



HARRIS

RF COMMUNICATIONS

RF-1310 SERIES EXCITER

INSTRUCTION MANUAL





LIMITED ONE YEAR WARRANTY
HARRIS CORPORATION (RF COMMUNICATIONS GROUP)

FROM HARRIS TO YOU – This warranty is extended to the original buyer and applies to all Harris Corporation, RF Communications Group equipment purchased and employed for the service normally intended, except those products specifically excluded.

WHAT WE WILL DO – If your Harris Corporation, RF Communications Group equipment purchased from us for use outside the United States fails in normal use because of a defect in workmanship or materials within one year from the date of shipment, we will repair or replace (at our option) the equipment or part without charge to you, at our factory. If the product was purchased for use in the United States, we will repair or replace (at our option) the equipment or part without charge to you at our Authorized Repair Center or factory.

WHAT YOU MUST DO – You must notify us promptly of a defect within one year from date of shipment. Assuming that Harris concurs that the complaint is valid, and is unable to correct the problem without having the equipment shipped to Harris:

- Customers with equipment purchased for use outside the United States will be supplied with information for the return of the defective equipment or part to our factory in Rochester, NY, U.S.A., for repair or replacement. You must prepay all transportation, insurance, duty and customs charges. We will pay for return to you of the repaired/replaced equipment or part, C.I.F. destination; you must pay any duty, taxes or customs charges.
- Customers with equipment purchased for use in the United States must obtain a Return Authorization Number, properly pack, insure, prepay the shipping charges and ship the defective equipment or part to our factory or to the Authorized Warranty Repair Center indicated by us.

Harris Corporation
RF Communications Group
Customer Service
1680 University Avenue
Rochester, NY 14610, U.S.A.

Telephone: (716) 244-5830
Telex: 240313
Cable: RFCOM

Harris will repair or replace the defective equipment or part and pay for its return to you, provided the repair or replacement is due to a cause covered by this warranty.

WHAT IS NOT COVERED – We regret that we cannot be responsible for:

- Defects or failures caused by buyer or user abuse or misuse.
- Defects or failures caused by unauthorized attempts to repair or alter the equipment in any way.
- Consequential damages incurred by a buyer or user from any cause whatsoever, including, but not limited to transportation, non-Harris repair or service costs, downtime costs, costs for substituting equipment or loss of anticipated profits or revenue.
- The performance of the equipment when used in combination with equipment not purchased from Harris.
- **HARRIS MAKES NO OTHER WARRANTIES BEYOND THE EXPRESS WARRANTY AS CONTAINED HEREIN. ALL EXPRESS OR IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY ARE EXCLUDED.**

SERVICE WARRANTY – Any repair service performed by Harris under this limited warranty is warranted to be free from defects in material or workmanship for sixty days from date of repair. All terms and exclusions of this limited warranty apply to the service warranty.

IMPORTANT – Customers who purchased equipment for use in the United States must obtain a Return Authorization Number before shipping the defective equipment to us. Failure to obtain a Return Authorization Number before shipment may result in a delay in the repair/replacement and return of your equipment.

IF YOU HAVE ANY QUESTIONS – Concerning this warranty or equipment sales or services, please contact our Customer Service Department.

MAJOR ASSEMBLY LOCATION AND INTERCONNECTION

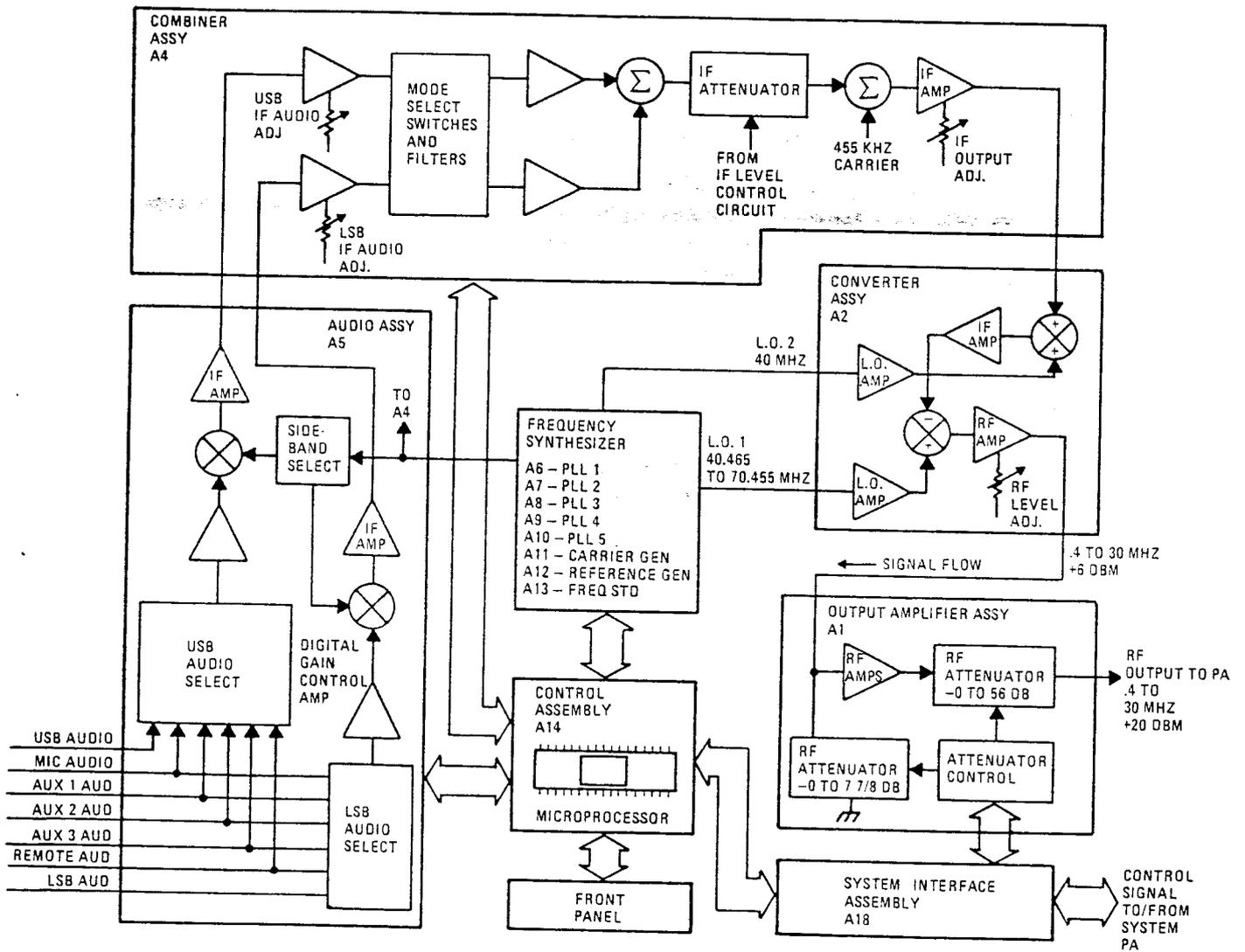


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MAJOR ASSEMBLY LOCATION AND INTERCONNECTION**1. MAIN CHASSIS**

The RF-1310 chassis is a rigid, one piece casting, containing compartments which house most printed wiring board assemblies. The Front Panel Assembly A13 and Power Supply Assembly A15 mount on the front and rear portions of the chassis, respectively. External top and bottom covers mount to the front Z bracket and the rear panel (part of A15 assembly).

1.1 Top Side of Chassis

The top side of the chassis is shown in figure 1 and contains the following assemblies:

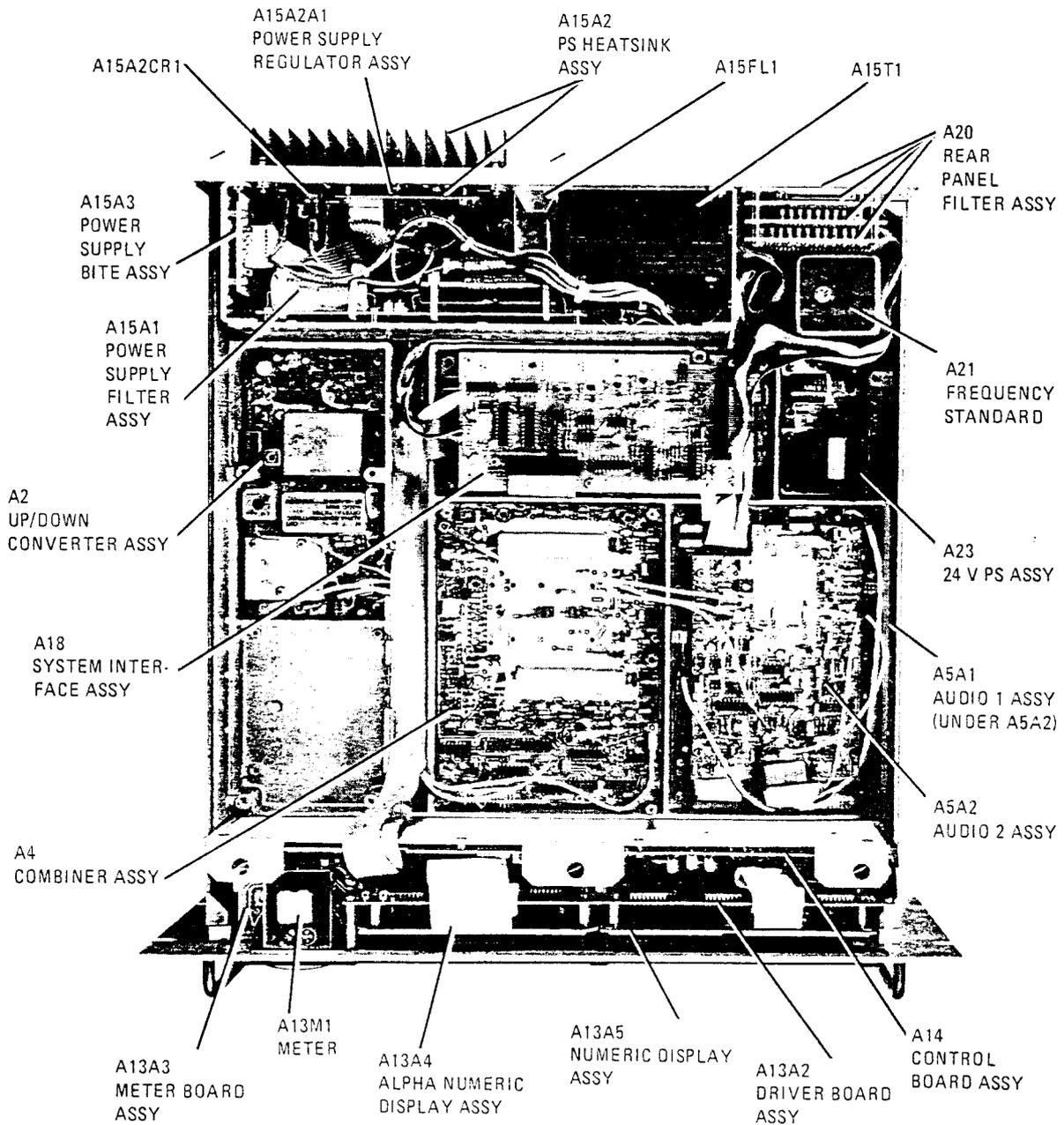
- Converter Assembly A2
- Combiner Assembly A4
- Audio Assembly A5
- Power Supply Assembly A15
- Remote Control Assembly A17
- System Interface Assembly A18
- Rear Panel Filter Assembly A20
- Frequency Standard Assembly A21
- + 24 Volt Power Supply Assembly A23

Remote Control Assembly A17, sits over Audio Assembly A5 in a hinged pan that pivots out for access to A5.

1.2 Underside of Chassis

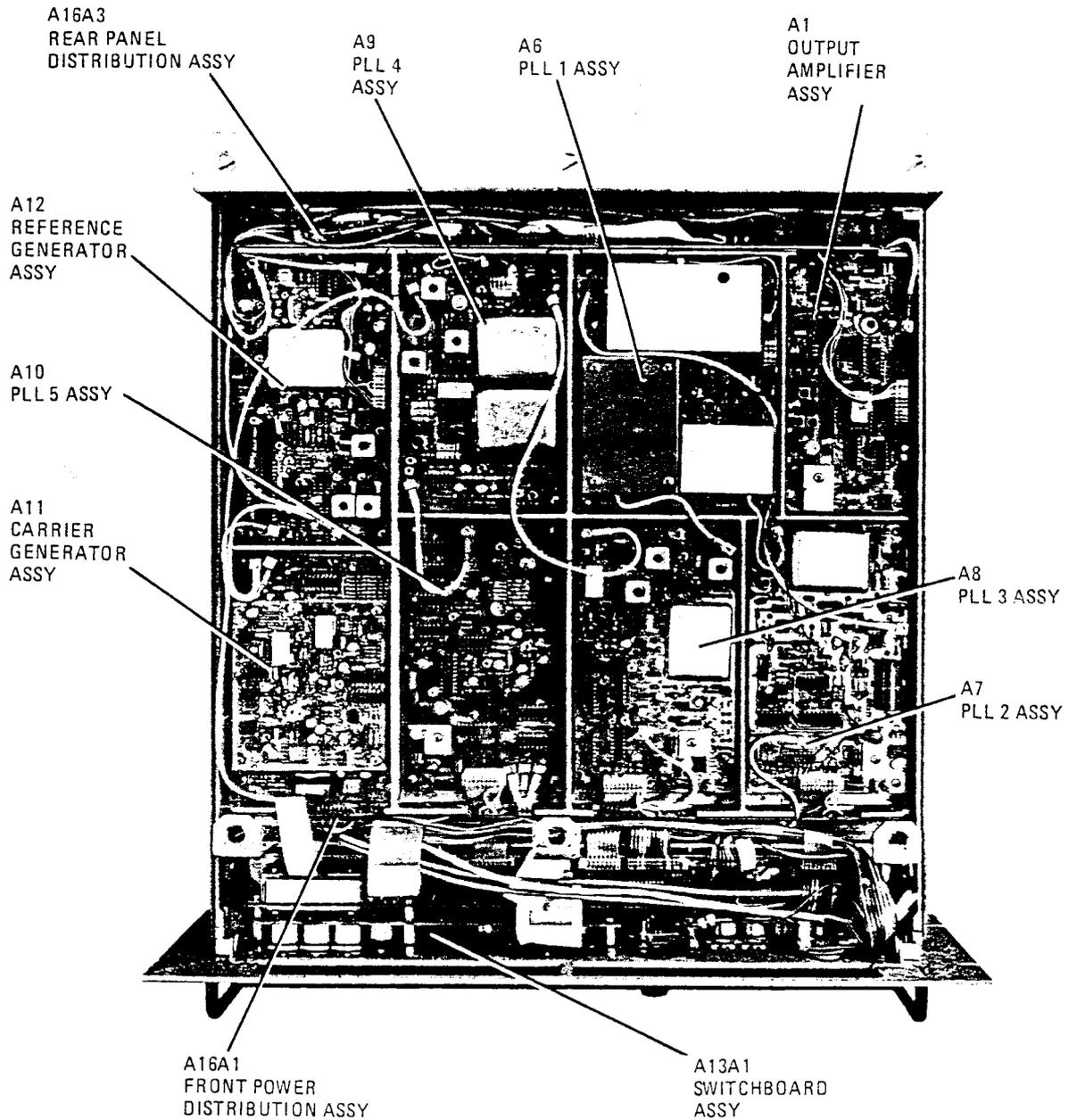
The underside of the chassis is shown in figure 2 and contains the following assemblies:

- Output Amplifier Assembly A1
- PLL 1 Assembly A6
- PLL 2 Assembly A7
- PLL 3 Assembly A8
- PLL 4 Assembly A9
- PLL 5 Assembly A10
- Fan Assembly B1 (mounted to bottom cover; not shown in figure 2)



1310-043p(A)

Figure 1. RF-1310 Top View Without Covers (Remote Control Assembly Removed)



1310-044P(A)

Figure 2. RF-1310 Bottom View

NOTE

The fan assembly is part of the bottom cover and must be removed to access the bottom of the unit.

