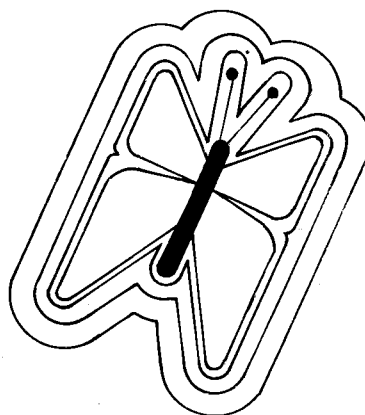


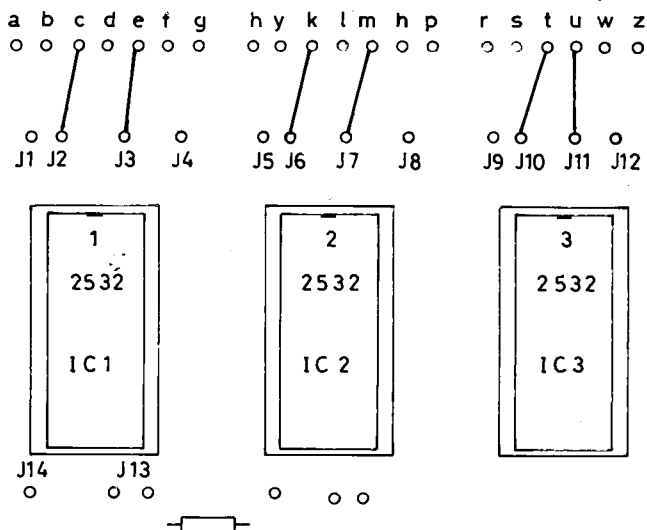
FARFALLA

ELECTRICAL DIAGRAMS



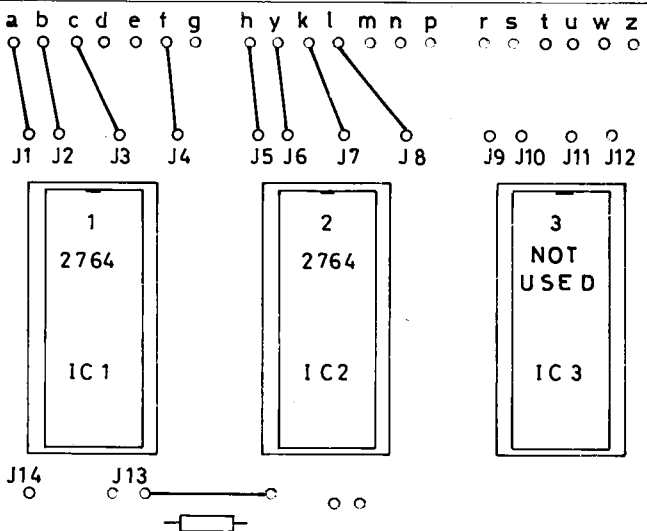
ZACCARIA®

JUMP LIST FOR MEMORIES SELECTION



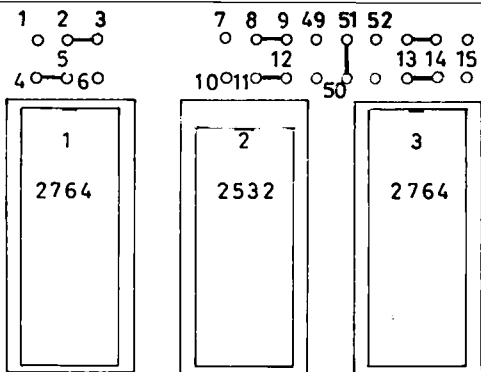
PINBALL CHAMP
SOCCER KINGS
TIME MACHINE

C.P.U.
P.C. 1B1165 , 65/0 , 65/1



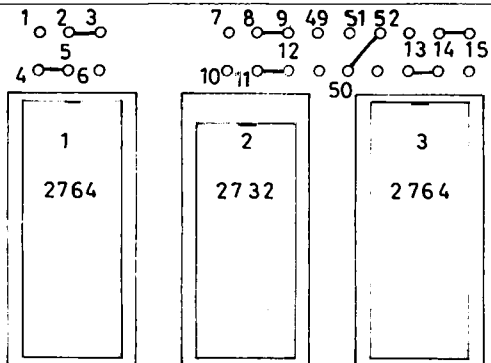
FARFALLA

C.P. U.
PC. 1B1165 65/0 65/1



TIME MACHINE

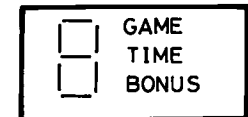
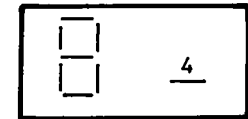
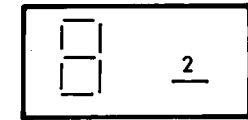
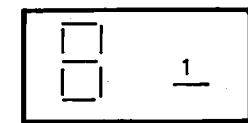
SOUND
PC.1B 11 136



FARFALLA

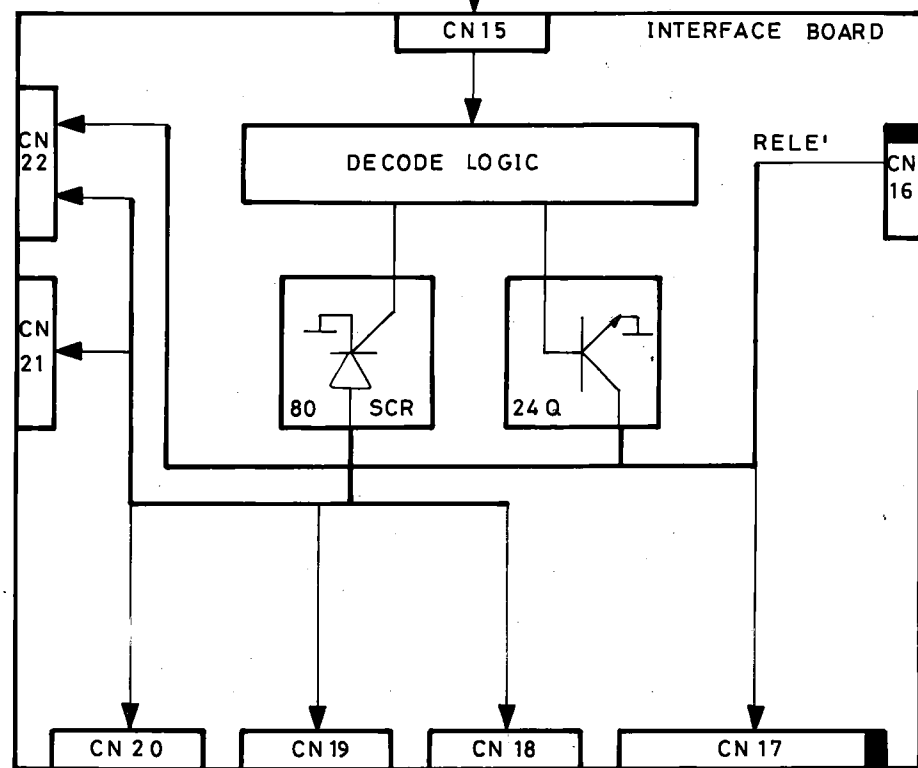
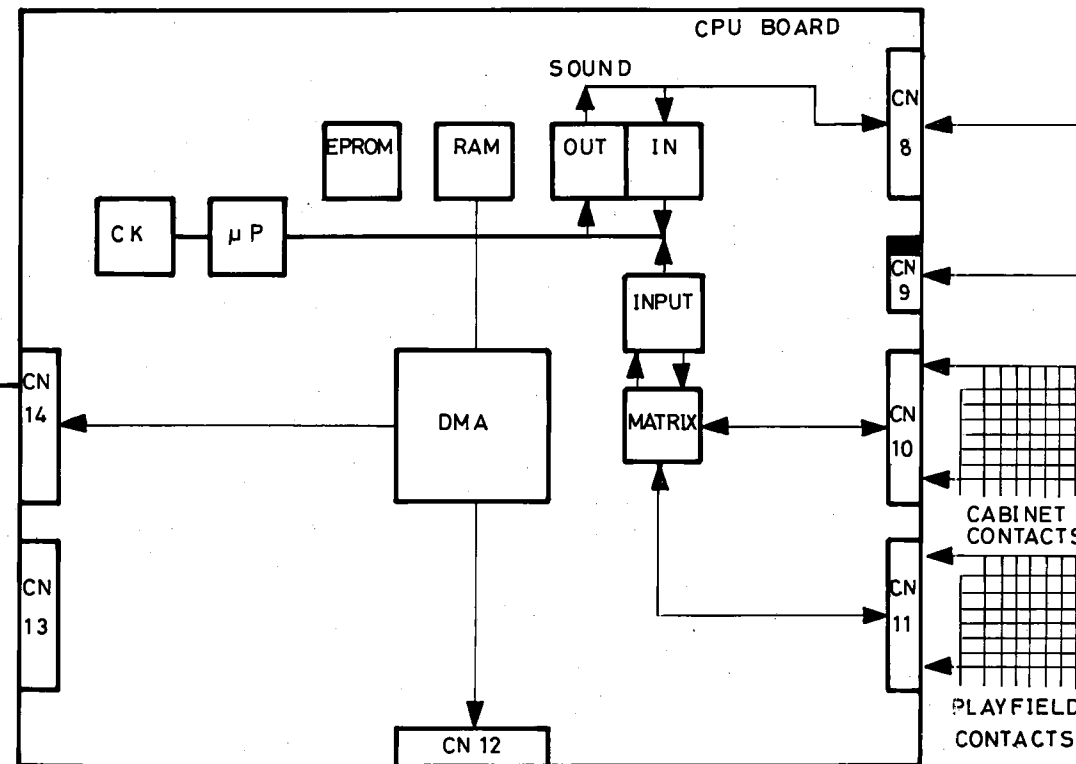
SOUND
PC. 1B 11136

DRIVER DISPLAY BOARDS



(HEAD SOLENOIDS)

HEAD LAMPS



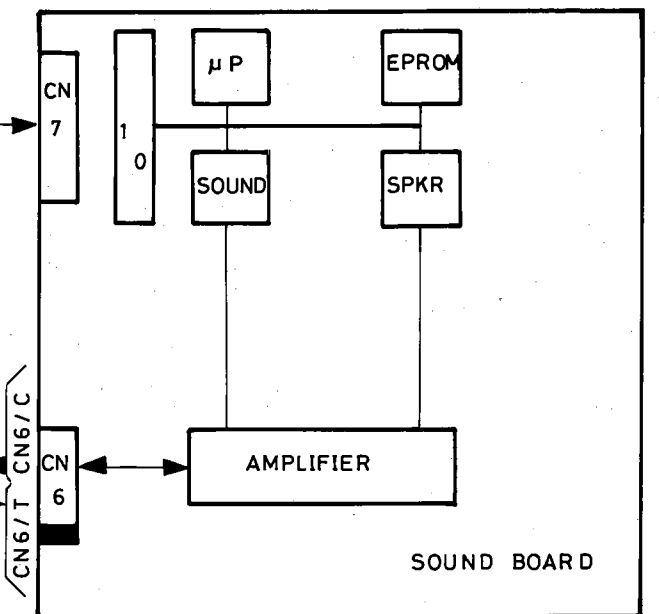
GND
+5
+170
P.F.

