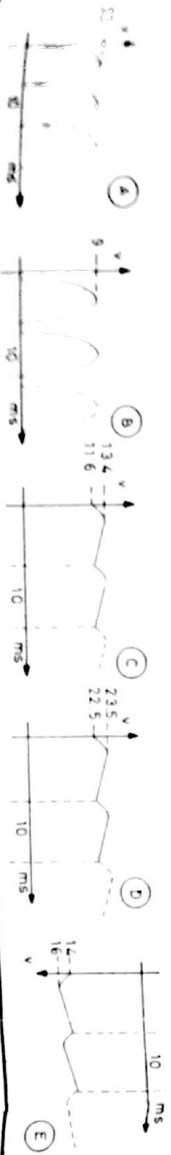


* WITH HEAT SINK

PARTICOLARE	DESCRIZIONE
ASSEMBLATO	ELECTRICAL DIAGRAM for POWER BOARD
6-E-0079	MATERIALE
DISCANTORE	TRATTAMENTO
DATA	APPROV ME
DATA	1° REV
DATA	2° REV
DATA	FOOT
DATA	1 OF



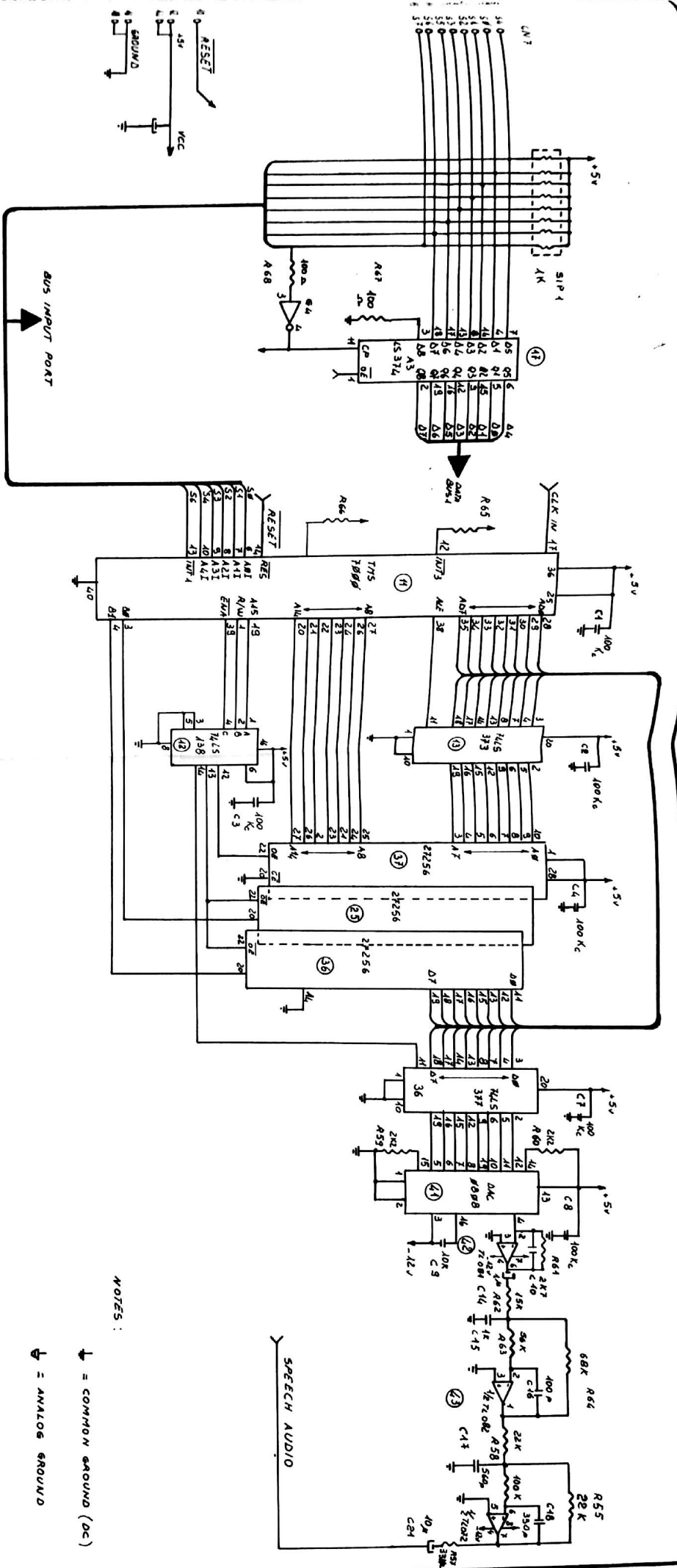
ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION
1	PC 1B 1165/2		Printed circuit board 1B1165/2
2	CN9		4 pin male conn. MTA 640 383-4
3	CN 10 CN 11		20 pin male conn. MTAS4-826379-0
4	CN8 CN12 CN14		20 flat cable male conn.
5	Ic9		2650 - A-1 MOS Ic 8 bit M Proc
6	Ic23		9101 bpc RHK MOSC IC
7	Ic5		2114 L MOS Ic 1K x 4 ram
8	Ic4		6514 -9 CMOS Ic 1K x 4 ram
9	Ic19		4001 BP CMOS Ic quad nor gate
10	Ic28		4002BP CMOS Ic dual 4-in nor gate
11	Ic37		4011 BP CMOS Ic quad 2-in nand gate
12	Ic31		4012BP CMOS Ic dual 4-in nand gate
13	Ic27 Ic35 Ic36 Ic41		4028BP CMOS Ic 10f10 decoder
14	Ic6 Ic10 Ic11 Ic33		4042BP CMOS Ic quad D latch
15	Ic15 Ic21		4040BP CMOS Ic 12 stage bynari count
16	Ic29 Ic30		4069BP CMOS Ic hey inverter
17	Ic32		4556 BP CMOS Ic dual 10f4 deco.
18	Ic18 Ic18 Ic24 Ic25		40097BP CMOS Ic 3 state non inverter buffer
19	Ic8		74LS00 TTL Ic quad 2-in nand gate
20	Ic13		74LS 14 TTL Ic hey Schmitt trigger
21	Ic17		74LS156 TTL Ic dual 10f4 decord
22	Ic16 Ic22		74LS157 TTL Ic quad 2-in MPX
23	Ic20		74LS161 TTL Ic sync. bynary count.
24	Ic14		74LS393TTL Ic dual 4 bit bynary count
25	Ic7 Ic12 Ic26 Ic34 Ic38 Ic40		TDA 3081 seven transistor array
26	TR1-TR3		BC548 NPN silicon transistor
27	TR4		BC 337 NPN silicon Transistor
28	D4		1N5400 diode
29	D1 D2 D5 - D9		1N4003 diodes
30	D3		1N4148 diode
31	BATT		3.6V 60mA N cd battery
32	Ic9		40 pin Ic socket (540 AG11D)
33	Ic1 Ic2		28 pin IC socket /528 AG11D)
34	Ic4		18 pin IC socket (518 AG11D)
35	C1		100uF 16VL elect. cap. radials leads
36	C5		10uF 16VL tantalum cap. vert lead
37	PC		0.1 uF 50VL ceramic capacitors
38	C4		10Kpf 50VL NPO ceramic. cap.
39	C6-C13		1kpF NPO ceramic cap.
40	C2		470 pF 50VL NPO ceramic cap.
41	C14		220 pF NPO ceramic cap.
42	C3		10pF 50VL NPO ceramic cap.
43	R2-R9-R25-R42-R102 R113 R117		10K 1/4W 5% carbon resistors
44	R10-R21 R24 R35 R39 R40 R54-R69 R74-R93 R103 R111		5.6K 1/4 5% carbon resistors
45	R26-R34		2.2K 1/4W 5% carbon resistors
46	R27 R70-R73 R94-R101		1K 1/4W 5% carbon resistors
47	R22 R23		680 1/4W 5% carbon resistor
48	R36		390 1/4W 5% carbin resistor
49	R1		100 1/4W 5% carbon resistor
50	R38		22 1/2W 5% carbon resistor
51	R115		22 K 1/4 W 5% carbon resistor
52	XTAL 1		6MHZ cristal quartz Hc 18/U
53	DIP 1		Dip switch 4 way
54	LED 1		FLV110 red led
55	Ic1 Ic2		B2764 MOS IC 8192 x 8 EPROM

