INSTRUCTION BOOK

FOR

TYPE 16A1

COUNTERMEASURES RECEIVER

GENERAL ELECTRONIC LABORATORIES, INC.

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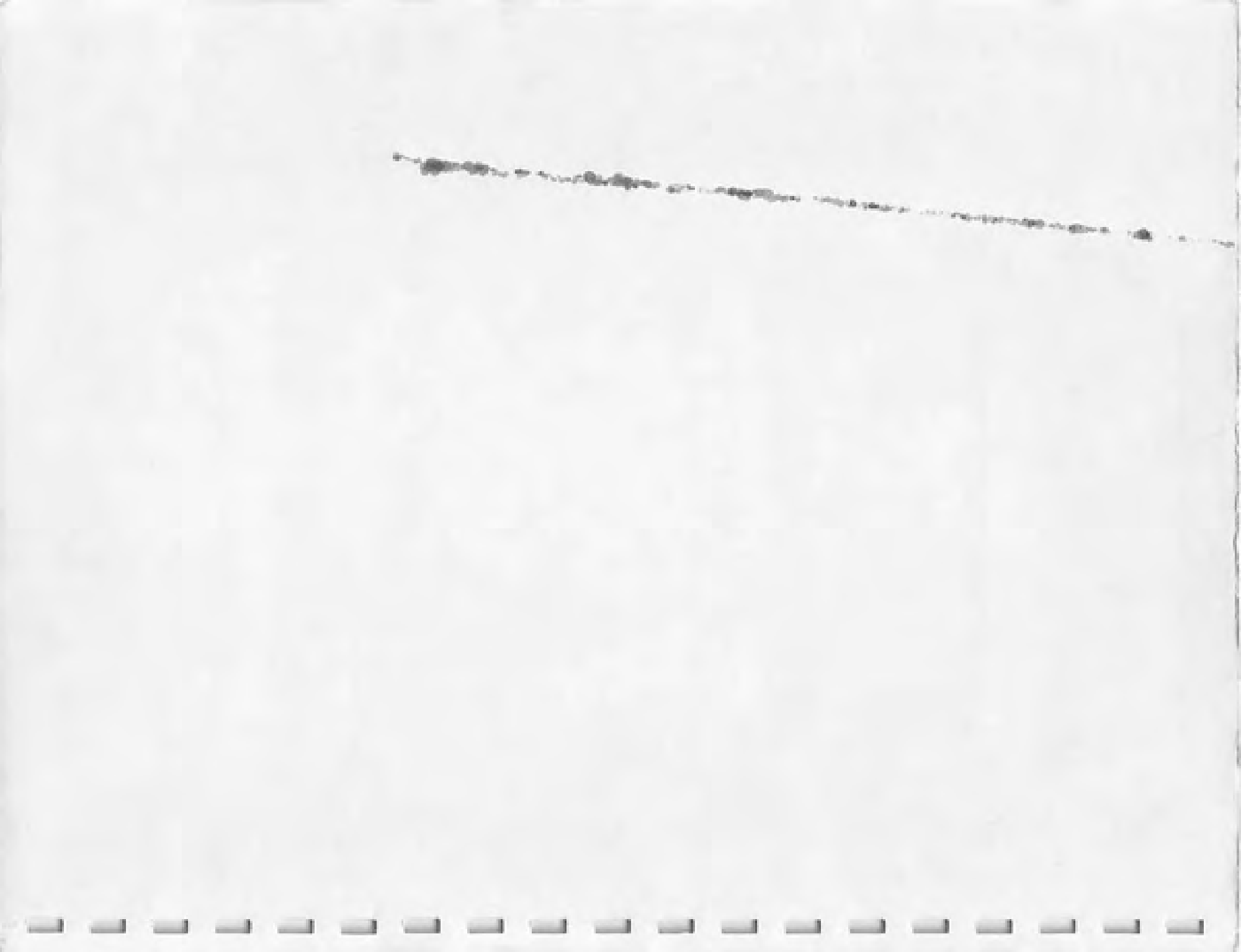

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TABLE 1. PERFORMANCE SPECIFICATIONS

Tuning Range	Band 1 30-60 mc Band 2 55-260 mc
Input Impedance	To be driven from a 50-ohm source
Noise Figure	Band 1 < 4 db Band 2 < 6 db
Image Rejection	Band 1 > 80 db Band 2 > 60 db
IF Rejection	Band 1 > 70 db Band 2 > 70 db
Local Oscillator Radiation	Less than 7 μv across 50 ohms (-90 dbm)
Intermediate Frequencies	21.4 mc and 13 mc
IF Bandwidths	1 mc or 300 kc and 10 kc
1 mc AM Video Response	100 cps to 500 kc
1 mc FM Video Response	100 cps to 500 kc
300 kc AM Video Response	100 cps to 150 kc
300 kc FM Video Response	100 cps to 150 kc
10 kc AM Video Response	100 cps to 5 kc
AM Output 1 mc or 300 kc	10 μv 30% mod. at 1 kc produces 2 volts RMS
FM Output 1 mc or 300 kc	10 μv 100 kc deviation at 1 kc produces 2 volts RMS
AM Output 10 kc	10 μv 30% mod. at 1 kc produces 2 volts RMS
Pulse Output	10 μv at 1 μs at 10 μs pulse produces .5 volts peak to peak
FM Output Stability	Output varies < 2 db for inputs above 2 μv
AM Output Stability	Output varies < 7 db for inputs above 2 μv
Audio Outputs	Speaker, jack for external phones, and balanced 600 ohm output
AM Distortion 1 mc or 300 kc	200 μv input 50% mod. at 1 kc < 5%
AM Distortion 10 kc	200 μv input 50% mod. at 1 kc < 5%
FM Distortion 1 mc or 300 kc	200 μv input 100 kc deviation at 1 kc < 1.5%

FIGURE 1 TYPE 16AI
COUNTERMEASURES RECEIVER
FRONT VIEW

SECTION I

GENERAL DESCRIPTION

1. PURPOSE OF EQUIPMENT.

The GEL Countermeasures Receiver has been designed for critical applications in countermeasures and intercept work.

2. DESCRIPTION OF EQUIPMENT.

The 16A1 receiver provides extreme sensitivity in the 30 to 260 mc frequency range. Simultaneous video outputs for the 300 kc or 1 mc AM and FM detectors are provided in addition to the 10 kc AM video output. Provisions for manual gain, AM, FM, CW, or pulse type AGC have been included. The RF tuning head is a completely shielded plug-in subassembly, and includes a precision two-speed gear drive. Additional features include: crystal-controlled BFO for use on 10 kc IF amplifier, audio monitor, local oscillator outputs for frequency recording, separate signal level recorder outputs for the 300 kc or 1 mc IF amplifier and the 10 kc IF amplifier. The design provides for extremely low local oscillator radiation. An output for operation of a GEL 14E1 frequency display unit has been provided. AFC is available for use with the 10 kc IF amplifier. The equipment is comprised of two 8-3/4" X 19" X 15" chassis complete with dust covers and three-foot interconnecting cables. The panels are notched for a standard 19" relay rack. Power consumption is 190 watts at 115 VAC, 50-60 cps, with a unit weight of 25 and 50 pounds respectively. The receiver chassis includes a cooling fan and air filter for improved reliability.

SECTION II
THEORY OF OPERATION

1. ANALYSIS, TYPE 16A1 RECEIVER.

A block diagram of the 16A1 receiver is shown in Figure 2. The circuit is a single superheterodyne for IF bandwidths of 300 kc or 1 mc with an intermediate frequency of 21.4 mc. A double superheterodyne is used for the 10 kc IF bandwidth with a 13 mc second IF center frequency. The amplifiers are built as completely shielded subassemblies.

The RF tuners are designed to provide the lowest possible noise figure consistent with a tuning range 30 to 60 mc and 55 to 260 mc.

The 300 kc and 1 mc IF amplifiers each use four stages of amplification, and drive a common limiter and phase shift discriminator. The 10 kc IF amplifier converts from 21.4 mc to 13 mc and employs a crystal bandpass filter and crystal discriminator for accurate AFC.

The AM and FM detectors of the 300 kc or 1 mc IF amplifier and the AM detector of the 10 kc IF amplifier drive separate resistance coupled video amplifiers.

a. ANTENNA INPUT IMPEDANCE. -- Operates from 50-ohm source. The input signal is applied through a type "N" 50-ohm coaxial receptacle located on the rear apron of the chassis.

b. FIRST RF STAGE. -- The input signal is applied through an impedance matching network to the cathode of the 6280/416B low-noise planar triode. To prevent loss of input signal due to cathode-to-filament capacity, the filaments are kept above RF ground with broadband chokes. Cooling is accomplished by a blower assembly mounted on the main chassis at the rear of the front end subassembly.

The plate tank circuit takes the form of a modified Pi network and is used to couple the high impedance plate circuit of the 6280/416B to the low input impedance of the 6J4 grounded grid second RF amplifier.

c. SECOND RF STAGE. -- The output of the Pi network drives the cathode of the 6J4 grounded-grid second RF amplifier. A low-noise second stage is used so that the system noise figure (first RF, second RF, and mixer) is essentially that of the first stage.

The plate of the 6J4 is coupled to the grid of the 6AK5 pentode mixer by a double-tuned overcoupled bandpass filter. A capacity "T" is used to prevent coupling between the primary and secondary tuned circuits. The shunt element of the "T" is adjustable, thus providing a control over the interstage bandwidth. The single-tuned high-Q plate circuit of the 6280/416B tube is used to "fill in" the dip in the overcoupled interstage network.

A convenient means for measuring the plate current of the 6280/416B tube is made possible by TP-301 or TP-401 at the junction of R-301 and R-302, or R-401 and R-402, the cathode bias resistors. A VTVM at the test point will read the voltage drop across 100 ohms. Thus 2V equals 20 ma, 3V equals 30 ma, etc.

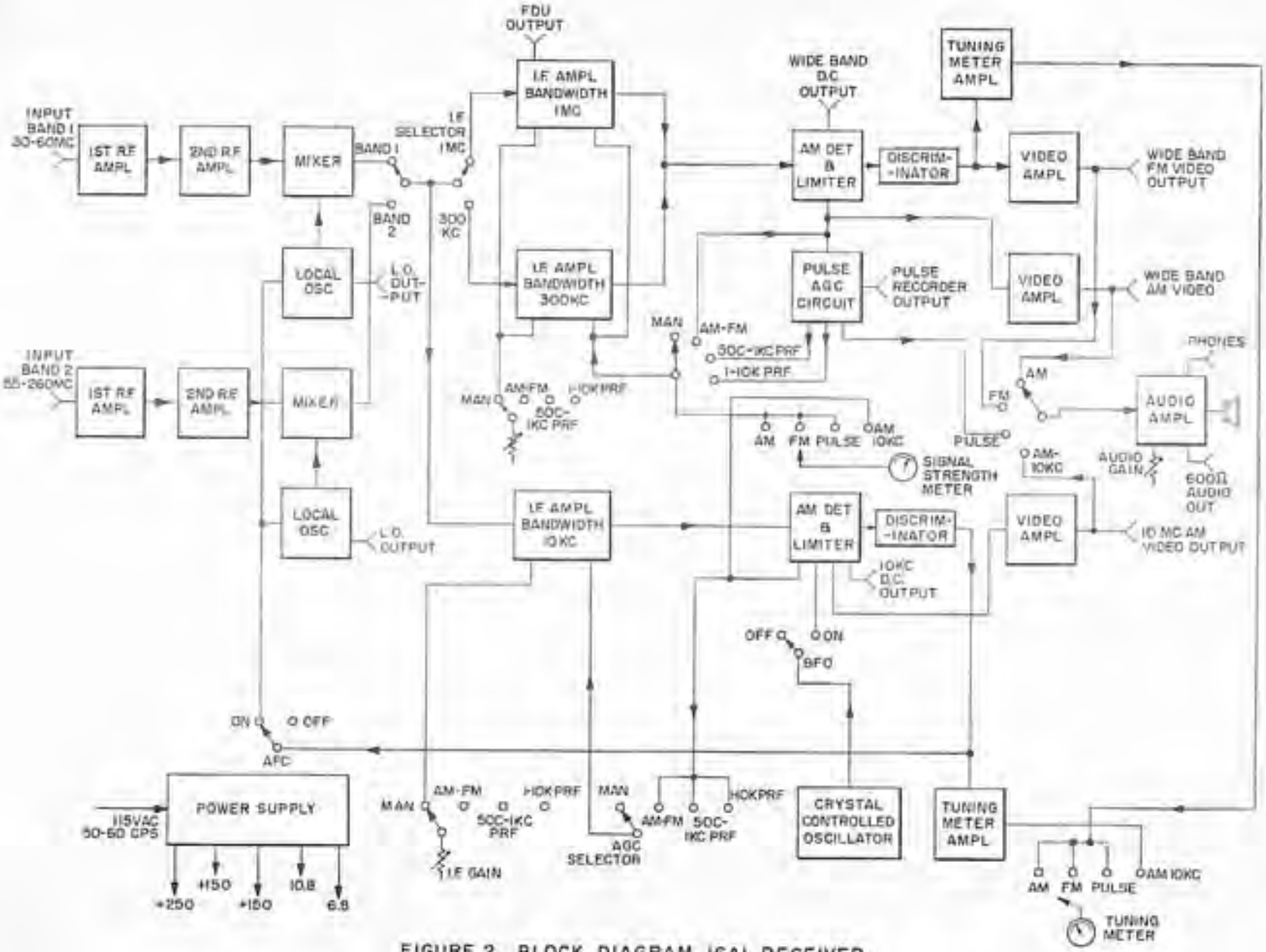


FIGURE 2 BLOCK DIAGRAM 16A1 RECEIVER

The filament of the 6280/416B is operated from a 10.8-volt winding of T-101 through a total series dropping resistance of 3.5 ohms. This produces a self-regulating effect which extends the tube life.

Positive grid bias of 8 volts is applied from a voltage divider from the 150-volt regulated B+. This voltage is necessary to cancel the cathode self-bias voltage to 8.2 volts so that the tube will operate with approximately 0.2-volt bias. The dc degeneration due to the large cathode resistor has a considerable stabilizing effect on the 6280/416B tube and minimizes performance variations from one tube to the next when replacement becomes necessary.

If, for any reason, the grid bias voltage is shorted or removed, the plate current is reduced and the tube will not be damaged.

d. MIXER. -- A 6AK5 pentode is used as a converter. The oscillator signal is injected into the grid circuit, developing an operating bias proportional to the amplitude of the local oscillator signal. This causes a minimum effect on the receiver operation due to variations in local oscillator amplitude. A decoupled test point (TP-302 or TP-402) from a tap on the mixer grid resistors provides a convenient means for observing the response of the RF circuits.

e. LOCAL OSCILLATOR. -- The local oscillator utilizes a 6AF4A tube in a modified Colpitts configuration. The end inductors for the 55 to 260 mc unit are made of solid brass bars to insure frequency stability. The 30 to 60 mc end inductors take the form of single layer space wound solenoids. The frequency stability of the oscillator is very high due to the use of a high GM tube which is loosely coupled to the high-Q tank circuit. Voltage variable capacitors are coupled to the oscillator to provide AFC for use with the 10 kc IF amplifier.

f. 1 MC IF AMPLIFIER. -- A primary winding of the first IF transformer is located on each of the two RF tuner subchassis. These primaries are coaxially switched with the RF bandswitch with the appropriate winding inductively coupled to the secondary of the first 1 mc IF transformer located on the 1 mc IF subchassis. The 1 mc IF subchassis uses three 6DC6 high gain stages followed by a 6AU6 output stage. The three 6DC6 stages are gain controlled and use cathode degeneration to eliminate detuning caused by changes in tube input capacitance resulting from a change in the bias voltage.

g. 300 KC IF AMPLIFIER. -- The grid of the first IF stage is connected by coaxial cable, through a small coupling capacitor, to the secondary of the first IF transformer in the 1 mc IF amplifier subchassis. Three 6DC6 IF stages are used followed by a 6AU6 driving an IN295 AM detector. The 6AU6 also drives a 6AK5 limiter and a phase shift discriminator. The discriminator has a peak separation greater than 1 mc and a video frequency response to 500 kc. The three gain controlled stages employ cathode compensation. The plate of the 6AU6 output stage in the 1 mc IF amplifier chassis is connected, by coaxial cable, in parallel with the plate of the 6AU6 driving the AM detector in the 300 kc IF chassis. The IF bandwidth switch transfers plate and screen voltage from one IF amplifier to the other thus providing selectivity of either 300 kc or 1 mc while utilizing a common AM detector, limiter and discriminator.