GND
+5
+12
-5

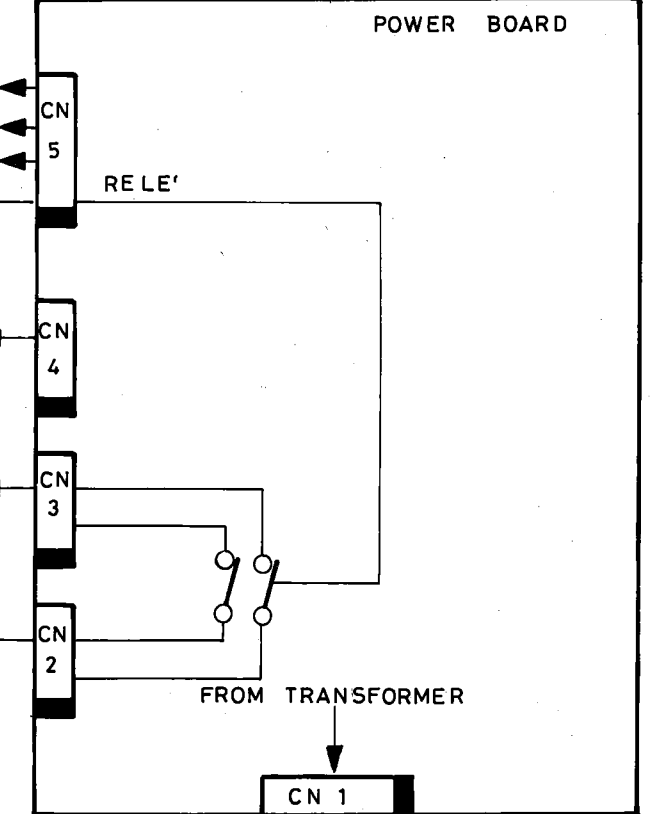
POWER TO HEAD

POWER TO PLAYFIELD

POWER TO CABINET

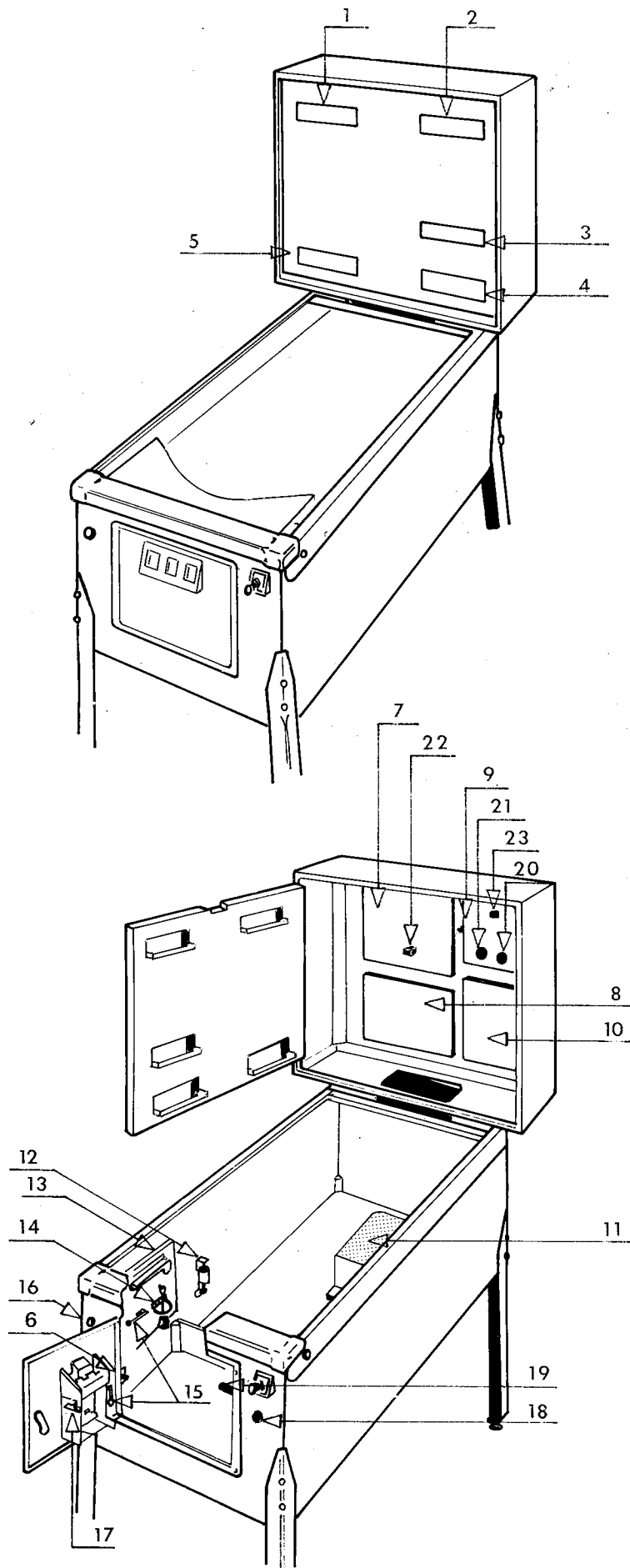


POWER BOARD



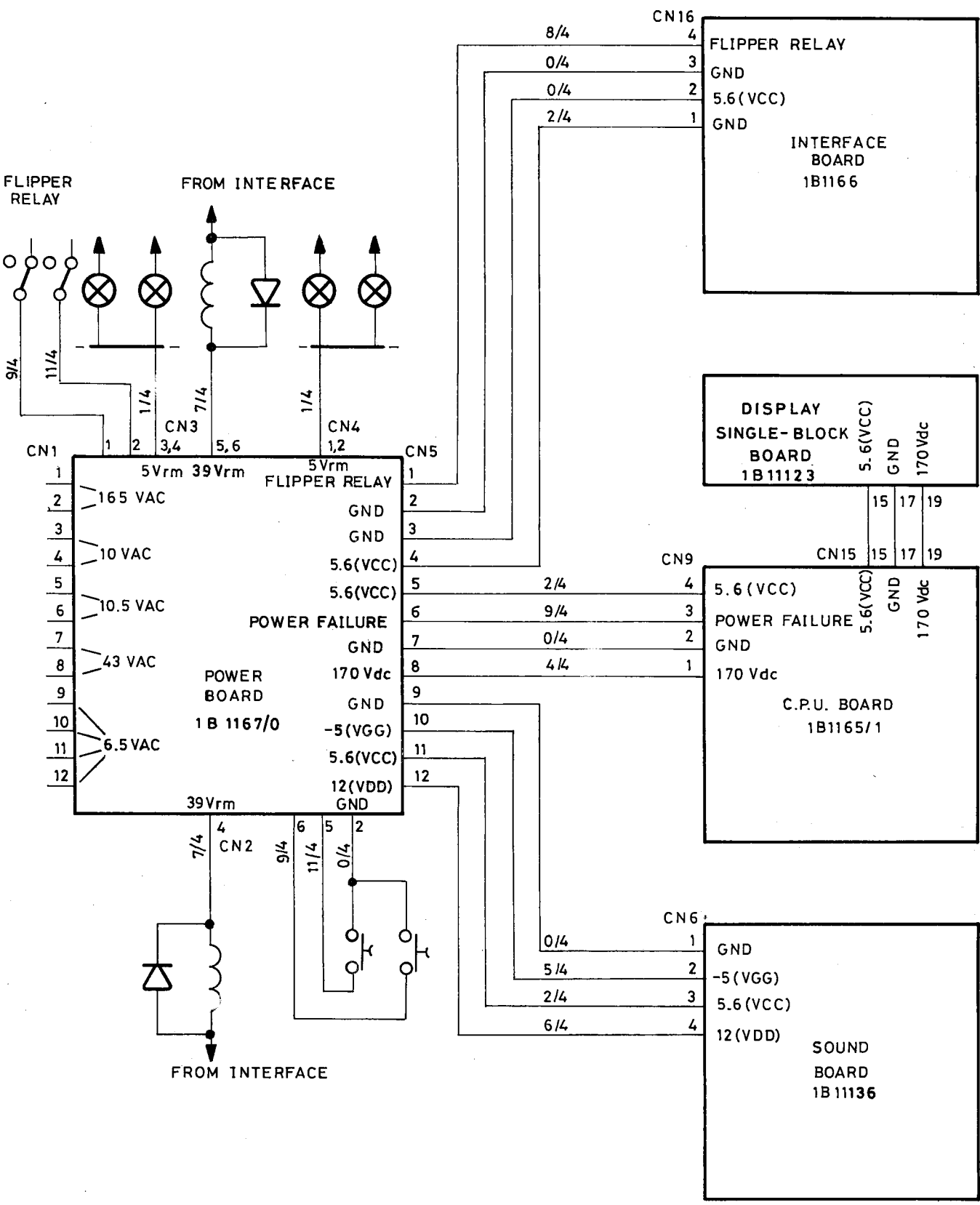
		F.LLI ZACCARIA		s.n.c.	
Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) ITALY					
Codice		Descrizione			
		BLOCK DIAGRAM "FARFALLA"			
Codice Gruppo		Dis.	Data	Rev.	Data Rev.
		LORENA	13. 6. 1983		
Materiale			Trattamento		Scala
• note :					Foglio

