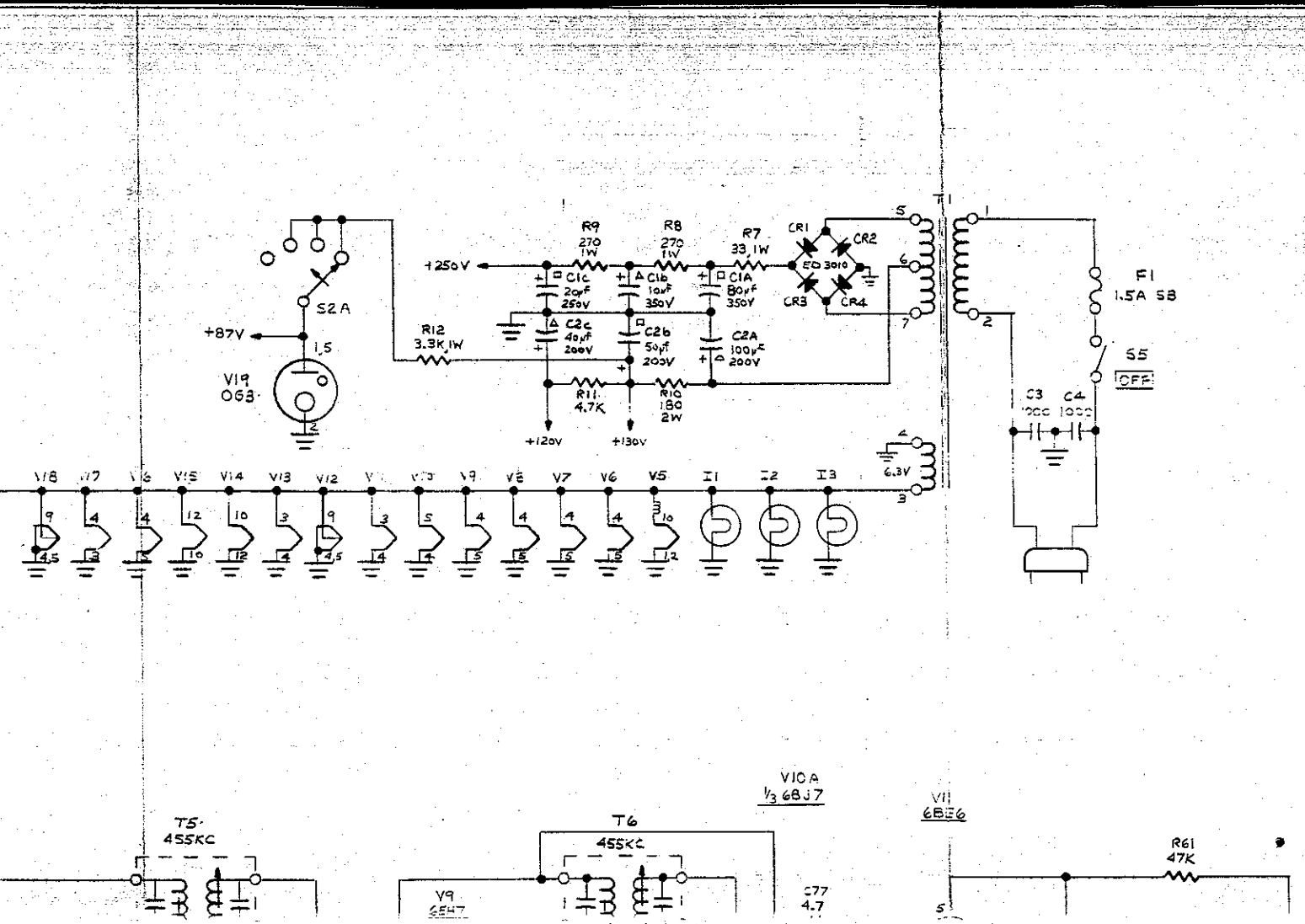
CLEGG LABORATORIES
DIV OF SQUIRES-SANDERS, INC

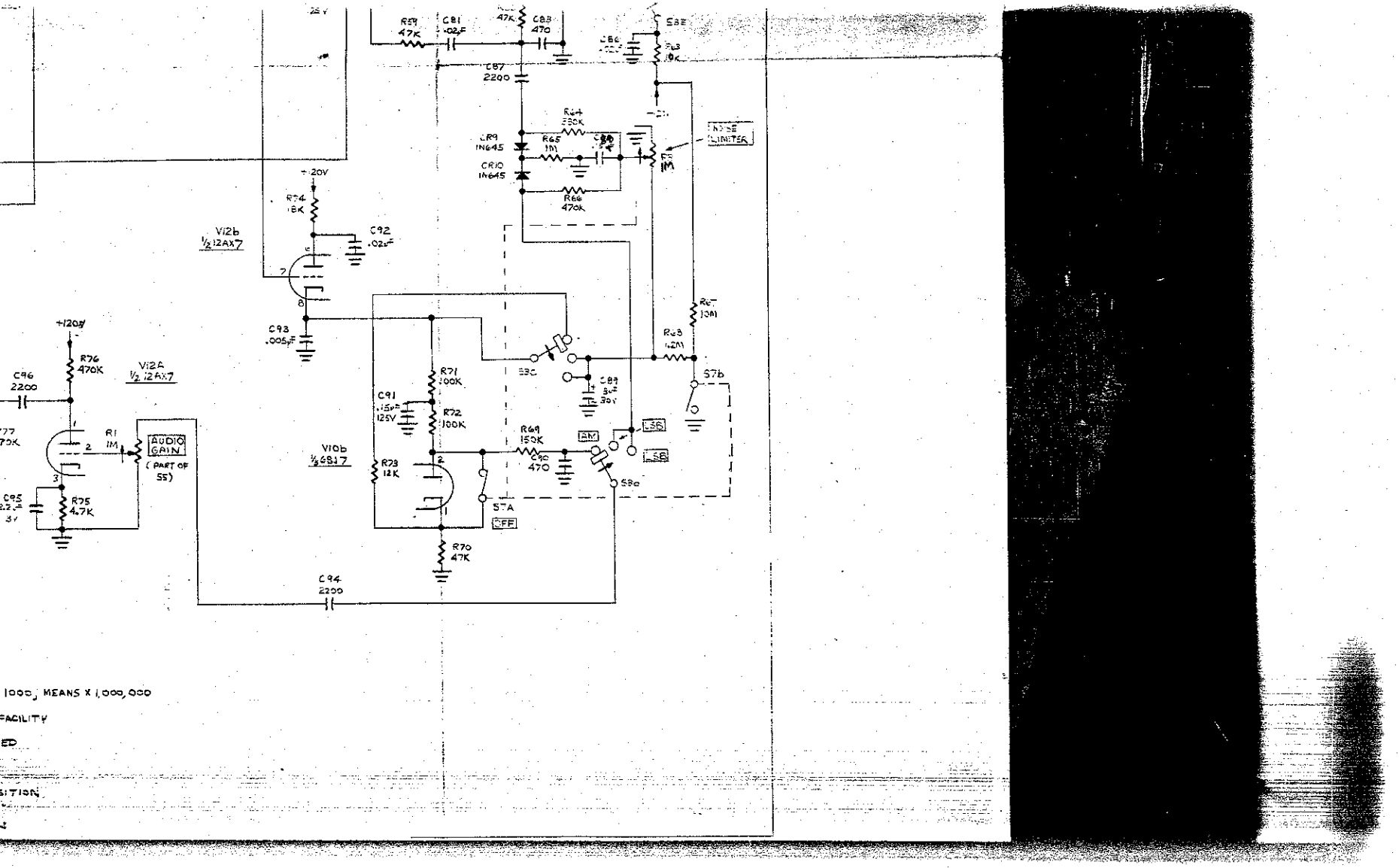
SCHEMATIC DIAGRAM
INTERCEPTOR 'B'

DRAWN BY BA Drumm	SCALE	MATERIAL
CHKD	DATE 5/21/63	DRAWING NO. D10-423A
TRACED	APPD	


V18
V17
V16
V15
V14
V13
V12
V11
V10
V9
V8
V7
V6
V5
I1
I2
I3
4.7K
180
2W
+120V
+130V
6.3V
T5
455KC
T6
455KC
V9
6EH7
VIC A
1/3 6BJ7
V1
6BE6
C67
.02μF
C68
.02μF
C69
.02μF
R46
22K
R47
1K
R48
470K
R49
180
C72
.02μF
C73
.02μF
R50
330
R51
820
C70
.02μF
C71
2μF
200V
R52
15K
R53
1K
+130V
C77
4.7
C76
33
R54
1M
R55
1M
C78
.047μF
25V
R61
47K
R62
8.2K
C84
470
CR8
451.55
CR7
448.15
C85
470
R57
270
C79
.02μF
R58
270K
R56
.22K
S3D
C80
68
C82
100
R60
47K
C83
470
R59
47K
C81
.02μF
S3E
C86
.02μF
R63
10K
C87
2200
R64
330K
CR9
IN645
CR10
IN645
R65
1M
C88
.15μF
R66
470K
NOISE
LIMITER
R3
1M
+120V
R74
18K
C92
.02μF
V12b
1/2 12AX7


L7
.5-1μh
V4
6CW4
C23
4.7
R24
4.7k
C17
100
R19
1M
C16
1-4
L2
L3
C15
2.2
C12
1-4
C13
175
C14
175
V2
6CW4
L4
V1
6CW4
C11
1-4
C18
4.7
J4
P4
2M ANTENNA
J5
L5
L6
C10
1-4
R15
100
C24
.001μF
R22
100
C21
2200
R21
100
C22
150
R20
10K
C19
1.0
R18
2.2K
R17
470K
R16
470K
C20
2200
V3
6CW4
L1
94MC
C9
.5-5
C6
33
R13
47K
R23
180
CR17
94MC
C7
47
R14
8.2K
C8
470
V1
V2
V3
V4
C5
2200
P2
J2
+120V
FROM S2C
V8
C47
100
J8
10.7MC
V6
6BL8
C48
15
T2
10.7MC
C49
33
C35
1.0
R31
C51
33
V7a
½ 6BL8
T3
455KC
C61
4.7
T4
455KC
V8
6EH7
C67


R9
270
1W
R8
270
1W
R7
33, 1W
CR1
CR2
CR3
CR4
ED 3010
+250V
C1c
20µF
250V
C1b
10µF
350V
C1A
80µF
350V
C2c
40µF
200V
C2b
50µF
200V
C2A
100µF
200V
R12
3.3K, 1W
R11
4.7K
R10
180
2W
+120V
+130V
+87V
S2A
1.5
V19
OG3
T1
F1
1.5A SB
S5
OFF
C3
C4
6.3V
V18
V17
V16
V15
V14
V13
V12
V5
I1
I2
I3
T5
455KC
T6
455KC
V9
6EH7
V10A
1/3 6BJ7
V11
6BE6
R61
47K
C77
4.7