TABLE 2. VOLTAGE CHART

SYMBOL	TYPE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9
V-101	6AZ8A	148	0	0	0	148	0	0		
V-102	6CA	118	0	6.3 VAC	0	116	0	6.3		
V-103	6AQ5	0	9.7	6.3 VAC	0	188	188	0		
V-201	ST26/6AL5W	0	*-.45	6.3 VAC	0 1	*.54	0	*-.38		
V-202	6BE6A	0	0	0	0	0	105	0	0	6.3 VAC
V-203	6CL6	162	181	248	1.9 VAC	0	243	162	245	181
V-204	6BE6A	80	0	2	0	0	78	0	2	6.3 VAC
V-205	ST26/6AL5W	-.38	-.48	6.3 VAC	0	.68	0	-.4		
V-206	6BE6A	203	0	14.7	0	0	203	0	11.7	6.3 VAC
V-207	6BE6A	147	0	6.7	0	0	120	0	6.7	6.3 VAC
V-208	6BE6A	140	0	6.7	0	0	0	0	0	6.3 VAC
V-209	6BE6A	134	0	6.3	6.3 VAC	6.3 VAC	133	94	102	0
V-210	6CL6	152	198	253	0	6.3 VAC	253	182	253	148
V-301	6268/6188	‡ Cathode +6.3 V		Filament 6.3 VAC			Plate +215 V		Grid +6.3	
V-302	6J1	0	1.72	0	6.3 VAC	0	0	190		
V-303	6BE6/6AK5W	-.29	0	0	6.3 VAC	148	29	0		
V-304	6AF4A	68	Do not measure	0	6.3 VAC	2	Do not measure	58		
V-401	6268/6188	Cathode +1 V		Filament 6.3 VAC			Plate +215 V		Grid +7 V	
V-402	6J1	0	1.24	0	6.3 VAC	0	0	124		
V-403	6BE6/6AK5W	-2.3	0	0	6.3 VAC	146	68	0		
V-404	6AF4A	58	Do not measure	0	6.3 VAC	2.3	Do not measure	58		
V-501	6DC8	0	49.5	6.3 VAC	0	4188	4182	0		
V-502	6DC8	0	49.5	6.3 VAC	0	4188	4188	0		
V-503	6DC8	0	49.5	6.3 VAC	0	4188	4182	0		
V-504	6AU6WA	0	0	6.3 VAC	0	288	159	2.6		
V-601	6DC8	0	9.4	6.3 VAC	0	198	154	0		
V-602	6DC8	0	9.3	6.3 VAC	0	198	148	0		
V-603	6DC8	0	9.4	6.3 VAC	0	188	188	0		
V-604	6AU6WA	0	0	6.3 VAC	0	298	158	3.0		
V-605	3654/6AK5W	-.38	0	6.3 VAC	0	11.5	80	0		
V-606	ST26/6AL5W	0	0	4.8 VAC	0	0	0	-.55		
V-701	6CL6	0	12.8	6.3 VAC	0	188	144	0		
V-702	6BA7	118	0	33	0	6.3 VAC	0	0	0	181
V-703	3654/6AK5W	-.49	.03	3.3 VAC	0	140	120	-.04		
V-704	6688	12.8	0	12.7	0	6.3 VAC	0	155	0	188
V-705	6688	.94	0	.91	0	6.3 VAC	0	243	0	126
V-706	6AU6WA	-.77	0	6.3 VAC	0	155	78	0		
V-707	3654/6AK5W	□0.1	□.04	6.3 VAC	0	□150	□ma	0		

Band Switch in 35x260 mc
AFC "OFF"
BFO "OFF"
AGC Selector "MAN"
RF Gain "MIN"
Audio Gain "MIN"
Audio Selector "AM"
Operation from 115 V, 60 cps line
Bandwidth "200 kc"

* Audio Selector in "Pulse" and AGC Selector in Pulse (E — 10 K PRF

‡ Bandwidth in "2KC"

□ BFO "ON"

† Band Switch in 35x60 mc

All measurements made with a Model VTVM

FIGURE 3 RF CHASSIS
FRONT VIEW

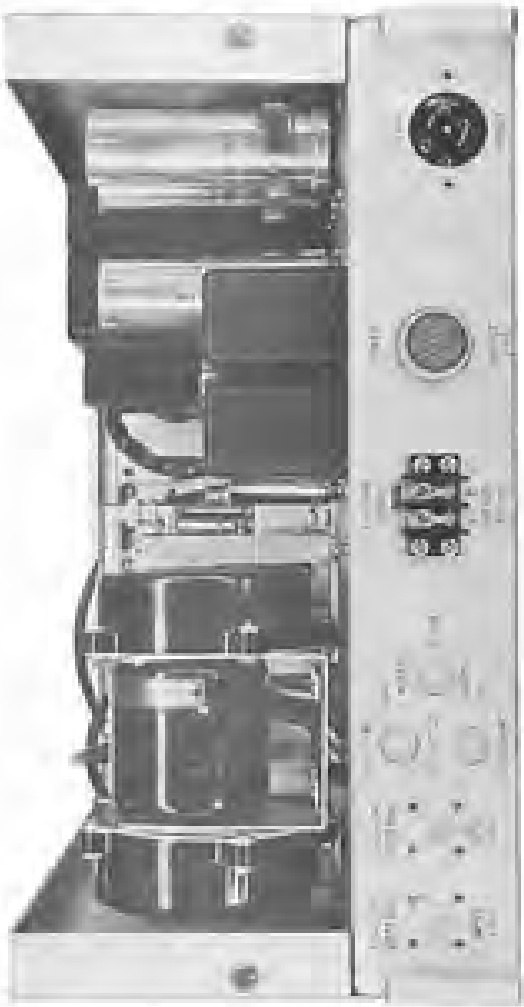


FIGURE 4 RF CHASSIS
REAR VIEW

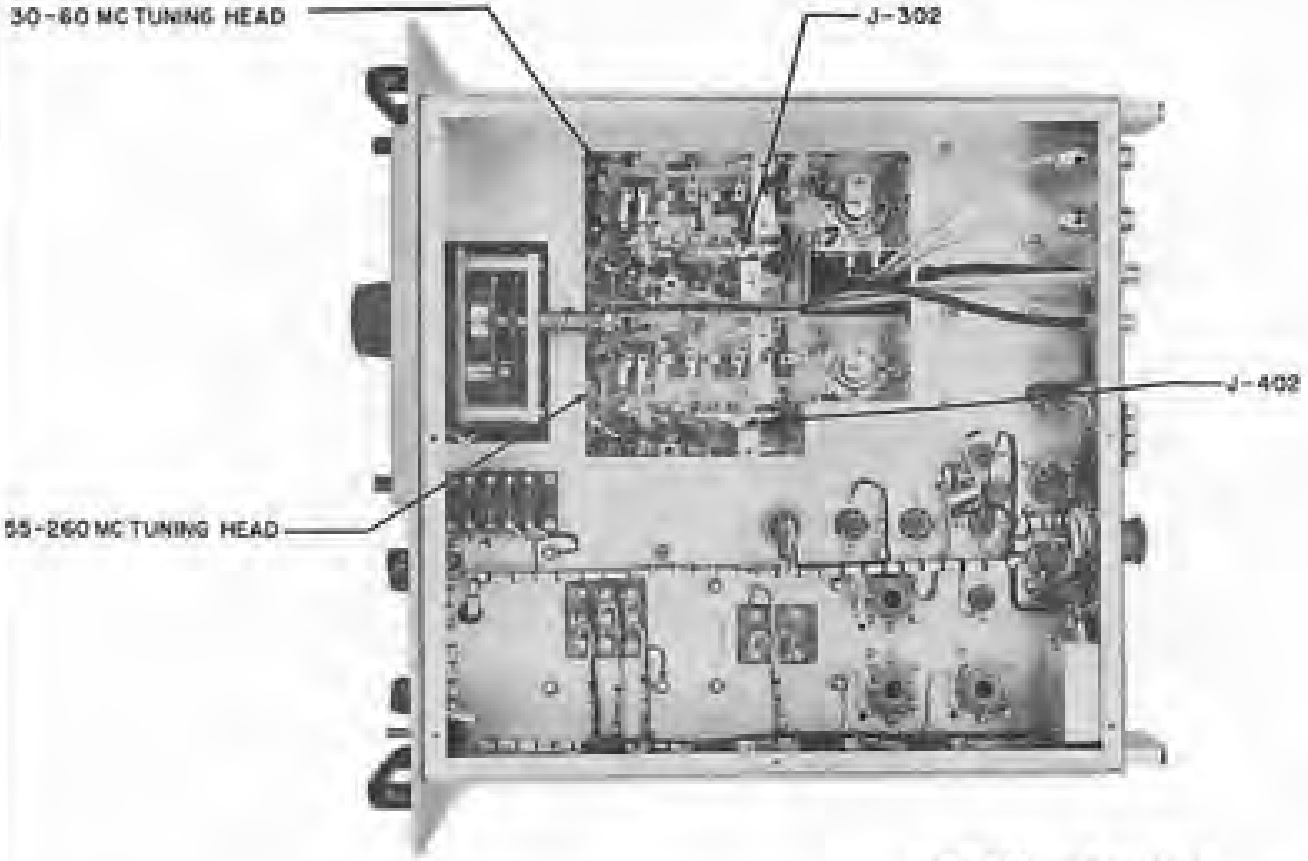


FIGURE 5 RF CHASSIS
BOTTOM VIEW

FIGURE 6 IF CHASSIS
FRONT VIEW

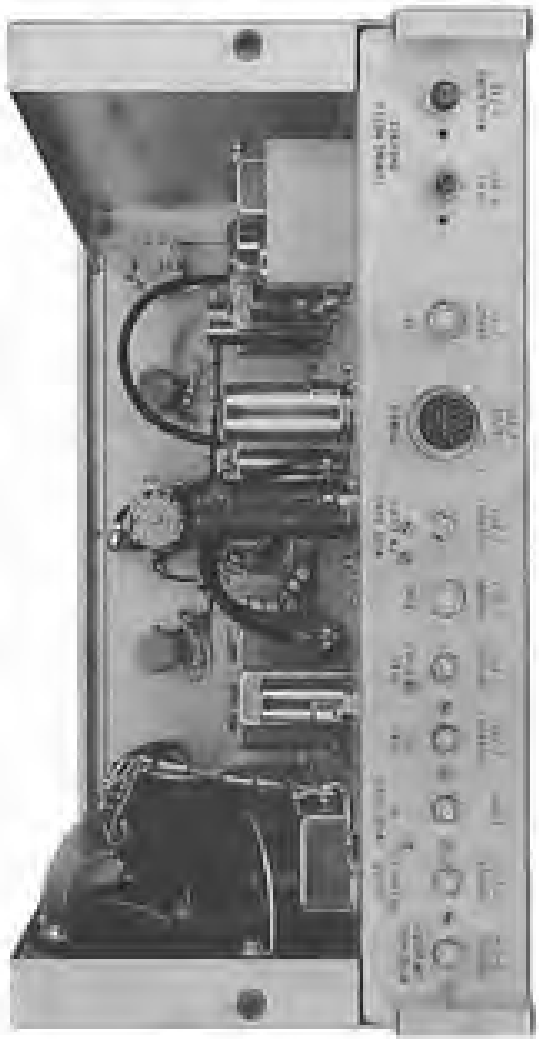


FIGURE 7 IF CHASSIS
REAR VIEW

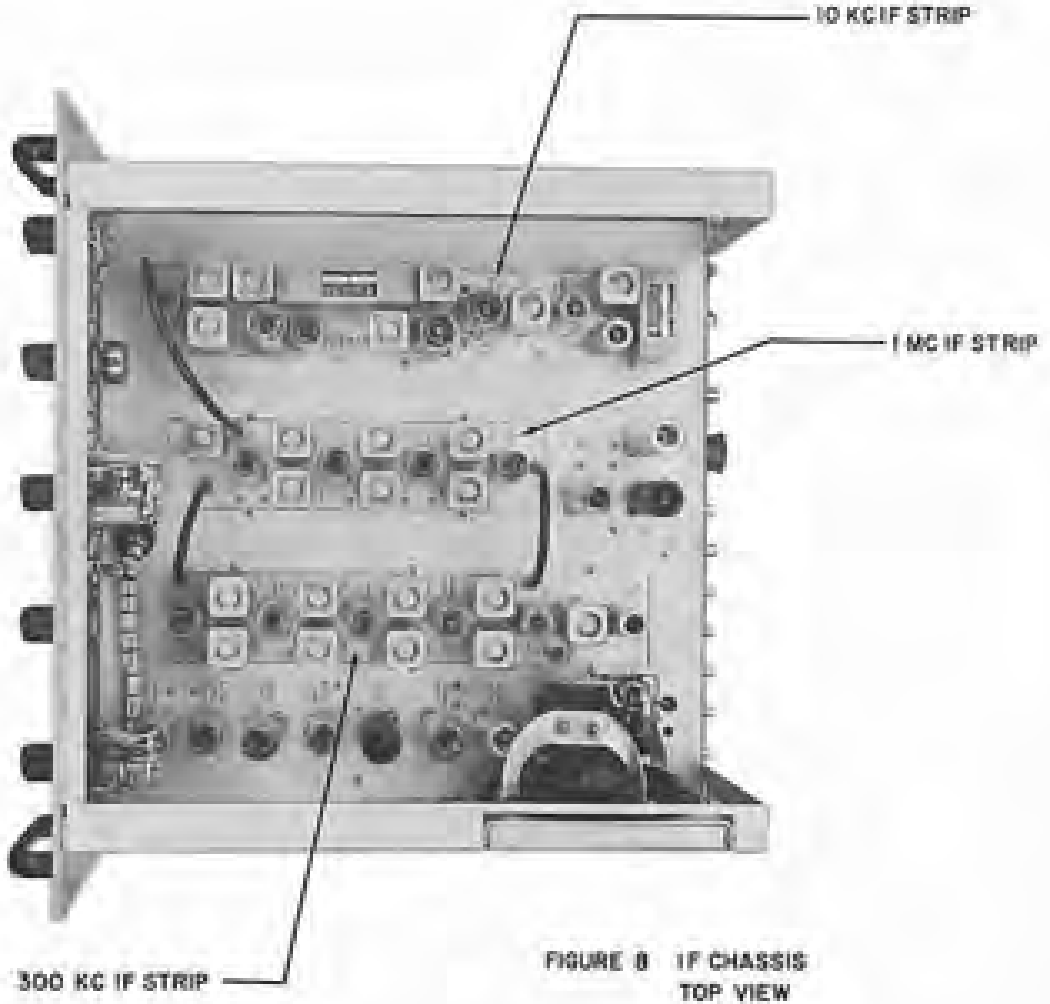


FIGURE 8 IF CHASSIS
TOP VIEW

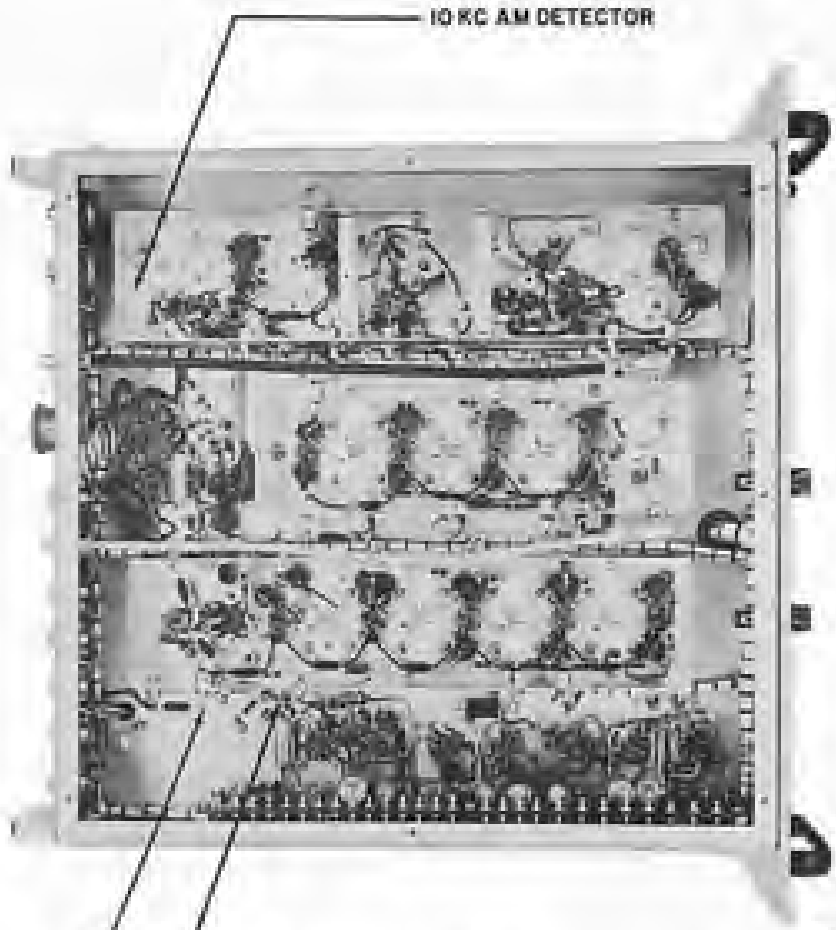


FIGURE 9 IF CHASSIS BOTTOM VIEW

h. 10 KC IF AMPLIFIER. -- The 10 kc IF amplifier employs one isolating stage at 21.4 mc driving a pentagrid mixer, followed by a 15 mc band pass crystal filter which, in turn, drives two synchronously tuned high gain amplifiers. The second IF amplifier stage drives a crystal diode AM detector and a pentode limiter preceding the 15 mc crystal discriminator. The FM output from the discriminator is used exclusively for AFC. The AFC is effective only when used with the 10 kc IF amplifier. The bandpass characteristics are determined by the selectivity of the crystal filter.

i. BEAT FREQUENCY OSCILLATOR. -- A crystal controlled BFO offset, by 1 kc from the center frequency of the 10 kc IF amplifier provides a 1 kc audio beat note when the received signal is tuned to the center of the 10 kc IF amplifier.

j. VIDEO. -- The 300 kc or 1 mc IF amplifier AM and FM detectors and the 10 kc IF amplifier AM detector drive separate resistance coupled video amplifiers with cathode follower output stages. The video amplifiers are designed to operate with a load impedance of 10 K ohms.

k. AUDIO. -- A two stage monitor audio amplifier can be switched to anyone of the three video outputs. The audio output is connected to a front panel phone jack and rear apron barrier strip in addition to the panel mounted speaker. The audio signal is removed from the speaker when the phone jack is inserted. The phone jack and barrier strip outputs are designed for operation with a 600-ohm load.

l. FREQUENCY DISPLAY UNIT. -- An output at 21.4 mc is provided for connection to a GEL type 14E) frequency display unit. This output is obtained from a capacity divider across the secondary of the first 1 mc IF transformer.

m. PULSE AGC CIRCUIT AND 1 MC RECORDER. -- A pulse signal, the plate of the 1 mc video output stage, is fed to a pulse stretcher, two-stage amplifier, and dual detector. The output from one detector supplies a dc voltage for signal strength recording. The external load impedance should be 100 K ohms. The output from the other detector is combined with the dc voltage at the AM detector of the 300 kc or 1 mc IF amplifier to provide AGC and signal strength meter voltage. With this arrangement the signal strength meter indicates on pulse or CW signals and the IF amplifier will not overload on pulse signals or block on CW signals.

n. 300 KC OR 1 MC RECORDER. -- A decoupled output from the 300 kc or 1 mc AM detector provides a dc voltage for external signal strength recording of AM or FM signal. The load impedance should be 100 K ohms.

o. TUNING INDICATOR - 300 KC OR 1 MC IF. -- The output of the discriminator is used to drive V-206A as a cathode follower. The other half V-206B is used as part of a bridge circuit so that the output voltage is zero when the discriminator output is zero. If the discriminator output is positive or negative, the tuning meter will read accordingly. This is the condition for a CW or sinusoidal frequency modulated signal when the receiver is off tune. When the output of the discriminator is a series of pulses with varying duty cycle, it is desirable to tune the receiver so that positive and negative frequency excursions

are equal. In effect, this centers the passband of the receiver about the frequency variations of the transmitter. When such a waveform is applied to the grid of V-206A, a similar output is obtained at the cathode from a much lower source impedance. This output is applied to two diode rectifiers with a meter connected in such a fashion that it indicates the difference between positive and negative peak voltages. Thus, when the meter is made to read zero, the desired condition of tuning exists in the receiver.

NOTE

When the audio selector switch S-203 is in the AM or FM position, the tuning meter is operated by the wideband discriminator. In the absence of an input signal, the tuning meter may indicate off zero on noise and the amount will shift with the setting of the 300 kc - 1 mc IF bandwidth switch. This "off center" indication is normal and is caused by a slight "tilt" in the IF passband at maximum gain. The discriminator secondary adjustment should not be used to make the tuning meter read zero on noise. If adjustment is thought to be necessary, proceed as indicated in Section 4, Maintenance.

(1) Perform operation "h" - 300 kc - 1 mc tuning meter zero adjustment.

(2) Feed in a 21.4 mc 500 cps signal to J-202, the FDU output located on the rear apron.

(3) Set the AGC selector switch S-202 to FM.

(4) Adjust the secondary of T-609 "bottom slug" for zero center indication on the tuning meter.

p. TUNING INDICATOR - 10 KC IF AMPLIFIER. - A zero center meter is used as a tuning indicator and is connected in a balanced bridge circuit consisting of V-207, type 5814A tube.

q. POWER SUPPLY. - The power supply of the 16A1 receiver uses a center-tapped transformer and four silicon rectifiers in a bridge circuit to supply the various output voltages. These are 250 volts unregulated, 150 volt regulated, and 150 volts unregulated. The latter is obtained from the center tap of the same transformer driving the full-wave bridge rectifier and uses the two rectifiers at the ground end of the bridge in a split-phase, full-wave rectifier. An OA2 supplies regulated 150 volts for the local oscillator.

