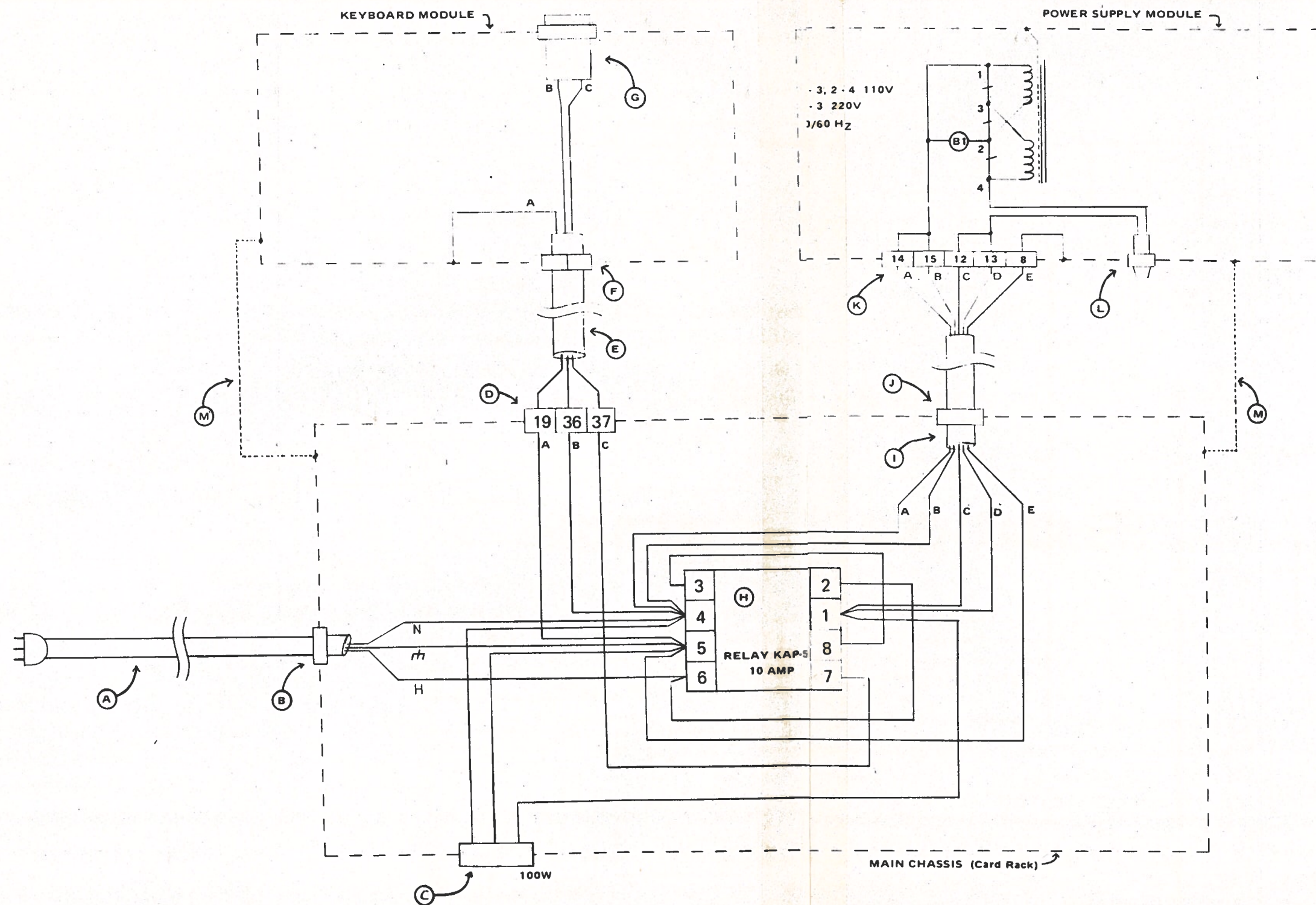


Benoit Laignan

Section 5.0

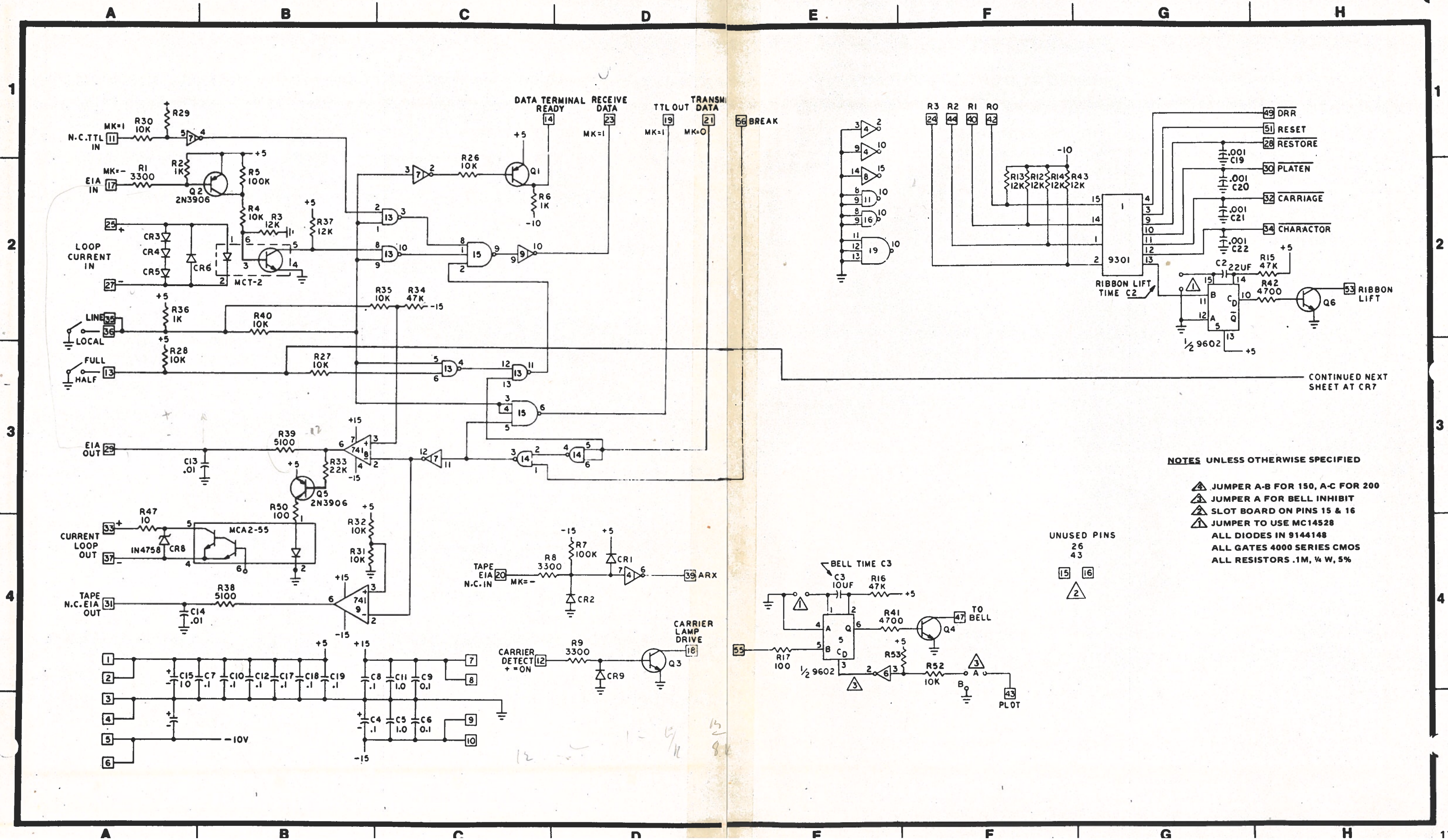
SCHEMATICS AND TABLES

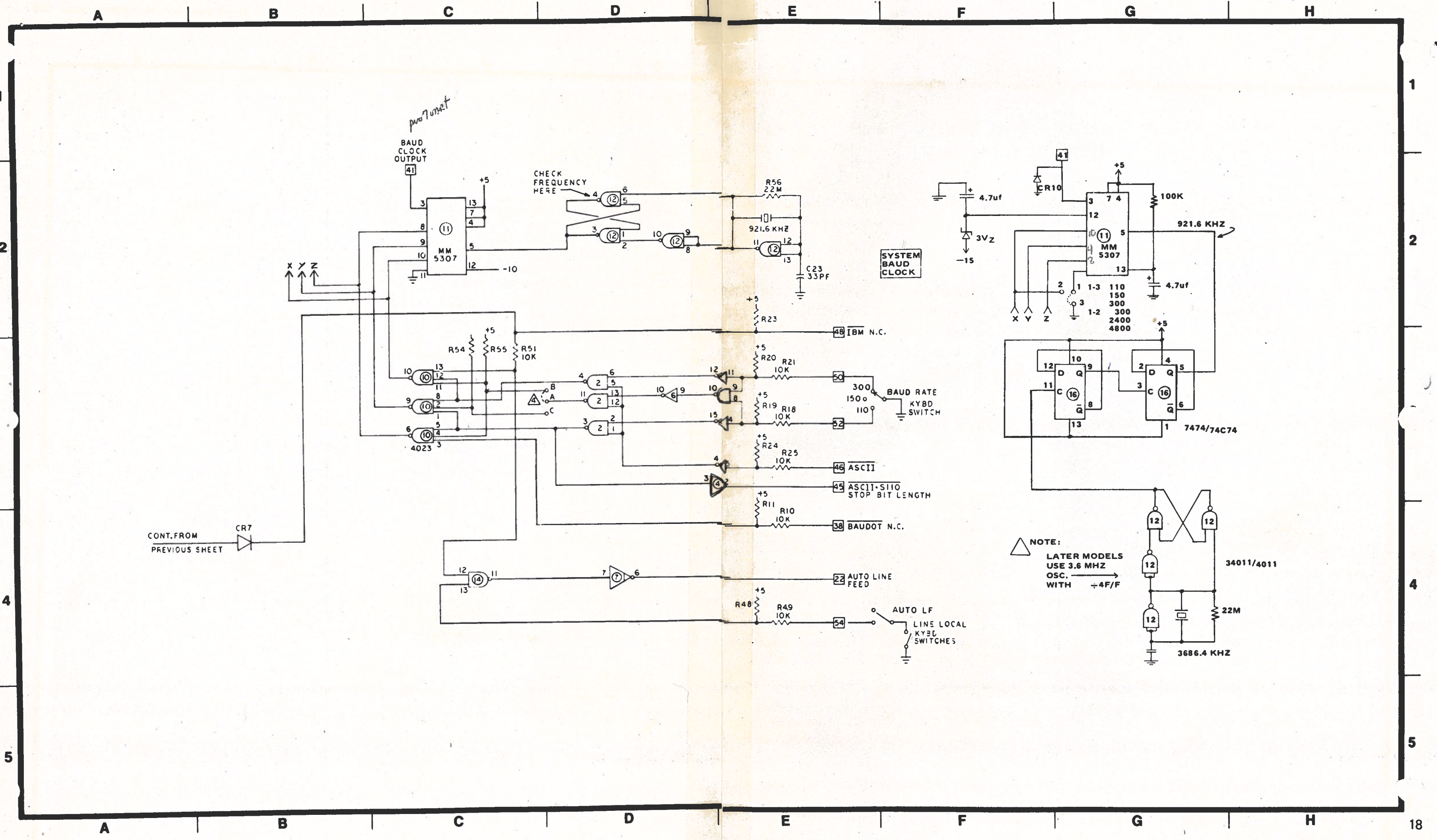
For 300S



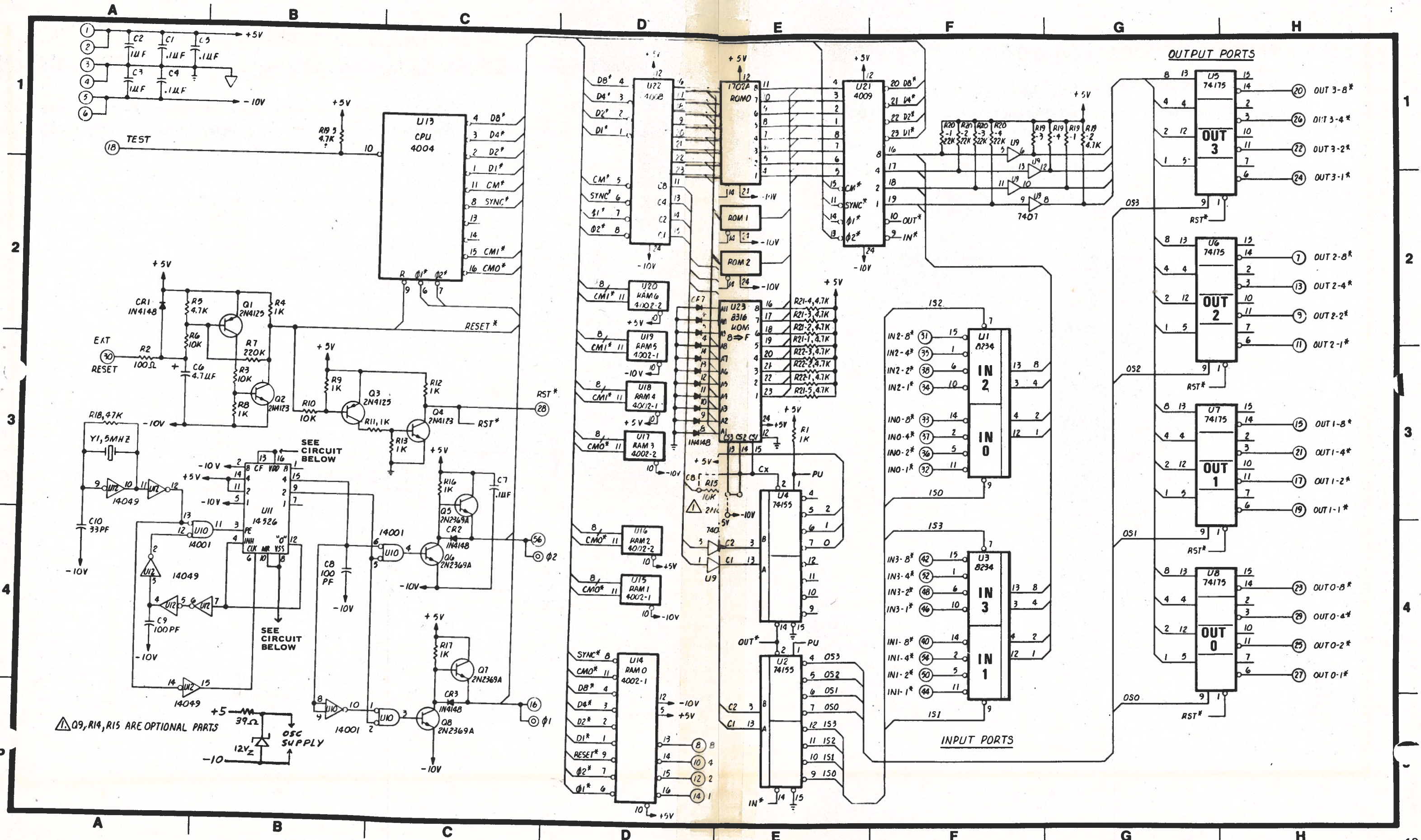
- A POWER CHORD
- B STRAIN RELIEF
- C CONVENIENCE OUTLET 100W
- D 37 PIN KEYBOARD CONNECTOR
- E CABLE, WIRE
- F CABLE CLAMP
- G MAIN POWER SWITCH
- H POWER RELAY AND SOCKET
- I CABLE WIRE
- J CABLE CLAMP
- K 15 PIN MOLEX CONNECTOR
- L FUSE AND HOLDER 8A
- M MECHANICAL CONNECTION