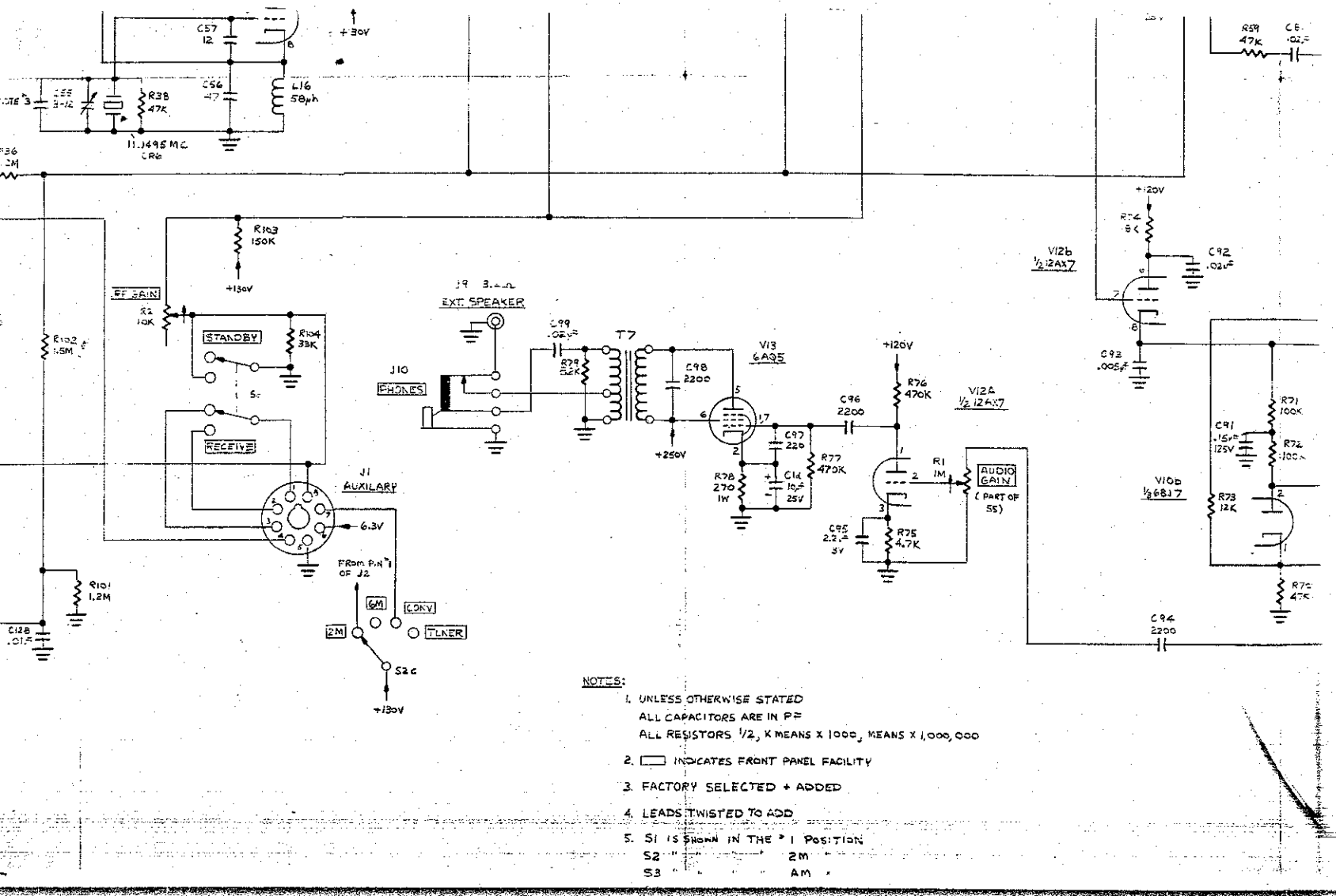


1000, MEANS X 1,000,000

FACILITY

ED

SITION,



NOTES:

