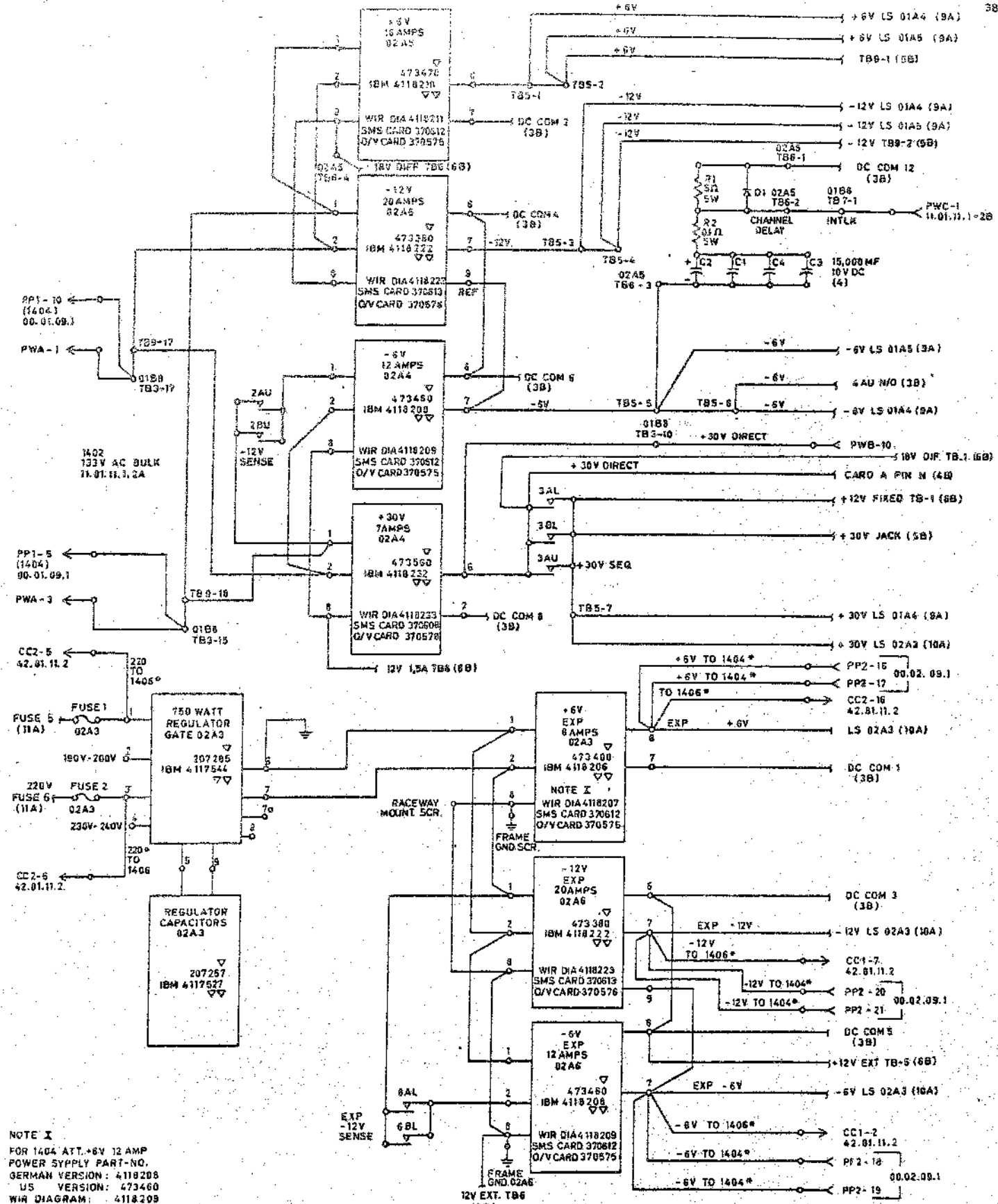


IBM
19-25427 20737-85

IBM

WIRING DIAGRAM



NOTE I
 FOR 1404 ATT. +6V 12 AMP
 POWER SUPPLY PART-NO.
 GERMAN VERSION: 4118208
 US VERSION: 473460
 WIR DIAGRAM: 4118209

▽ GERMAN VERSION
 □ US VERSION
 * OPTIONAL FEATURE WIRING

CHANGE NO.
1847

DATE
16.5.63

DATE
1847

1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1

SHEET NO.
Blatt Nr.

MADE BY
Angestellte
WIRING DIAGRAM POWER SUPPLY C E OR MODEL F

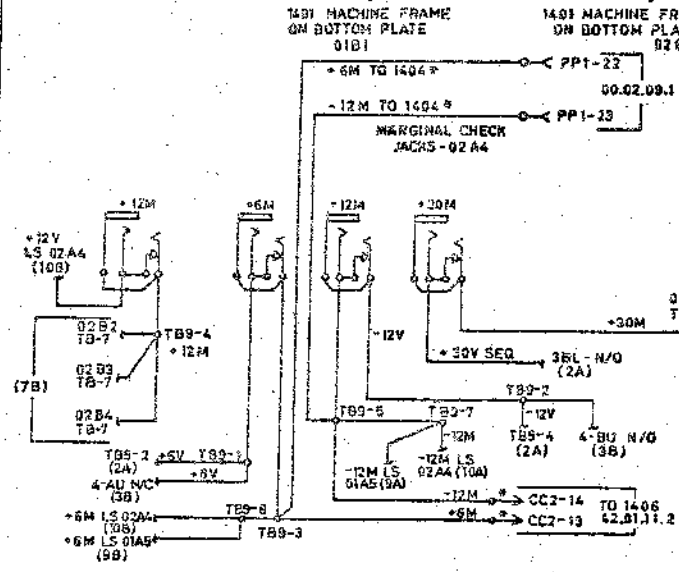
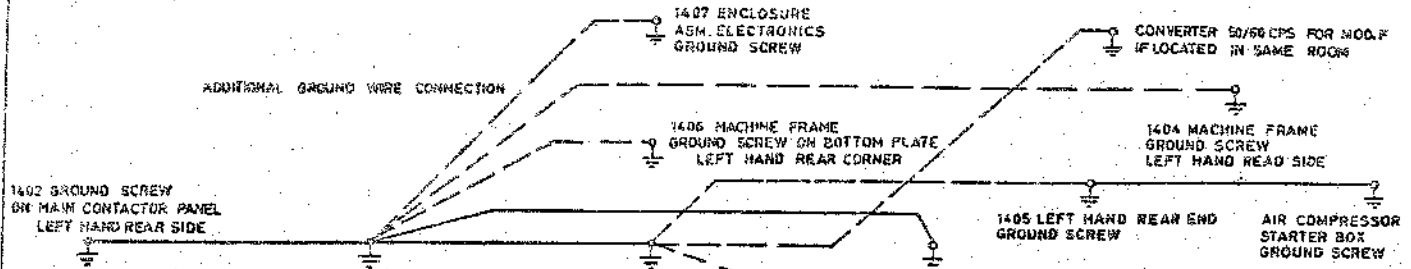
Sil. WITH TAPES

SUMMARY OF CHANGES
Anderungs-Ubersicht

DATE
Datum
10.5.63

4 062 987 G

SHEET
Blatt
0



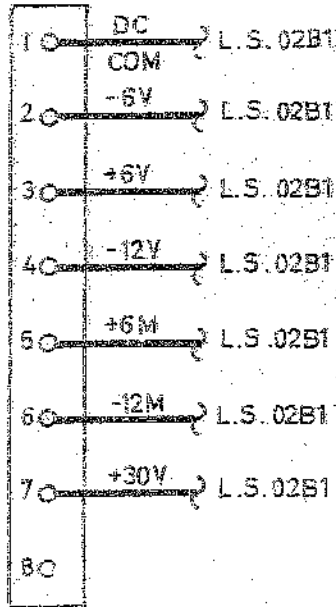
STANDARDS CODE	RELEASED FOR ASSY.	QTY.	SYMBOL	DATE	CHANGE NO.	REVISION	DEVELOPMENT NO.	Q/M
				23.11.61	7A-1013			
							4064789	

Form N. 33 206

GATE TERMINAL BLOCKS-VOLTAGE DISTR.

02B1

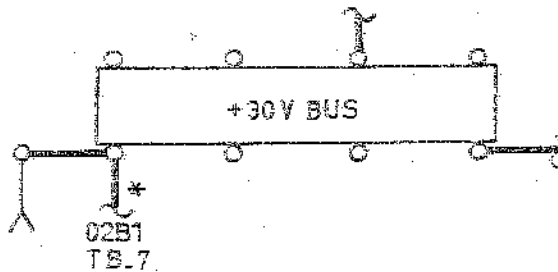
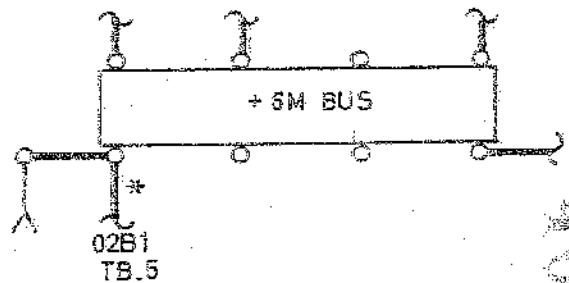
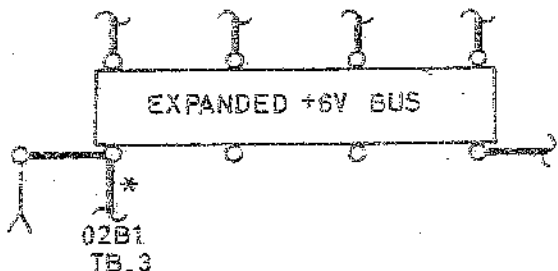
38.11.41.1



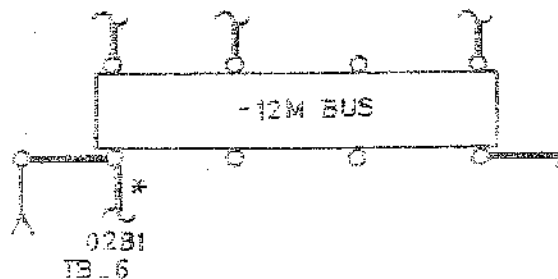
*

LAMINAR STRIP DISTRIBUTION

38.11.51.4



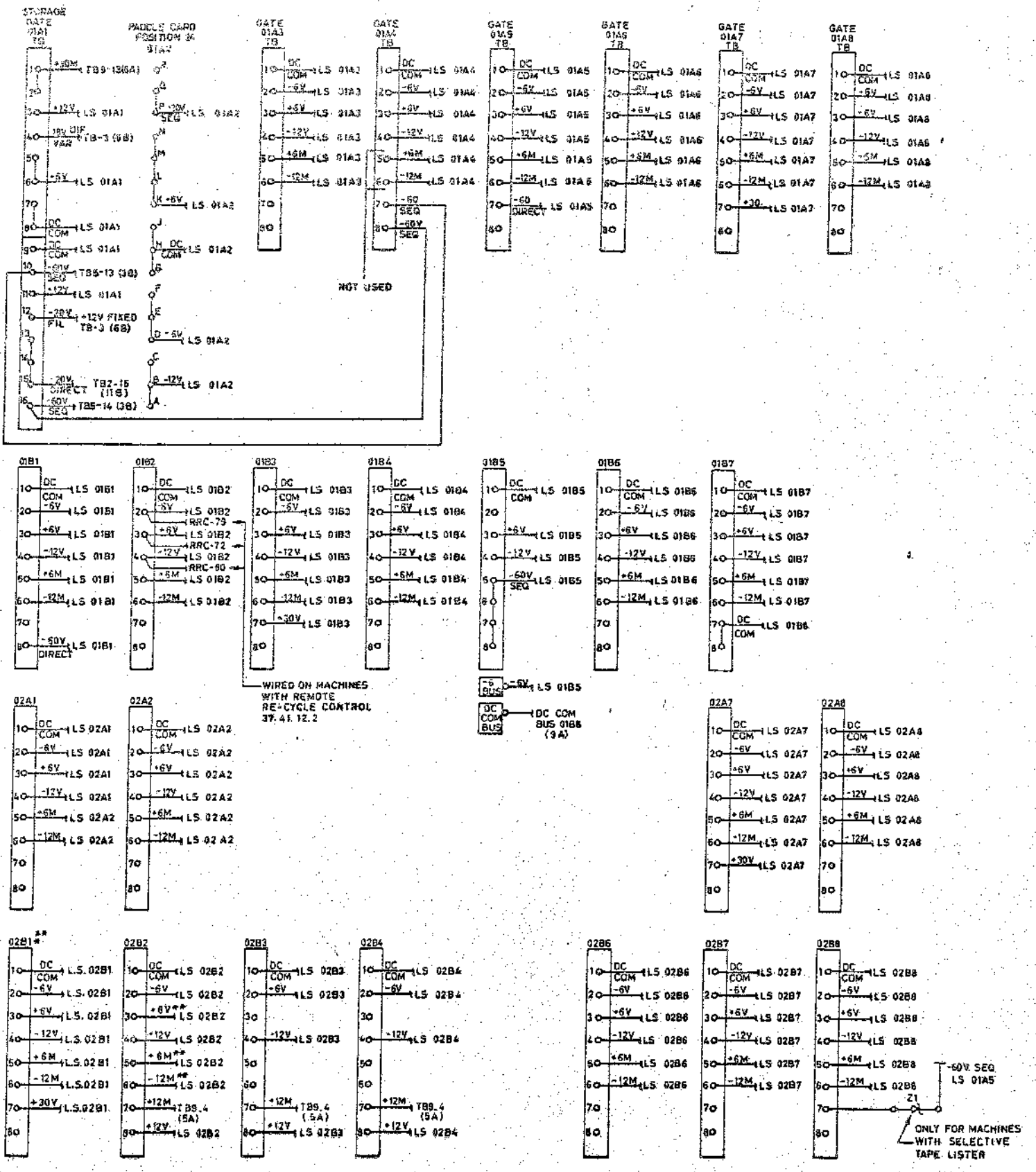
* STERLING ONLY



IBM			
NAME	POWER DISTRIBUTION FOR STERLING DEVICE		
DESIGN.	1571	MODEL	1401B-F
DETAIL.		SCALE	
CHECK.		DRAW	SII, 21.11.61
APPRO.		CHECK.	

