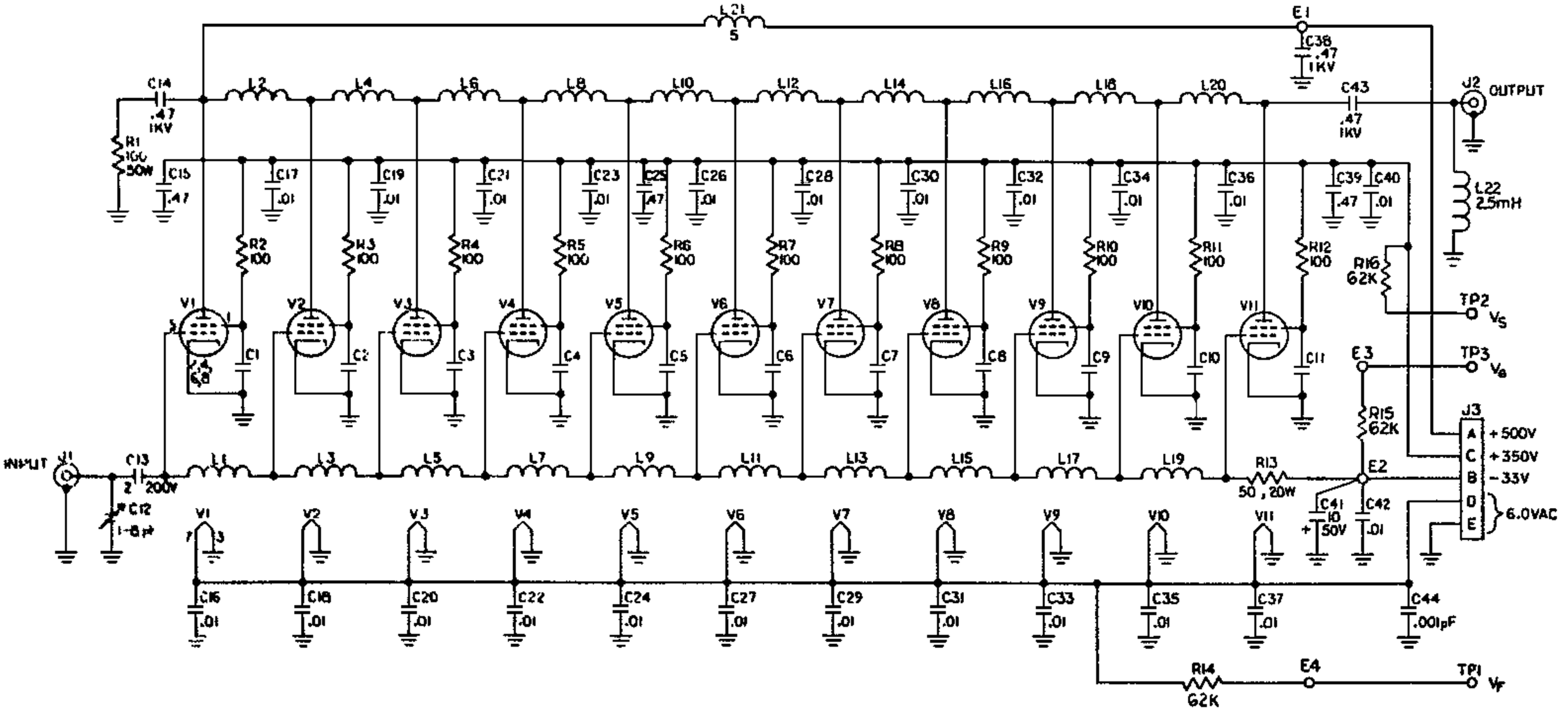
REVISIONS		
A	AT J3 : B (WAS) C , C (WAS) B	7-14-86
B	AT J3 : C WAS B, B WAS C ; DWG NO WAS 91122	6 APR 90
C	REVISED TO AGREE WITH LATEST UNIT ADDED E1, E2, E3, E4, K15, K16, TP2, TP3 : REVISED R14 WAS 100 1/2 W	22MAR91



NOTES: UNLESS OTHERWISE SPECIFIED
1. CAPACITOR VALUES ARE IN MICROFARADS
2. C1 THRU C11 ARE BUILT-IN 1000pF SCREEN CAPACITORS
3. RESISTOR VALUES ARE IN OHMS
4. INDUCTOR VALUES ARE IN MILLIHENRIES
5. V1 THRU V11 ARE 4CX250B
6. LAST REF. DESIGNATION USED: C45, J3, L22, R16, V11, TP3, E4

SCALE NONE	APPROVED BY	DRAWN BY DAL
DATE 11-29-85	CHECKED BY	REVISED 22MAR91

SCHEMATIC-AMPLIFIER, 10KHz-220MHz, 200W

MODEL 122C | DRAWING NUMBER 7-35402001

99122
REDUCTION ON FILE

1.3 SPECIFICATIONS

Frequency Range	:	10 KHz - 220 MHz
Power Gain	:	48 dB minimum
Bandpass Flatness	:	+/- 2.0 dB typical
Gain Control	:	30 dB continuous
Input Impedance	:	50 Ohm nominal
Output Impedance	:	50 Ohm nominal
Power Output	:	200 Watt CW minimum
Duty Factor	:	100%
Harmonic Distortion	:	-17 dBc typical; -25 dBc above 130 MHz
Rise Time	:	4 ns
Mismatch Protection	:	At rated power, no damage for operation at VSWR of 4:1; At rated power output will operate into an open circuit without damage for short periods of time. (NOTE: Open circuit operation should be avoided!)
Short Circuit Protection	:	Can withstand short circuits under full load without damage.
Types of Signals	:	Amplifier will faithfully reproduce any AM, FM CW, SSB, PULSE, or complex wave at its output with minimum distortion.
Connectors	:	N jack
Dimensions (W X H X D)	:	56 X 71 X 67 cm (22" X 27" X 27")
Weight	:	275 lbs (124 kg)
Primary Power Required	:	100, 115, 200, 230 VAC; 50/60 Hz; 3 KVA.
Cooling	:	Self-contained blowers and filters
Pushbutton Controls	:	HV ON HV OFF RESET

