

SCRAMBLE

Technical

Manual



ZACCARIA

SWITCHES ADJUSTMENT

- SCRAMBLE -

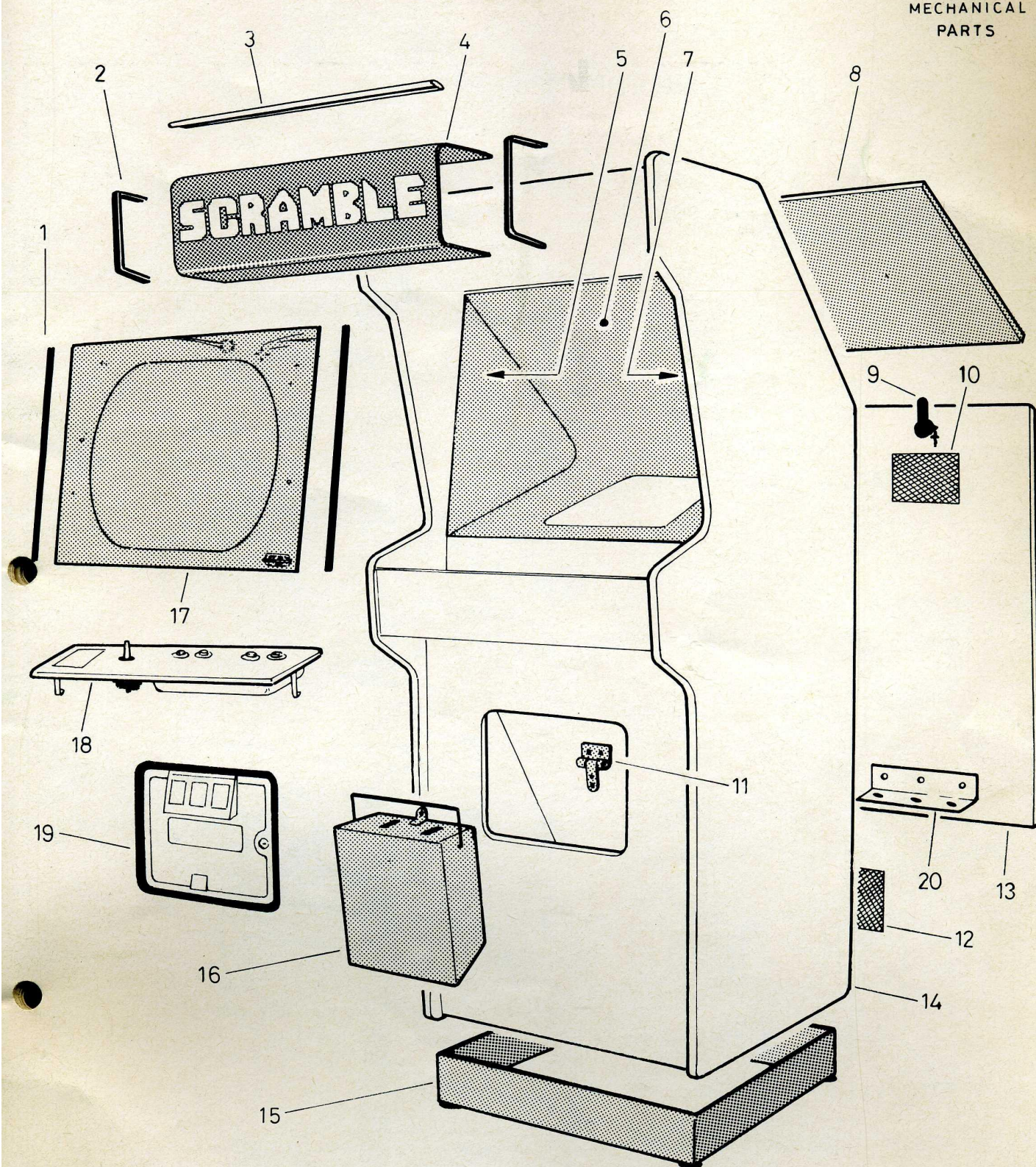
LOGIC BOARD (P. C. 1B1164)

	1	2	3	4	5	6	
N° ROCKET	OFF OFF ON ON	OFF ON OFF ON					TEST (6) 5 4 3
CABINET VERSION			OFF ON				TABLE UP RIGHT
COIN MECHANISM				ON	ON		1 COIN 1 PLAY
						NOT USED	

COIN SWITCH ADJUSTMENT BOARD (P. C. 1B1145)

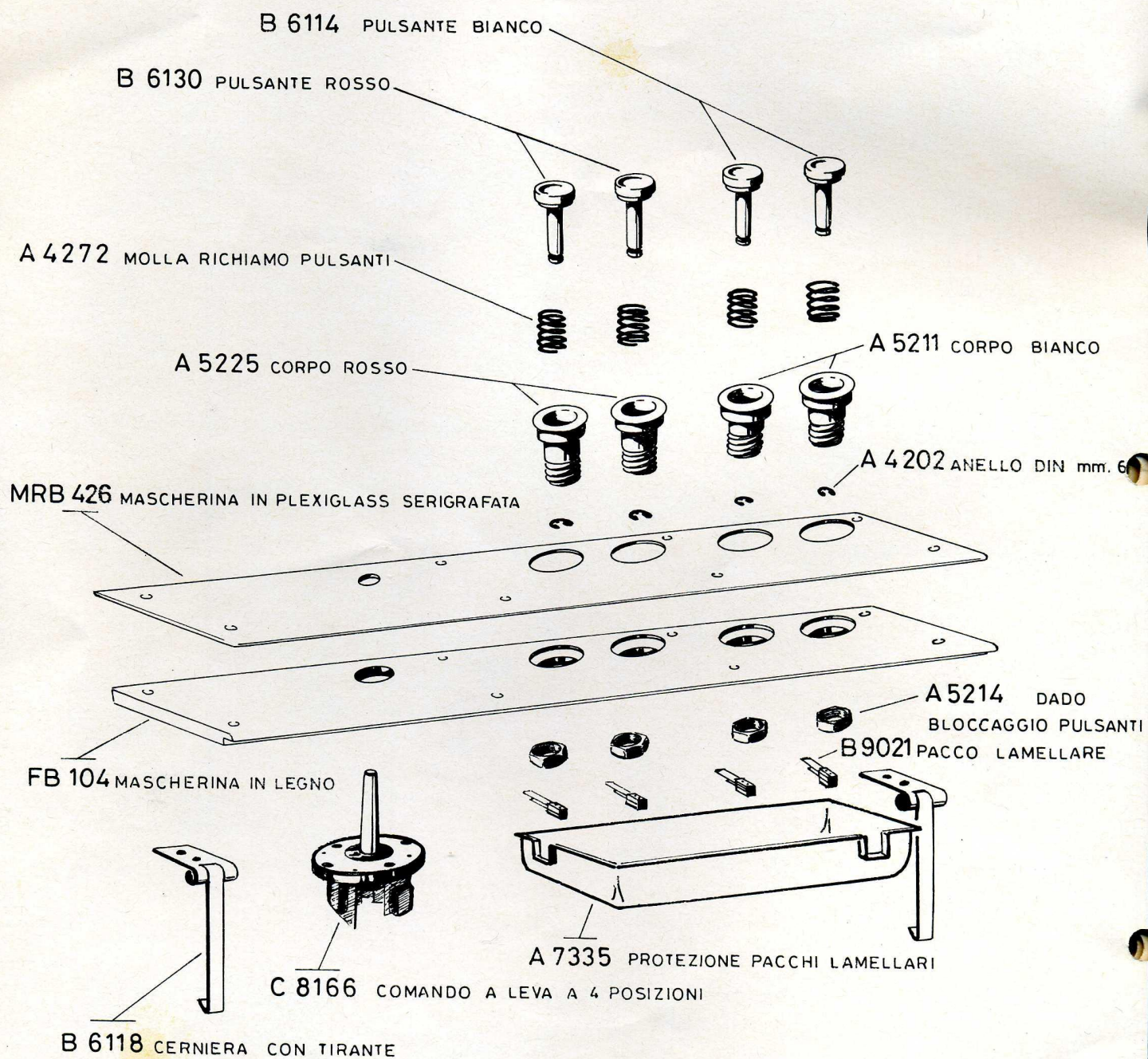
COIN MECHANISM 1				COIN MECHANISM 2					
1	2	3	8			4	5	6	7
OFF	ON	OFF	OFF	2 COINS	1 PLAY	OFF	ON	OFF	OFF
OFF	ON	OFF	ON	1 COIN	1 PLAY	OFF	ON	OFF	ON
OFF	OFF	ON	ON	1 COIN	2 PLAYS	OFF	OFF	ON	ON
OFF	ON	ON	ON	1 COIN	3 PLAYS	OFF	ON	ON	ON
ON	OFF	OFF	ON	1 COIN	4 PLAYS	ON	OFF	OFF	ON
ON	ON	OFF	ON	1 COIN	5 PLAYS	ON	ON	OFF	ON
ON	OFF	ON	ON	1 COIN	6 PLAYS	ON	OFF	ON	ON
ON	ON	ON	ON	1 COIN	7 PLAYS	ON	ON	ON	ON