- Carrier Generator Assembly A11
- Reference Generator Assembly A12

1.3 Front View of Chassis

Control Board Assembly A14 is mounted on a Z bracket that is securely fastened to the side rails.

Front Panel Assembly A13, shown in figures 3 and 4, contains all the operator controls. It is hinged so that it can be pivoted down for easy access to the assemblies which are mounted to it. The assemblies which are mounted to the A13 assembly are:

- Switch Board Assembly A13A1
- Driver Board Assembly A13A2
- Meter Board Assembly A13A3
- Display Board (alphanumeric) Assembly A13A4
- Display Board (numeric) Assembly A13A5
- Converter Assembly A13A6
- Microphone Assembly A13A7

The front panel is securely fastened to the main chassis by four captive screws.

Front Panel Assembly A13 details may be found in subsection A13 of this manual.

1.4 Rear View of Main Chassis

The entire rear panel including the power supply can be removed as one assembly to facilitate troubleshooting. Figure 5 shows the RF-1310 rear panel. To remove the rear panel, refer to the A15 subsection.

Power Supply Assembly A15 contains the following assemblies housed in a wrap around chassis design.

- A15A1 Power Supply Filter Board
- A15A2 Power Supply Regulator Heatsink Assembly, with Regulator Board A15A2A1
- A15A3 Power Supply BITE Board
- Ac line transformer, line filter, fuse holder, etc.

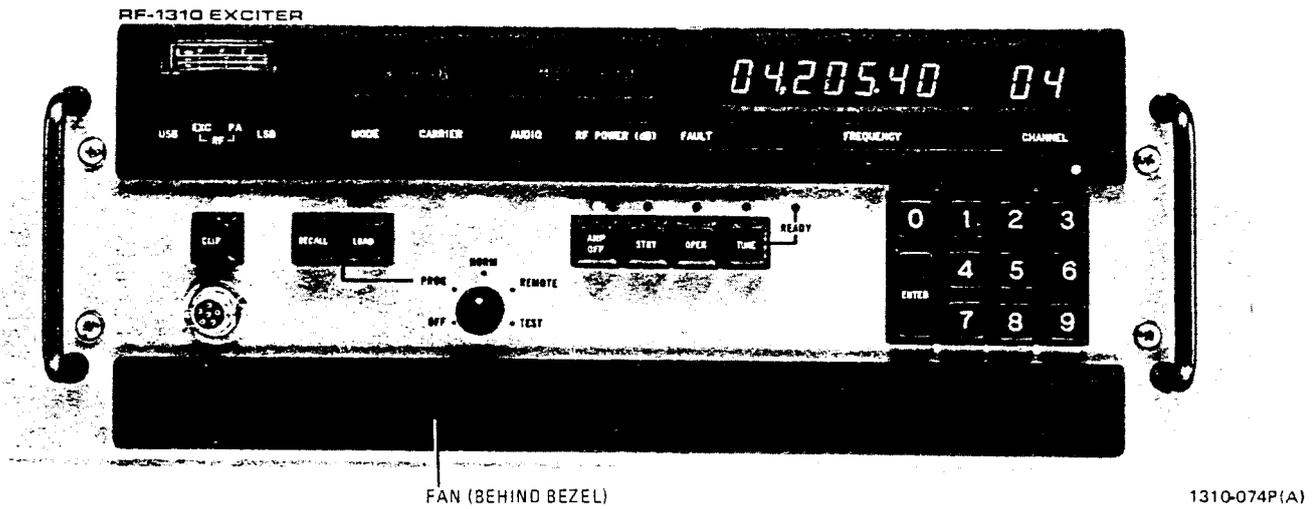


Figure 3. RF-1310 Front View

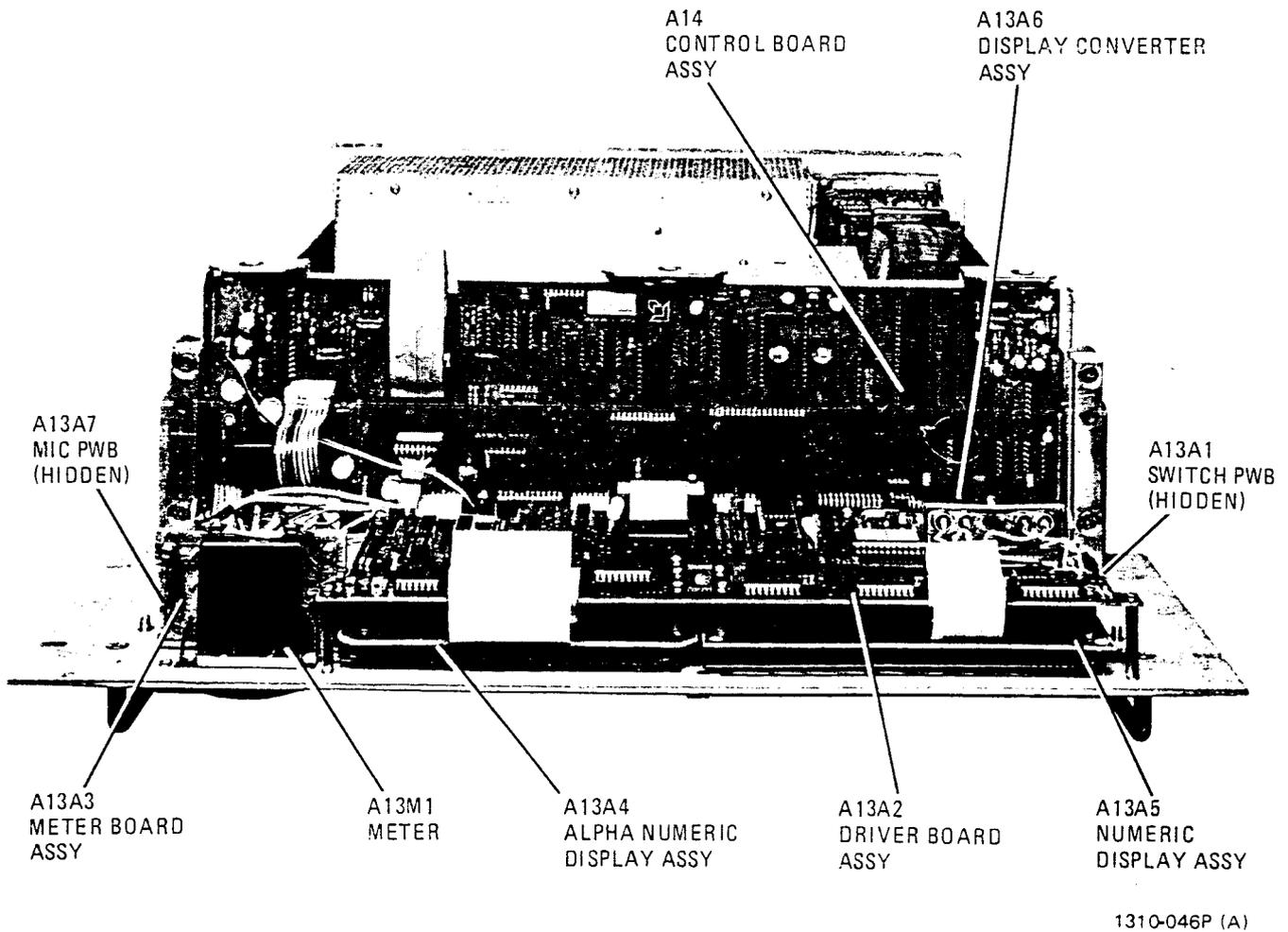
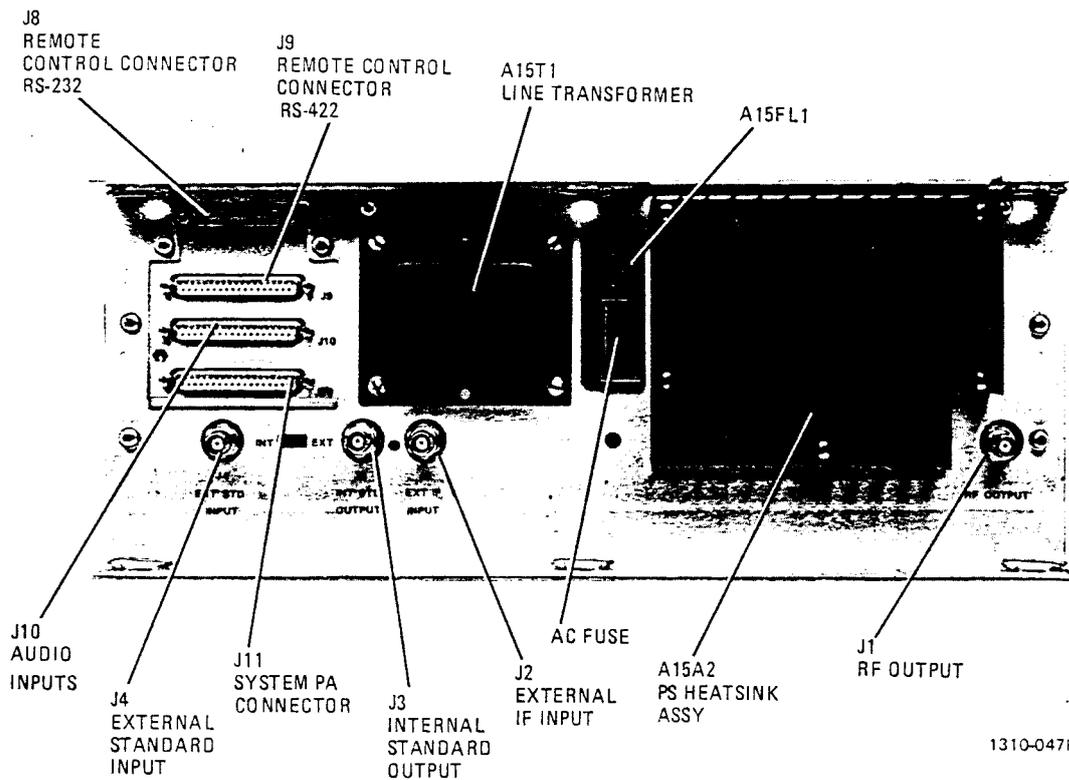


Figure 4. RF-1310 Front View With Panel Down



1310-047P

Figure 5. RF-1310 Rear Panel

Filter Board Assembly A20 is located inside the rear panel. Connectors J8, J9, J10, and J11 are part of this assembly.

2. PARTS LIST AND SCHEMATIC DIAGRAM

Table 1 is a comprehensive parts list including all major assemblies and cables for the 10121-1000 exciter. Table 2 contains the parts required to make a 10121-1000 exciter into an RF-1310-01 exciter. Table 3 contains the parts required to make a 10121-1000 exciter into an RF-1310-02 exciter. Table 4 contains the parts required to make a 10121-1000 exciter into an RF-1310-03 exciter. Table 5 contains the parts required to make a 10121-1000 exciter into an RF-1310-04 exciter. Figure 6 shows the RF-1310 major assemblies location diagram. Figure 7 is the RF-1310 Interconnection Schematic Diagram.

Table 1. 10121-1000 Exciter Assembly Parts List

Ref. Desig.	Part Number	Description
A16	10121-1000	EXCITER ASSEMBLY
A16A1	10121-1200	PWB ASSY, FRONT PWR DIST
A16A3	10121-1300	PWB ASSY, REAR PWR DIST
	10121-1006	CHASSIS, MACHINED
	10121-1008	COVER, CHASSIS TOP
	10121-1009	COVER, CHASSIS BOTTOM
	10121-1011	FILTER, AIR
	10073-3008	COVER, POWER SUPPLY

Table 1. 10121-1000 Exciter Assembly Parts List (Cont.)

Ref. Desig.	Part Number	Description
	10121-1012	PLENUM
	10121-1108	COVER, SYSTEM INTERFACE
	B21-0003-001	FAN BOX 115 VAC
	M08-0001-051	INSL RUBBR/PLSTC FOR XSTR
	M10-0006-000	WSHR SHLDR NYLON .12X.06L
	10121-5106	HEATSINK BLOCK
	10073-1019	COVER, REMOTE CONTROL
	10121-5806	COVER, POWER SUPPLY
A1	10121-5100-01	PWB ASSY, OUTPUT AMPLFR
A2	10121-5200	PWB ASSY, CONVERTER
A4	10121-5500-01	COMBINER ASSY. (WITH STD. FILTERS)
A4	10121-5500-03	COMBINER ASSY. (MECH. FILTERS)
A4	10121-5500-04	COMBINER ASSY. (DELAY COMPENSATED FILTERS)
A5	10121-5400	AUDIO ASSY
A6	10073-4100-01	PWB ASSY, PLL 1 SLOW
A7	10073-4200	PWB ASSY, PLL 2
A8	10073-4300	PWB ASSY, PLL 3
A9	10073-4400	PWB ASSY, PLL 4
A10	10073-4500	PWB ASSY, PLL 5
A11	10121-4600	CARRIER GENERATOR ASSY
A12	10121-4700	PWB ASSY, REF GENERATOR
A13	10121-2000	FRONT PANEL ASSY
A14	10121-2800	PWB ASSY, CONTROL
A15	10121-3000-01	POWER SUPPLY ASSY
A17	10121-6200	PWB ASSY, REMOTE
A18A1	10121-6310	PWB ASSY, LWR SYSTEM I/F
A18A2	10121-6350	SYSTEM INTERFACE I/O ASSY.
A18A2	10121-6370	SYSTEM INTERFACE I/O ASSY.
A20	10121-1050	REAR PANEL FILTER ASSY
A21	759-3906	OSCILLATOR PROP. CONTR.
A23	10121-5800	PWB ASSY, POWER SUPPLY
J1	P/O W25	CONNECTOR
J2	P/O W4	CONNECTOR
J3	P/O W7	CONNECTOR
J4	P/O W10	CONNECTOR
J7	J90-0012-001	CONN ADP SMB F'DTHRU F-F
J8	P/O A20	CONNECTOR
J9	P/O A20	CONNECTOR
J10	P/O A20	CONNECTOR
J11	P/O A20	CONNECTOR
W1	10121-7245	CABLE ASSY, REAR CHASSIS
W2	10121-7161	CABLE, COAX
W3	10121-7158	CABLE, COAX W3
W4	10121-7181	CABLE, COAX
W5	10121-7184	CABLE, COAX W5

Table 1. 10121-1000 Exciter Assembly Parts List (Cont.)