Cont'd next page

SPECIFICATIONS cont'd

Status Indicators	:	FILAMENT READY HV (high voltage) NO AIR OVERLOAD
Automatic Blower Overrun	:	30 Seconds after shutdown
Front Panel Metering	:	Bias Voltage, Eg Screen Voltage, Es
	:	Plate Voltage, Eb Grid Current, Ig Screen Current, Is Plate Current, Ib
Protective Devices	:	see system component manuals

NO AIR -- RED light turns on when an automatic shut-down has occurred due to a failure of the forced air cooling system.

OVERLOAD -- Red light turns on when an automatic shut-down has occurred due to an overload of the power amplifier caused by overdrive or dangerously mismatched load.

2.6 PLACING EQUIPMENT IN SERVICE

It is good practice to follow procedure below for placing the equipment in service:

a. Make sure equipment is connected to appropriate power source. (see equipment serial number tag)

b. Make sure appropriate load is connected. Impedance should be approximately 50 Ohm resistive and power rating should be observed.

c. Without a signal applied to the input or with input gain control fully counter clockwise:

1) Switch the POWER switch to the ON position with the 210LCR driver AC LINE switch in the ON position.

NOTE: Sequence of POWER switch and AC LINE switch is not important.

2) The Amber FILAMENT light should come on, together with the cooling air blower system.

d. The dual range meter circuit is a very useful feature of the 122 amplifier. It provides the operator with a means for immediate circuit check-out at six different check points. Check each as outlined below:

1) Position 1: OFF

2) Position 2: Eg - Grid bias voltage: This reading should be -25 V +/- 10% (0-50 V F.S)

3) Position 3: Es - Screen Voltage: This reading should be +330 V +/- 10% (0-500 V F.S.)

4) Position 4: Eb - Plate Voltage: This reading should be 500 V +/-10% (0-1000 V F.S.)

5) Position 5: Ig - Grid Current: Ideally, no grid current should flow. When the output power reaches 200 W or more, some grid current may be indicated at some frequencies (0-100 mA F.S.).

6) Position 6: Is - Screen Current :50 mA is about normal. As the power output increases, the screen current will follow. At approximately 200 Watt output the screen should be 200-250 mA. (0-500 mA F.S.). The overload relay will trip the system if the current goes beyond 300 mA. Depressing the RESET button will put the system back into operation.

7) Position 7: Ib - Plate Current: Should read 4 A +/- 10% (0-10 A F.S)

e. If the NO AIR protection circuit operates, the entire start-up procedure must be repeated. Care should be exercised to determine the cause of the NO AIR shutdown and remedial steps should be taken to correct the situation.

2.7 NORMAL OPERATING PROCEDURE

Under normal operating conditions only the POWER ON /OFF and the HV ON and HV OFF pushbuttons are used unless various power levels are desired for which the GAIN Adjust control would be used.

Occasional checks of plate current should be made to ensure proper operation. Bias should be adjusted when necessary.

The equipment may be shut down by operating the POWER ON/OFF switch to the OFF position. No special shut-down procedure is required.

1.4 SPECIFICATIONS

Frequency Range	: 10 kHz to 220 MHz
Power Gain	: 13 dB typical
Bandpass Flatness	: +/- 2.0 dB typical
Impedances	: 50 ohms nominal
Power Output	: 200 Watts CW minimum
Duty Factor	: 100%
Harmonic Distortion	: -17 dBc typical
Rise Time	: 25 ns maximum
Mismatch Protection	: No damage for operation at VSWR of 4:1; will operate into an open circuit without damage under full power conditions for short periods of time (Note: open circuit should be avoided!)
Short Circuit Protection	: Can withstand short circuits under full load without damage.
Types of Signals	: The amplifier will faithfully reproduce any AM, FM, CW, SSB, PULSE, or complex wave at its output with minimum distortion.
Connectors	: BNC input and Type "N" output.
Dimensions (W X H X D)	: 559 X 711 X 673 mm (22 X 28 X 26.5 inches)
Weight	: 255 lbs. (116 kg)
Primary Power Required	: 115/230 Volts at 50/60 cycles 2.5 kVA; 100/200 Volts at 50/60 cycles 2.5 kVA.
Cooling	: Self-contained blowers and filters.
Pushbutton Controls	: HV ON HV OFF RESET
Status Indicators	: FILAMENTs READY HV (high voltage) NO AIR OVERLOAD
Automatic Blower Overrun	: 30 Seconds after Shutdown

2.0 DESCRIPTION AND OPERATION

2.1 GENERAL PRINCIPLE OF OPERATION

The Model 122 is a distributed amplifier. In general, distributed amplifiers are comprised of a series of distributed amplifier modules served by a common DC supply. All stages have their vacuum tubes arranged such that their input capacitances form the shunt capacitance of an artificial transmission line.

A signal propagating along the input line will feed each successive grid with a signal which is increasingly delayed in time. Thus the signals appearing at the plate as a result of the grid excitation will be similarly delayed.

For a signal propagating in the forward direction on the plate line, there will be a signal addition if the phase shift on the plate line is the same as the phase shift on the grid line per section. The signal appearing at the output terminal is the sum of the forward propagating signals generated by each of the tubes along the line.