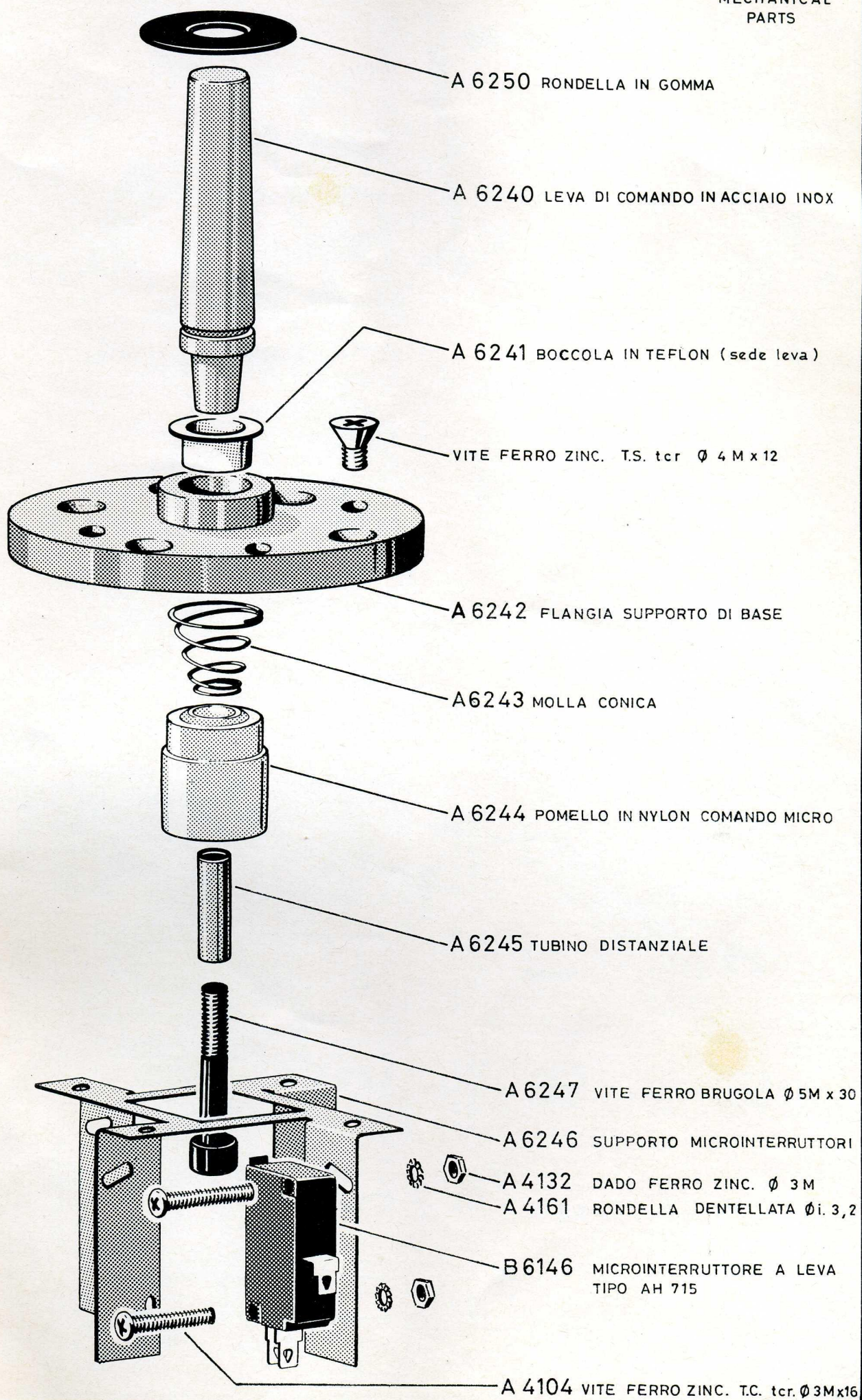
ATTENTION : Do not use other possible combinations



- | | | | | | |
|----|---------|---|----|---------|--------------------------------------|
| 1 | MV 009 | Profilato Cornice | 11 | B 6116 | Squadretta Fissaggio Cassetta Monete |
| 2 | MV 034 | Guarnizione Nera | 12 | A 7294 | Rete Stirata 180 x 180 |
| 3 | A 7286 | Guarnizione in Alluminio Anodizzato | 13 | FB 074 | Sportello Posteriore |
| 4 | MRB 424 | Pannello ad "U" serigrafato
"SCRAMBLE" | 14 | MRB 423 | Mobile Serigrafato |
| 5 | MRB 383 | Scenario Verticale Sinistro | 15 | FB 071 | Zoccolo |
| 6 | MRB 381 | Scenario | 16 | B 7154 | Cassetta Monete |
| 7 | MRB 382 | Scenario Verticale Destro | 17 | MRB 425 | Vetro Serigrafato |
| 8 | FB 075 | Sportello Superiore | 18 | C 8170 | Pannello Comandi Assemblato |
| 9 | B 7091 | Serratura | 19 | C 8109 | Sportello per Gettoniera |
| 10 | A 7295 | Rettangolo Rete Stirata 130 x 250 | 20 | A 7260 | Angolare Rinforzo Mobile |

C 8170 Pannello comandi assemblato



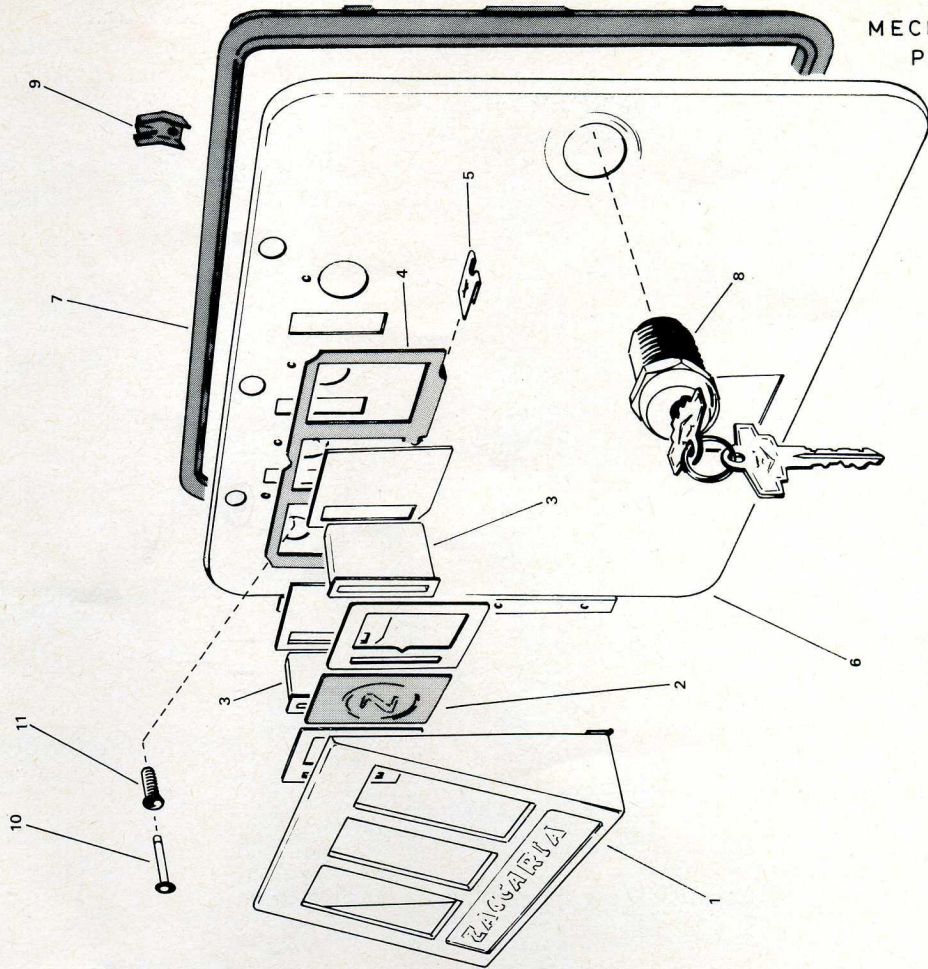
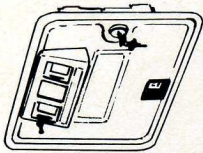


PIASTRINE SERIGRAFATE

& Introduzioni Monete

AUSTRALIA p.ser. B 5056 in. m. A 5007	AUSTRIA p.ser. B 5045 in. m. A 5008	BELGIO p.ser. B 5035 in. m. A 5008	 p.ser. B 5034 in. m. A 5007	p. ser. = PIASTRINA serigrafata
DANIMARCA & SVEZIA p.ser. B 4074 in. m. A 5007	 p.ser. B 5065 in. m. A 4401	FRANCIA & SVIZZERA p.ser. B 5024 in. m. A 5008	 p.ser. B 5025 in. m. A 5007	p. ser. B 5060 in. m. A 4401
GERMANIA p. ser. B 4059 in. m. A 5008	 p. ser. B 4060 in. m. A 5007	GIAPPONE p. ser. B 5051 in. m. A 4399	 p. ser. B 5052 in. m. A 4398	in. m. = PIASTRINA introduzione moneta
INGHILTERRA p. ser. B 4062 in. m. A 5007	 p. ser. B 4091 in. m. A 4401	ITALIA p. ser. B 5001 in. m. A 5007	JUGOSLAVIA p. ser. B 4081 in. m. A 5008	p. ser. B 4082 in. m. A 5007
LIBANO p. ser. B 5059 in. m. A 5008	OLANDA p. ser. B 4085 in. m. A 5008	UNGHERIA p. ser. B 6139 in. m. A 5008	U.S.A. & CANADA p. ser. B 5046 in. m. A 5008	p. ser. B 5061 in. m. A 5007