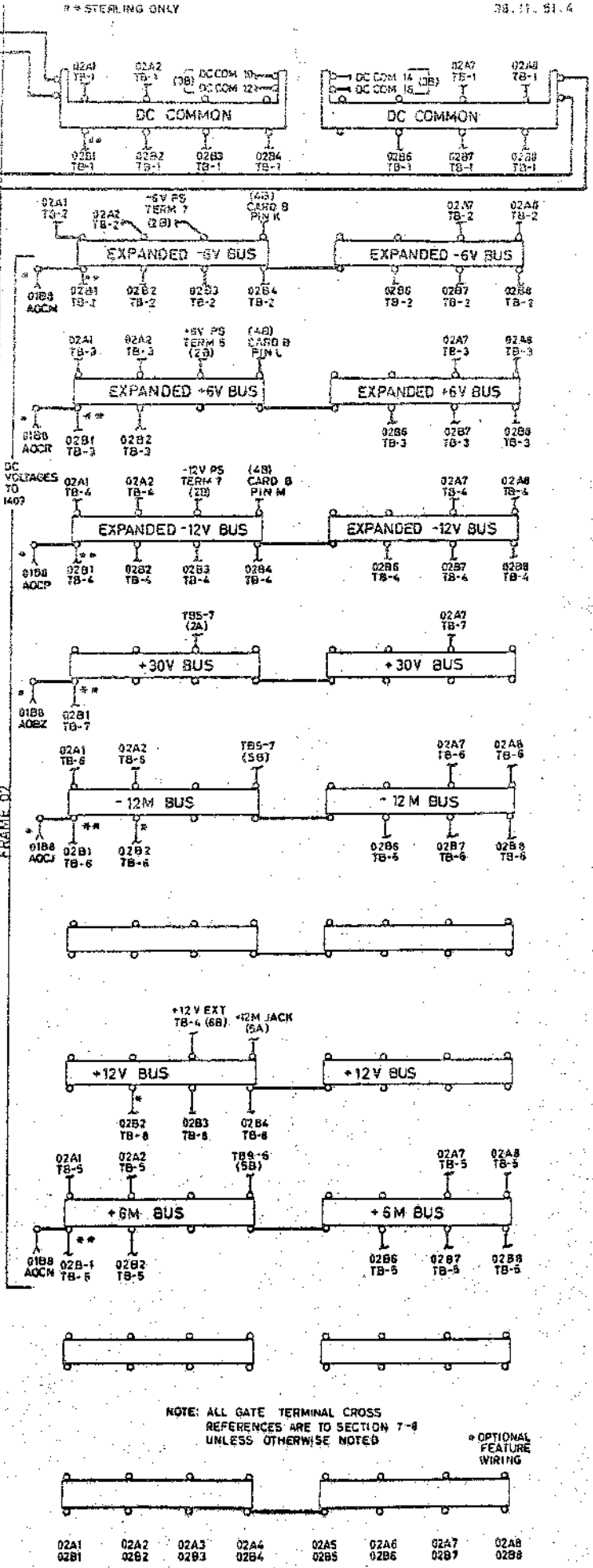
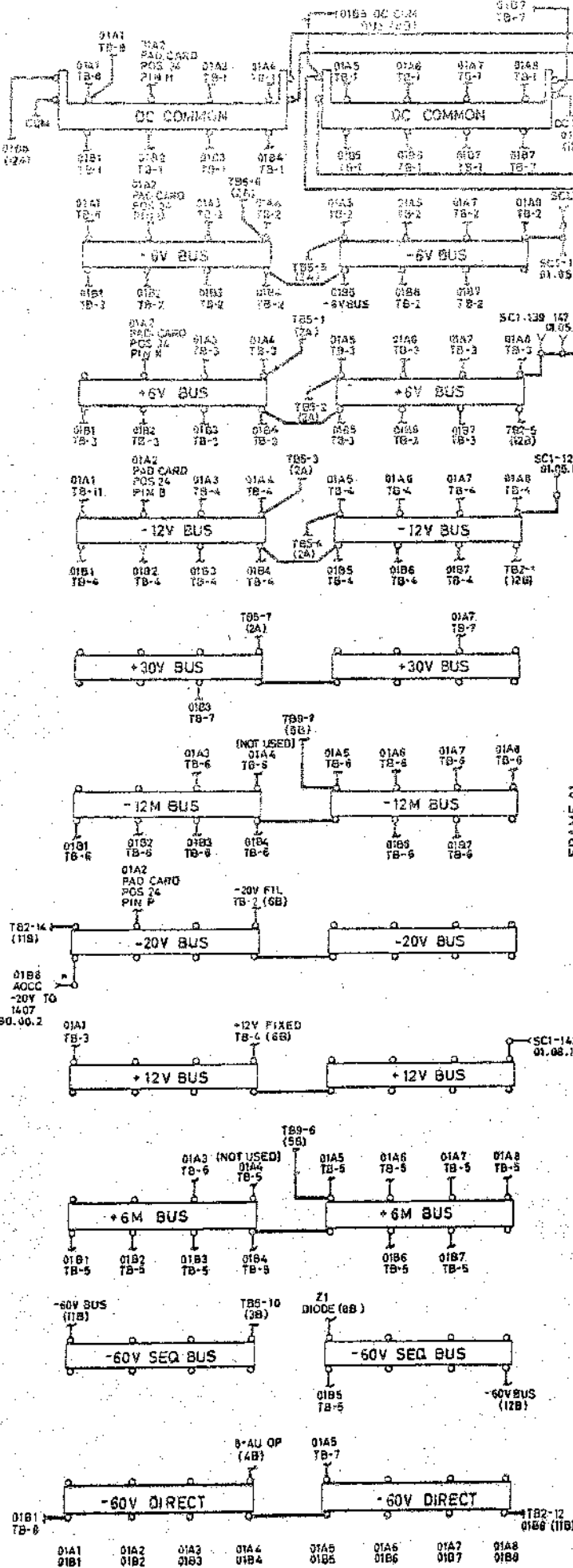
4064789

GATE TERMINAL BLOCKS - VOLTAGE DISTRIBUTION



NOTE X: ALL LAMINAR STRIP (LS) CROSS REFERENCE ARE TO SECTION 9-10

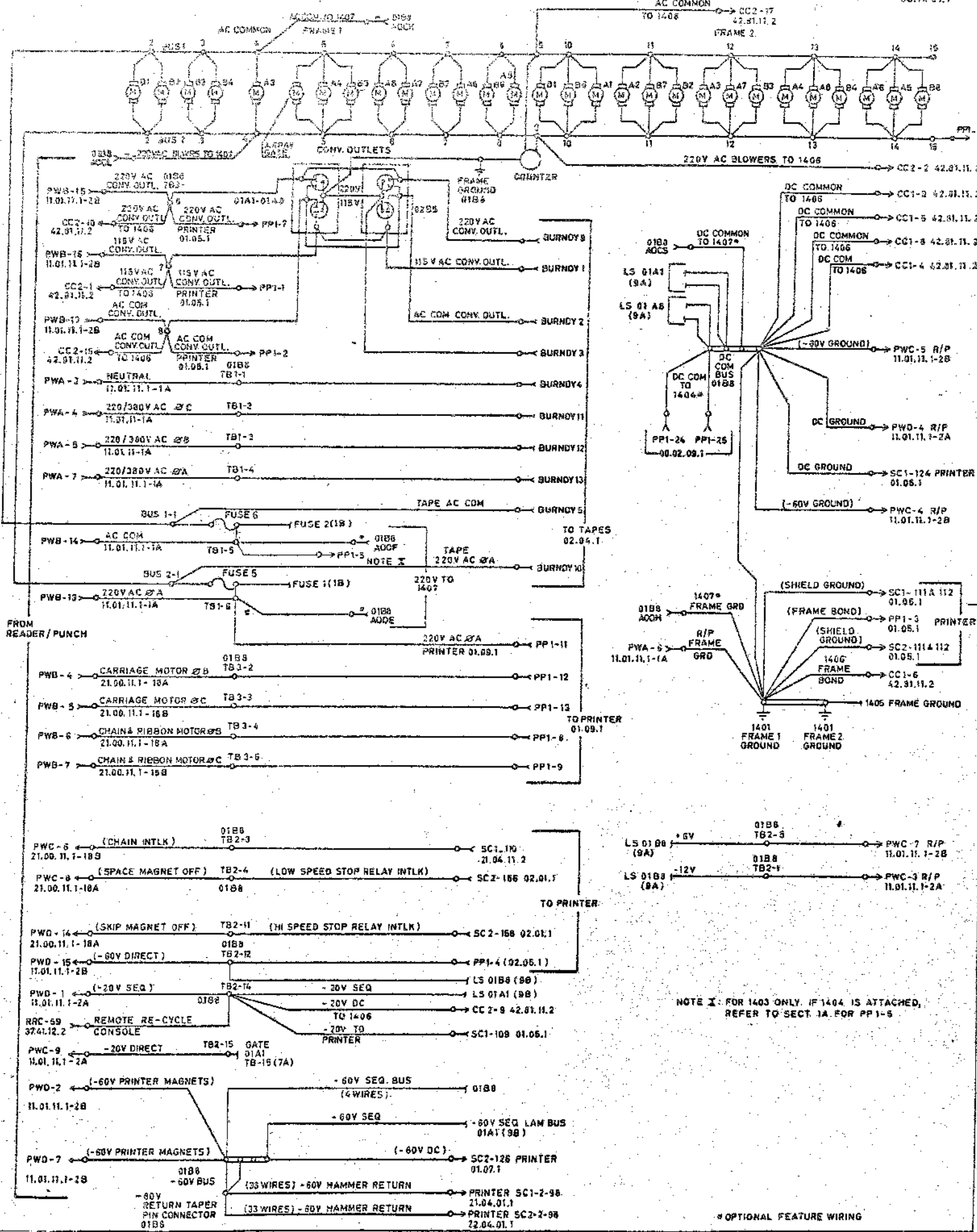
*STERLING ONLY
** OPTIONAL FEATURE WIRING



FRAME 01
FRAME 02

NOTE: ALL GATE TERMINAL CROSS REFERENCES ARE TO SECTION 7-8 UNLESS OTHERWISE NOTED

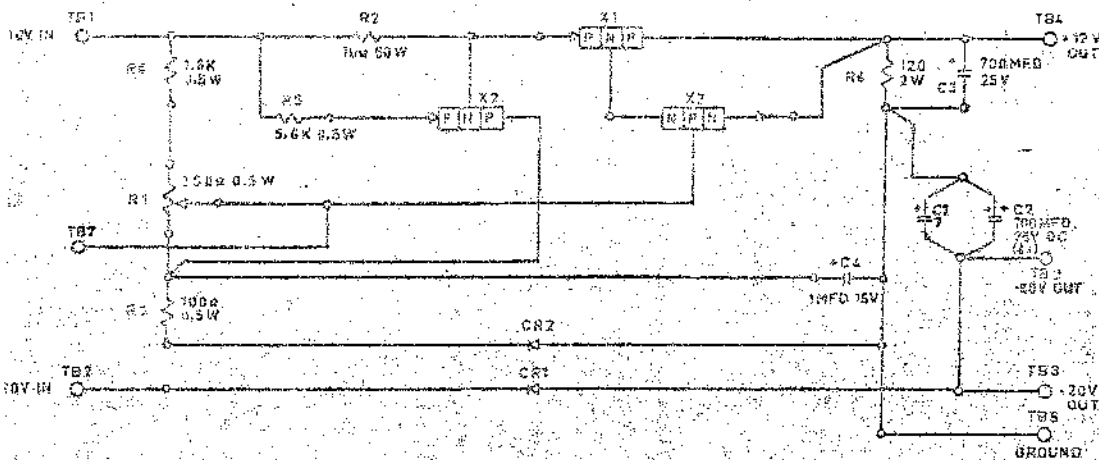
* OPTIONAL FEATURE WIRING



NOTE X: FOR 1403 ONLY. IF 1404 IS ATTACHED, REFER TO SECT. 1A. FOR PP1-5

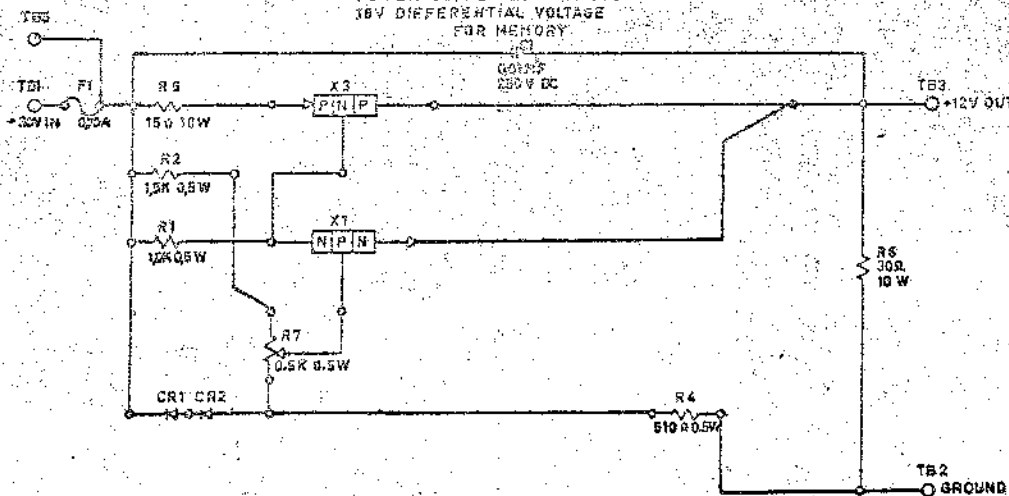
OPTIONAL FEATURE WIRING

POWER SUPPLY NO 4117 533
 +12V AT 1.5 AMP
 +20V AT 50 MILS FILLED



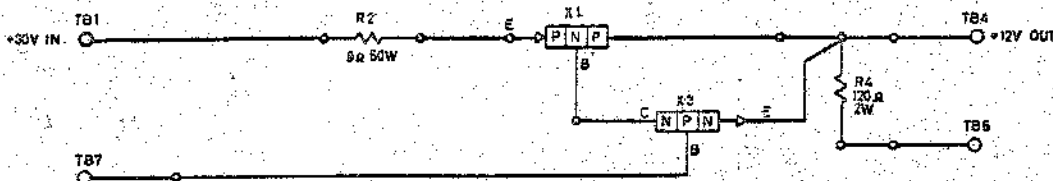
COMPONENT CHART		
CODE	DESCRIPTION	PART NO
C1	CAP 1000 MFD 25V DC	4116 298
C2	CAP 1000 MFD 25V DC	4116 298
CR1	BRIDGE RECTIFIER 200V 0.5A	4116 191
C3	DIODE (10V Zener)	4116 309
R1	RESISTOR 100K 0.5W	4117 533
R2	RESISTOR 100K 0.5W	4117 533
R3	RESISTOR 100K 0.5W	4117 533
R4	RESISTOR 120Ω 2W	4117 745
R5	RESISTOR 5.6K 0.5W	4117 533
R6	RESISTOR 100K 0.5W	4117 533
X1	TRANSISTOR POWER PNP	209 001
X2	TRANSISTOR NPN	209 007
X3	TRANSISTOR NPN	209 001
C4	CAP 1MFD 15V DC	4116 292

POWER SUPPLY NO 4117 538
 10V DIFFERENTIAL VOLTAGE
 FOR MEMORY



COMPONENT CHART		
CODE	DESCRIPTION	PART NO
C1	CAP 201 MF 250V DC	4116 191
CR1	DIODE (10V Zener)	4116 309
CR2	DIODE (10V Zener)	4116 309
R1	RESISTOR 100K 0.5W	4117 533
R2	RESISTOR 1.5K 0.5W	4117 533
R3	RESISTOR 30Ω 10W	4117 533
R4	RESISTOR 30Ω 10W	4117 533
R5	RESISTOR 15Ω 10W	4117 533
R6	RESISTOR 30Ω 10W	4117 533
R7	RESISTOR 0.5K 0.5W	4117 533
F1	FUSE 0.75A	111 295
X1	TRANSISTOR NPN	209 007
X2	TRANSISTOR POWER PNP	209 001

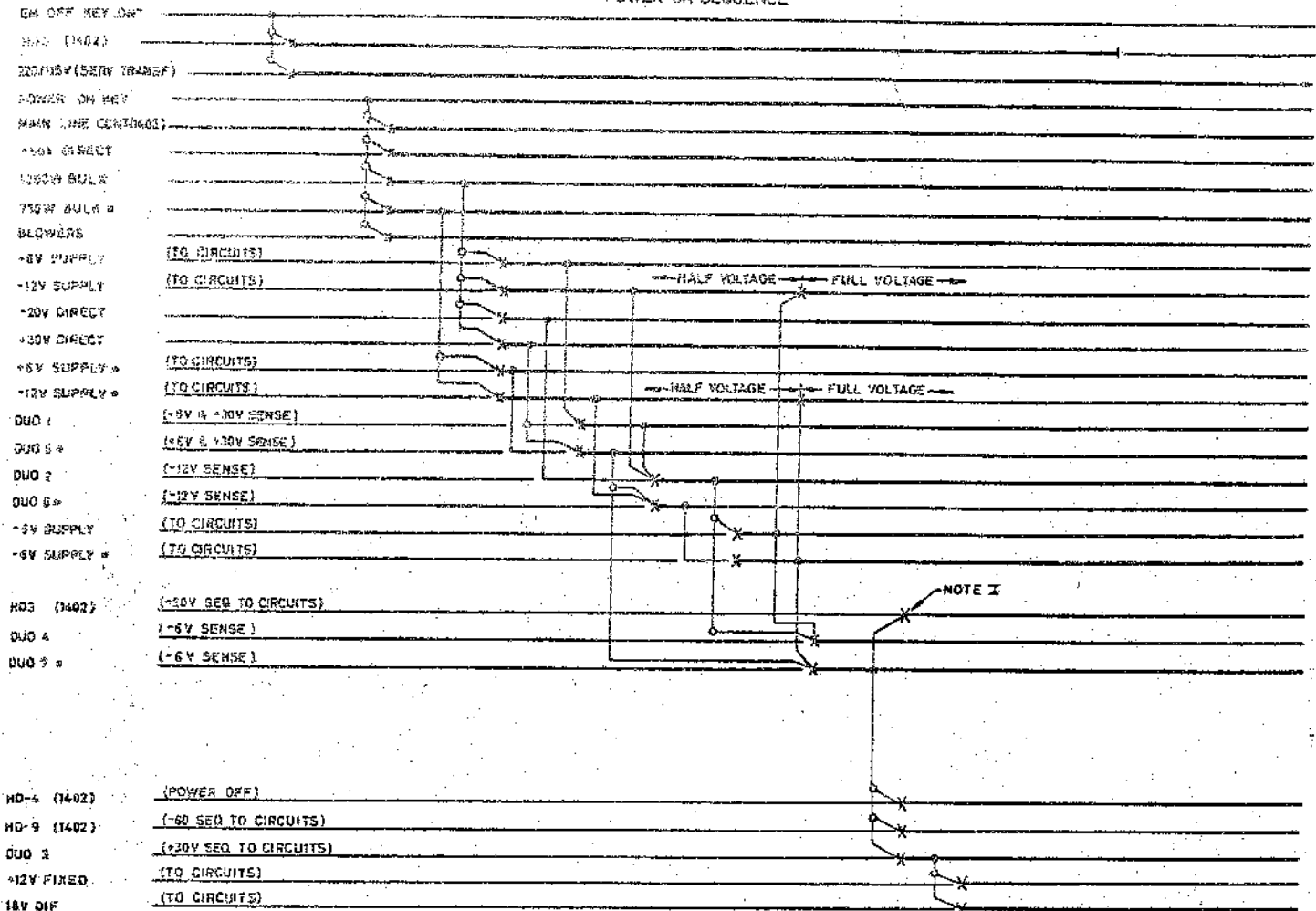
POWER SUPPLY EXTENDER 12V AT 1.5AMP
 NO. 4117 536



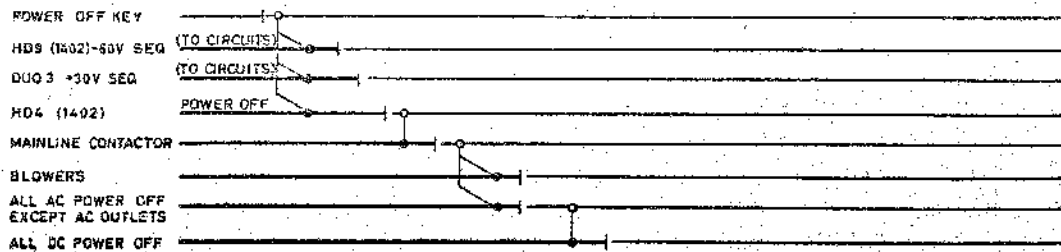
COMPONENT CHART		
CODE	DESCRIPTION	PART NO
R2	RESISTOR 9Ω 50W	4117 608
R4	RESISTOR 120Ω 2W	4117 745
X1	TRANSISTOR PNP	209 001
X2	TRANSISTOR NPN	4116 304

1401-1402
POWER ON SEQUENCE

38 II. 72.1



1401-1402
POWER OFF SEQUENCE



NOTE X: FOR SYSTEM MACHINES WITH INCREASED CORE STORAGE, THIS POINT ALSO SENSES THE 1406 +30V SENSE RELAY HD-17 FAILURE OF THE 1406 +30V SUPPLY WILL NOT ALLOW THE 1401-1402 TO SEQUENCE ANY FURTHER.