It should be noted that part of each tube's output signal will travel the "wrong way" on the plate line. Therefore, each line is terminated at the reverse end by a resistive load equal to the characteristic impedance of the line, which is basically determined by the tube and circuit capacitance of the bandpass desired. In this way there is no reflection form the far end of the transmission line. The reverse propagating signal in the plate line does not build up in amplitude, but arrives in random phase dependent on the frequency and is absorbed in the reverse termination.

Therefore, the distributed amplifier, by distributing the tubes along these two transmission lines, essentially operates the tubes in parallel so far as their ability to generate current into a load is concerned, but splits up the capacitance so that they do not similarly add and thereby hold the gain bandwidth factor constant. It is thus possible to design an amplifier with a gain-bandwidth in excess of the gain-bandwidth product of the individual tube used.

2.2 CIRCUIT DESCRIPTION

The power amplifier utilizes eleven 4CX250B power tetrodes in a low-pass distributed amplifier configuration. The plate and grid lines are terminated resistively with high power terminating resistors. The tubes are forced air cooled and provided with

circulating chimneys to direct the air over the seals and through the anode coolers.

Power for the stage is supplied from the main high voltage power supply. The bias is adjustable by a screwdriver adjustment located internally and should be adjusted only after consulting the factory. Gain of this stage is 13 dB.

The high voltage power supply provides the DC power for the 11 tube power amplifier. Plate and screen supplies are arranged in such a way that the plate current flows through the screen supply. Protection against excessive screen dissipation due to loss of plate voltage is provided by an electrically reset, lockout type overload relay.

The critical element in operation of the final amplifier stage is its screen current, because the permissible screen dissipation will be exceeded before the allowable plate dissipation is exceeded. Therefore the screen current should be monitored while the system is in operation. The screen current should not exceed 250 mA on a continuous basis, but is allowed to exceed this level for short bursts of signal.

It is normal for the screen currents to be negative under certain conditions. The power supply has been designed to accommodate this negative screen current without causing a rising screen voltage. The meter is protected by a diode such that an off scale negative reading will not damage the meter.

Since it is possible to drive the final amplifier into excessive output and excessive dissipation, an overload relay has been incorporated into the screen circuit of the final amplifier stage. This relay is mounted in the power supply chassis and is adjusted by a potentiometer. It has been set at the factory for approximately 300 ma. The potentiometer may be reset for intermittent operation at higher than normal power output.

3.5 FRONT PANEL CONTROLS AND INDICATORS

The 122 amplifier has been designed avoiding the need of critical adjustments, and therefore has few controls which require attention.

POWER -- Turns equipment ON and OFF. When shutting down, the blower will continue to run for 30 seconds to ensure proper cool-down prior to shut-off.

HV OFF -- Disables system with momentary pushbutton operation. Switches off the high voltage plate supply.

HV ON -- Used to activate the system by switching on the high voltage plate supply.

RESET -- Used to clear a fault condition caused by excessive screen grid current. The HV ON button must be operated subsequently to continue operation.

METER SELECTOR -- Permits switching of dual range multi- purpose meter to various circuits for monitoring and to facilitate troubleshooting.

3.6 PLACING EQUIPMENT IN SERVICE

It is good practice to follow the following procedure for placing the equipment in service.

a. Make sure equipment is connected to appropriate power source.

b. Make sure appropriate load is connected. Impedance should be approximately 50 Ohm resistive.

c. Without signal applied to the input or with the input gain control fully counter clockwise:

1) Switch the POWER switch to the ON position.

2) The Amber FILAMENT light should come on, together with the cooling air blower system.

d. The dual range meter circuit is a very useful feature of the 122 amplifier. It provides the operator with a means for immediate circuit check-out at six different check points. Check each one for the readings listed below:

1) Position 1: OFF

2) Position 2: Eg - Grid bias voltage: This reading should be -25 V +/- 10% (0-50 V F.S)

3) Position 3: Es - Screen Voltage: This reading should be +330 V +/- 10% (0-500 V F.S.)

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5) Position 5: Ig - Grid Current: Ideally, no grid current should flow. When the output power reaches 200 W or more, some grid current may be indicated at some frequencies (0-100 mA F.S.).

6) Position 6: Is - Screen Current :50 mA is about normal. As the power output increases, the screen current will follow. At approximately 200 Watt output the screen should be 200-250 mA. (0-500 mA F.S.). The overload relay will trip the system if the current goes beyond 300 mA. Depressing the RESET button will put the system back into operation.

7) Position 7: Ib - Plate Current: Should read 4 A +/- 10% (0-10 A F.S)

e. If the NO AIR protection circuit operates, the entire start-up procedure must be repeated. Care should be exercised to determined the cause of the NO AIR shut-down and remedial steps should be taken to correct the situation.