C 8109
SPORTELLLO PORTA
GETTONIERE
ASSEMBLATO

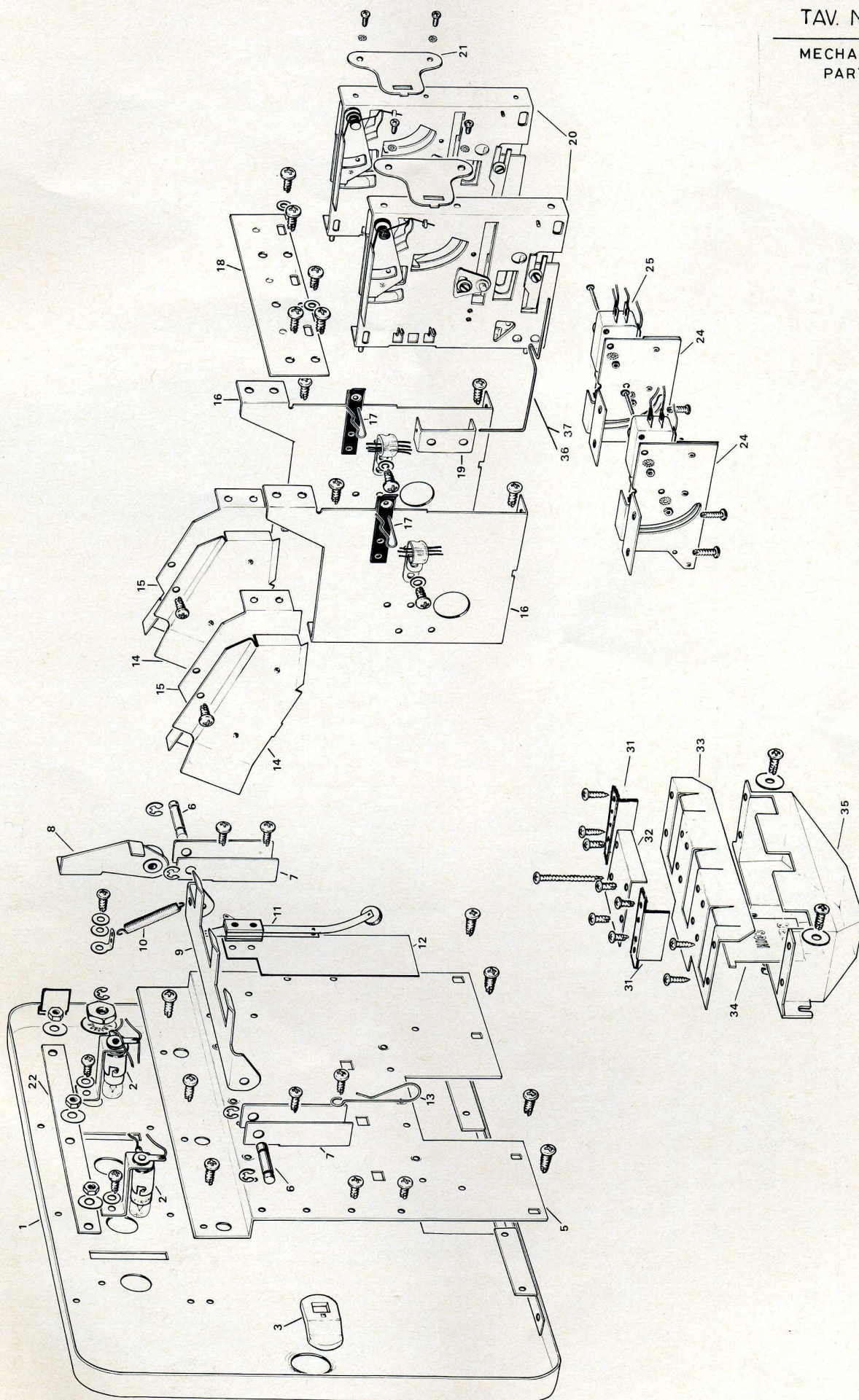


TAV. N° 4
MECHANICAL
PARTS

C 8109 Sportello porta gettoniere assemblato

TAV. N.º 5

MECHANICAL
PARTS



TAV. N° 4

C 8109 - SPORTELLLO PER GETTONIERE ASSEMBLATO

1	ASB	116	FRONTALINO SPORTELLLO CON CERNIERA
2	A	5009	PIASTRINA CON MARCHIO
3	A	6008	GUIDA MONETA IN PLASTICA
4	A	7005	COMPONENTE FISSAGGIO ACCESSORI
5	A	4383	PIASTRINA SEMIDOPPIA
6	B	7194	SPORTELLLO CON CERNIERA
7	A	7236	CORNICE IN ALLUMINIO PRESSOFUSO
8	B	7153	SERRATURA
9	A	4460	STAFFA FISSAGGIO CORNICE
10	A	4031	PULSANTE SCARTO MONETA
11	A	4032	COMPONENTE PER PULSANTE

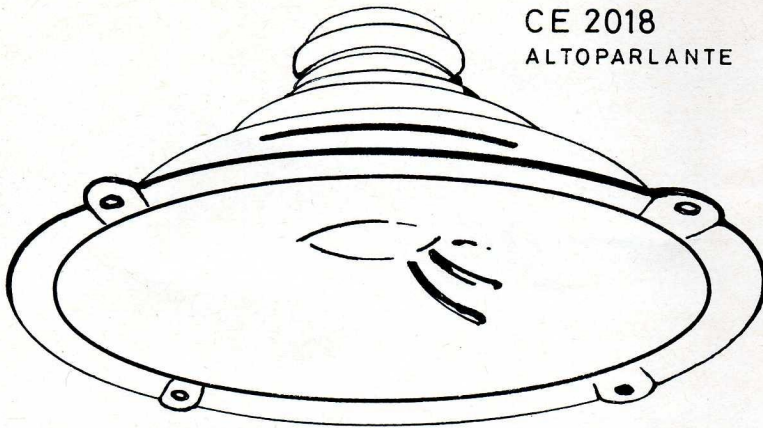
TAV. N° 5

1	B	7194	SPORTELLLO CON CERNIERA COMPL. DI ACCESSORI
2	B	5029	PORTA LAMPADA ALTO SPORTELLLO
3	A	4328	LEVA PER SERRATURA SPORTELLLO ANTERIORE
4	A	5002	FERRO BARRA ARRESTO MONETA
5	A	7002	PIASTRA SUPPORTO GETTONIERE
6	A	4005	PERNO PER CAVALLOTTO SPORTELLLO
7	A	6001	CAVALLOTTO SPORTELLLO
8	B	6001	LEVA CON BOCCOLA
9	A	6002	LEVA DI SCARTO GETTONIERA
10	A	5201	MOLLA RICHIAMO LEVA DI SCARTO
11	B	9015	PACCO LAMELLARE TILT
12	A	5205	CARTONCINO ISOLATORE SPORTELLLO
13	A	5021	FERRETTO PORTA CHIAVE SPORTELLLO
14	A	7009	SCORRIMONETE MASCHIO
15	A	7008	SCORRIMONETE FEMMINA
16	B	7006	SUPPORTO GETTONIERA
17	A	5252	FORCELLINA FISSAGGIO GETTONIERA
18	A	5014	PIASTRINA ACCOPPIAMENTO SUPP. GETTONIERA
19	A	5015	COMPONENTE PER ASTA ARRESTO MONETA
20	B	7083	GETTONIERA L. 50
"	B	7084	" L. 100
"	B	7175	" L. 200
"	B	7092	" 25 Ø
"	B	7096	" 5 F
"	B	7097	" 10 F
"	B	7098	" 5 P
"	B	7099	" 10 P
"	B	7147	" 50 P
"	B	7111	" 0,50 pfg
"	B	7112	" 1 DM
"	B	7113	" 2 DM
"	B	7114	" 5 DM
"	B	7128	" 1 FS
"	B	7129	" 2 FS
"	B	7148	" 10 Fr BELGI
"	B	7233	" 5 DINARI
"	B	7234	" 10 DINARI
21	A	5114	PIASTRINA FISSAGGIO GETTONIERA
22	A	5006	ASTA PER FRONTALINO
23	A	5001	BARRA ARRESTO MONETA
24	B	6109	PIASTRA PORTA MICRO
25	B	5053	MICRO NERO
"	B	5054	MICRO ROSSO
"	B	5055	MICRO BIANCO
31	A	7279	SQUAD. UNIDIREZIONALE ANTIFRODE
32	A	5010	SQUAD. 4 FORI
33	A	6009	COPERTURA PER RACCOGLITORE MONETE
34	A	5011	CANCELLETTO
35	A	7300	RACCOGLITORE IN LEGA
36	A	5208	FERRETTO ARRESTO MONETA GRANDE
37	A	5013	FERRETTO ARRESTO MONETA PICCOLA