A 6.3-volt winding on the power transformer supplies filament power to all tubes except V-301 or V-401, the 6280/416B RF amplifier. A separate 10.8-volt winding on the power transformer, with a 3.5-ohm series dropping resistor, supplies the 6280/416B RF amplifier. RF line filtering is included in the equipment.

SECTION III
OPERATION

1. INTRODUCTION.

Figure 1 shows the appearance and location of controls on the front panels of the Model 16A1 VHF Countermeasures Receiver.

2. CONTROL SETTINGS.

a. POWER. -- Turn on the main power switch located on the front panel. The model 16A1 receiver uses a time delay relay to delay the application of plate voltage to the first and second RF amplifiers for approximately 60 seconds. Delay of plate voltage to the 6280/416B tube is in the interest of improved tube life. The receiver will therefore be inoperative for approximately one minute after it is turned on.

b. TUNING RANGE. -- Set bandswitch to appropriate range. Band one covers 30 to 60 mc and band two covers 55 to 260 mc. When switching bands with the receiver operating, allow one minute warmup time for operation of the protective time delay relay.

c. IF BANDWIDTH. -- The front panel IF bandwidth control provides operation of either the 300 kc or the 1 mc IF amplifier.

d. AGC SELECTOR. -- For manual gain operation of both the 300 kc or 1 mc IF amplifier and 10 kc IF amplifier, set the AGC selector switch to the "MANUAL" position. For the reception of FM and AM signals under AGC conditions, the selector switch should be in the AM-FM position. To receive PULSE signals with AGC, two time constants are provided; one for high PRF, the other for low PRF signals.

e. AUDIO SELECTOR. -- The audio selector switch allows selection of AM, FM, stretched pulse, or 10 kc AM signals to be fed to the monitor audio amplifier.

f. AUDIO GAIN. -- Adjust as needed.

g. MANUAL GAIN. -- A front panel IF gain control becomes operative when the AGC selector switch is in the "MANUAL" position.

h. AFC. -- The AFC is effective only when using the 10 kc IF amplifier and can be switched on or off by a front panel control.

i. BEAT FREQUENCY OSCILLATOR. -- Set the audio monitor to AM 10 kc. Set the AFC switch to off. Tune in the desired signal for zero on the tuning meter. Turn the BFO on. Switch the AGC selector to "MANUAL" and adjust the IF gain control for the loudest beat note.

SECTION IV
MAINTENANCE

1. INTRODUCTION.

The model 16A1 receiver has been designed to give comparatively trouble-free operation. The highest quality components, conservatively rated, have been used throughout. A thorough knowledge of the theory of operation, as contained in Section II, with the voltage chart and schematic diagram should facilitate servicing of the equipment. Alignment of the equipment should never be attempted as a means of making a non-operating device function. If difficulty is encountered, alignment is the very last thing that should be done and then only with the proper test equipment. Nothing will destroy the performance of the receiver faster than making unnecessary adjustments.

2. ALIGNMENT PROCEDURE.

30-60 MC FRONT END:

a. LOCAL OSCILLATOR ADJUSTMENT. -- The only adjustment necessary on the local oscillator is to make the tuning dial read properly. This section may be disregarded if the dial is reading properly. If a tube has been replaced or an error is noted, it may be corrected by the adjustment of C-342. This adjustment should be made with a signal generator of high accuracy at 30 mc. Turn the receiver to 30 mc; with the signal generator at 30 mc, adjust C-342 for zero on the tuning meter.

The high frequency end of the dial is controlled by moving turns on L-314. The correct adjustment is made at the factory and normally will not require readjustment in the field. The dial should read correctly at 60 mc.

b. RF AMPLIFIER ADJUSTMENT. -- The RF circuits are designed around a highly stable, Mallory Spiral Inductuner. The end inductors are very stable, therefore, realignment problems will be minimized. If realignment is found necessary, then proceed as follows:

(1) Unsolder C-324 from the inductuner lug and solder to the BNC test connector J-302.

(2) Connect a sweep generator with a 50-ohm source impedance to the BNC test connector J-302.

(3) Connect an oscilloscope to the front end test point TP-302.

(4) Set the dial to 30 mc.

(5) Adjust C-330 and C-335 for a double-tuned symmetrical response centered at 29.9 mc.

(6) Adjust C-334 for a 2% dip in the response.

(7) Repeat step 5 above.

(8) Tune the receiver to 10 mc and adjust the coil symmetry of L-309 and L-310 for a symmetrical response centered at 60 mc and 15% dip.

(9) Unsolder C-324 from the BNC test jack J-402 and reconnect it to the inductuner lug.

(10) Connect the sweep generator to the Antenna Input jack J-402 or J-501.

(11) Set the dial to 30 mc.

(12) Adjust C-307 for a symmetrical response.

(13) Set the dial to 60 mc and adjust L-304 by sliding turns for a symmetrical response.

(14) Repeat local oscillator adjustment if necessary.

55-260 MC FRONT END:

c. LOCAL OSCILLATOR ADJUSTMENT. -- The only adjustment necessary on the local oscillator is to make the tuning dial read properly. This section may be disregarded if the dial is reading properly. If a tube has been replaced or an error is noted, it may be corrected by adjustment of C-439. This adjustment should be made with a signal generator of high accuracy. Tune the receiver to 55 mc and with the signal generator at 55 mc, adjust C-439 for zero on the tuning meter.

The high frequency end of the dial is controlled by the location of C-440 on the end inductor L-431. The correct adjustment is made at the factory and normally will not require readjustment in the field. The dial should read correctly at 260 mc.

d. RF AMPLIFIER ADJUSTMENT. -- The RF circuits are designed around a highly stable Mallory Spiral Inductuner.

The end inductors are very stable; therefore, realignment problems will be minimized. If realignment is found necessary, proceed as follows:

(1) Unsolder C-426 from the inductuner lug and solder to the BNC test connector J-402.

(2) Connect a sweep generator with a 50-ohm source impedance to the BNC test connector J-402.

(3) Connect an oscilloscope to the front end test point TP-401.

(4) Set the dial to 55 mc.

(5) Adjust C-429 and C-433 for a double-tuned symmetrical response centered at 54 mc.

(6) Adjust C-431 for a 30% dip on the response.

(7) Repeat step 5 above.

(8) Set the dial to 260 mc and adjust the end inductors L-409 and L-410 to produce a symmetrical response centered at 260.7 mc.

(9) Unsolder C-426 from the BNC connector J-402 and resolder it to the inductuner lug.

(10) Connect a sweep generator to the antenna jack J-403 or J-401.

(11) Set the dial to 55 mc.

(12) Adjust C-406 for a symmetrical response.

(13) Set the dial to 260 mc and move the position of C-406 along the portion of the end inductor L-404 to produce a symmetrical round-nose response.

(14) Repeat local oscillator adjustment if necessary.

e. 300 KC IF AMPLIFIER ALIGNMENT.

(1) Remove the oscillator tubes V-404 and V-304 (6AF4A).

(2) AGC selector switch should be in the "MANUAL" position.

(3) IF gain control fully clockwise.

(4) BFO switch should be "off".

(5) AFC switch should be "off".

(6) Bandwidth selector switch should be in the 300 kc position.

(7) Remove V-604.

(8) Connect an oscilloscope to the FM discriminator output.

(9) Connect a sweep generator to pin 1 of V-605.

(10) With maximum output from the sweep generator, adjust the primary and secondary of T-609 for a maximum symmetrical "S" curve centered at 21.4 mc with a peak separation of 1.1 mc ±50 kc.

NOTE

To adjust the peak separation, remove the transformer can and adjust the coupling link between the primary and secondary windings. The can should be replaced each time the link is adjusted to insure proper tuning.

(11) Connect the oscilloscope to the AM detector through a 10 K ohm resistor.

(12) Replace V-604.

(13) Remove V-603.

(14) Connect the sweep generator to pin 1 of V-604.

(15) With the output from the sweep generator adjusted to produce approximately 2 volts peak to peak, tune the primary and secondary T-607 and T-608 for a maximum symmetrical response centered at 21.4 mc.

(16) Replace V-603.

(17) Remove V-602.

(18) Connect the sweep generator to pin 1 of V-603 through a 200-ohm resistor with a 10-ohm resistor from pin 1 to ground.

(19) Adjust the primary and secondary T-605 and T-606 for a maximum symmetrical response centered at 21.4 mc with the sweep generator output adjusted to produce the same oscilloscope deflection as in step 15.

(20) Remove the 200-ohm and the 10-ohm resistors.

(21) Replace V-602.

(22) Remove V-601.

(23) Connect the sweep generator to pin 1 of V-602 through a 200-ohm resistor with a 10-ohm resistor from pin 1 of V-602 to ground.

(24) Adjust the primary and secondary T-603 and T-604 for a maximum symmetrical response centered at 21.4 mc with the sweep generator output adjusted to produce the same oscilloscope deflection in step 15.

(25) Replace V-601.

(26) Remove the 10-ohm and the 200-ohm resistors.

(27) Replace the bottom cover.

(28) Connect the sweep generator to J-601.

(29) Adjust the primary and secondary T-601 and T-602 for a maximum symmetrical response centered at 21.4 mc with the sweep generator output adjusted to produce the same oscilloscope deflection in step 15.

NOTE

If noise is excessive reduce the IF gain by the control on the front panel, and increase the sweep generator output to produce the same oscilloscope deflection.

(10) The overall response of the 300 kc IF amplifier should be 300 kc ±25 kc at the 3 db points with a maximum dip of 5%. This completes the alignment of the 300 kc IF amplifier.

f. 1 MC IF AMPLIFIER ALIGNMENT.

NOTE

The 300 kc IF amplifier should be aligned before attempting alignment on the 1 mc IF amplifier because of the common limiter and discriminator. The bottom cover should be on the 300 kc IF amplifier during alignment of the 1 mc IF amplifier.

(1) Remove the oscillator tubes V-404 and V-304.

(2) AGC selector switch should be in the "MANUAL" position.

(3) IF gain control fully clockwise.

(4) BFO switch should be "off".

(5) AFC switch should be "off".

(6) Bandwidth selector switch should be in the 1 mc position.

(7) Remove V-505.

(8) Connect an oscilloscope to the AM output on the 300 kc IF amplifier through a 10 K resistor.

(9) Connect a sweep generator to pin 1 of V-504.

(10) Adjust the sweep generator output to produce a 2-volt peak-to-peak signal as indicated on the oscilloscope. This should produce a symmetrical response centered 21.4 mc.

NOTE

If the shape is not correct, then realignment of the 300 kc IF amplifier is necessary.

(11) Replace V-503.

(12) Remove V-502.

(13) Connect a sweep generator to pin 1 of V-503.

(14) Adjust the primary and secondary T-506 and T-507 for maximum symmetrical response centered at 21.4 mc with the sweep generator output adjusted to produce the same oscilloscope deflection as in step (10).

(15) Replace V-502.

(16) Remove V-501.

(17) Connect a sweep generator to pin 1 of V-502 through a 200-ohm resistor with a 10-ohm resistor from pin 1 to ground.

(18) Adjust the primary and secondary T-504 and T-505 for a maximum symmetrical response centered 21.4 mc with the sweep generator output adjusted to reduce the same oscilloscope deflection as in step (10).

(19) Replace J-501.

(20) Remove the 10-ohm and the 200-ohm resistors.

(21) Connect at sweep generator to pin 1 of V-501 through a 200- ohm resistor with a 10-ohm resistor from pin 1 to ground.

(22) Adjust the primary and secondary T-502 and T-503 for a maximum symmetrical response centered at 21.4 mc with the sweep generator output adjusted to produce the same oscilloscope deflection as in step (10).

(23) Remove the 10-ohm and the 200- ohm resistors.

(24) Replace the bottom cover.

(25) Connect a sweep generator to TP-302.

(26) The bandswitch should be in the 30-60 mc position.

(27) Adjust the primary and secondary T-501 for maximum symmetrical response centered at 21.4 mc.

(28) The front end selector switch should be switched to the 55-260 mc position. Reconnect the sweep generator to TP-402 and adjust L-413 for symmetrical response centered at 21.4 mc. Care should be taken not to readjust L-501.

NOTE

If noise is excessive, reduce the IF gain with the IF gain control located on the front panel; and increase the sweep generator output to produce the same oscilloscope deflection as in step (10). If the output from the sweep generator is insufficient, remove the front end bottom cover and connect the sweep generator to the junction of the two 470 K resistors, R-314 and R-315, or R-414 and R-415, depending upon the front end in use.

(29) Connect a 21.4 mc post amplifier to J-202 frequency display unit output. (GEL post amplifier type 1.) The amplifier should be about 3.2 mc wide across the flat portion of the response.

(30) Connect the oscilloscope to the output of the post amplifier.

(31) Adjust T-501 for a flat response.

(32) Connect the oscilloscope to the AM detector output on the 300 kc IF amplifier; and if the overall response is tilted adjust the secondary T-503 until the IF has a symmetrical response. This adjustment should require only slight retuning of T-503.

(33) Check the overall response of the amplifier. It should be 1 mc ± 75 kc at the 3 db points with a maximum dip of 5%. This completes the alignment of the 1 mc IF amplifier.

g. 10 KC IF ALIGNMENT.

(1) Remove the oscillator tubes V-304 and V-404.

(2) AGC selector switch should be in the "MANUAL" position.

(3) IF gain control fully clockwise.

(4) BFO switch should be "off".

(5) AFC switch should be "off".

(6) Remove V-705.

(7) Connect an oscilloscope to the FM output C-747.

(8) Connect a sweep generator to pin 1 of V-706.

(9) Adjust T-707 for a symmetrical "S" curve centered at 13 mc.

(10) Replace V-705.

(11) Disconnect the oscilloscope.

(12) Disconnect the sweep generator.

(13) Connect a vacuum tube voltmeter to the AM output.

(14) Connect a signal generator to pin 2 of V-705.

(15) Adjust T-706 for maximum output at 13 mc. The AM detector should be operated at about 2 to 5 volts.

(16) Connect the signal generator to pin 2 of V-704.

(17) Adjust T-705 for maximum output at 13 mc keeping the AM output between 2 to 5 volts.

(18) Connect the signal generator to pin 7 of V-702.

(19) Tune the signal generator to 21.4 mc.

(20) Adjust T-703, T-704 and L-702 located near the crystal filter, for maximum output again operating the detector between 4 and 5 volts.

(21) Connect the signal generator to J-701.

(22) Replace the bottom cover.

(23) Adjust T-701 and T-702 for maximum output. This completes the 10 kc IF alignment.

h. 300 KC - MC TUNING METER ZERO ADJUSTMENT.

(1) Remove signal input to receiver.

(2) Set AGC selector switch S-202 to "MANUAL".

(3) Set IF gain control R-228 to maximum counter clockwise position "MINIMUM GAIN".

(4) Set audio selector switch S-203 to FM.

(5) Adjust R-235 on rear apron for zero center indication on tuning meter M-102.

i. 10 KC TUNING METER ZERO ADJUSTMENT.

(1) Remove signal input to receiver.

(2) Set AGC selector switch S-202 to "MANUAL".

(3) Set IF gain control R-228 to maximum counterclockwise position "MINIMUM GAIN".

(4) Set audio selector switch S-203 to AM 10 kc.

(5) Adjust R-240 on rear apron for zero center indication on tuning meter M-102.

j. INDUCTUNER ALIGNMENT. -- The ganged inductuners must be aligned in the following manner for proper tracking.

(1) Looking at shaft ends, rotate both inductuner shafts in a CCW direction until they are against their respective stops.

(2) Lock sprockets to shaft using cone-pointed set screws.

k. INDUCTUNER TO MECHANICAL STOP ALIGNMENT. -- The aligned inductuners must be attached to the gear train in such a manner that the mechanical stop on the knob shaft will control rotation so as to allow the inductuner stops to just touch their respective stops.

l. DIAL TO INDEX MARKER ALIGNMENT.

(1) Rotate knob shaft CCW against stop, loosen set screw on gear below dial shaft, and rotate dial so that arrowhead mark on the inner scale is aligned under the marker line.

(2) Tighten set screws.

m. REPLACEMENT OF 6280/416B. -- The 6280/416B tube, V-301 and V-401 located on the rear of each front end assembly, should be removed as follows:

(1) Remove four screws that hold cover in place.

(2) Loosen four captive screws located in the corners of the penthouse deck and lift penthouse vertically away from tube. Tube will extract itself from socket and remain on the front end chassis.

(3) Tube must then be unscrewed from the grid flange and replaced with a new tube.

(4) Align pins on tube to closely match socket in penthouse by rotating tube and grid flange in CW direction thereby assuring it is not loose on the grid flange and then replace penthouse and cover.

n. AIR FILTER MAINTENANCE. -- This equipment has been furnished with a permanent-type air filter that should be removed and cleaned periodically, depending upon environmental conditions.

(1) Remove dust cover.

(2) Slide filter up and out.

(3) Wash filter, and impregnate with Filter Coat No. 3, Research Products Corp., Madison, Wisconsin or equal and replace in chassis.

o. FAN MAINTENANCE.

(1) Fan should be oiled with MIL-L-6085a every two weeks when used continuously on 50 cps or monthly when operated on 60 cps.

(2) Keep centrifugal blades and housing free of dust and dirt for efficient operation.

p. GENERAL MAINTENANCE OF BEARINGS, GEARS, CHAIN, AND STOP WASHERS.

(1) Gear faces, sprocket chain and mechanical stop washers should be wiped clean and washed with varsol and relubricated with MIL-G-3278 type lubricant every two months.

(2) Ball bearings should be cleaned and lubricated with MIL-L-6086 type lubricant every two months.