REF DESIGNATOR	QTY	DESCRIPTION	PART NUMBER
A1		**POWER SUPPLY**	**4-64-012-002**
A1A1	1	BOARD ASSY METER	4-65-124-001
A1A2	1	PCB ASSY BIAS REGULATOR	4-30-220-001
A1A3	1	AMPLIFIER CONTROL ASSY	4-65-125-001
	1	BASEPLATE	7-41-522-001
T3	1	TRANSFORMER POWER	7-44-024-001
T2	1	TRANSFORMER FILAMENT	7-44-018-002
T1	1	TRANSFORMER BIAS	7-44-014-001
L1	1	INDUCTOR FILTER	7-44-004-001
K3,8	2	CONTACTOR 200-220 VOLT	7-17-014-002
C1,2,3	3	CAP ELECT 3000mF/250V	7-03-709-308
C4	1	CAP ELECT 1100mF/450V	7-03-716-001
	1	BRKT CONN MTG	7-41-563-001
J1	1	CONN MS AC IN	7-19-053-001
CR1,2	2	RECTIFIER BRIDGE	7-06-009-001
R2	1	POTENTIOMETER 100 OHM 2W	7-02-002-101
R1	1	POTENTIOMETER 2.5K 2W	7-02-002-252
	2	BRACKET MTG. POT	7-41-396-001
	1	CLAMP COMPONENT	7-51-044-012
R3-5	3	RESISTOR 24K 2W	7-01-304-243
J1 MATE	1	CONNECTOR MS	7-19-070-001
J1 MATE	1	STRAIN RELIEF	7-19-071-001
	2	HANDLE	7-21-001-001
	1	PANEL FRONT	7-41-746-001
A1S5	1	SWITCH ROCKER	7-16-020-001
A1DS1-5	5	HOLDER LAMP	7-12-009-001
A1DS4,5	2	LENSE RED	7-12-006-003
A1DS1-3	3	LENSE AMBER	7-12-006-005
F1	1	FUSE BLOCK	7-14-006-001
Q1	1	TRANSISTOR 2N3055	7-07-017-001
Q1	1	INSULATOR TRANSISTOR	7-22-006-001
A1DS1-5	6	BULB NEON	7-12-007-001
A1A3S1-3	3	SWITCH PUSHBUTTON	7-16-002-001
A1A3S1-3	3	BUTTON SWITCH	7-16-032-003
TB3	2	TERMINAL STRIP 3 TERM	7-20-008-003
TB2	1	TERMINAL STRIP 5 TERM	7-20-008-005
A1M1	1	METER PANEL	7-25-013-001
	1	TERMINAL SWAGE	7-20-027-001
A1S1	1	SWITCH ROTARY	7-16-017-001
	1	KNOB	7-21-007-001
K5	1	SOCKET RELAY	7-15-006-001
P5	1	HOUSING CONNECTOR	7-19-016-004
P2	1	HOUSING CONNECTOR	7-19-016-003
	1	BRKT PCB MTG	7-41-542-001
	35	TERM CRIMP MALE	7-19-005-002
	25	TERM CRIMP FEMALE	7-19-005-001

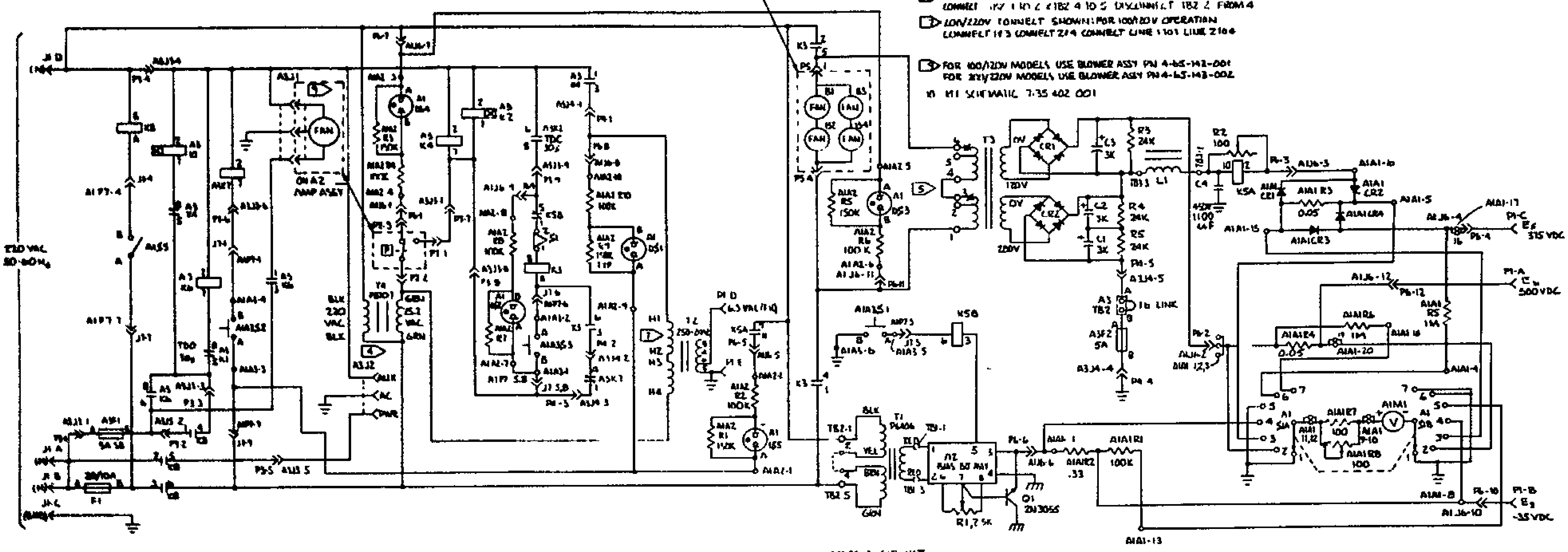
REF DESIGNATOR	QTY	DESCRIPTION	PART NUMBER
A1A1		**METER BOARD ASSEMBLY**	**4-65-124-001**
CR1-4	4	DIODE 1N4003	7-06-002-003
R7	1	POTENTIOMETER 2W 100 OHM	7-02-002-101
R1	1	RESISTOR 2W 100K	7-01-304-104
R2	3	RESISTOR 1/2W 1 OHM	7-01-202-109
R7	1	RESISTOR 2W 100 OHM	7-01-304-101
R5,6	2	RESISTOR 2W 1M	7-01-304-105
R4	1	SHUNT (RESISTOR 2W 510K)	7-01-304-514
R3	1	SHUNT (RESISTOR 2W 510K)	7-01-304-514
	1	TERMINAL BOARD	7-20-001-001
A1A2		**PCB ASSEMBLY BIAS REGULATOR**	**4-30-220-001**
	1	PCB	7-30-220-001
R4	1	RESISTOR 150 OHM 2W	7-01-304-151
R6	1	RESISTOR 2K 2W	7-01-304-202
R1,2,3,7	4	RESISTOR 5.6K 2W	7-01-304-562
CR5	1	DIODE ZENER IN2995	7-06-010-047
CR1,2,3,4	4	DIODE IN4003	7-06-002-003
C1	1	CAPACITOR 100UF 75V	7-03-712-107
C2	1	CAPACITOR 220UF 63V	7-03-701-227
Q1	1	TRANSISTOR MJ2955	7-07-080-001
	7	TERMINAL SWAGE	7-20-027-001
R8	1	RESISTOR MF 2W 510 OHM	7-01-304-511
A1A3		**AMPLIFIER CONTROL CHASSIS ASSEMBLY**	**4-65-125-001**
	1	CHASSIS	7-41-394-001
F1,2	2	FUSE HOLDER	7-14-001-001
F1,2	2	FUSE S.B. 5A.	7-13-102-050
K1,2,4,6,7	5	SOCKET RELAY	7-15-005-008
J1,2	1	CONNECTOR AC	7-19-056-001
J3,4	2	HOUSING CONNECTOR	7-19-016-109
	1	TERMINAL STRIP	7-20-026-001
	14	TERMINAL CRIMP	7-19-005-001