ASSEMBLY DRAWING



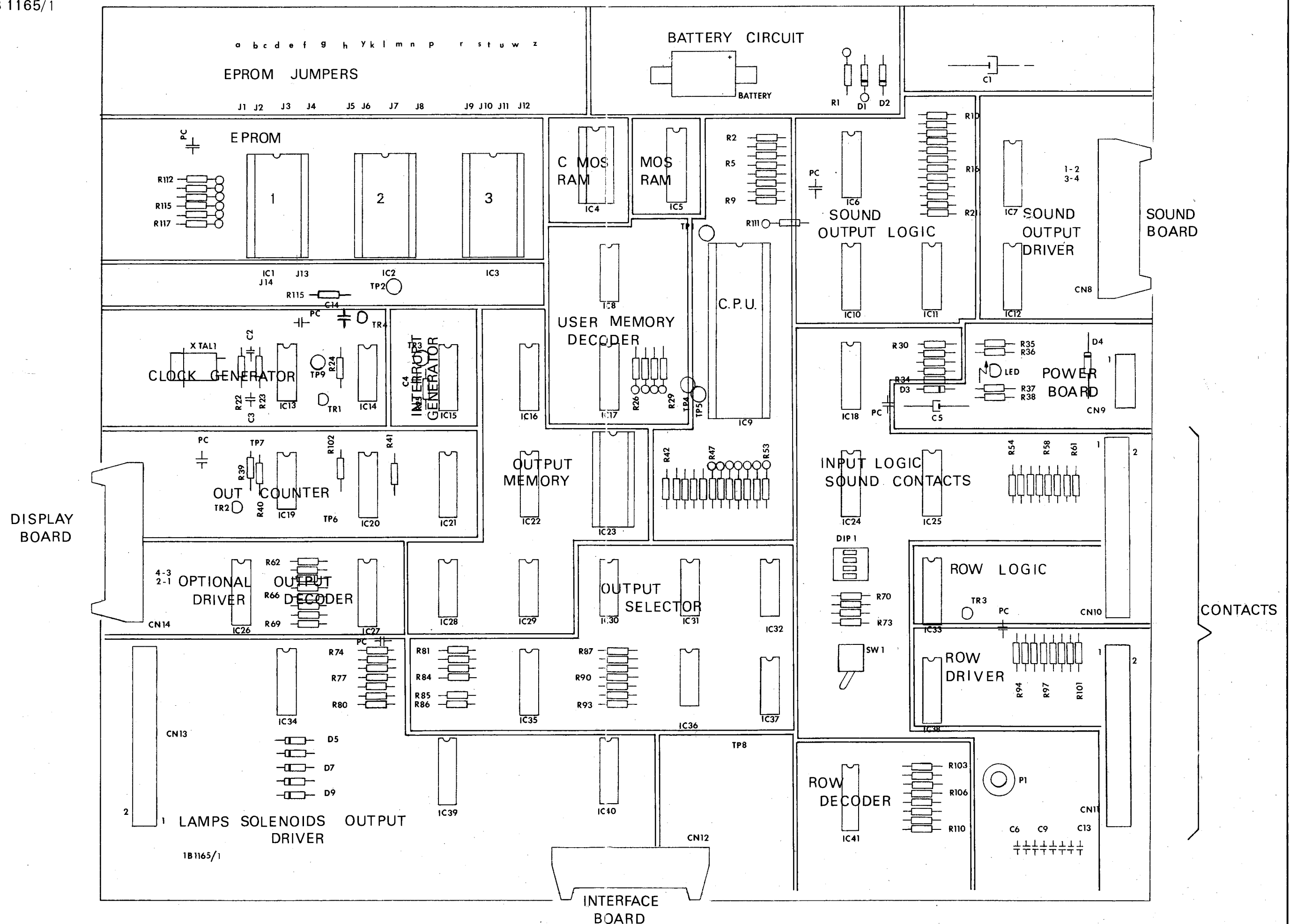
- 1 - 1st player display
Highest score display
- 2 - 2nd player display
- 3 - Credit display
Display ball to play
Match
Game time bonus
- 4 - 4th player display
- 5 - 3rd player display

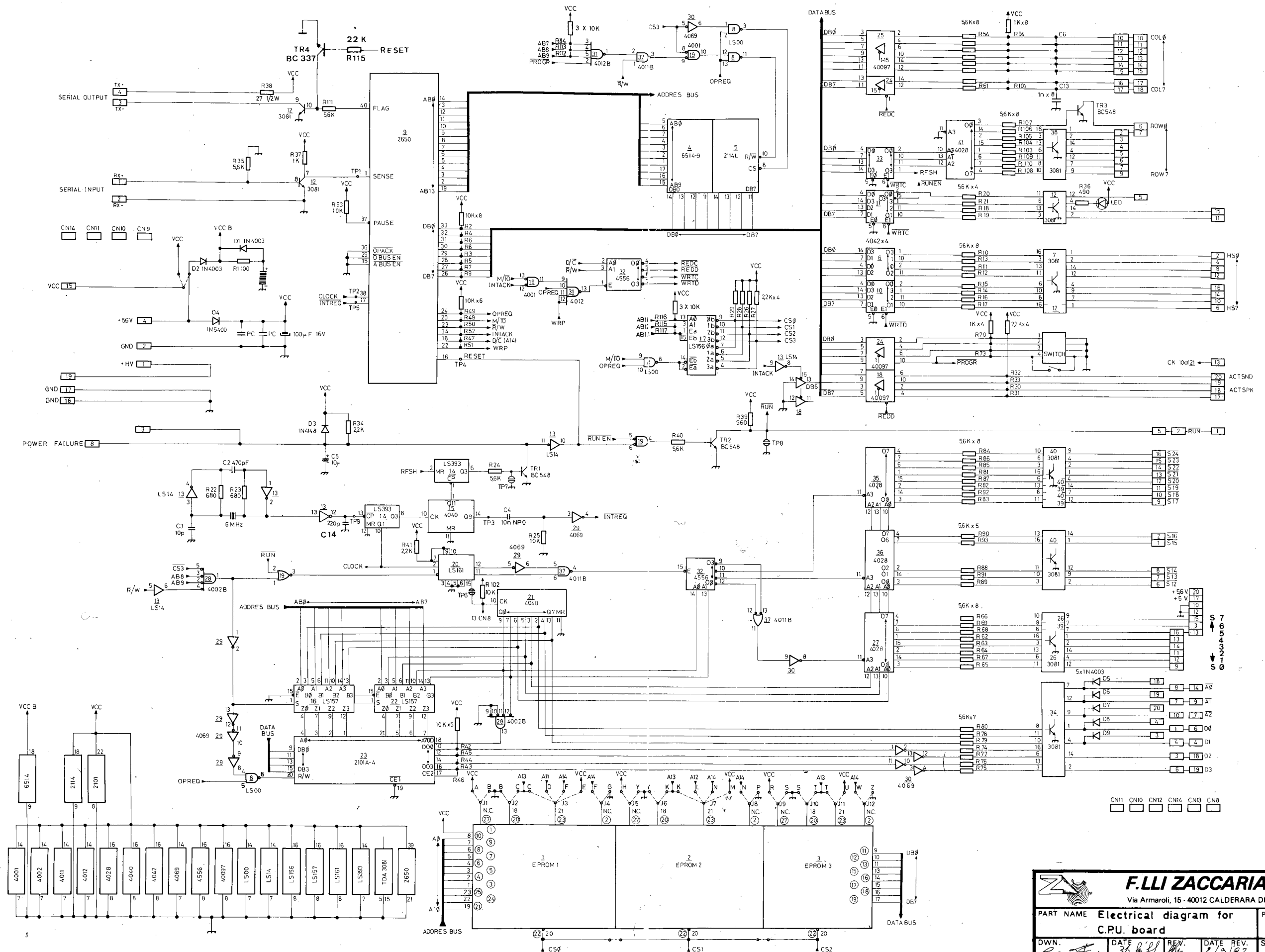
- 6 - Service button
- 7 - C.P.U. board
- 8 - Interface board
- 9 - Sound board
- 10 - Power board
- 11 - Transformer
- 12 - Knocker
- 13 - Roll ball tilt
- 14 - Bob tilt
- 15 - Antichoc tilt
- 16 - Credit button
- 17 - Advance & Return test
- 18 - Head phone jack
- 19 - General vol.
- 20 - Maximum speech vol.
- 21 - Maximum sound vol.
- 22 - Dip SWS
- 23 - Sound self-test button



				F.LLI ZACCARIA s.n.c.	
Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) Italy					
PART NAME			PART NO.		
Electrical digram power wiring					
DWN.	DATE	REV.	DATE	REV.	SHEET
	3/9/82		12/1/82		
NOTES: UNLESS OTHERWISE SPECIFIED					
1) ALL RESISTORS VALUES IN					
2) ALL CAPACITORS VALUES IN					