Ref. Desig.	Part Number	Description
W6	10121-7157	CABLE, COAX W6
W7	10121-7182	CABLE, COAX
W8	10121-7156	CABLE, COAX W8
W9	10121-7054	CABLE, RIBBON, 24 COND
W10	10121-7183	CABLE, COAX
W11	10073-7246	CABLE, AC POWER
W12	10073-7155	CABLE, COAX
W13	10073-7154	CABLE, COAX
W14	10073-7159	CABLE, COAX
W15	10073-7153	CABLE, COAX
W16	10073-7150	CABLE, COAX
W17	10121-7069	CABLE, RIBBON, PWR SUPPLY
W19	10121-7152	CABLE, COAX W19
W20	10121-7070	CABLE, RIBBON, 8 COND
W22	10121-7151	CABLE, COAX W22
W23	10121-7280	CABLE ASSY W23
W24	10121-7275	CABLE, RIBBON, 8 COND
W25	10073-7185	CABLE, COAX
W26	10121-7056	CABLE, RIBBON, 8 COND
W27	10121-7279	CABLE, COAX W27
W28	10121-7278	CABLE, RIBBON, 16 COND
W29	10121-7294	CABLE, RIBBON, 8COND W29
W30	10121-7162	CABLE, COAX
W31	10121-7276	CABLE, COAX W31
W32	10073-7075	RIBBON CABLE, 40 COND
W34	10121-7277	CABLE, RIBBON, 20 COND

Table 2. RF-1310-01 Assembly and Cable Parts List

Ref. Desig.	Part Number	Description
RF-1310-01	10121-6300-01	RF 1310-01 EXCITER
	F03-0002-005	FUSE, 1/8 A SB 2
	F03-0002-019	FUSE, 1.0 A SB 2
	10121-0021	ANCILLARY KIT
	10121-1000	EXCITER ASSEMBLY
A4	10121-5500-03	COMBINER ASSEMBLY
A18A2	10121-6370	SYS INTERFACE I/O ASSEMBLY
	10121-8612	SYS INTERFACE PROM KIT

Table 3. RF-1310-02 Parts List

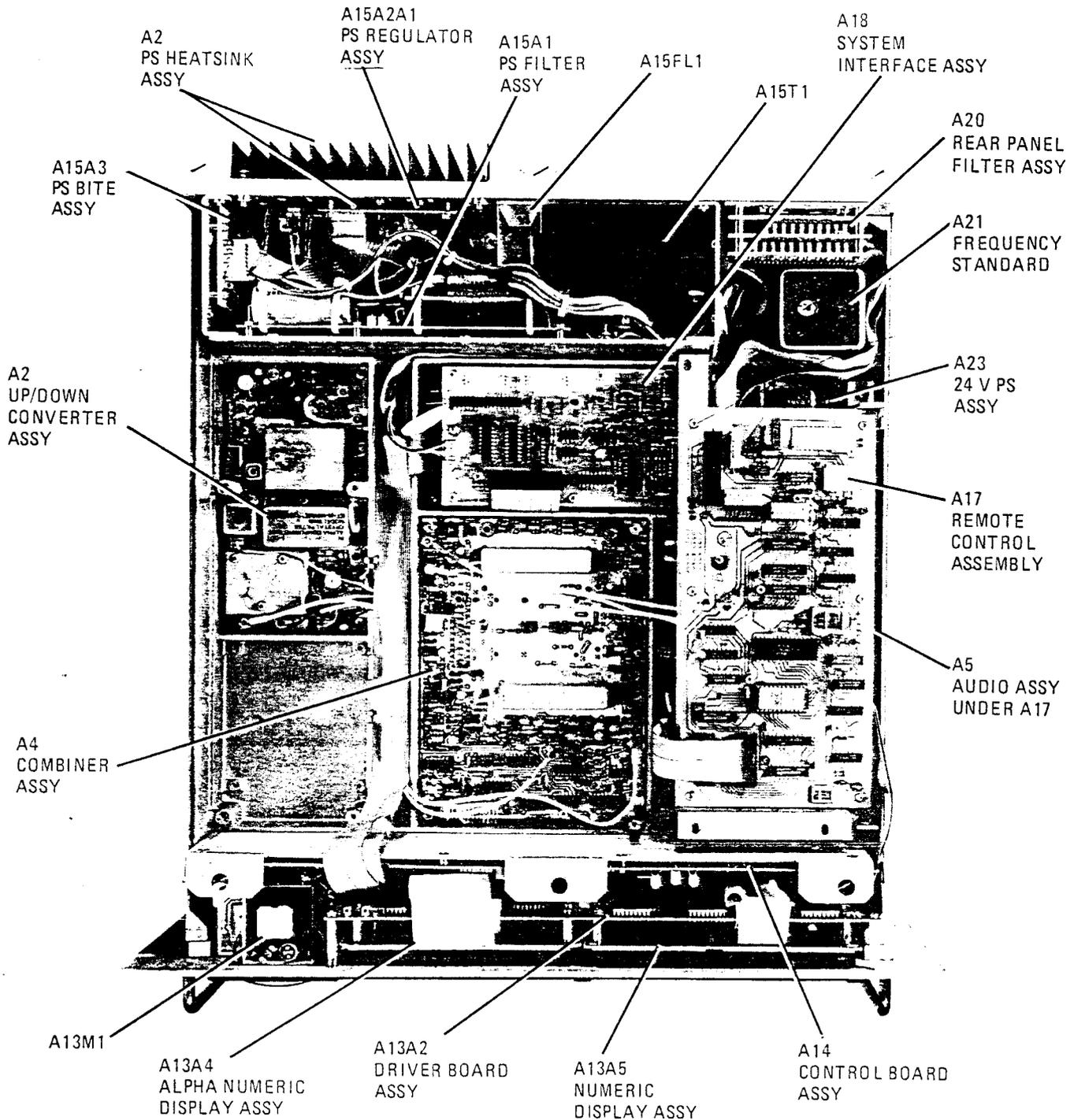
Ref. Desig.	Part Number	Description
RF-1310-02 A4 A18A2	10121-6300-02	RF 1310-02 EXCITER
	F03-0002-005	FUSE, 1/8 A SB 2
	F03-0002-019	FUSE, 1.0 A SB 2
	10121-0021	ANCILLARY KIT
	10121-1000	EXCITER ASSEMBLY
	10121-5500-03	COMBINER ASSEMBLY
	10121-6350	SYS INTERFACE I/O ASSEMBLY
	10121-7301	CABLE ASSEMBLY
	10121-8615	SYS INTERFACE PROM KIT

Table 4. RF-1310-03 Parts List

Ref. Desig.	Part Number	Description
RF-1310-03 A4 A18A2	10121-6300-03	RF-1310-03 EXCITER
	F03-0002-005	FUSE, 1/8 A SB 2
	F03-0002-019	FUSE, 1.0 A SB 2
	10121-0021	ANCILLARY KIT
	10121-1000	EXCITER ASSEMBLY
	10121-5500-03	COMBINER ASSEMBLY
	10121-6350	SYS INTERFACE I/O ASSEMBLY
	10121-7302	CABLE ASSEMBLY
	10121-8622	SYS INTERFACE PROM KIT

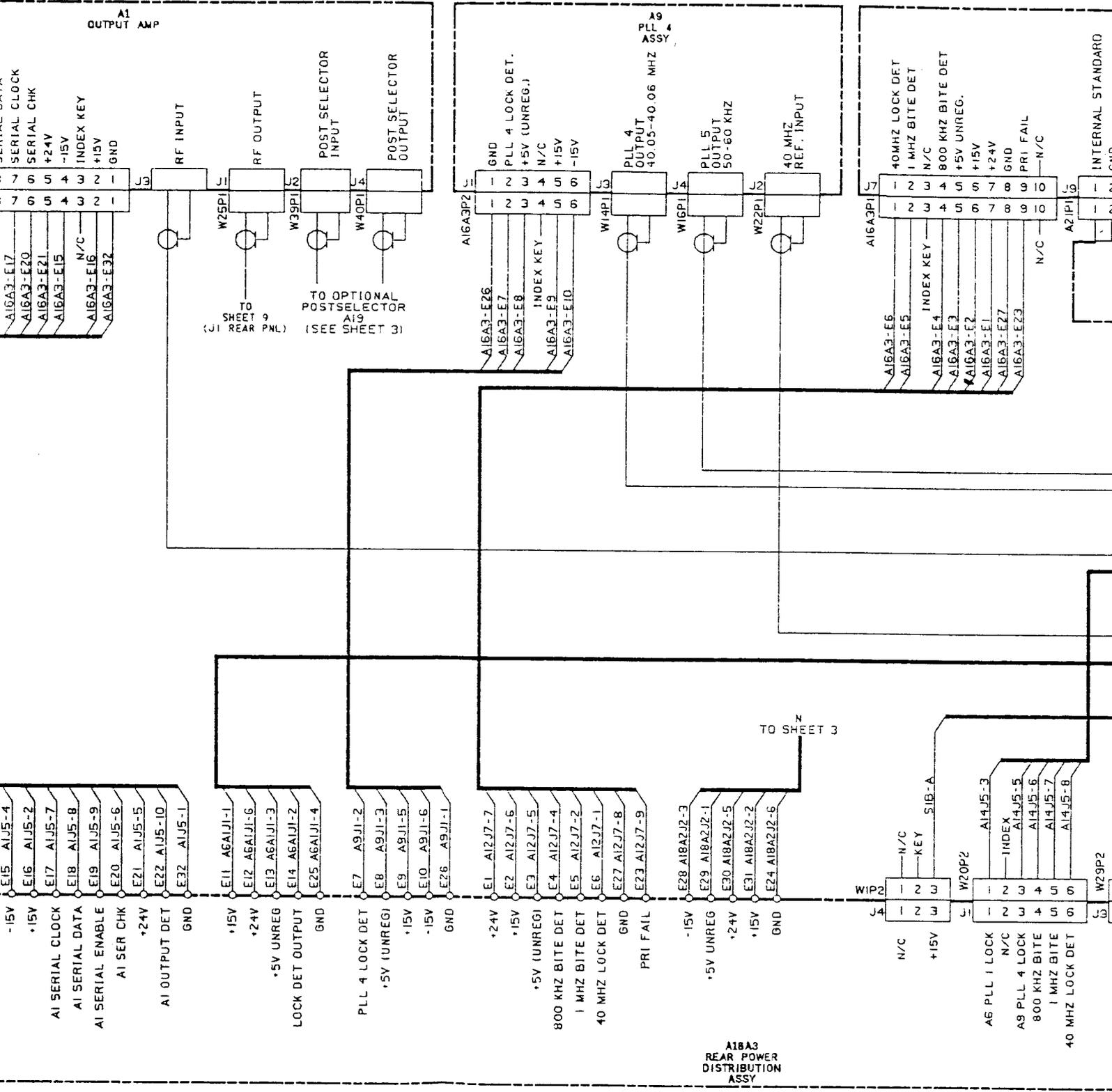
Table 5. RF-1310-04 Parts List

Ref. Desig.	Part Number	Description
RF-1310-04 A4 A18A2	10121-6300-04	RF-1310-04 EXCITER
	F03-0002-005	FUSE, 1/8 A SB 2
	F03-0002-019	FUSE, 1.0 A SB 2
	10121-0021	ANCILLARY KIT
	10121-1000	EXCITER ASSEMBLY
	10121-5500-03	COMBINER ASSEMBLY
	10121-6350	SYS INTERFACE I/O ASSEMBLY
	10121-8617	SYS INTERFACE PROM KIT



1310-045P

Figure 6. RF-1310 Major Assemblies Location Diagram



**A1
OUTPUT AMP**

**A9
PLL 4
ASSY**

**A16A3
REAR POWER
DISTRIBUTION
ASSY**

- A1GA3-E17
- A1GA3-E20
- A1GA3-E21
- A1GA3-E15
- N/C
- A1GA3-E16
- A1GA3-E32

- A1GA3P2
- 1 GND
- 2 PLL 4 LOCK DET.
- 3 +5V (UNREG.)
- 4 N/C
- 5 +15V
- 6 -15V

- A16A3P1
- 1 +40MHZ LOCK DET
- 2 1 MHZ BITE DET
- 3 N/C
- 4 800 KHZ BITE DET
- 5 +15V UNREG.
- 6 +15V
- 7 +24V
- 8 GND
- 9 PRI FAIL
- 10 N/C

- E15 AIJ5-4
- E16 AIJ5-2
- E17 AIJ5-7
- E18 AIJ5-8
- E19 AIJ5-9
- E20 AIJ5-6
- E21 AIJ5-5
- E22 AIJ5-10
- E32 AIJ5-1
- GND

- E11 A6AIJ1-1
- E12 A6AIJ1-6
- E13 A6AIJ1-3
- E14 A6AIJ1-2
- E25 A6AIJ1-4
- GND

- E7 A9J1-2
- E8 A9J1-3
- E9 A9J1-5
- E10 A9J1-6
- E26 A9J1-1
- GND

- E1 AI2J7-7
- E2 AI2J7-6
- E3 AI2J7-5
- E4 AI2J7-4
- E5 AI2J7-2
- E6 AI2J7-1
- E27 AI2J7-8
- E23 AI2J7-9
- GND

- E28 A18A2J2-3
- E29 A18A2J2-1
- E30 A18A2J2-5
- E31 A18A2J2-2
- E24 A18A2J2-6
- GND

- W1P2
- 1 N/C
- 2 KEY
- 3 SIB-A
- GND

- W20P2
- 1 A14J5-3
- 2 INDEX
- 3 AI4J5-5
- 4 A14J5-6
- 5 A14J5-7
- 6 A14J5-8
- GND

- W29P2
- 1
- 2
- 3
- 4
- 5
- 6
- GND

TO SHEET 9
(J1 REAR PNL)

TO OPTIONAL
POSTSELECTOR
A19
(SEE SHEET 3)