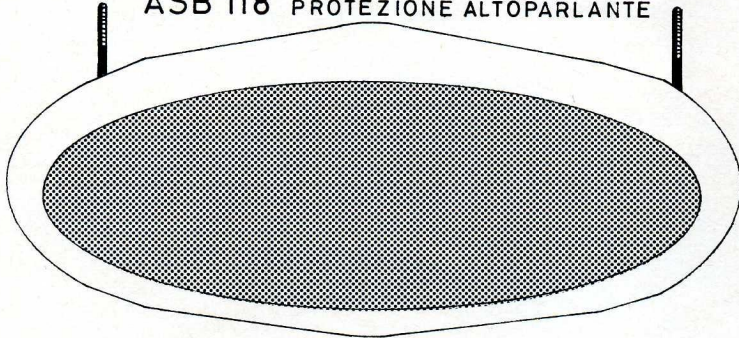
CE 2018
ALTOPARLANTE

TAV. N.º 6

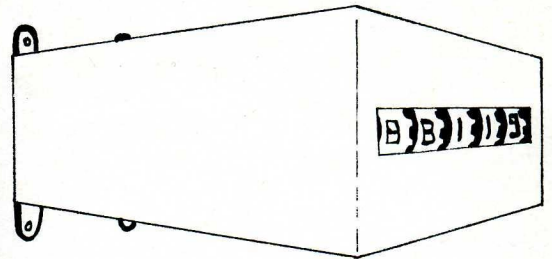
MECHANICAL
PARTS



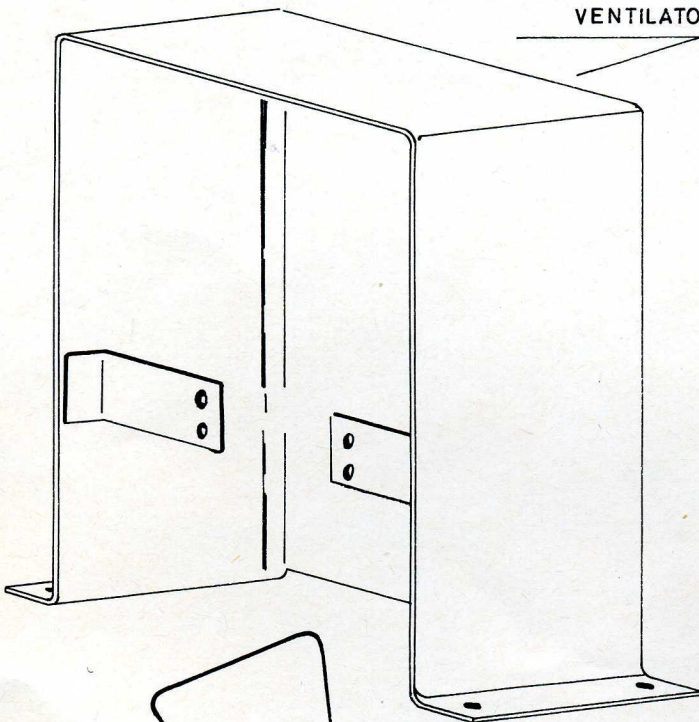
ASB 118 PROTEZIONE ALTOPARLANTE



B 6110 CONTATORE

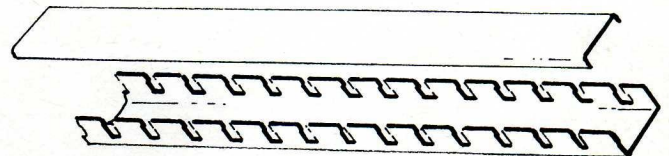


B 7235 SUPPORTO
VENTILATORE



X064
MOLLA FORTE

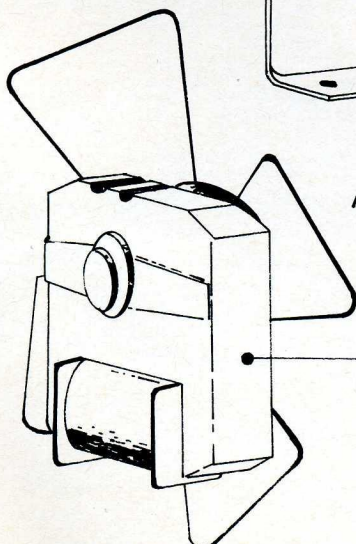
A4380
MOLLA
LEGGERA



CANALETTA
CONDUZIONE
CABLAGGIO
CON
COPERTICIO

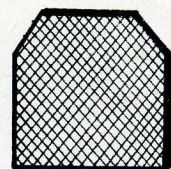
cm. 47 cm. 33
A7312 A7313

MV058



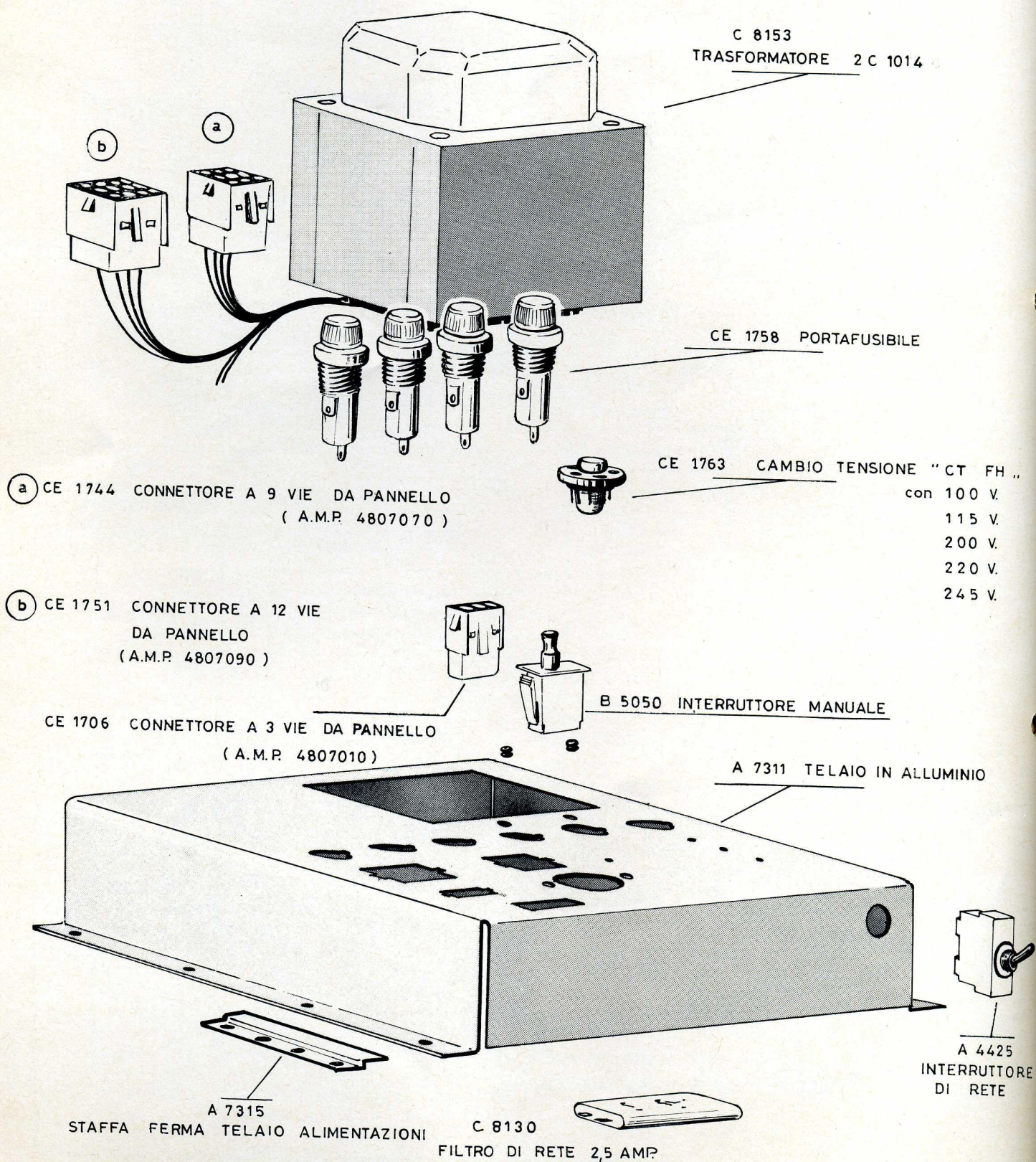
AS1066 VENTOLA IN
PLASTICA A 3 PALE
(VA 130 A)

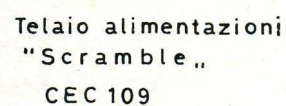
B 7240
MOTORE PER VENTOLA
ASSIALE (VA 130 A)



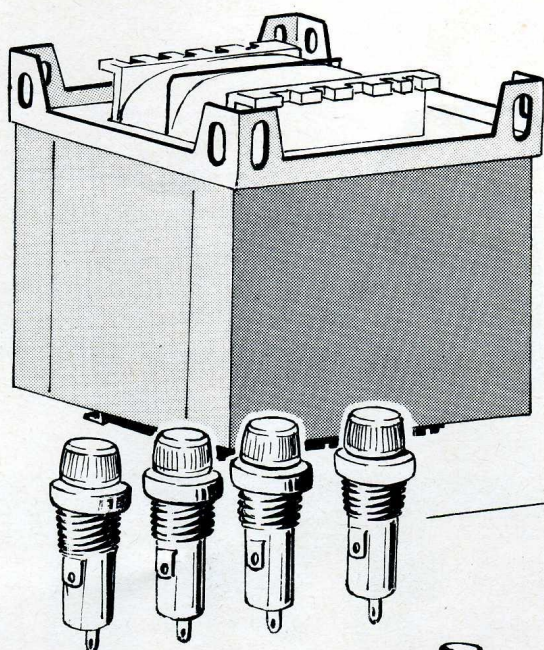
X065 RETE PLASTICA
PROTEZIONE MONITOR

TRASFORMATORE 2C1014
USATO PER MONITOR
HANTAREX MTC 900





TRASFORMATORE 2C1005C
USATO PER MONITOR
PHILIPS



C 8123
TRASFORMATORE 2 C 1005 C

CE 1758 PORTAFUSIBILE

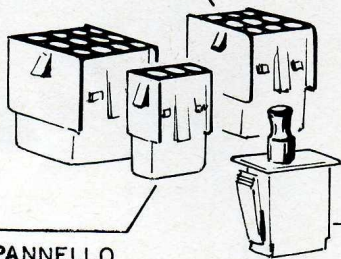
CE 1744 CONNETTORE A 9 VIE DA PANNELLO
(A.M.P. 4807070)

CE 1751 CONNETTORE A 12 VIE
DA PANNELLO
(A.M.P. 4807090)

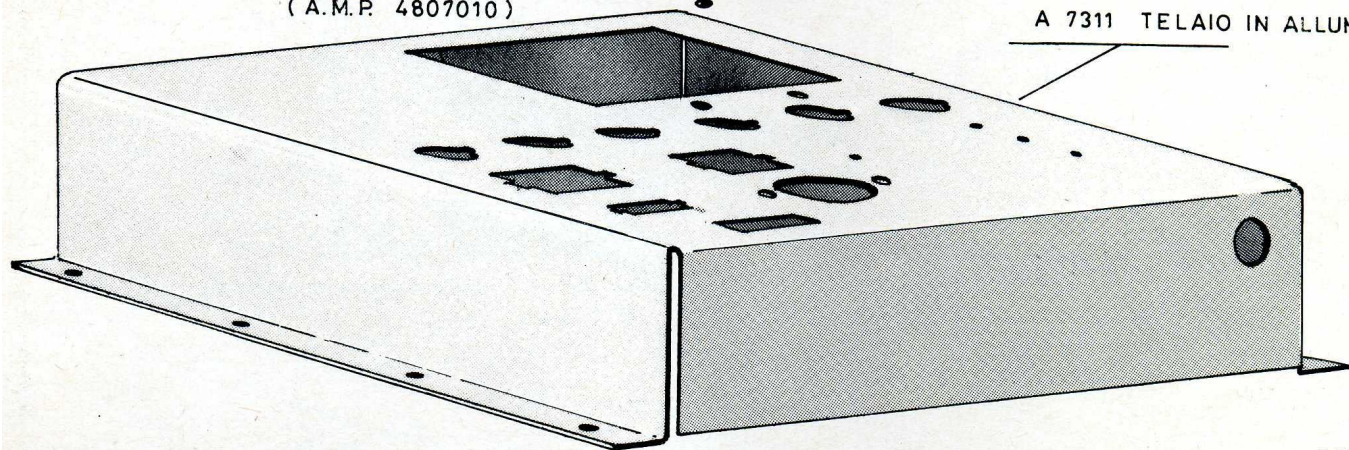
CE 1706 CONNETTORE A 3 VIE DA PANNELLO
(A.M.P. 4807010)



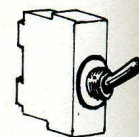
CE 1763 CAMBIO TENSIONE " CT FH ..
con 100 V.
115 V.
200 V.
220 V.
245 V.