P.C.1 B 1165/2
ASSEMBLY
6-E-0022



ITEM N.	PART DESIGNATION	CODE PART N.	DESCRIPTION
1	2-2C-8001		Printed circuit 2-2C-8001
2	CW7		Male connector 20PIN 90. F.C.
3	CW6		Male connector 10PIN
4	R1-51-67-58		Carbon resistor 100
5	R2		Carbon resistor 22K
6	R3		Carbon resistor 4K7
7	R4-7-8-22-23-24		Carbon resistor 68
8	R5-6-9-10-18-20-26-27-28-31-33-34-35-38 R19-49-50		Carbon resistor 1K
11	R170-12		Carbon resistor 470
13	R3K3-14-21-25		Carbon resistor 3K3
15	R1,2K		Carbon resistor 1,2K
16	R10K-17-19-29-30-32-37-40-41-42-43-44 R57-65-66		Carbon resistor 10K
36	R33K-46-47-48		Carbon resistor 33K
45	R100K-56		Carbon resistor 100K
52	R4,7		Carbon resistor 4,7
53	R220		Carbon resistor 220
54	R2,2		Carbon resistor 2,2
55	R22K-58		Carbon resistor 22K
59	R2K2-60-61		Carbon resistor 2K2
62	R15K		Carbon resistor 15K
63	R56K		Carbon resistor 56K
64	R68K		Carbon resistor 68K
65	C1-2-3-4-7-8-9-25-33-34-35-36-37-38-39 C10-41-42-43-44-45-46-47-48-49-50-51		Capacitor 0,1 uF disc ceramic
66	C5-6-21-22-30		Capacitor 10 nF disc ceramic
67	C10		Capacitor 120 pF disc ceramic
68	C11-12		Capacitor 10 pF disc ceramic
69	C13-14-20-23		Capacitor 1 uF electr. 25V
70	C15		Capacitor 1000 pF disc ceramic
71	C16		Capacitor 100 pF disc ceramic
72	C17		Capacitor 560 pF disc ceramic
73	C18		Capacitor 330 pF disc ceramic
74	C19-31-32		Capacitor 1000 uF electr. 25V

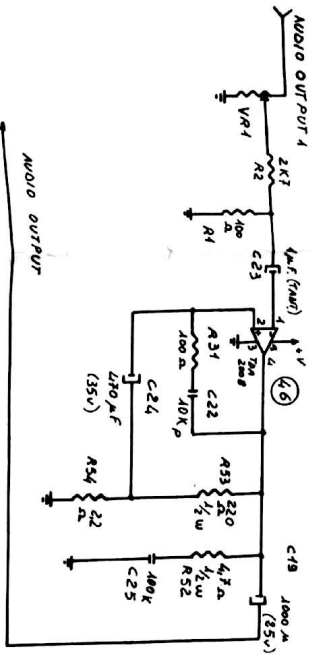
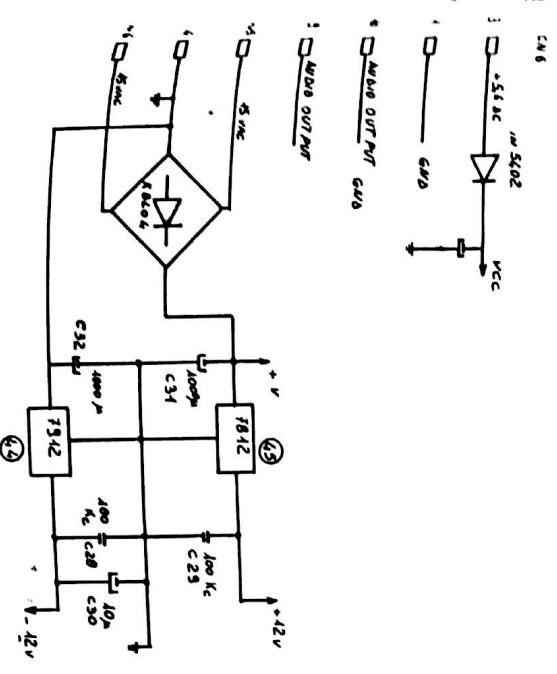
ITEM N.	PART DESIGNATION	CODE PART N.	DESCRIPTION
75	C24		Capacitor 470 uF electr. 25V
76	C16-27		Capacitor 0,012 uF disc ceramic
78	C18-29		Capacitor 0,1 uF disc ceramic
79	IC1-39		Integrated circuit 74LS04
80	IC2-3-4-14-15		Integrated circuit 74LS1
81	IC5-30		Integrated circuit 6502
82	IC6-7-31		Integrated circuit 2754
83	IC8-32		Integrated circuit 611K
84	IC10		Integrated circuit A79S10
85	IC11		Integrated circuit 78S7000
86	IC12-16		Integrated circuit 74LS138
87	IC13		Integrated circuit 74LS373
88	IC17-18-21-22-23-24		Integrated circuit 74LS374
89	IC19-28		Integrated circuit 74LS244
90	IC20		Integrated circuit 74LS245
91	IC24		Integrated circuit 873-8910
92	IC25-26-37		Integrated circuit 27256
93	IC29		Integrated circuit 74LS139
94	IC33		Integrated circuit AD7524
95	IC34-35		Integrated circuit LM324
96	IC36		Integrated circuit LM337
97	IC38		Integrated circuit 74LS74
98	IC40		Integrated circuit 74BC08
99	IC41		Integrated circuit DAC800
100	IC42		Integrated circuit TL081
101	IC43		Integrated circuit TL082
102	IC44		Integrated circuit 7912
103	IC45		Integrated circuit 7812
104	IC46		Integrated circuit TDA2008
105	XTAL1		4 Mhz Cristal quartz
106	D1PSW		Dip switch 4 way
107	LED1		FLV110 red led
108	P1-2		Push-button
109	VR1		Potentiometer 10K
110	DB1		Diode bridge