TO SHEET 3

INTERNAL STANDARD

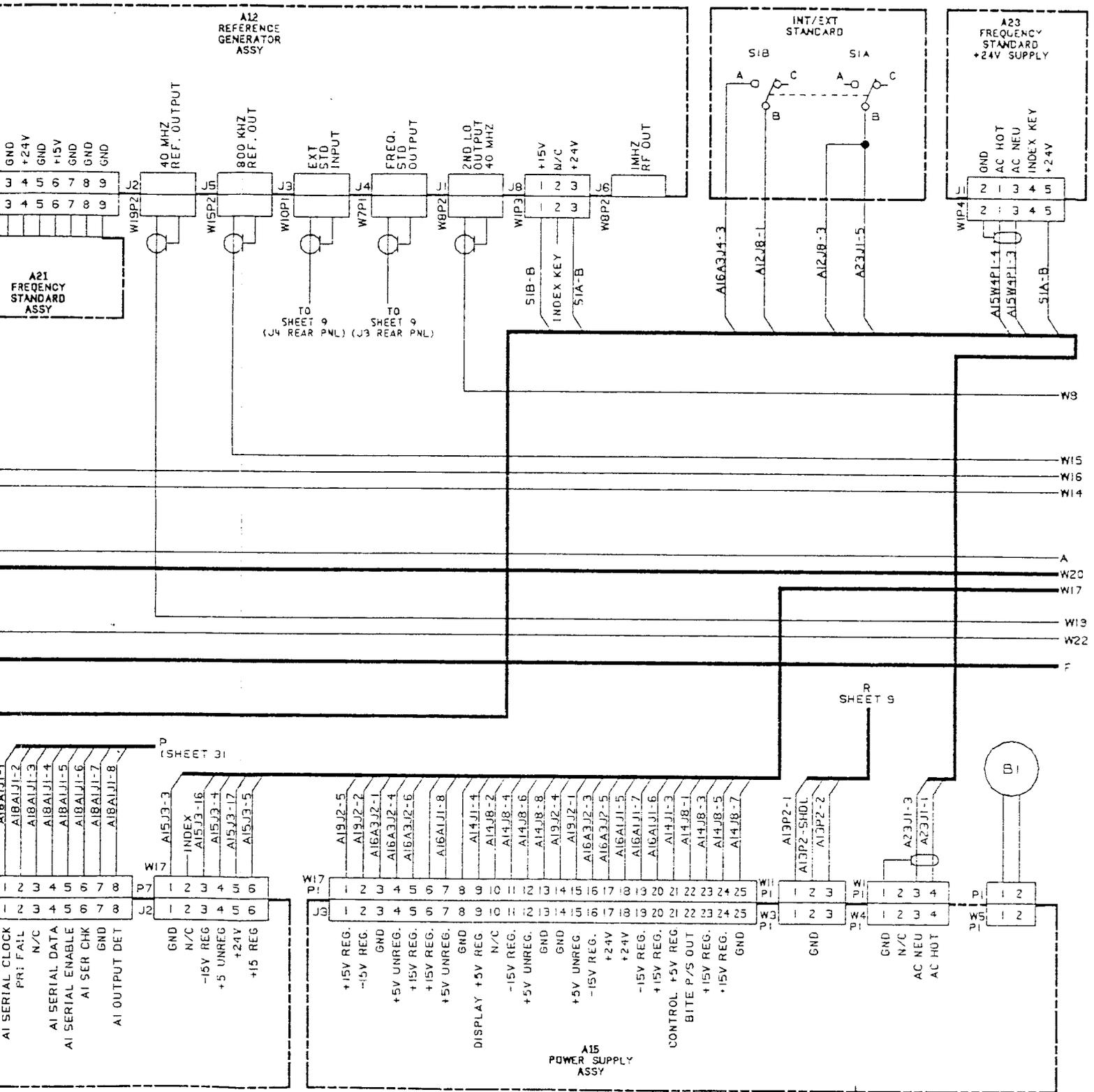
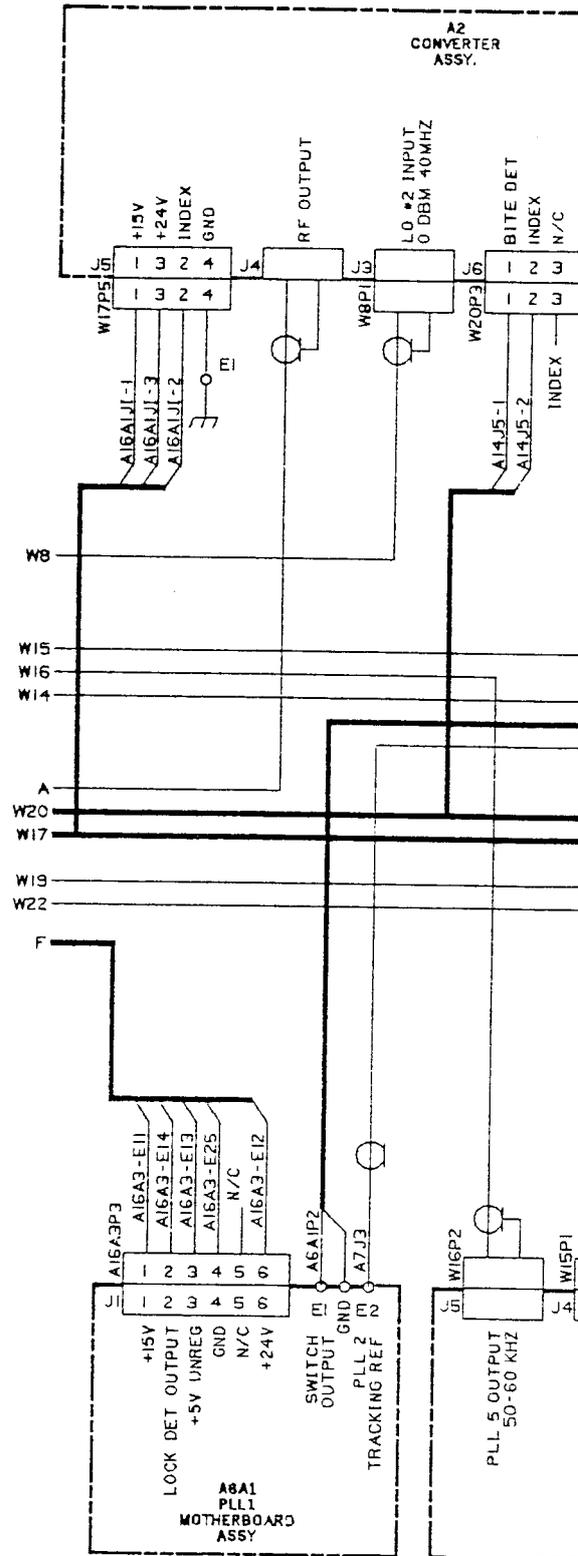
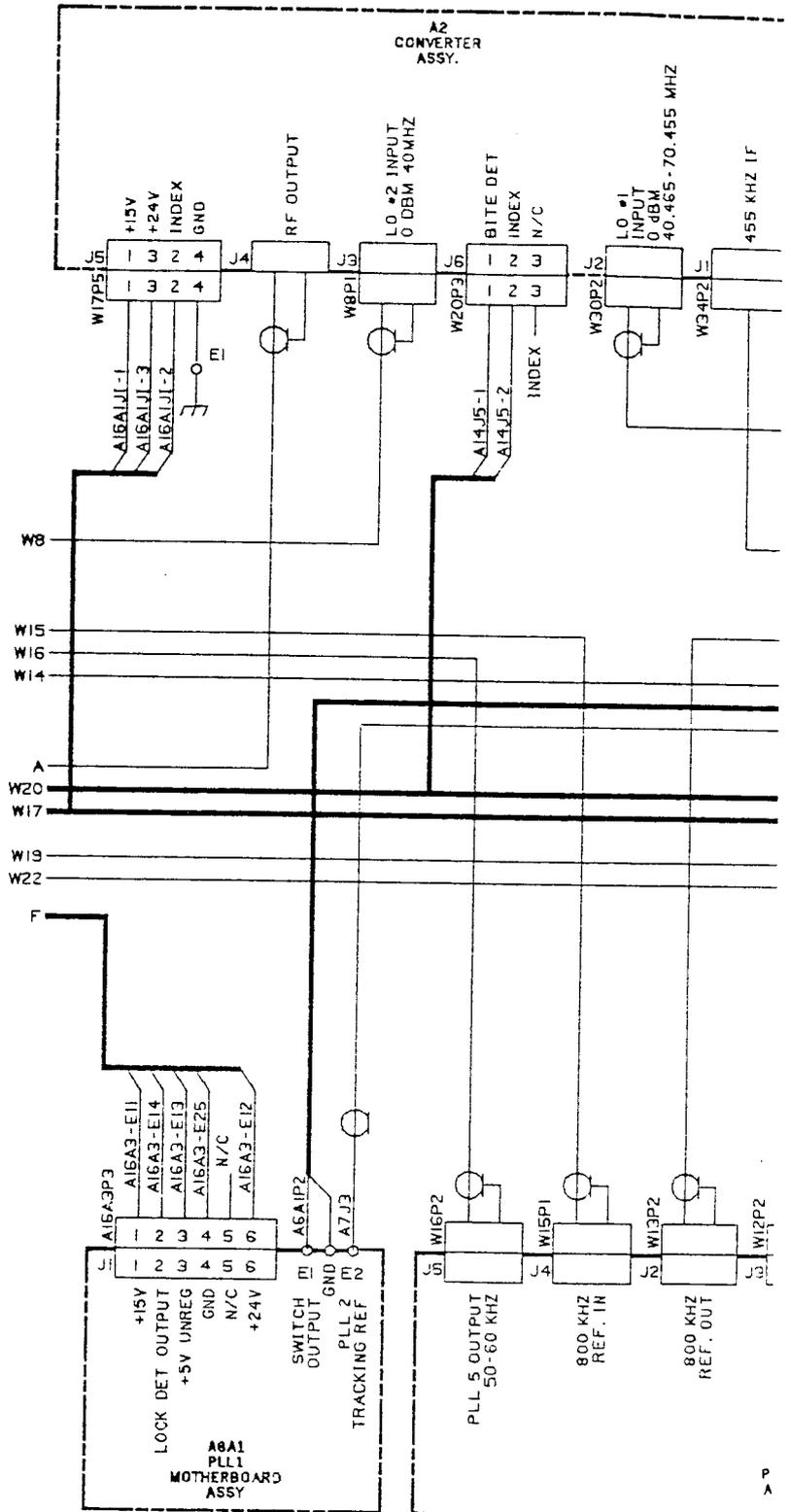


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 1 of 9)





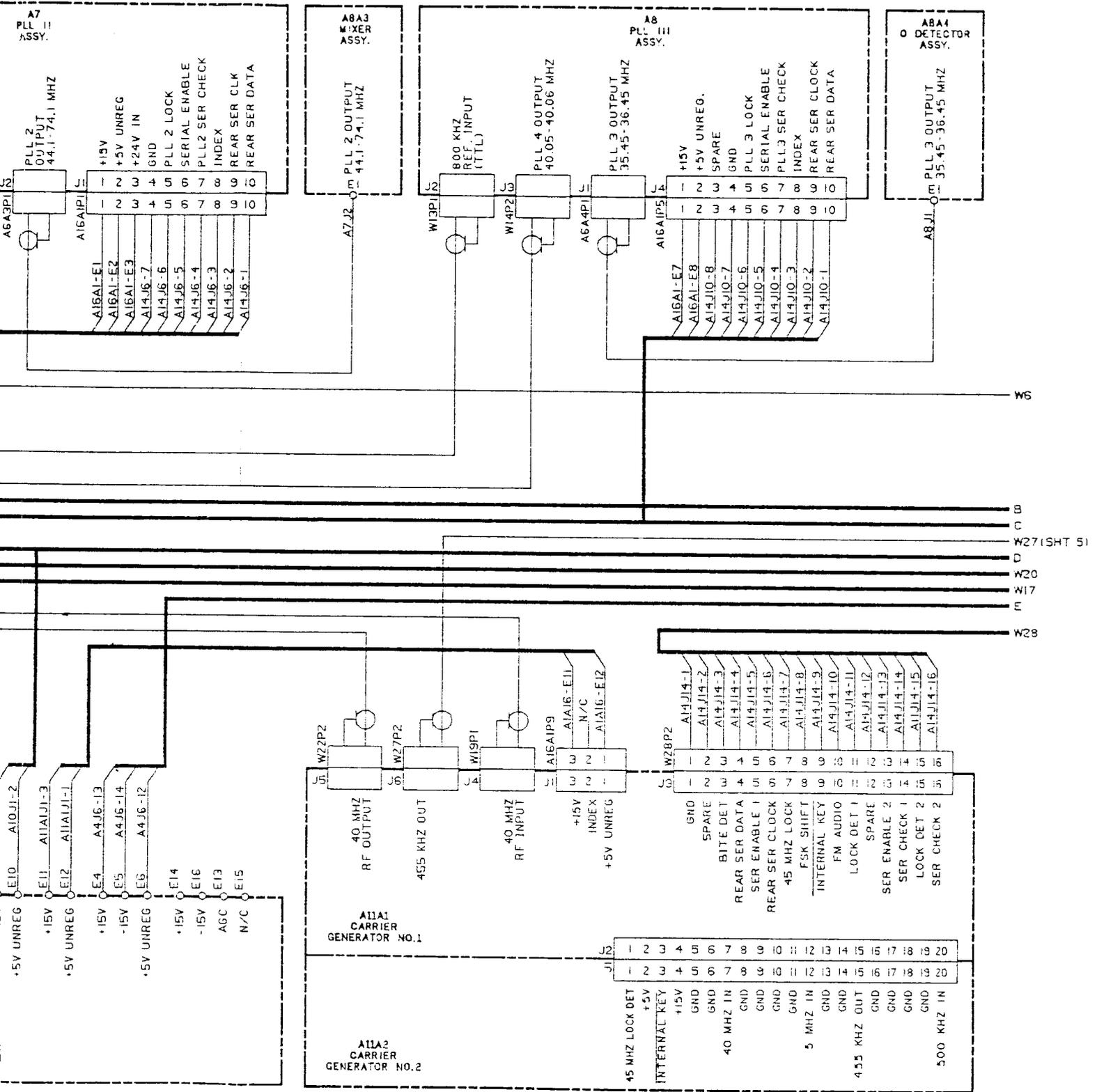
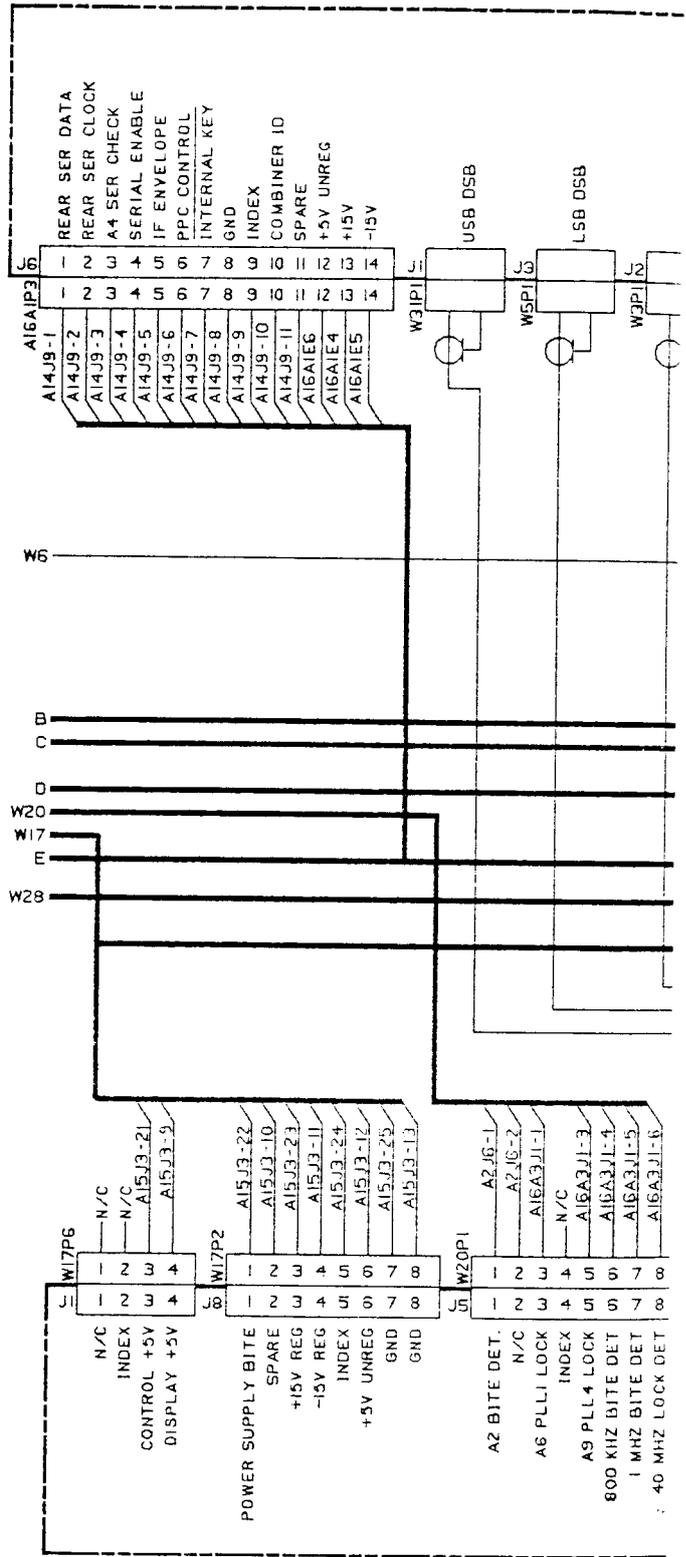
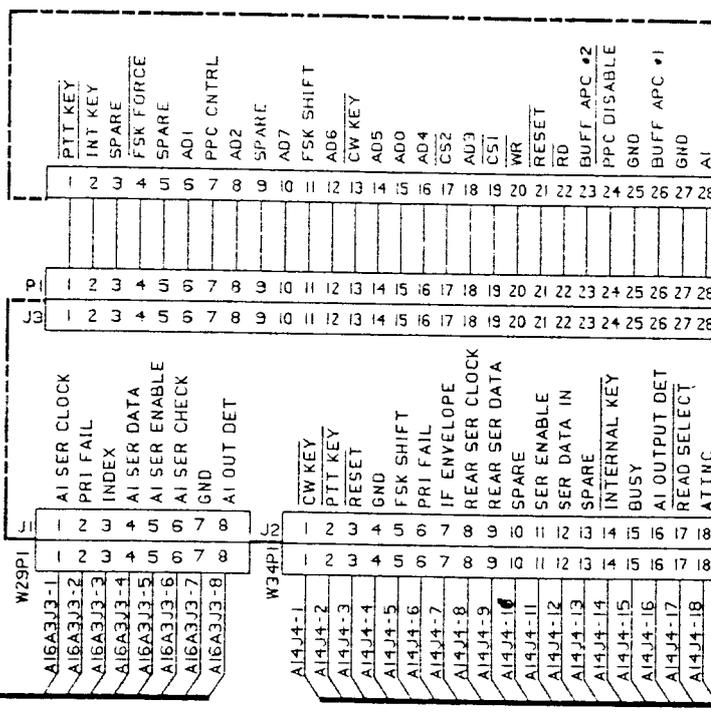
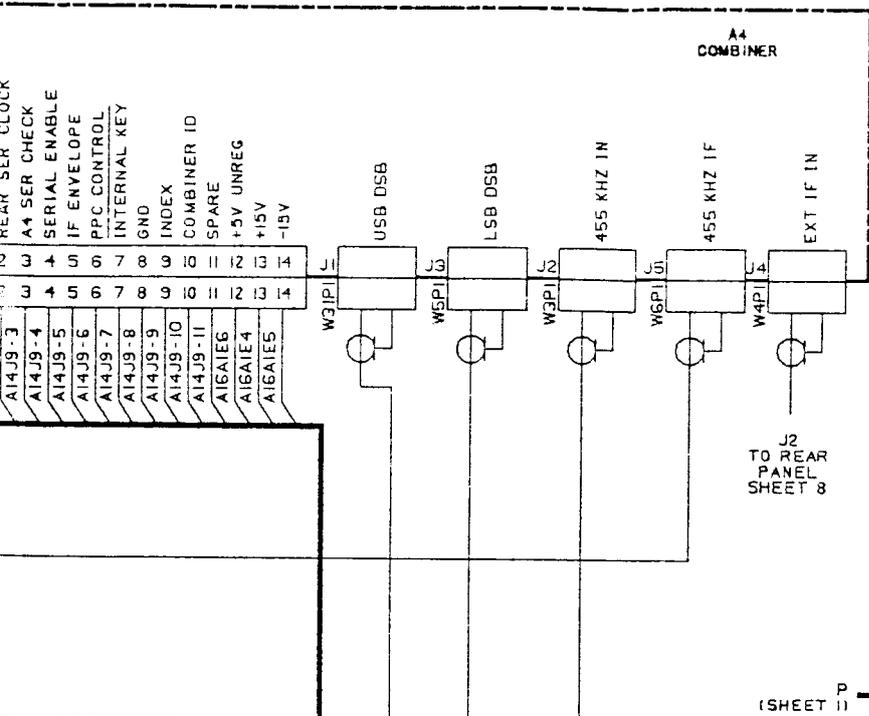