* EXPANDED (SUPPLIES IN GATES 02A3 AND 02A6)

38.11.73.1

Table with columns for DATE, TERMINAL BLOCKS, and TERMINALS (1-18).

COLOR CODING table with color names and their corresponding codes.

Table: EXTERNAL POWER CABLES - 1402 READER PUNCH TO 1401 PROCESS UNIT. Columns: 1401 DRAWING, 1401 TERMINAT, FUNCTION, 1401 TERMINAT, 1401 DRAWING.

Table: EXTERNAL POWER CABLES - 1401 PROCESS UNIT TO T29 TAPE UNITS. Columns: 1401 DRAWING, 1401 TERMINAT, FUNCTION, T29 CONNECTOR, T29 DRAWING.

Table: EXTERNAL POWER LINES-1401 PROCESS UNIT TO 1405 FILE. Columns: 1401 DRAWING, 1401 TERMINATION, FUNCTION, 1405 CONNECTOR, 1405 DRAWING.

Table: EXTERNAL POWER CABLE-1401 PROCESS UNIT TO 1405 EXP 65. Columns: 1401 DRAWING, 1401 TERMINATION, FUNCTION, 1405 CONNECTOR, 1405 DRAWING.

Table: EXTERNAL POWER LINES - 1401 PROCESS UNIT TO 1403 PRINTER. Columns: 1401 DRAWING, 1401 TERMINAT, FUNCTION, 1403 CONNECTOR, 1403 DRAWING.

Table: EXTERNAL POWER LINES - 1401 PROCESSING UNIT TO 1407 INQUIRY STATION. Columns: 1401 DRAWING, 1401 TERMINATION, FUNCTION, 1407 CONNECTOR.

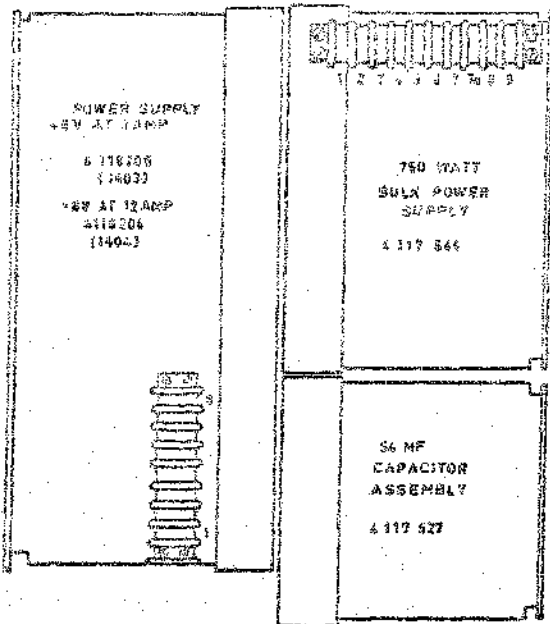
Table: EXTERNAL POWER LINES REQUIRED FOR 1404 FEATURE. Columns: 1401 DRAWING, 1401 TERMINATION, FUNCTION, 1404 FEATURE.

Table: EXTERNAL POWER LINES TO 1401 FILE. Columns: 1401 DRAWING, 1401 TERMINATION, FUNCTION, 1401 TERMINATION.

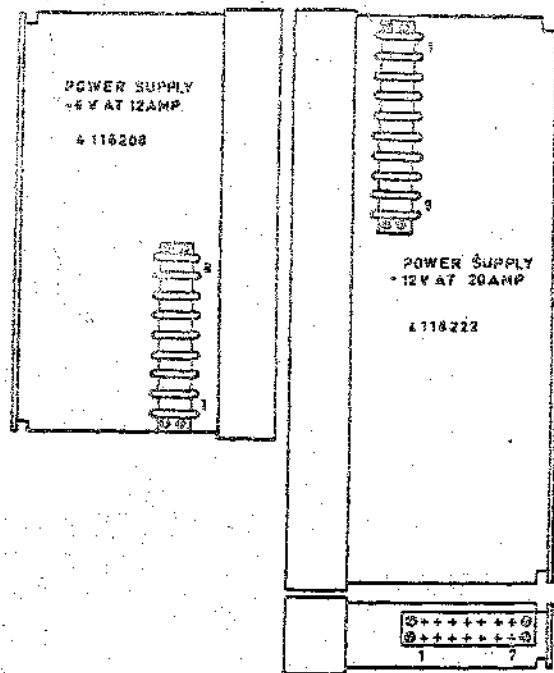
Table: COMPONENT CHART. Columns: CODE, DESCRIPTION, LOC, PART NO.

Table: RELAYS. Columns: NO, COIL, AU, AL, BU, BL, LOC, FREQ.

Table: POWER SWITCH LOCATION CHART. Columns: SWITCH, POWER, LOC.

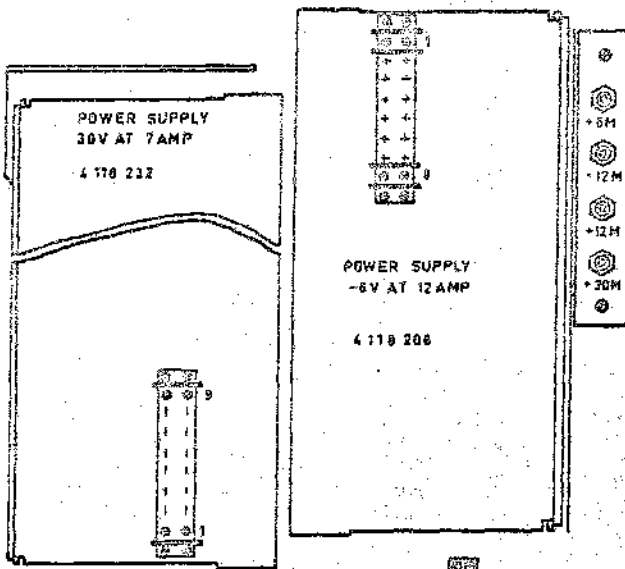


02A3



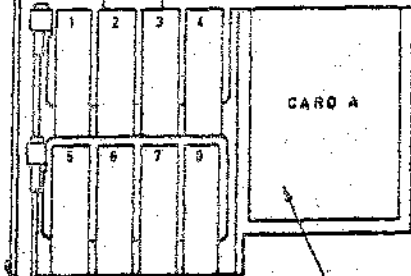
+12V 1.5 AMP EXTENDER
 IBM 4117 555 GERMAN VERSION
 722 900 US VERSION

02A6



BC COM

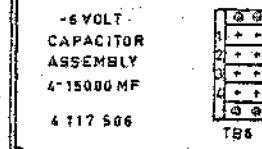
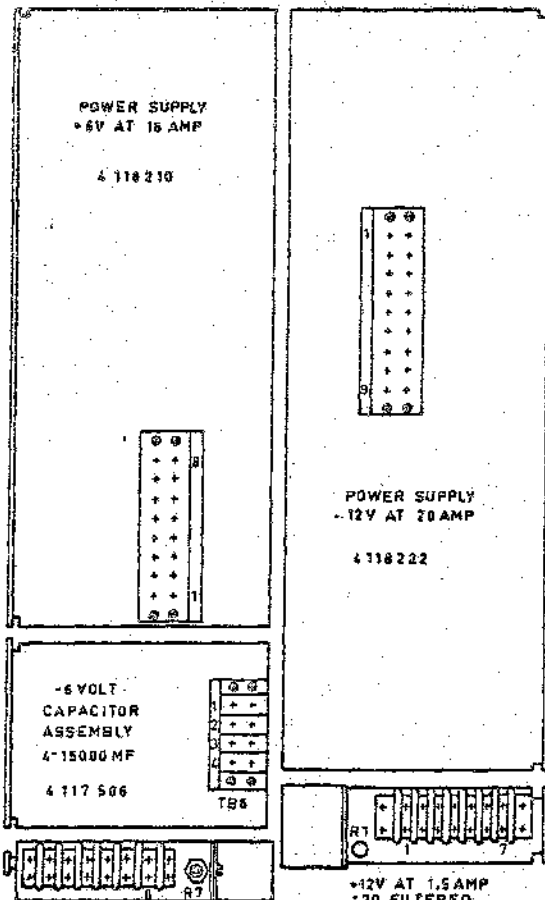
TB5



02A4 CARD B BACK SIDE



TB-9



18V DIFFERENTIAL VOLTAGE
 482 438 US VERSION
 4117 539 GERMAN VERSION

02A5

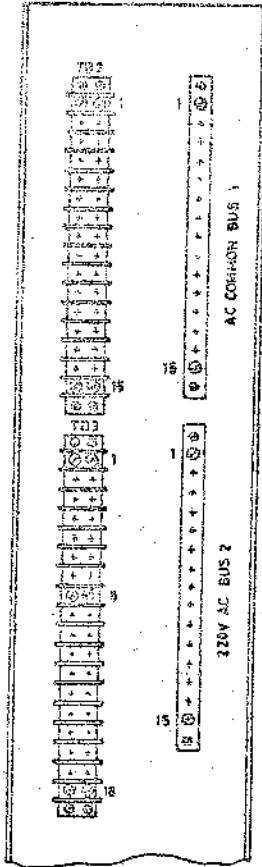
REFERENCE CHART FOR POWER SUPPLIES

OLD POWER SUPPLIES ASM				NEW POWER SUPPLIES ASM		
50 CYCLE			50 CYCLE	50 CYCLE		50 CYCLE
NAME	POWER SUPP PART NO	WIRING DIAG PART NO	POWER SUPP PART NO	POWER SUPP PART NO	WIRING DIAGR PART NO	POWER SUPP PART NO
±3V 8AMP MC	4117541	4280590	210840	—	—	—
±6V 8AMP	4117440	4280478	207204	4118205	4118207	473400
±6V 12AMP	4117441	4280471	207207	4118208	4118209	473409
±6V 16AMP	4117442	4280472	207210	4118210	4118211	473470
±12V 12AMP	4117443	4280473	207231	4118220	4118221	473500
±12V 16AMP	4117532	4280481	207234	4118240	4118241	473510
±12V 20AMP	4117444	4280474	205258	4118222	4118223	473380
±20V 6AMP	4117448	4280478	207237	4118224	4118225	477220
±30V 7AMP	4117542	4280489	210090	4118232	4118233	473560

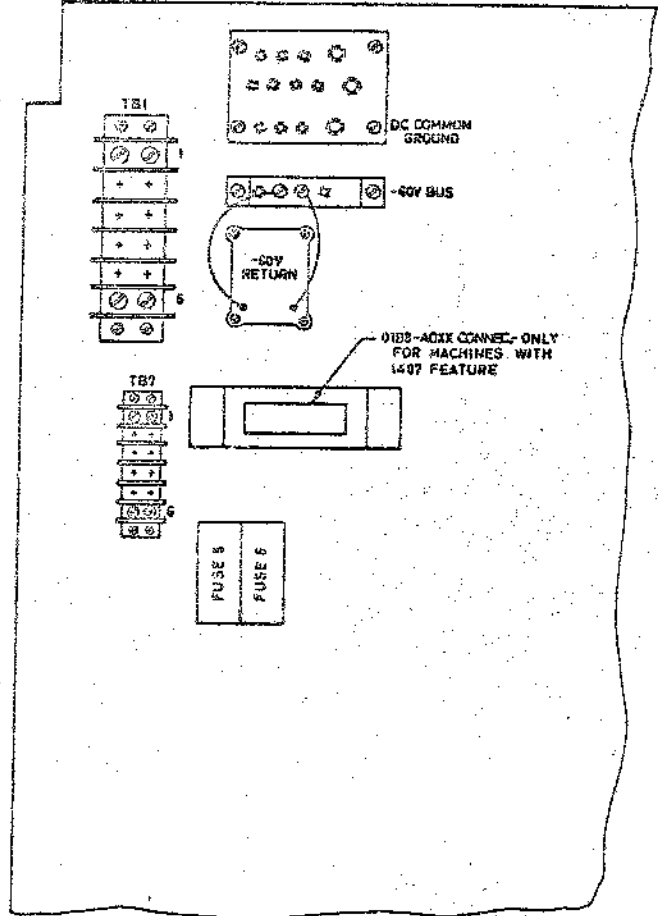
AMPLIFIER AND OVERVOLTAGE CARD				
NAME	OLD		NEW	
	AMPLIFIER CARD	O/V ASM	AMPLIFIER CARD	O/V CARD
±3V 8AMP MC	371656	—	—	—
±6V 8AMP	371656	208957	370612	370575
±6V 12AMP	371656	208957	370612	370575
±6V 16AMP	371656	208957	370612	370575
±12V 12AMP	371655	208960	370613	370576
±12V 16AMP	371655	208960	370613	370576
±12V 20AMP	371655	208960	370613	370576
±20V 6AMP	371656	208972	370607	370578
±30V 7AMP	371656	208967	370608	370578