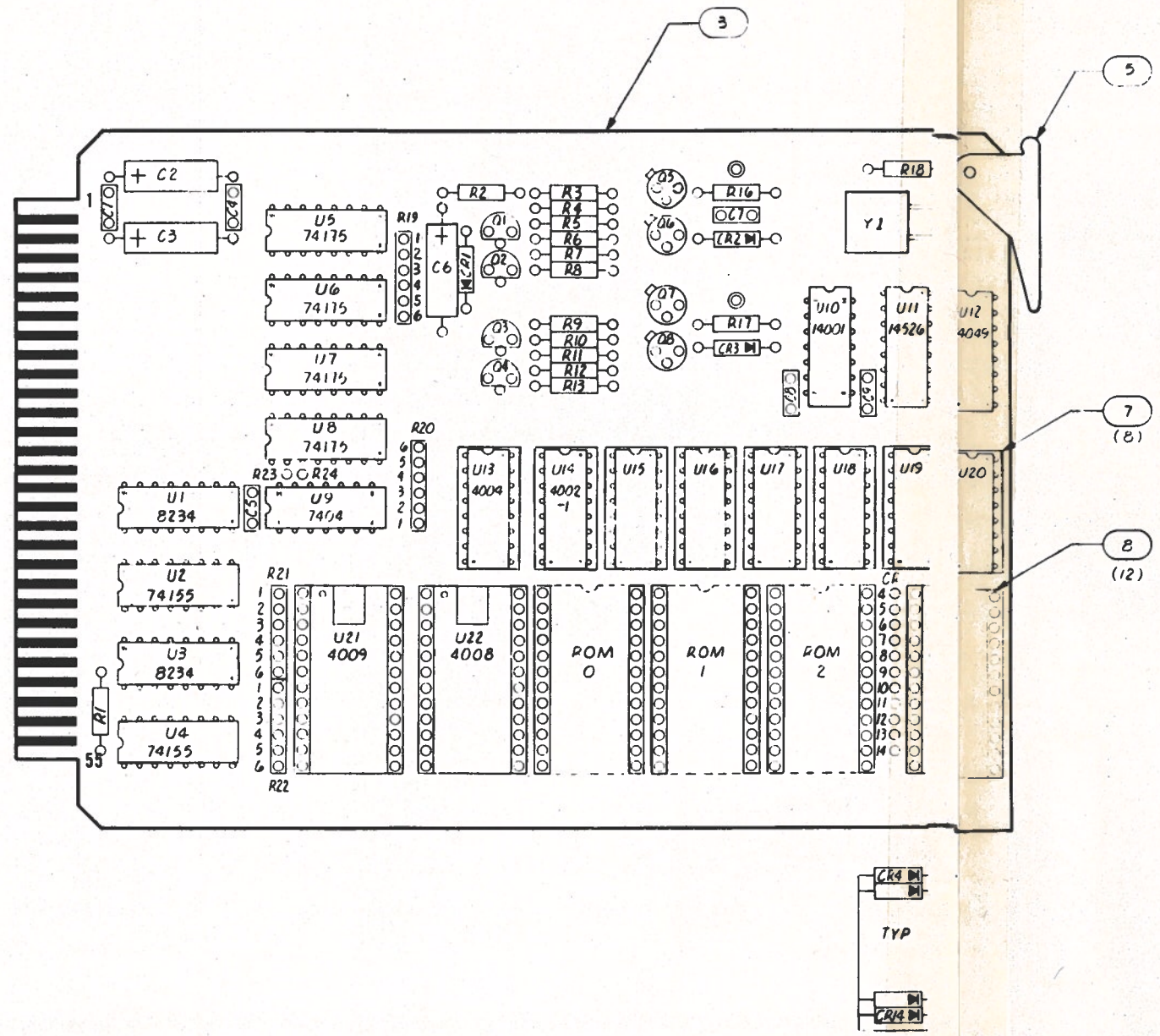
5.4 Controller No. 2A



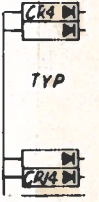


5.6 Micro-Processor Schematics - 3K Memory

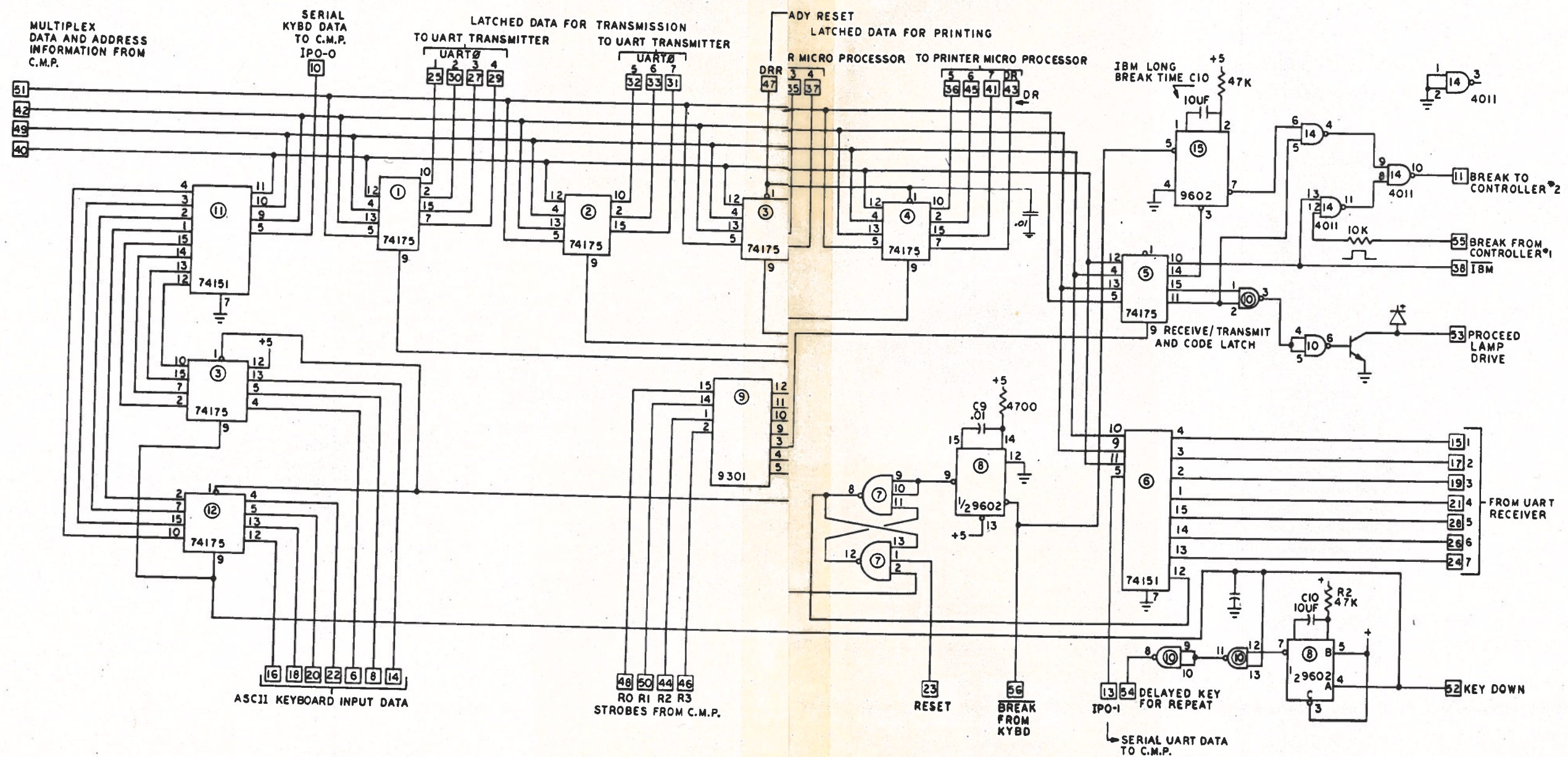




42	4.7K NETWORK	R19, 21, 22
41	4.7K CC 1/4W	R5, 23, 24
40	100Ω	R2
39	10K	R3, 6, 10
38	1K	R1, 4, 8, 9, 11, 12, 13, 16 & 17
37	220K CC 1/4W	R7
36	22K NETWORK	R20
35	47K CC 1/4W	R18
34		
33		
32	1N4148 DO-35	CR1 - CR14
31		
30	2N4123 TO-92	Q2, Q4
29	2N4125 TO-92	Q1 & Q3
28	2N2369A TO-18	Q5, 6, 7 & 8
27		
26	100PF CK05	C8 & C9
25	33PF CK05	C10
24	.1UF 50V	C1, C4, C5 & C7
23	1.0UF 25V	C2 & C3
22	4.7UF 20V	C6
ITEM	DESCRIPTION	REF. DESIGNATION



5.8 Code Conversion Auxiliary Board



5.14 Connector Pin Assignments and Baud Rate Switches

5.14.1 DTC-300 Keyboard Cable Pin Assignments

DATA SIGNALS		CONTROL SIGNALS	POWER SIGNALS
1.	LSB	14. Plot Inhibit	32. $\neq$ Signal
2.	ASCII	15. 10/12 CPI	33. + 5V
3.	DATA	16. Half - Full	34. - 10V
4.	+5 =M	17. Local - Line	35. N.C.
5.	0 = 5	18. Reset	36. } A.C. Control
6.		19. $\rightarrow$ Earth	37. }
7.	MSB	20. Odd	
8.	Proceed	21. None	
9.	Key Strobe	22. Even	
10.	Repeat	23. 300	
11.	Break	24. 110	
12.	Shift	25. ASCII	
13.	Here Is	26. Baudot	
		27. Correspondence	