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 2 of 9)

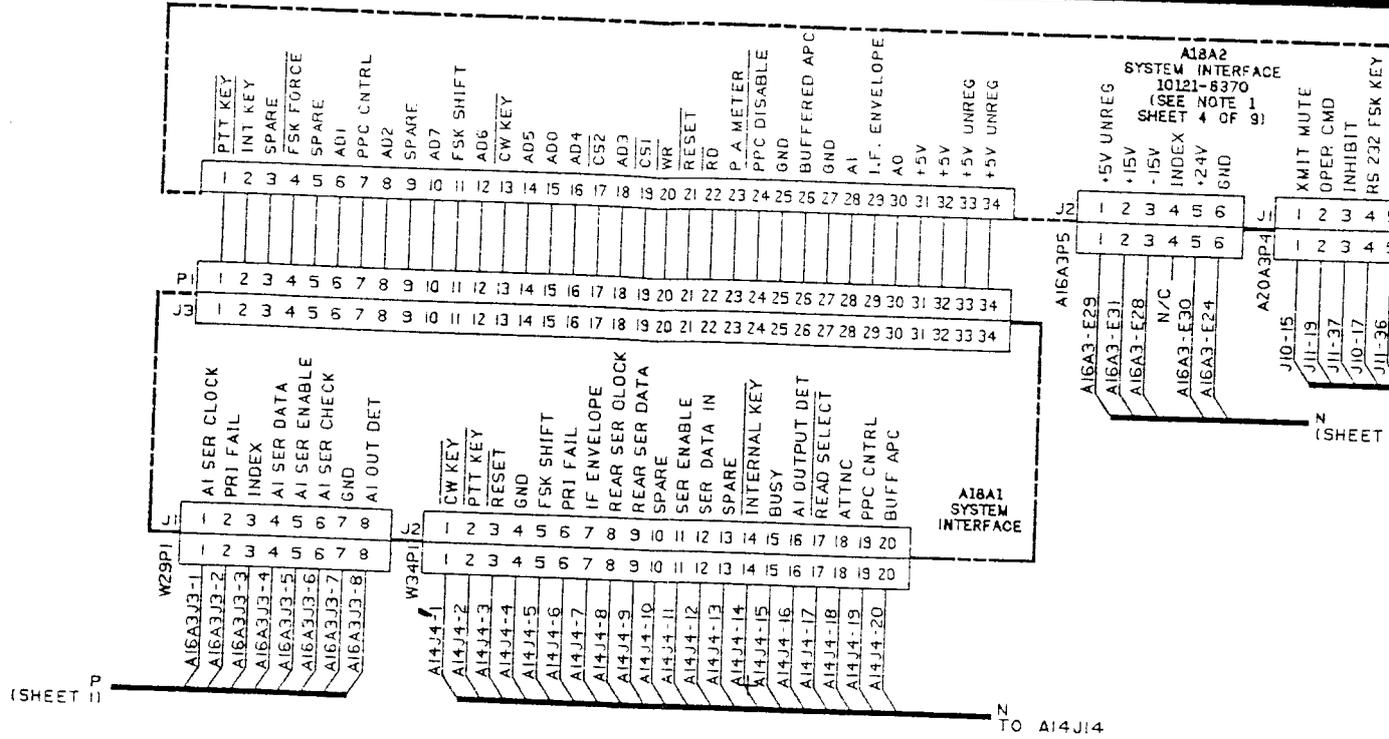


A14J9-1	1	REAR SER DATA
A14J9-2	2	REAR SER CLOCK
A14J9-3	3	A4 SER CHECK
A14J9-4	4	SERIAL ENABLE
A14J9-5	5	IF ENVELOPE
A14J9-6	6	PPC CONTROL
A14J9-7	7	INTERNAL KEY
A14J9-8	8	GND
A14J9-9	9	INDEX
A14J9-10	10	COMBINER ID
A14J9-11	11	SPARE
A16A1E6	12	+5V UNREG
A16A1E4	13	+15V
A16A1E5	14	-15V

W17P6	1	N/C
W17P6	2	INDEX
W17P6	3	CONTROL +5V
W17P6	4	DISPLAY +5V
W17P6	5	N/C
W17P6	6	N/C
W17P6	7	A15J3-21
W17P6	8	A15J3-22
W17P2	1	POWER SUPPLY BITE
W17P2	2	SPARE
W17P2	3	A15J3-10
W17P2	4	+15V REG
W17P2	5	-15V REG
W17P2	6	INDEX
W17P2	7	A15J3-24
W17P2	8	+5V UNREG
W17P2	9	GND
W17P2	10	GND
W17P2	11	A15J3-25
W17P2	12	A15J3-13
W29P1	1	A2J6-1
W29P1	2	N/C
W29P1	3	A2J6-2
W29P1	4	A16A3J1-1
W29P1	5	INDEX
W29P1	6	N/C
W29P1	7	A16A3J1-3
W29P1	8	A16A3J1-4
W29P1	9	800 KHZ BITE DET
W29P1	10	1 MHZ BITE DET
W29P1	11	A16A3J1-5
W29P1	12	40 MHZ LOCK DET
W29P1	13	A16A3J1-6



P/O A11
CONTROL
BOARD
ASSY.

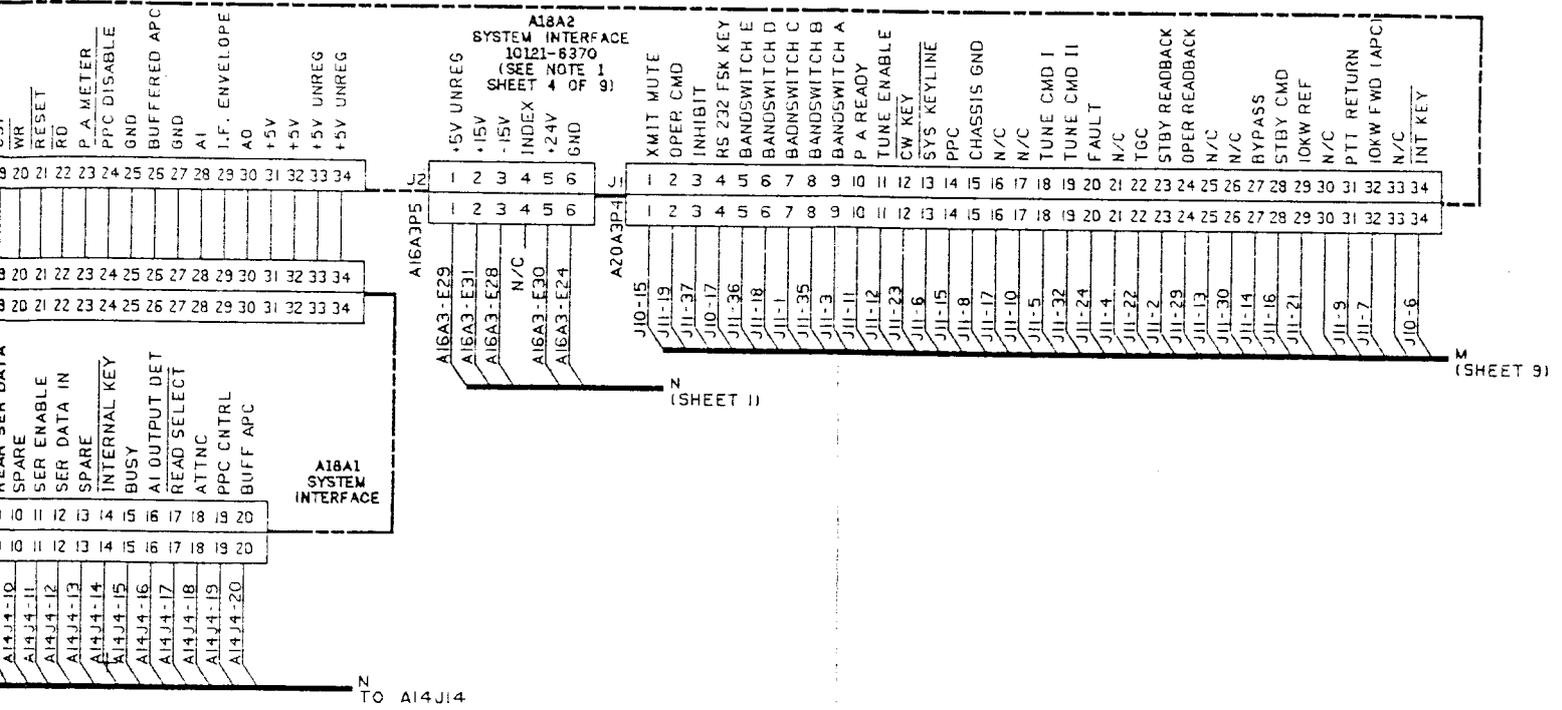


(SHEET 11)

N TO A14J14

SEE NOTE 1.0 ABOVE.

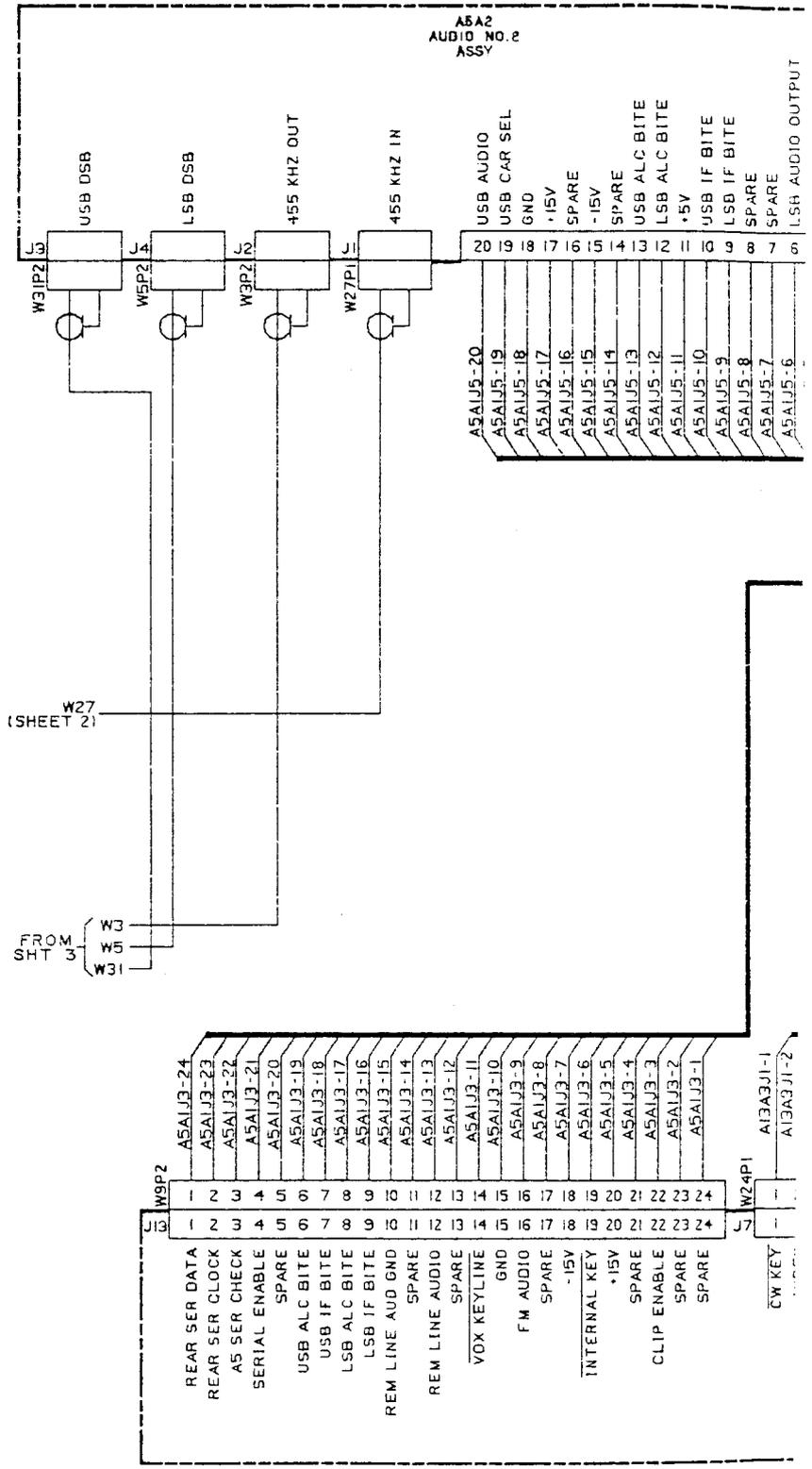
PIN NO'S OF A20A1J11	SIGNAL NAMES WHEN USING THE 10121-6350 A18A2	SIGNAL NAMES WHEN USING THE 10121-6370 A18A2
1	PA BANDSW CODE C	PA BANDSW CODE C
2	NO CONNECTION	STBY READBACK
3	PA BANDSW CODE E	PA BANDSW CODE A
4	NO CONNECTION	NO CONNECTION
5	BYPASS REQUEST	TUNE CMD I
6	SYS KEYLINE	SYS KEYLINE
7	APC	IOKW FWD (APC)
8	CHASSIS GND	CHASSIS GND
9	PTT RETURN	PTT RETURN
10	NO CONNECTION	NO CONNECTION
11	SYS KEY INTLK	PA READY
12	TUNE PWR REQ.	TUNE ENABLE
13	PA CLASS	NO CONNECTION
14	BYPASS	BYPASS
15	NO CONNECTION	PPC
16	STBY CMD	STBY CMD
17	SHIELD GND	SHIELD GND
18	PA BANDSW CODE B	PA BANDSW CODE D
19	OPER CMD	OPER CMD
20	INDEX	INDEX
21	NO CONNECTION	IOKW REF
22	NO CONNECTION	TGC
23	CW KEY	CW KEY
24	PA FAULT	FAULT
25	NO CONNECTION	NO CONNECTION
26	NO CONNECTION	NO CONNECTION
27	NO CONNECTION	NO CONNECTION
28	NO CONNECTION	NO CONNECTION
29	NO CONNECTION	NO CONNECTION
30	PTT KEY	OPER READBACK
31	NO CONNECTION	NO CONNECTION
32	NO CONNECTION	NO CONNECTION
33	NO CONNECTION	TUNE CMD II
34	NO CONNECTION	NO CONNECTION
35	PA BANDSW CODE D	NO CONNECTION
36	PA BANDSW CODE A	PA BANDSW CODE B
37	SYSTEM RETUNE	PA BANDSW CODE E
		INHIBIT