GATE LAYOUT 01B3

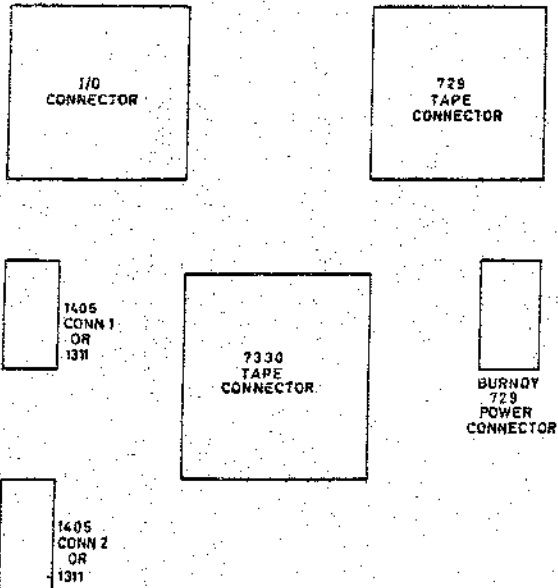
FRONT PANEL



SIDE PLATE



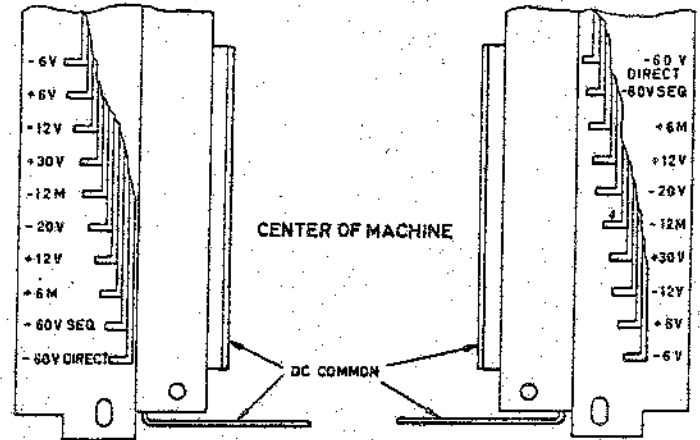
02B5 GATE LAYOUT



REAR

LAMINAR BUSSES

FRONT



CONNECTIONS FOR VOLTAGE INPUT TO GATE 01A8

TOP VIEW

CONNECTIONS FOR VOLTAGE INPUT TO GATE 01A1

IBM

WIRING DIAGRAM - POW SUPPLY

MOD. C, E OR MOD. F WITH TAPES

1401-C

ÄHNLICH T-NR. 480 255

16.4.61

1401 PROCESSING UNIT
STAGE II
SMS POWER SUPPLY INDEX

POWER SUPPLY

RATING

SCHEMATIC

4 117 541	± 3 V AT 5 A MC	4 280 590
4 118 200	± 3 V AT 5 A MC	4 118 201
4 117 440	± 6 V AT 8 A	4 280 470
4 118 206	± 6 V AT 8 A	4 118 207
4 117 441	± 6 V AT 12 A	4 280 471
4 118 208	± 6 V AT 12 A	4 118 209
4 117 442	± 6 V AT 16 A	4 280 472
4 118 210	± 6 V AT 16 A	4 118 211
4 117 443	± 12 V AT 12 A	4 280 473
4 118 220	± 12 V AT 12 A	4 118 221
4 117 448	± 20 V AT 6 A	4 280 478
4 118 224	± 20 V AT 6 A	4 118 225
4 117 445	± 20 V AT 15 A	4 280 475
4 118 226	± 20 V AT 15 A	4 118 227
4 117 542	± 30 V AT 7 A	4 280 489
4 118 232	± 30 V AT 7 A	4 118 233
4 117 444	± 12 V AT 20 A	4 280 474
4 118 222	± 12 V AT 20 A	4 118 223
4 117 449	± 60 V AT 10 A	4 280 480
4 117 404	± 60 V AT 20 A	4 280 487

SMS O/V PROTECTION SCHEMATIC

6V SUPPLIES	208948
12V SUPPLIES	208961
30V SUPPLIES	208968

SYM	DESCR	CHARGE NO	DATE	SYM	DESCR	CHARGE NO	DATE
		37902E	20.8.62				

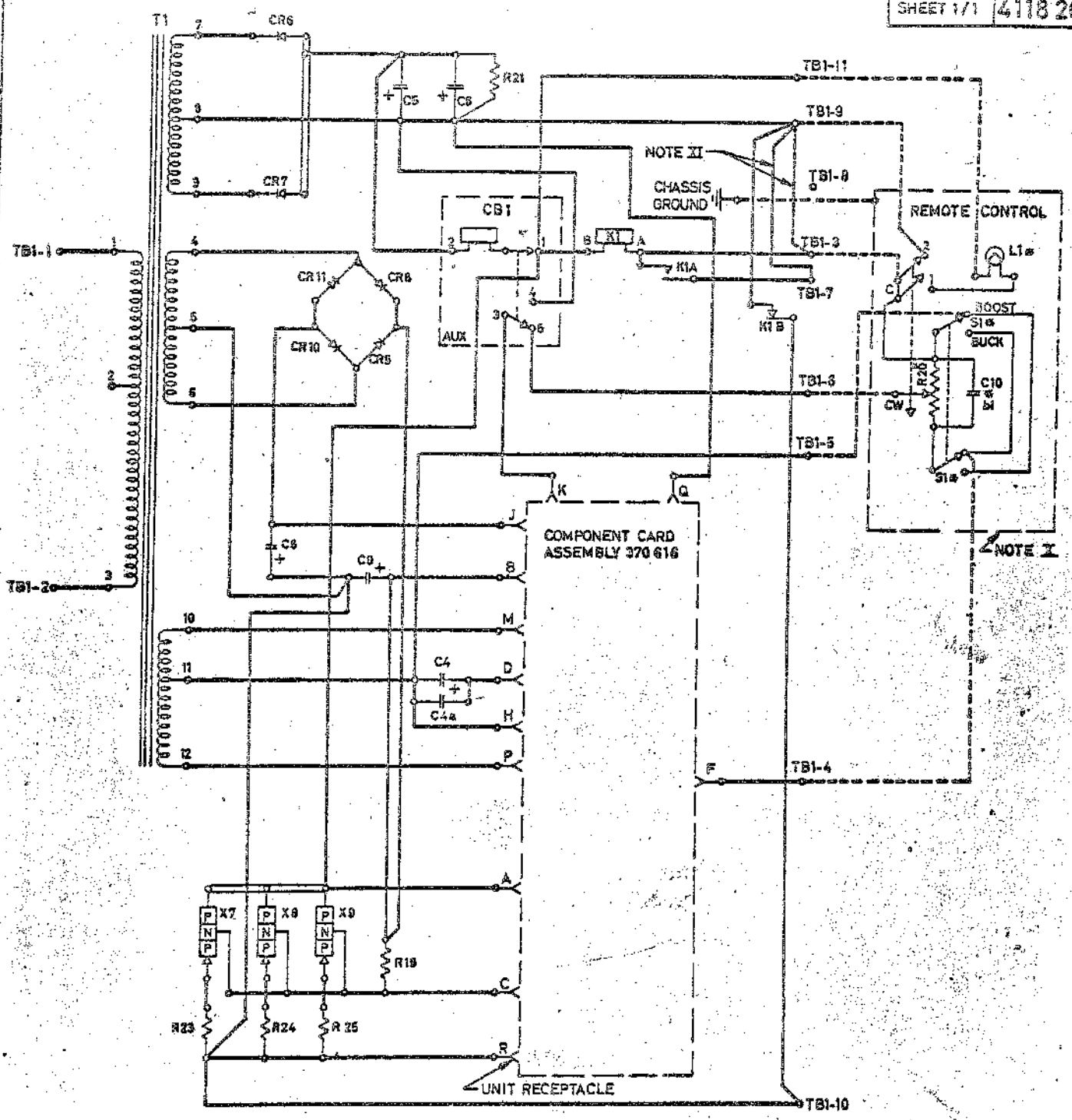
IBM			
GENERAL CHART			
FOR SMS POWER SUPPLY			
DESIGN	MOGH	1401	
DETAIL	SCALE		
CHECK	DRAW	12.7.62	
APPRO	ENCK	2.8.62	

4280532

A

B

4118 201K



COMPONENT CHART

CODE	DESCRIPTION	CODE	DESCRIPTION
C4 + 4a	CAP. 700 MFD 25V DC	R20 *	
C5 + 6	CAP. 15000 MFD 13 V DC	R21	RESISTOR 240 OHM 2W
C8 + 9	CAP. 700 MFD 25V DC	R23 - 25	RESISTANCE WIRE 0.1 OHM
C10 *	CAP. 50 MFD 12V DC bipolar	S1 *	TRANSFORMER
CB1	CIRCUIT BREAKER	T1	TERMINAL BLOCK
CR6 + 7	DIODE	TB1	TRANSISTOR TYPE 1Q8
CR8 - 11	DIODE	X7 - 9	RELAY
K1	RELAY	L1 *	RESISTOR 310 OHM 0.5W
R19	RESISTOR 310 OHM 0.5W		

NOTE

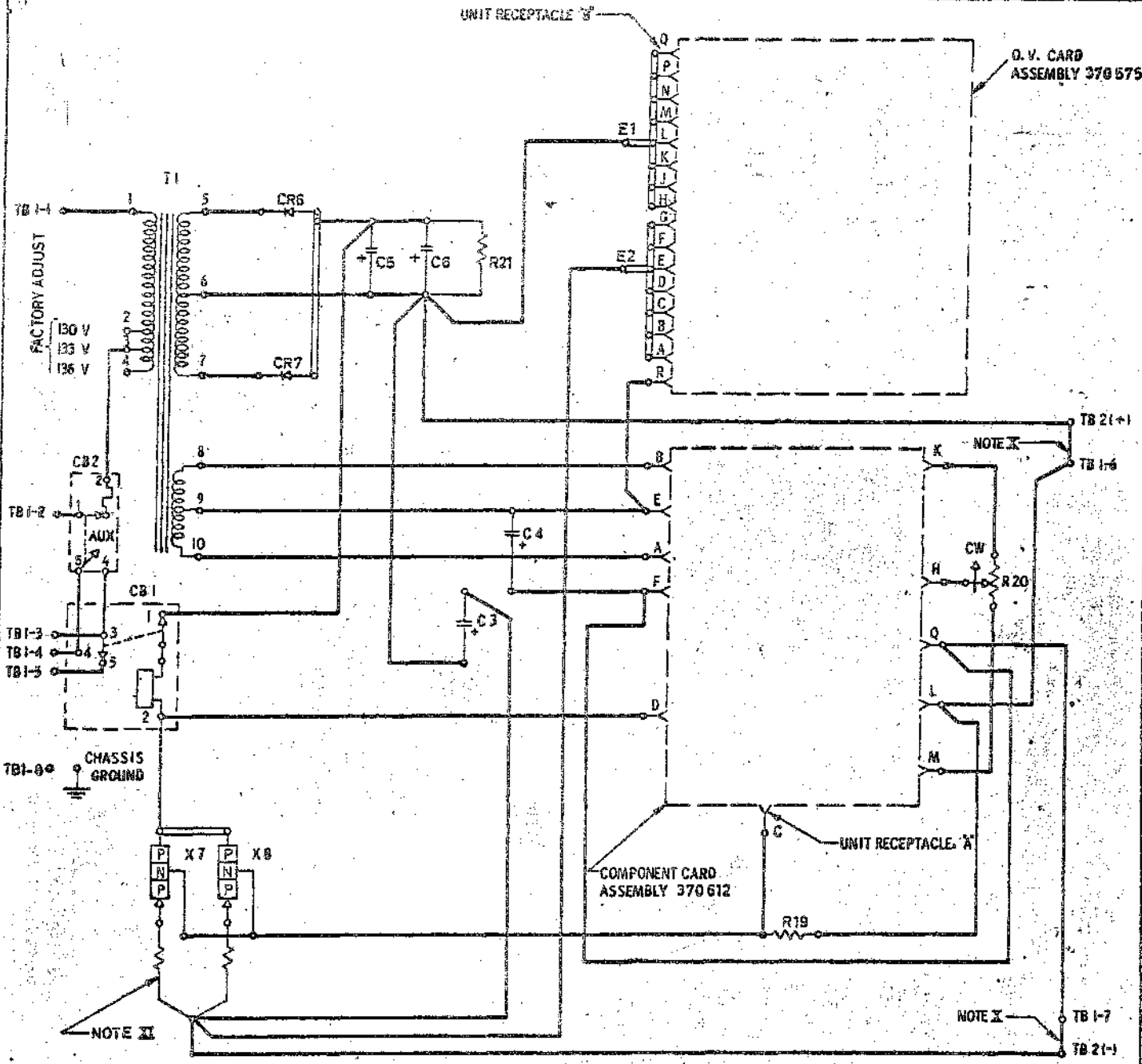
- I - REMOTE CONTROL ASSEMBLY CONSISTING OF 210 946 (POT-SWITCH ASM) AND 4 116 830 (SWITCH), SUPPLIED WITH PORTABLE UNIT ONLY * COMPONENT ON REMOTE ASSEMBLY
- II - REMOVE JUMPER FOR PORTABLE APPLICATION APPLY JUMPER AS SHOWN WITH DOTTED LINE FOR SPECIAL SYSTEM REQUIREMENT.

SIMILAR TO 477 281A

SYM	MEMO	CHKD	DATE	SYM	MEMO	CHKD	DATE
			37982 E 20.2.62				
			37982 F 26.7.62				
			1653 29.11.62				
			1774 7.3.63				
			1906 25.7.63				

IBM	
WIRING DIAGRAM - POWER SUPPLY	
3V DC AT 5A MC 50 CY/S	
DESIGN	8058
CHECK	3.7.62
APPROV	3.8.62

4118 207



COMPONENT CHART

CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP. 8000 MFD 12V DC	R20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP. 700 MFD 25V DC	R21		RESISTOR 100 OHM 2 W
C5-6		CAP. 15000 MFD 15V DC			
CB1		CIRCUIT BREAKER			
CB2		CIRCUIT BREAKER	T1		TRANSFORMER
CR6-7		DIODE	TB1		TERMINAL BLOCK
E1-2		BUS PLATE	TB2		TERMINAL BLOCK
A & B		RECEPTACLE	X7-8		TRANSISTOR TYPE 108
R19		RESISTOR 100 OHM 2W			

NOTES

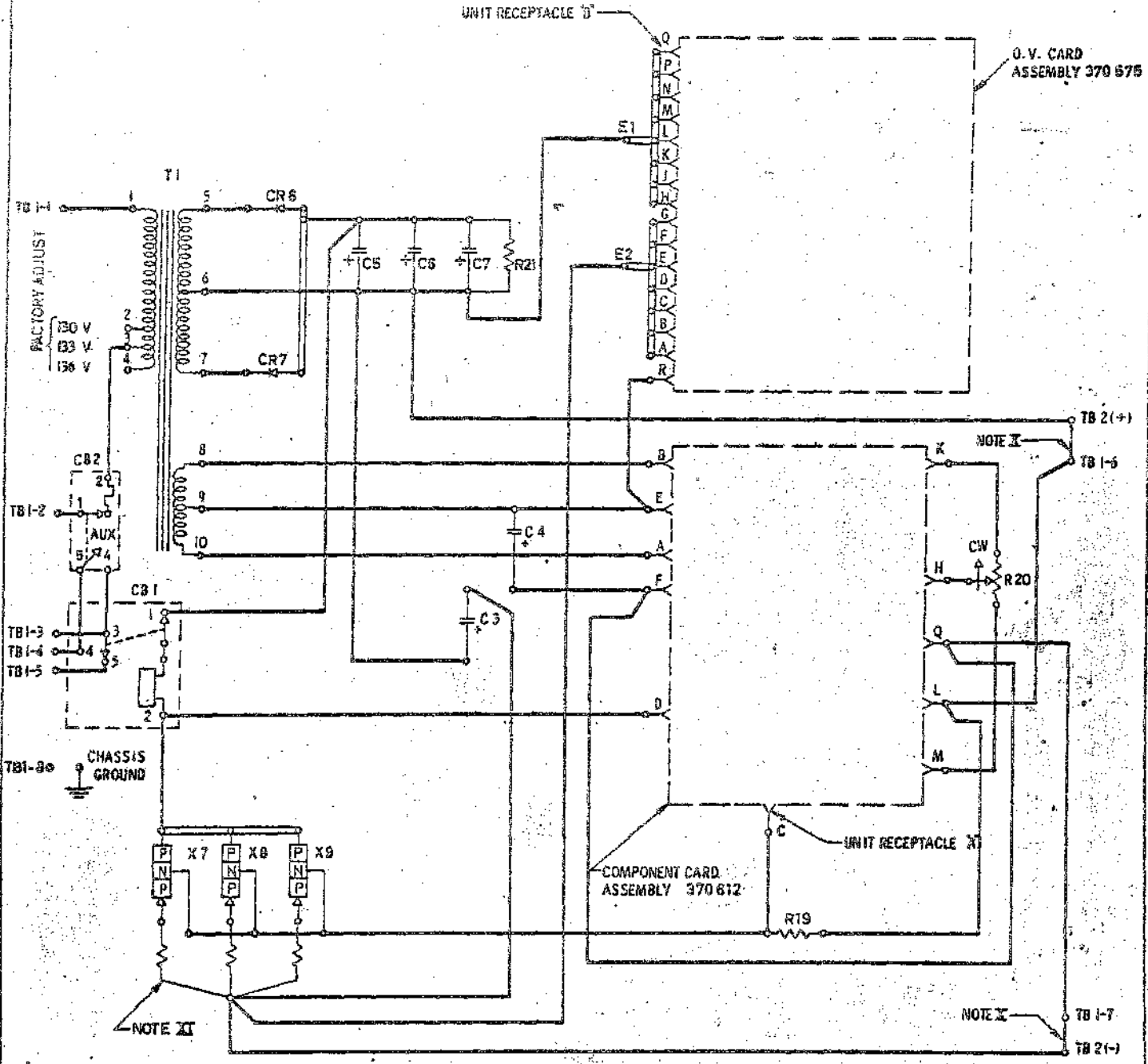
- X FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
- XI RESISTANCE WIRE 0.1 OHM EACH (2x)

SIMILAR TO 473 401C

SYM	MICRO	EC	CHANGE-NO	DATE	SYM	MICRO	EC	CHANGE-NO	DATE
			37922E	20.8.62					
			1774B	22.3.63					

IBM			
WIRING DIAGRAM-POWER SUPPLY			
6V DC AT 0A 50 CV/s			
DESIGN	SCALE	8053	
DRAWN	DATE	10.2.62	
CHECK	CHECK	BA 3.7.62	