REF DESIGNATOR	QTY	DESCRIPTION	PART NUMBER
A2		**AMPLIFIER ASSY**	**4-62-107-001**
	1	CHASSIS	7-41-534-001
XV1-XV11	11	SOCKET TUBE	7-15-003-001
	11	CAPACITOR SCREEN	7-03-903-001
V1-11	11	TUBE 4CX250B	7-11-002-001
	11	CHIMNEY	7-11-003-001
	11	CLAMP ANODE	7-41-447-001
L2,4,6,ETC THRU	10	COIL AIR PLATELINE	7-05-003-003
	4	BLOCK MTG COMPONENT	7-42-028-001
	3	TERMINAL SOLDER LUG #4	7-20-013-004
	1	BRACKET MTG. OUTPUT CONN	7-41-395-001
	3	TERMINAL CHASSIS MNT	7-20-004-006
J1,2	1	CONNECTOR BNC	7-19-010-001
C38,14,43	2	CAPACITOR .47 1KV	7-03-904-474
C15, 25, 39	3	CAPACITOR .47 600V	7-03-905-474
C13	1	CAPACITOR 2UF 200V	7-03-902-205
R13	1	RESISTOR TERM 50 OHM	7-01-902-004
R1	1	RESISTOR TERM 100 OHM	7-01-902-003
	25	TERMINAL CHASSIS MNT	7-20-030-001
J3	1	CONNECTOR	7-19-057-001
R2-12	11	RESISTOR 100 OHM 1/2W	7-01-202-101
	1	TERMINAL FEED-THRU	7-20-016-001
TP1	3	CAPACITOR FEED-THRU	7-03-406-102
	3	STAND-OFF CERAMIC	7-51-027-016
	4	CLIP COMP MTG	7-51-057-001
C16-24,26-9,40, 31	23	CAPACITOR .01UF 1KV	7-03-403-103
C42	1	CAPACITOR MONO 0.1UF 100V	7-03-501-103
C41	1	CAPACITOR ELECT 10UF 50V	7-03-706-106
C12	1	CAPACITOR VAR 18PF	7-04-007-018
	1	TERMINAL STRIP	7-20-008-003
	9	TERMINAL SOLDER #6	7-20-013-006
	4	BEAD FERRITE	7-24-008-001
	11	SCREW CAP HEX SKT HD 4-40 x3/8	7-50-021-006
L21		RE INDUCTOR ASSY	4-05-022-001
	7	ROD FERRITE	7-24-013-005
	AR	WIRE MAGNET 18ANG	7-29-061-018
	1	PLATE COVER	7-41-632-001
	1	STAND-OFF	7-51-040-016

	A	RELEASE TO PRODUCTION		
	B	REVISED SCHEMATIC TO AGREE WITH UNIT		

NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTANCE IN OHMS
2. ALL CAPACITANCE IN MICROFARADS

1 USED ON 100/200V MODELS ONLY TO BOOST LINE VOLTAGE
2 220V CONNECTION SHOWN: FOR 200V OPERATION CONNECT 2 & 4 CONNECT LINE 1 TO 1 AND LINE 2 TO 5. FOR 120V OPERATION CONNECT 1 & 4, CONNECT 3 & 6: CONNECT LINE 1 TO 1 - CONNECT LINE 2 TO 6. FOR 100V OPERATION CONNECT 1 & 4 CONNECT 2 & 5 CONNECT LINE 1 TO 1 CONNECT LINE 2 TO 5
3 200/220V CONNECTION SHOWN: FOR 100/120V OPERATION CONNECT TB2 1 TO 2 & TB2 4 TO 5. DISCONNECT TB2 2 FROM 4
4 200/220V CONNECT SHOWN: FOR 100/120V OPERATION CONNECT 1 & 3 CONNECT 2 & 4 CONNECT LINE 1 TO 1 LINE 2 TO 4
5 FOR 100/120V MODELS USE BLOWER ASSY PN 4-65-143-001 FOR 200/220V MODELS USE BLOWER ASSY PN 4-65-143-002
10 M1 SCHEMATIC 7-35 402 001