TABLE II. TUBE COMPLEMENT

SYMBOL	TYPE	FUNCTION
V-101	0A2WA	Voltage Regulator
V-102	6C4	Audio Amplifier
V-103	6AQ5	Audio Output
V-201	5726/6AL5W	Wideband AGC Delay and Pulse Stretcher
V-202	5814A	Wideband AM Video Amplifier
V-203	6CL6	Wideband AM Video Cathode Follower
V-204	5814A	Pulse Amplifier
V-205	5726/6AL5W	Pulse Detector
V-206	5814A	Wideband Metering Amplifier
V-207	5814A	10 kc Metering Amplifier
V-208	5814A	10 kc AGC Delay and Wideband FM Video Amplifier
V-209	5814A	10 kc AM Video Amplifier 10 kc AM Video Cathode Follower
V-210	6CL6	Wideband FM Video Cathode Follower
V-301	6280/416B	First RF Amplifier (30-60 mc)
V-302	6J4	Second RF Amplifier
V-303	5654/6AK5W	Mixer
V-304	6AF4A	Oscillator
V-401	6280/416B	First RF Amplifier (55-260 mc)
V-402	6J4	Second RF Amplifier
V-403	5654/6AK5W	Mixer
V-404	6AF4A	Oscillator
V-501	6DC6	First IF Amplifier, 21.4 mc, 1 mc
V-502	6DC6	Second IF Amplifier, 21.4 mc, 1 mc
V-503	6DC6	Third IF Amplifier, 21.4 mc, 1 mc
V-504	6AU6WA	Fourth IF Amplifier, 21.4 mc, 1 mc
V-601	6DC6	First IF Amplifier, 21.4 mc, 300 kc
V-602	6DC6	Second IF Amplifier, 21.4 mc, 300 kc

TABLE II. TUBE COMPLEMENT (CONT)

SYMBOL	TYPE	FUNCTION
V-603	6DC6	Third IF Amplifier, 21.4 mc, 300 kc
V-604	6AU6WA	Fourth IF Amplifier, 21.4 mc, 300 kc
V-605	5654/6AK5W	FM Limiter, 21.4 mc, 300 kc and 1 mc
V-606	5726/6AL5W	Discriminator, 21.4 mc, 300 kc and 1 mc
V-701	6CB6	First IF Amplifier, 21.4 mc, 10 kc
V-702	6BA7	Mixer
V-703	5654/6AK5W	Second Oscillator
V-704	6688	First IF Amplifier, 13 mc, 10 kc
V-705	6688	Second IF Amplifier, 13 mc, 10 kc
V-706	6AU6WA	FM Limiter
V-707	5654/6AK5W	Beat Frequency Oscillator

SECTION V

PARTS LIST

A. POWER SUPPLY CHASSIS

SYMBOL	DESCRIPTION
B-101	BLOWER: Heinze #D60425
C-101	CAPACITOR: fixed, ceramic disc, 5000 μμf GMV 1400 V Radio Materials Company, type "U" AC line bypass B-5000 GMV
C-102	CAPACITOR: fixed, ceramic disc, 5000 μμf GMV 1400 V Radio Materials Company, type "U" AC line bypass B-5000 GMV
C-103	CAPACITOR: fixed, ceramic feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-104	CAPACITOR: fixed, ceramic feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-105 A, B	CAPACITOR: electrolytic, 45-45 μf at 400 V, Pyramid CE-52C450Q
C-106 A, B	CAPACITOR: electrolytic, 45-45 μf at 400 V, Pyramid CE-52C450Q
C-107 A, B	CAPACITOR: electrolytic, 45-45 μf at 450 V, Pyramid CE-52C450Q
C-108	CAPACITOR: fixed, ceramic disc, 10,000 μμf +100% - 20%, Erie, CK63Y103Z
C-109	CAPACITOR: electrolytic, 20 μf +25% - 10% 25 V, Aerovox XPP-25020F
C-110	CAPACITOR: fixed, paper, 1 μf ±20% 200 V, Aerovox P123ZGP
CR-101	RECTIFIER: silicon, Texas Instrument IN2071
CR-102	RECTIFIER: silicon, Texas Instrument IN2071
CR-103	RECTIFIER: silicon, Texas Instrument IN2071
CR-104	RECTIFIER: silicon, Texas Instrument IN2071
F-101	FUSE: 1.5 amp, Slo-Blo
J-101	CONNECTOR: receptacle, Deutsch DM-9601-19S
J-102	Integral Part of W-102
J-103	Integral Part of W-101
J-104	Integral Part of W-104
J-105	Integral Part of W-103
J-106	CONNECTOR: receptacle, IPC 46025

SYMBOL	DESCRIPTION
J-107	CONNECTOR: receptacle, IPC 46025
J-108	CONNECTOR: receptacle, IPC 46025
J-109	Integral Part of W-107
J-110	CONNECTOR: receptacle, Hubbell #7486G
J-111	CONNECTOR: receptacle, Deutsch #DM-9601-27S
K-101	DELAY RELAY: Curtiss-Wright Snapper Type 6.3-60-DF
K-102	DELAY RELAY: Curtiss-Wright Snapper Type 8.3-60-DF
L-101	CHOKE: 1.45 μh, GEL Drawing #B-10-207
L-102	CHOKE: 1.45 μh, GEL Drawing #B-10-207
L-103	CHOKE: power, GEL Drawing #C-10-252
L-104	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-105	CHOKE: 2.7 μh, GEL Drawing #B-10-103
M-101	METER: signal strength, 0-50 μa, GEL Drawing #111013
M-102	METER: tuning, 50-0-50, GEL Drawing #111015
P-101	PLUG: connector, Deutsch DM-9702-19P
P-102	Integral Part of W-102
P-103	Integral Part of W-101
P-104	Integral Part of W-104
P-105	Integral Part of W-103
P-106	Integral Part of W-105
P-107	Integral Part of W-106
P-108	Integral Part of W-107
P-109	Integral Part of W-108
P-110	Integral Part of W-105
P-111	Integral Part of W-106
R-101	RESISTOR: fixed, wirewound, 3.5 ohm, 25 watt ±3%, Dale Products Co. RH-25 Dalohm
R-102	RESISTOR: fixed, wirewound, 350 ohm, 25 watt ±3% Dale Products Co. RH-25 Dalohm
R-103	RESISTOR: fixed, wirewound, 47 ohm, 25 watt ±3% Dale Products Co. RH-25 Dalohm

SYMBOL	DESCRIPTION
R-104	RESISTOR: fixed, wirewound, 3000 ohm, 25 watt ±3% Dale Products Co. RH-25 Dalohm
R-105	RESISTOR: fixed, composition, 220 K, 1/2 watt,±10% Allen Bradley EB-2241
R-106	RESISTOR: fixed, composition, 10 K, 1/2 watt,±10% Allen Bradley EB-1031
R-107	RESISTOR: fixed, composition, 470 K, 1/2 watt,±10% Allen Bradley EB-4741
R-108	RESISTOR: fixed, composition, 330 ohm, 2 watt,±5% Allen Bradley HB-3315
S-101	SWITCH: power, Smith #522
S-102	SWITCH: Centralab #PA-2001
S-103	SWITCH: Centralab #PA-2003
T-101	TRANSFORMER: power, GEL Drawing #C-10-754
T-102	TRANSFORMER: audio, Chicago AMS-5
T-103	TRANSFORMER: audio, Chicago AMS-2
V-101	TUBE: electron, OA2WA
V-102	TUBE: electron, 6C4
V-103	TUBE: electron, 6AQ5
W-101	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-464
W-102	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-464
W-103	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-465
W-104	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-465
W-105	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-467
W-106	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-467
W-107	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-469
W-108	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-466
W-109	CABLE ASSEMBLY: power input, GEL Drawing #B-10-335
W-110	CABLE ASSEMBLY: interconnecting, GEL Drawing #B-10-577

SYMBOL	DESCRIPTION
B-201	BLOWER: Rotron KS-401 Model DFE Air Flow R, Series 92A Frame TA-1
C-201	CAPACITOR: fixed, bathtub, 1 mfd, 600 V, Pyramid CP53B1EF105K
C-202	Not assigned
C-203	CAPACITOR: fixed, paper, 2 mfd ±20%, 200 V, Aerovox P123ZGP
C-204	CAPACITOR: fixed, ceramic disc, 10,000 µµf +100% - 20%, Erie CK65Y103Z
C-205	CAPACITOR: fixed, silvered mica, 330 µµf ±5%, Elmenco CM-15-E-331-J
C-206	CAPACITOR: fixed, paper, .5 µfd ±20%, 200 V, Aerovox P123ZGP
C-207	CAPACITOR: fixed, ceramic disc, 4700 µµf +100% - 20% Erie CK62Y472Z
C-208	CAPACITOR: fixed, paper, .002 µfd ±20%, 600 V, Aerovox P123ZGP
C-209	CAPACITOR: fixed, paper, .2 µfd ±20%, 200 V, Aerovox P123ZGP
C-210	CAPACITOR: fixed, paper, .5 µfd ±20%, 200 V, Aerovox P123ZGP
C-211	CAPACITOR: fixed, paper, .5 µfd ±20%, 400 V, Aerovox P123ZGP
C-212	CAPACITOR: fixed, silvered mica, 330 µµf ±5%, Elmenco CM-15-E-331-J
C-213	CAPACITOR: fixed, silvered mica, 330 µµf ±5%, Elmenco CM-15-E-331-J
C-214	CAPACITOR: fixed, paper, .5 µfd ±20%, 400 V, Aerovox P123ZGP
C-215	CAPACITOR: fixed, paper, 1 mfd ±20%, 200 V, Aerovox P123ZGP
C-216	CAPACITOR: fixed, paper, 1 mfd ±20%, 200 V, Aerovox P123ZGP
C-217	CAPACITOR: fixed, ceramic disc, 1500 µµf ±10%, Erie HR-619-X5F
C-218	CAPACITOR: fixed, paper, 1 µfd ±20%, 200 V, Aerovox P123ZGP
C-219	CAPACITOR: fixed, paper, .5 mfd ±20%, 400 V, Aerovox P123ZGP
C-220	CAPACITOR: fixed, paper, .1 mfd ±20%, 200 V, Aerovox P123ZGP

SYMBOL	DESCRIPTION
C-221	CAPACITOR: fixed, paper, .1 mfd ±20%, 200 V Aerovox P123ZGP
C-222	CAPACITOR: fixed, ceramic disc, 10,000 μμf +100% - 20% Erie CK63Y103Z
C-223	CAPACITOR: fixed, paper, .5 μfd ±20%, 200 V, Aerovox P123ZGP
C-224	CAPACITOR: fixed, paper, .1 mfd ±20%, 200 V, Aerovox P123ZGP
C-225	CAPACITOR: fixed, paper, .22 μfd ±20%, 200 V, Aerovox P123ZGP
C-226	CAPACITOR: fixed, ceramic disc, 10,000 μμf +100% - 20% Erie CK63Y103Z
C-227	CAPACITOR: fixed, ceramic disc, 10,000 μμf +100% - 20% Erie CK63Y103Z
C-228	CAPACITOR: fixed, paper, .2 μfd ±20%, 200 V, Aerovax P123ZGP
C-229	CAPACITOR: fixed, ceramic disc, 10,000 μμf +100% - 20% Erie CK63Y103Z
C-230	CAPACITOR: fixed, silvered mica, 330 μμf ±5%, Elmenco CM-15-E-331-J
C-231	CAPACITOR: fixed, paper, .2 μfd ±20%, 200 V, Aerovax P123ZGP
CR-201	DIODE: germanium, IN295
CR-202	DIODE: germanium, IN295
I-201	PILOT LIGHT: GE #328
J-201	Integral Part of W-201
J-202	Integral Part of W-202
J-203	CONNECTOR: receptacle, UG-1094/U
J-204	CONNECTOR: receptacle, UG-1094/U
J-205	CONNECTOR: receptacle, UG-1094/U
J-206	CONNECTOR: receptacle, UG-1094/U
J-207	CONNECTOR: receptacle, UG-1094/U
J-208	CONNECTOR: receptacle, UG-1094/U
J-209	JACK: phone, Switchcraft #C-12A
J-210	CONNECTOR: receptacle, Deutsch DM-9601-27P

SYMBOL	DESCRIPTION
L-201	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-202	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-203	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-204	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-205	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-206	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-207	CHOKE: 11.5 μh, GEL Drawing #A-10-163
LS-201	SPEAKER: PM, RCA #76373
P-201	Integral Part of W-108
P-202	Integral Part of W-201
P-203	Integral Part of W-501
P-204	Integral Part of W-501
P-205	Integral Part of W-503
P-206	Integral Part of W-503
P-207	Integral Part of W-202
P-208	Integral Part of W-502
P-209	Integral Part of W-502
P-210	Integral Part of W-110
R-201	RESISTOR: fixed, composition, 160 K, 1/2 W, ±5%, Allen Bradley EB-1645
R-202	RESISTOR: fixed, composition, 15 K, 1/2 W, ±10%, Allen Bradley EB-1531
R-203	RESISTOR: fixed, composition, 100 K, 1/2 W, ±5%, Allen Bradley EB-1045
R-204	RESISTOR: fixed, composition, 22 meg, 1/2 W, ±10%, Allen Bradley EB-2261
R-205	RESISTOR: fixed, composition, 10 K, 1/2 W, ±5%, Allen Bradley EB-1035
R-206	RESISTOR: fixed, composition, 10 K, 1/2 W, ±5%, Allen Bradley EB-1035
R-207	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10%, Allen Bradley EB-1051

SYMBOL	DESCRIPTION
R-208	RESISTOR: fixed, composition, 24 K, 1/2 W,±5%, Allen Bradley EB-2435
R-209	RESISTOR: fixed, composition, 1.6 K, 1/2 W,±5%, Allen Bradley EB-1625
R-210	RESISTOR: fixed, composition, 270 K, 1/2 W,±10%, Allen Bradley EB-2741
R-211	RESISTOR: fixed, composition, 220 K, 1/2 W,±5%, Allen Bradley EB-2245
R-212	RESISTOR: fixed, composition, 510 ohm, 1/2 W,±5%, Allen Bradley EB-5115
R-213	RESISTOR: fixed, wirewound, 10 K, 10 W ±3%, Dale Products Co. RH-10
R-214	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10%, Allen Bradley EB-1051
R-215	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10%, Allen Bradley EB-1051
R-216	RESISTOR: fixed, composition, 330 K, 1/2 W,±10%, Allen Bradley EB-3341
R-217	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10%, Allen Bradley EB-1051
R-218	RESISTOR: fixed, composition, 750 ohm, 1/2 W,±5%, Allen Bradley EB-7515
R-219	RESISTOR: fixed, composition, 62 K, 1/2 W,±5%, Allen Bradley EB-6235
R-220	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10%, Allen Bradley EB-1051
R-221	RESISTOR: fixed, composition, 750 ohm, 1/2 W,±5%, Allen Bradley EB-7515
R-222	RESISTOR: fixed, composition, 62 K, 1/2 W,±5%, Allen Bradley EB-6235
R-223	RESISTOR: fixed, composition, 5.1 meg, 1/2 W,±5%, Allen Bradley EB-5155
R-224	RESISTOR: fixed, composition, 100 K, 1/2 W,±10%, Allen Bradley EB-1041
R-225	RESISTOR: fixed, composition, 150 K, 1/2 W,±10%, Allen Bradley EB-1541
R-226	RESISTOR: fixed, composition, 470 K, 1/2 W,±10%, Allen Bradley EB-4741
R-227	RESISTOR: fixed, composition, 82 K, 1/2 W,±10%, Allen Bradley EB-8231
R-228 A, B	POTENTIOMETER: composition, 10 K, Dual Ohmite type AB CCU-1031

SYMBOL	DESCRIPTION
R-229	RESISTOR: fixed, composition, 330 K, 1/2 W,±10% Allen Bradley EB-3341
R-230	RESISTOR: fixed, composition, 3.3 K, 1/2 W,±5% Allen Bradley EB-3325
R-231	RESISTOR: fixed, composition, 15 K, 1/2 W,±10% Allen Bradley EB-1531
R-232	RESISTOR: fixed, composition, 15 K, 1/2 W,±10% Allen Bradley EB-1531
R-233	RESISTOR: fixed, composition, 20 meg, 1/2 W,±10% Allen Bradley EB-2061
R-234	RESISTOR: fixed, composition, 2.2 K, 1/2 W,±10% Allen Bradley EB-2221
R-235	POTENTIOMETER: composition, 2.5 K, type AB Ohmite CLU-2521
R-236	POTENTIOMETER: composition, 500 K, type AB Ohmite CU-5041
R-237	RESISTOR: fixed, composition, 3.3 K, 1/2 W,±10% Allen Bradley EB-3321
R-238	RESISTOR: fixed, composition, 15 K, 1/2 W,±10% Allen Bradley EB-1531
R-239	RESISTOR: fixed, composition, 22 K, 1/2 W,±10% Allen Bradley EB-2231
R-240	POTENTIOMETER: composition, 50 K, type AB Ohmite CLU-5031
R-241	RESISTOR: fixed, composition, 47 K, 1/2 W,±10% Allen Bradley EB-4731
R-242	RESISTOR: fixed, composition, 3.3 K, 1/2 W,±10% Allen Bradley EB-3321
R-243	RESISTOR: fixed, composition, 1.0 meg, 1/2 W,±10% Allen Bradley EB-1051
R-244	RESISTOR: fixed, composition, 180 K, 1/2 W,±10% Allen Bradley EB-1841
R-245	RESISTOR: fixed, composition, 330 K, 1/2 W,±10% Allen Bradley EB-3341
R-246	RESISTOR: fixed, composition, 270 K, 1/2 W,±10% Allen Bradley EB-2741
R-247	RESISTOR: fixed, composition, 30 K, 1/2 W,±5% Allen Bradley EB-3035
R-248	RESISTOR: fixed, composition, 18 K, 1/2 W,±5% Allen Bradley EB-1835
R-249	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10% Allen Bradley EB-1051

SYMBOL	DESCRIPTION
R-250	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10% Allen Bradley EB-4731
R-251	RESISTOR: fixed, composition, 3.3 K, 1/2 W, ±5% Allen Bradley EB-3325
R-252	RESISTOR: fixed, composition, 10 K, 2 W, ±5% Allen Bradley HB-1035
R-253	RESISTOR: fixed, composition, 1.6 meg, 1/2 W, ±5% Allen Bradley EB-1655
R-254	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10% Allen Bradley EB-1051
R-255	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10% Allen Bradley EB-1051
R-256	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10% Allen Bradley EB-1051
R-257	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10% Allen Bradley EB-4731
R-258	RESISTOR: fixed, composition, 3.3 K, 1/2 W, ±5% Allen Bradley EB-3325
R-259	RESISTOR: fixed, wirewound, 10 K, 10 W ±5% Dale Products Co. RH-10
R-260	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10% Allen Bradley EB-1051
R-261	RESISTOR: fixed, composition, 470 K, 1/2 W, ±10% Allen Bradley EB-4741
R-262	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10% Allen Bradley EB-4731
S-201	SWITCH: rotary, Centralab PA-2001
S-202 A, B, C, D, E	SWITCH: rotary, Centralab PA-2023
S-203 A, B, C, D, E	SWITCH: rotary, Centralab PA-2023
V-201	TUBE: electron, 5726/6AL5W
V-202	TUBE: electron, 5814A
V-203	TUBE: electron, 6CL6
V-204	TUBE: electron, 5814A
V-205	TUBE: electron, 5726/6AL5W
V-206	TUBE: electron, 5814A

SYMBOL	DESCRIPTION
V-207	TUBE: electron, 5814A
V-208	TUBE: electron, 5814A
V-209	TUBE: electron, 5814A
V-210	TUBE: electron, 6CL6
W-201	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-470
W-202	CABLE ASSEMBLY: coaxial, GEL Drawing #B-10-471
XI-201	PILOT LIGHT ASSEMBLY: [illegible]50-121
XF-201	FUSE HOLDER: Littlefuse #342003
XF-202	FUSE HOLDER: Littlefuse #342003