4118209



COMPONENT CHART

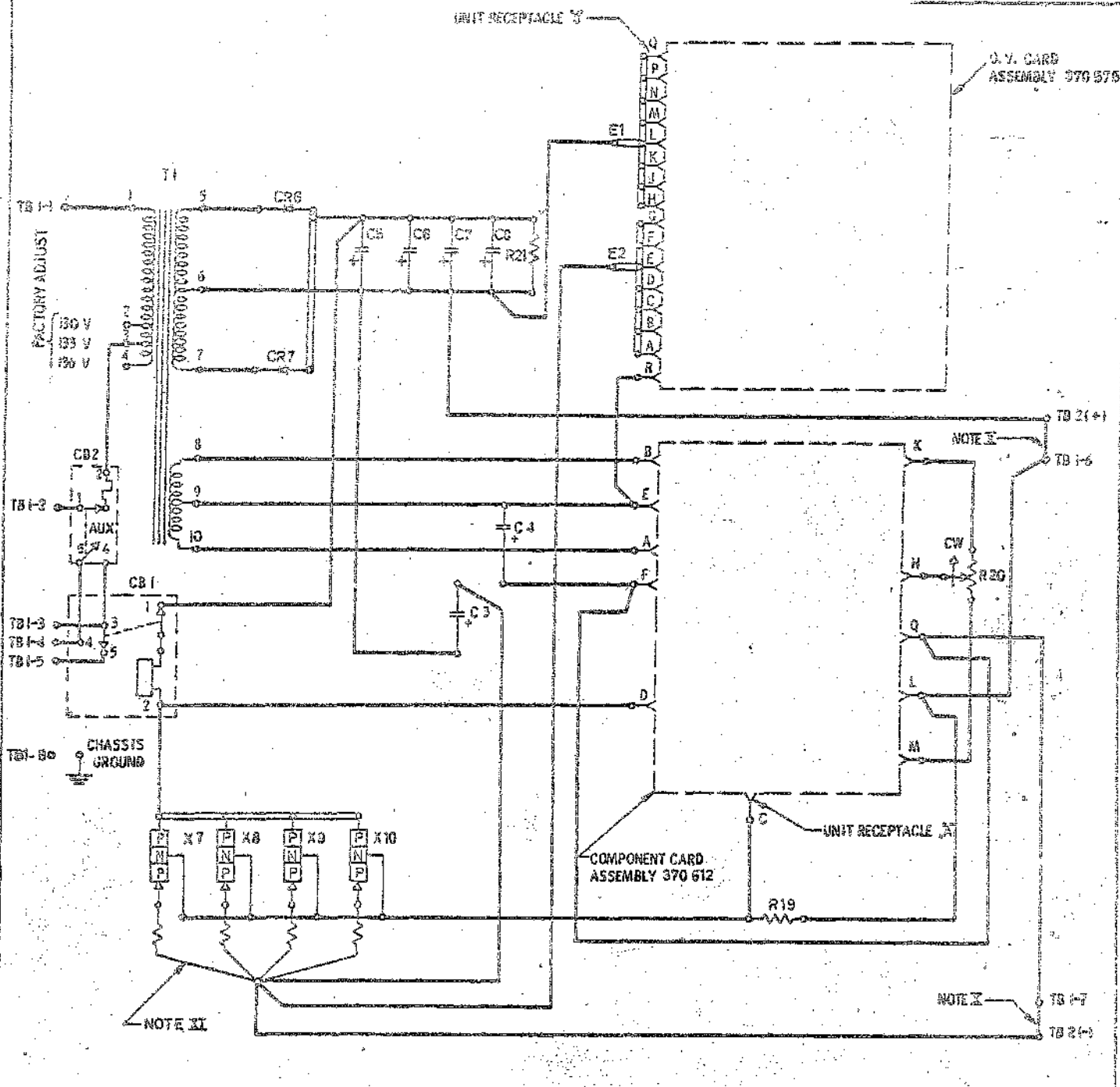
CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP. 8000 MFD 12V DC	R20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP. 700 MFD 25V DC	R21		RESISTOR 70 OHM 5 W
C5-7		CAP. 15000 MFD 13V DC			
CR6-7		DIODE	T1		TRANSFORMER
E1-2		BUS PLATE	TB1		TERMINAL BLOCK
A & B		RECEPTACLE	TB2		TERMINAL BLOCK
R19		RESISTOR 100 OHM 2 W	X7-9		TRANSISTOR TYPE 108

- NOTES
- X FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
 - XI RESISTANCE WIRE 0.1 OHM EACH (3x)

SIMILAR TO 473 481 C

DATE	BY	REVISION	DATE	BY	REVISION
20.3.62	E	1	22.3.63	B	2
1774 B					

IBM	
WIRING DIAGRAM-POWER SUPPLY	
6 V DC AT 12 A 50 CY/S	
DESIGN	8068
CHECK	1.8.62
DATE	1.8.62



COMPONENT CHART

CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP. 8 000 MFD 12V DC	R 20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP. 5 800 MFD 20V DC	R 21		RESISTOR 50 OHM 5W
C5-8		CAP. 15 000 MFD 13V DC			
CB1		CIRCUIT BREAKER			
CB2		CIRCUIT BREAKER	T1		TRANSFORMER
CR6-7		DIODE	TB1		TERMINAL BLOCK
E1-2		SUS PLATE	TB2		TERMINAL BLOCK
A & B		RECEPTACLE	X7-10		TRANSISTOR TYPE 108
R19		RESISTOR 100 OHM 2W			

- NOTES
- X FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
 - XI RESISTANCE WIRE 0.1 OHM EACH (40)

SIMILAR TO 493 471 D

DATE	ORIGIN	CHANGED BY	DATE	REASON	DATE	ORIGIN	DATE
			27.10.52	20.9.52			
			17.7.53	29.3.53			

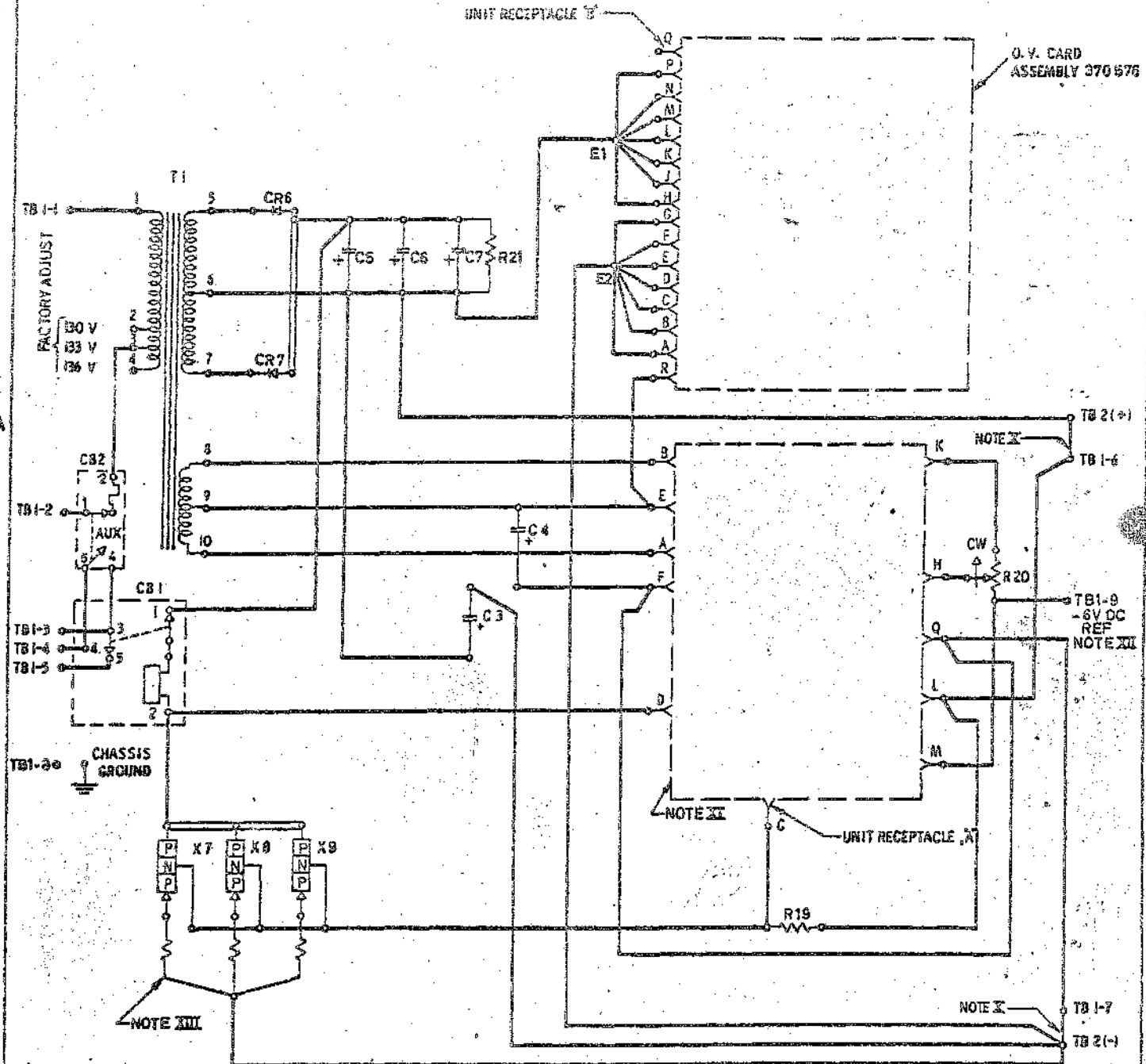
IBM		
WIRING DIAGRAM - POWER SUPPLY		
5V DC AT 15A 50 C/P'S		
DESIGN	MODEL	3083
DRAWN	DATE	
CHECK	DATE	1.5.52
TEST	DATE	1.5.52

4118611

A

B

4118221



COMPONENT CHART

CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP 11000 MFD 20V DC	R20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP 700 MFD 25V DC	R21		RESISTOR 100 OHM 10 W
C5-7		CAP. 11000 MFD 20V DC			
CB1		CIRCUIT BREAKER			
CB2		CIRCUIT BREAKER	T1		TRANSFORMER
CR6-7		DIODE	TB1		TERMINAL BLOCK
			TB2		TERMINAL BLOCK
E1-2		CONNECTOR			
A & B		RECEPTACLE	X7-9		TRANSISTOR TYPE 100
R19		RESISTOR 200 OHM 2W			

NOTES

- I FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
- II FOR REFERENCE TO GROUND USE COMPONENT CARD ASSEMBLY 370610
- III FOR REFERENCE TO -5V DC USE COMPONENT CARD ASSEMBLY 370613
- III RESISTANCE WIRE 0.1 OHM EACH (3w)

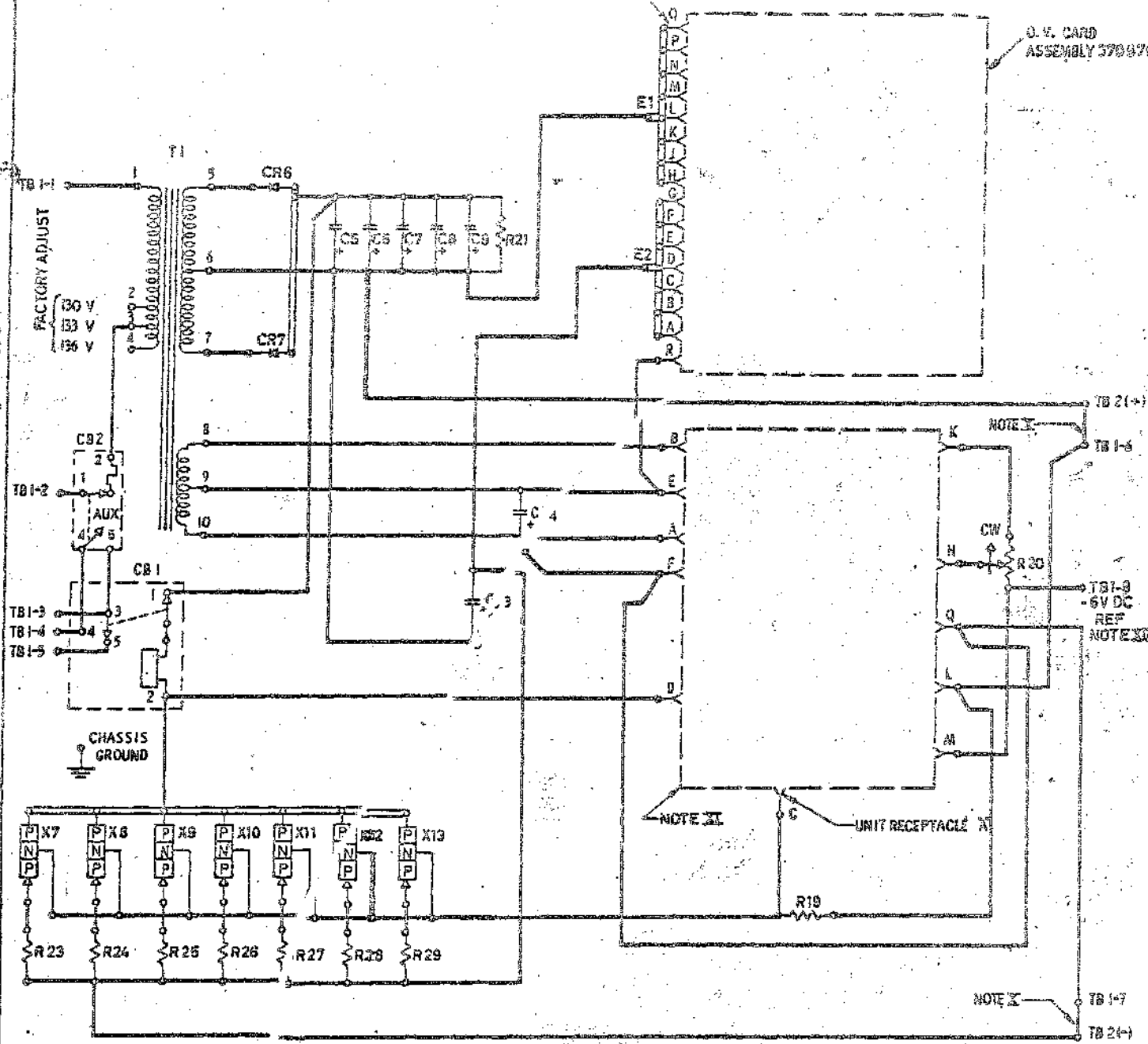
SIMILAR TO 473501C

DATE	ICD	EC	CHARGE-NO	DATE	EXT	ICD	EC	CHARGE-NO	DATE
			37982E	20.2.62					
			1774A	7.3.63					

IBM	
NAME WIRING DIAGRAM-POWER SUPPLY	
12V DC AT 12A 50 CV/s	
DESIGN	MODEL 8068
DRAWN	SCALE
CHECK	DATE 11.7.62
APPROV	CHECK 29 3.8.62

UNIT RECEPTACLE

O. V. CARD ASSEMBLY 370076



NOTES

- I FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
- II FOR REFERENCE TO GROUND USE COMPONENT CARD ASSEMBLY 370 810
- III FOR REFERENCE TO -6V DC USE COMPONENT CARD ASSEMBLY 370619