LEGEND:
A1 - FRONT PANEL ASSEMBLY
A1A1 - METER BOARD ASSEMBLY
A2 - BIAS BOARD ASSEMBLY
A3 - RELAY BOX ASSEMBLY

A1DS1 - FILAMENTS
A1DS2 - READY
A1DS3 - HIGH VOLTAGE ON
A1DS4 - NO AIR
A1DS5 - OVERLOAD

A1A2 - INDICATOR PCB ASSY
A1A3 - SWITCH PCB ASSY

E_b - PLATE VOLTAGE
E_g - GRID VOLTAGE
E_s - SCREEN VOLTAGE
A3K1 - BLOWER OVERRUN (30S TDO)
A3K2 - HIGH VOLTAGE RELAY (30S T.D.O.)
K3 - POWER CONTACTOR
A3K4 - FILAMENT RELAY
K5 - OVERLOAD RELAY (LATCHING)
A3K6 - CONTROL RELAY
P - AIRFLOW SENSING SWITCH
A3K7 - HIGH VOLTAGE OFF RELAY
K8 - PRIMARY ON/OFF CONTACTOR

R1 - BIAS ADJUSTMENT
R2 - OVERLOAD SENSITIVITY ADJUSTMENT
A1A1R8 - METER CALIBRATION
S1 - DOOR INTERLOCK SWITCH (220-200 ONLY)
T1 - BIAS VOLTAGE TRANSFORMER
T2 - FILAMENT TRANSFORMER
T3 - H.V. TRANSFORMER
T4 - LINE VOLTAGE BOOSTER TRANSFORMER
A1A3S2 - H.V. OFF
A1A3S3 - H.V. ON
A1A3S1 - RESET
A1S5 - PWR ON/OFF
A1S1 - METER FUNCTION SELECT SWITCH

METER CIRCUIT
POS. 1 - OFF
POS. 2 - I_b (10A F.S.)
POS. 3 - I_a (1000mA F.S.)
POS. 4 - I_g (100mA F.S.)
POS. 5 - E_g (100V F.S.)
POS. 6 - E_s (1000 V F.S.)
POS. 7 - E_b (1000V F.S.)

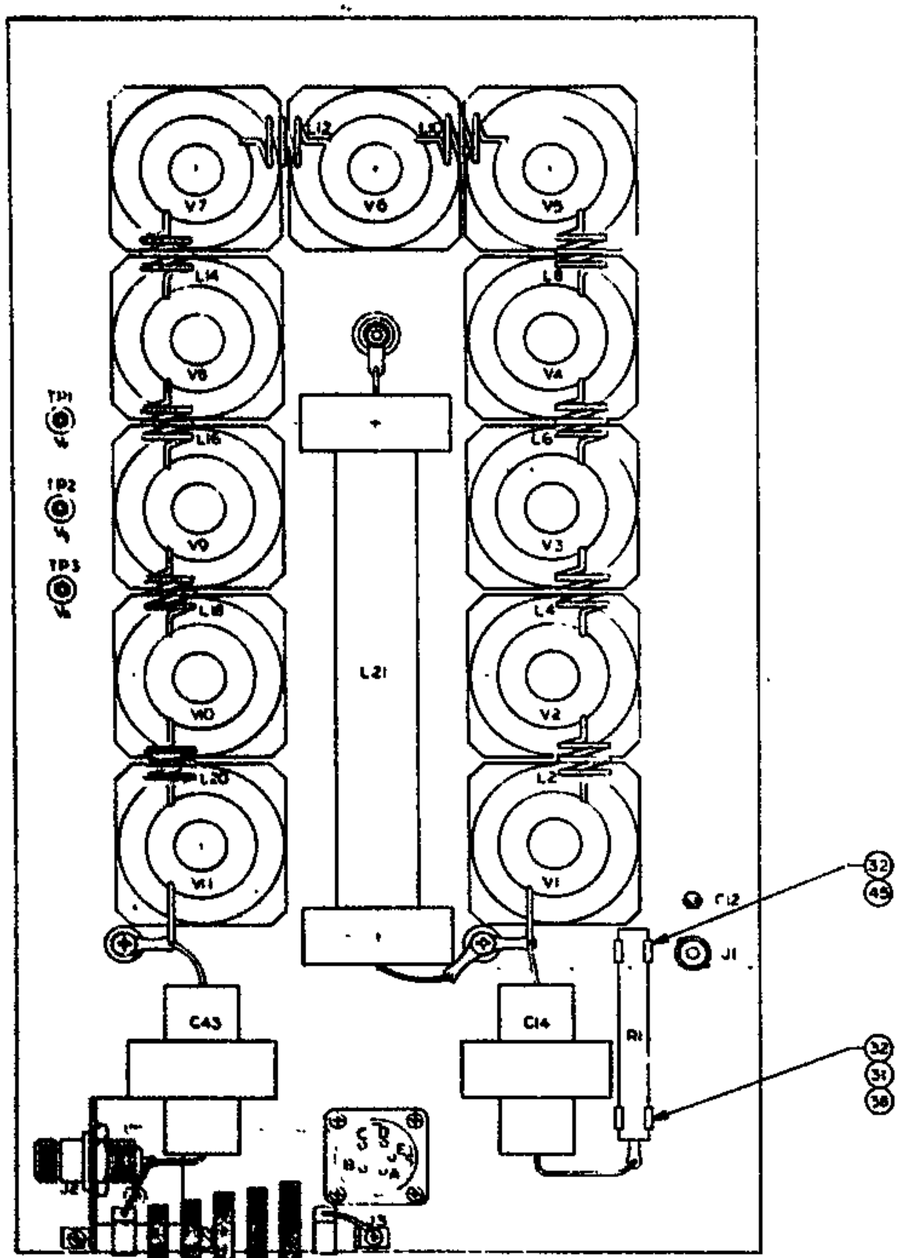
J7-2 A1P7-2 FRONT PANEL GROUND LUG AT A1S1