B 5050 INTERRUOTTORE MANUALE



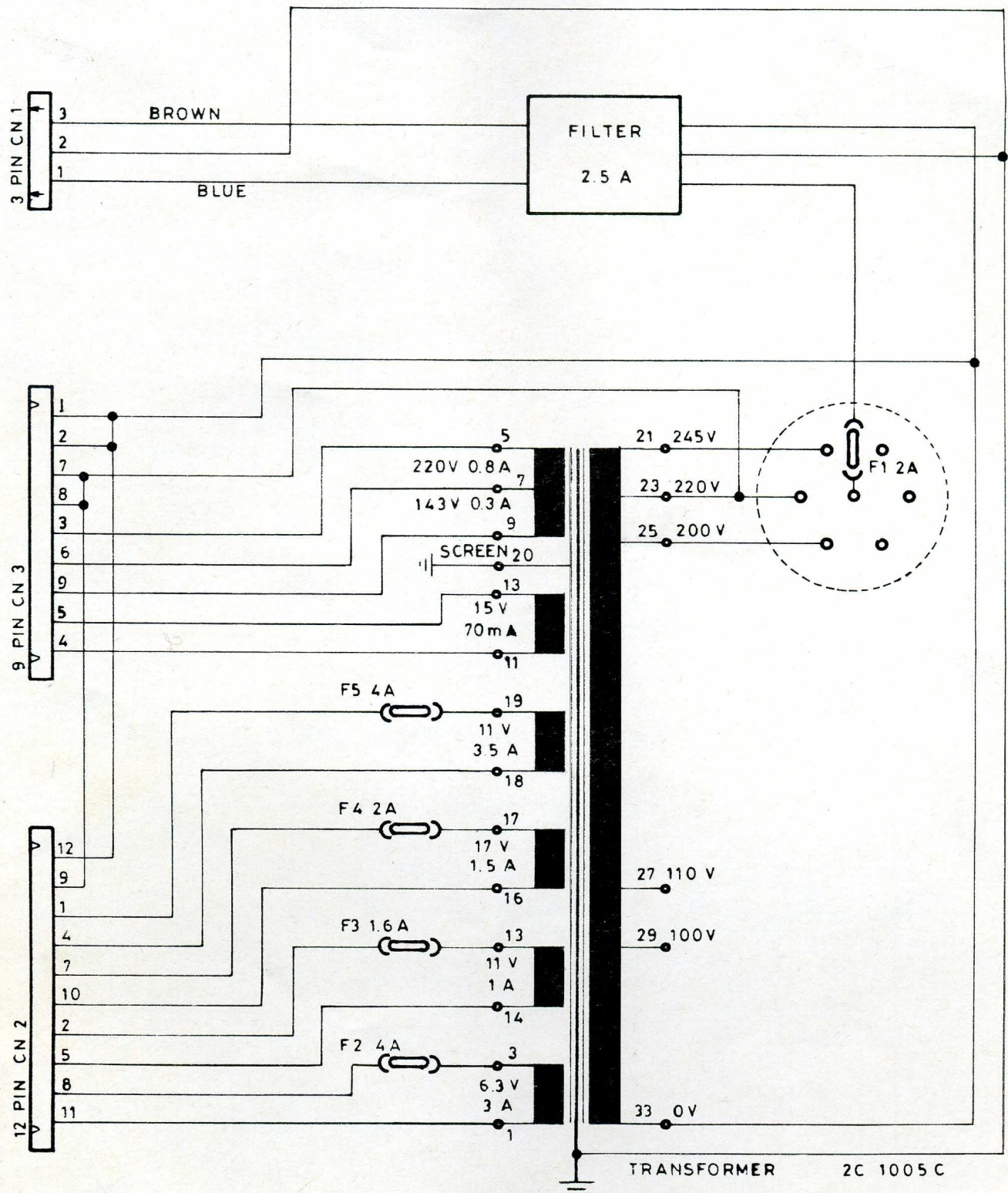
A 7311 TELAIO IN ALLUMINIO



A 4425
INTERRUPTORE
DI RETE



C 8130
FILTRO DI RETE 2,5 AMP

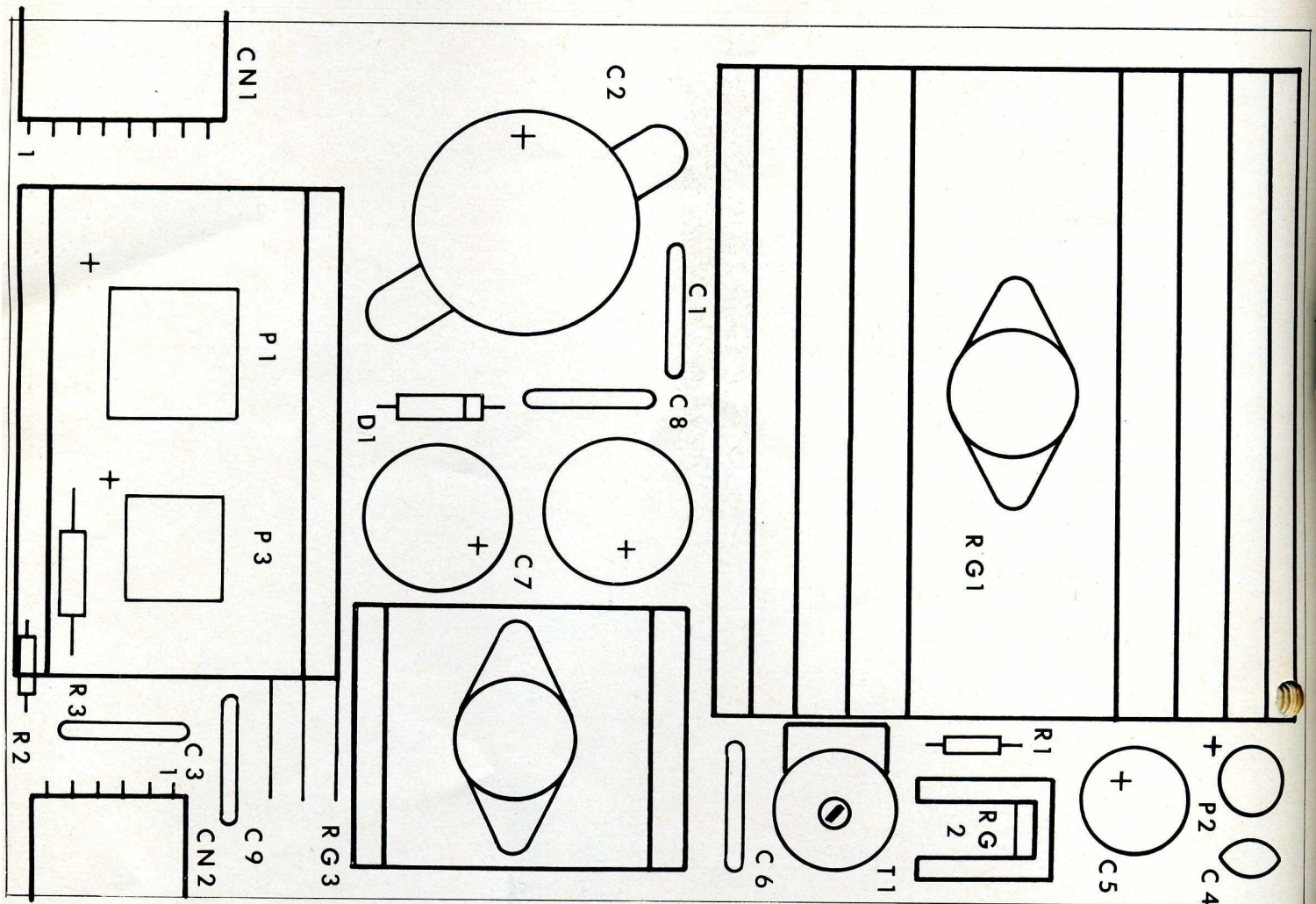


TRASFORMATORE 2C 1005C
USATO PER MONITOR
PHILIPS

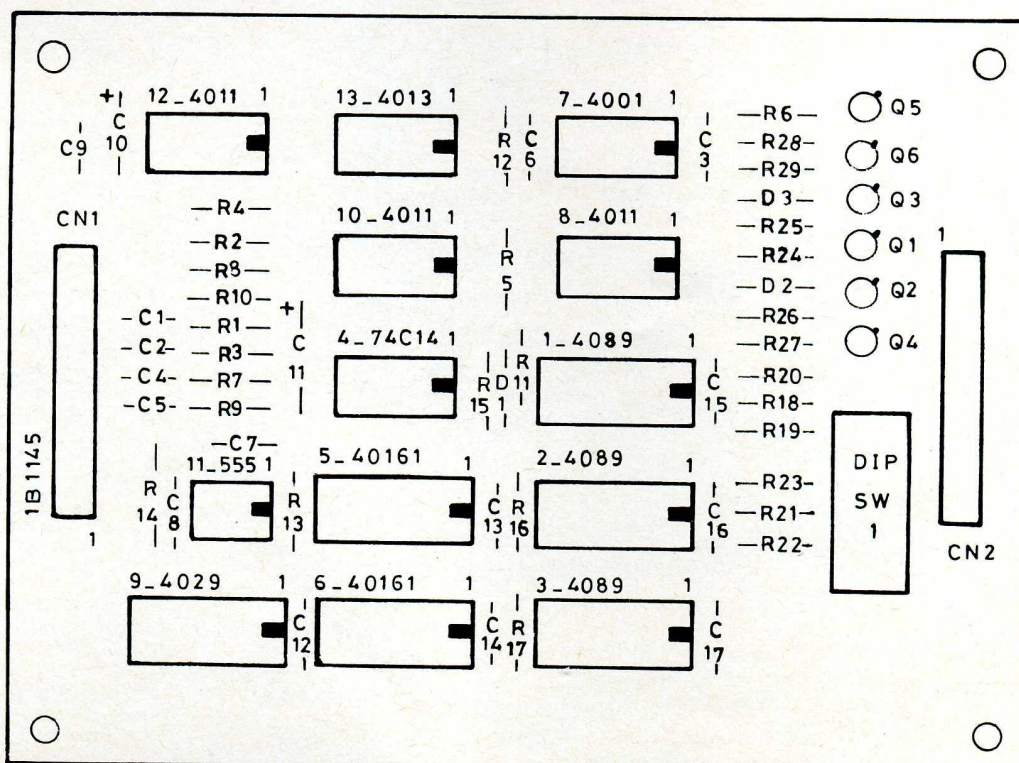
Telaio alimentazioni
- SCRAMBLE -

CEC 084

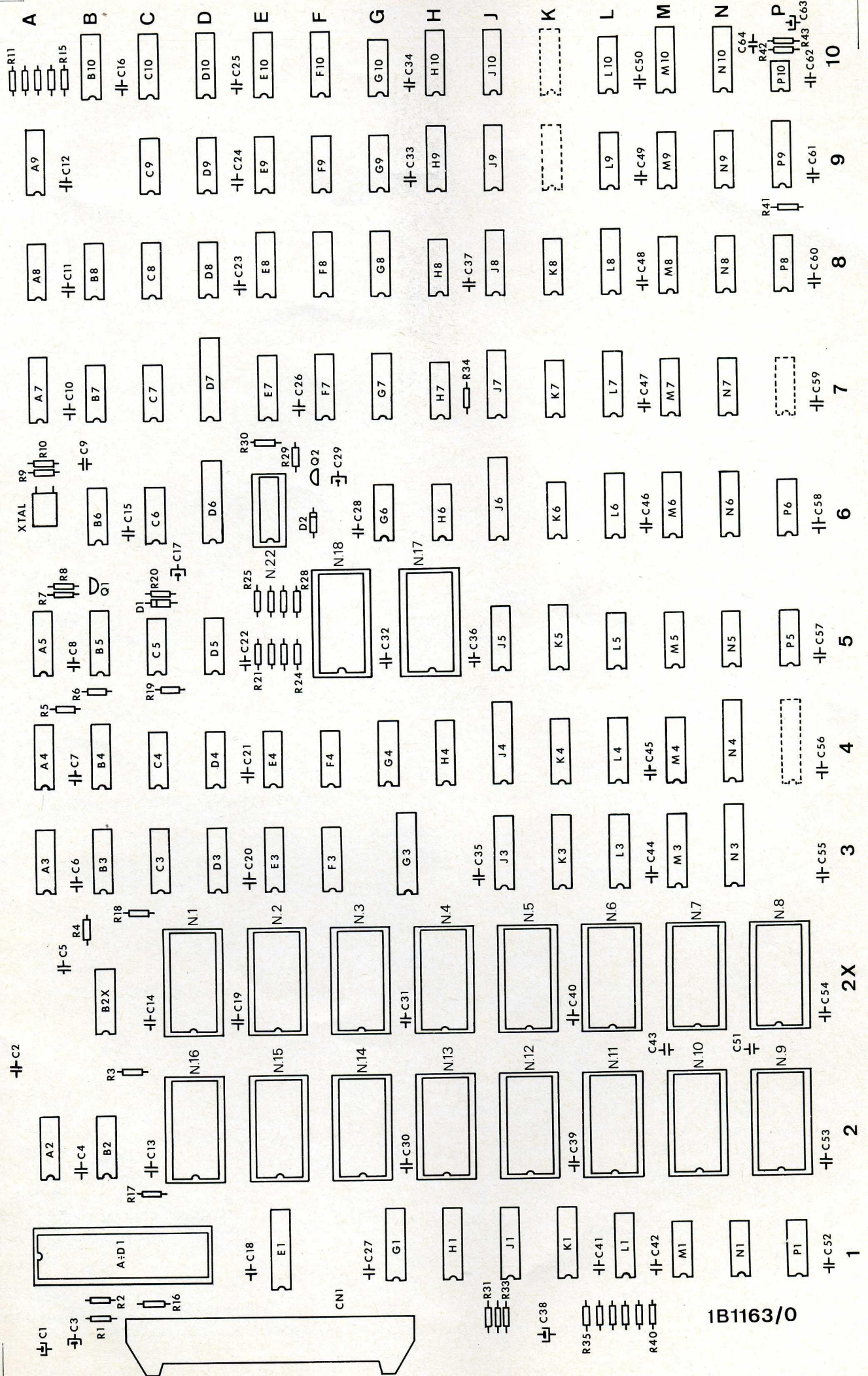
CEC 110 POWER board (P.C. 1B1126)



CEC 069 COIN SWITCHES ADJUSTMENTS board (P.C. 1B1145)