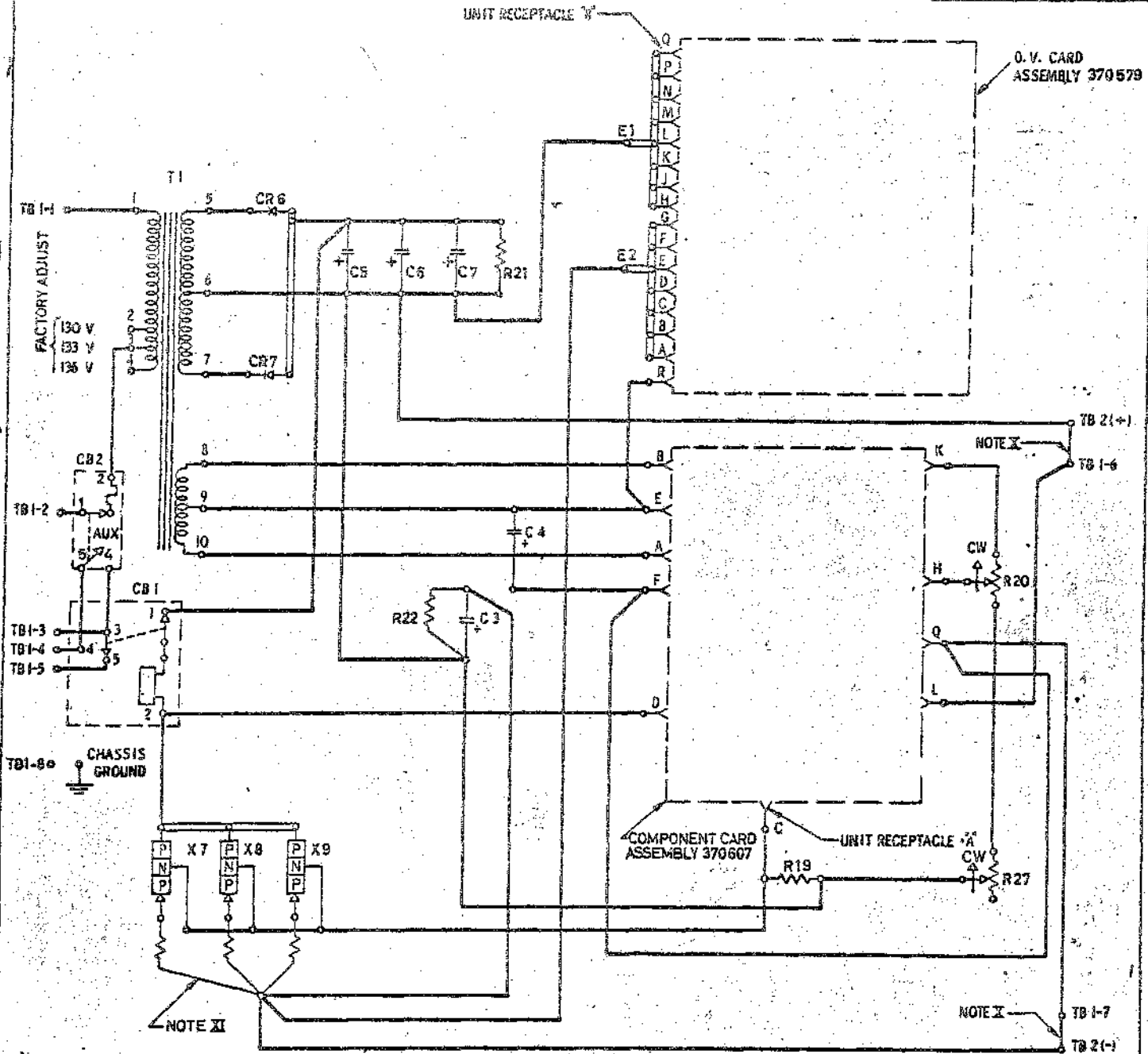
COMPONENT CHART

CODE	DESCRIPTION	CODE	DESCRIPTION
C3	CAP. 5 500 MFD 20V DC	R 20	POTENTIOMETER 250 OHM 0.5 W
C4	CAP. 700 MFD 25V DC	R 21	RESISTOR 75 OHM 10W
C5-9	CAP. 11 000 MF 20V DC	R23-29	RESISTANCE WIRE 0.1 OHM
CB1	CIRCUIT BREAKER	T1	TRANSFORMER
CB2	CIRCUIT BREAKER	TB1	TERMINAL BLOCK
CR6-7	DIODE	TB2	TERMINAL BLOCK
E1-2	BUS PLATE	Z 7-13	TRANSISTOR TYPE 10B
A & B	RECEPTACLE		
R19	RESISTOR 20 0 OHM 2W		

SIMILAR TO 473 381 D

REV	DATE	BY	CHKD	APPD
1	37932E 20-8-62			
2	7653 20-11-62			
3	7774 7-9-63			

IBM			
WIRING DIAGRAM - POWER SUPPLY			
12V DC AT 20A 50 CV/S			
DESIGN	WORK	DATE	BY
			6088
CHECK	DATE	BY	5.7.62
APPR.	DATE	BY	2.3.62



COMPONENT CHART

CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP 5000 MFD 55V DC	R20		POTENTIOMETER 500 OHM 0.5 W
C4		CAP 100 MFD 60V DC	R21		RESISTOR 100 OHM 17W
C5-7		CAP 10.000 MFD 30V DC	R22		RESISTOR 220 OHM 5 W
CB1		CIRCUIT BREAKER	R27		POTENTIOMETER 2.5K 1.5W
CB2		CIRCUIT BREAKER	T1		TRANSFORMER
CR6-7		DIODE	TB1		TERMINAL BLOCK
E1-2		BUS PLATE	TB2		TERMINAL BLOCK
A & B		RECEPTACLE	X7-9		TRANSISTOR TYPE 108
R19		RESISTOR 250 OHM 5 W			

NOTES

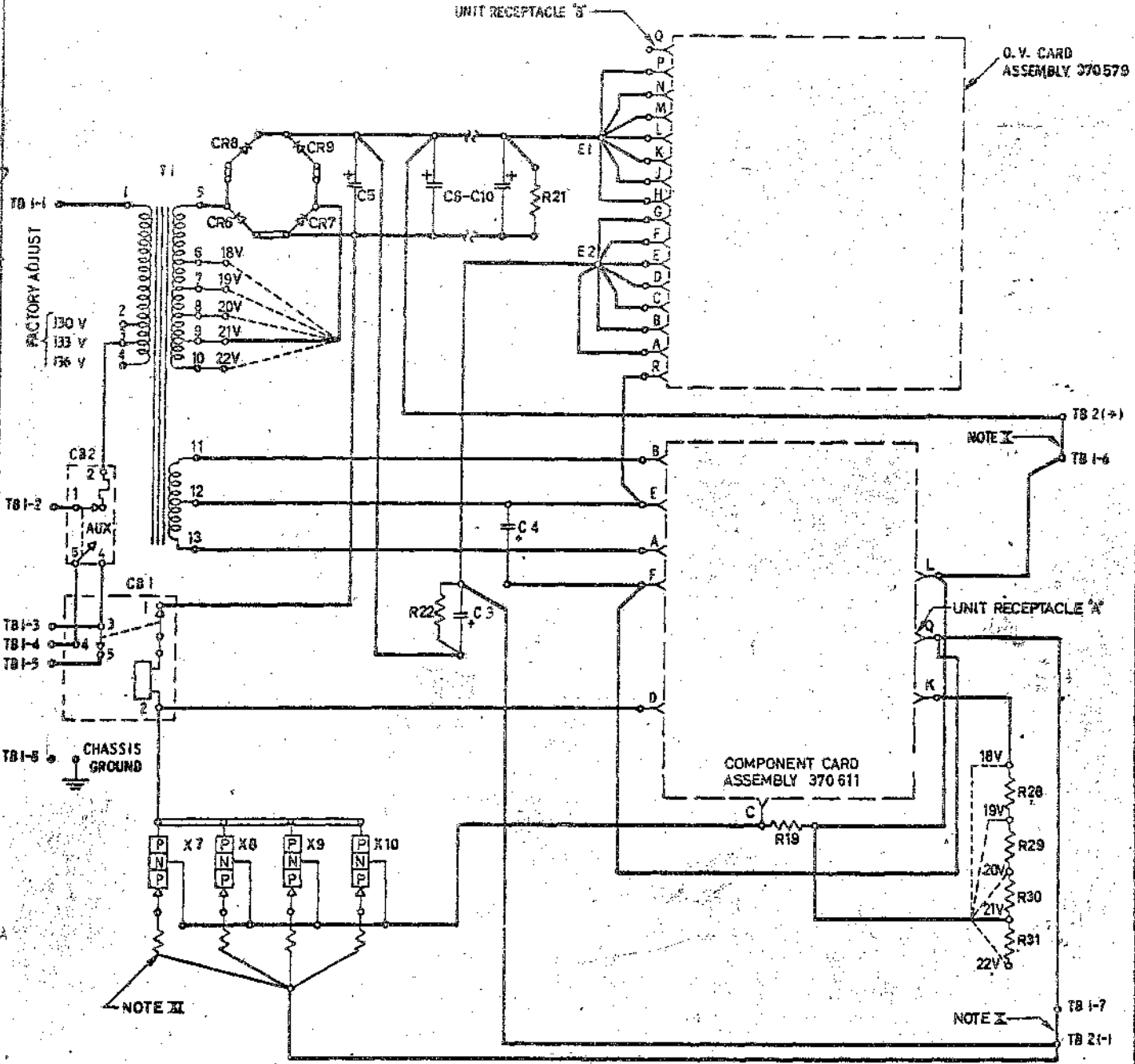
- I FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
- II RESISTANCE WIRE 0.1 OHM EACH (4x)

SIMILAR TO 477221 C

BY	DATE	CHKD	DATE	BY	DATE	CHKD	DATE
	20.8.62						
	29.3.62						

IBM			
WIRING DIAGRAM-POWER SUPPLY			
20V DC AT 6A 50 CY/S			
DESIGN	MODEL	8068	
DATE	YEAR		
CHECK	DATE	BY	L. S. 62
APPROV	DATE	BY	S. S. 62

4118227



- NOTES**
- I** FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
 - II** RESISTANCE WIRE 0.1 OHM EACH (5#)

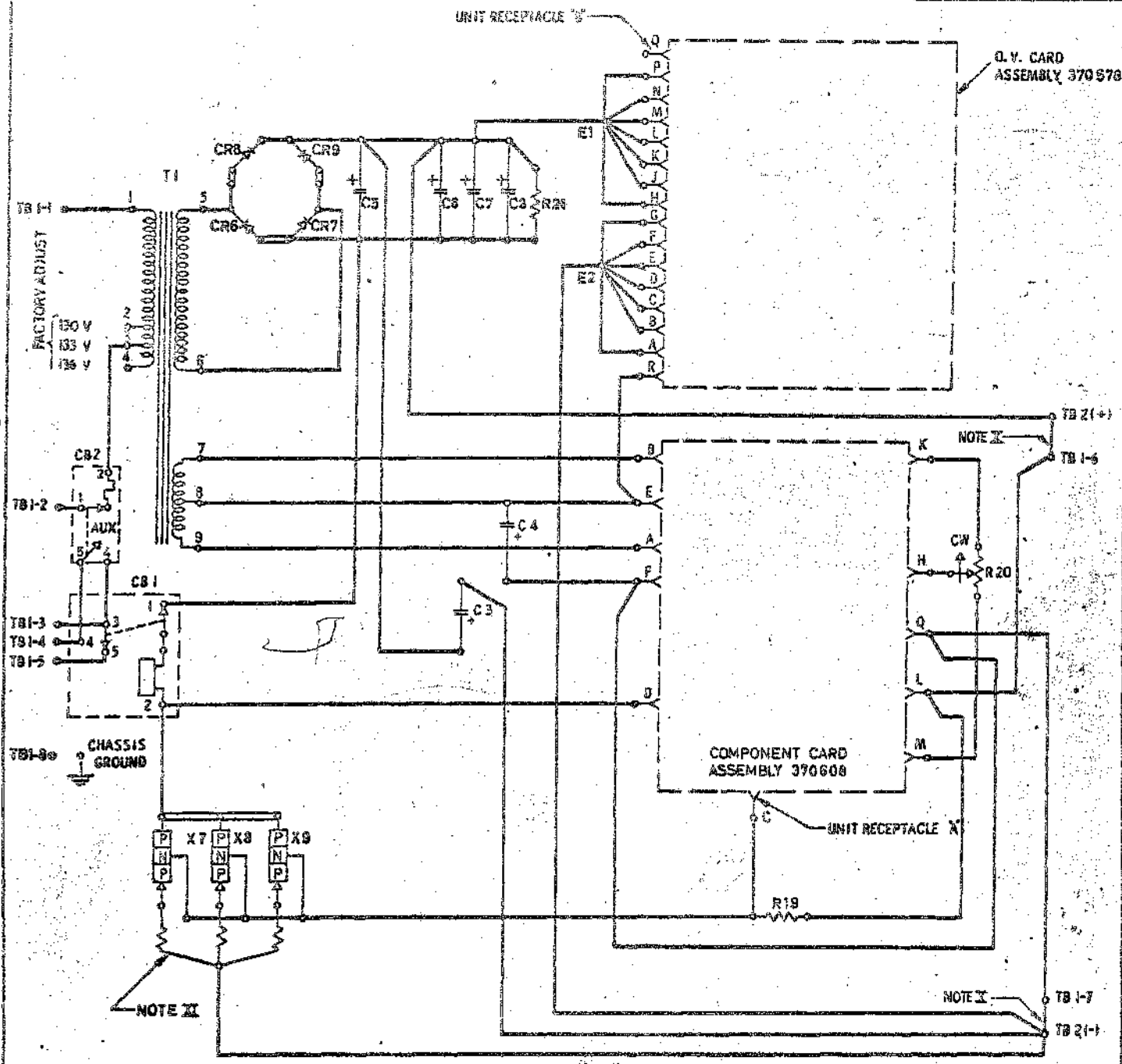
COMPONENT CHART					
CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP. 10 000MFD 30V DC			
C4		CAP. 700MFD 25V DC	R 21		RESISTOR 50 OHM 35W
C5-10		CAP. 10 000MFD 30V DC	R 22		RESISTOR 100 OHM 10 W
CB1		CIRCUIT BREAKER	R28-31		RESISTOR 200 OHM 5 W
CB2		CIRCUIT BREAKER	T1		TRANSFORMER
CR6-9		DIODE	TB 1		TERMINAL BLOCK
E1-2		CONNECTOR	TB 2		TERMINAL BLOCK
A & B		RECEPTACLE			
R19		RESISTOR 250 OHM 5 W	X7-10		TRANSISTOR TYPE 108

SIMILAR TO 473431 D

REV	INSTR	FILE	PC	CHANGE NO	DATE	BY	CHKD	APPD	DATE
				37982E	20.8.62				
				37982F	26.8.62				
				1774A	7.9.62				
				37982	6.9.62				

IBM			
WIRING DIAGRAM - POWER SUPPLY			
20V DC AT 15A 50 CY/S			
DESIGN		MODEL	8068
DATE		DRW	
CHECK		CHKD	11.7.62
APPD		CHKD	3.8.62

4118233



- NOTES
- I FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
 - II RESISTANCE WIRE 0.1 OHM EACH (5x)

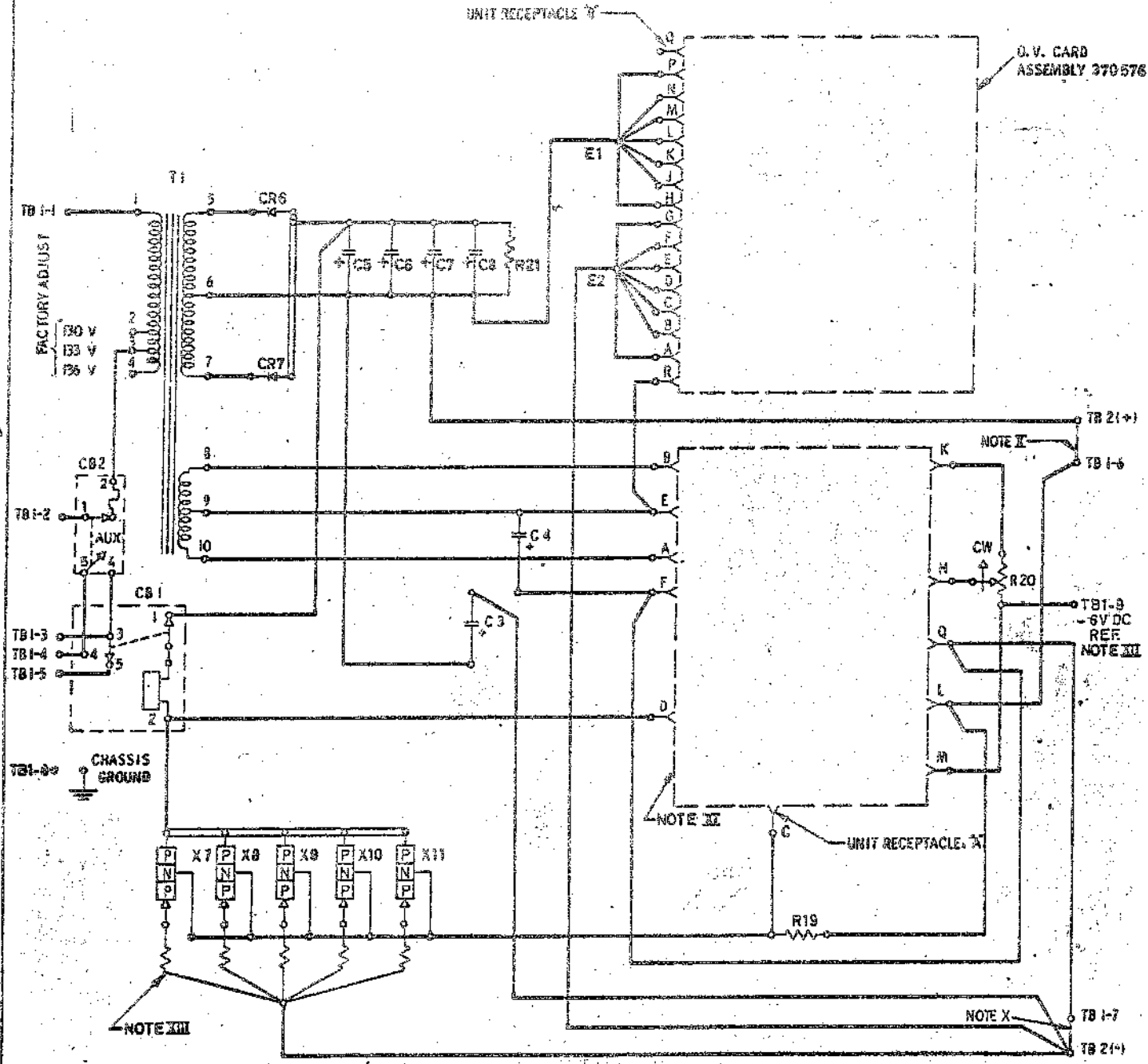
COMPONENT CHART					
CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP. 2500 MFD 50V DC	R20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP. 700 MFD 25V DC	R21		RESISTOR 100 OHM 25 W
C5-7		CAP. 5000 MFD 55V DC			
C8		CAP. 2500 MFD 50V DC			
CB1		CIRCUIT BREAKER	T1		TRANSFORMER
CB2		CIRCUIT BREAKER	TB1		TERMINAL BLOCK
CR6-9		DIODE	TB2		TERMINAL BLOCK
E1-2		CONNECTOR	X7-9		TRANSISTOR TYPE 108
A & B		RECEPTACLE	R19		RESISTOR 500 OHM 5W