0 ABOVE.

6350 A18A2	SIGNAL NAMES WHEN USING THE 10121-6370 A18A2
	PA BNDSW CODE C
	STBY READBACK
	PA BNDSW CODE A
	NO CONNECTION
	TUNE CMD I
	SYS KEYLINE
	IOKW FWD (APC)
	CHASSIS GND
	PTT RETURN
	NO CONNECTION
	PA READY
	TUNE ENABLE
	NO CONNECTION
	BYPASS
	PPC
	STBY CMD
	SHIELD GND
	PA BNDSW CODE D
	OPER CMD
	INDEX
	IOKW REF
	TGC
	CW KEY
	FAULT
	NO CONNECTION
	OPER READBACK
	NO CONNECTION
	NO CONNECTION
	TUNE CMD II
	NO CONNECTION
	NO CONNECTION
	PA BNDSW CODE B
	PA BNDSW CODE E
	INHIBIT

Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 4 of 9)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
REAR SER DATA	REAR SER CLOCK	AS SER CHECK	SERIAL ENABLE	SPARE	USB ALC BITE	USB IF BITE	LSB ALC BITE	LSB IF BITE	REM LINE AUD GND	REM LINE AUDIO	SPARE	VOX KEYLINE	FM AUDIO	SPARE	-15V	INTERNAL KEY	+15V	SPARE	CLIP ENABLE	SPARE	SPARE		

AS2
AUDIO NO. 2
ASSY

FROM SHT 3
W3
W5
W31

W27
(SHEET 21)

W24P1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
CW KEY

20
19
18
17
16
15
14
13
12
11
10
9
8
7
6

AS1J5-20
AS1J5-19
AS1J5-18
AS1J5-17
AS1J5-16
AS1J5-15
AS1J5-14
AS1J5-13
AS1J5-12
AS1J5-11
AS1J5-10
AS1J5-9
AS1J5-8
AS1J5-7
AS1J5-6

A13A3J1-1
A13A3J1-2

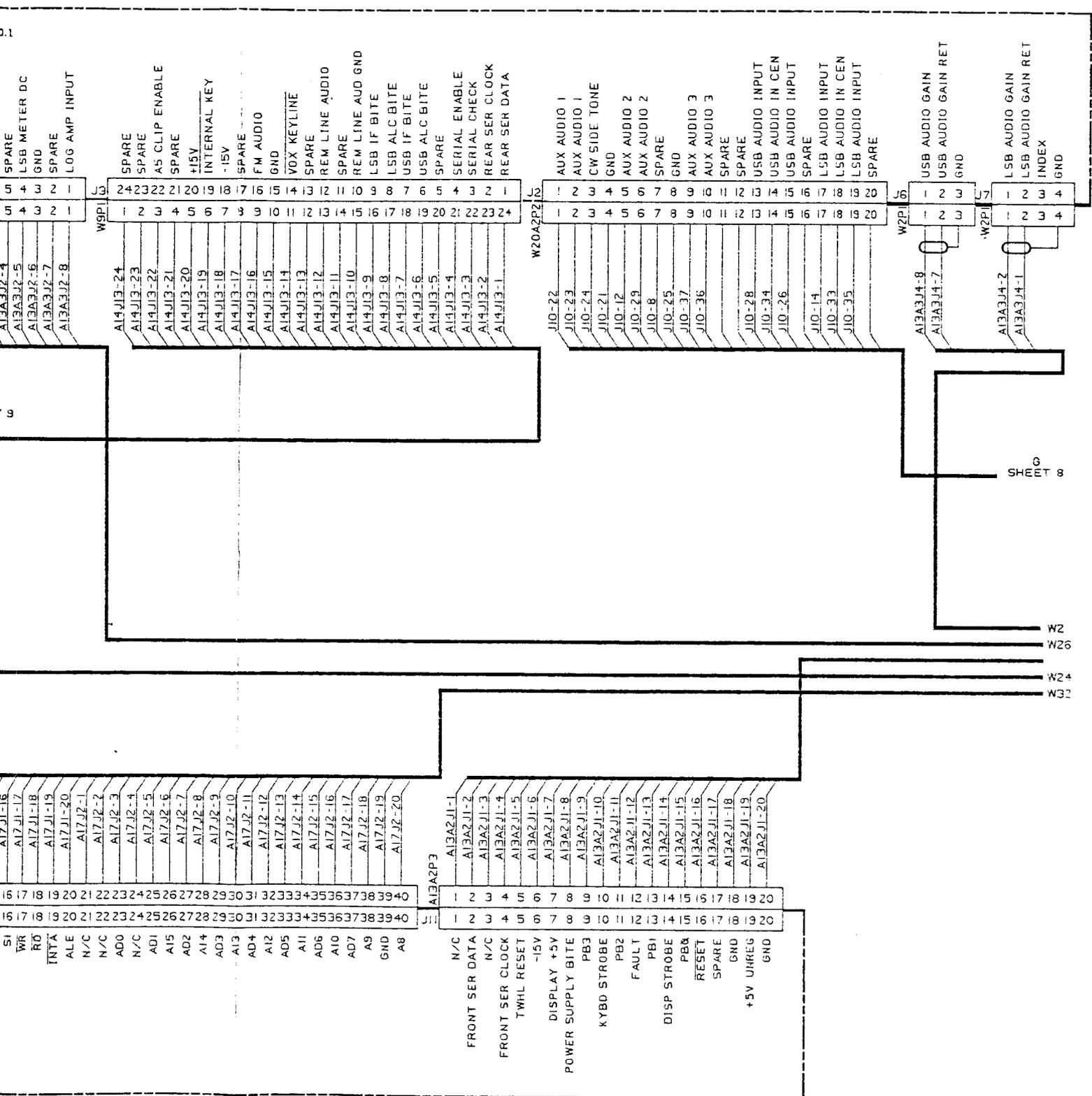
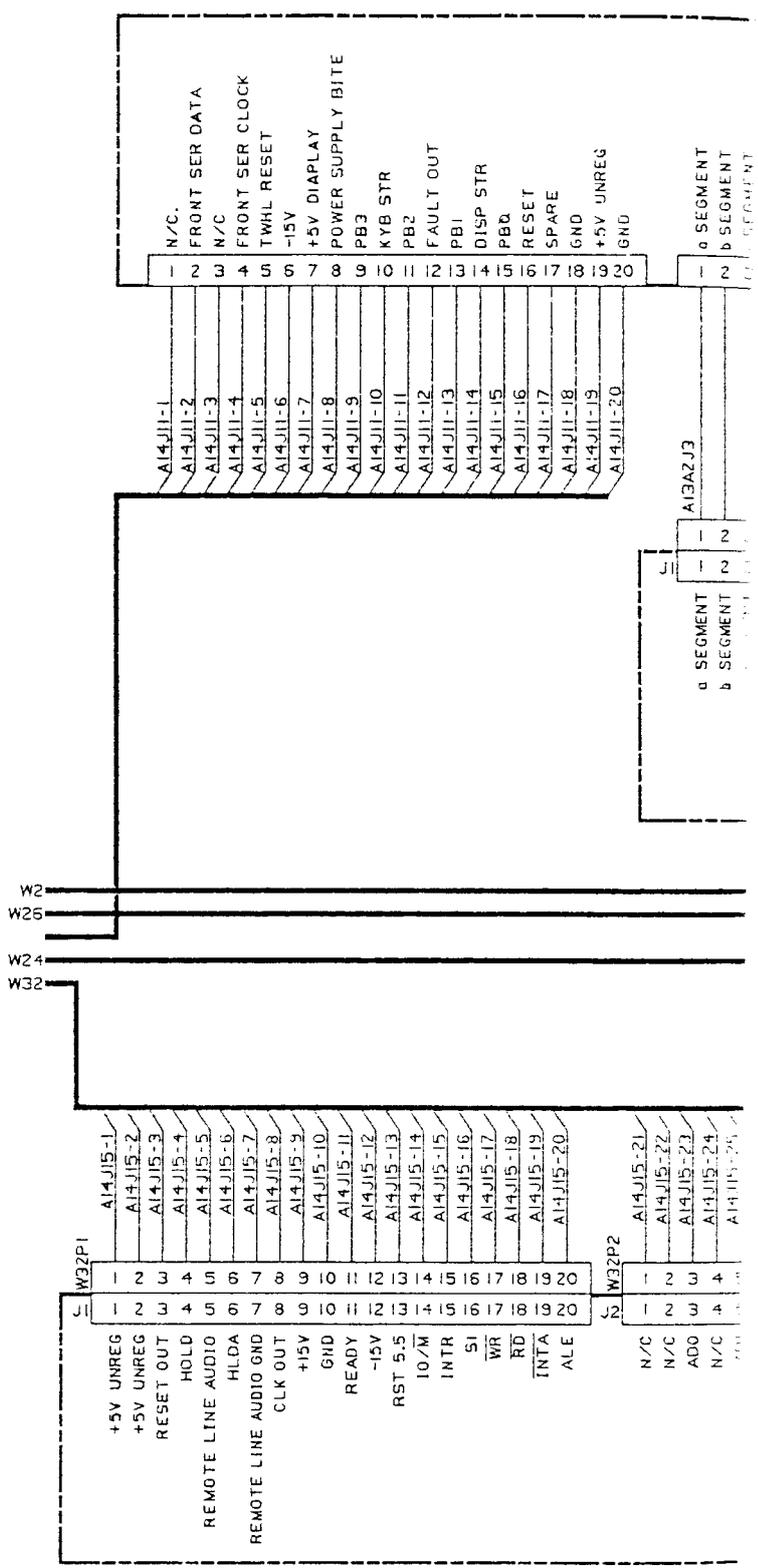


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 5 of 9)



1	N/C
2	FRONT SER DATA
3	N/C
4	FRONT SER CLOCK
5	TWHL RESET
6	-15V
7	+5V DIAPLAY
8	POWER SUPPLY BITE
9	PB3
10	KYB STR
11	PB2
12	FAULT OUT
13	PB1
14	DISP STR
15	PB0
16	RESET
17	SPARE
18	GND
19	+5V UNREG
20	GND

1	A14J11-1
2	A14J11-2
3	A14J11-3
4	A14J11-4
5	A14J11-5
6	A14J11-6
7	A14J11-7
8	A14J11-8
9	A14J11-9
10	A14J11-10
11	A14J11-11
12	A14J11-12
13	A14J11-13
14	A14J11-14
15	A14J11-15
16	A14J11-16
17	A14J11-17
18	A14J11-18
19	A14J11-19
20	A14J11-20

1	a SEGMENT
2	b SEGMENT
3	c SEGMENT
4	d SEGMENT
5	e SEGMENT
6	f SEGMENT
7	g SEGMENT
8	h SEGMENT
9	i SEGMENT
10	j SEGMENT
11	k SEGMENT
12	l SEGMENT
13	m SEGMENT
14	n SEGMENT
15	N/C
16	g1 DIGIT
17	P SEGMENT
18	R SEGMENT
19	G2 DIGIT
20	G3 DIGIT
21	G20 DIGIT
22	G4 DIGIT
23	G5 DIGIT
24	G6 DIGIT
25	G19 DIGIT
26	G7 DIGIT
27	G8 DIGIT
28	G9 DIGIT
29	G18 DIGIT
30	G10 DIGIT
31	G11 DIGIT
32	G12 DIGIT
33	G17 DIGIT
34	G13 DIGIT
35	G14 DIGIT
36	N/C
37	G16 DIGIT
38	G15 DIGIT
39	FILAMENT
40	FILAMENT

A13A4 (ALPHANUMERIC) DISPLAY BOARD ASSY

1	+5V UNREG
2	RESET OUT
3	HOLD
4	REMOTE LINE AUDIO
5	HLOA
6	REMOTE LINE AUDIO GND
7	CLK OUT
8	+15V
9	GND
10	READY
11	-15V
12	RST 5.5
13	10/M
14	INTR
15	SI
16	WR
17	RD
18	INTA
19	ALE
20	

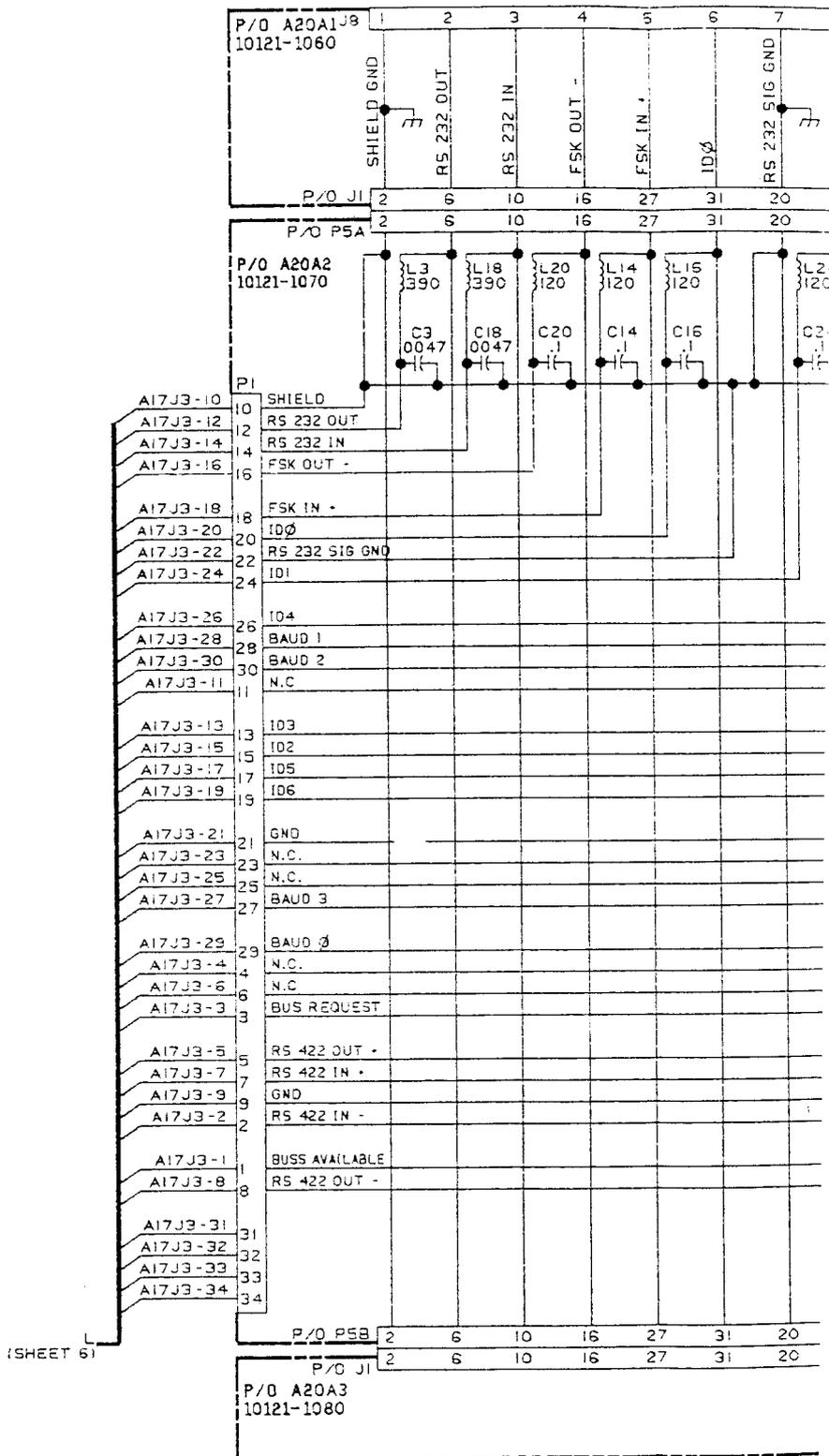
1	A14J15-21
2	A14J15-22
3	A14J15-23
4	A14J15-24
5	A14J15-25
6	A14J15-26
7	A14J15-27
8	A14J15-28
9	A14J15-29
10	A14J15-30
11	A14J15-31
12	A14J15-32
13	A14J15-33
14	A14J15-34
15	A14J15-35
16	A14J15-36
17	A14J15-37
18	A14J15-38
19	A14J15-39
20	A14J15-40