P.C.1 B 1165/1





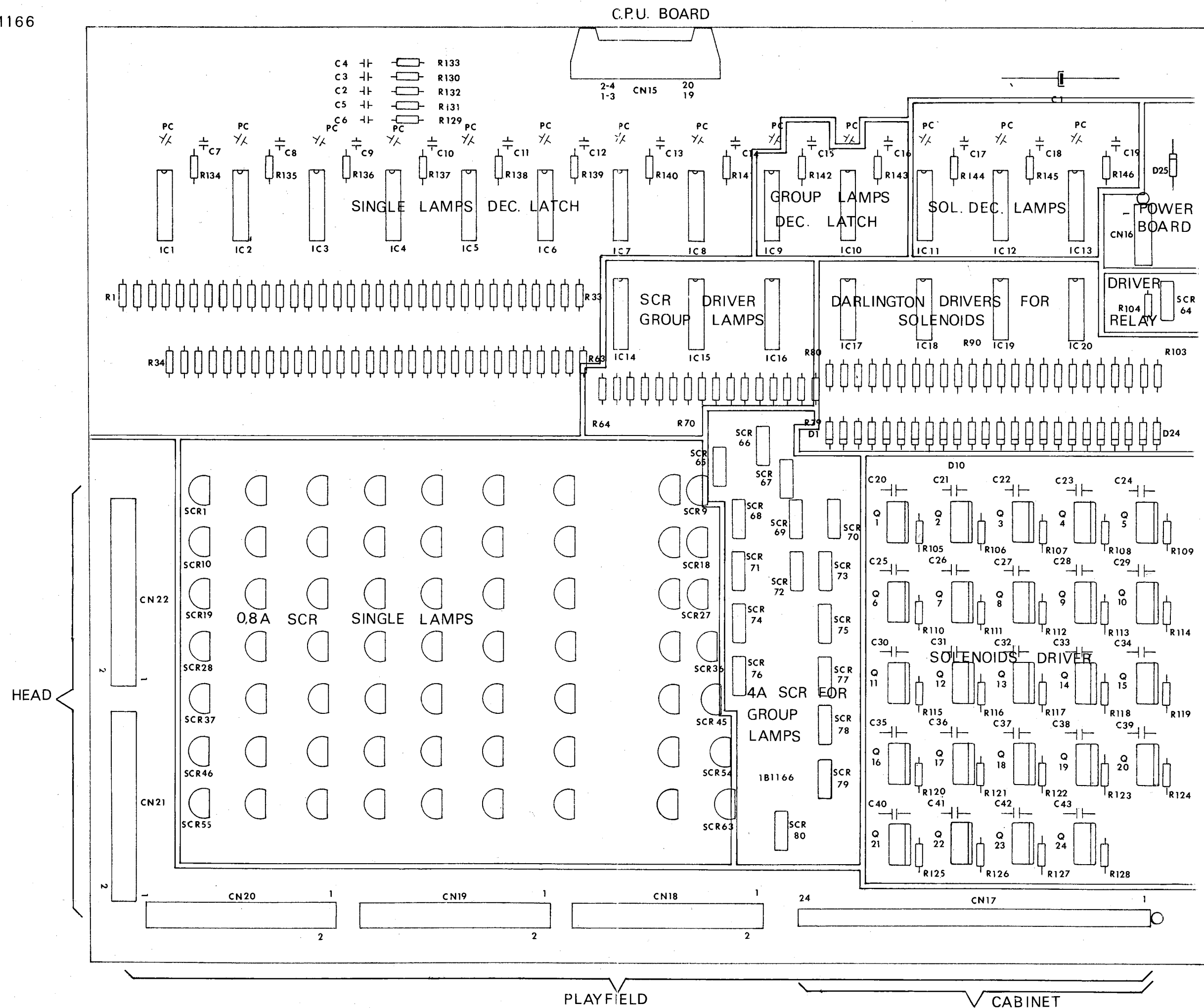
F.LI ZACCARIA s.n.c.
Via Amatori, 15 - 40012 CALDERARA DI RENO (Bo) Italy

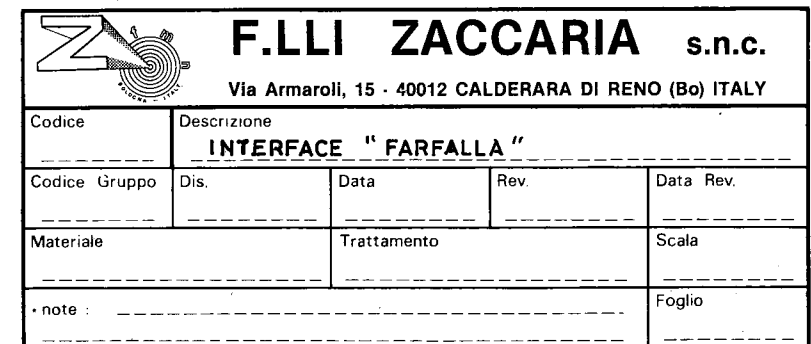
PART NAME Electrical diagram for		PART NO.	
CPU board		1B 13 65/1	
OWN. <i>Rest.</i>	DATE <i>2/2/82</i>	REV. <i>1</i>	DATE REV. <i>2/3/82</i>
SHEET		SHEET	

NOTES: UNLESS OTHERWISE SPECIFIED
 1) ALL RESISTORS VALUES IN _____
 2) ALL CAPACITORS VALUES IN _____

INTERFACE board

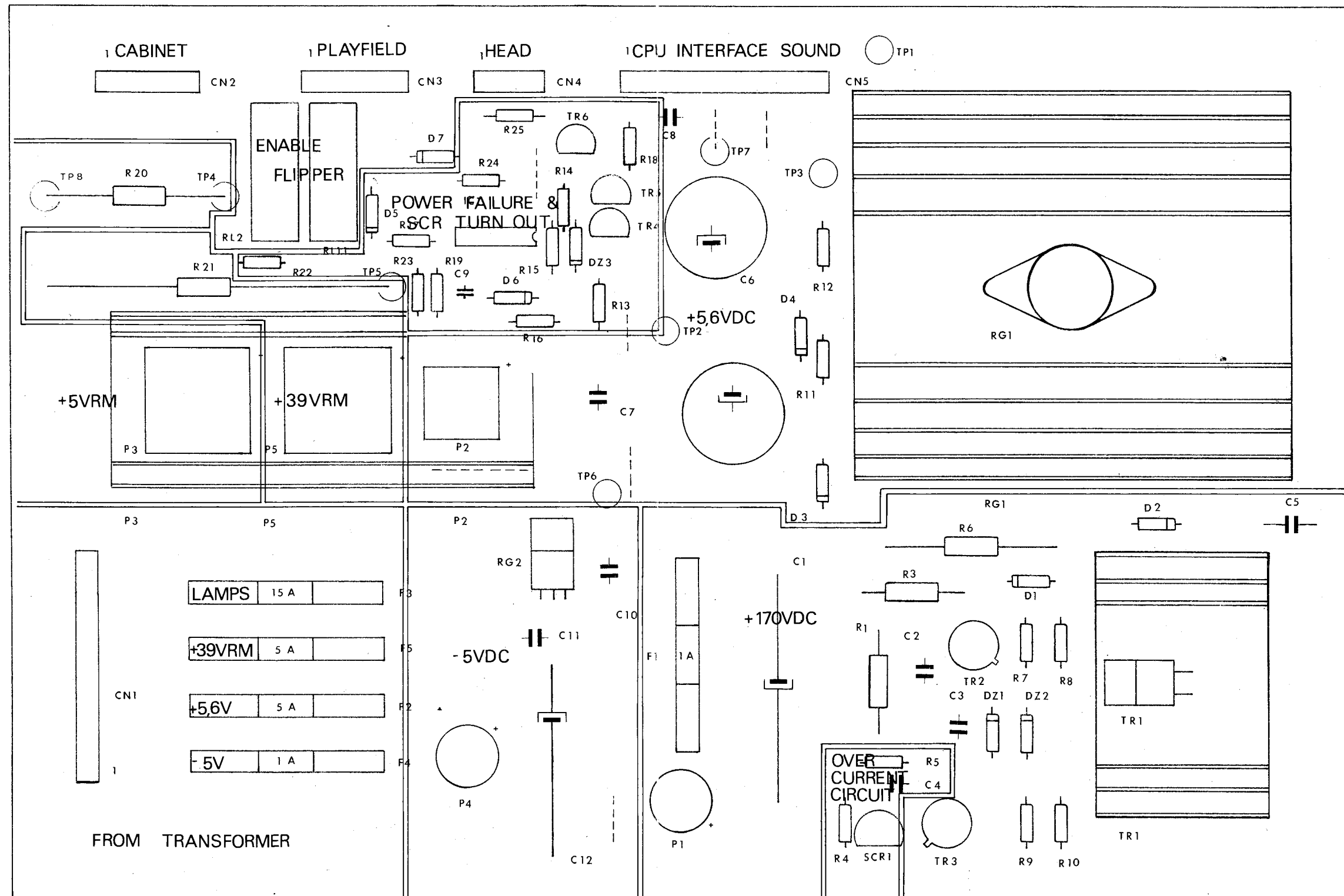
P.C. 1B1166

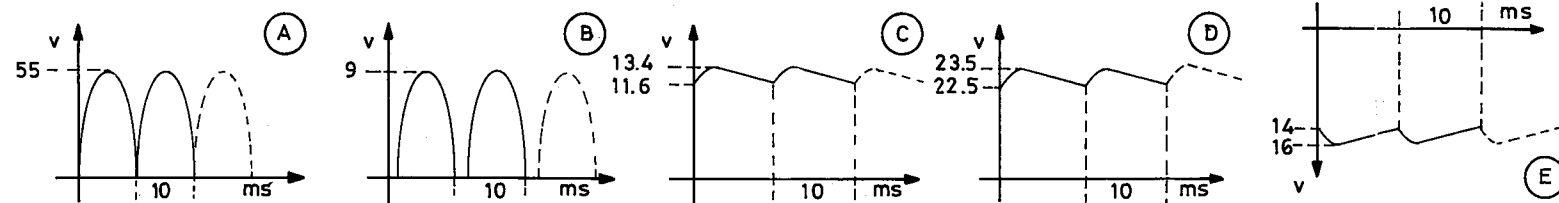
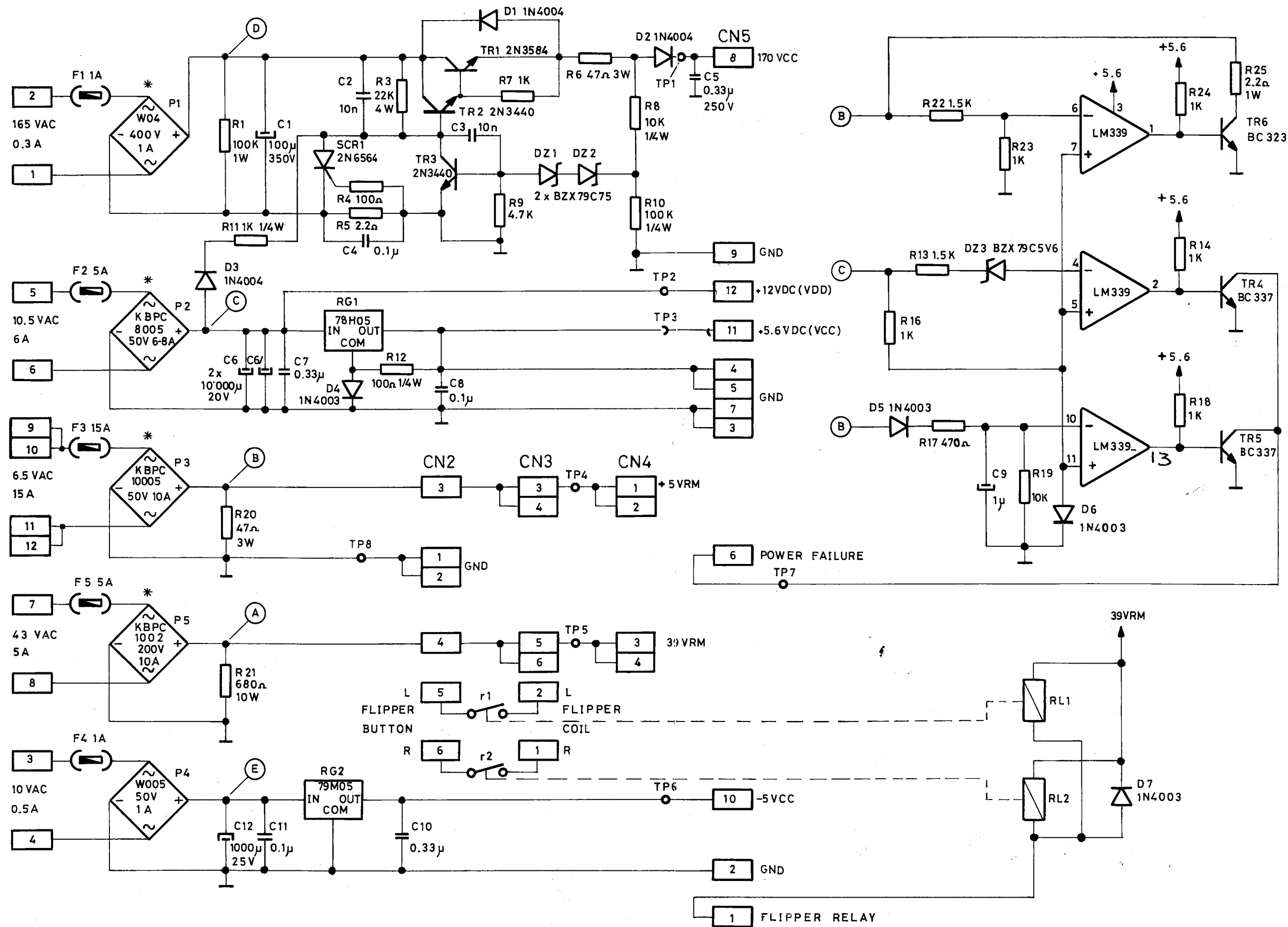