SCHEMATIC, POWER SUPPLY / CONTROL 220-100/200

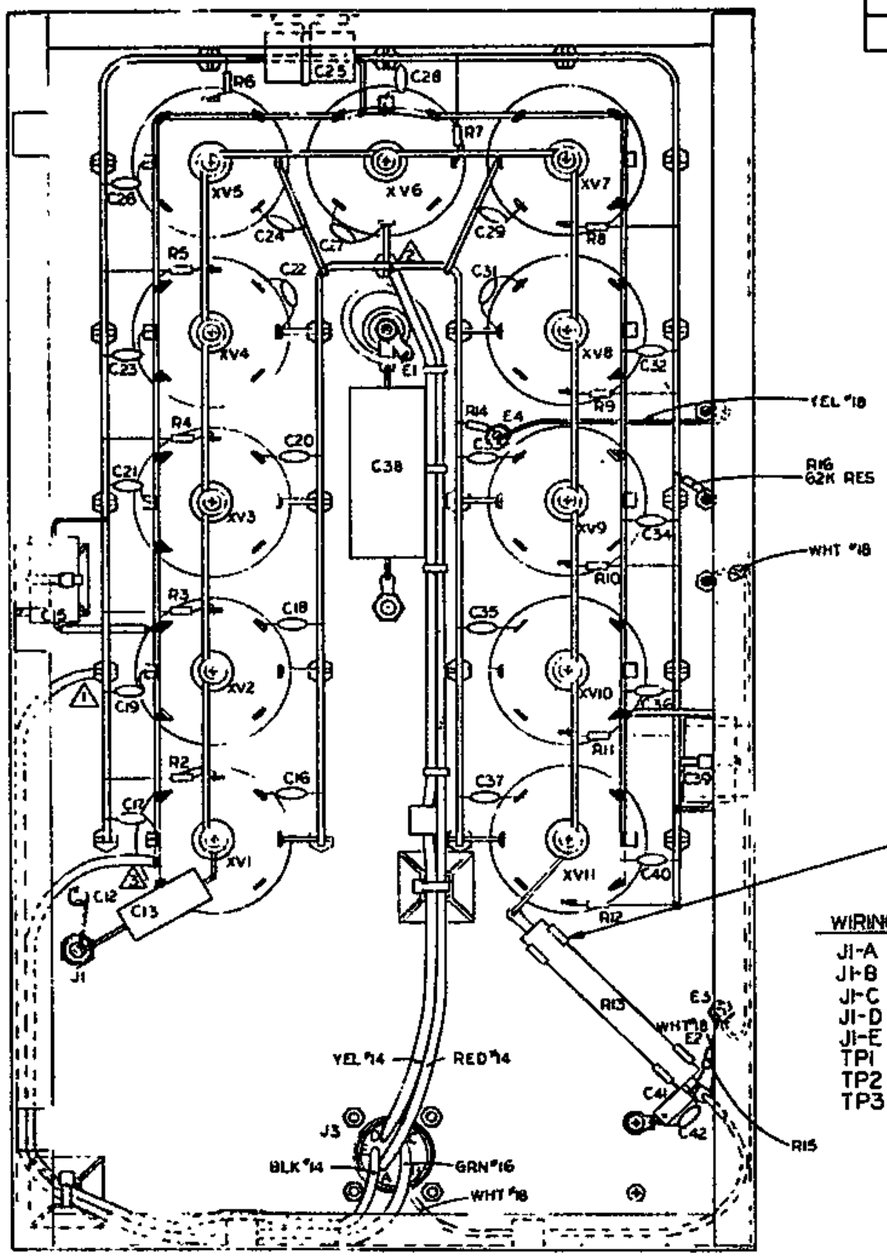
DRAWN BY R SHUTE

7-35-350-001

REVISIONS			
ZONE	REV	DESCRIPTION	DATE / APPROVED
	-	RELEASE TO PRODUCTION	16APR90
	A	ADDED PARTS CALLOUT	14 JUN 90
	B	REVISED J1 WAS "BAL" TYPE CONN ADDED L22	1 AUG 90
	C	REVISED DRAWING TO AGREE WITH LATEST UNIT	22MAR91



TOP VIEW



BOTTOM VIEW

WIRING TABLE

J1-A	#14	RED E1
J1-B	#18	WHT E2
J1-C	#16	GRN
J1-D	#14	YEL
J1-E	#14	BLK
TP1	V_F	#18 YEL
TP2	V_S	62KΩ RESISTOR END (R16)
TP3	V_6	#18 WHT