SYMBOL	DESCRIPTION
C-301	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-302	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ±.5 μμf Erie NPO-A
C-303	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-304	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20% Erie style 376
C-305	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-306	CAPACITOR: fixed, ceramic, tubular, 12 μμf ±5% Erie NPO-A
C-307	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-308	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10% Erie 370-FA-201K
C-309	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10% Erie 370-FA-201K
C-310	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10% Erie 370-FA-201K
C-311	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10% Erie 370-FA-201K
C-312	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10% Erie 370-FA-201K
C-313	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-314	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-315	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-316	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-317	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-318	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-319	CAPACITOR: fixed, ceramic, tubular, 22 μμf ±5%, Erie NPO-A
C-320	CAPACITOR: fixed, ceramic, tubular, 33 μμf ±5%, Erie NPO-T

SYMBOL	DESCRIPTION
C-321	CAPACITOR: fixed, silvered mica, 82 μμf ± 5%, Elmenco CM-15-E-820J
C-322	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20% Erie GP2 style 327
C-323	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20% Erie GP2 style 327
C-324	CAPACITOR: fixed, ceramic, tubular, 1000 μμf ± 10%, Erie GP2 style 331
C-325	CAPACITOR: fixed, ceramic, tubular, 2 μμf ± .1 μμf, Erie NPO-A
C-326	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20% Erie GP2 style 327
C-327	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20% Erie GP2 style 327
C-328	CAPACITOR: fixed, ceramic, tubular, 15 μμf ± 5%, Erie NPO-A
C-329	CAPACITOR: fixed, ceramic, Tubular, 6.2 μμf ± .25 μμf Erie NPO-A
C-330	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-331	CAPACITOR: fixed, ceramic, tubular, 1 μμf ± .1 μμf, Erie NPO-A
C-332	CAPACITOR: fixed, ceramic, tubular, 2 μμf ± .1 μμf, Erie NPO-A
C-333	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ± .5 μμf, Erie NPO-A
C-334	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-335	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-336	CAPACITOR: fixed, ceramic, tubular, 10 μμf ± .5 μμf, Erie NPO-A
C-337	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% - 20%, Erie CK61Y102Z
C-338	CAPACITOR: fixed, ceramic, feed-thru, 47 μμf ± 20%, Erie GP1 style 327
C-339	CAPACITOR: fixed, ceramic, tubular, 12 μμf ± 5%, Erie NPO-A
C-340	CAPACITOR: voltage variable, V-56, Pacific Semiconductor Co.
C-341	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-342	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-343	CAPACITOR: fixed, ceramic, tubular, 3.9 μμf ± .1 μμf, Erie NPO-A

SYMBOL	DESCRIPTION
C-344	CAPACITOR: fixed, ceramic, tubular, 12 μμf ±5%, Erie NPO-A
C-345	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-346	CAPACITOR: fixed, ceramic, tubular, .66 μμf ±.1 μμf, Erie NPO-A
C-347	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.5 μμf, Erie NPO-A
C-348	CAPACITOR: fixed, ceramic, tubular, .5 μμf ±.1 μμf, Erie NPO-A
C-349	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-350	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-351	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20%, Erie style 326
C-352	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-353	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.5 μμf, Erie NPO-A
C-354	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-355	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
J-301	CONNECTOR: receptacle, UG-1098/U
J-302	CONNECTOR: receptacle, UG-1098/U
J-303	CONNECTOR: receptacle, UG-1094/U
J-304	CONNECTOR: receptacle, UG-1094/U
L-301	.72 μh, GEL Drawing #B-10-218
L-302	14 μh, GEL Drawing #B-10-216
L-303	14 μh, GEL Drawing #B-10-216
L-304	INDUCTOR: end, GEL Drawing #A-10-618
L-305 A, B, C, D	INDUCTUNER: Mallory Spiral, GEL Drawing #A-10-539
L-306	2.7 μh, GEL Drawing #B-10-103
L-307	14 μh, GEL Drawing #B-10-216
L-308	14 μh, GEL Drawing #B-10-216
L-309	INDUCTOR: end, GEL Drawing #A-10-619
L-310	INDUCTOR: end, GEL Drawing #A-10-620
L-311	Not assigned

SYMBOL	DESCRIPTION
L-312	INDUCTOR: end, GEL Drawing #A-10-621
L-313	INDUCTOR; variable, GEL Drawing #A-10-675
L-314	INDUCTOR; end, GEL Drawing #A-10-622
L-315	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-316	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-317	Not assigned
L-318	Not assigned
L-319	Not assigned
R-301	RESISTOR: fixed, composition, 160 ohm, 1/2 W,±5%, Allen Bradley EB-1615
R-302	RESISTOR: fixed, composition, 100 ohm, 1/2 W,±5%, Allen Bradley EB-1015
R-303	RESISTOR: fixed, composition, 100 ohm, 1/2 W,±10%, Allen Bradley EB-1011
R-304	RESISTOR: fixed, composition, 51 K, 1/2 W,±5%, Allen Bradley EB-5135
R-305	RESISTOR: fixed, composition, 8.2 K, 1/2 W,±5%, Allen Bradley EB-8225
R-306	RESISTOR: fixed, composition, 100 K, 1/2 W,±10%, Allen Bradley EB-1041
R-307	RESISTOR: fixed, composition, 1.5 K, 2 W,±10%, Allen Bradley HB-1521
R-308	RESISTOR: fixed, composition, 120 ohm, 1/2 W,±5%, Allen Bradley EB-1215
R-309	RESISTOR: fixed, composition, 110 K, 1/2 W,±5%, Allen Bradley EB-1145
R-310	RESISTOR: fixed, composition, 3 K, 1/2 W,±5%, Allen Bradley EB-3025
R-311	RESISTOR: fixed, composition, 1 meg, 1/2 W,±10%, Allen Bradley EB-1051
R-312	RESISTOR: fixed, composition, 12 K, 1 W,±5%, Allen Bradley GB-1235
R-313	RESISTOR: fixed, composition, 27 K, 1/2 W,±10%, Allen Bradley EB-2731
R-314	RESISTOR: fixed, composition, 470 K, 1/2 W,±10%, Allen Bradley EB-4741
R-315	RESISTOR: fixed, composition, 470 K, 1/2 W,±10%, Allen Bradley EB-4741

SYMBOL	DESCRIPTION
R-316	RESISTOR: fixed, composition, 150 K, 1/2 W, ±5%, Allen Bradley EB-1545
R-317	RESISTOR: fixed, composition, 8.2 K, 2 W, ±10%, Allen Bradley HB-8221
R-318	RESISTOR: fixed, composition, 1 K, 1 W, ±10%, Allen Bradley GB-1021
R-319	RESISTOR: fixed, composition, 22 K, 1/2 W, ±5%, Allen Bradley EB-2235
R-320	RESISTOR: fixed, composition, 180 ohm, 1/2 W, ±5%, Allen Bradley EB-1815
R-321	RESISTOR: fixed, composition, 47 ohm, 1/2 W, ±5%, Allen Bradley EB-4705
R-322	RESISTOR: fixed, composition, 68 ohm, 1/2 W, ±5%, Allen Bradley EB-6805
R-323	RESISTOR: fixed, composition, 10 K, 1/2 W, ±10%, Allen Bradley EB-1031
R-324	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-325	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley EB-1011
R-326	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
V-301	6280/416B
V-302	6J4
V-303	5654/6AK5W
V-304	6AF4A

d. 55-260 MC FRONT END

SYMBOL	DESCRIPTION
C-401	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-402	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ±.5 μμf Erie NPO-A
C-403	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-404	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20% Erie style 326
C-405	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20% Erie GP2 style 327
C-406	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-407	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10%, Erie 370-FA-201K
C-408	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10%, Erie 370-FA-201K
C-409	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10%, Erie 370-FA-201K
C-410	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10%, Erie 370-FA-201K
C-411	CAPACITOR: fixed, silvered mica, button, 200 μμf ±10%, Erie 370-FA-201K
C-412	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20 % Erie CK61Y102Z
C-413	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-414	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-415	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-416	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-417	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327

SYMBOL	DESCRIPTION
C-418	CAPACITOR: fixed, ceramic, feed-thru, 47 μμf ±20%, Erie GP1 style 327
C-419	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-420	CAPACITOR: fixed, ceramic, tubular, 22 μμf ±5%, Erie NPO-A
C-421	CAPACITOR: fixed, ceramic, tubular, 18 μμf ±5%, Erie NPO-A
C-422	CAPACITOR: fixed, ceramic, tubular, 18 μμf ±5%, Erie NPO-A
C-423	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-424	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-425	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-426	CAPACITOR: fixed, ceramic, tubular, 1000 μμf ±10%, Erie GP2 style 331
C-427 A, B	CAPACITOR: fixed, printed circuit, GEL Drawing #A-10-269
C-428	CAPACITOR: fixed, ceramic, tubular, 15 μμf ±5%, Erie NPO-A
C-429	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-430	CAPACITOR: fixed, ceramic, tubular, 1 μμf ±.1 μμf, Erie NPO-A
C-431	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-432	CAPACITOR: fixed, ceramic, tubular, 2 μμf ±.1 μμf, Erie NPO-A
C-433	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-434	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.5 μμf, Erie NPO-A
C-435	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-436	CAPACITOR: fixed, ceramic, feed-thru, 47 μμf ±20%, Erie GP1 style 327
C-437	CAPACITOR: fixed, ceramic, tubular, 4.3 μμf ±.25 μμf, Erie NPO-A
C-438	CAPACITOR: voltage variable, V-56, Pacific Semiconductor Co.
C-439	CAPACITOR: variable, piston-type, .8 - 8.5 μμf, JFD VC-20-G
C-440	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.5 μμf, Erie NPO-A
C-441	CAPACITOR: fixed, ceramic, tubular, 3.9 μμf ±.1 μμf, Erie NPO-A
C-442	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z

SYMBOL	DESCRIPTION
C-443	CAPACITOR: fixed, ceramic, tubula . .5 μμf ±.1 μμf, Erie NPO-A
C-444	CAPACITOR: fixed, ceramic, tubular, 3.3 μμf ±.1 μμf, Erie NPO-A
C-445	CAPACITOR: fixed, ceramic, tubula . .5 μμf ±.1 μμf, Erie NPO-A
C-446	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-447	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP? style 327
C-448	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20%, Erie style 326
C-449	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - ?0%, Erie CK62Y472Z
C-450	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.5 μμf, Erie NPO-A
C-451	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-452	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
I-301	PILOT LAMP: GE #328
I-401	PILOT LAMP: GE #328
I-402	PILOT LAMP: GE #328
J-305	CONNECTOR: receptacle, IPC #46025
J-401	CONNECTOR: receptacle, UG-1098/U
J-402	CONNECTOR: receptacle, UG-1098/U
J-403	CONNECTOR: receptacle, UG-1094/U
J-404	CONNECTOR: receptacle, UG-1094/U
J-405	CONNECTOR: receptacle, IPC #46025
J-406	CONNECTOR: receptacle, IPC #46025
L-401	CHOKE: .72 μh, GEL Drawing #B-10-218
L-402	CHOKE: 14 μh, GEL Drawing #B-10-216
L-403	CHOKE: 14 μh, GEL Drawing #B-10-216
L-404	INDUCTOR: coil, GEL Drawing #A-10-219

SYMBOL	DESCRIPTION
L-405 A, B, C, D	INDUCTUNER: Mallory, GEL Drawing #A-10-540
L-406	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-407	CHOKE: 14 μh, GEL Drawing #B-10-216
L-408	CHOKE: 14 μh, GEL Drawing #B-10-216
L-409	INDUCTOR: end, GEL Drawing #A-10-157
L-410	INDUCTOR: end, GEL Drawing #A-10-156
L-411	INDUCTOR: end, GEL Drawing #A-10-154
L-412	INDUCTOR: 1.15 μh, padding, GEL Drawing #B-10-211
L-413	INDUCTOR: variable, GEL Drawing #A-10-675
L-414	INDUCTOR: end, GEL Drawing #A-10-155
L-415	INDUCTOR: end, GEL Drawing #A-10-158
L-416	INDUCTOR: end, GEL Drawing #A-10-166
L-417	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-418	CHOKE: 11.5 μh, GEL Drawing #A-10-163
R-401	RESISTOR: fixed, composition, 160 ohm, 1/2 W, ±5%, Allen Bradley EB-1615
R-402	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±5%, Allen Bradley EB-1015
R-403	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley EB-1011
R-404	RESISTOR: fixed, composition, 51 K, 1/2 W, ±5%, Allen Bradley EB-5135
R-405	RESISTOR: fixed, composition, 8.2 K, 1/2 W, ±5%, Allen Bradley EB-8225
R-406	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
R-407	RESISTOR: fixed, composition, 1.5 K, 2W, ±10%, Allen Bradley HB-1521
R-408	RESISTOR: fixed, composition, 120 ohm, 1/2 W, ±5%, Allen Bradley EB-1215
R-409	RESISTOR: fixed, composition, 510 K, 1/2 W, ±5%, Allen Bradley EB-5145
R-410	RESISTOR: fixed, composition, 3 K, 1/2 W, ±5%, Allen Bradley EB-3325
R-411	RESISTOR: fixed, composition, 1 meg, 1/2 W, ±10%, Allen Bradley EB-1057

SYMBOL	DESCRIPTION
R-412	RESISTOR: fixed, composition, 12 K, 1 W, ±5%, Allen Bradley GB-1235
R-413	RESISTOR: fixed, composition, 27 K, 1/2 W, ±10%, Allen Bradley EB-2731
R-414	RESISTOR: fixed, composition, 470 K, 1/2 W, ±10%, Allen Bradley EB-4741
R-415	RESISTOR: fixed, composition, 470 K, 1/2 W, ±10%, Allen Bradley EB-4741
R-416	RESISTOR: fixed, composition, 150 K, 1/2 W, ±5%, Allen Bradley EB-1545
R-417	RESISTOR: fixed, composition, 8.2 K, 2 W, ±10%, Allen Bradley HB-8221
R-418	RESISTOR: fixed, composition, 1 K, 1 W, ±10%, Allen Bradley GB-1021
R-419	RESISTOR: fixed, composition, 22 K, 1/2 W, ±5%, Allen Bradley EB-2235
R-420	RESISTOR: fixed, composition, 180 ohm, 1/2 W, ±5%, Allen Bradley EB-1815
R-421	RESISTOR: fixed, composition, 47 ohm, 1/2 W, ±5%, Allen Bradley EB-4705
R-422	RESISTOR: fixed, composition, 68 ohm, 1/2 W, ±5%, Allen Bradley EB-6805
R-423	RESISTOR: fixed, composition, 10 K, 1/2 W, ±10%, Allen Bradley EB-1031
R-424	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-425	RESISTOR: fixed, composition, 15 ohm, 2 W, ±10%, Allen Bradley HB-1501
S-401	SWITCH: rotary, Centralab #PA-2019
S-402	SWITCH: rotary, Centralab #1460
V-401	TUBE: electron, 6280/416B
V-402	TUBE: electron, 6J4
V-403	TUBE: electron, 5654/6AK5W
V-404	TUBE: electron, 6AF4A
XI-301	PILOT LAMP ASSEMBLY: Sloan #655SI-G-2
XI-401	PILOT LAMP ASSEMBLY: Sloan #655SI-G-2
XI-402	PILOT LAMP ASSEMBLY: Dialco #101-4830-937

SYMBOL	DESCRIPTION
C-501	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf Erie NPO-A
C-502	CAPACITOR: fixed, ceramic, tubular, 2.2 μμf ±.1 μμf Erie NPO-A
C-503	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf Erie NPO-A
C-504	CAPACITOR: fixed, silvered mica, 68 μμf ±5%, E. F. Johnson CM15-E-680J
C-505	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 331
C-506	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-507	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-508	CAPACITOR: fixed, ceramic, disc, 1300 μμf ±10%, Erie HR-819-X5F
C-509	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-510	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-511	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf Erie NPO-A
C-512	CAPACITOR: fixed, ceramic, tubular, 3 μμf ±.1 μμf, Erie NPO-A
C-513	CAPACITOR: fixed, ceramic, tubular, 2.7 μμf ±.1 μμf, Erie NPO-A
C-514	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf, Erie NPO-A
C-515	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 331
C-516	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-517	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-518	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-519	CAPACITOR: fixed, ceramic, disc, 1300 μμf ±10%, Erie HR-819-X5F
C-520	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z

SYMBOL	DESCRIPTION
C-521	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-522	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf, Erie NPO-A
C-523	CAPACITOR: fixed, ceramic, tubular, 3 μμf ±.1 μμf, Erie NPO-A
C-524	CAPACITOR: fixed, ceramic, tubular, 2.7 μμf ±.1 μμf, Erie NPO-A
C-525	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf, Erie NPO-A
C-526	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 331
C-527	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-528	CAPACITOR: fixed, ceramic, disc, 1500 μμf ±10%, Erie HR-819-X5F
C-529	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-530	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-531	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf, Erie NPO-A
C-532	CAPACITOR: fixed, ceramic, tubular, 3 μμf ±.1 μμf, Erie NPO-A
C-533	CAPACITOR: fixed, ceramic, tubular, 2.7 μμf ±.1 μμf, Erie NPO-A
C-534	CAPACITOR: fixed, ceramic, tubular, 4.7 μμf ±.25 μμf, Erie NPO-A
C-535	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-536	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-537	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-538	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-539	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-540	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-541	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y102Z
C-542	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327

SYMBOL	DESCRIPTION
C-543	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20%, Erie style 326
C-544	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 127
J-501	CONNECTOR: receptacle, IPC #46025
J-502	CONNECTOR: receptacle, IPC #46025
J-503	CONNECTOR: receptacle, UG-1098/U
J-504	CONNECTOR: receptacle, UG-1098/U
J-505	CONNECTOR: receptacle, IPC #46025
L-501	CHOKE: 13.5 μh, GEL Drawing #A-10-163
L-502	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-503	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-504	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-505	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-506	CHOKE: 2.7 μh, GEL Drawing #B-10-103
R-501	RESISTOR: fixed, composition, 5.1 K, 1/2 W, ±5%, Allen Bradley EB-5125
R-502	RESISTOR: fixed, composition, 91 ohm, 1/2 W, ±5%, Allen Bradley EB-9105
R-503	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
R-504	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-505	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-506	RESISTOR: fixed, composition, 10 K, 1/2 W, ±10%, Allen Bradley EB-1031
R-507	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-508	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-509	RESISTOR: fixed, composition, 7.5 K, 1/2 W, ±5%, Allen Bradley EB-7525
R-510	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041

SYMBOL	DESCRIPTION
R-511	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley EB-1011
R-512	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-513	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-514	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley EB-1011
R-515	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-516	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-517	RESISTOR: fixed, composition, 10 K, 1/2 W, ±10%, Allen Bradley EB-1031
R-518	RESISTOR: fixed, composition, 7.5 K, 1/2 W, ±5%, Allen Bradley EB-7525
R-519	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
R-520	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-521	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-522	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-523	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-524	RESISTOR: fixed, composition, 7.5 K, 1/2 W, ±5%, Allen Bradley EB-7525
R-525	RESISTOR: fixed, composition, 390 ohm, 1/2 W, ±5%, Allen Bradley EB-3915
R-526	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-527	RESISTOR: fixed, composition, 160 ohm, 1/2 W, ±5%, Allen Bradley EB-1615
T-501	TRANSFORMER: IF, GEL Drawing #B-10-491
T-502	TRANSFORMER: IF, GEL Drawing #B-10-143
T-503	TRANSFORMER: IF, GEL Drawing #B-10-485
T-504	TRANSFORMER: IF, GEL Drawing #B-10-143
T-505	TRANSFORMER: IF, GEL Drawing #B-10-485