SIMILAR TO 473 661C

REV	MICRO P/W	CC	CHANGE NO	DATE	BY	MICRO P/W	CC	CHANGE NO	DATE
			37382 E 20.8.62						
			1779 A 7.3.63						

IBM			
NAME WIRING DIAGRAM-POWER SUPPLY			
30V DC AT 7A 50 CY/S			
DESIGN	MODEL	3068	
DETAIL	CC		
DRAWN	DATE	11.7.62	
NO	REV	3.3.62	

4110641



- NOTES**
- I FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB 1-6 AND TB 1-7
 - II FOR REFERENCE TO GROUND USE COMPONENT CARD ASSEMBLY 370 610
 - III FOR REFERENCE TO -6V DC USE COMPONENT CARD ASSEMBLY 370613
 - IV RESISTANCE WIRE 0.1 OHM EACH (50)

COMPONENT CHART

CODE	PART-NO	DESCRIPTION	CODE	PART-NO	DESCRIPTION
C3		CAP 5500 MFD 20V DC	R20		POTENTIOMETER 250 OHM 0.5 W
C4		CAP 700 MFD 25V DC	R21		RESISTOR 75 OHM 10 W
C5-8		CAP 11000 MFD 20V DC			
CB1		CIRCUIT BREAKER	T1		TRANSFORMER
CB2		CIRCUIT BREAKER	TB1		TERMINAL BLOCK
CR6-7		DIODE	TB2		TERMINAL BLOCK
E1-2		CONNECTOR	X7-11		TRANSISTOR TYPE 109
A & B		RECEPTACLE			
R19		RESISTOR 200 OHM 2W			

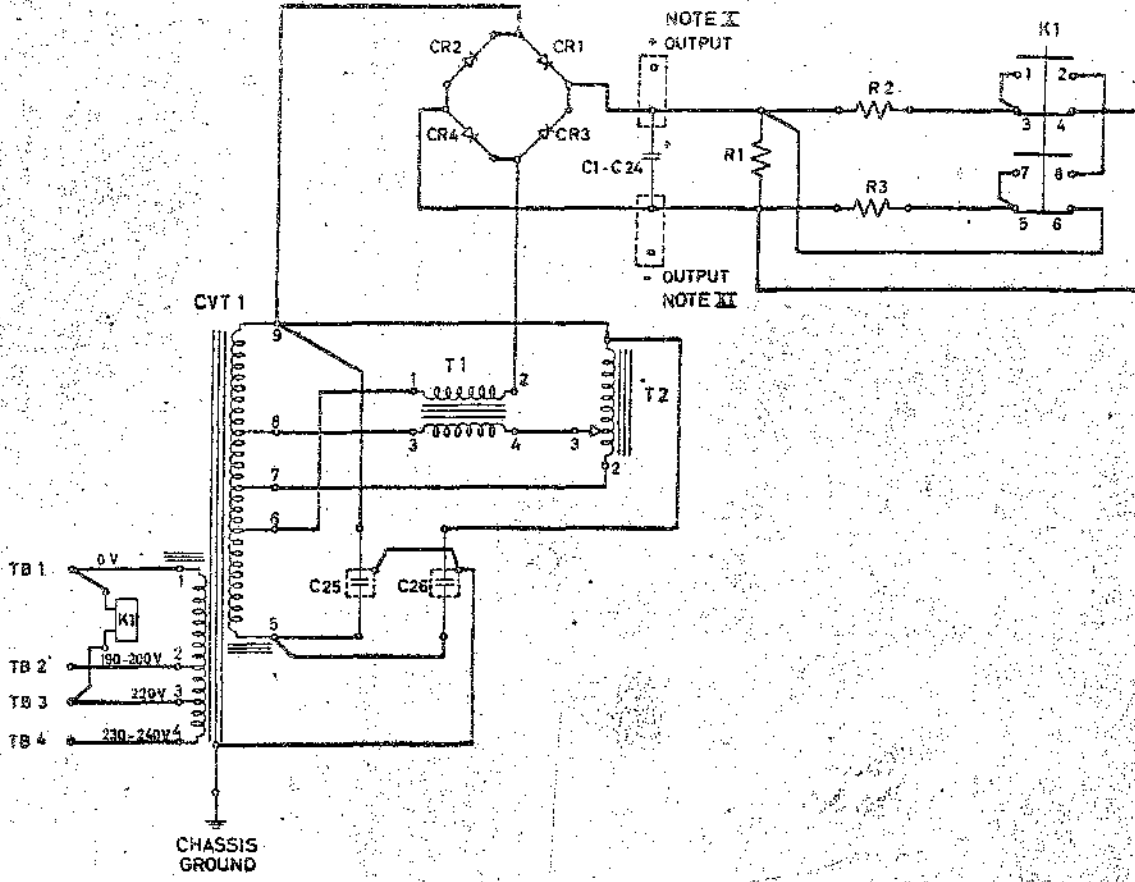
SIMILAR TO 473 811 C

REV	ISSUED	BY	DATE	CHKD	DATE	APPROVED	DATE
			378925 20.2.52				
			1776A 7.2.53				

IBM			
WIRING DIAGRAM-POWER SUPPLY			
12V DC AT 16A 50 CY'S			
DESIGN		REVISION	8058
DATE		BY	
CHECK		DATE	11.7.52
APPROV		DATE	3.8.52

4280480

DATE	CHANGE NO.
20.9.60	3137500A
13.9.61	TA-37954



NOTE I
 * OUTPUT
 - OUTPUT
 NOTE II

CODE	PART-NO.	DESCRIPTION
CVT-1	4116373	VOLTAGE REGULATOR
T1	4117524	TRANSF BUCK BOOST
T2	4117523	VARIAC
C1-C24	4116261	CAP 4 000 MFD 75V DC
C25-26	8010761	CAP 18 MFD 300V AC
CR1-4	4116799	DIODE
R1	4117742	RESISTOR 150 OHM 35W
R2-R3	4117741	RESISTOR 50 OHM 35W
K1	4116890	CONTACTOR

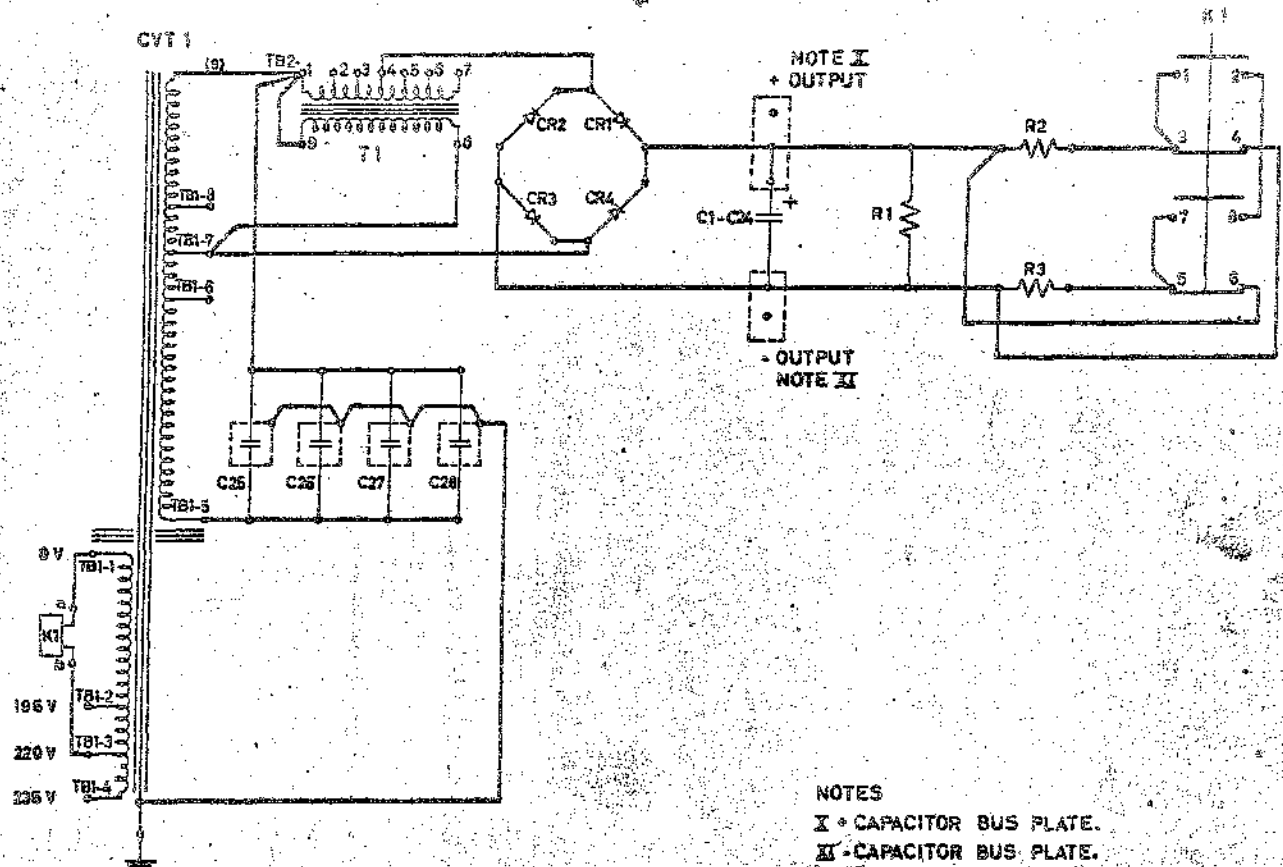
NOTES
 I - CAPACITOR BUS PLATE.
 II - CAPACITOR BUS PLATE.

0210807

IBM			
NAME	WIRING DIAGRAM-POWER SUPPLY		
	± 60V DC AT 10A (50 CY/S)		
DESIGN.		MODEL	
DETAIL.		SCALE	
CHECK		DRAW.	22.8.60
APPRO.		CHECK.	28.8.60

SIMILAR TO 220903

7820871



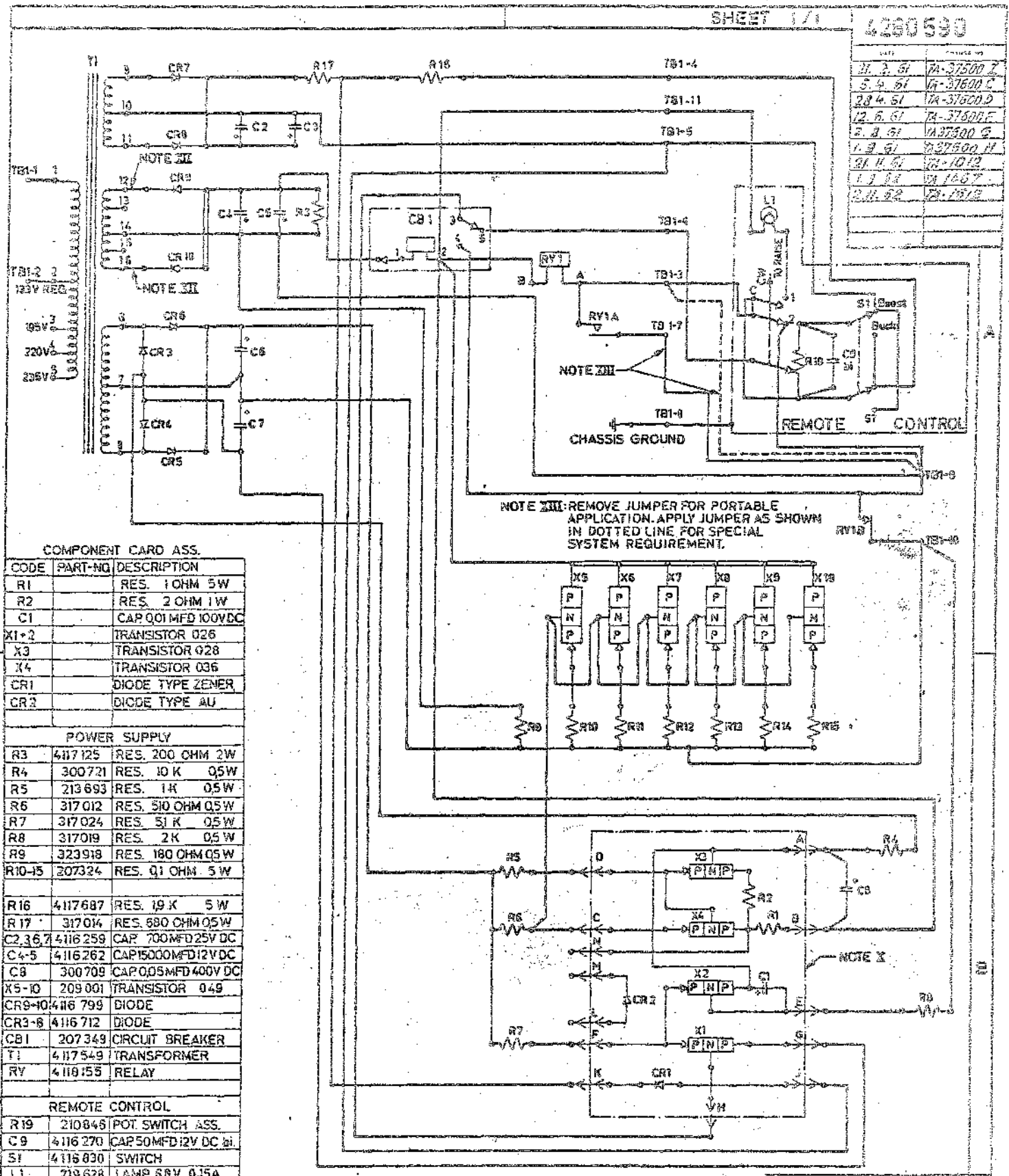
NOTES
 I - CAPACITOR BUS PLATE.
 II - CAPACITOR BUS PLATE.

CODE	PART NO	DESCRIPTION
CVT 1	4 116 374	VOLTAGE REGULATOR
T1	4 116 380	TRANS BUCK BOOST
C1-24	4 116 261	CAP 4 000 MFD 75V DC
C25-28	8 010 761	CAP 18 MFD 300 V AC
CR1-4	4 116 909	DIODE
R1	4 117 742	RESISTOR 150 OHM 35W
R2+R3	4 117 741	RESISTOR 50 OHM 35W
K1	4 116 890	CONTACTOR

SIMILAR TO 698208

WAVE	DATE	CHKD	APPROV	DATE	CHKD	APPROV	DATE	CHKD	APPROV	DATE	CHKD	APPROV
WIRING DIAGRAM POWER SUPPLY 360V AT 20A (300W)	11/91			31.1.62								
DESIGN												
CHKD												
APPROV												

DATE	CHANGE NO.	BY	DESCRIPTION
11. 2. 61	1A	JA-37500 Z	
5. 4. 61	1A	JA-37500 C	
28. 4. 61	1A	JA-37500 D	
12. 6. 61	1A	JA-37500 E	
7. 8. 61	1A	JA37500 G	
1. 9. 61	2	JA37500 H	
31. 11. 61	3	JA-1012	
1. 7. 62	4	JA 1657	
2. 11. 62	5	JA-1618	



COMPONENT CARD ASS.