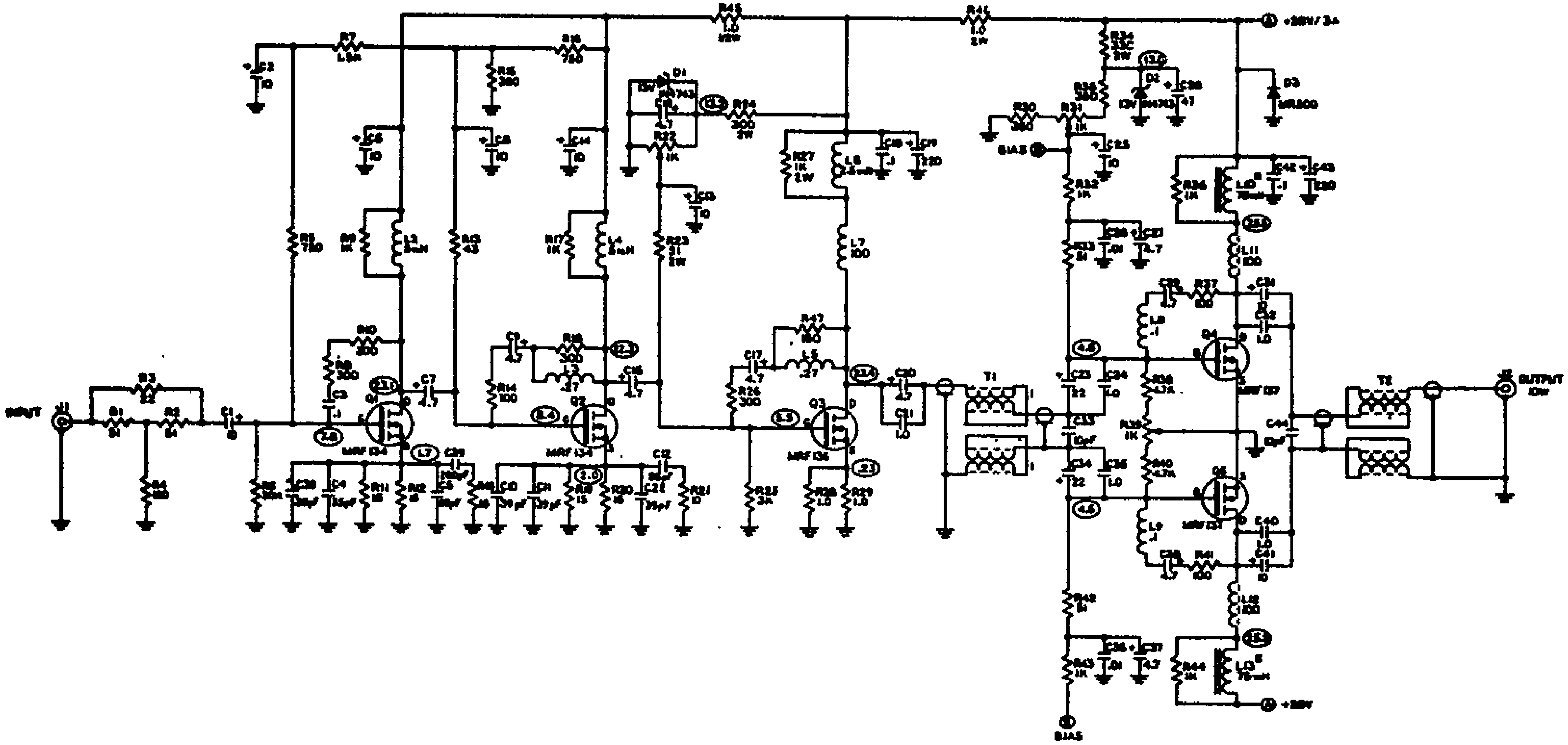
2 REF CHASSIS DWG NO 7-41-251-001
1 REF SCHEMATIC DWG NO 7-35-402-001
NOTES: UNLESS OTHERWISE SPECIFIED

SCALE 1:1	DRAWN BY	CHECKED R SHUTE
DATE 16APR90	ENGINEER	APPROVED 22MAR91

ASSEMBLY, AMPLIFIER, 11 TUBE

4-EZ-101-001

REDUCTION OF FILE



NOTES: UNLESS OTHERWISE SPECIFIED
1. CAPACITOR VALUES ARE IN MICROFARADS
2. INDUCTOR VALUES ARE IN MICROHENRIES
3. ⊕ SELECTIONS L10, L13, ARE MOUNTED EXTERNAL OF PRINTED CIRCUIT BOARD
4. RESISTOR VALUES ARE IN OHMS
5. ◯ INDICATES VOLTAGE TO GND
6. LAST REF DESIGNATION USED: C44, D3, J2, L13, Q5, R46, T2
NOT USED: L1

SCHEMATIC-AMPLIFIER, 6MHz-225MHz, 10W

7-35-516-001

MODEL 210LC

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
–	RELEASE TO PRODUCTION	29 JUN 90	
A	A3 DELETED (USED ONLY FOR TEMP FAULT); P1-3 WAS P1-4; P1-4 WAS P1-3; A3DS1 OVERDRIVE WAS FAULT; ADDED VSWR · A4 VOLT REG ASSY	19 JUL 90	

RF INPUT
J2
P3
P5
J1
C1 1µF
CR1 HP5082-3080
CR2 HP5082-3080
C2 1µF
J2
P4
R1 2K
R2 200
R3 2K
C3, .001
C4, .001
C5 .01
C6 .01
E3
E1
E2
A2 PIN DIODE ATT
A1
A1 PCB
E (IN)
GND
E(L10)
E(L13)
E(+28)
E2
E5
FERRITE BEAD
L1
L2
145°
S1
E1
P2
J3
RF OUT
A3 FAULT DETECTOR ASSY
P1
1
2
4
NOT USED
3
A3DS1 "OVERDRIVE" "VSWR"
AC LINE INPUT
E
L
N
J1 (F1, F2)
220
3
2
1
5
S1
4
2
3
1
5
PS
+
–
E1
1
2
3
R1
B1 FAN
A4 VOLT REG ASSY
E3
E1
VR1
C1 .1
C2 .1
E2

SCALE: NONE	APPROVED BY:	DRAWN BY SHUTE
DATE: 29 JUN 90	CHECKED BY:	REVISED

SYSTEM SCHEMATIC 210LCR

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