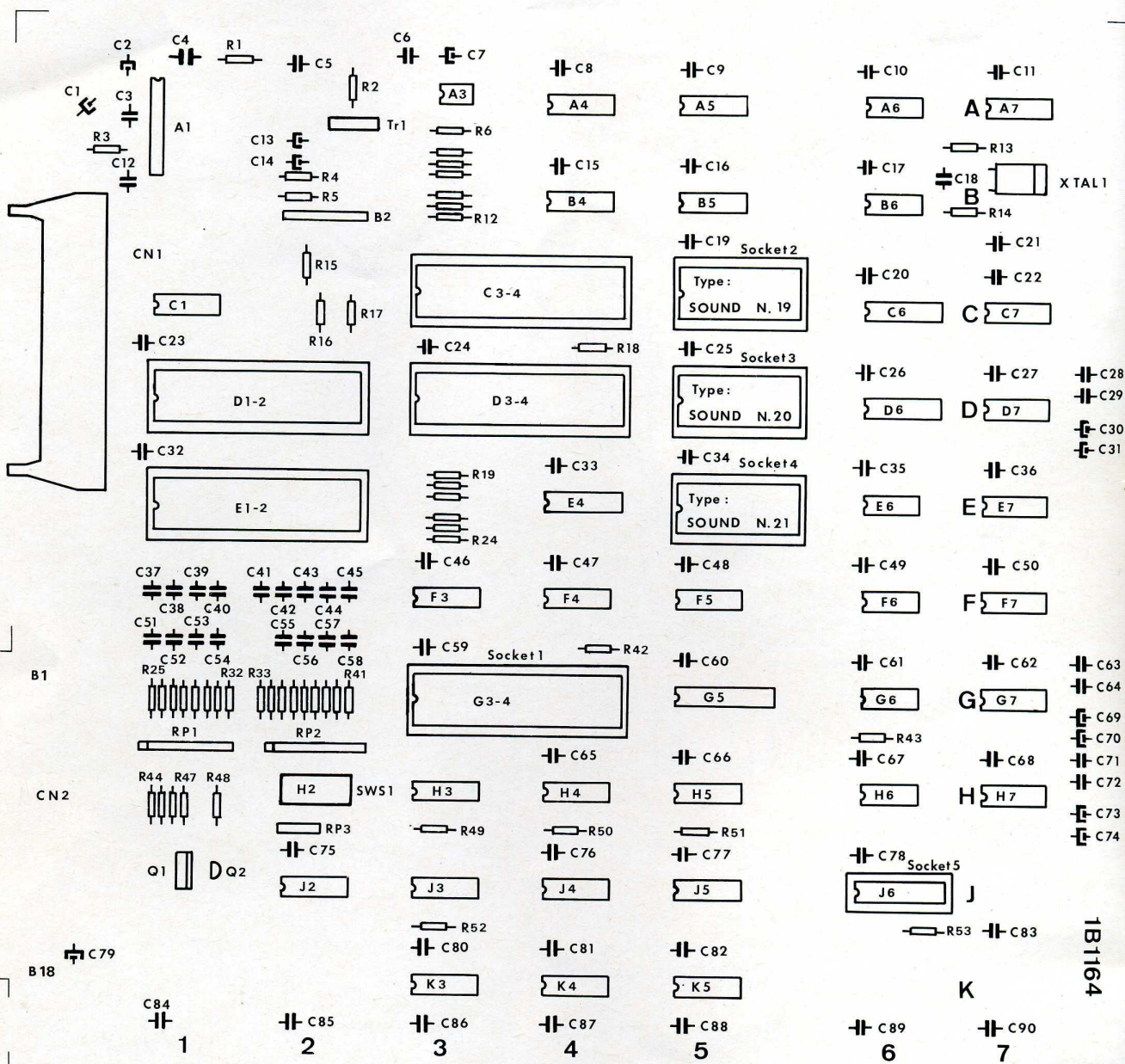


CEB 081 LOGIC board (P.C. 1B1163/0)



1B1163/0

CEB 082 SOUND board (P.C. 1B1164)



1B1164

F.LLI ZACCARIA s.n.c. Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy		PART NO. 1B1164	
PART NAME Layout components for Sound Board			
DWN. <i>[Signature]</i>	DATE 31-3-81	REV. 1	DATE REV. 31-3-81
SHEET 1		SHEET 1	
NOTES: UNLESS OTHERWISE SPECIFIED 1) ALL RESISTORS VALUES IN Ω 2) ALL CAPACITORS VALUES IN μF			