		28. BCD	
		29. Fault	
		30. Carr. Det.	
		31. Auto L.F.	

5.14.2 DTC-300 and 300/S Power Supply Pin Assignments

CONNECTOR P-1 (HyType Output)		CONNECTOR P-2 (AC Input/Aux. Output)	
Pin	Function	Pin	Function
1.	}	1.	-15V
2.		2.	} +5V
3.		3.	
4.		4.	} $\neq$ DC ground
5.	+15V	5.	
6.	} +5V	6.	} $\neq$ DC ground
7.		7.	+15V
8.	NC	8.	$\rightarrow$ AC ground
9.	} $\neq$ DC ground	9.	} -10V
10.		10.	
11.	} -15V	11.	-15V
12.		12.	} ACH
13.		13.	
14.		14.	} ACN
15.		15.	

NOTE: AC ground is not same as DC ground

5.14.3 EIA Interface Port Pin Assignments

Pin	Function
1.	Protect Ground
2.	Data from Terminal
3.	Data to Terminal
7.	Signal Ground
8.	Carrier Detect to Terminal
11.	Busy (R.O. only)
20.	Data Terminal Ready

5.14.4 Teletype Interface Connector (20-80 ma) Pin Assignments

Pin	Function
5.	Transmit Negative
6.	Transmit Positive
7.	Receive Negative
8.	Receive Positive
13.	DAA - DT
15.	DAA - DR

5.14.5 Receive Only Parallel Interface Pin Assignments

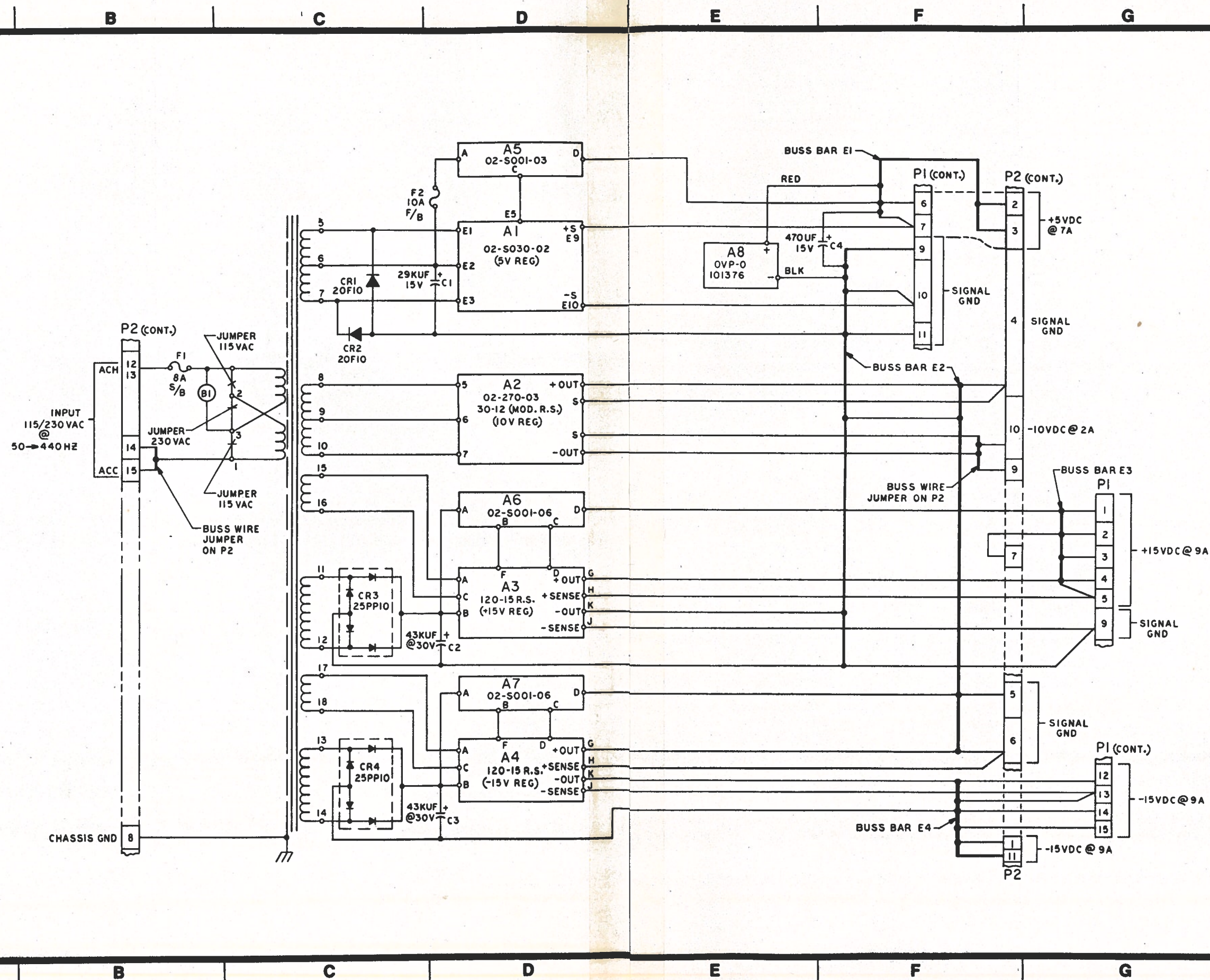
Pin	Function
1.	Data Bit 1
2.	Data Bit 2
3.	Data Bit 3
4.	Data Bit 4
5.	Data Bit 5
6.	Data Bit 6
7.	Data Bit 7
9.	+ Load
10.	- Load
11.	+ Busy
12.	- Busy
13.	$\neq$
14.	D T R
25.	$\rightarrow$