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   ALL CAPACITORS ARE IN PF
   ALL RESISTORS 1/2, K MEANS X 1000, MEANS X 1,000,000
2. ▭ INDICATES FRONT PANEL FACILITY
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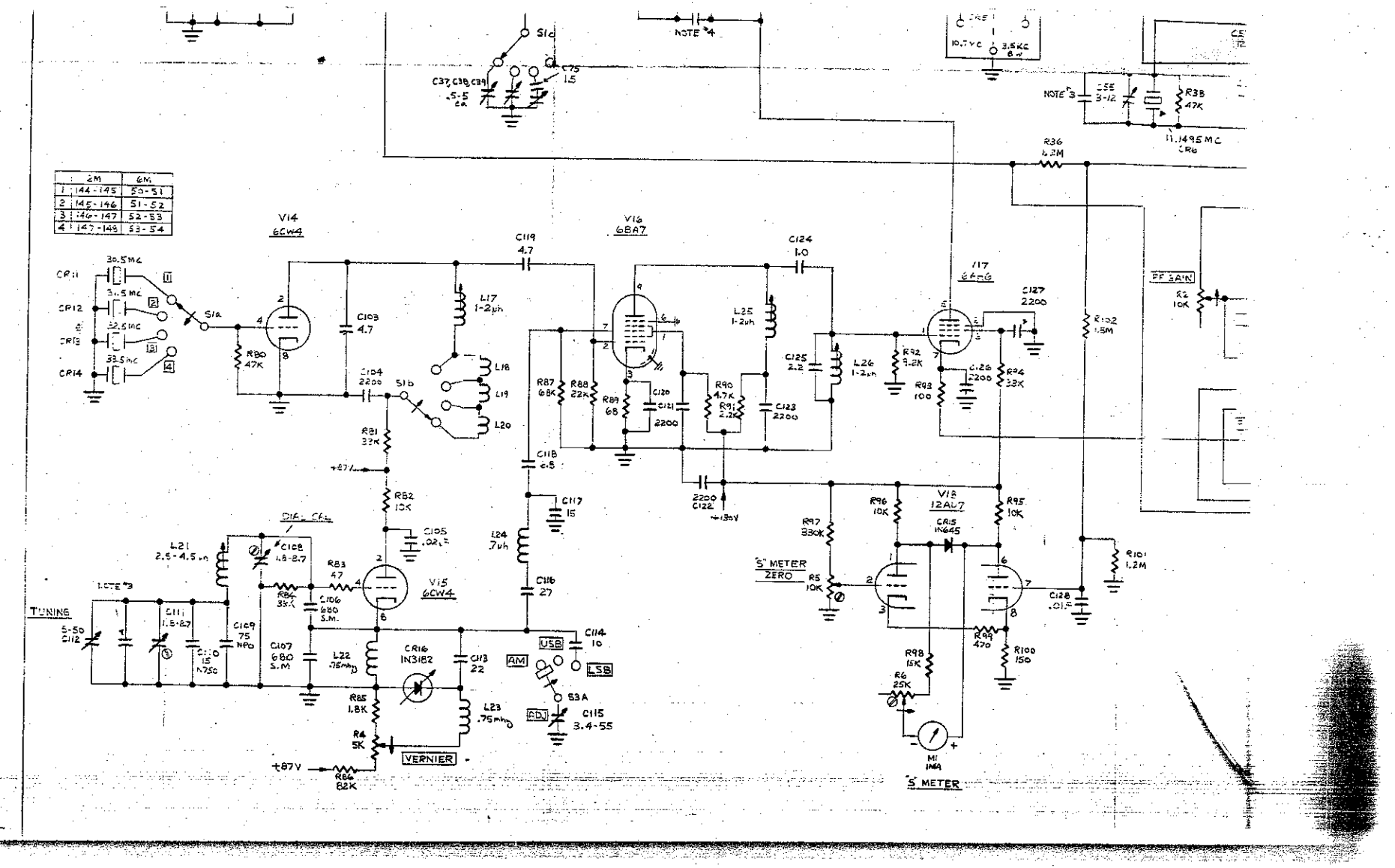
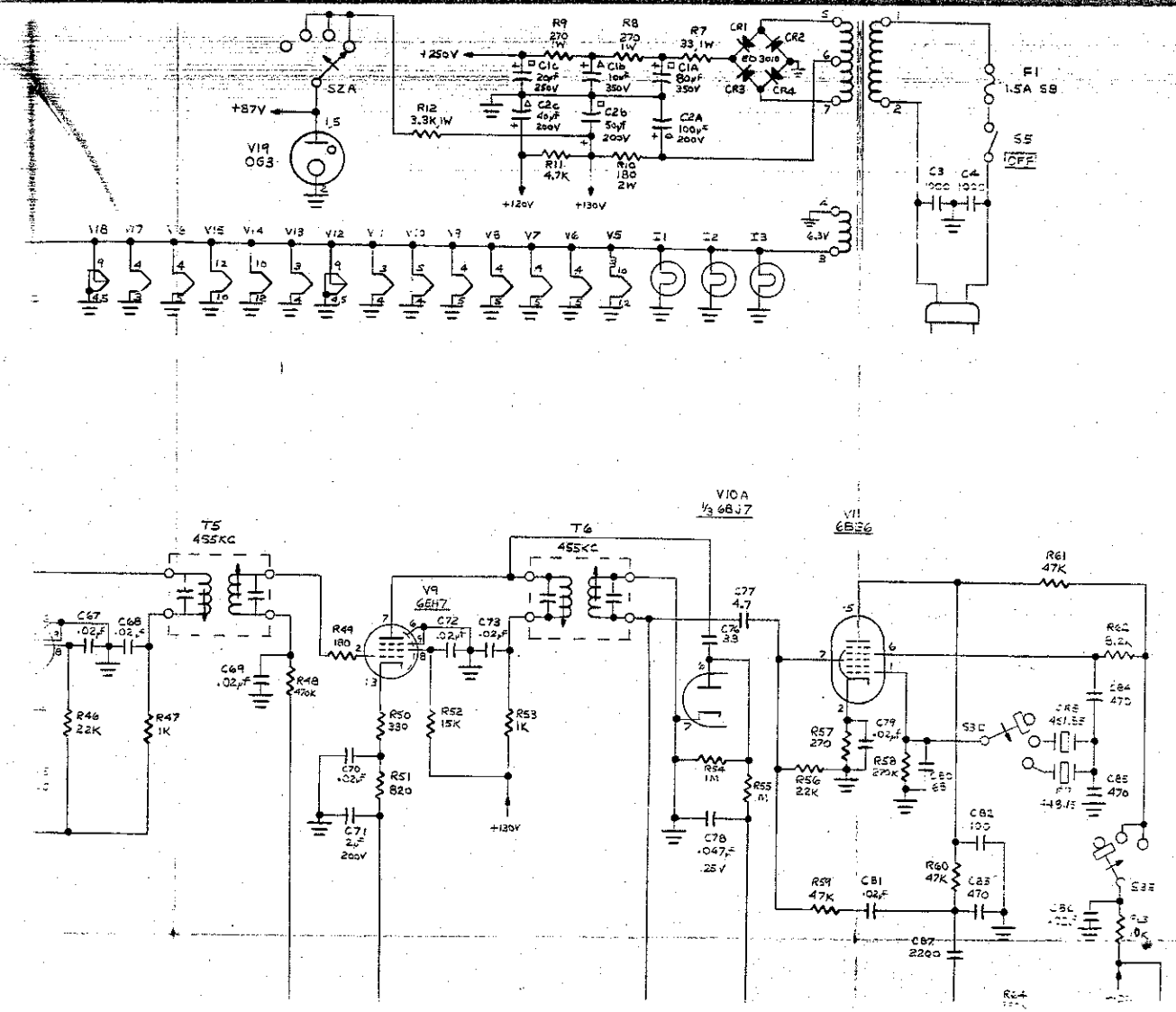
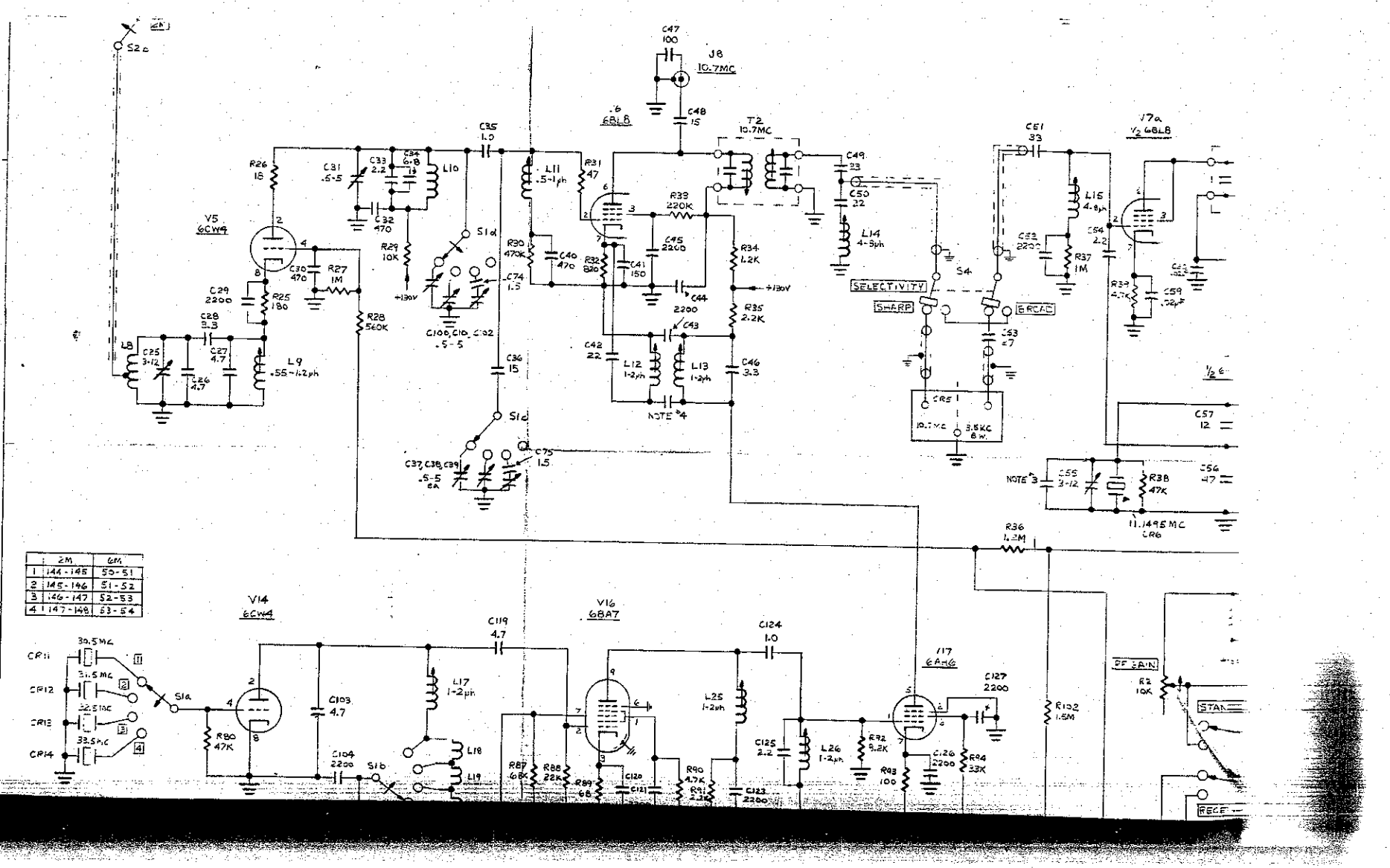
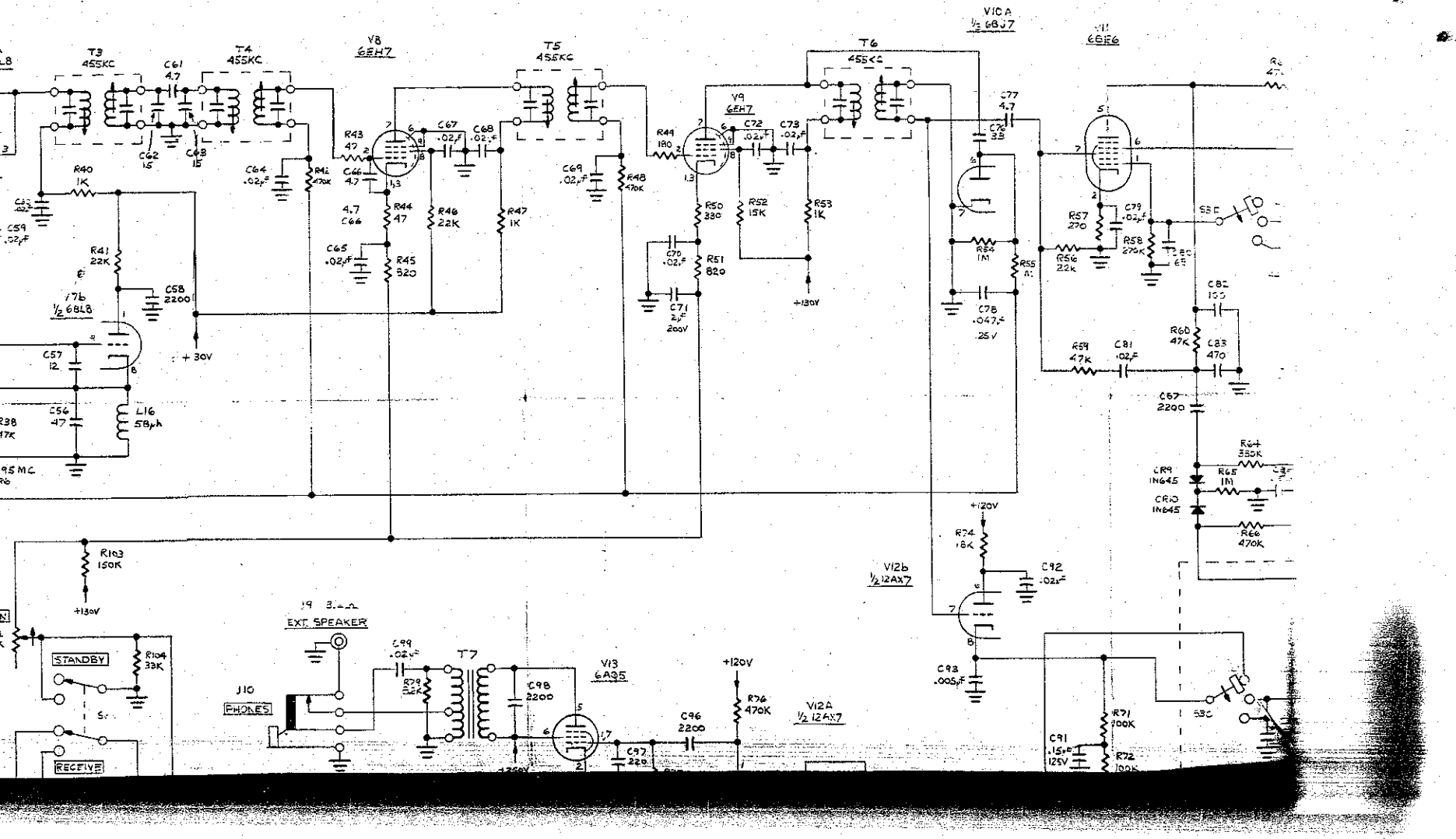
4. LEADS TWISTED TO ADD
5. S1 IS SHOWN IN THE "1" POSITION
   S2 " " " " 2M "
   S3 " " " " AM "