POWER board

P.C. 1B1167/0



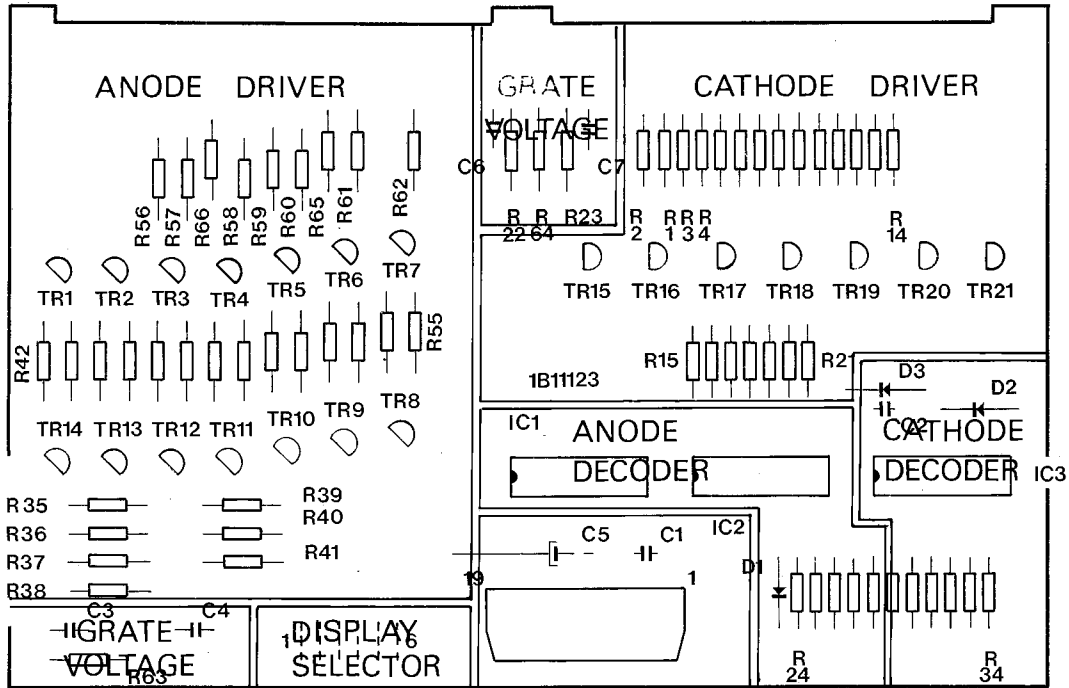


* WITH HEAT SINK

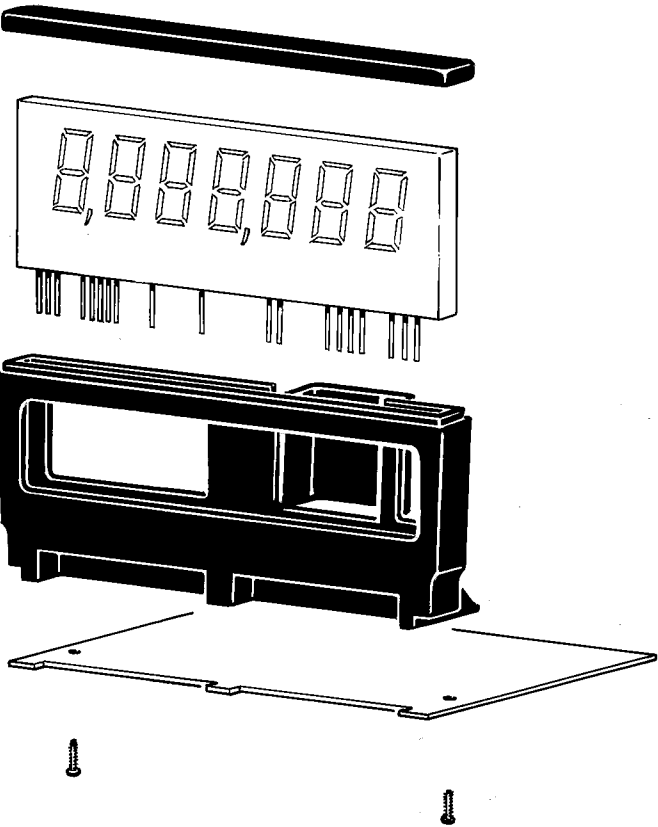
F.LLI ZACCARIA s.n.c. Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) Italy			
PART NAME Electrical diagram for POWER BOARD		PART NO. 1B1367/0	
DWN <i>[Signature]</i>	DATE 26/7/82	REV. 1	DATE REV. 2.8.82
NOTES: UNLESS OTHERWISE SPECIFIED 1) ALL RESISTORS VALUES IN 2) ALL CAPACITORS VALUES IN		SHEET	

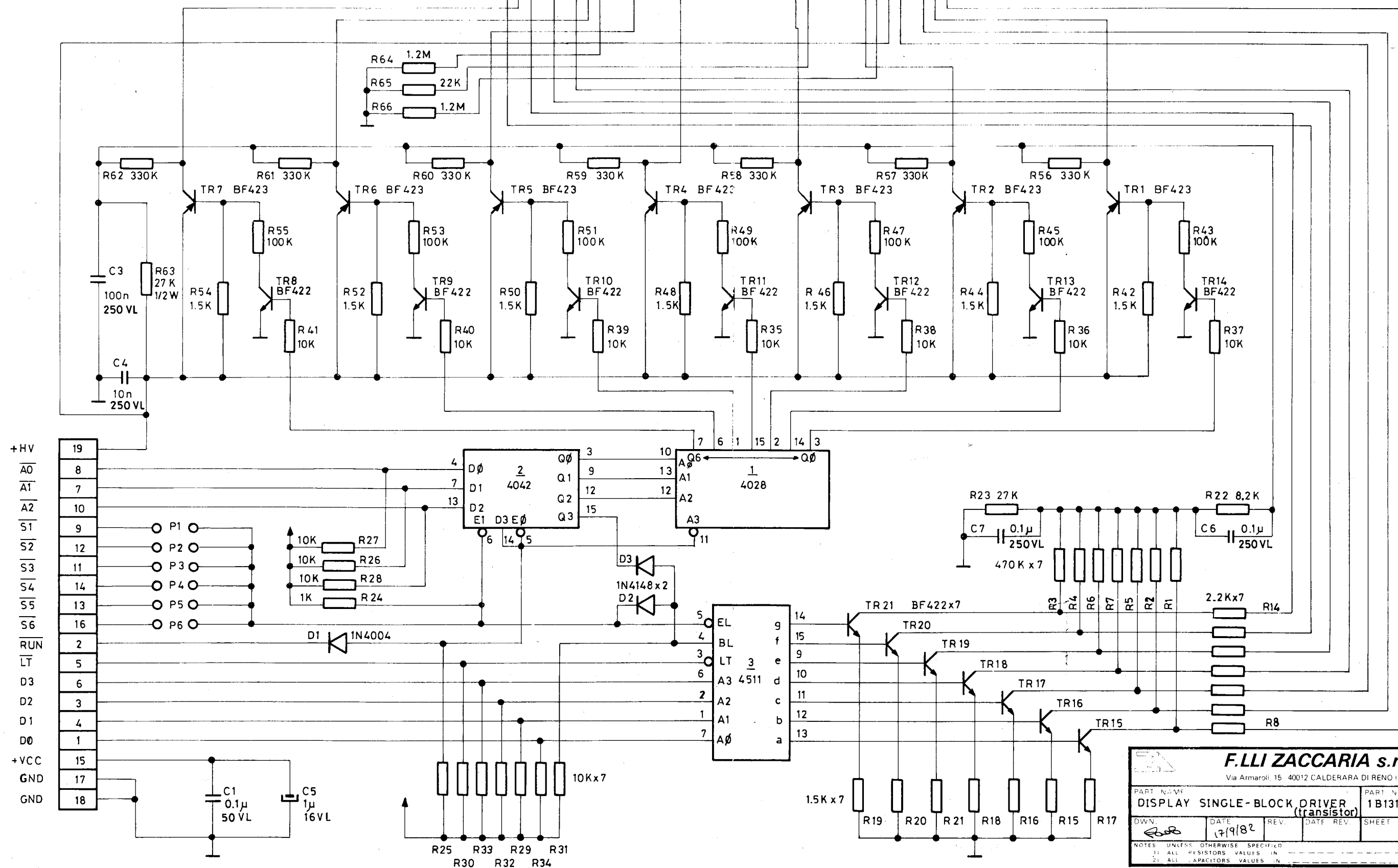
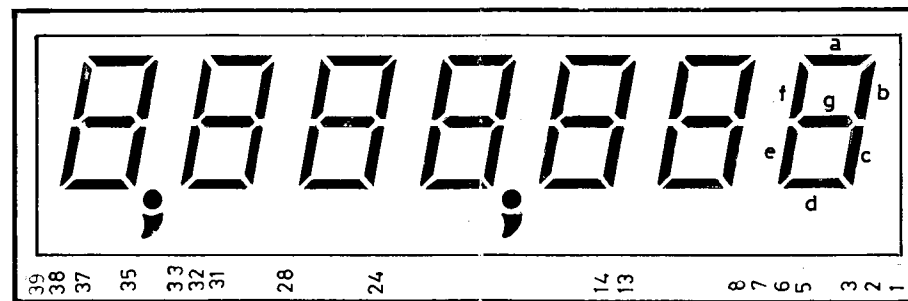
DRIVER DISPLAY board