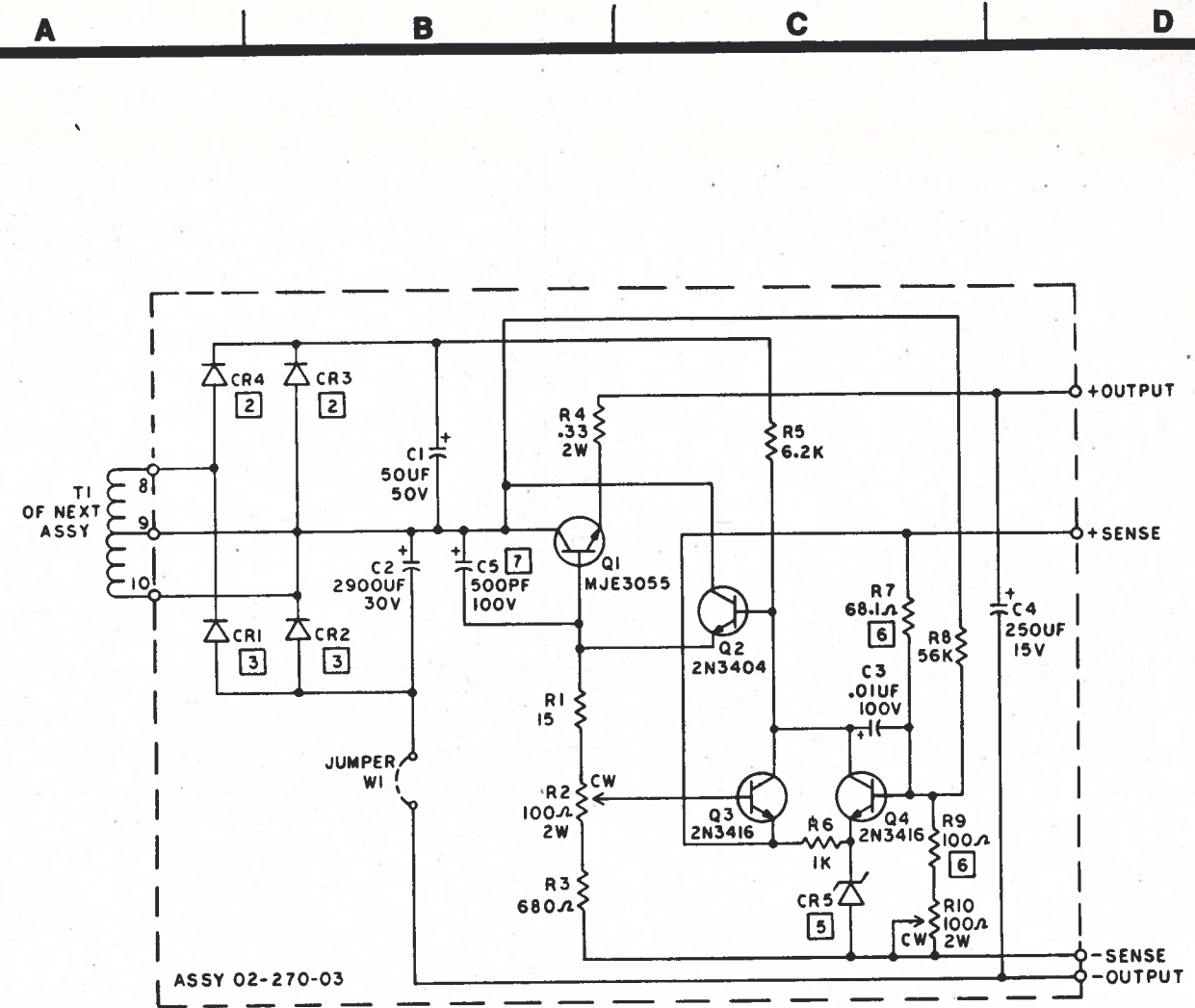
5.14.6 Receive Only Baud Rate Selection

Switch No.				Rate		
1	2	3	4			
0	0	1	1	1	1	0
0	0	1	0	2	0	0
0	1	0	1	1	5	0
0	1	1	0	3	0	0
0	1	1	1	6	0	0
1	0	0	0	9	0	0
1	0	0	1	1	2	0

1 = Off 0 = On
EIA Busy is provided on Pin 11.
Data rates above 1200 not recommended.