NOTES:

↑ = COMMON GROUND (DC)

⬇ = ANALOG GROUND

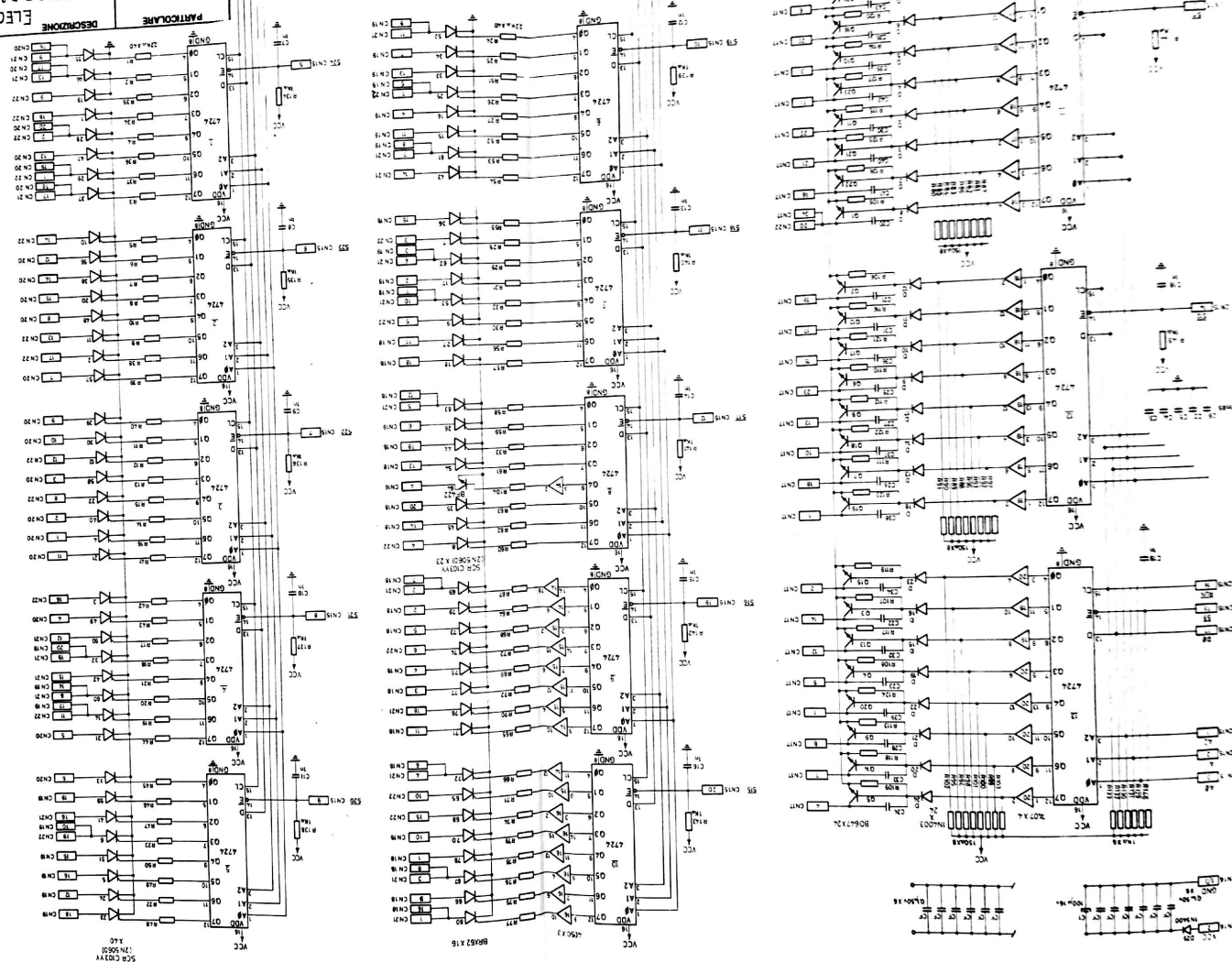


ASS-6-E-0013

PART NO.	TITLE
0013	ELECTRICAL DIAGRAM FOR
DATE 26/11/86	SOUND AND SPEECH BOARD
SHEET 2/2	REV
	DATE REV

6-E-0020

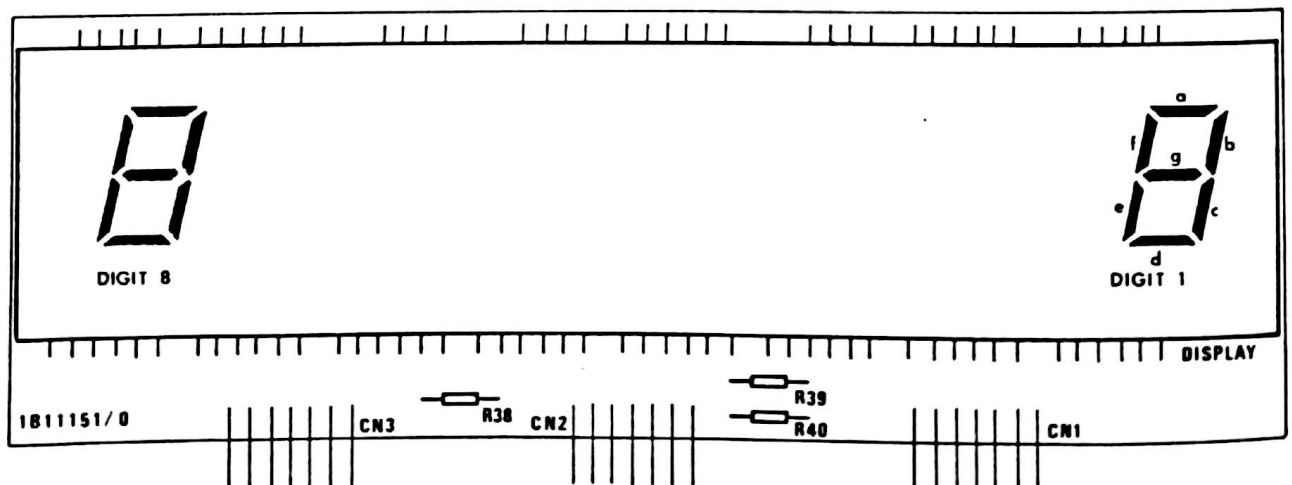
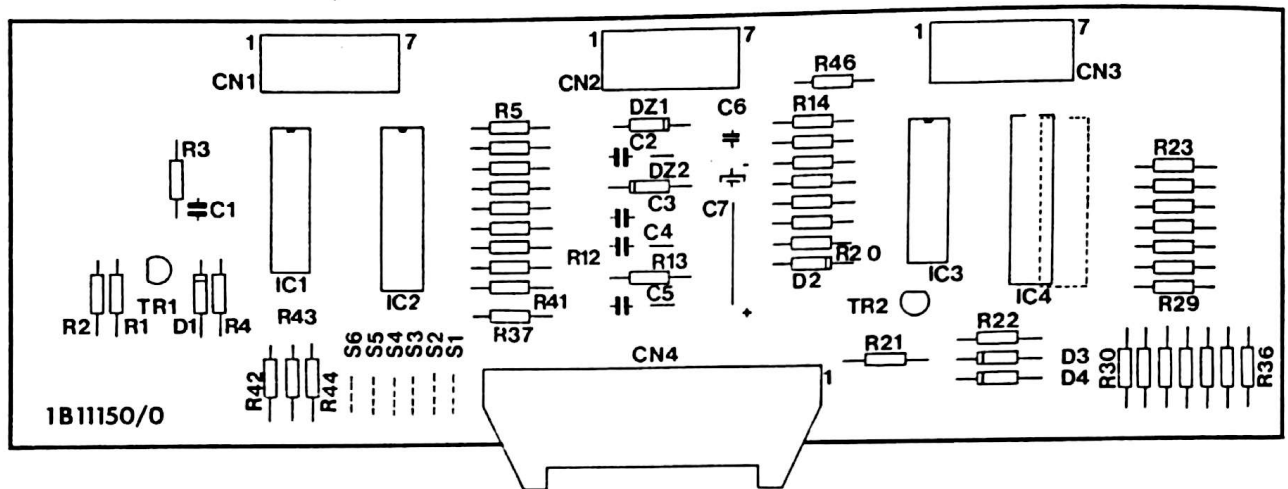