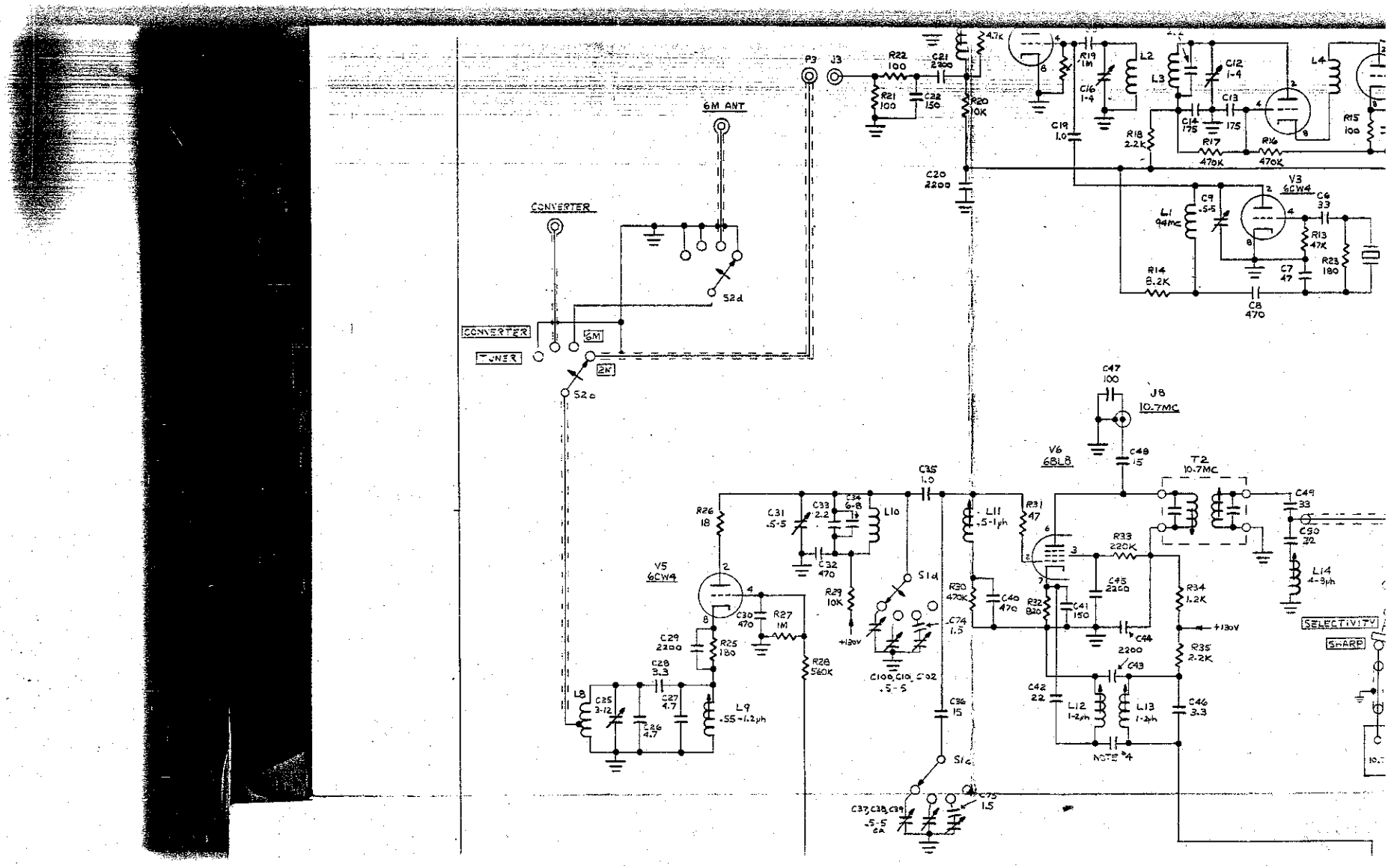

2M
6M
1 144-145 50-51
2 145-146 51-52
3 146-147 52-53
4 147-148 53-54
V14 6CW4
V15 6CW4
V16 6BA7
V17 6AMG
V18 12AU7
CR11
CR12
CR13
CR14
30.5MC
31.5MC
32.5MC
33.5MC
S1A
S1B
S1C
S1D
L17 1-2μh
L18
L19
L20
L21 2.5-4.5μh
L22 .75mhy
L23 .75mhy
L24 .7μh
L25 1-2μh
L26 1-2μh
C103 4.7
C104 2200
C105 .02μF
C106 680 S.M.
C107 680 S.M.
C108 4.8-8.7
C109 75 NPO
C110 15 N750
C111 1.5-8.7
C112 5-50
C113 22
C114 10
C115 3.4-55
C116 27
C117 15
C118 4.5
C119 4.7
C120 2200
C121 2200
C122 2200
C123 2200
C124 1.0
C125 2.2
C126 2200
C127 2200
C128 .01μF
R80 47K
R81 33K
R82 10K
R83 47
R84 33K
R85 1.8K
R86 82K
R87 68K
R88 22K
R89 68
R90 4.7K
R91 2.2K
R92 9.2K
R93 100
R94 33K
R95 10K
R96 10K
R97 330K
R98 15K
R99 470
R100 150
R101 1.2M
R102 1.5M
R36 4.2M
R38 47K
R4 5K
R5 10K
R6 25K
R8 10K
CR15 IN645
CR16 IN3182
NOTE 3
NOTE 4
10.7MC
3.5KC
11.1495 MC
TUNING
VERNIER
AM
USB
LSB
ADJ
+87V
+135V
"S" METER ZERO
"S" METER
M1 1MA
DIAL CAL
FF GAIN
R2 10K

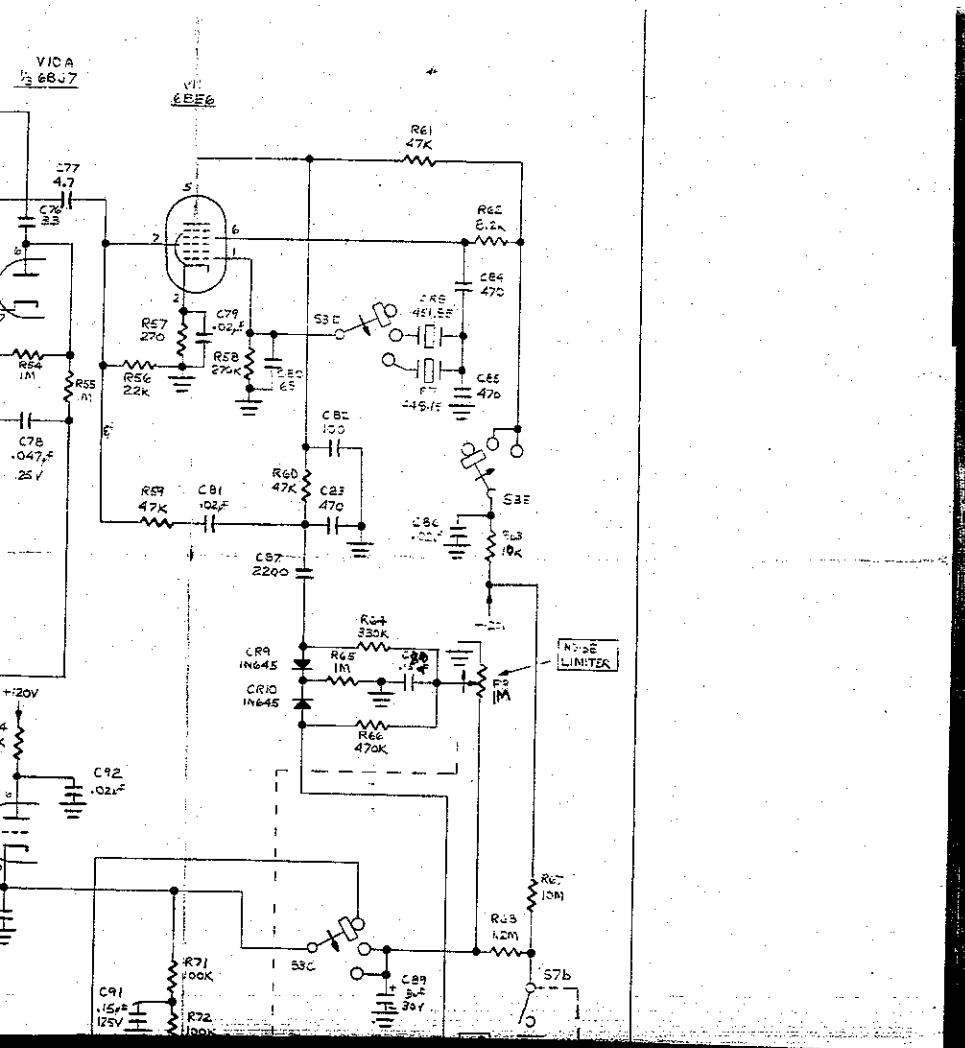

R9 270 1W
R8 270 1W
R7 33 1W
CR1
CR2
CR3
CR4
EO 3010
+250V
C1c 20µF 250V
C1b 10µF 350V
C1A 80µF 350V
C2c 40µF 200V
C2b 50µF 200V
C2A 100µF 200V
R12 3.3K 1W
R11 4.7K
R10 180 2W
+120V
+130V
+87V
S2A
V19 0G3
F1 1.5A SB
S5 OFF
C3 .005
C4 .005
6.3V
V18 V17 V16 V15 V14 V13 V12 V11 V10 V9 V8 V7 V6 V5 I1 I2 I3
T5 455Kc
T6 455Kc
V10A 1/3 6BJ7
V11 6BE6
V9 6EH7
C67 .02µF
C68 .02µF
C69 .02µF
R46 22K
R47 1K
R48 470K
R49 180
C72 .02µF
C73 .02µF
R50 330
R51 820
R52 15K
R53 1K
C70 .02µF
C71 2µF 200V
+130V
C77 4.7
C76 33
R54 1M
R55 1M
C78 .047µF 25V
R61 47K
R62 5.2K
C84 470
C85 470
CR5 457.5Kc
CR6 448.5Kc
S3C
S3E
R57 270
C79 .02µF
R58 270K
R56 22K
C82 100
R60 47K
C83 470
R59 47K
C81 .02µF
C87 2200
R63 .05