A17 REMOTE CONTROL ASSY

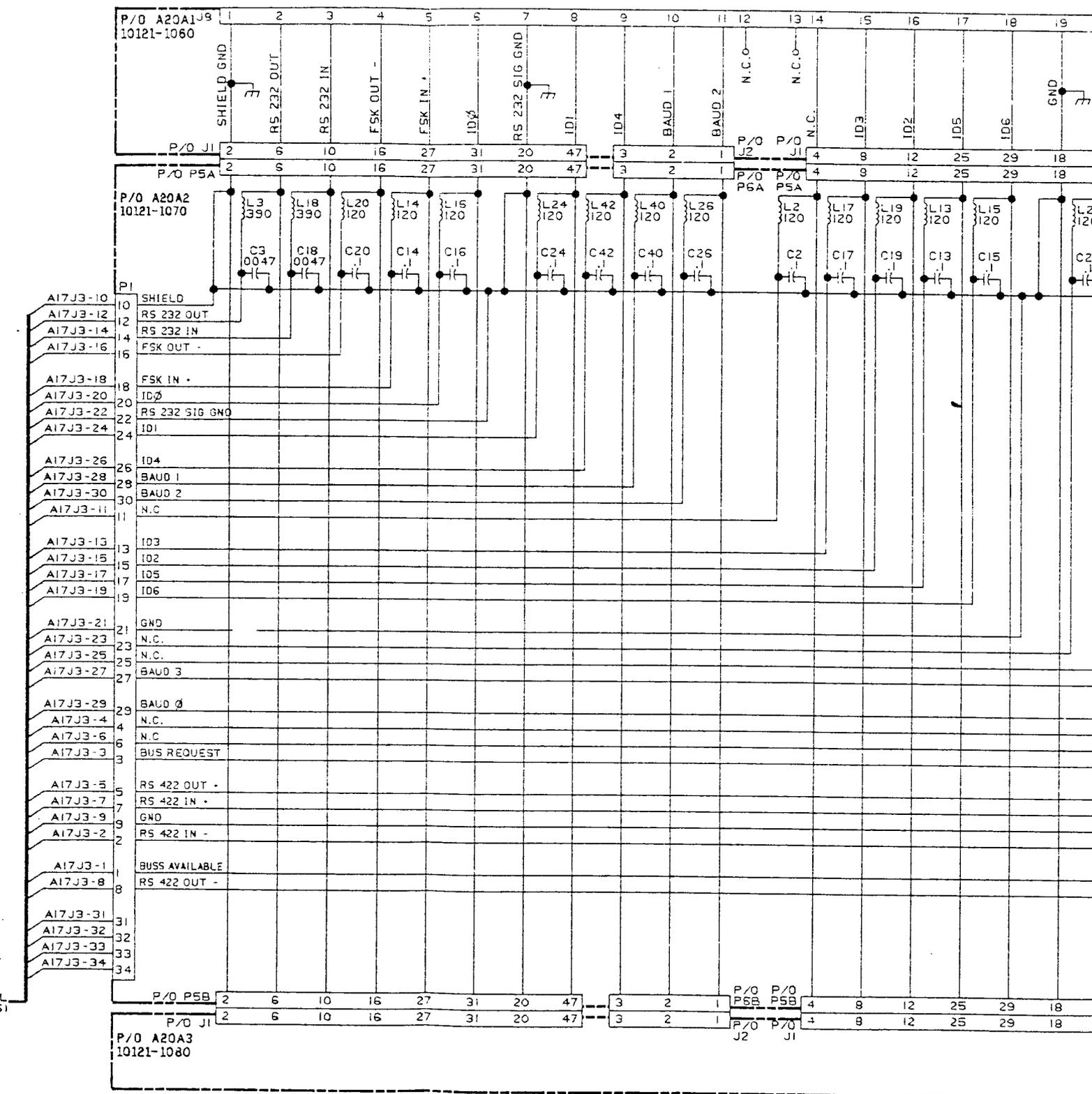
SHEET 7

1	A20A2PI
2	J9-21
3	J9-20
4	J9-3
5	J9-4
6	J9-6
7	J9-37
8	J9-19
9	J8-1
10	J8-14
11	J8-2
12	J8-15
13	J8-3
14	J8-16
15	J8-4
16	J8-17
17	J8-5
18	J8-18
19	J8-6
20	J8-19
21	J8-7
22	J8-20
23	J8-8
24	J8-21

1	BUS AVAILABLE
2	RS-422 IN
3	BUS REQUEST
4	SPARE
5	RS-422 OUT *
6	SPARE
7	RS-422 IN *
8	RS-422 OUT -
9	GND
10	SHIELD, GND
11	SPARE
12	RS-232C/MIL188 OUT
13	RS-232C/MIL188 IN
14	ID3
15	ID2
16	FSK DATA OUT -
17	ID5
18	FSK DATA IN *
19	ID6
20	ID0
21	GND
22	RS-232 SIG GND
23	SPARE
24	ID1



(SHEET 5)



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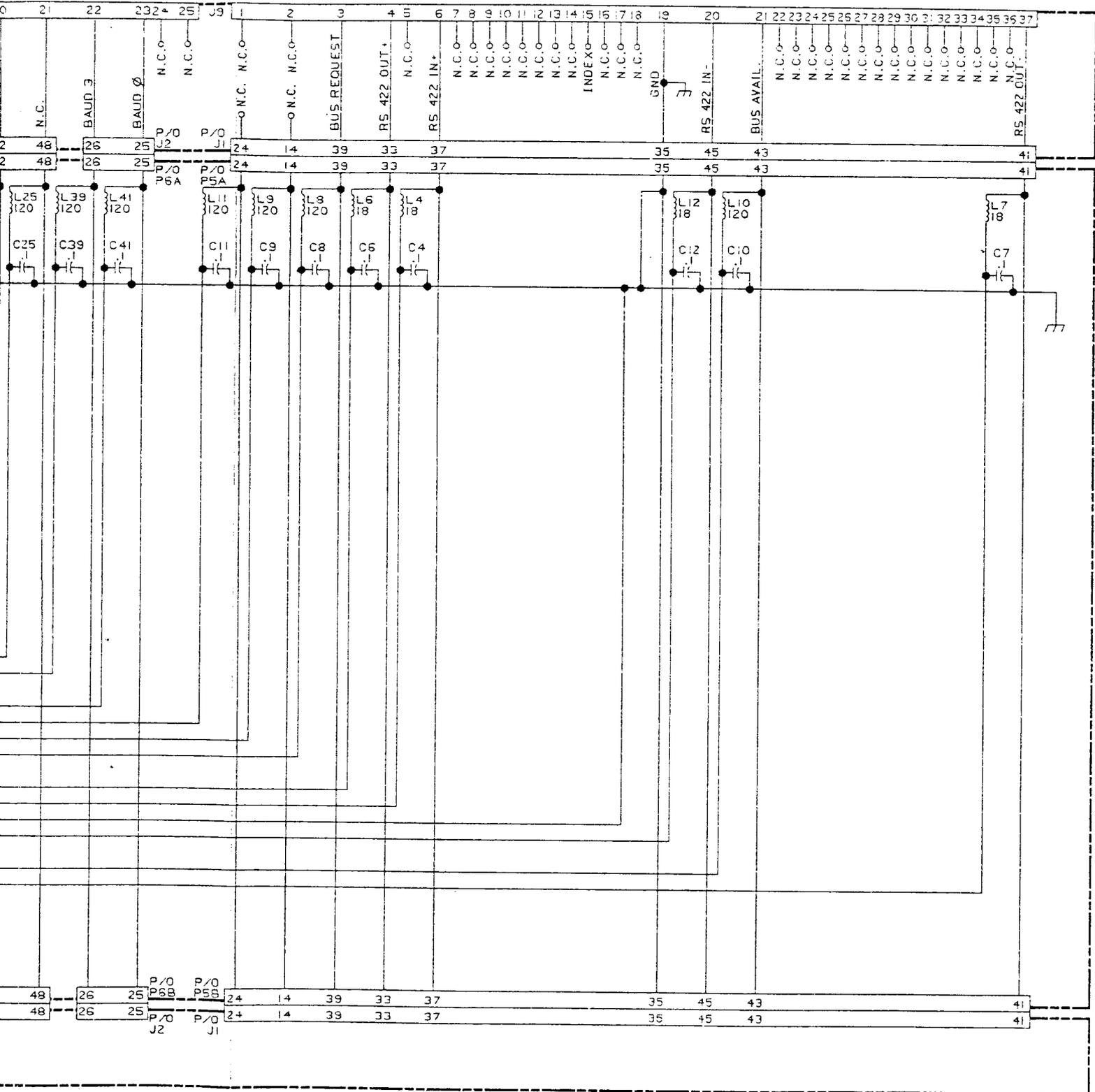
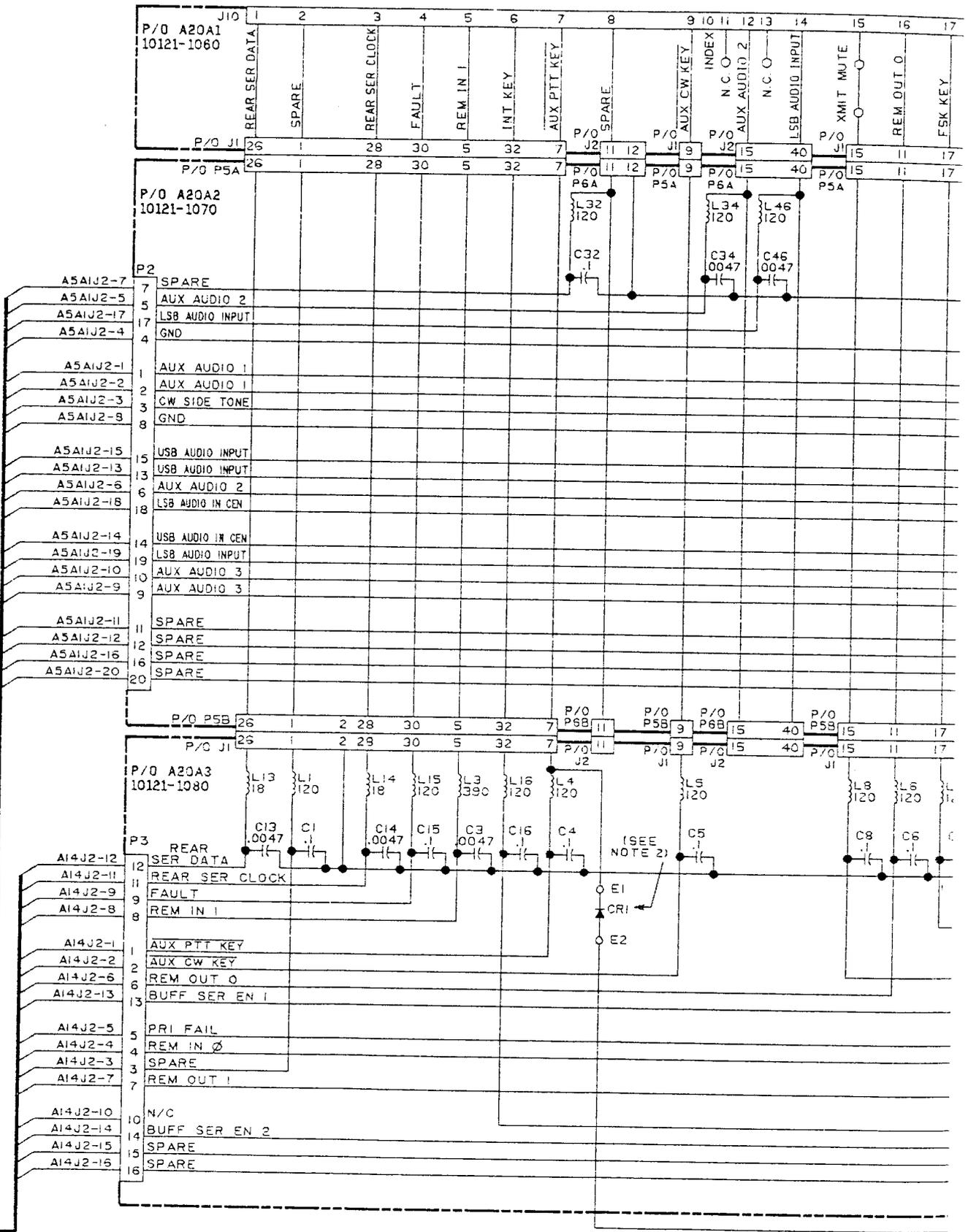
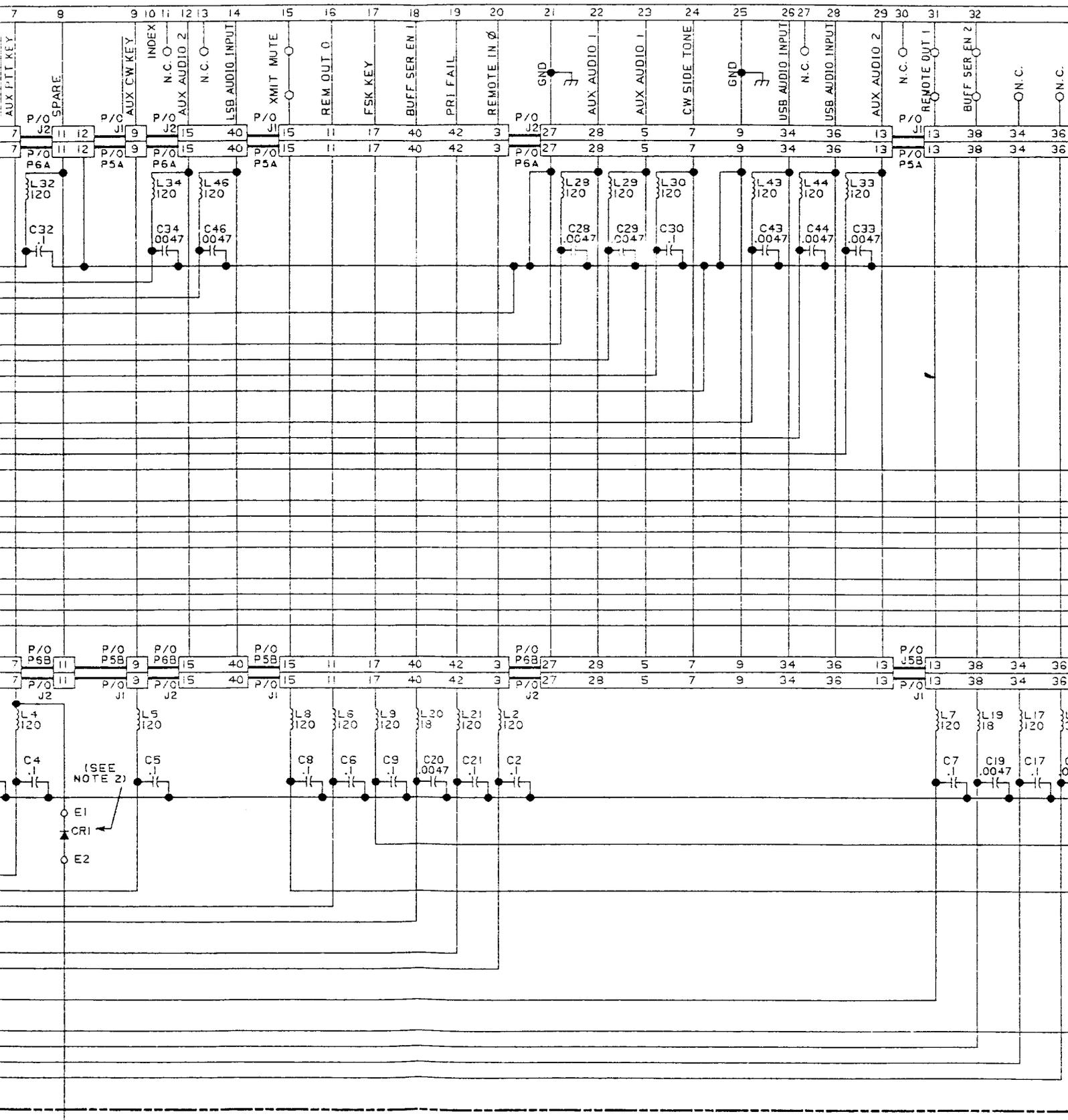