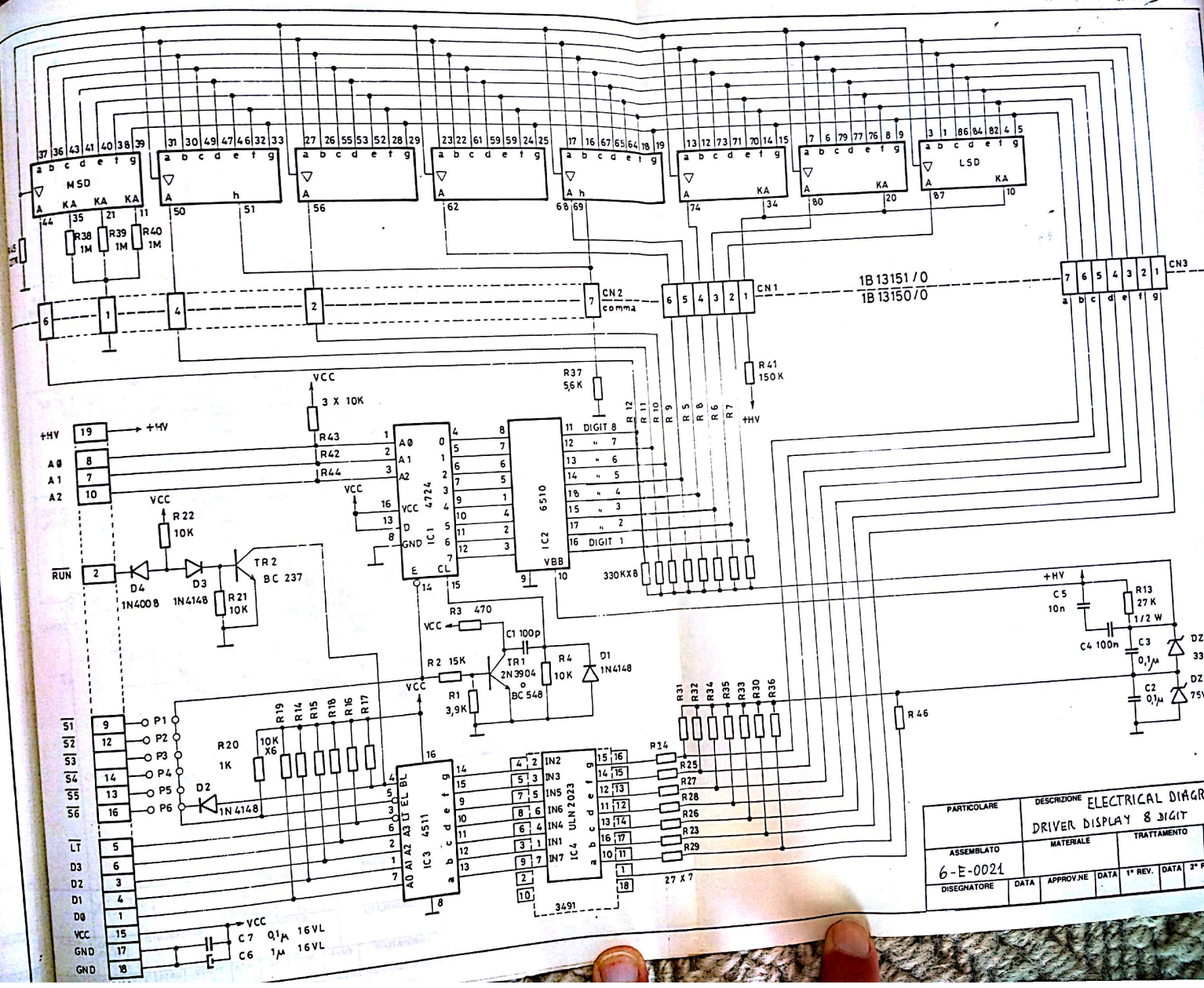


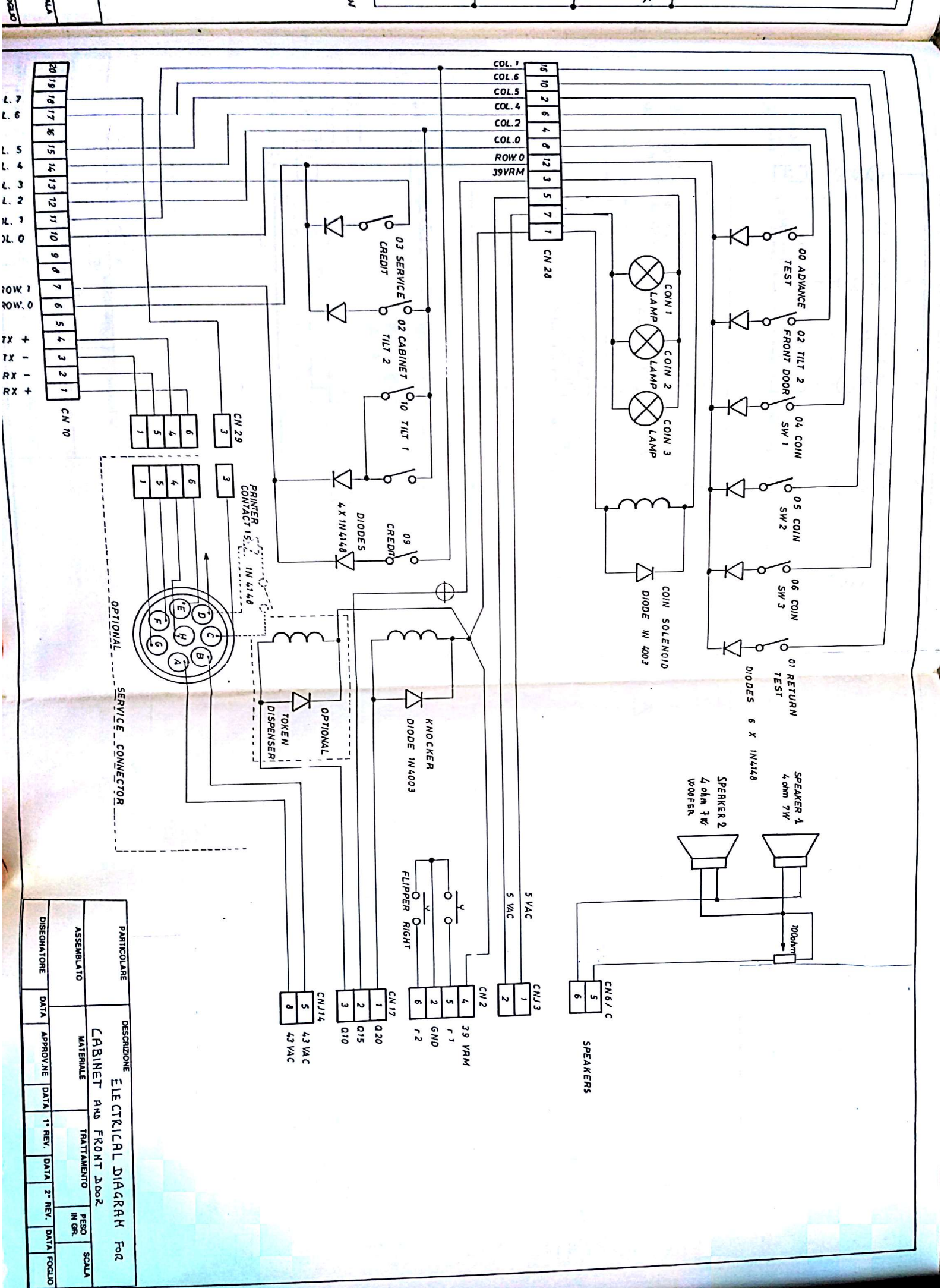
ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION
1	PC 1B11150/0		Printed circuit 1B11150/0
2	lc1		4724 lc.
3	lc2		6510 lc.
4	lc3		4511 lc
5	lc4		2823 lc. (2823 o MC3491)
6	R1		3. 9K Carbon resistor 1/4W
7	R2		15K carbon resistor 1/4W
8	R3		470 carbon resistor 1/4W
9	R4/14/15/16/17/18/19/21/22/42/43/44		10K carbon resistor 1/4W
10	R5/6/7/8/9/10/11/12/30/31/32/33/34		
	35/36		330K carbon resistor 1/4W
11	R13		27K carbon resistor 1/2W
12	R20		1K carbon resistor 1/4W
13	R23/24/25/26/27/28/29		27K carbon resistor 1/4W
14	R37		56K carbon resistor 1/4W
15	R41		150K carbon resistor 1/4W
16	D1/D2/D3		Diode 1N4148
17	D4		Diode 1N4004
18	DZ1		Zener 75V
19	DZ2		Zener 33V
20	TR1/TR2		BC548 (BC237 o 2N3909)
21	C1		100pF CER.
22	C2/C4		0,1uf 250VL POL.
23	C3/C7		0,1 uF 50VL CER.
24	C5		10nF 250VL Pol.
25	C6		1uF 16VL elett.
26	CN4		Flat 20 pin male conn.
27	CN1/CN2/CN3		Conn. CIS 7 Pin vert. 163680/5
28			Occhielli 22 x 40
29			Squadretta fissaggio display
30			Viti 3MA x 8
31			Dadi 3MA
32			Rondella dentellata int. 7 3,2
33			Ponticello passo 7,5
34	R5 ÷ R12		Can be replaced with 330K SIP8 + 1
35	R30 ÷ R36		Can be replaced with 330K SIP 8 + 1
36	R14 ÷ R19		Can be replaced with 10K SIP 6 + 1