Component list POWER BOARD ASSEMBLY CEC 110

ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION	REQ'D No
1	PC 1	CE 2070	Printed Circuit 1B 1126	1
2	PC 1	CE 1405	50V. 10 AMP Rect.Brid.(KBPC 10-005)	1
3	P 2	CE 1233	50V. 1 AMP Rect.Brid.(W-005)	1
4	P 3	CE 1276	50V. 3 AMP Rect.Brid.(KBPC* 1-005)	1
5	RG 1	CE 1238	+5V. 5 AMP Voltage Regulator (MA 78H05 KC)	1
6	RG 2	CE 1648	-5V. 1 AMP Voltage Regulator (MA 7905 UC)	1
7	RG 3	CE 1688	+12V.1 AMP Voltage Regulator (MA 7812 KC)	1
8	D 1	CE 1299	1N 5400 Diode	1
9	CN 2	CE 1332	6 Pin Modu 1 Male Connector	1
10	CN 1	CE 1361	8 Pin Modu 1 Male Connector	1
11	HS 1	CE 1566	Heat Sink 16/75/2	1
12	HS 2	CE 1278	Heat Sink 41/100/B	1
13	HS 3	CE 1099	Heat Sink ML 26/50 TO-220	1
14	HS 4	CE 1529	Heat Sink 16/40/B	1
15	C 1-3-6-8-9	CE 1261	0.33 MF 50V. Polies.film Capac.	5
16	C 2	CE 1384	10.000MF 16V. Electr.Cap.Sin. Ended	1
17	C 4	CE 1005	0.1MF 50V. Ceramic Capacitor	1
18	C 5	CE 1026	1.000MF 25V. Elec.Cap.Sin.End.	1
19	C 7	CE 1579	2.200MF 25V. Elec.Cap.Sin.End.	2
20	R 1	CE 1170	1 KOHM 1/4W. 5% Carbon Resistor	1
21	T 1		47 OHM 1 Turn Vertical Trimmer (Commonly mounted 22 OHM 1/4W.5% Carbon Resistor)	1

Component list COIN SWITCHES ADJUSTMENTS BOARD CEC 069

ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION	REQ'D No
1	P.C. 1B 1145	CE 2100	Printed Circuit Board 1B 1145	1
2	CN 1-2	CE 1590	15 Pin Modu 2 Male Connectors	2
3	IC 7	CE 1014	4001 B C-Mos-Ic	1
4	IC 8-10-12	CE 1016	4011 B C-Mos-Ic	3
5	IC 13	CE 1745	4013 B C-Mos-Ic	1
6	IC 9	CE 1237	4029 B C-Mos-Ic	1
7	IC 1-2-3	CE 1746	4089 B C-Mos-Ic	3
8	IC 5-6	CE 1740	40161B C-Mos-Ic	2
9	IC 4	CE 1735	74C14 C- Mos- Ic	1
10	Dip Sw. 1	CE 1480	Dip Switch 8 vie	1
11	Q 6 - 2	CE 1290	BC 337 NPN Transistors	2
12	Q 5-4-3-1	CE 1030	BC 171 NPN Transistor	4
13	C 10	CE 1162	100 MF 16VL. Elettr.Cap.Assiale	1
14	C 7	CE 1643	0.33MF 16VL. Tantalum Cap.	1
15	IC 11	CE 1031	NE 555 Mos Ic	1
16	C 9-12-13-14-15-16-17	CE 1005	0.1 MF Ceramic Capacitor	7
17	C 11	CE 1100	10 MF 16VL. Elettr.Cap.Assiale	1
18	C 1-2-4-5-8	CE 1029	10 Kpf 50VL. Ceramic Cap.	5
19	C 3-6	CE 1159	1 Kpf 50VL. Ceramic Cap.	2
20	D 1-2-3	CE 1539	1N 4003 Diodes	3
21	R 24-25-27-28	CE 1194	22K OHM 1/4W/ 5% Carbon Resistor	4
22	R 14	CE 1195	15K OHM 1/4W. 5% Carbon Resistor	1
23	R 2-4-5-8-10-11-16-17-18-19-20-21-22-23	CE 1171	10K OHM 1/4W. 5% Carbon Resistor	14
24	R 13-6-12	CE 1165	4.7K OHM 1/4W. 5% Carbon Resis.	3
25	R 1-3-7-9-26-29-15	CE 1164	2.2K OHM 1/4W. 5% Carbon Resis.	7

ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION	REQD No
1	P.C.	CE 2128	Printed Circuit 1B 1163/1	1
2	CN 1	CE 1815	Male Connector 50 Pin 90° Flat C.	1
3		CE 1816	Female Connector 50 Pin Flat C.	1
4	N7-A8-C8-E4-C5-	CE 1134	I.C. 74LS00	5
5	D4-C6-E9	CE 1143	I.C. 74LS02	3
6	C7-M8	CE 1133	I.C. 74LS04	2
7	P6-B8-D8-H8	CE 1145	I.C. 74LS08	4
8	N5-L9	CE 1146	I.C. 74LS10	2
9	K6-C9-D9	CE 1139	I.C. 74LS20	3
10	N1-G6	CE 1669	I.C. 74LS30	2
11	F4-F9	CE 1147	I.C. 74LS32	2
12	C4-P5-B6-M7-N8-M9-N9-L10	CE 1141	I.C. 74LS74A	8
13	L5-M5-M6-K7-K8-G9-G10	CE 1322	I.C. 74LS86	7
14	B7	CE 1800	I.C. 74LS107A	1
15	M7	CE 1865	I.C. 74LS126A	1
16	B2X-B3-C3-D3-E3-F3	CE 1144	I.C. 74LS138	6
17	B4-M10-N10	CE 1670	I.C. 74LS139	3
18	P8	CE 1705	I.C. 74LS151	1
19	G4-H4-K4-L4-M4-J5-K5-N6-E8	CE 1433	I.C. 74LS157	9
20	M6-L6-L7-L8-H9-J9-P9-J10-H10	CE 1131	I.C. 74LS161A	9
21	M1-P1	CE 1663	I.C. 74LS164	2
22	A9	CE 1524	I.C. 74LS174	1
23	E7	CE 1703	I.C. 74LS175	1
24	F7-G7-G8-F8	CE 1866	I.C. 74LS194A	4
25	N3-N4	CE 1589	I.C. 74LS244	2
26	E1-G3	CE 1810	I.C. 8T 245 (or 74LS245)	2
27	B5	CE 1867	I.C. 74LS259	1
28	J6-J4-D6	CE 1868	I.C. 74LS273	3
29	J8-J7	CE 1700	I.C. 74LS283	2
30	E6	CE 1498	I.C. 74LS288 PROM	1
31	L1	CE 1869	I.C. 74LS366	1
32	A2-B2-A3-A4	CE 1783	I.C. 74LS367	4
33	A5-A7	CE 1782	I.C. 74LS368	2
34	D7	CE 1870	I.C. 74LS377	1
35	D5	CE 1788	I.C. 74LS393	1
36	P10	CE 1031	I.C. NE 555	1
37	G1-H1-J1-K1	CE 1910	I.C. 2114 L3 RAM	4
38	J3-K3-L3-M3	CE 1909	I.C. 2114 L2 RAM	4
39	B10-C10-D10-E10-F10	CE 1880	I.C. 27LS00	5
40	CD2-E2-F2-M2-JK2-L2-MN2-P2-CD2X-E2X-F2X-M2X-JK2X-I2X-MN2X-P2X	CE 1364	I.C. 2708 EPROM	16
41	F5-M5	CE 1687	I.C. 2716 EPROM	2
42	ABCD1	CE 1887	I.C. Z 80 A (Microprocessor)	1
43	R1-R40-R36-R37-R7-R8	CE 1409	Carbon Resistor 100 OHM 1/4W. 5%	6
44	R38-R39-R35	CE 1268	Carbon Resistor 150 OHM 1/4W. 5%	3
45	R2-R21-R24-R25	CE 1166	Carbon Resistor 220 OHM 1/4W. 5%	4