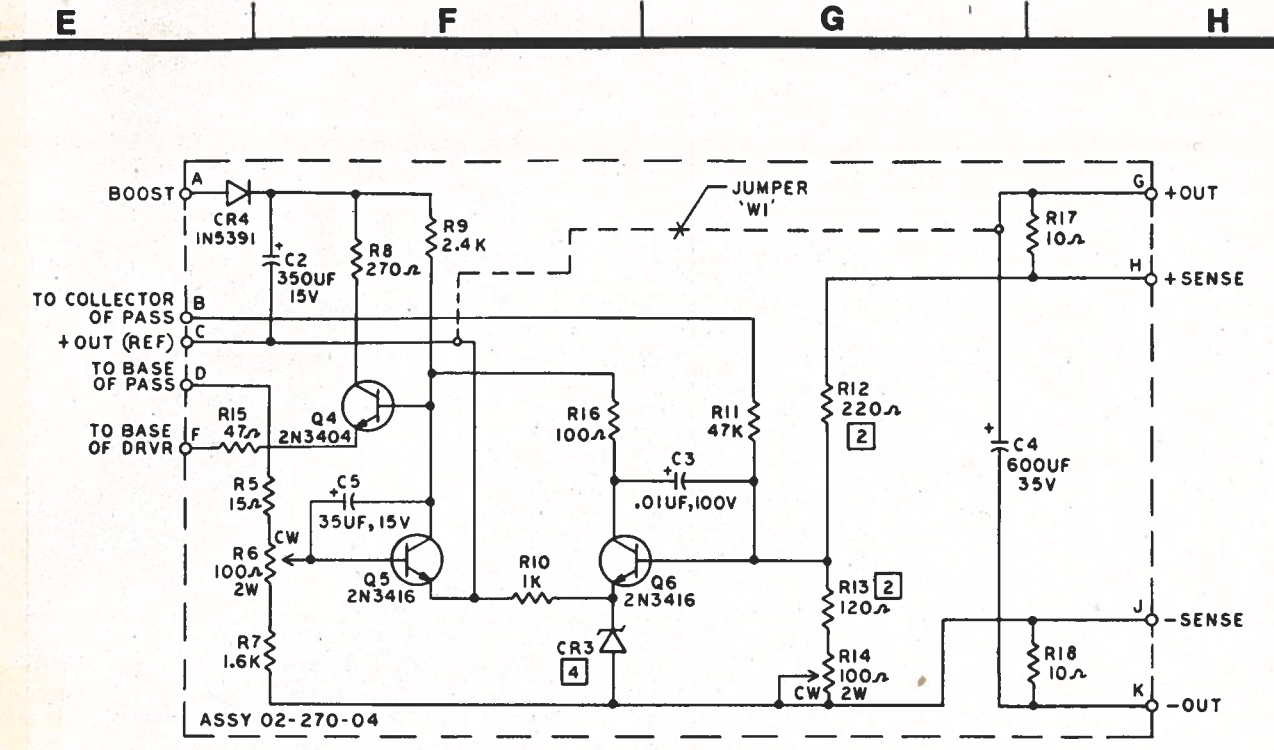
5.10 Power Supply Block Diagram





-10 Volt Regulator

- 7 ENGINEERING OPTION: C5, MAY OR MAY NOT BE USED.
 - 6 FILM RESISTOR, OHMS $\pm 2\%$, $1/2$ W.
 - 5 IN4735A, SELECT VALUE $5.9V \pm 0.1V$.
 - 4. REFERENCE ASSEMBLY 02-270-03.
 - 3 PART NUMBER IS IN5401.
 - 2 PART NUMBER IS IN5391.
 - 1. RESISTOR VALUES ARE IN OHMS $\pm 5\%$, $1/2$ W.
- NOTES: UNLESS OTHERWISE SPECIFIED

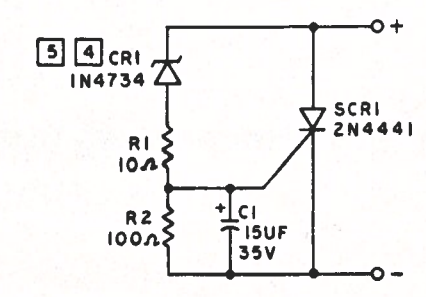


±15 Volt Regulators

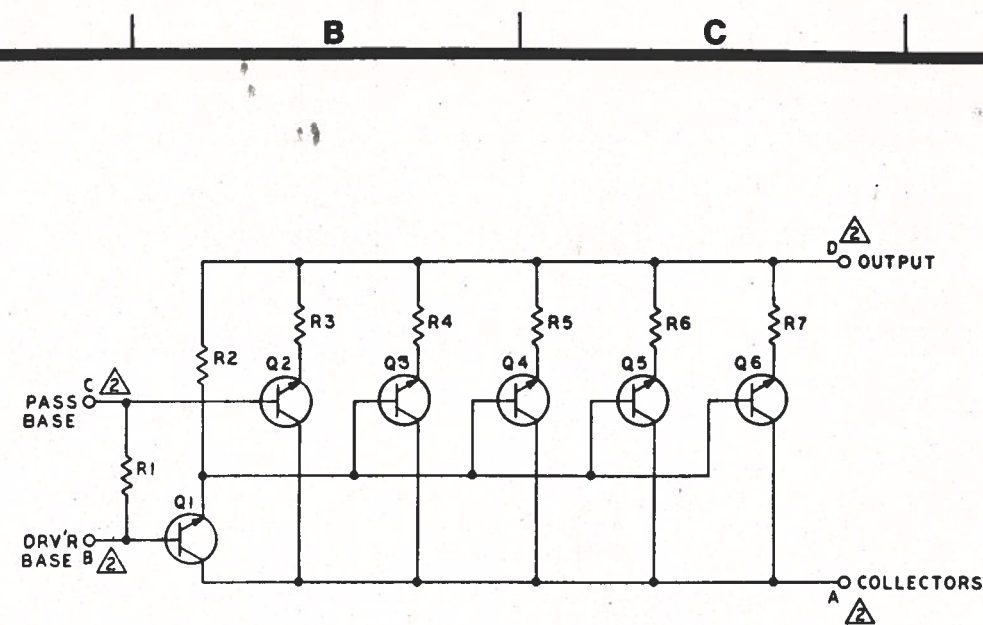
- 4 SELECT IN4735A $5.9V \pm .1V$.
 - 3. REFERENCE ASSEMBLY 02-270-04.
 - 2 METAL FILM RESISTOR, TOL $\pm 2\%$, $1/2$ W.
 - 1. CARBON RESISTORS, TOL $\pm 5\%$, $1/2$ W.
- NOTES: UNLESS OTHERWISE SPECIFIED

+5 Volt Overvoltage Protection Circuit

- 5 OVP SHALL FIRE BETWEEN $+6.0$ $+6.8V$
 - 4 SELECT VALUE
CRI IN4734 $5.9V \pm .1V$; R1, 10Ω
CRI IN4735 $6.0V \pm .1V$; R1, JUMPER
 - 3. REFERENCE ASSEMBLY 101376.
 - 2. RESISTORS VALUES ARE IN OHMS $\pm 5\%$, $1/2$ W.
 - 1. ALL DIMENSIONS, TOLERANCES, SYMBOLS AND ABBREVIATIONS PER CURRENT APPLICABLE MIL-STDs.
- NOTES: UNLESS OTHERWISE SPECIFIED