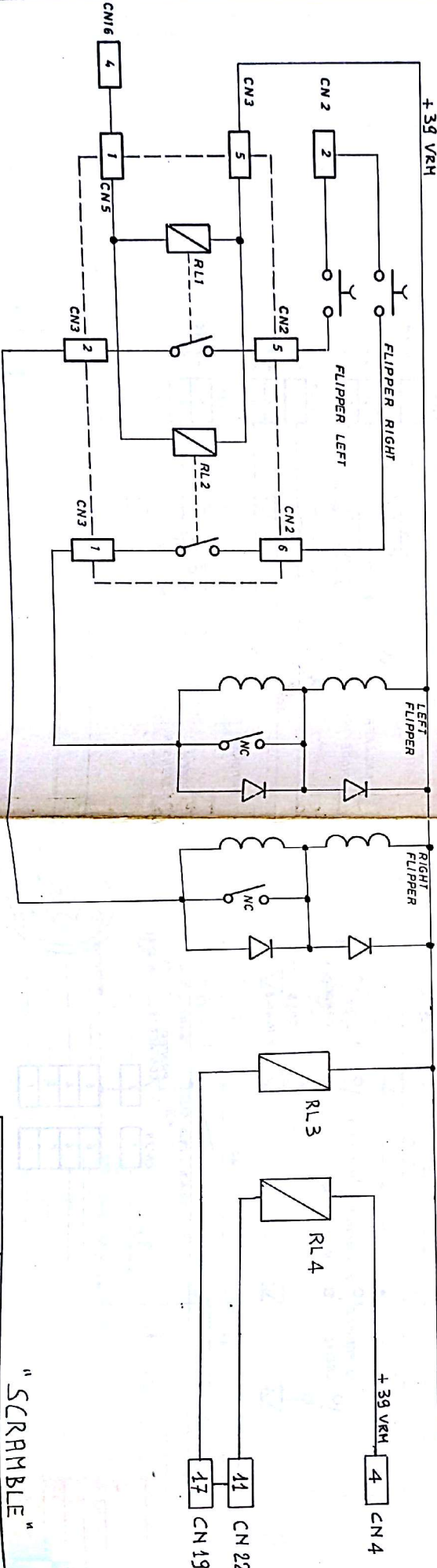
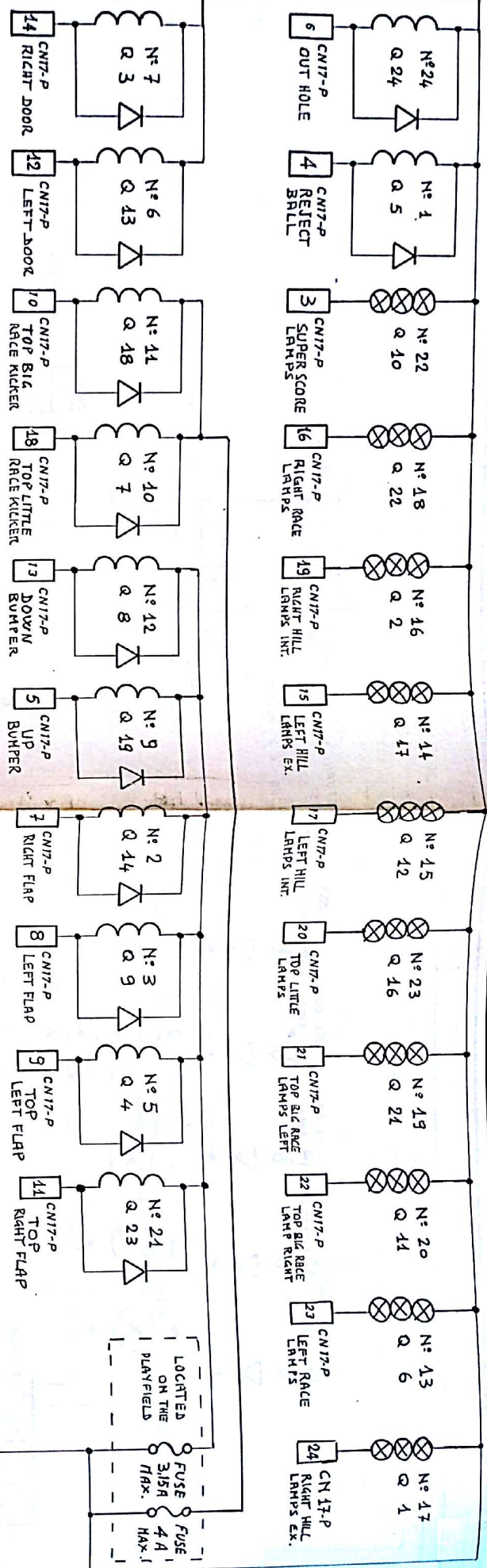
ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION
1	P.C. 1B11151/0		Printed circuit 1B11151/0
2	R38/39/40		1M carbon resistor 1/4W 5%
3	Display		Display Philips 8 cifre monobl.
4	CN1/CN2/CN3		Strip CIS 7 Pin 163740/5

ASS. 6-E-0021 8 DIGIT DISPLAY WITH DRIVER + BASE (150/0-151/0)