P.C. 1B11123



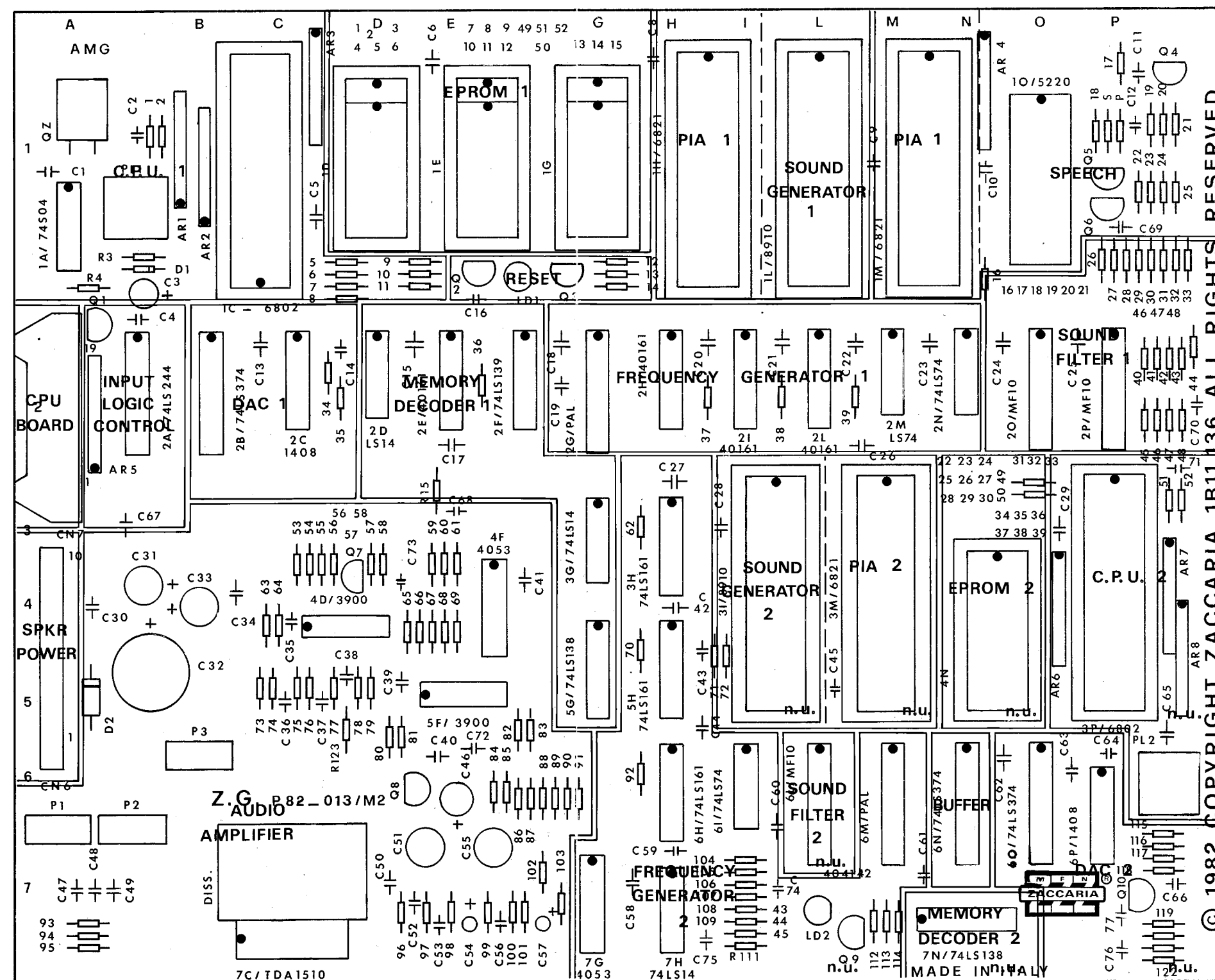
C.P.U. BOARD

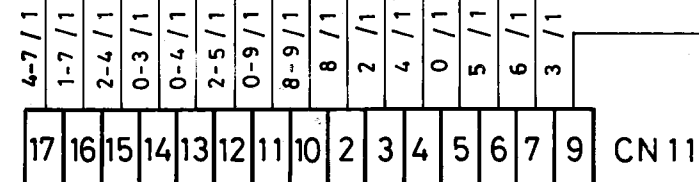




F.LLI ZACCARIA s.n.c. Via Armadori, 15 40012 CALDERARA DI RENO (Bo) Italy			
PART NAME DISPLAY SINGLE-BLOCK DRIVER (transistor)		PART NO. 1B13123	
DWN. <i>[Signature]</i>	DATE 17/9/82	REV. 1	SHEET 1
NOTES: UNLESS OTHERWISE SPECIFIED 1) ALL RESISTORS VALUES IN Ω 2) ALL CAPACITORS VALUES IN μ			

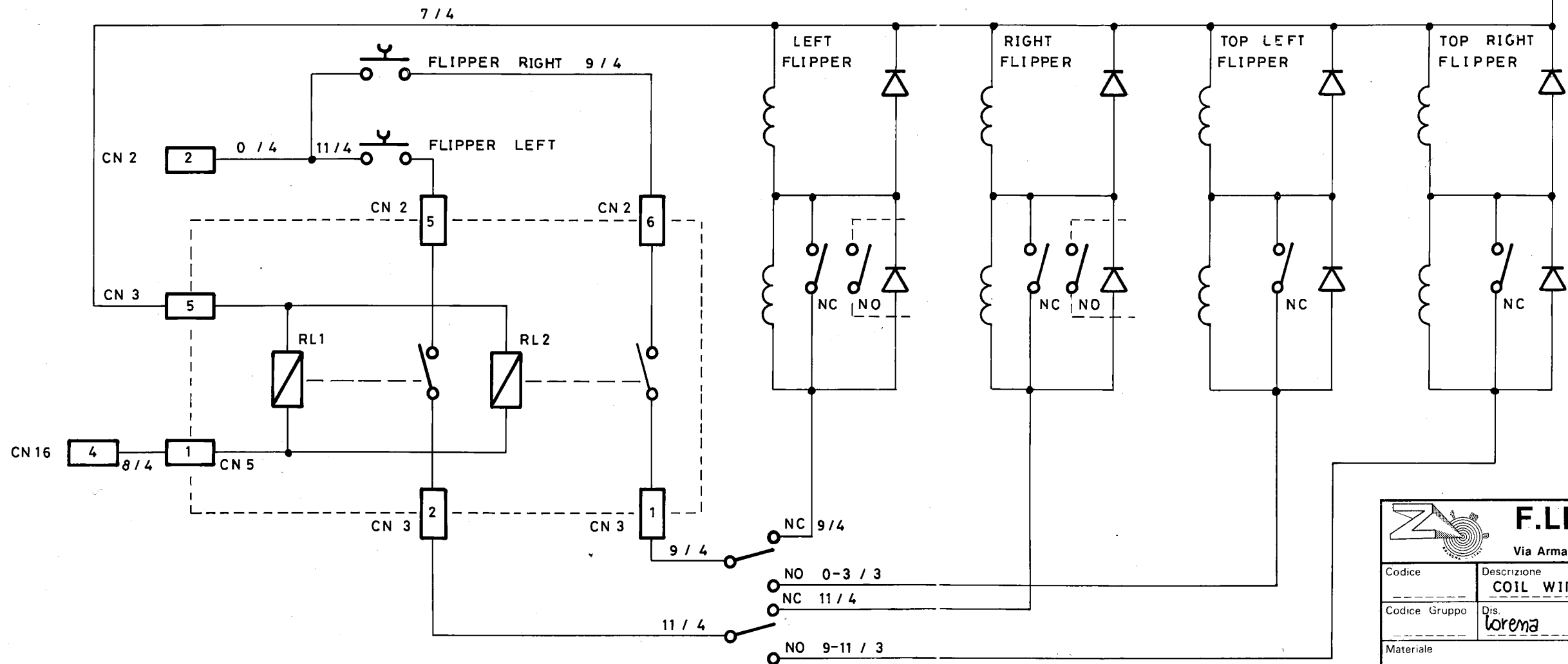
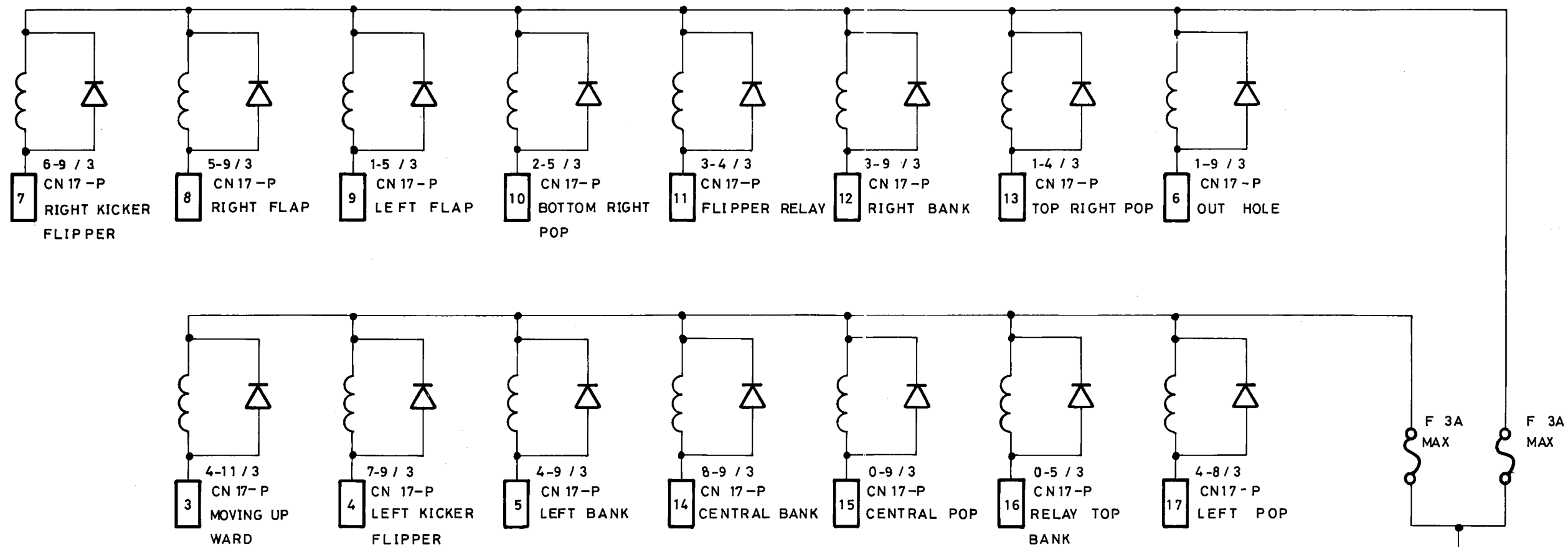
P.C. 1B1136