Sound Board SCRAMBLE
Component list
Sound end Logic Boards

CEB 082

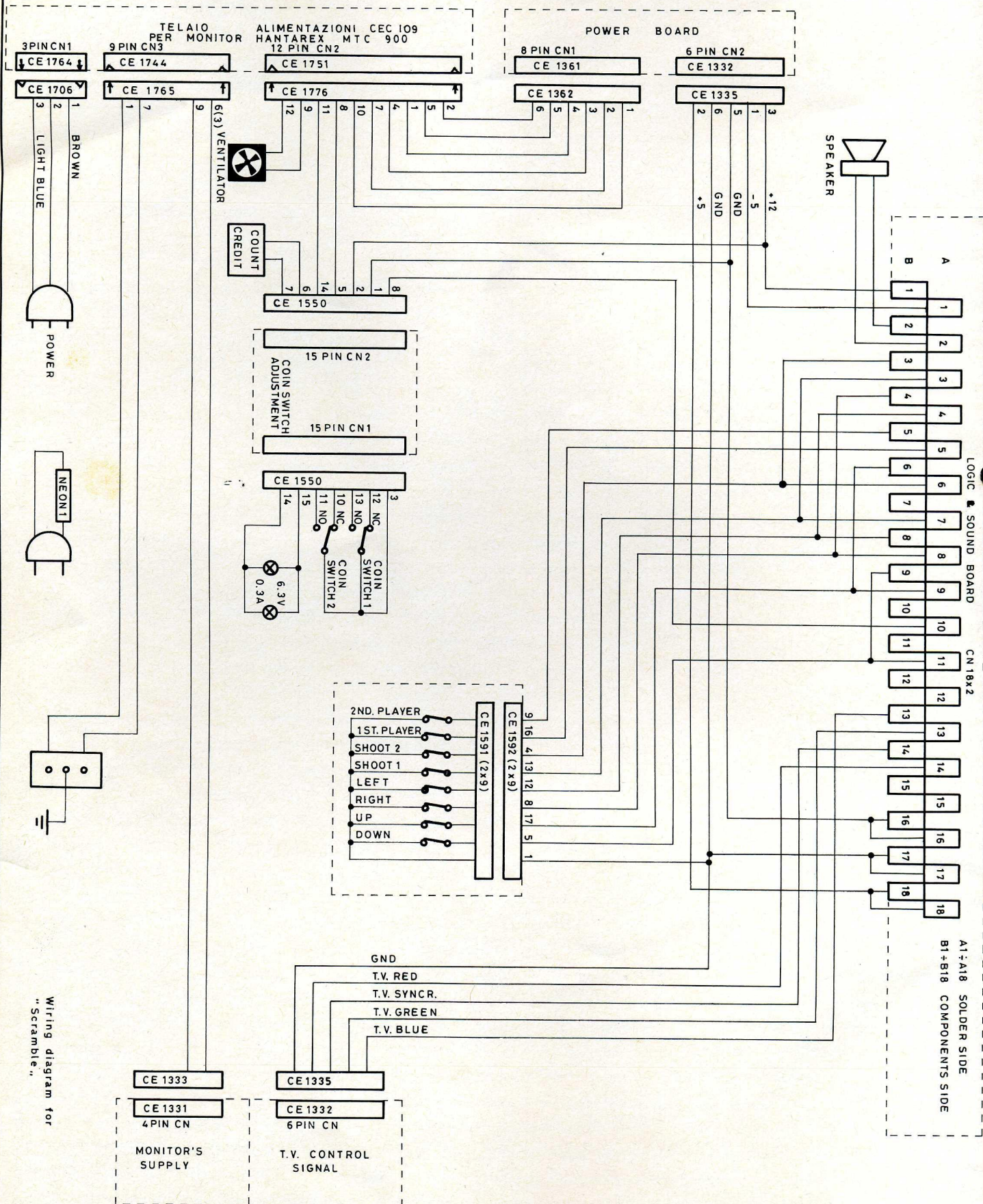
PC. 1B 1164

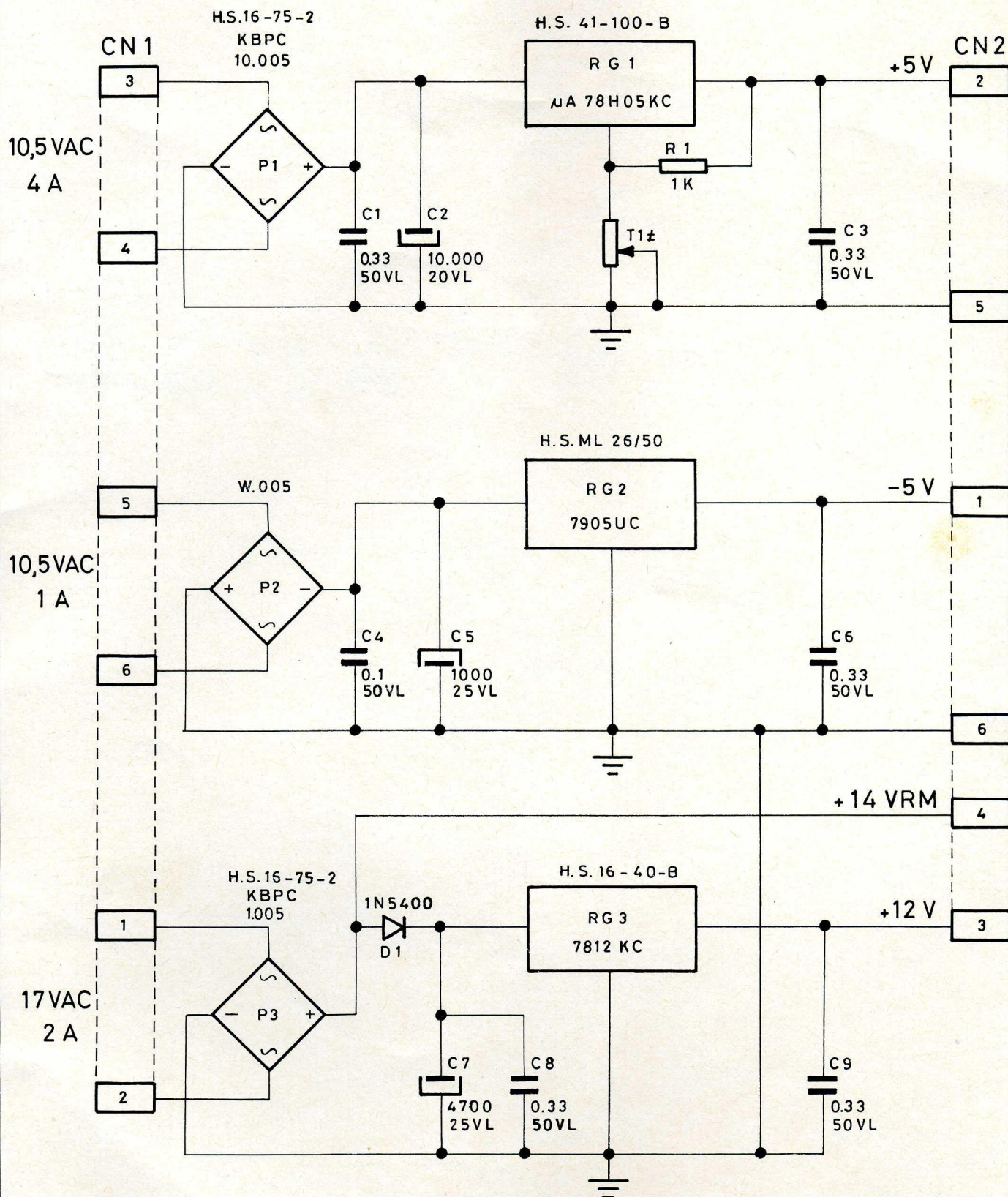
CEC 112

ITEM No	PART DESIGNATION	CODE PART No	DESCRIPTION	REQD No
1	P.C.	CE 2129	Printed Circuit 1B 1164	1
2	CN 1	CE 1815	Male Connector 50Pin 90° Flat C.	1
3		CE 1816	Female Connector 50Pin Flat Cable	1
4	C1-H5	CE 1134	I.C. 74LS00	2
5	J4-J5-A7	CE 1133	I.C. 74LS04	3
6	J2-F3-H3-F4-H4-F5	CE 1145	I.C. 74LS08	6
7	A5-A6-K3	CE 1142	I.C. 74LS27	3
8	K4	CE 1864	I.C. 74LS28	1
9	K5-A4	CE 1147	I.C. 74LS32	2
10	E 4	CE 1789	I.C. 74LS42	1
11	J3-H6-G6-F6-E6-F7-E7	CE 1141	I.C. 74LS74A	7
12	B 4	CE 1752	I.C. 74LS90	1
13	B 5-B 6 - C7	CE 1709	I.C. 74LS93	3
14	G 5	CE 1810	I.C. 74LS245	1
15	B 2	CE 1912	I.C. 10S CUSTOM	1
16	A 1	CE 1434	I.C. TDA 1010	1
17	J 6	RE 223	I.C. K 10 S CUSTOM	1
18	A 3	CE 1860	I.C. MC 1741 8 Led Minidip	1
19	H7-G7-D7	CE 1859	I.C. MSM 4066 SR	3
20	C6-D6	CE 1911	I.C. 2114 L	2
21	G3.4	CE 1887	I.C. Z 80 (Microprocessor)	1
22	C3.4-D3.4	CE 1844	I.C. AY-3-8910 (Sound)	2
23	D1.2-E1.2	CE 1857	I.C. D 8255 AC-5 (PIO)	2
24	E5-D5-C5	CE 1687	I.C. 2716 (EPROM)	3
25	RP1-RP2	CE 1820	Carbon Resistor SIP 8 x 1 KOHM	2
26	RP3	CE 1821	Carbon Resistor SIP 4 x 1 KOHM	1
27	R1	CE 1306	Carbon Resistor 4,7 OHM 1/4W. 5%	1
28	R53	CE 1409	Carbon Resistor 100 OHM 1/4W. 5%	1
29	R25+41	CE 1166	Carbon Resistor 220 OHM 1/4W. 5%	17
30	R18	CE 1202	Carbon Resistor 330 OHM 1/4W. 5%	1
31	R13-14	CE 1043	Carbon Resistor 820 OHM 1/4W. 5%	2
32	R2-10+12-15-19+21-42-44+47-49-50	CE 1170	Carbon Resistor 1KOHM 1/4W. 5%	16
33	R4-5	CE 1417	Carbon Resistor 3,9KOHM 1/4W. 5%	2
34	R7+9-22+24-48	CE 1824	Carbon Resistor 5,1KOHM 1/4W. 5%	8
35	R6	CE 1164	Carbon Resistor 2,2KOHM 1/4W. 5%	1
36	R43-51	CE 1171	Carbon Resistor 10KOHM 1/4W. 5%	2
37	R 3	CE 1447	Carbon Resistor 330KOHM 1/4W. 5%	1
38	R 16	CE 1079	Carbon Resistor 12KOHM 1/4W. 5%	1
39	Tr 1	CE 1598	Turn Vertical Trimmer 10 KOHM	1
40	C 21	CE 1257	Capacitor 100pF 50V. 5mm. Disc C.	1
41	C 5	CE 1473	Capacitor 330pF 50V. 5mm. Disc.C.	1
42	C 18	CE 1513	Capacitor 470pF 50V. 5mm. Disc.C.	1
43	C28-29-63-64-71-72	CE 1052	Capacitor 47KpF50V. 5mm. Disc.C.	6
44	C3-4-6-8+12-15+17-19-20-22+27-32+62-65+68-75+78-80+82-84+90	CE 1005	Capacitor 100KpF50V. 5mm. Disc C.	67
45	C79	CE 1613	Capacitor 220MF 16V. Electrol.Ver	1
46	C 2	CE 1118	Capacitor 100MF 16V. Electrol.Ver.	1
47	C 7	CE 1901	Capacitor 6,8MF 16V. Electrol.Ver.	1

R17-C14-C90 Not Used

(3) TELAIO ALIMENTAZIONE CEC 084
PER MONITOR PHILIPS





±: 47 Ω TRIMMER or 22 Ω 1/4W 5% RESISTOR

 F.LLI ZACCARIA s.n.c. Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy		PART NAME		PART NO.
		POWER BOARD 1B1126 (CEC 110)		1B1326-F
QWN.	DATE	REV.	DATE REV.	SHEET
Atc Rn	30-3-84			- 1 -
NOTES: UNLESS OTHERWISE SPECIFIED				
1) ALL RESISTORS VALUES IN				
2) ALL CAPACITORS VALUES IN μF				