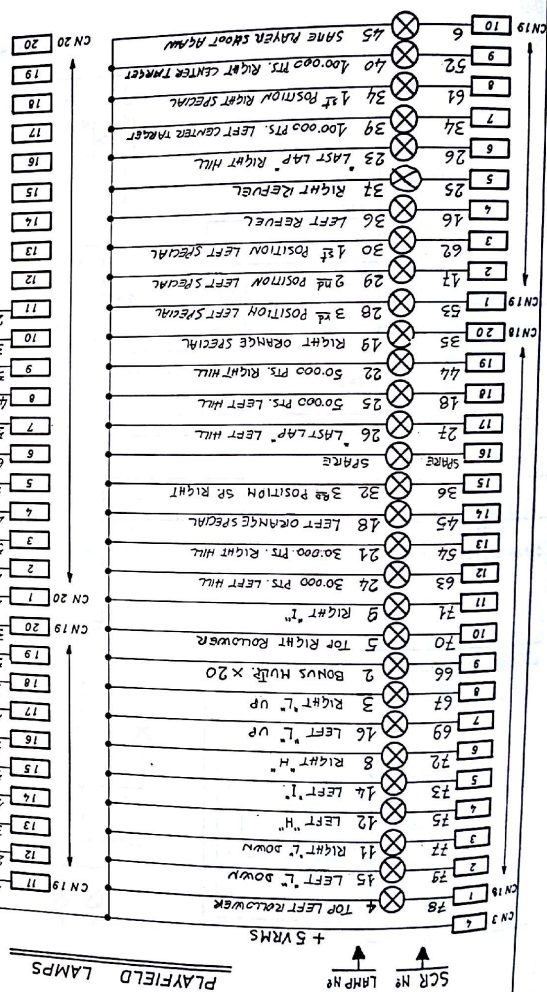
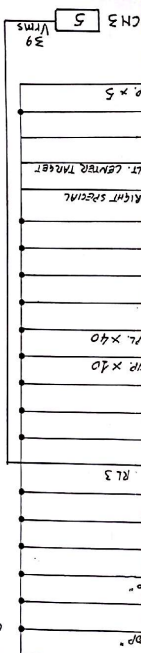
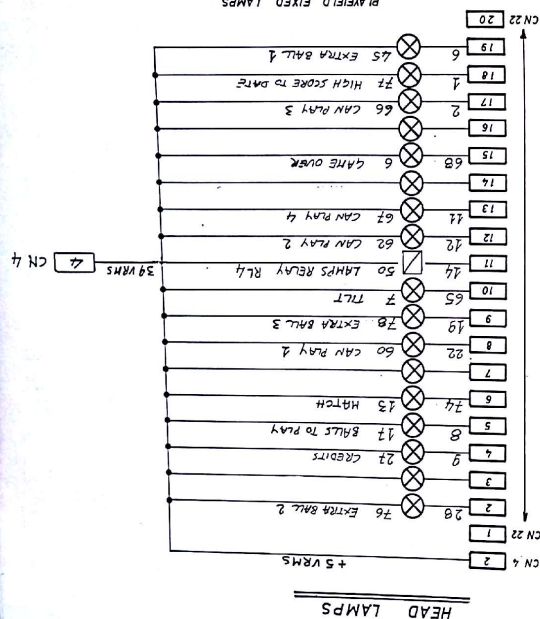
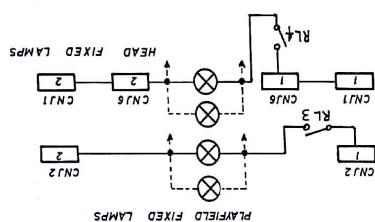


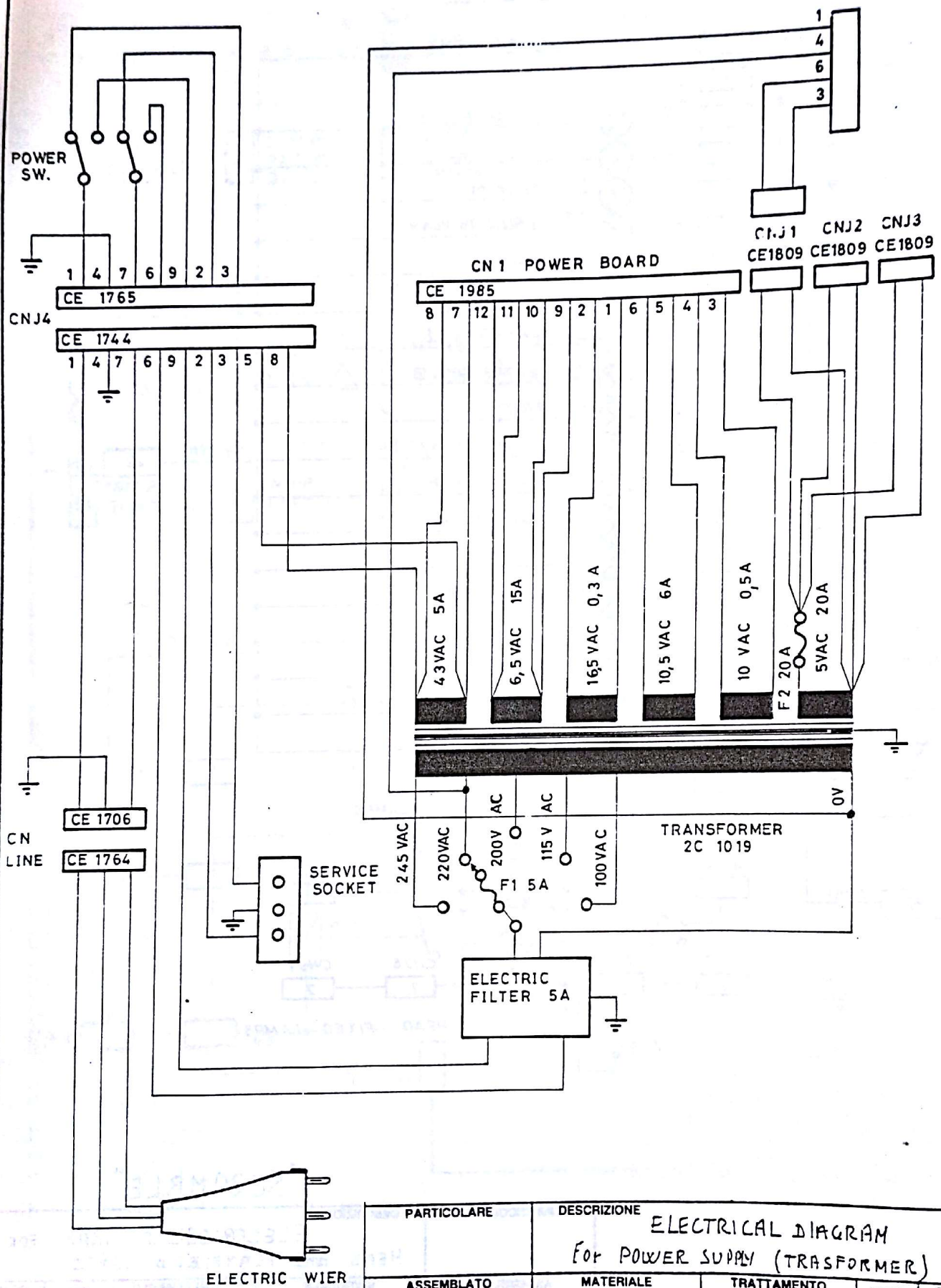
PARTICOLARE		DESCRIZIONE	
ASSEMBLATO		ELECTRICAL DIAGRAM	
MATERIALE		FOR SOLENOIDS AND GROUP OF LAMPS	
DISSEGNAZIONE		TRATTAMENTO	
DATA	APPROVAZIONE	DATA	1° REV.
DATA	APPROVAZIONE	DATA	2° REV.
DATA	APPROVAZIONE	DATA	3° REV.
DATA	APPROVAZIONE	DATA	4° REV.