SYMBOL	DESCRIPTION
T-506	TRANSFORMER: IF, GEL Drawing #B-10-504
T-507	TRANSFORMER: IF, GEL Drawing #B-10-487
V-501	TUBE: electron, 6DC6
V-502	TUBE: electron, 6DG6
V-503	TUBE: electron, 6DC6
V-504	TUBE: electron, 6AU6WA

SYMBOL	DESCRIPTION
C-601	Not assigned
C-602	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-603	CAPACITOR: fixed, ceramic, disc, 1300 μμf ±10%, Erie HR-819-X5F
C-604	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-605	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-606	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ±.5 μμf, Erie NPO-A
C-607	CAPACITOR: fixed, ceramic, tubular, 2 μμf ±.1 μμf, Erie NPO-A
C-608	CAPACITOR: fixed, ceramic, tubular, 1.5 μμf ±.1 μμf, Erie NPO-A
C-609	CAPACITOR: fixed, ceramic, tubular, 39 μμf ±5%, Erie NPO-T
C-610	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 331
C-611	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 331
C-612	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-613	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-614	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-615	CAPACITOR: fixed, ceramic, disc, 1300 μμf ±10%, Erie HR-819-X5F
C-616	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-617	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-618	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ±.5 μμf, Erie NPO-A
C-619	CAPACITOR: fixed, ceramic, tubular, 2 μμf ±.1 μμf, Erie NPO-A
C-620	CAPACITOR: fixed, ceramic, tubular, 1.5 μμf ±.1 μμf, Erie NPO-A
C-621	CAPACITOR: fixed, ceramic, tubular, 39 μμf ±5%, Erie NPO-T

SYMBOL	DESCRIPTION
C-622	CAPACITOR: fixed, ceramic, tubular, 470 μμf ±10%, Erie GP2 style 311
C-623	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-624	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-625	CAPACITOR: fixed, ceramic, disc, 1300 μμf ±10%, Erie HR-819-X5F
C-626	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-627	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20% Erie CK62Y472Z
C-628	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ±.5 μμf, Erie NPO-A
C-629	CAPACITOR: fixed, ceramic, tubular, 2 μμf ±1 μμf, Erie NPO-A
C-630	CAPACITOR: fixed, ceramic, tubular, 1.5 μμf ±.1 μμf, Erie NPO-A
C-631	CAPACITOR: fixed, ceramic, tubular, 39 μμf ±5%, Erie NPO-T
C-632	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-633	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-634	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-635	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20%, Erie CK61Y302Z
C-636	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-637	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-638	Not assigned
C-639	CAPACITOR: fixed, ceramic, tubular, 6.8 μμf ±.25 μμf, Erie NPO-A
C-640	CAPACITOR: fixed, ceramic, tubular, 5.6 μμf ±.25 μμf, Erie NPO-A
C-641	CAPACITOR: fixed, ceramic, tubular, 39 μμf ±5%, Erie NPO-T
C-642	Not assigned
C-643	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.25 μμf, Erie NPO-A
C-644	CAPACITOR: fixed, ceramic, tubular, 10 μμf ±.25 μμf, Erie NPO-A

SYMBOL	DESCRIPTION
C-645	CAPACITOR: fixed, ceramic, feed-thru, 47 μμf ±20%, Erie GP1 style 327
C-646	CAPACITOR: fixed, ceramic, tubular, 1000 μμf ±10%, Erie GP2 style 331
C-647	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
C-648	CAPACITOR: fixed, ceramic, tubular, 33 μμf ±5%, Erie NPO-T
C-649	CAPACITOR: fixed, ceramic, tubular, 22 μμf ±5%, Erie NPO-A
C-650	CAPACITOR: fixed, ceramic, tubular, 33 μμf ±5%, Erie NPO-T
C-651	CAPACITOR: fixed, ceramic, tubular, 24 μμf ±5%, Erie NPO-A
C-652	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-653	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-654	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-655	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-656	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-657	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-658	CAPACITOR: fixed, ceramic, disc, 1000 μμf +100% - 20% Erie CK61Y102Z
C-659	CAPACITOR: fixed, ceramic, stand-off, 1500 μμf ±20%, Erie style 326
C-660	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-661	CAPACITOR: fixed, ceramic, disc, 4700 μμf +100% - 20%, Erie CK62Y472Z
CR-601	DIODE: germanium, IN67, Raytheon
J-601	CONNECTOR: receptacle, IPC #46025
J-602	CONNECTOR: receptacle, IPC #46025
L-601	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-602	CHOKE: 11.5 μh, GEL Drawing #A-10-163
L-603	CHOKE: 11.5 μh, GEL Drawing #A-10-163

SYMBOL	DESCRIPTION
L-604	CHOKE: 15.8 μh, GEL Drawing #A-10-163
L-605	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-606	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-607	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-608	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-609	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-610	CHOKE: 2.7 μh, GEL Drawing #B-10-103
L-611	CHOKE: 450 μh, Wilco #3430-55
R-601	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
R-602	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-603	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-604	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-605	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-606	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley EB-1011
R-607	RESISTOR: fixed, composition, 22 K, 1/2 W, ±5%, Allen Bradley EB-2235
R-608	RESISTOR: fixed, composition, 100 K, 1/2 W, ±10%, Allen Bradley EB-1041
R-609	RESISTOR: fixed, composition, 10 K, 1/2 W, ±10%, Allen Bradley EB-1031
R-610	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-611	RESISTOR: fixed, composition, 82 ohm, 1/2 W, ±5%, Allen Bradley EB-8205
R-612	RESISTOR: fixed, composition, 47 K, 1/2 W, ±10%, Allen Bradley EB-4731
R-613	RESISTOR: fixed, composition, 1 K, 1/2 W, ±10%, Allen Bradley EB-1021
R-614	RESISTOR: fixed, composition, 100 ohm, 1/2 W, ±10%, Allen Bradley, EB-1011
R-615	RESISTOR: fixed, composition, 22 K, 1/2 W, ±5%, Allen Bradley EB-2235

SYMBOL	DESCRIPTION
R-616	RESISTOR: fixed, composition, 100 K, 1/2 W,±10%, Allen Bradley EB-1041
R-617	RESISTOR: fixed, composition, 100 ohm, 1/2 W,±10%, Allen Bradley EB-1011
R-618	RESISTOR: fixed, composition, 82 ohm, 1/2 W,±5%, Allen Bradley EB-8205
R-619	RESISTOR: fixed, composition, 82 ohm, 1/2 W,±5%, Allen Bradley EB-8205
R-620	RESISTOR: fixed, composition, 47 K, 1/2 W,±10%, Allen Bradley EB-4731
R-621	RESISTOR: fixed, composition, 1 K, 1/2 W,±10%, Allen Bradley EB-1021
R-622	RESISTOR: fixed, composition, 16 K, 1/2 W,±5%, Allen Bradley EB-1635
R-623	RESISTOR: fixed, composition, 390 ohm, 1/2 W,±5%, Allen Bradley EB-3915
R-624	RESISTOR: fixed, composition, 47 K, 1/2 W,±10%, Allen Bradley EB-4731
R-625	RESISTOR: fixed, composition, 100 ohm, 1/2 W,±10%, Allen Bradley EB-1011
R-626	RESISTOR: fixed, composition, 1 K, 1/2 W,±10%, Allen Bradley EB-1021
R-627	RESISTOR: fixed, composition, 2.7 K, 1/2 W,±5%, Allen Bradley EB-2725
R-628	RESISTOR: fixed, composition, 62 ohm, 1/2 W,±5%, Allen Bradley EB-6205
R-629	RESISTOR: fixed, composition, 220 K, 1/2 W,±10%, Allen Bradley EB-2241
R-630	RESISTOR: fixed, composition, 100 K, 1/2 W,±10%, Allen Bradley EB-1041
R-631	RESISTOR: fixed, composition, 33 K, 1/2 W,±5%, Allen Bradley EB-3335
R-632	RESISTOR: fixed, composition, 33 K, 1/2 W,±5%, Allen Bradley EB-3335
R-633	RESISTOR: fixed, composition, 33 K, 1/2 W,±5%, Allen Bradley EB-3335
R-634	RESISTOR: fixed, composition, 4.7 ohm, 1 W,±10%, Allen Bradley GB-47G1
R-635	RESISTOR: fixed, composition, 24 K, 1/2 W,±5%, Allen Bradley EB-2435
R-636	RESISTOR: fixed, composition, 24 K, 1/2 W,±5%, Allen Bradley EB-2435

SYMBOL	DESCRIPTION
R-637	RESISTOR: fixed, composition, 5.1 K, 1/2 W, 5%, Allen Bradley EB-5125
T-601	TRANSFORMER: IF, GEL Drawing #B-10-135
T-602	TRANSFORMER: IF, GEL Drawing #B-10-138
T-603	TRANSFORMER: IF, GEL Drawing #B-10-135
T-604	TRANSFORMER: IF, GEL Drawing #B-10-138
T-605	TRANSFORMER: IF, GEL Drawing #B-10-135
T-606	TRANSFORMER: IF, GEL Drawing #B-10-482
T-607	TRANSFORMER: IF, GEL Drawing #B-10-484
T-608	TRANSFORMER: IF, GEL Drawing #B-10-481
T-609	TRANSFORMER: IF, GEL Drawing #B-10-214
V-601	TUBE: electron, 6DC6
V-602	TUBE: electron, 6DC6
V-603	TUBE: electron, 6DC6
V-604	TUBE: electron, 6AU6WA
V-605	TUBE: electron, 5654/6AK5W
V-606	TUBE: electron, 5726/6AL5W

SYMBOL	DESCRIPTION
C-701	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-702	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-703	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20% Erie CK63Y103Z
C-704	CAPACITOR: fixed, ceramic, disc, 1500 μμf ± 10%, Erie HR-819-X5F
C-705	CAPACITOR: fixed, ceramic, disc, 4700 μμf + 100% - 20%, Erie CK62Y472Z
C-706	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ± .5 μμf, Erie NPO-A
C-707	CAPACITOR: fixed, ceramic, tubular, .68 μμf ± .1 μμf, Erie NPO-A
C-708	CAPACITOR: fixed, ceramic, tubular, .1 μμf ± .1 μμf, Erie NPO-A
C-709	CAPACITOR: fixed, ceramic, disc, 4700 μμf + 100% - 20%, Erie CK62T472Z
C-710	CAPACITOR: fixed, ceramic, tubular, 39 μμf ± 5%, Erie NPO-T
C-711	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
C-712	CAPACITOR: fixed, ceramic, tubular, 20 μμf ± 5%, Erie NPO-A
C-713	CAPACITOR: fixed, silvered mica, 200 μμf ± 5%, Elmenco CM15-E-201J
C-714	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20% Erie CK63Y103Z
C-715	CAPACITOR: fixed, ceramic, tubular, 10 μμf ± .25 μμf, Erie NPO-A
C-716	CAPACITOR: fixed, ceramic, disc, 10,000 μμf ± 100% - 20%, Erie CK63Y103Z
C-717	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ± .5 μμf, Erie NPO-A
C-718	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
C-719	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie
C-720	CAPACITOR: fixed, ceramic, tubular, 24 μμf ± 5%, Erie NPO-A
C-721	CAPACITOR: fixed, silvered mica, 160 μμf ± 5%, Elmenco CM15-E-161J
C-722	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-723	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327

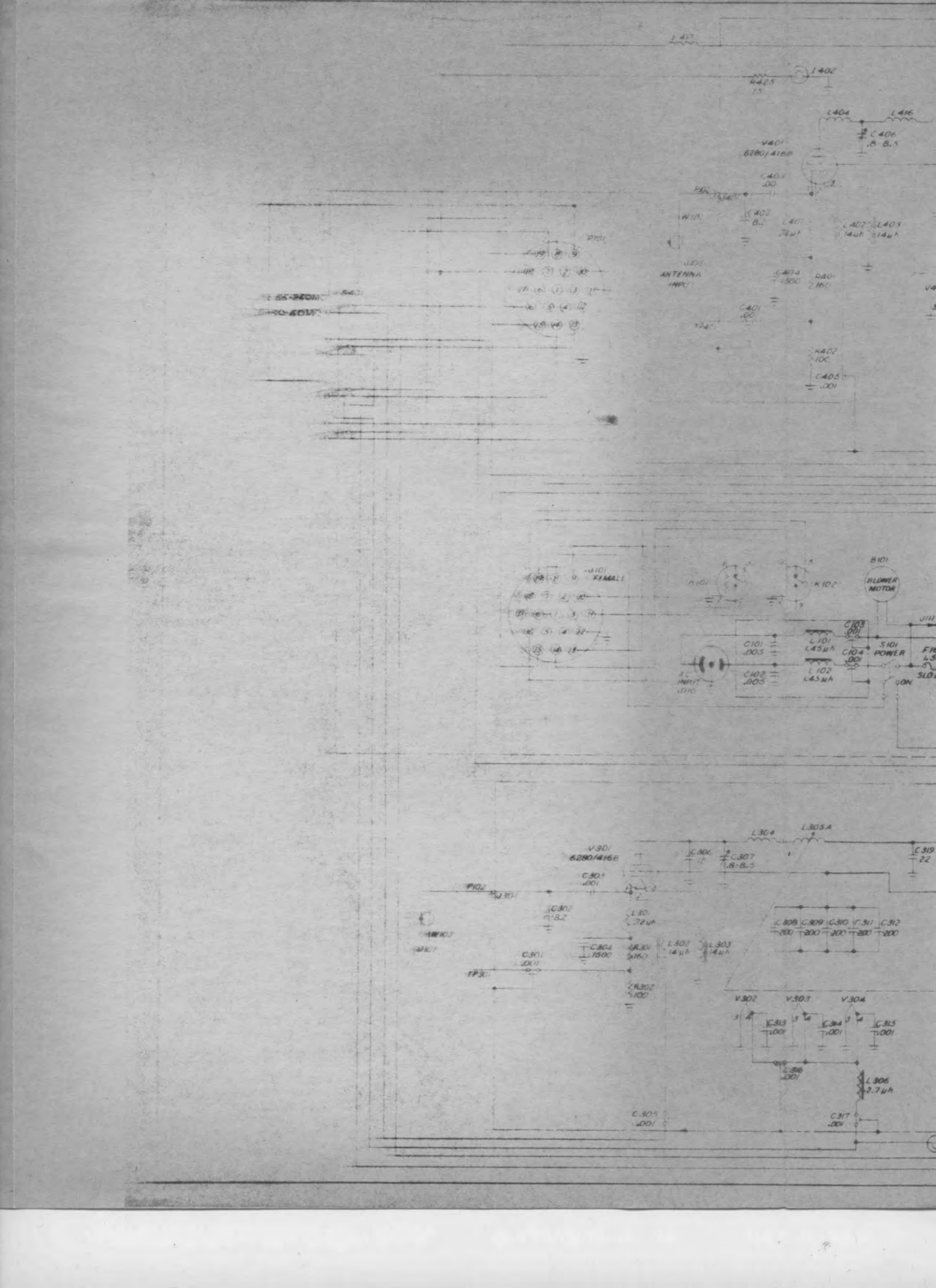
SYMBOL	DESCRIPTION
C-724	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-725	CAPACITOR: fixed, ceramic, tubular, 24 μμf ± 5%, Erie NPO-A
C-726	CAPACITOR: fixed, silvered mica, 75 μμf ± 5%, Elmenco CM15-E-750J
C-727	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20% Erie CK63Y103Z
C-728	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20% Erie CK63Y103Z
C-729	CAPACITOR: fixed, ceramic, disc, 100 μμf ± 10%, Erie HR-839-X5F
C-730	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% -20% Erie CK63Y103Z
C-731	CAPACITOR: fixed, ceramic, tubular, 8.2 μμf ± .5 μμf, Erie NPO-A
C-732	CAPACITOR: fixed, ceramic, tubular, 10 μμf ± .25 μμf, Erie NPO-A
C-733	CAPACITOR: fixed, ceramic, disc, 4700 μμf + 100% - 20%, Erie CK62Y472Z
C-734	CAPACITOR: fixed, ceramic, disc, 100 μμf ± 10%, Erie HR-839-X5F
C-735	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
C-736	Not assigned
C-737	CAPACITOR: fixed, ceramic, tubular, 5.1 μμf ± .5 μμf, Erie NPO-A
C-738	CAPACITOR: fixed, ceramic, tubular, 10 μμf ± .25 μμf, Erie NPO-A
C-739	CAPACITOR: fixed, ceramic, tubular, 470 μμf ± 10%, Erie GP2 style 331
C-740	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-741	CAPACITOR: fixed, ceramic, tubular 15 μμf ± 5%, Erie NPO-A
C-742	CAPACITOR: fixed, ceramic, tubular .5 μμf ± .1 μμf, Erie NPO-A
C-743	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
C-744	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
C-745	CAPACITOR: fixed, ceramic, tubular, 15 μμf ± 5%, Erie NPO-A
C-746	CAPACITOR: fixed, ceramic, tubular, 30 μμf ± 5%, Erie NPO-T