CODE	PART-NO	DESCRIPTION
R1		RES. 1 OHM 5W
R2		RES. 2 OHM 1W
C1		CAP 0.01 MFD 100VDC
X1-2		TRANSISTOR Q26
X3		TRANSISTOR Q28
X4		TRANSISTOR Q36
CR1		DIODE TYPE ZENER
CR2		DIODE TYPE AU
POWER SUPPLY		
R3	4117125	RES. 200 OHM 2W
R4	300721	RES. 10 K 0.5W
R5	213693	RES. 1K 0.5W
R6	317012	RES. 510 OHM 0.5W
R7	317024	RES. 51 K 0.5W
R8	317019	RES. 2K 0.5W
R9	323918	RES. 180 OHM 0.5W
R10-15	207324	RES. 0.1 OHM 5W
R16	4117687	RES. 19 K 5W
R17	317014	RES. 680 OHM 0.5W
C2,3,6,7	4116258	CAP 700MFD 25V DC
C4-5	4116262	CAP 1500MFD 12V DC
C8	300709	CAP 0.05MFD 400V DC
X5-10	209001	TRANSISTOR Q49
CR9-10	4116799	DIODE
CR3-8	4116712	DIODE
CB1	207349	CIRCUIT BREAKER
T1	4117549	TRANSFORMER
RY	4119155	RELAY
REMOTE CONTROL		
R19	210846	POT. SWITCH ASS.
C9	4116270	CAP 50MFD 12V DC
S1	4116830	SWITCH
L1	219628	LAMP 8.8V 0.15A

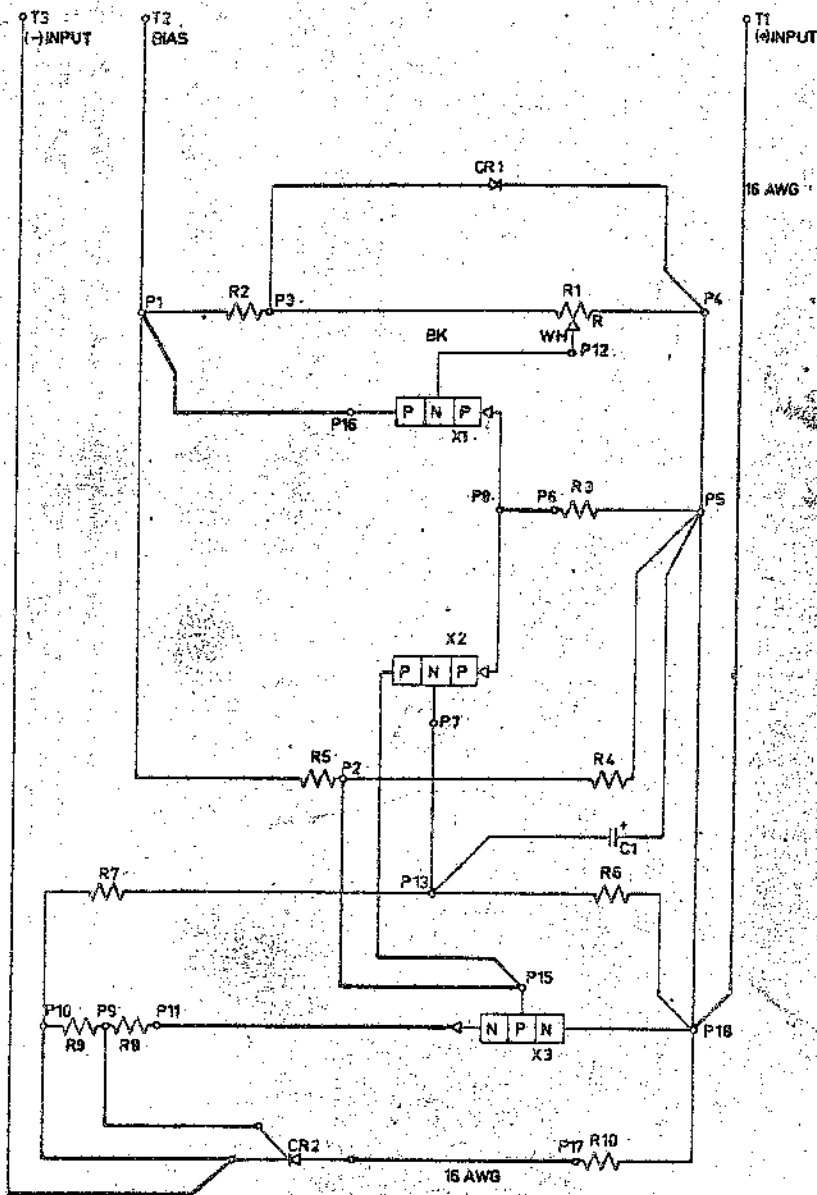
NOTES: X COMPONENT CARD ASSEMBLY NO. 371656
 XI ORDER ONE EACH OF 210846 (POT. SWITCH ASS.) AND 4116830 (SWITCH) EXCEPT WHEN UNIT IS TO BE AS A PORTABLE.
 XII CONNECT WITH TERMINALS 12,16 WHEN PRIMARY LINE VOLTAGE IS APPLIED, WITH TERMINALS 13,15 WHEN REGULATED VOLTAGE 150V IS APPLIED.

SIMILAR TO 210864 E

IBM			
NAME	WIRING DIAGRAM POWER SUPPLY		
	24V DC 5A (800mA)		
DESIGN	REEL	9000	
DETAIL	SCALE		
CHECK	DATE	BY	11. 7. 61
APPRO	CHKD		

DATE	CHANGE NO.
30. 12. 59	EC-105564X
20. 9. 60	TA-37500A
15. 12. 60	TA-37500F
12. 6. 61	TA-37600F
13. 9. 60	EC-105587X
2. 8. 61	TA-37600G

COMPONENT LOCATION CHART		
CODE	PART NO.	DESCRIPTION
CR 1	208950	DIODE IN 429
CR 2	208955	RECTIFIER C35U
X1+X2	535441	TRANSISTOR 02G
R1	208952	POT. 750 OHM 1WATT
R2	317015	RES. 750 OHM 0.5WATT
R3	322347	RES. 560 OHM 0.5WATT
R4	317027	RES. 11 K 0.5WATT
R5	213549	RES. 47K 0.5WATT
R6+R7	208951	RES. 400 OHM 1WATT ±1%
R8	317002	RES. 22 OHM 0.5WATT
R9	317007	RES. 220 OHM 0.5WATT
R10	208225	RES. 0.05 OHM 5 WATT
C1	124575	CAP. 0.22MFD 35VDC
X3	369087	TRANSISTOR 086



208948

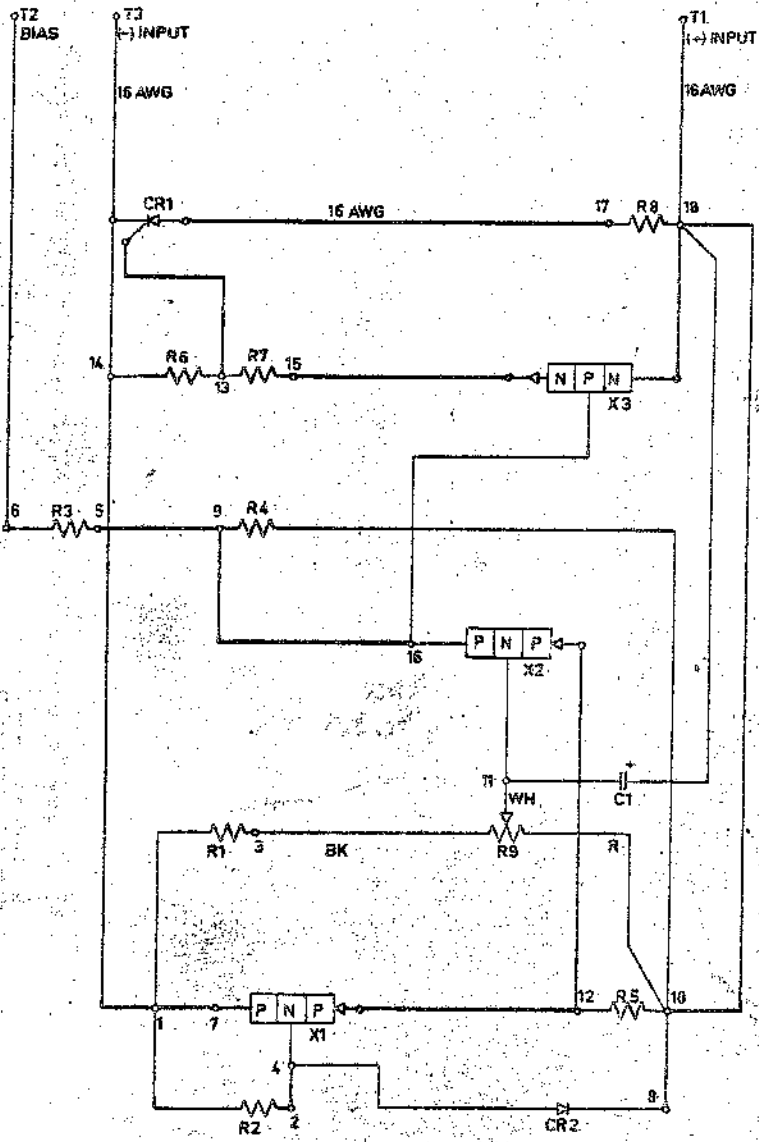
NOTES:

- I: ADJUST R1 TO FIRE CR2 AT 6.78±0.02 VOLTS BETWEEN PINS 1&3 WITH BIAS OF 14±2% VOLTS BETWEEN PINS 2(-) &3(+)
- II: ALL WIRE 20 GA. UNLESS OTHERWISE NOTED.

IBM	
NAME	WIRING DIAGR. OVERVOLTAGE
PROTECTION ± 5 VDC POWER SUPPLY	
DESIGN	MODEL
DETAIL	SCALE
CHECK	DRAWN 548 BOB.60
APPROV.	CHECKED 7- 6.3.58

DATE	CHANGE NO.
30. 12. 59	EC-105 564 X
20. 9. 60	TA-37500A
15. 12. 60	TA-37500F
13. 9. 60	EC-105 587 X
2. 8. 61	TA-37600G

COMPONENT CHART		
CODE	PART NO.	DESCRIPTION
R1	208951	RES. 5400 OHM 1WATT ± 1%
R2	317014	RES. 680 OHM 0.5WATT
R3	323920	RES. 3 K. 0.5WATT
R4	317025	RES. 6.8K 0.5 WATT
R5	213693	RES. 1K. 0.5 WATT
R6	317007	RES. 220 OHM 0.5 WATT
R7	355683	RES. 51 OHM 1WATT
R8	207324	RES. 0.1 OHM 5WATT
R9	208952	POI. 750 OHM 1WATT
X1+X2	535441	TRANSISTOR 026
X3	369087	TRANSISTOR 086
CR1	208955	CONTROLLED RECT. C35U
CR2	208950	DIODE ZENER IN 429
C1	124575	CAP. 0.22 MFD 35 VDC



NOTES

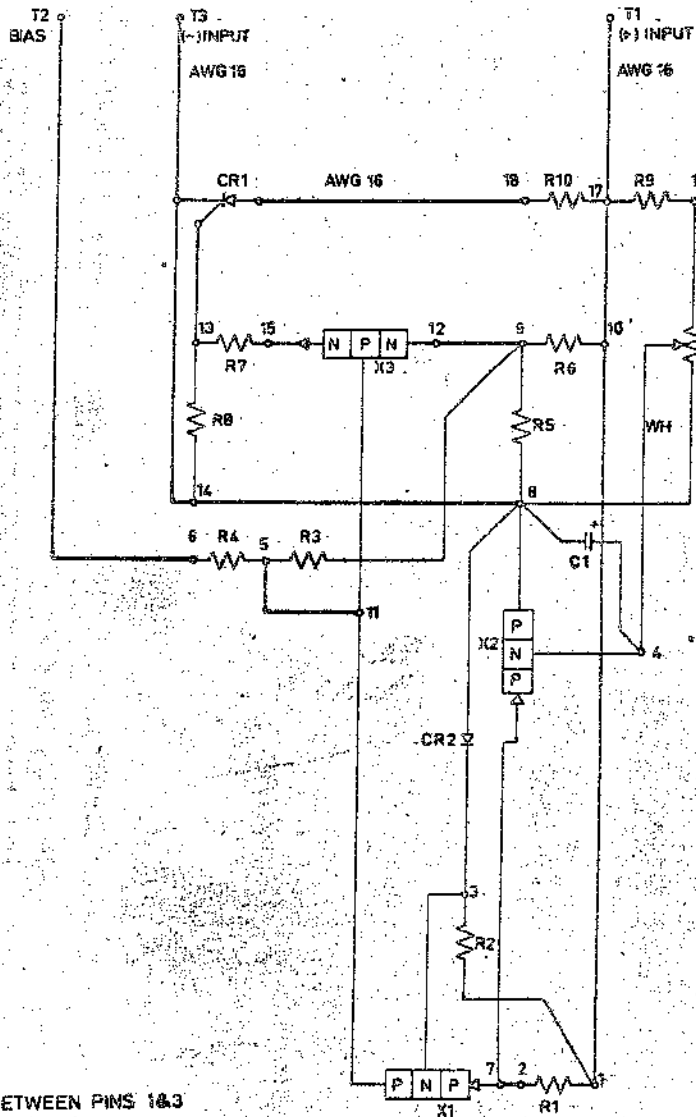
- 1. ADJUST POTENTIOMETER TO FIRE C35U AT 12.96 ± 0.02 VOLTS INPUT PINS 1 & 3 WITH BIAS OF 12 ± 2% VOLTS BETWEEN PINS 2 (-) & 3 (+).
- 2. ALL WIRE 20 GA UNLESS OTHERWISE NOTED.

208961

IBM			
NAME WIRING DIAGR. OVERVOLTAGE			
PROTECTION ± 12 V DC POWER SUPPLY			
DESIGN		MODEL	
DETAIL		SCALE	
CHECK		DRAW. BY	BOB GO
APPV.		CHECK	1. 3. 58

DATE	CHANGE NO.
30. 12. 59	EC-105 584 X
20. 9. 60	TA-37500 A
15. 12. 60	TA-37500 F
16. 2. 60	EC-105 585 H
2. 8. 61	TA-37500 G

COMPONENT CHART		
CODE	PART NO.	DESCRIPTION
R1	213 549	RES. 4.7 K. 0.5 WATT
R2	317 054	RES. 2.7 K. 1 WATT
R3	317 025	RES. 68 K. 0.5 WATT
R4	323 920	RES. 3 K. 0.5 WATT
R5	335 138	RES. 200 OHM 2 WATT
R6	207 328	RES. 400 OHM 5 WATT
R7	355 683	RES. 51 OHM 1 WATT
R8	317 007	RES. 220 OHM 0.5 WATT
R9	208 969	RES. 2.6 K. 5 WATT ±1%
R10	208 970	RES. 0.5 OHM 5 WATT
R11	208 952	POT. 750 OHM 1 WATT
X1, X2	535 441	TRANSISTOR 026
X3	369 087	TRANSISTOR 086
CR1	208 975	RECTIFIER C35F
CR2	208 950	DIODE ZENER IN 429
C1	124 575	CAP. 0.22 MFD 35 VDC



NOTES:
 Σ ADJUST R11 TO FIRE CR1 AT 32.40 ± 0.04 VOLTS BETWEEN PINS 1 & 3 WITH BIAS OF $12 \pm 2\%$ VOLTS BETWEEN PINS 2 (-) & 3 (+).
 Σ ALL WIRE 20 GA UNLESS OTHERWISE NOTED.

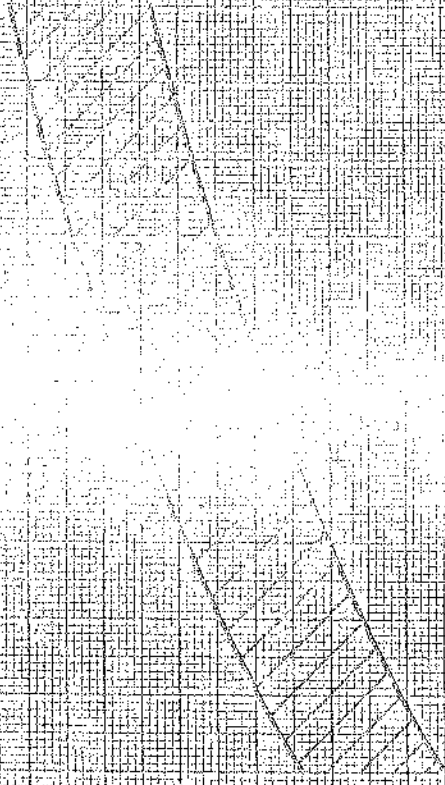
208968

IBM			
NAME	WIRING DIAGR. OVERVOLTAGE		
	PROTECTION = 30 V DC POWER SUPPLY		
DESIGN.		MODEL	
DETAIL.		SCALE	
CHECK		DRAW.	308.60
APPRO.		CHECK.	1.1.60

FERRI RESONANT REG

INPUT VOLTAGE

124
122
120



10%

OUTPUT VOLTAGE

Three types operation of
resonant regulator are

Measures the input voltage
to find the voltage loss
Measure the output voltage

Examples: input voltage
Output
Output