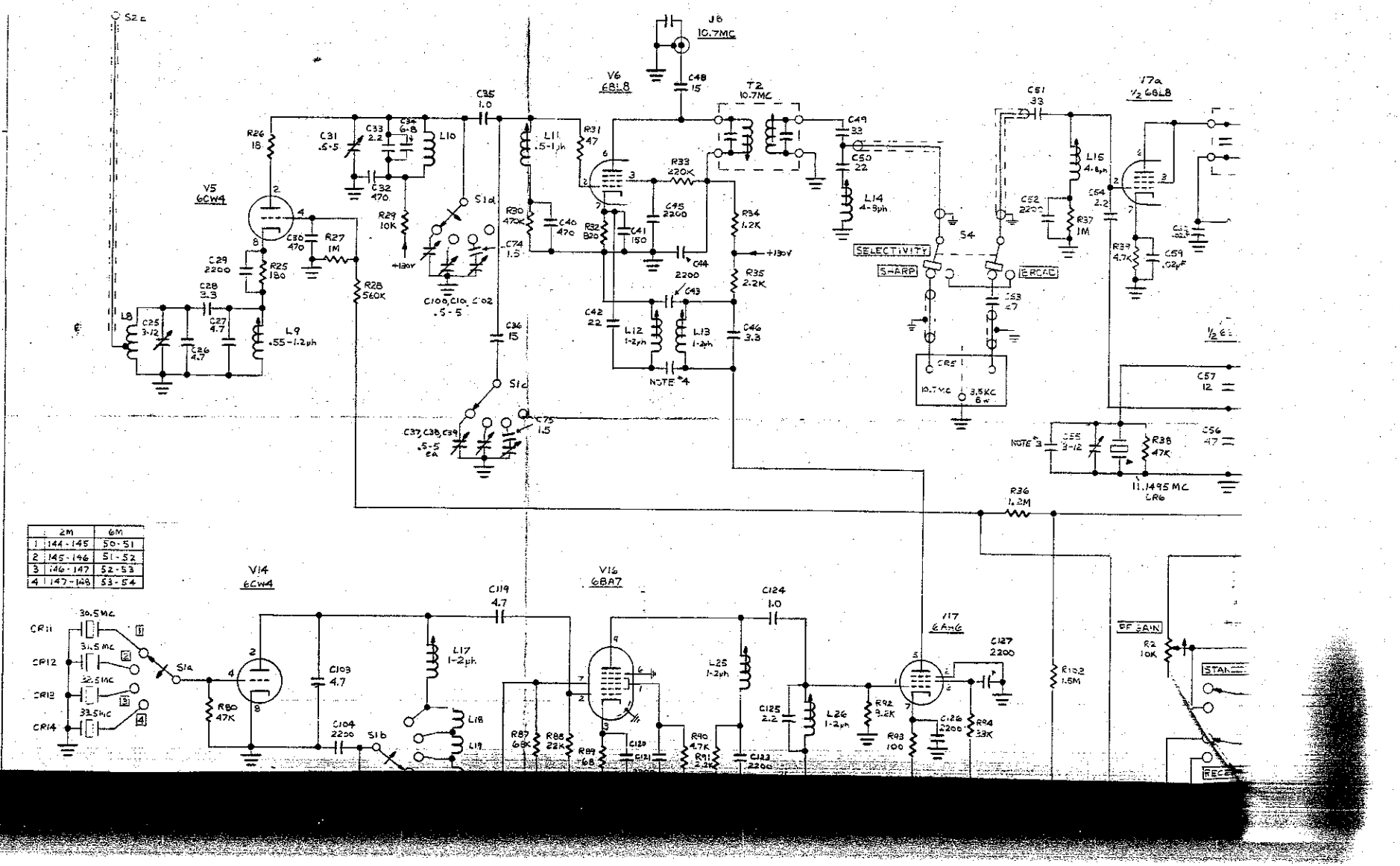


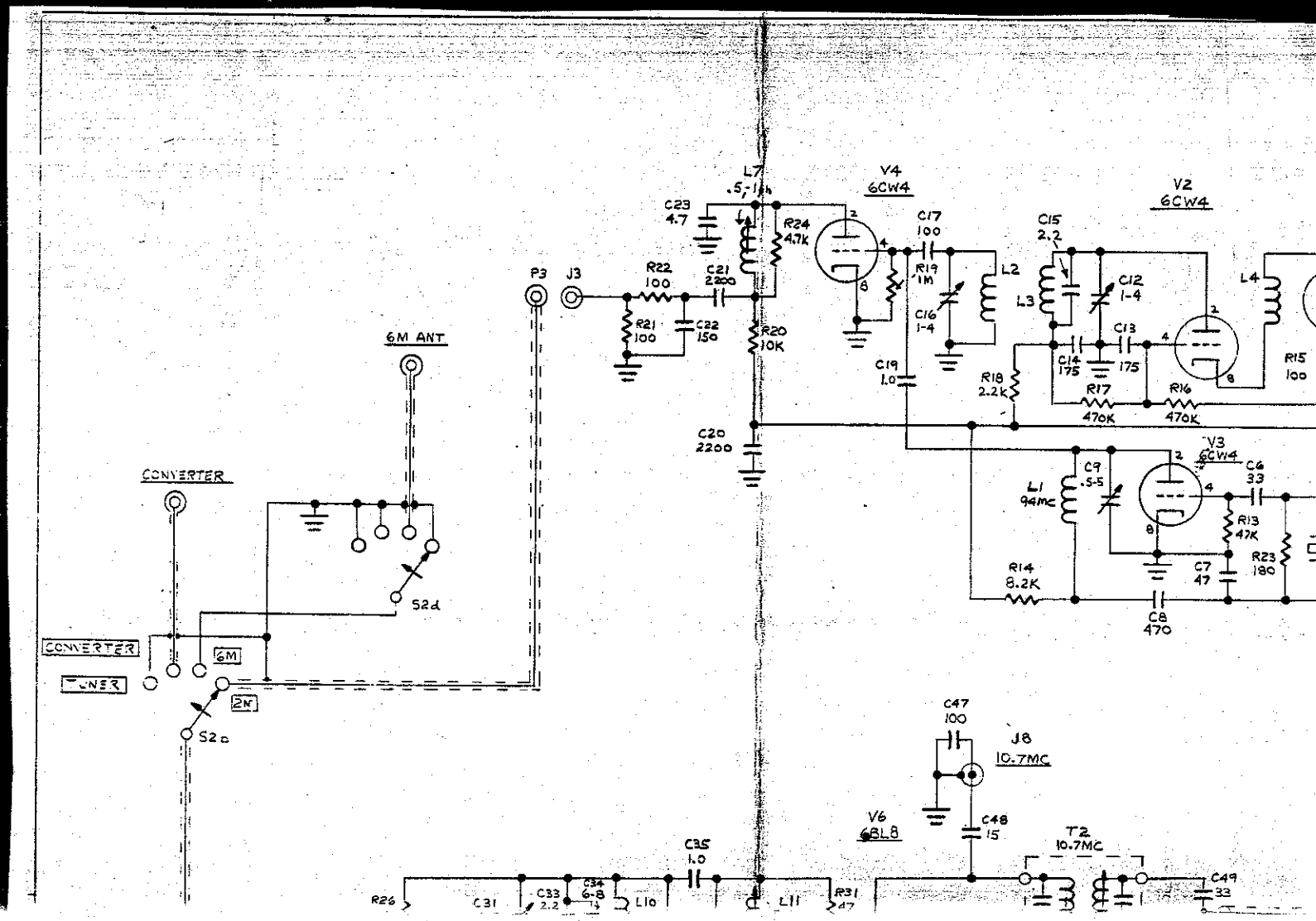
	2M	6M
1	144 - 145	50 - 51
2	145 - 146	51 - 52
3	146 - 147	52 - 53
4	147 - 148	53 - 54

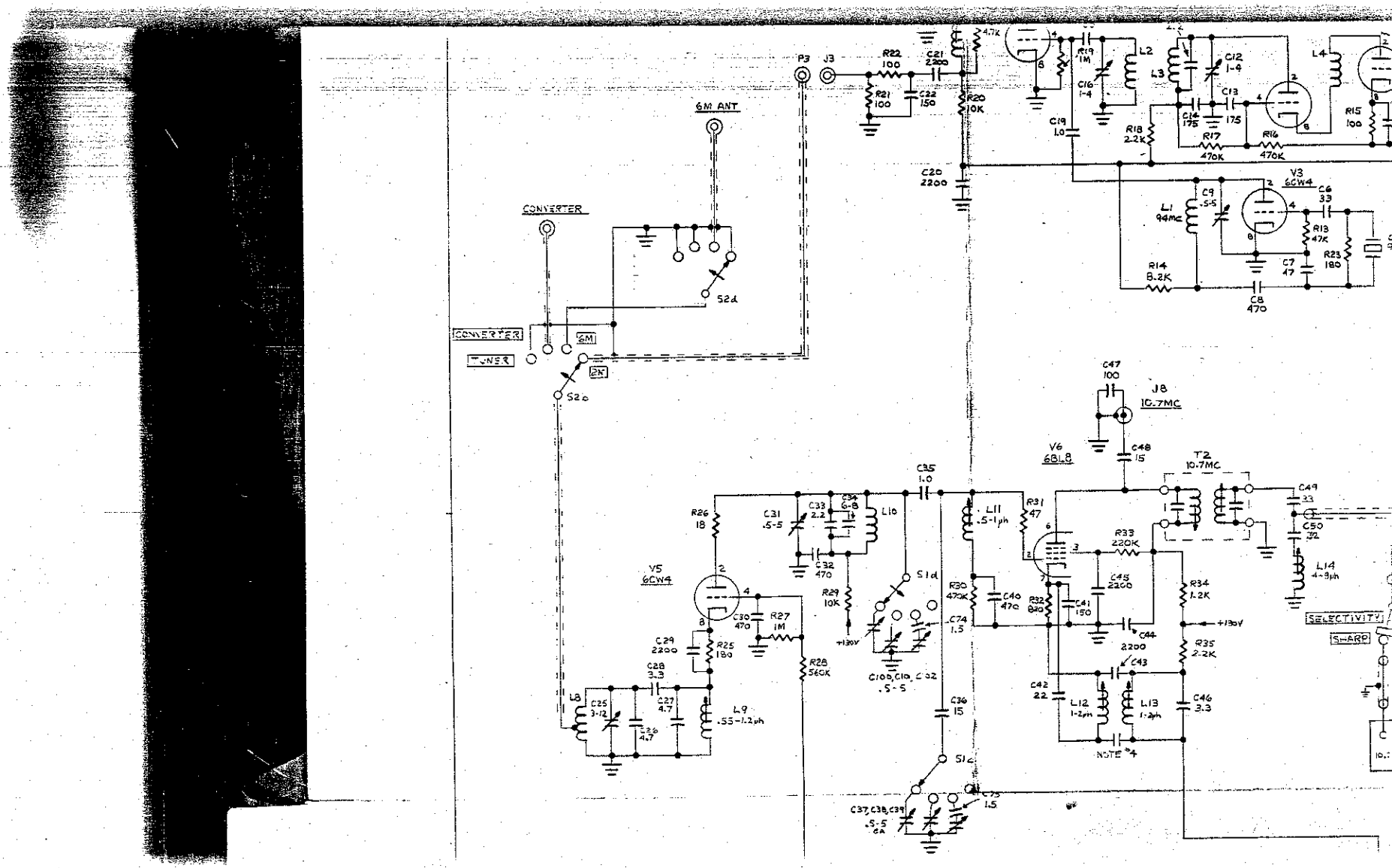

T3 455KC
T4 455KC
V8 6EH7
T5 455KC
V9 6EH7
T6 455KC
V10A ½ 6BJ7
V11 6BE6
V7b ½ 6BL8
V12b ½ 12AX7
V12A ½ 12AX7
V13 6A95
T7
EXT. SPEAKER
J10
PHONES
STANDBY
RECEIVE
+130V
+120V
+ 30V
SSB
R103 150K
R104 33K
R40 1K
R41 22K
R42 470K
R43 47
R44 47
R45 820
R46 22K
R47 1K
R48 470K
R50 330
R51 820
R52 15K
R53 1K
R54 18K
R55 1K
R56 22K
R57 270
R58 270K
R59 47K
R60 47K
R64 330K
R65 1M
R66 470K
R71 100K
R72 100K
R74 470K
R76 470K
R79 5.2K
C57 12
C58 2200
C59 .02µF
C61 4.7
C62 15
C63 15
C64 .02µF
C65 .02µF
C66 4.7
C67 .02µF
C68 .02µF
C69 .02µF
C70 .02µF
C71 2µF 200V
C72 .02µF
C73 .02µF
C76 .047µF 25V
C77 4.7
C78 33
C79 .02µF
C80 1300 pf
C81 .02µF
C82 100
C83 470
C87 2200
C91 .15µF 125V
C92 .02µF
C93 .005µF
C96 2200
C97 220
C98 2200
C99 .02µF
L16 58µh
CR9 IN645
CR10 IN645