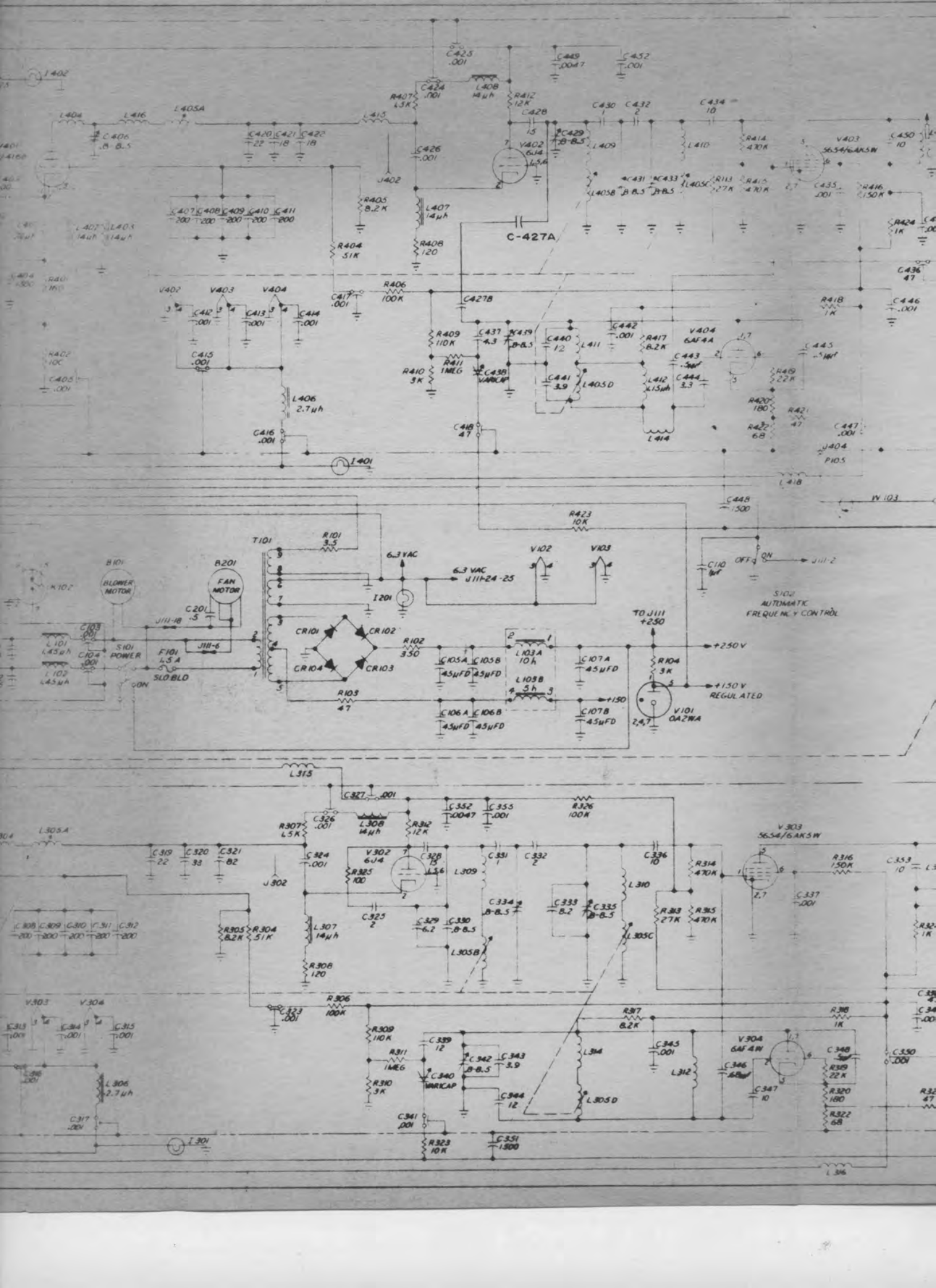
SYMBOL	DESCRIPTION
C-747	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ±20%, Erie GP2 style 327
C-748	CAPACITOR: fixed, ceramic, tubular, 20 μμf ±5%, Erie NPO-A
C-749	CAPACITOR: fixed, silvered, mica, 200 μμf ±5%, Elmenco CM15-E-201-J
C-750	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20% Erie CK63Y103Z
C-751	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% -20% Erie CK63Y103Z
C-752	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 Style 327
C-753	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% -20%, Erie CK61Y102Z
C-754	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% - 20%, Erie CK61Y102Z
C-755	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-756	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% - 20%, Erie CK61Y102Z
C-757	CAPACITOR: fixed, ceramic, feed-thru, 1000 μμf ± 20%, Erie GP2 style 327
C-758	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% - 20%, Erie CK61Y102Z
C-759	CAPACITOR: fixed, ceramic, disc, 1000 μμf + 100% - 20%, Erie CK61Y102Z
C-760	CAPACITOR: fixed, ceramic, disc, 4700 μμf + 100% - 20%, Erie CK62Y472Z
C-761	CAPACITOR: fixed, ceramic, disc, 10,000 μμf + 100% - 20%, Erie CK63Y103Z
CR-701	DIODE: germanium, IN295
J-701	CONNECTOR: receptacle IPC #46025
L-701	CHOKE: 300 μh, Wilco #1300-15
L-702	CHOKE: 1-1.8 μh, variable, GEL Dwg. #A-10-581

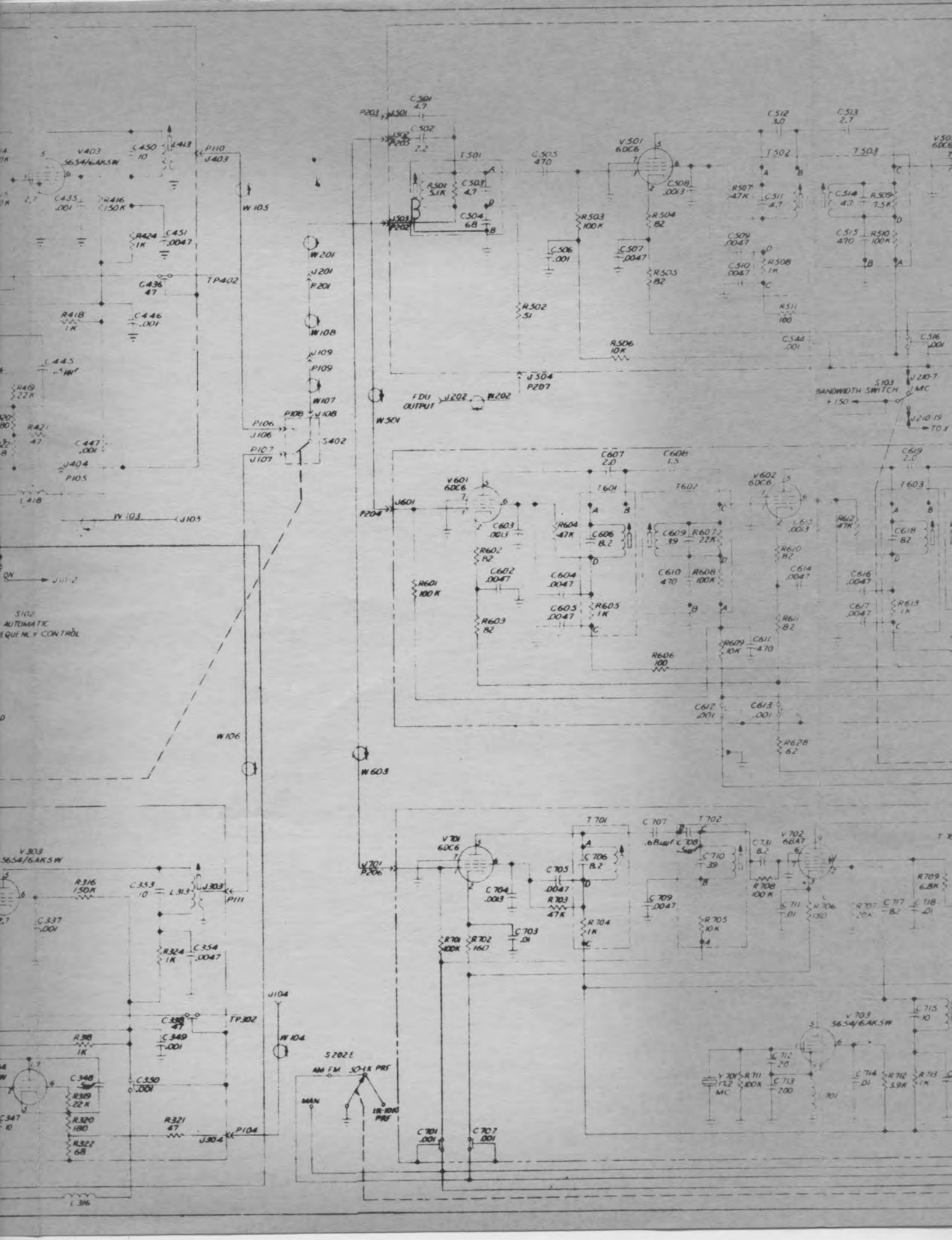
SYMBOL	DESCRIPTION
L-703	CHOKE: 38 µh, Wilco #3038-15
L-704	CHOKE: 300 µh, Wilco #1300-15
L-705	CHOKE: 38 µh, Wilco #3038-15
L-706	CHOKE: 2.7 µh, GEL Dwg. #B-10-103
L-707	CHOKE: 2.7 µh, GEL Dwg. #B-10-103
L-708	CHOKE: 2.7 µh, GEL Dwg. #B-10-103
L-709	CHOKE: 2.7 µh, GEL Dwg. #B-10-103
L-710	CHOKE: 2.7 µh, GEL Dwg. #B-10-103
R-701	RESISTOR: fixed, composition, 100 K, 1/2 W, 10%, Allen Bradley EB-1041
R-702	RESISTOR: fixed, composition, 160 ohm, 1/2 W, 5%, Allen Bradley EB-1615
R-703	RESISTOR: fixed, composition, 47 K, 1/2 W, 10%, Allen Bradley EB-4731
R-704	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-705	RESISTOR: fixed, composition, 10 K, 1/2 W, 10%, Allen Bradley EB-1031
R-706	RESISTOR: fixed, composition, 150 ohm, 1/2 W, 5%, Allen Bradley EB-1515
R-707	RESISTOR: fixed, composition, 20 K, 1/2 W, 10%, Allen Bradley EB-2031
R-708	RESISTOR: fixed, composition, 100 K, 1/2 W, 10%, Allen Bradley EB-1041
R-709	RESISTOR: fixed, composition, 6.8 K, 1/2 W, 10%, Allen Bradley EB-6821
R-710	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-711	RESISTOR: fixed, composition, 100 K, 1/2 W, 10%, Allen Bradley EB-1041
R-712	RESISTOR: fixed, composition, 3.9 K, 1/2 W, 10%, Allen Bradley EB-3921

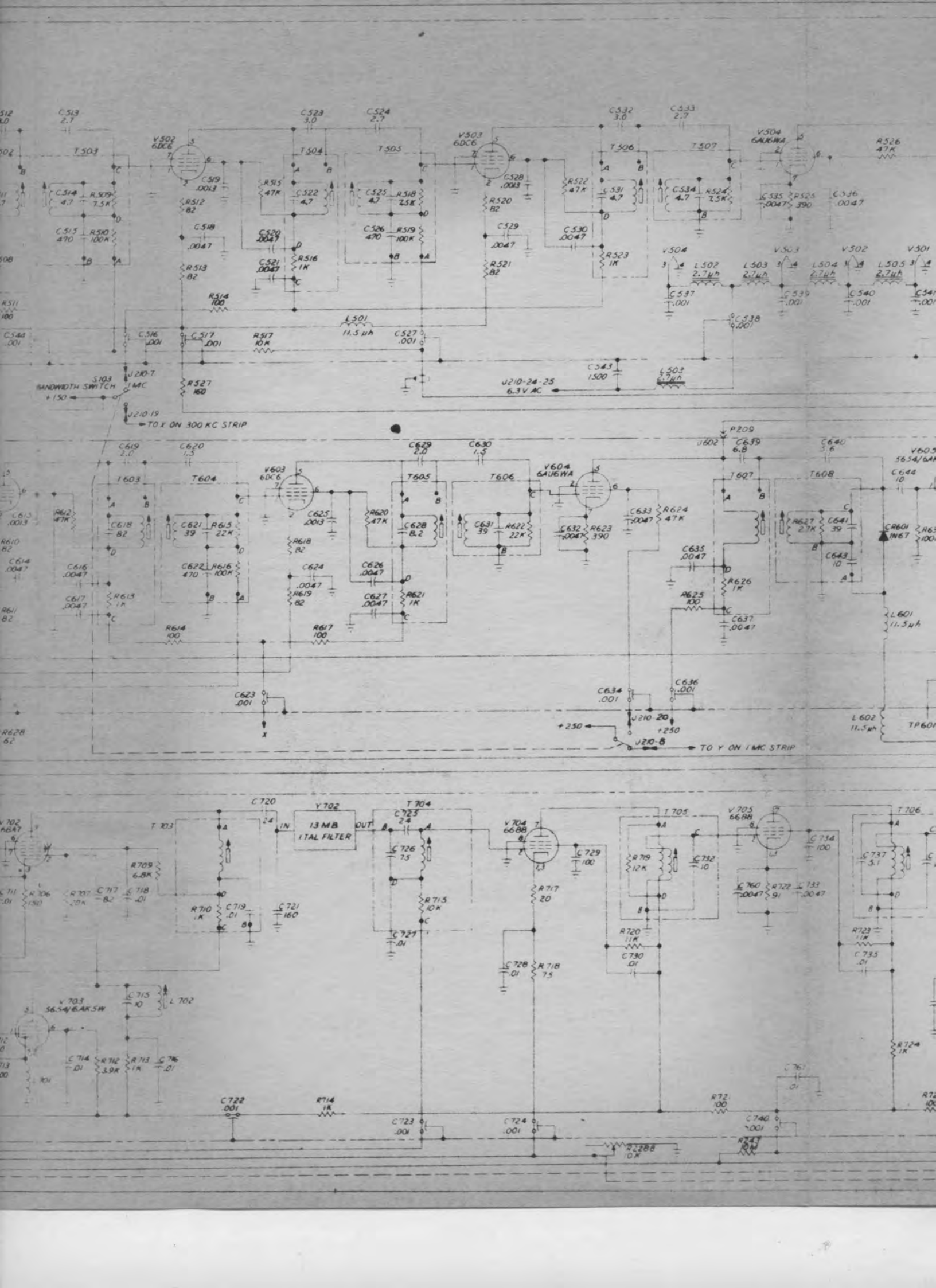
SYMBOL	DESCRIPTION
R-713	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-714	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-715	RESISTOR: fixed, composition, 10 K, 1/2 W, 10%, Allen Bradley EB-1031
R-716	Not assigned.
R-717	RESISTOR: fixed, composition, 20 ohm, 1/2 W, 5%, Allen Bradley EB-2005
R-718	RESISTOR: fixed, composition, 75 ohm, 1/2 W, 5%, Allen Bradley EB-7505
R-719	RESISTOR: fixed, composition, 12 K, 1/2 W, 5%, Allen Bradley EB-1235
R-720	RESISTOR: fixed, composition, 11 K, 1/2 W, 5%, Allen Bradley EB-1135
R-721	RESISTOR: fixed, composition, 100 ohm, 1/2 W, 10%, Allen Bradley EB-1011
R-722	RESISTOR: fixed, composition, 91 ohm, 1/2 W, 5%, Allen Bradley EB-9105
R-723	RESISTOR: fixed, composition, 11 K, 1/2 W, 5%, Allen Bradley EB- 1135
R-724	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-725	RESISTOR: fixed, composition, 100 ohm, 1/2 W, 10%, Allen Bradley EB-1011
R-726	RESISTOR: fixed, composition, 220 K, 1/2 W, 10%, Allen Bradley EB-2241
R-727	RESISTOR: fixed, composition, 47 K, 1/2 W, 10%, Allen Bradley EB-4731
R-728	RESISTOR: fixed, composition, 100 K, 1/2 W, 10%, Allen Bradley EB-1041
R-729	RESISTOR: fixed, composition, 47 K, 1/2 W, 10%, Allen Bradley EB-4731
R-730	RESISTOR: fixed, composition, 1 K, 1/2 W, 10%, Allen Bradley EB-1021
R-731	RESISTOR: fixed, composition, 470 K, 1/2 W, 10%, Allen Bradley EB-4741

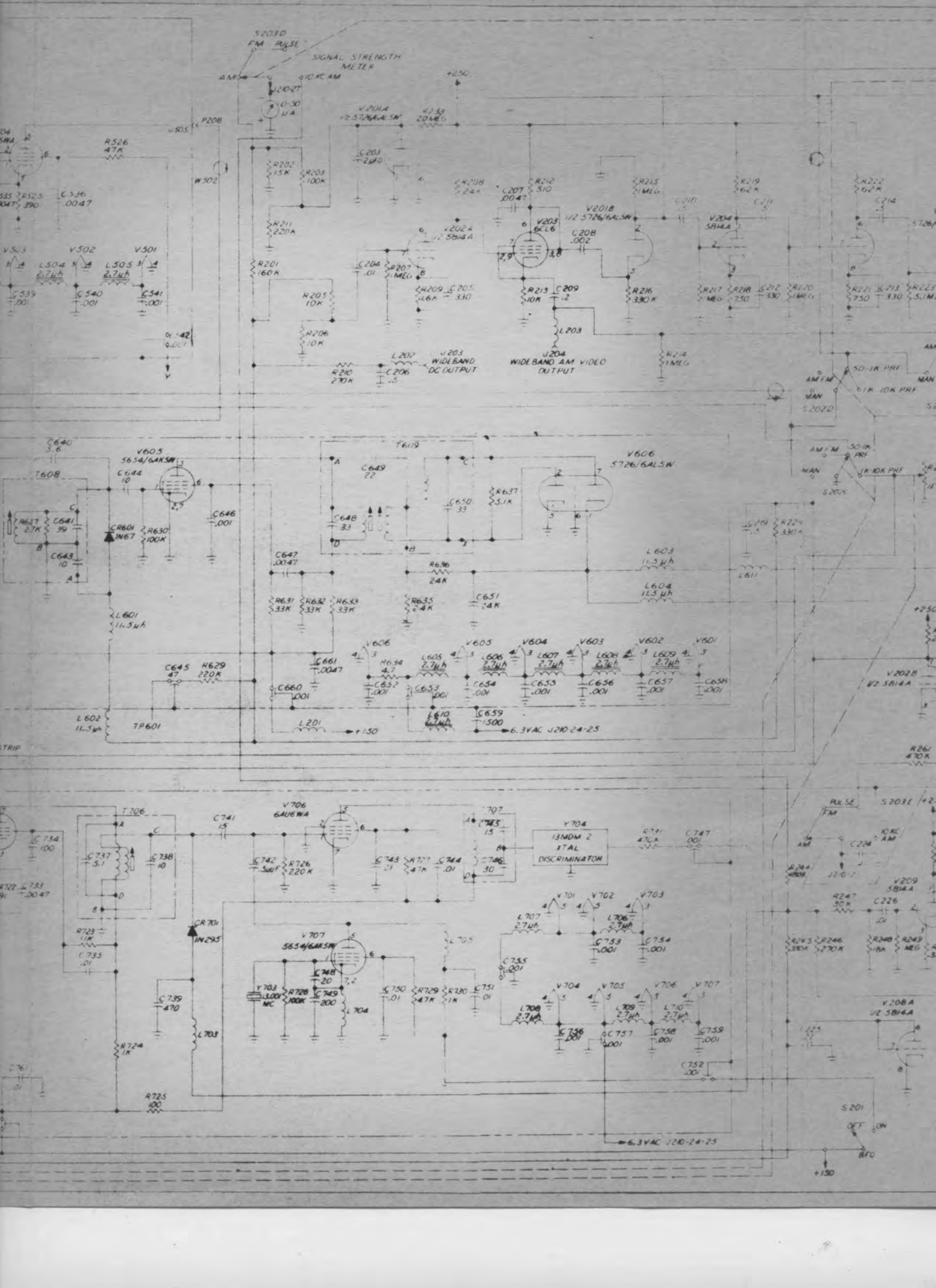
SYMBOL	DESCRIPTION
T-701	TRANSFORMER: IF, GEL Dwg. #B-10-546
T-702	TRANSFORMER: IF, GEL Dwg. #B-10-547
T-703	TRANSFORMER: IF, GEL Dwg. #B-10-548
T-704	TRANSFORMER: IF, GEL Dwg. #B-10-544
T-705	TRANSFORMER: IF, GEL Dwg. #B-10-549
T-706	TRANSFORMER: IF, GEL Dwg. #B-10-550
T-707	TRANSFORMER: IF, GEL Dwg. #B-10-545
V-701	TUBE: electron, 6DC6
V-702	TUBE: electron, 6BA7
V-703	TUBE: electron, 5654/6AK5W
V-704	TUBE: electron, 6688
V-705	TUBE: electron, 6688
V-706	TUBE: electron, 6AU6WA
V-707	TUBE: electron, 5654/6AK5W
Y-701	CRYSTAL: quartz, M-20, McCoy, 172 mc
Y-702	CRYSTAL: filter, Hycon Eastern #13MB
Y-703	CRYSTAL: quartz, M-20, McCoy, 13.001 mc
Y-704	CRYSTAL: discriminator, Hycon Eastern #13 MDM-