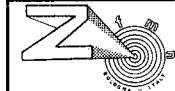




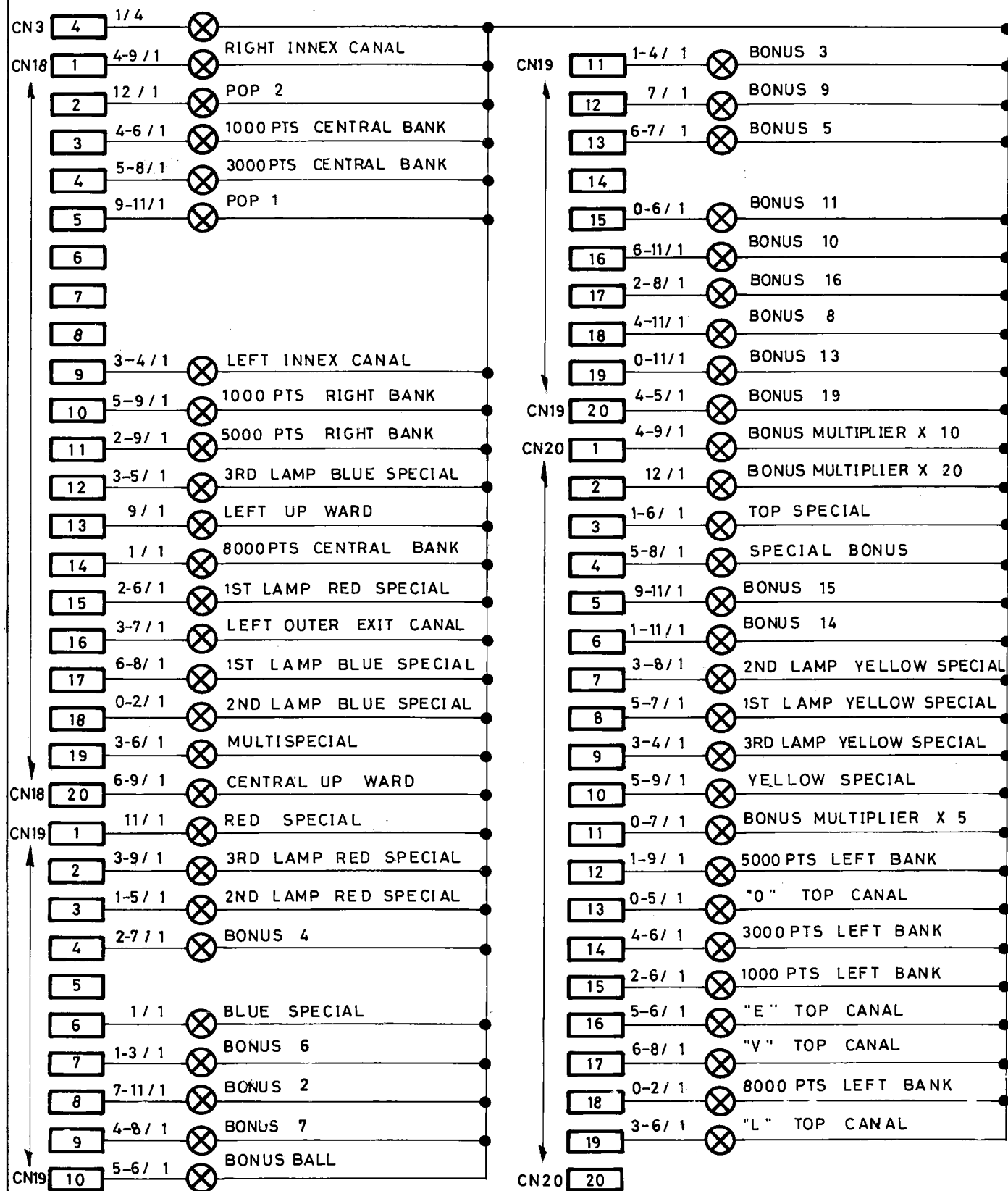
ALL DIODES ARE 1N4148

		F.LLI ZACCARIA s.n.c.		
Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) ITALY				
Codice	Descrizione DIAGRAM FOR PLAYFIELD CONTACTS WIRING "FARFALLA"			
Codice Gruppo	Dis. lorena	Data 6.6.1983	Rev.	Data Rev.
Materiale	Trattamento		Scala	
note				Foglio

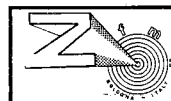
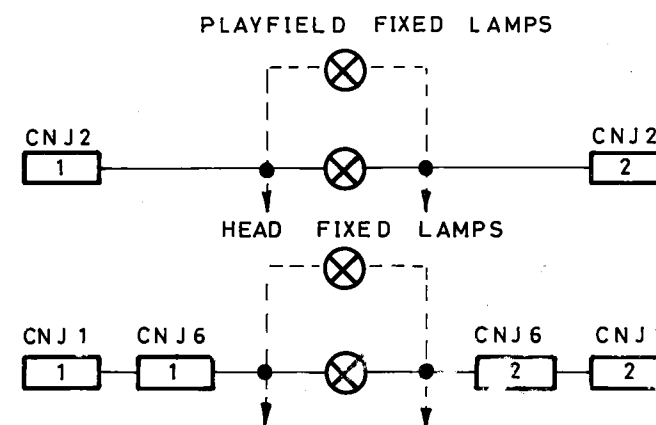
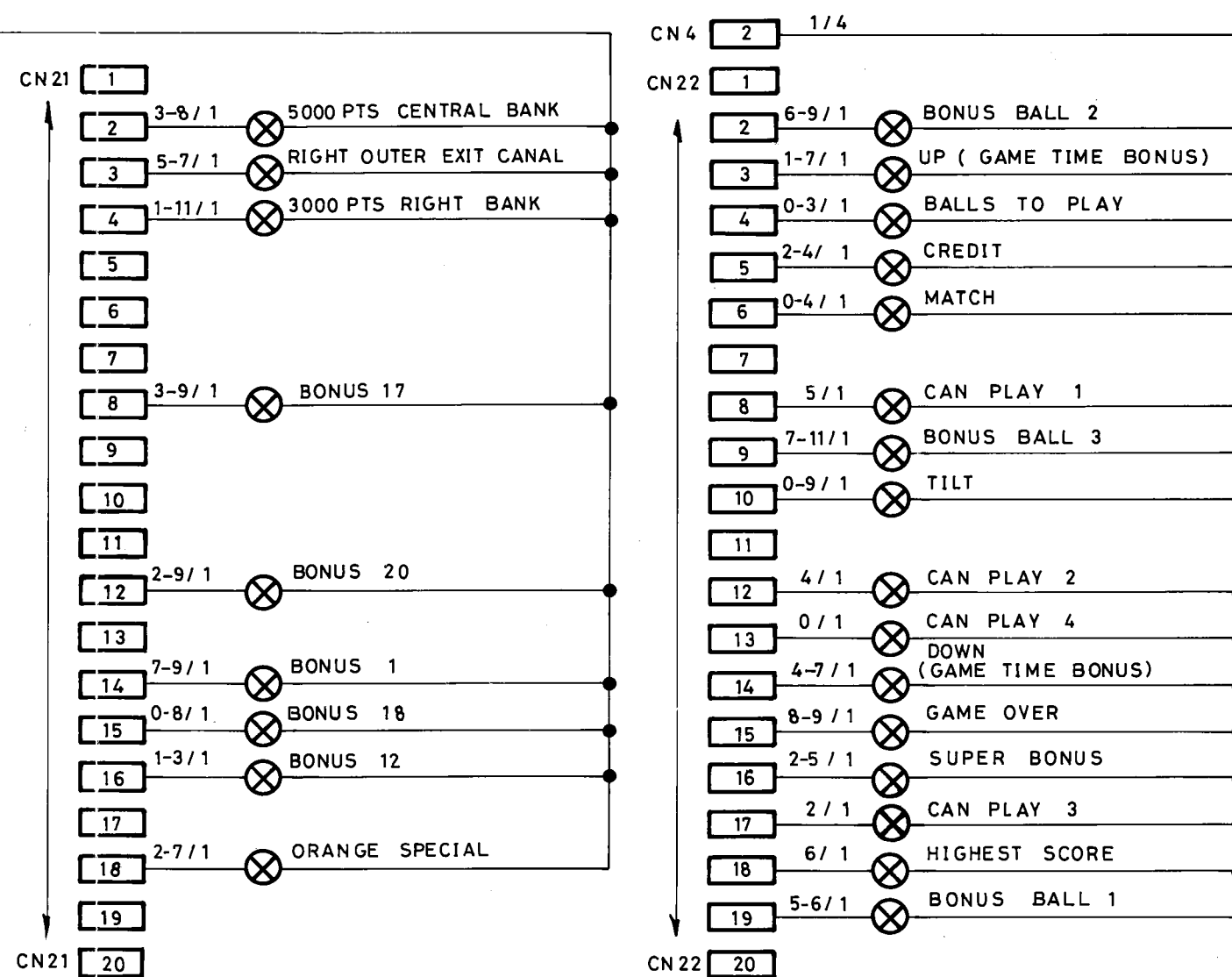