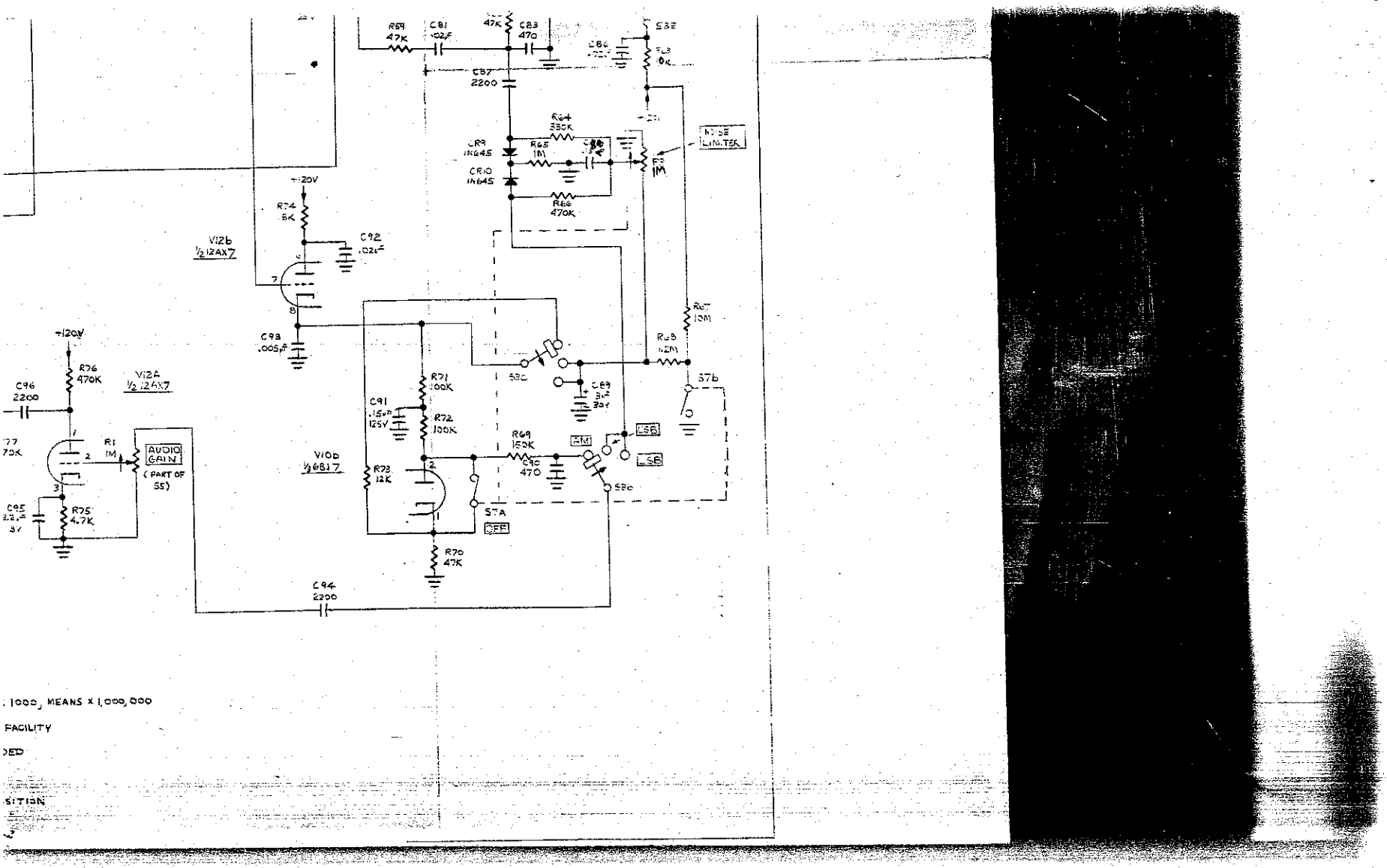

6M ANT
CONVERTER
S2d
CONVERTER
TUNER
6M
2M
S2c
P3
J3
R22 100
C21 2200
R21 100
C22 150
4.7K
R20 10K
C20 2200
R19 1M
C16 1-4
C19 1.0
L2
L3
C12 1-4
C13
C14 175
175
R18 2.2K
R17 470K
R16 470K
L4
R15 100
V3 6CW4
C9 5-5
L1 94MC
C6 33
R13 47K
R23 180
C7 47
R14 8.2K
C8 470
J8 10.7MC
C47 100
C48 15
V6 6BL8
T2 10.7MC
C35 1.0
R26 18
C31 .5-5
C33 2.2
C34 6-8
L10
C32 470
V5 6CW4
R29 10K
+130V
S1d
C30 470
R27 1M
C29 2200
R25 180
C28 3.3
R28 560K
C27 4.7
C26 4.7
L8
C25 3-12
L9 .55-1.2μh
C100, C101, C102 .5-5
C74 1.5
L11 .5-1μh
R31 47
R30 470K
C40 470
R32 820
C41 150
C45 2200
R33 220K
R34 1.2K
C44 2200
R35 2.2K
C43
C42 22
L12 1-2μh
L13 1-2μh
C46 3.3
NOTE #4
C36 15
S1c
C37, C38, C39 .5-5 2R
C75 1.5
C49 33
C50 22
L14 4-9μh
SELECTIVITY
SHARP

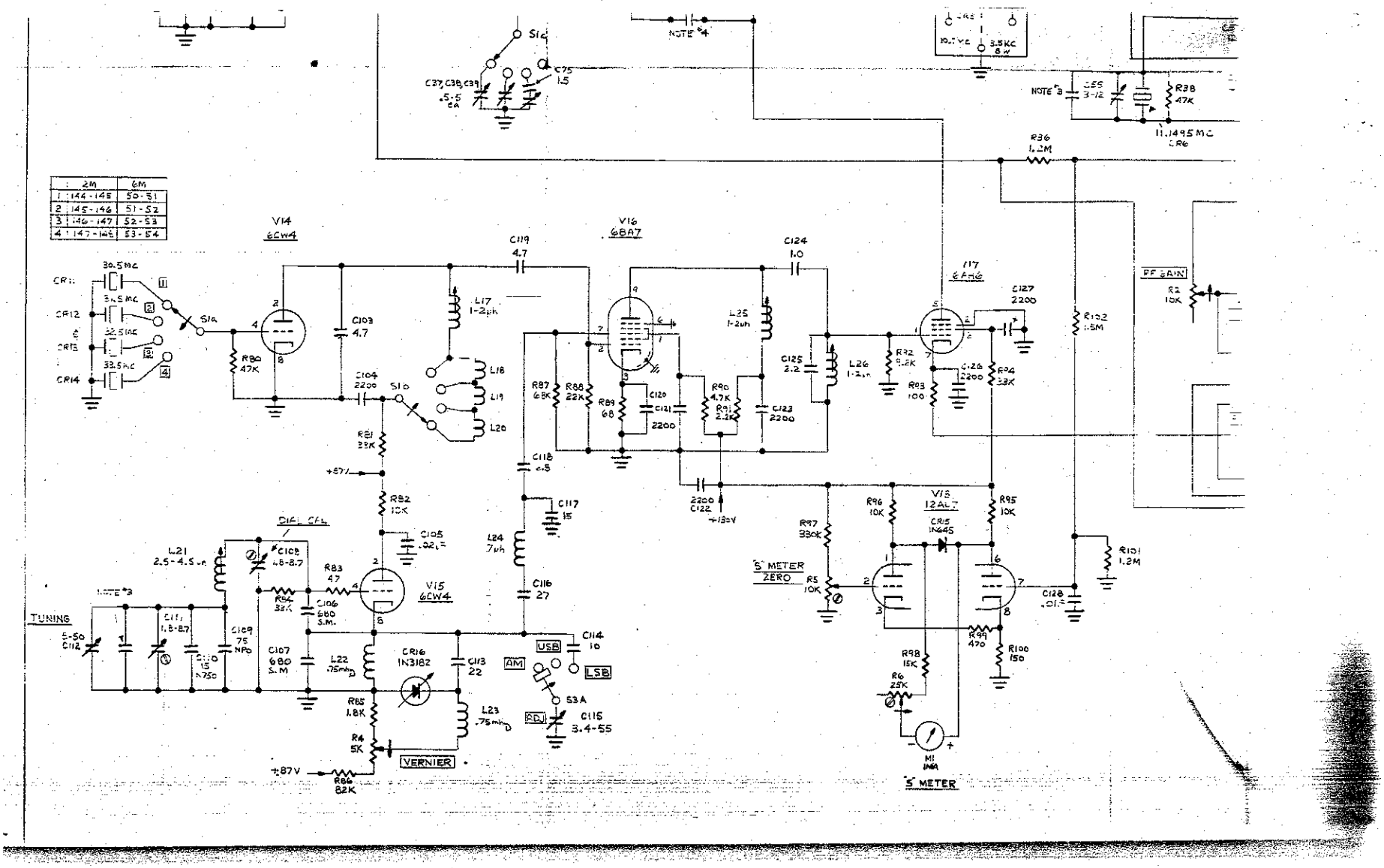

V1C A
½ 6BJ7
V1D
6BE6
R61
47K
C77
4.7
C76
33
R62
6.2K
C84
470
R57
270
C79
.02μF
S3D
CR6
451.55
R58
27K
C85
470
R56
22K
C82
100
R60
47K
C83
470
R59
47K
C81
.02μF
S3E
C86
.02μF
R63
10K
C87
2200
R64
330K
CR9
1N645
R65
1M
CR10
1N645
R66
470K
R9
1M
NOISE LIMITER
+120V
C92
.02μF
R67
10M
R68
4.2M
S3C
S7b
R71
100K
C91
.15μF
125V
R72
100K
C89
3μF
30V