5.12 Power Supply +5 VDC Regulator and Pass Elements



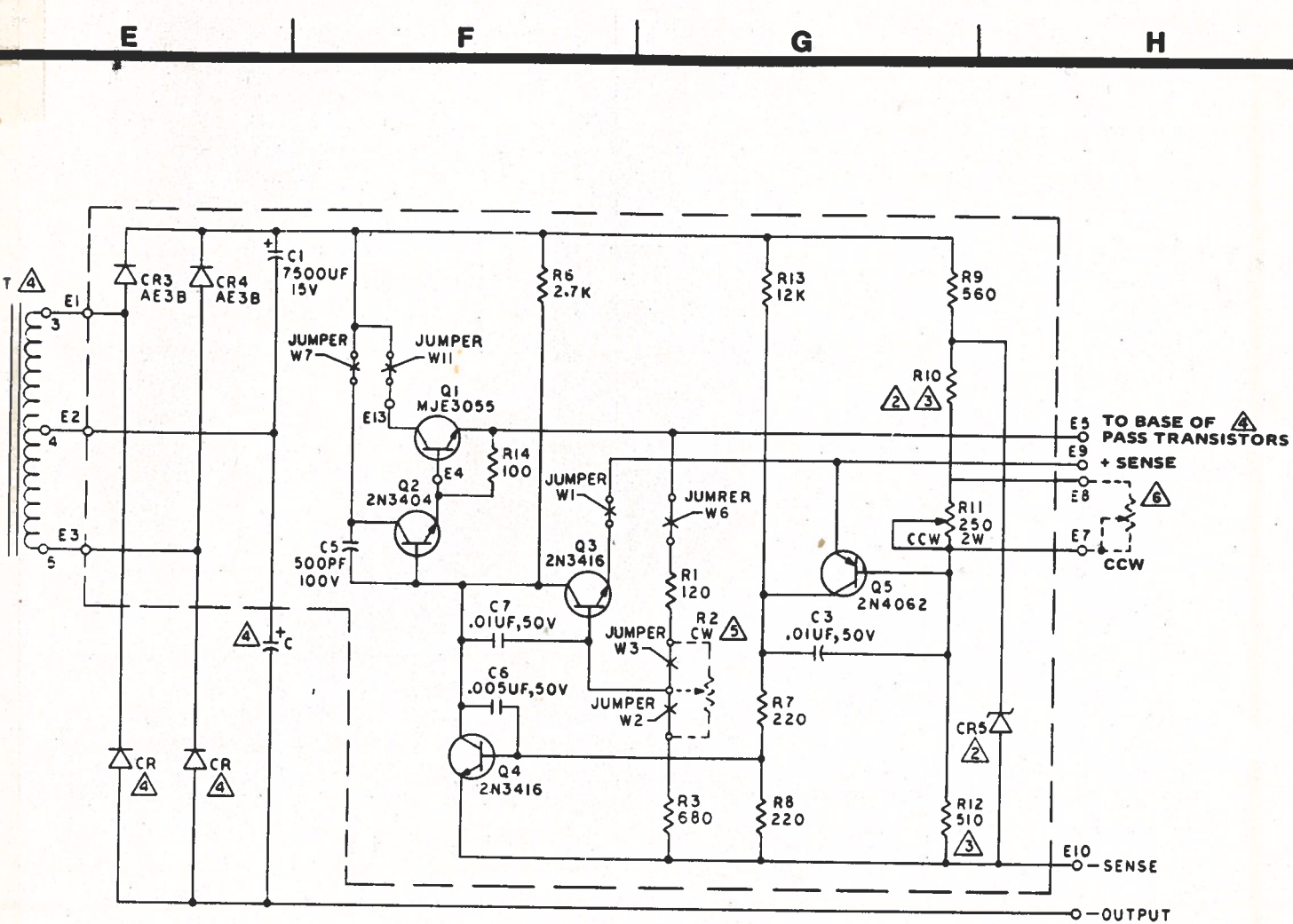
Pass Elements

SCHEMATIC DASH NO. TABULATION														REMARKS
DASH NO.	R1	R2	R3	R4	R5	R6	R7	Q1	Q2	Q3	Q4	Q5	Q6	
-01	X	X	X	-	-	-	-	X	X	-	-	-	-	(1) DRV'R (1) PASS
-02	X	X	X	X	-	-	-	X	X	X	-	-	-	(2)
-03	X	X	X	X	X	-	-	X	X	X	X	-	-	(3)
-04	X	X	X	X	X	X	-	X	X	X	X	X	-	(4)
-05	X	X	X	X	X	X	X	X	X	X	X	X	X	(1) DRV'R (5)
-06	-	X	-	-	X	-	-	-	-	X	-	-	-	(1)
-07	-	X	-	X	X	-	-	-	X	X	-	-	-	(2)
-08	-	X	X	X	X	-	-	-	X	X	X	-	-	(3) PASS

△ TERMINAL DESIGNATIONS SHOWN FOR REF. ONLY & MAY BE DIFFERENT REFER TO ASSY.DRWGS OF NEXT ASSY. TO DETERMINE.