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 7 of 9)

G
(SHT 5)
T
(SHT 5)





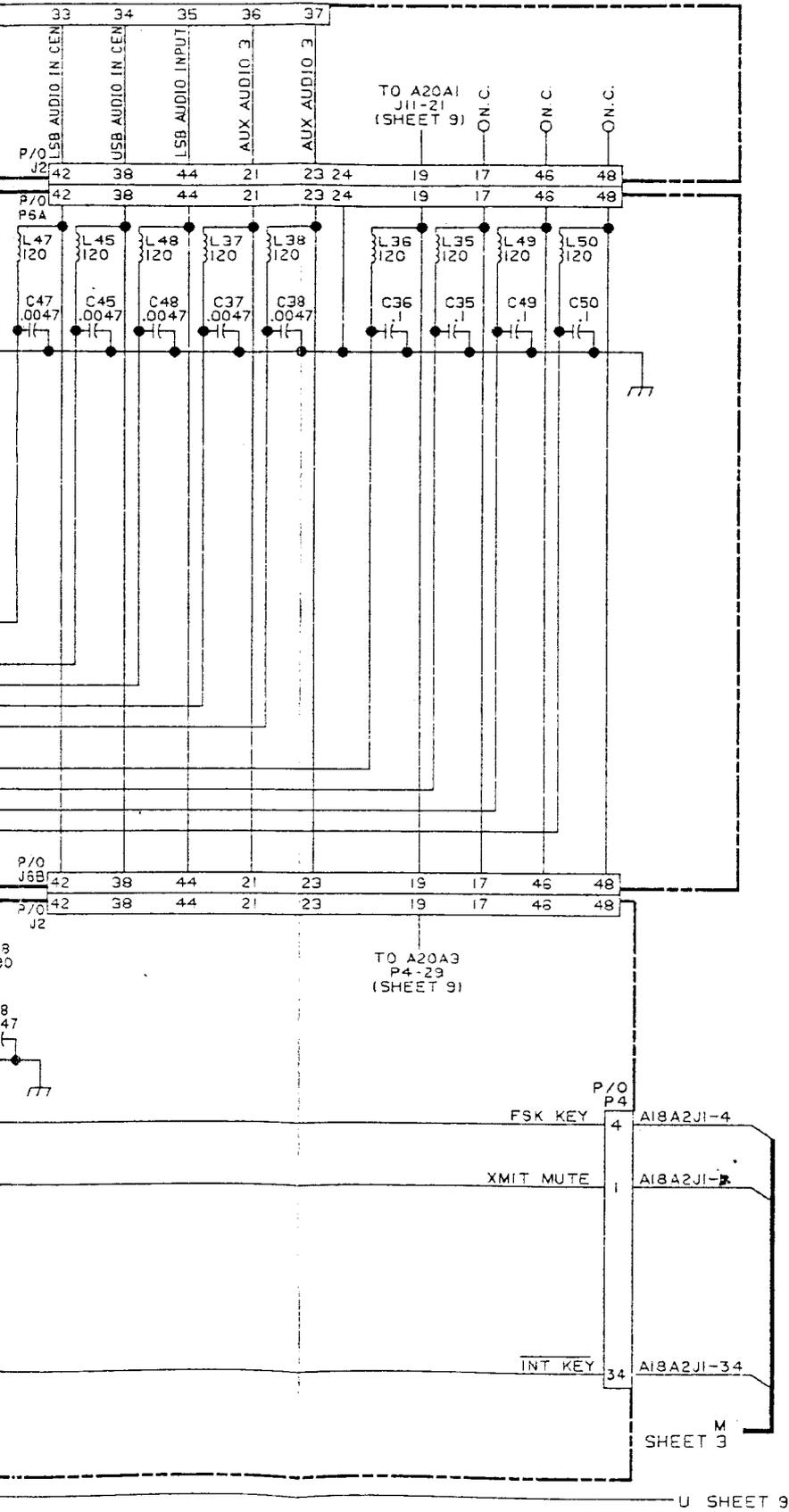
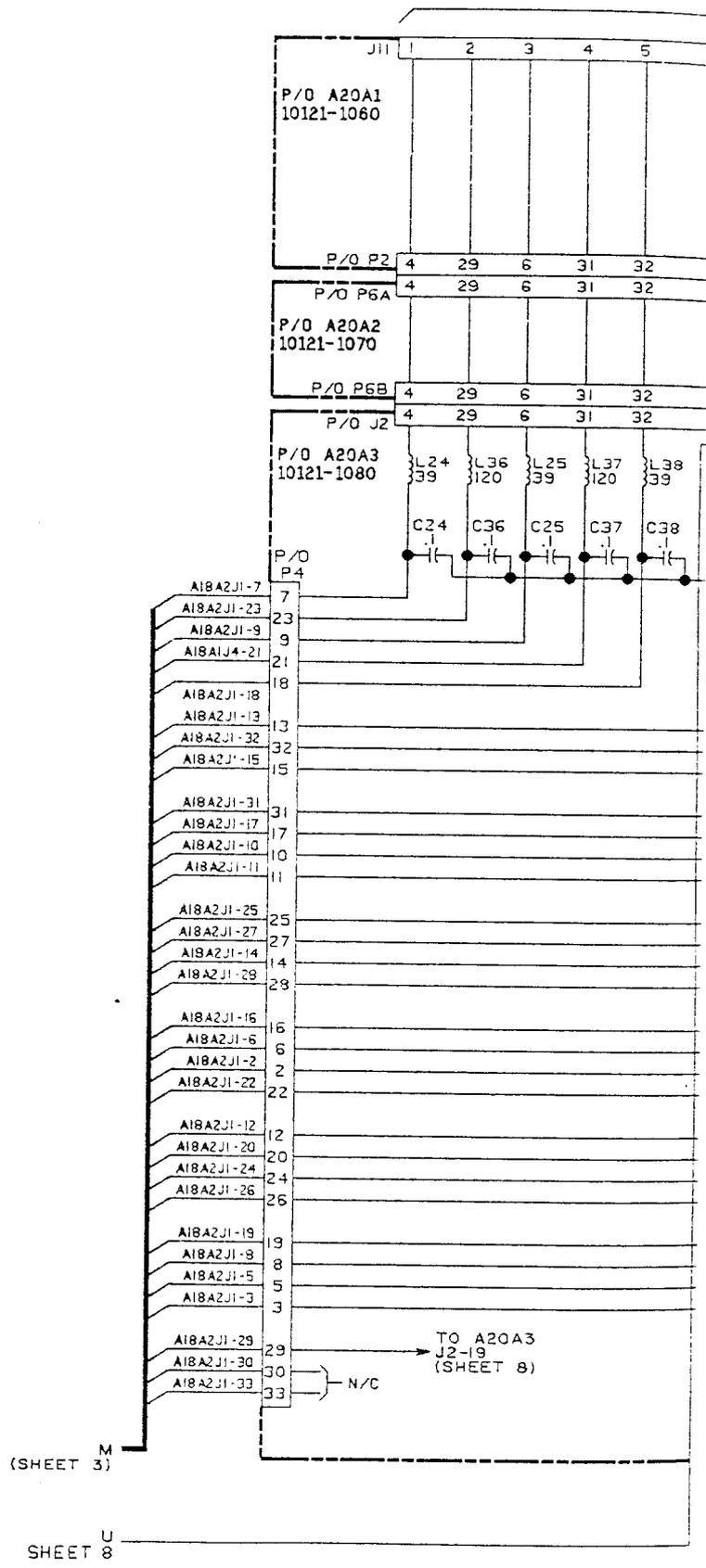
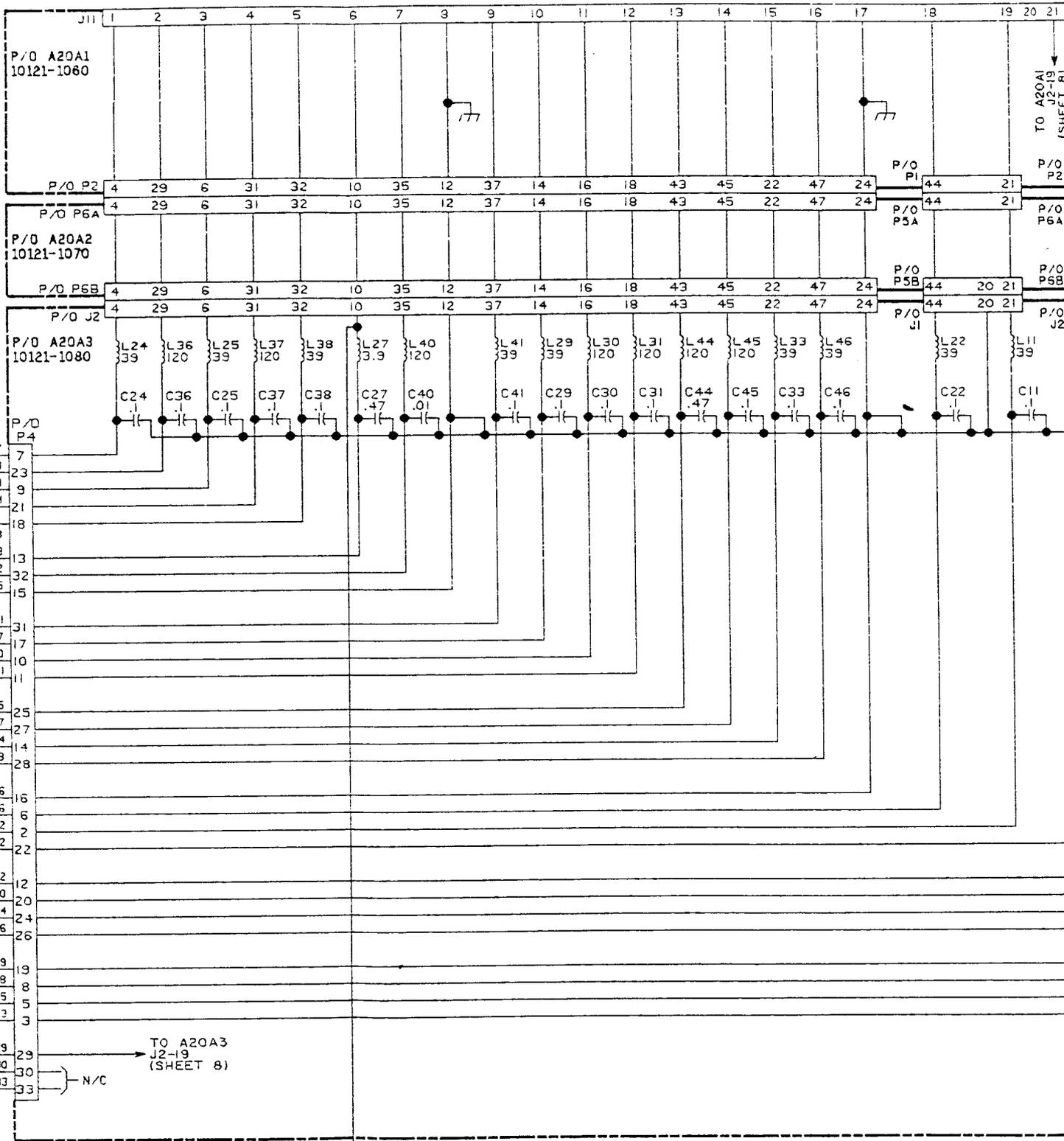


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 8 of 9)





TO A20A1
J2-19
(SHEET 8)

TO A20A3
J2-19
(SHEET 8)

N/C

M
U
8

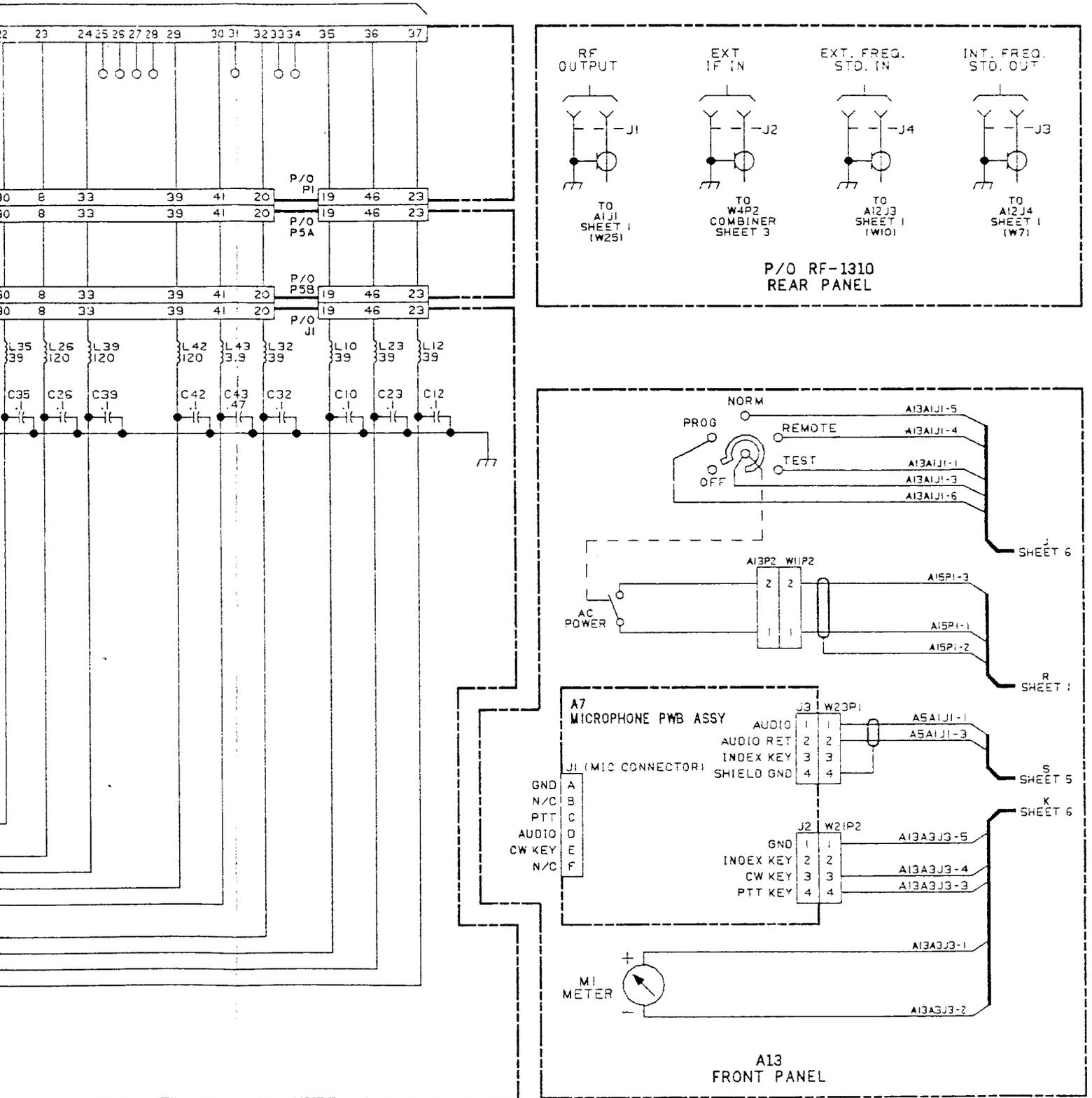


Figure 7. RF-1310 Interconnection Schematic Diagram (10121-1001 Rev.G) (Sheet 9 of 9)