J8
10.7MC
V6
6BL8
T2
10.7MC
V5
6CW4
V14
6CW4
V16
6BA7
V17
6AM6
½ 6BL8
SELECTIVITY
S-HARP
BROAD
+130V
NOTE "4"
NOTE "3"
11.1495 MC
CR6
CR11
CR12
CR13
CR14
30.5MC
31.5 MC
32.5MC
33.5MC
RF GAIN
STAN
REC
2M
6M
1 144-145 50-51
2 145-146 51-52
3 146-147 52-53
4 147-148 53-54

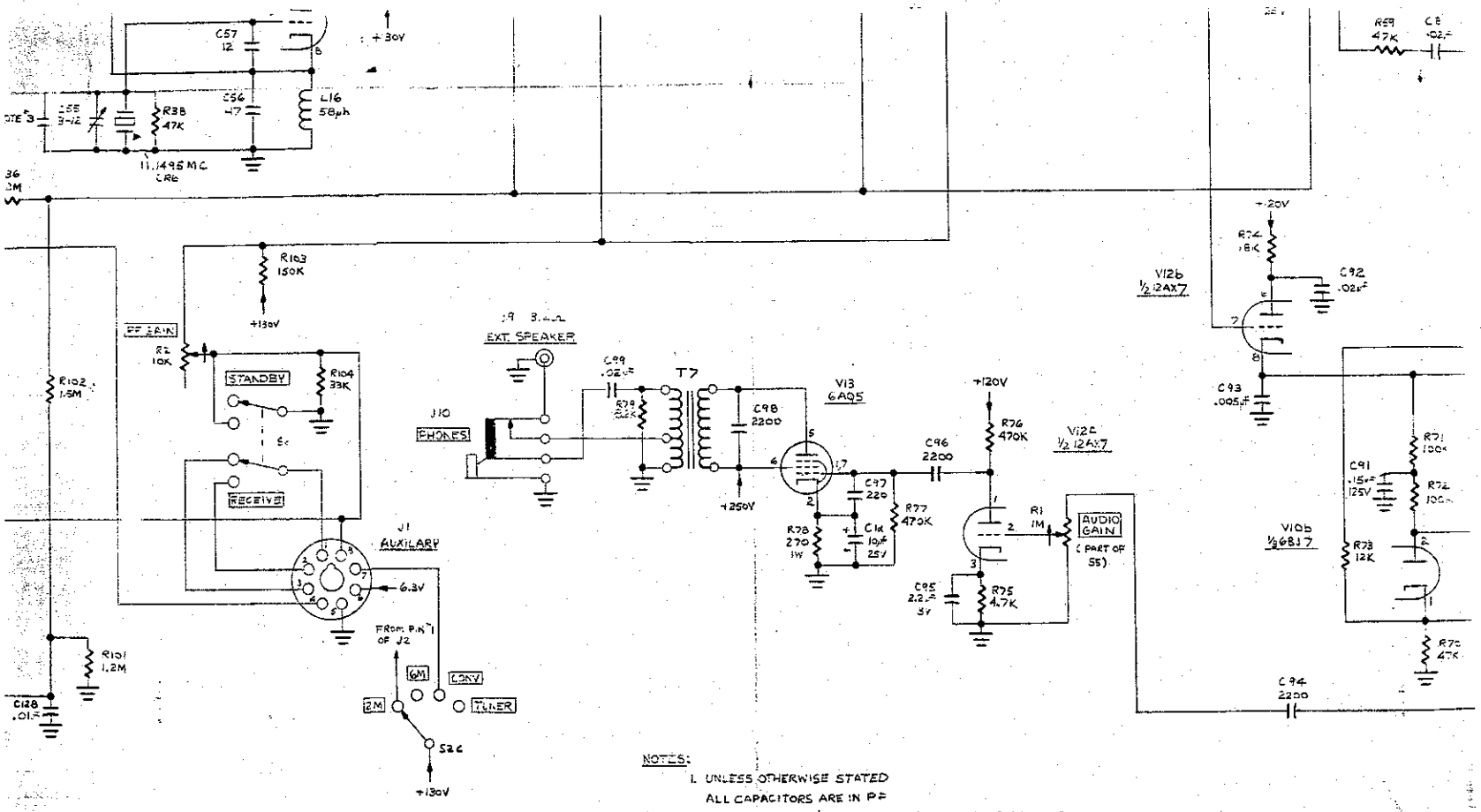

L7
.5,-1μh
V4
6CW4
V2
6CW4
C23
4.7
R24
4.7k
C17
100
C15
2.2
P3
J3
R22
100
C21
2200
R19
1M
L2
L3
C12
1-4
L4
R21
100
C22
150
C16
1-4
C13
R20
10K
C14
175
175
R15
100
C19
1.0
R18
2.2k
R17
470K
R16
470K
C20
2200
6M ANT
V3
6CW4
C9
.5-5
C6
33
L1
94mc
R13
47K
R23
180
R14
8.2K
C7
47
C8
470
CONVERTER
S2d
CONVERTER
TUNER
6M
2M
S2c
C47
100
J8
10.7MC
V6
6BL8
C48
15
T2
10.7MC
C35
1.0
C49
33
R26
C31
C33
2.2
C34
6-8
L10
L11
R31
47


6M ANT
CONVERTER
S2d
CONVERTER TUNER
6M
2M
S2a
P3
J3
R22 100
C21 2200
R21 100
C22 150
R20 10K
4.7K
R19 1M
C16 1-4
C19 1.0
C20 2200
L2
L3
C12 1-4
C13
C14 175
175
R18 2.2K
R17 470K
R16 470K
L4
R15 100
V3 6CW4
L1 94mc
C9 .5-5
C6 33
R13 47K
R23 180
C7 47
R14 8.2K
C8 470
C47 100
J8 10.7MC
C48 15
V6 6BL8
T2 10.7MC
C35 1.0
R26 18
C31 .5-5
C33 2.2
C34 6-8
L10
C32 470
R29 10K
+130V
S1d
C74 1.5
C105, C10, C102 .5-5
V5 6CW4
C30 470
R27 1M
C29 2200
R25 180
R28 560K
C28 3.3
C27 4.7
C25 3-12
C26 4.7
L9 .55-1.2μh
L11 .5-1μh
R31 47
R30 470K
C40 470
R32 820
C41 150
R33 220K
C45 2200
C44 2200
C43
R34 1.2K
R35 2.2K
C42 22
L12 1-2μh
L13 1-2μh
C46 3.3
NOTE #4
C36 15
S1c
C75 1.5
C37, C38, C39 .5-5 6A
C49 33
C50 22
L14 4-9μh
SELECTIVITY
SHARP


R59 47K
C81 .02μF
47K
C83 470
C82
C86 .02μF
R63 10K
C87 2200
R64 330K
CR9 IN645
R65 1M
C88
NOISE LIMITER
R3 1M
CR10 IN645
R66 470K
+120V
R74 15K
C92 .02μF
V12b ½ 12AX7
C98 .005μF
R67 10M
R68 10M
57b
58c
C89 3μF 30V
R71 100K
C91 .15μF 125V
R72 100K
R69 150K
AM
USB
LSB
C90 470
58a
V10b ½6BJ7
R73 12K
57A
OFF
R70 47K
C94 2200
+120V
R76 470K
V12A ½ 12AX7
C96 2200
R1 1M
AUDIO GAIN
(PART OF 55)
R75 4.7K
C95
1000 MEANS X 1,000,000
FACILITY
DED
SITION