"SCRAMBLE"

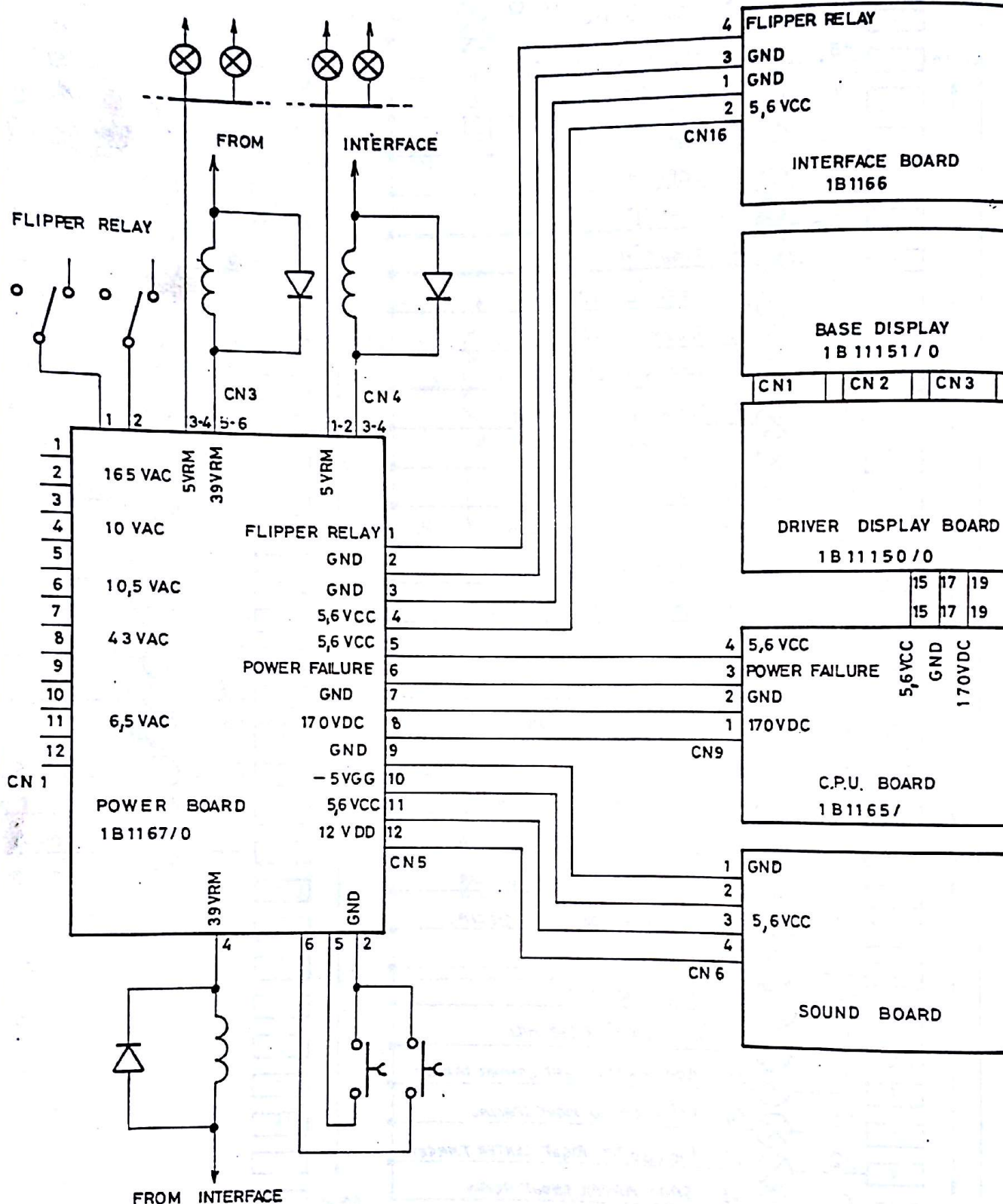
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ASSEMBLY	DATE	APPROVE	DATA	1 st REV.	DATA	2 nd REV.	DATA	3 rd REV.	DATA	FOOTNOTES
PARTICOLARE	DESCRIZIONE	MATERIALE	TRATTAMENTO	IN GR.	SCALA					
ELECTRICAL DIAGRAM FOR HEAD and PLAYFIELD LAMPS										

SCRAMBLE





PARTICOLARE		DESCRIZIONE							
		ELECTRICAL DIAGRAM							
		For POWER SUPPLY (TRASFORMER)							
ASSEMBLATO	MATERIALE	TRATTAMENTO		PESO IN GR.		SCALA			
6-E-0018									
DISEGNATORE	DATA	APPROV. NE	DATA	1° REV.	DATA	2° REV.	DATA	FOGLIO	



PARTICOLARE		DESCRIZIONE							
		ELECTRICAL DIAGRAM							
		POWER							
ASSEMBLATO		MATERIALE		TRATTAMENTO		PESO IN GR.		SCALA	
DISEGNATORE	DATA	APPROV.NE	DATA	1° REV.	DATA	2° REV.	DATA	FOGLIO	