 F.LLI ZACCARIA s.n.c. Via Armaroli, 15 - 40012 CALDERARA DI.RENO (Bo) ITALY		Codice			Descrizione		
		COIL WIRING			"FARFALLA"		
Codice Gruppo	Dis.	Data	Rev.	Data Rev.			
	lorena	8.6.1983					
Materiale		Trattamento		Scala			
note :					Foglio		

PLAYFIELD LAMPS



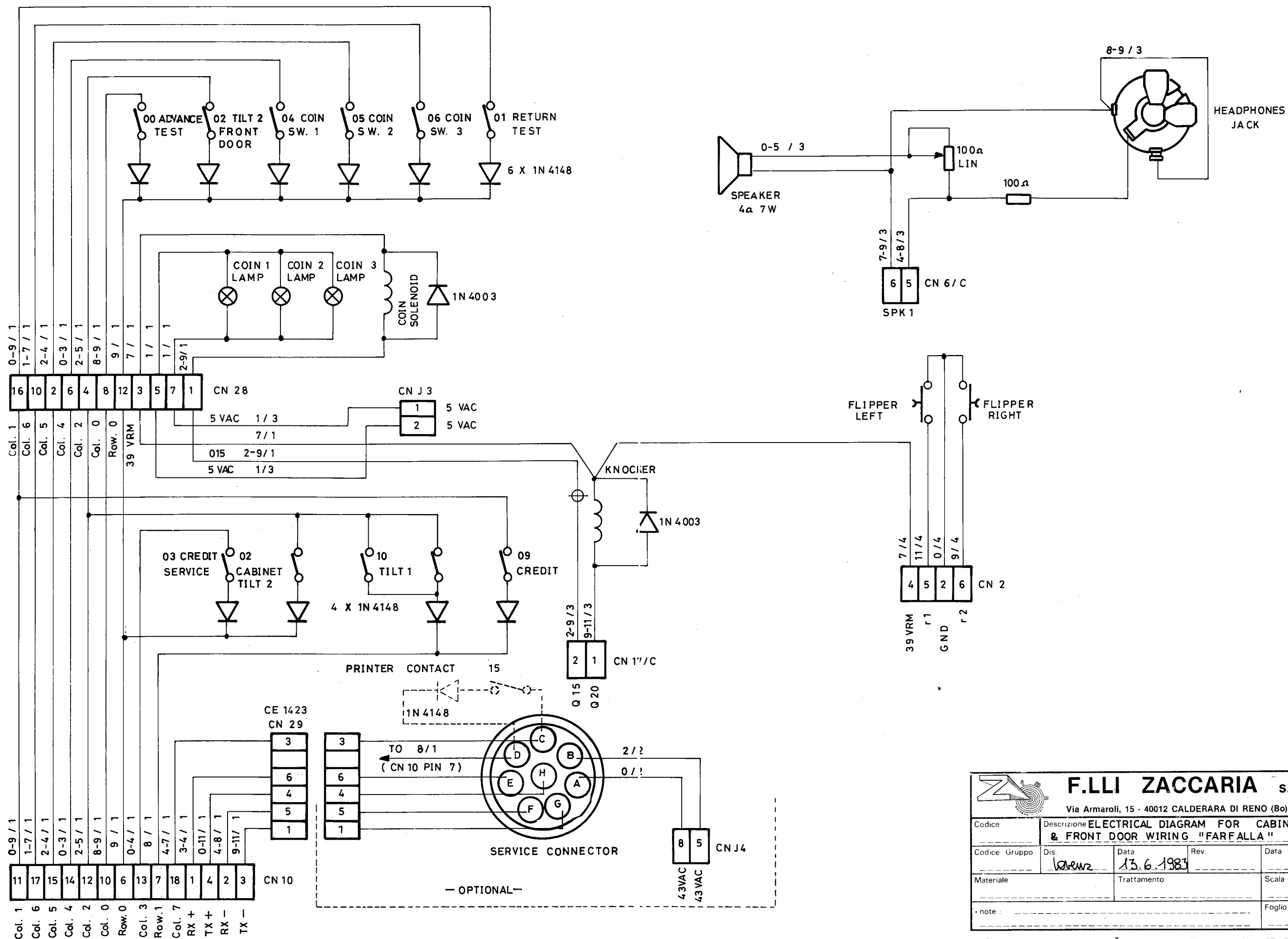
HEAD LAMPS



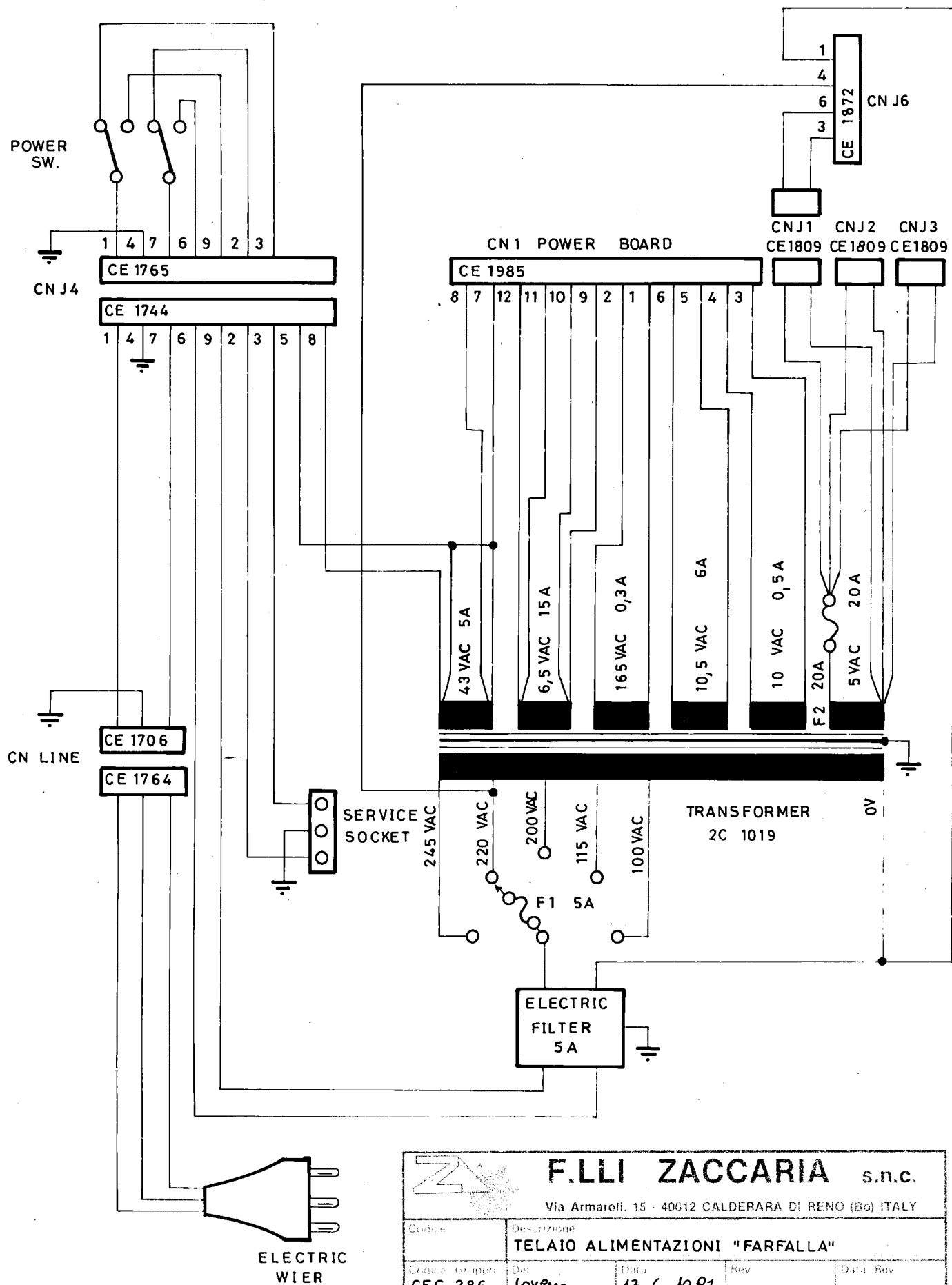
F.LLI ZACCARIA s.n.c.

Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) ITALY

Codice	Descrizione ELECTRICAL DIAGRAM FOR PLAYFIELD & HEAD LAMPS "FARFALLA"			
Codice Gruppo	Dis. lorena	Data 9.6.1983	Rev.	Data Rev.
Materiale		Trattamento		Scala
• note :				Foglio



 F.LLI ZACCARIA s.n.c. Via Armaroli, 15 - 40012 CALDERARA DI RENO (Bo) ITALY				
Codice	Descrizione ELECTRICAL DIAGRAM FOR CABINET & FRONT DOOR WIRING "FARFALLA"			
Codice Gruppo	Dis.	Data	Rev.	Data Rev.
	<i>laurea</i>	13.6.1983		
Materiale	Trattamento		Scala	
note				Foglio



F.LLI ZACCARIA s.n.c. Via Armadori, 15 - 40012 CALDERARA DI RENO (Bo) ITALY				
Codice CEC 286	Descrizione TELAIO ALIMENTAZIONI "FARFALLA"			
Codice Gruppo CEC 286	Dis. LORENZ	Data 13.6.1983	Rev. 	Data Rev.
Materiale 	Trattamento 			Scala
Note 	Foglio 			

LIST OF ILLUSTRATIONS

JUMP LIST FOR MEMORIES SELECTION

BLOCK DIAGRAM

ASSEMBLY DRAWING

POWER WIRING

LAYOUT }
DIAGRAM } CPU

LAYOUT }
DIAGRAM } INTERFACE

LAYOUT }
DIAGRAM } POWER

LAYOUT }
DIAGRAM } DRIVER DISPLAY

LAYOUT }
DIAGRAM } SOUND & SPEECH

PLAYFIELD CONTACTS WIRING

COIL WIRING

PLAYFIELD & HEAD LAMPS WIRING

CABINET & FRONT DOOR WIRING

POWER SUPPLY

COLOR CODE

WIRES CUTAWAY
VIEW LIST

Black	0	mm ² 0,22	/1
Brown	1	mm ² 0,35	/2
Red	2	mm ² 0,5	/3
Orange	3	mm ² 0,9	/4
Yellow	4	mm ² 1,5	/5
Green	5		
Blue	6		
Violet	7		
Grey	8		
White	9		
Pink	11		
Light Blue	12		