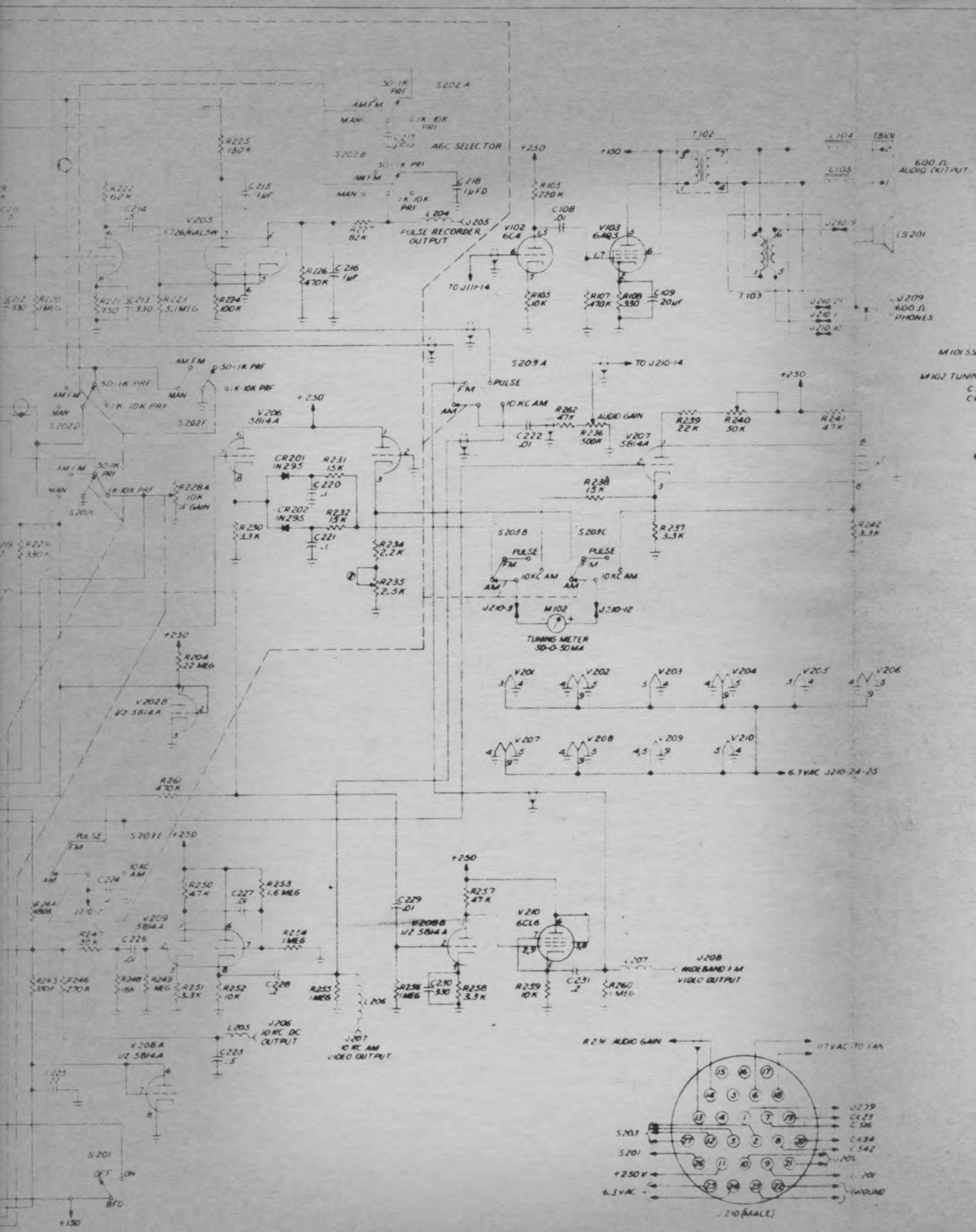

L417
R425
15
1402
L404
L416
C406
.8-8.5
V401
6280/416B
C403
.00
P102
J110
W10
C402
8.2
L401
.78μH
L407
.14μH
L403
.14μH
P101
J103
ANTENNA
INPUT
C404
4500
R401
150
C401
.00
R402
10K
C405
.001
J101
FEMALE
B101
BLOWER
MOTOR
C103
.001
C101
.005
L101
.45μH
S101
POWER
C104
.001
C102
.005
L102
.45μH
J111
J110
L304
L305A
V301
6280/416B
C306
12
C307
.8-8.5
C319
22
C303
.001
P102
J301
C302
8.2
L301
.72μH
W102
J102
C304
1900
R301
316
L302
.14μH
L303
.14μH
C308
200
C309
200
C310
200
C311
200
C312
200
C301
.001
TP3
R302
100
V302
V303
V304
C313
.001
C314
.001
C315
.001
C316
.001
L306
2.7μH
C305
.001
C317
.001

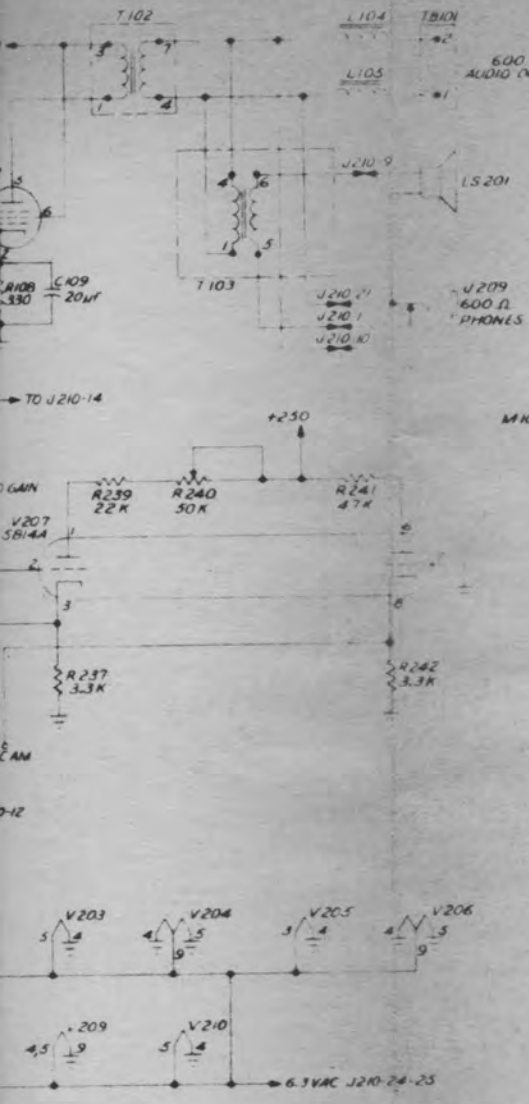

C-427A
T101
B101
BLOWER MOTOR
B201
FAN MOTOR
S101 POWER
S102 AUTOMATIC FREQUENCY CONTROL
V101 0A2WA
V102
V103
V302 6J4
V303 5654/6AK5W
V304 6AF4W
V402 6J4
V403 5654/6AK5W
V404 6AF4A
6.3 VAC
+250 V
+150 V REGULATED
TO J111 +250
J111-24-25
J111-18
J111-6
J111-2
J302
J402
J404 P10.5
SLO BLO
OFF
ON

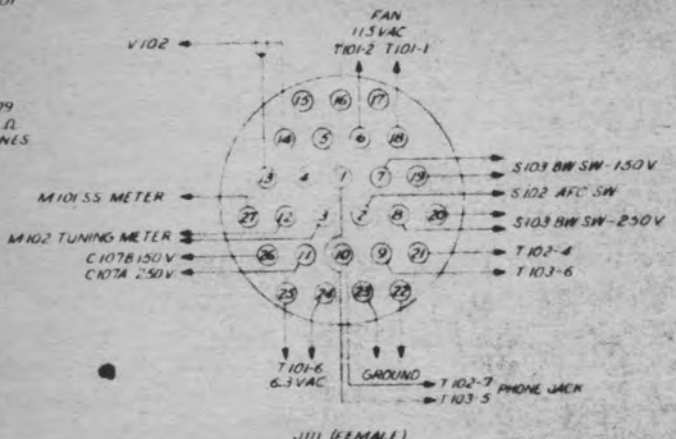

V403 5654/6AK5W
C450 10
J403
P110
W105
C435 .001
R416 150K
R424 1K
C451 .0047
C436 47
TP402
R418 1K
C446 .001
C445 .5MF
R419 22K
R421 47
C447 .001
J404
P105
W103
J105
J111-2
S102 AUTOMATIC FREQUENCY CONTROL
W106
V303 5654/6AK5W
R316 150K
C353 10
L313
J303
P111
C337 .001
R324 1K
C354 .0047
C358 47
TP302
R318 1K
C349 .001
C348
R319 22K
C350 .001
R320 180
R321 47
R322 68
J304
P104
L316
J104
W104
S202E
AM FM 50-1K PRS
MAN
1K-10K PRS
C701 .001
C707 .001
C501 4.7
P203
J501
C502 .0033
2.2
T501
R501 5.1K
C503 4.7
J503
P202
C504 68
W201
J201
P201
W108
J109
P109
W107
J108
P108
P106
J106
P107
J107
S402
W504
F.DU OUTPUT
J202
W202
C505 470
V501 6DC6
C508 .0013
R503 100K
R504 82
C506 .001
C507 .0047
R505 82
R502 51
R506 10K
J304
P207
C512 3.0
C513 2.7
T502
T503
R507 47K
C511 4.7
C514 4.7
R509 7.5K
C509 .0047
C515 470
R510 100K
C510 .0047
R508 1M
R511 100
C544 .001
C516 .001
S103 BANDWIDTH SWITCH
+150
J210-7
MC
J210-19
TO I
C607 2.0
C608 1.5
V601 6DC6
T601
T602
V602 6DC6
T603
J601
P204
C603 .0013
R604 47K
C606 8.2
C609 39
R607 22K
C613 .0013
R612 47K
C619 2.0
C618 82
R602 82
C602 .0047
C604 .0047
C610 470
R608 100K
R610 82
C614 .0047
C616 .0047
R601 100K
C605 .0047
R605 1K
R603 82
C617 .0047
R613 1K
R611 82
R609 10K
C611 470
R606 100
C612 .001
C613 .001
R628 6.2
W603
T701
C707 .68MF
T702
V701 6DC6
C706 8.2
C705 .0047
C704 .0033
R703 47K
C710 39
C709 .0047
C731 8.2
V702 6BA7
R708 100K
R709 6.8K
C711 .01
R706 130
C717 8.2
C718 .01
R704 1K
R705 10K
R701 100K
R702 160
C703 .01
V703 5654/6AK5W
C715 10
C712 20
C713 200
C714 .01
R712 3.9K
R713 1K
V701 17.2 MC
R711 100K
701
C701 .001
C707 .001

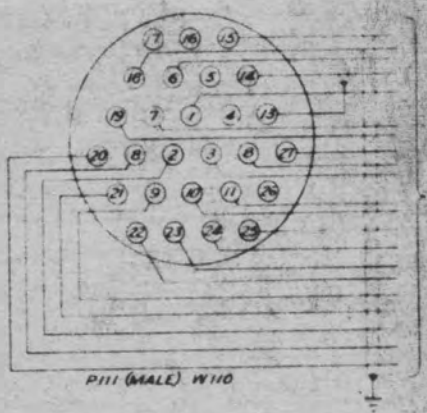

V502 6DC6
V503 6DC6
V504 6AU6WA
T503
T504
T505
T506
T507
S103 BANDWIDTH SWITCH
J210-7
J210-19
TO X ON 300 KC STRIP
J210-24-25 6.3V AC
V603 6DC6
V604 6AU6WA
T603
T604
T605
T606
T607
T608
P209
J602
J210-20
J210-8
TO Y ON 1 MC STRIP
V702 6BA7
T703
T704
13 MB ITAL FILTER
V704 6688
V705 6688
T705
T706
V703 5654/6AK5W
L702
TP601

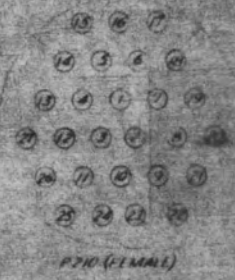

S203D
FM PULSE
SIGNAL STRENGTH METER
AM
910 KC AM
J207
0-50 UA
+250
V201A
1/2 5726/6AL5W
R233 20 MEG
P208
J205
W502
R526 47K
C203 2 MFD
R202 15K
R203 100K
R208 24K
C207 .0047
R212 510
R215 1 MEG
R219 62K
R222 62K
C210
C211
C214
V2018
1/2 5726/6AL5W
V203 6CL6
C208 .002
V204 5814A
R211 220A
V202A
1/2 5814A
C204 .01
R207 1 MEG
R209 1.6K
C205 330
R213 10K
C209 .2
R216 330K
R217 1 MEG
R218 750
C212 330
R220 1 MEG
R221 750
C213 330
R223 5.1M
V503
V502
V301
L504 2.7 µh
L505 2.7 µh
C539 .001
C540 .001
C541 .001
R201 160K
R205 10K
R206 10K
C202 .001
L202
C206 .5
R210 270K
J203 WIDEBAND DC OUTPUT
J204 WIDEBAND AM VIDEO OUTPUT
R214 1 MEG
L203
50-1K PRF
AM FM
MAN
S202D
1K-10K PRF
S202K
C640 5.6
V605 5654/6AK5W
T608
C644 10
C646 .001
R627 2.7K
C641 39
CR601 1N67
R630 100K
C643 10
T609
C649 22
C650 33
R637 5.1K
C648 33
V606 5726/6AL5W
C647 .0047
R636 24K
C651 24K
L603 11.5 µh
L604 11.5 µh
L611
C219
R224 330K
R631 33K
R632 33K
R633 33K
R635 4K
L601 11.5 µh
C645 47
R629 220K
C661 .0047
C660 .001
R634 4.7
L605 2.7 µh
L606 2.7 µh
L607 2.7 µh
L608 2.7 µh
L609 2.7 µh
C652 .001
C653 .001
C654 .001
C655 .001
C656 .001
C657 .001
C658 .001
L610 2.7 µh
C659 1500
L602 11.5 µh
TP601
L201
+150
6.3VAC J210 24-25
V202B
1/2 5814A
R261 470K
T706
C734 100
C737 5.1
C738 10
C741 15
V706 6AU6WA
C742 5 µµf
R726 220K
C743 .01
R727 47K
C744 .01
T707
C745 15
C746 30
Y704 13MDM 2 XTAL DISCRIMINATOR
R731 47K
C747 .001
R723 1K
C735 .01
CR701 1N295
C739 470
R724 1K
R725 100
V707 5654/6AK5W
C748 20
Y703 13.001 MC
R728 100K
C749 200
L704
C750 .01
R729 47K
R730 1K
C751 01
L705
V701
V702
V703
L707 2.7 µh
L706 2.7 µh
C733 .001
C754 .001
C755 .001
V704
V705
V706
V707
L708 2.7 µh
L709 2.7 µh
L710 2.7 µh
C756 .001
C757 .001
C758 .001
C759 .001
C752 .001
C761 .01
PULSE FM
S203E
10 KC AM
C224
J210-2
V209 5814A
R247 30K
C226 .01
R243 330A
R246 270K
R248 18K
R249 MEG
V208A
1/2 5814A
C225
S201
OFF
ON
BFO
+150
6.3VAC J210-24-25

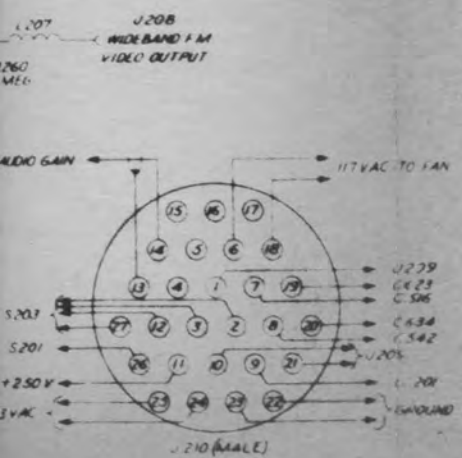

S202A
AM FM
MAN
50-1K PRF
0.1K-10K PRF
AGC SELECTOR
S202B
S202D
S202F
S202C
R225 150K
R222 62K
C215 1MF
C214 .5
V203 6726/6AL5W
R221 750
C213 330
R223 5.1MEG
C212 330
R220 1MEG
R224 100K
R226 470K
C216 1MF
R227 82K
L204
J205
PULSE RECORDER OUTPUT
C218 1MFD
+250
+150
R105 220K
C108 .01
V102 6C4
R103 10K
TO J111-14
V103 6AR5
R107 470K
R108 330
C109 20MF
T102
T103
L104
L105
TB101
600Ω AUDIO OUTPUT
J210-9
LS201
J210-24
J210-1
J210-10
J209 600Ω PHONES
S203A
TO J210-14
PULSE
FM
AM
10KC AM
R262 47K
AUDIO GAIN
R236 500K
C222 .01
V206 5814A
V207 5814A
R239 22K
R240 50K
R241 47K
R238 15K
R237 3.3K
R242 3.3K
CR201 IN295
CR202 IN295
R231 15K
C220 .1
R232 15K
C221 .1
R230 3.3K
R234 2.2K
R235 2.5K
R228A 10K IF GAIN
S203B
S203C
J210-9
M102
J210-12
TUNING METER 50-0-50MA
R204 22 MEG
V202B V2 5814A
V201
V202
V203
V204
V205
V206
V207
V208
V209
V210
6.3VAC J210-24-25
R261 470K
S203E
R250 47K
R253 1.6 MEG
C227 .01
R254 1MEG
C224
C226 .01
R247 90K
R248 18K
R249 MEG
R251 3.3K
R252 10K
C228 .5
R255 1MEG
L206
J207 10KC AM VIDEO OUTPUT
V209 5814A
V208B V2 5814A
C229 .01
R257 47K
V210 6CL6
R256 MEG
C230 330
R258 3.3K
R259 10K
C231 .2
R260 1MEG
L207
J208 WIDEBAND FM VIDEO OUTPUT
R243 330K
R246 270K
L205
J206 10KC DC OUTPUT
C223 .5
V208A V2 5814A
L225
S201 OFF ON
BFO
+150
R24 AUDIO GAIN
117VAC TO FAN
J209
C629
C506
C634
L542
J204
L201
GROUND
6.3VAC
S203
S201
J210 (MALE)











NOTE!
UNLESS OTHERWISE INDICATED
1. CAPACITOR VALUES LESS THAN ONE ARE IN MICROHENRYS, VALUES GREATER THAN ONE ARE IN MMFD MICROFARADS
2. RESISTOR VALUES ARE IN OHMS, K = 1000, M = 1000,000
3. INDUCTANCE VALUES ARE IN MICROHENRIES

SCHEMATIC DIAGRAM
16AI RECEIVER

6-10-65 16AI 2CHE