1. REF. APPLICABLE ASSY. P/L FOR COMPONENT VALUES TO DETERMINE DASH NO. OF SCHEMATIC TO BE REF.

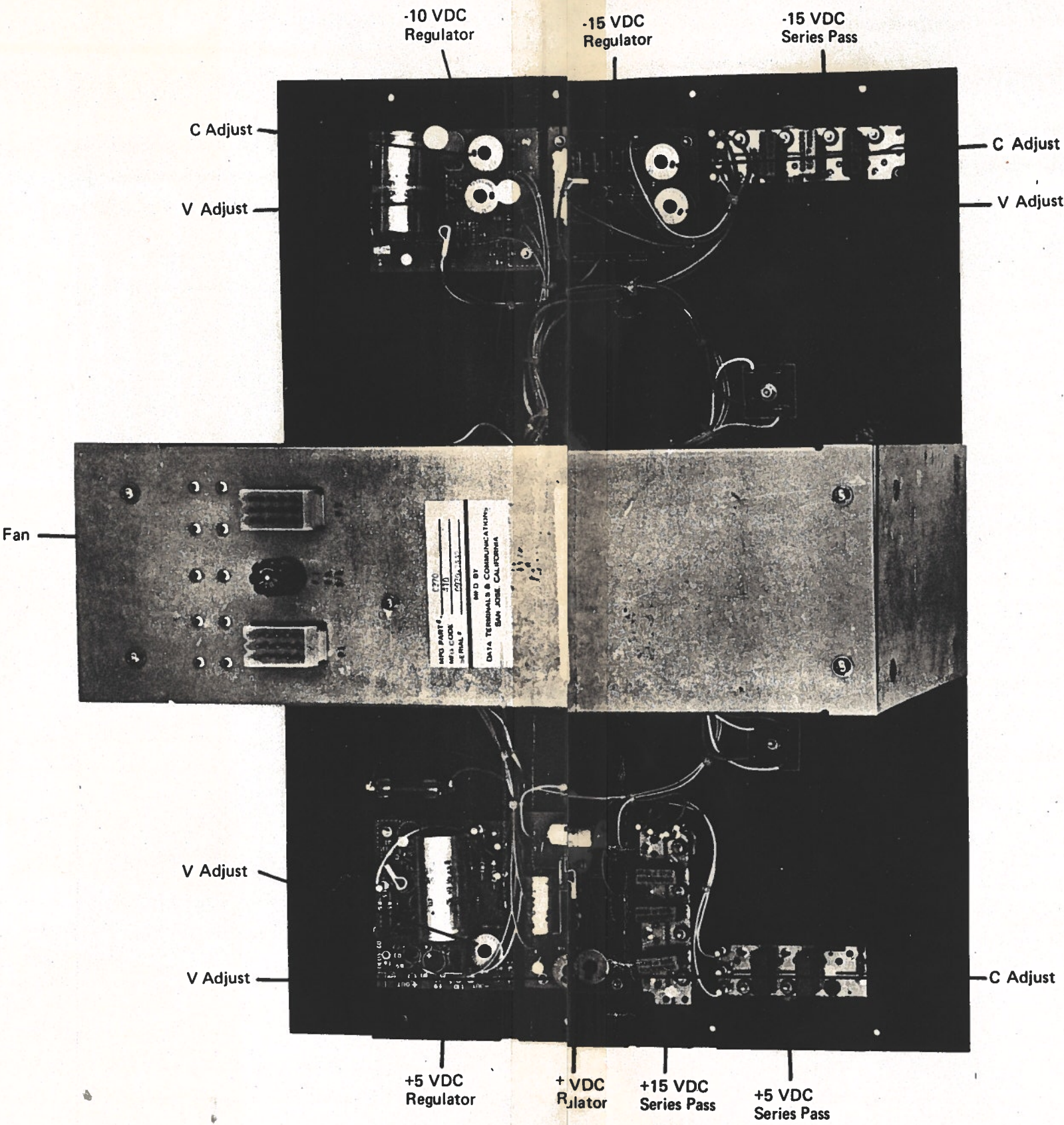
NOTES UNLESS OTHERWISE SPECIFIED



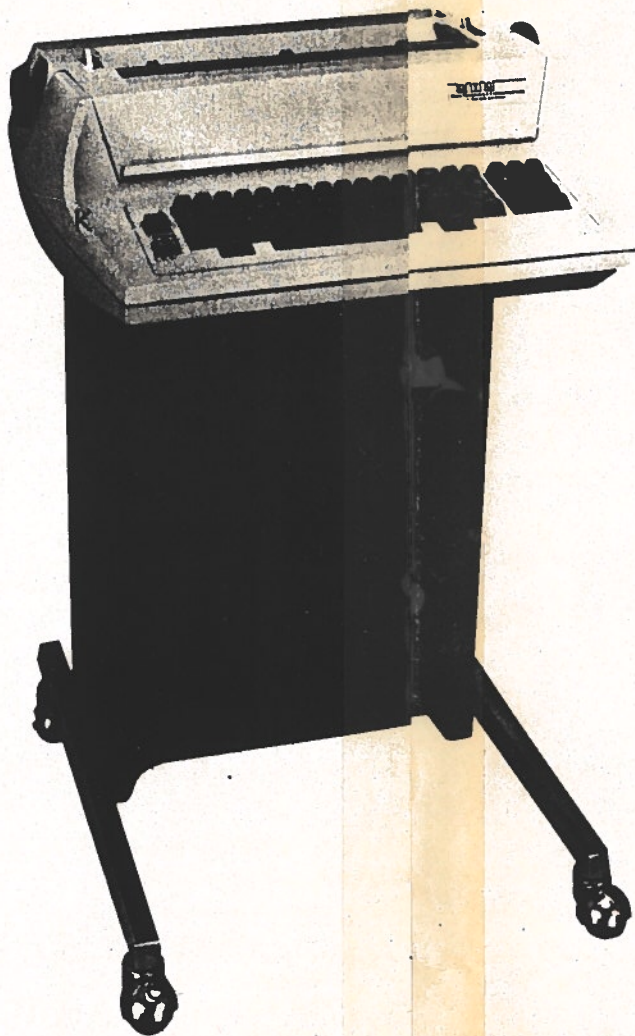
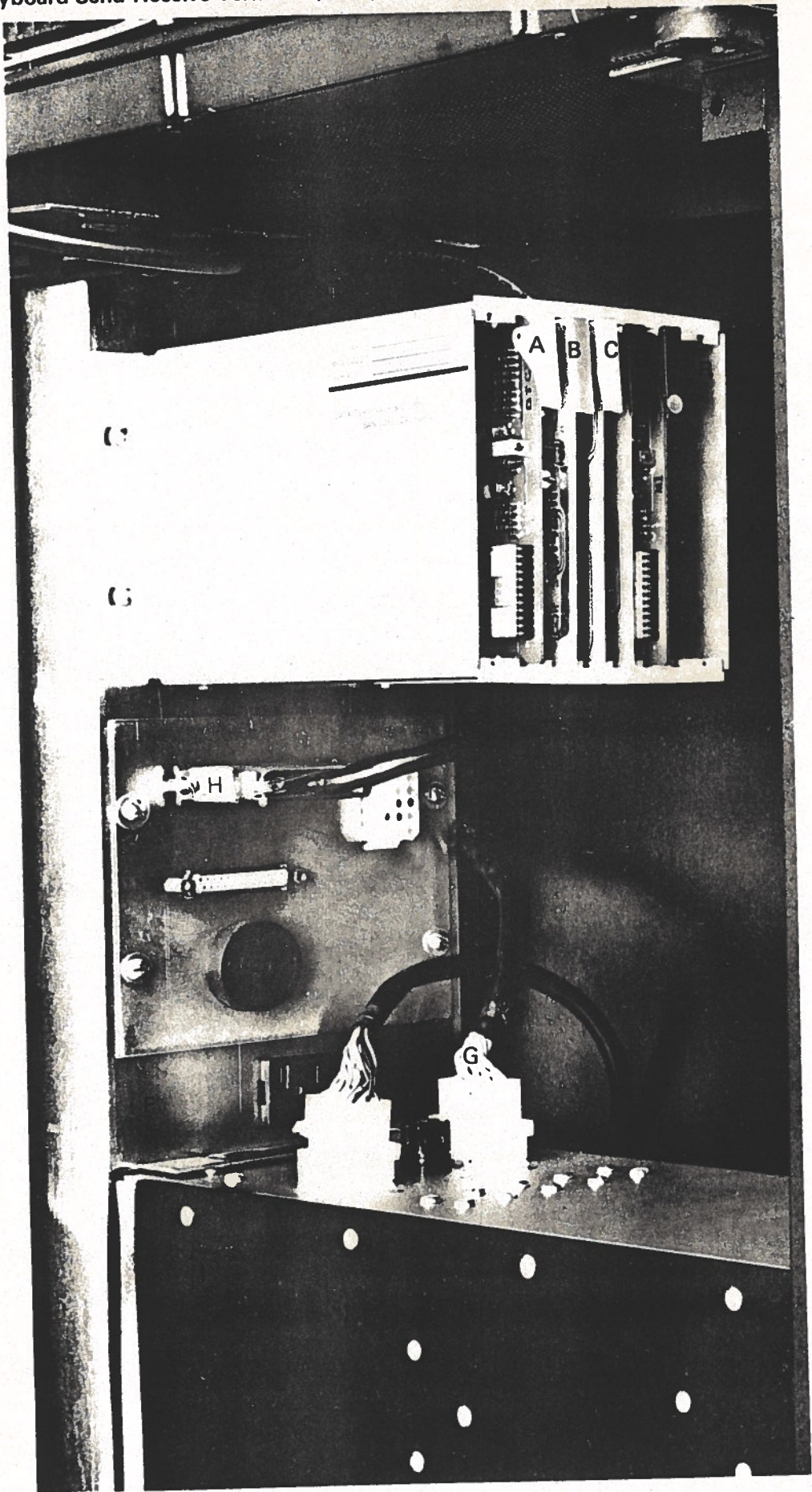
+5 Volt Regulator

- △ R11 VOLTAGE ADJ. POT MAY BE REMOTE FROM THIS ASSY. REF. NEXT ASSY SCHEMATIC TO DETERMINE LOCATION.
- △ R2 (CURRENT LIMIT'G POT) IS OPTION, SEE APPLICABLE NEXT ASSY. P/L. JUMPERS W2 & W3 ARE OMITTED WHEN R2 IS USED.
- △ THIS COMPONENT IS MOUNTED AT NEXT ASSY LEVEL & IS SHOWN FOR REF. ONLY.
- △ FILM RESISTOR IN OHMS ± 2%, ½ WATT.
- △ SELECT VALUE: CR5 IN4735A 5.9V ± .1V R10 8 Ω
CR5 IN4735A 6.5V ± .1V R10 120 Ω
CR5 IN4735A 6.2V ± .1V R10 100 Ω.
- 1. RESISTOR VALUES IN OHMS ± 5%, ½ WATT CARBON COMP.

NOTES UNLESS OTHERWISE SPECIFIED



6.1 Keyboard Send Receive Terminal (KSR)



Location	Description	Part Number
A1	Micro-Processor printed circuit board (300)	3-7
✓A2	Micro-Processor printed circuit board (300/S or 300/T)	3-7S
✓B	Controller 1 printed circuit board	3-8
✓C	Controller 2 printed circuit board	3-9
D	Code Conversion Micro-Processor	3-7cp
E	Code Conversion Auxiliary printed circuit board	3-11
✓F	Electronics column (chassis)	3-1
✓G	Printer power cable	5-2
✓H	Keyboard cable	2-4
✓I	Power supply	5-1
✓J	Power fuse	8 amp 110V fuse
✓K	Printer case	1-1-1
L1	Platen assembly (pin feed)	4-1-9
✓L2	Platen assembly (friction feed)	4-1-4
✓M	Power switch assembly	2-2
✓N	Keyboard assembly	2-1
✓O	Pedestal stand with back cover	1-2-17
✓P	Chrome leg	1-2-12
✓Q	Caster	1-2-13
R	DAA board (not shown)	3-13