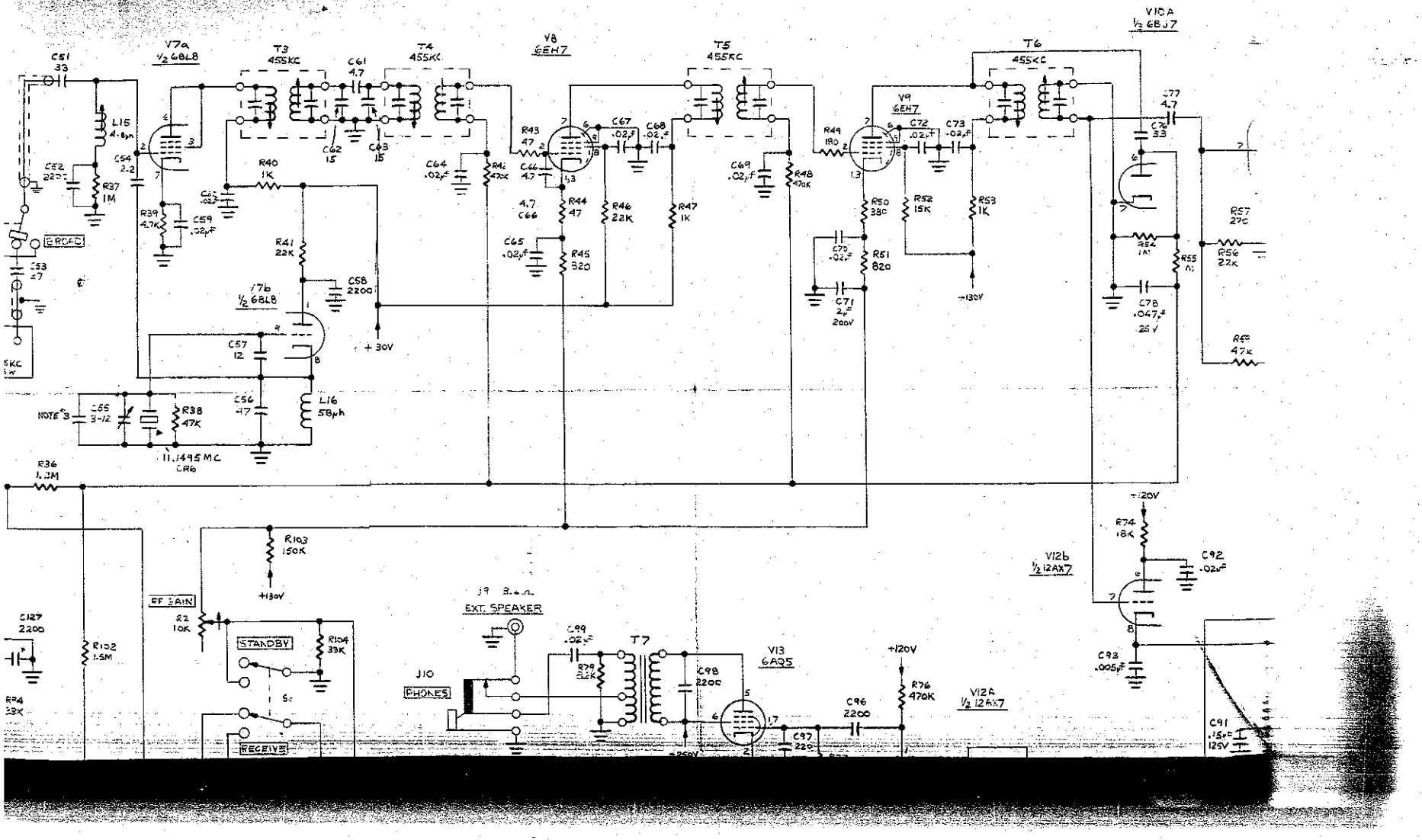


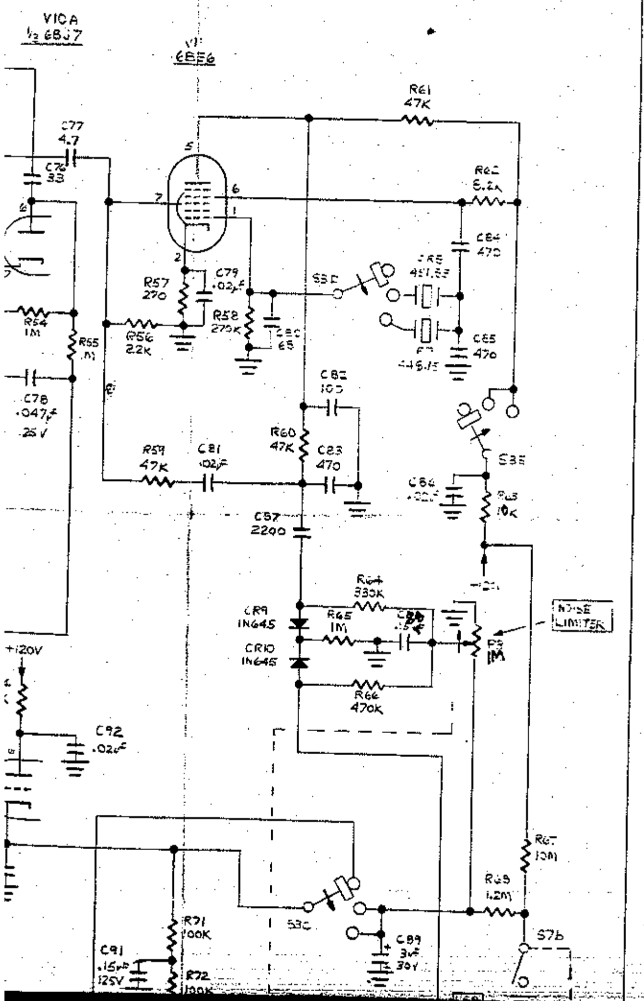
	2M	6M
1	144-145	50-51
2	145-146	51-52
3	146-147	52-53
4	147-148	53-54



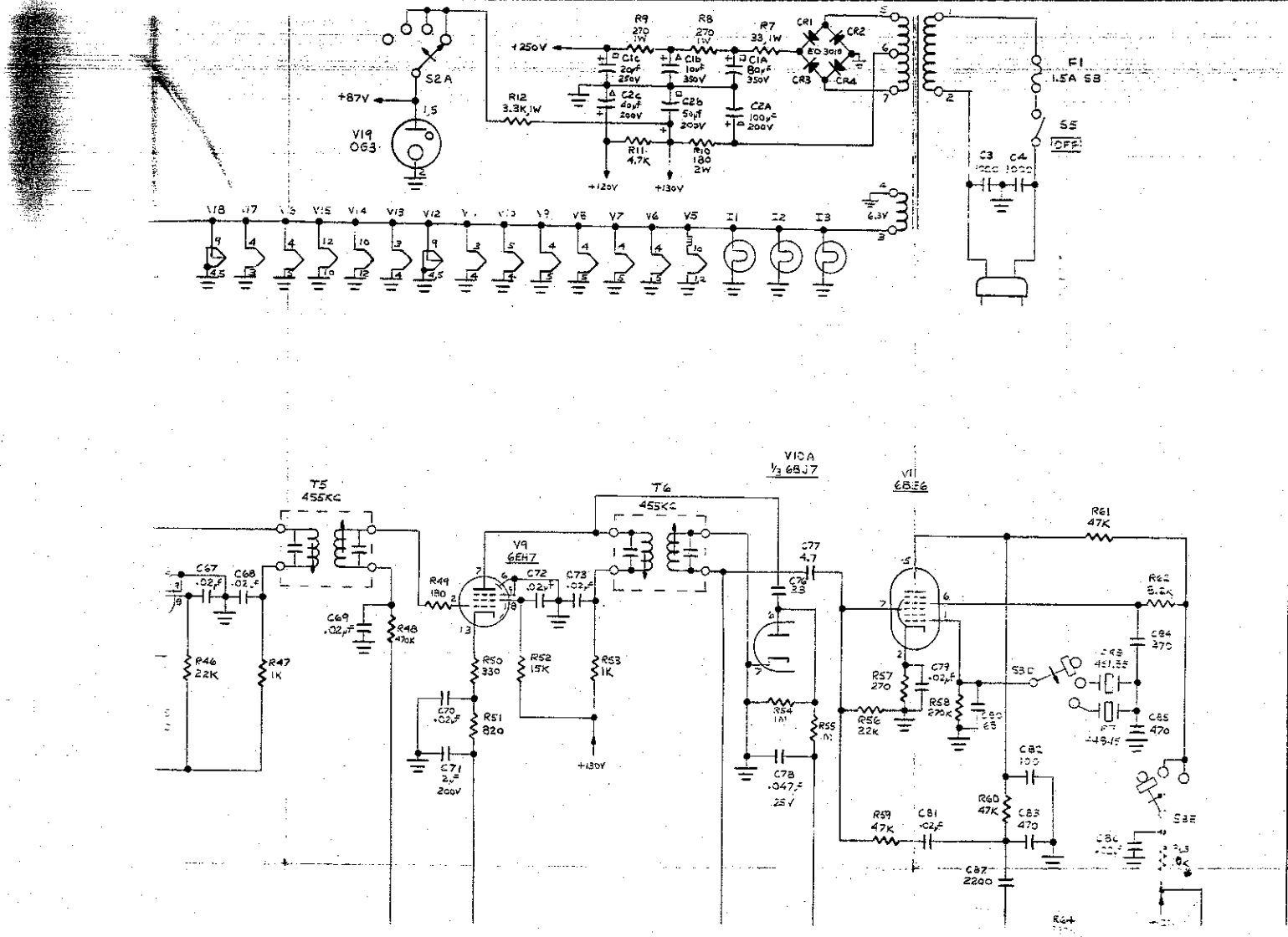
NOTES:

1. UNLESS OTHERWISE STATED
   ALL CAPACITORS ARE IN PF
   ALL RESISTORS ½ W, K MEANS X 1000, MEGS X 1,000,000
2. ▭ INDICATES FRONT PANEL FACILITY
3. FACTORY SELECTED + ADDED
4. LEADS TWISTED TO ADD
5. S1 IS SHOWN IN THE "1" POSITION
   S2 " " " " 2M "
   S3 " " " " AM "


V7a
½ 6BL8
V7b
½ 6BL8
V8
6EH7
V9
6EH7
V10A
½ 6BJ7
V12b
½ 12AX7
V12A
½ 12AX7
V13
6AQ5
T3
455KC
T4
455KC
T5
455KC
T6
455KC
T7
C51
33
L15
4.6µh
C52
220
R37
1M
C54
2.2
R39
4.7K
C59
.02µF
C53
.7
BROAD
R40
1K
C63
.02µF
R41
22K
C58
2200
+ 30V
C57
12
C55
3-12
R38
47K
C56
47
L16
58µh
11.1495 MC
CR6
NOTE 3
C62
15
C61
4.7
C63
15
C64
.02µF
R42
470K
R43
47
C66
4.7
R44
47
C65
.02µF
R45
820
R46
22K
R47
1K
C67
.02µF
C68
.02µF
C69
.02µF
R48
470K
R49
180
C72
.02µF
C73
.02µF
R50
330
C75
.02µF
R51
820
C71
2µF
200V
R52
15K
R53
1K
+130V
C77
4.7
C76
33
R54
1M
R55
R57
27Ω
R56
22K
C78
.047µF
25V
R58
47K
R36
1.2M
R103
150K
+130V
RF GAIN
R2
10K
STANDBY
R104
33K
S1
RECEIVE
R102
1.5M
C127
2200
R4
33K
J9
EXT. SPEAKER
J10
PHONES
C99
.02µF
R79
3.2K
C98
2200
C97
220
C96
2200
R76
470K
+120V
+120V
R74
18K
C92
.02µF
C93
.005µF
C91
.15µF
125V



V10A
½ 6BJ7
V11
6BE6
R61
47K
C77
4.7
C76
33
R62
8.2K
C84
470
R57
270
C79
.02µF
R58
275K
R54
1M
R56
22K
R55
.1M
C80
65
C85
470
C78
.047µF
.25V
C82
100
R60
47K
C83
470
R59
47K
C81
.02µF
S3E
R63
10K
C57
2200
R64
330K
CR9
1N645
R65
1M
CR10
1N645
R66
470K
NOISE
LIMITER
+120V
C92
.02µF
R67
10M
R68
1.2M
S3C
S7b
C89
3µF
30V
R71
100K
C91
.15µF
125V
R72
100K


+250V
R9 270 1W
R8 270 1W
R7 33 1W
CR1
CR2
CR3
CR4
EO 3010
C1c 20µF 250V
C1b 10µF 350V
C1A 80µF 350V
C2c 40µF 200V
C2b 50µF 200V
C2A 100µF 200V
R12 3.3K 1W
R11 4.7K
R10 180 2W
+120V
+130V
+87V
S2A
1.5
V19 0G3
F1 1.5A SB
S5 OFF
C3 1000
C4 1000
6.3V
V18 V17 V16 V15 V14 V13 V12 V11 V10 V9 V8 V7 V6 V5 I1 I2 I3
T5 455KC
T6 455KC
V10A 1/2 6BJ7
V9 6EH7
V11 6BJ6
C67 .02µF
C68 .02µF
C69 .02µF
C70 .02µF
C71 2µF 200V
C72 .02µF
C73 .02µF
C77 4.7
C78 .047µF 25V
C79 .02µF
C80 68
C81 .02µF
C82 100
C83 470
C84 470
C85 470
C86 .02µF
C87 2200
R46 2.2K
R47 1K
R48 470K
R49 180
R50 330
R51 820
R52 15K
R53 1K
R54 1M
R55 1M
R56 2.2K
R57 270
R58 270K
R59 47K
R60 47K
R61 47K
R62 5.2K
R63 5.2K
S3D
S3E