

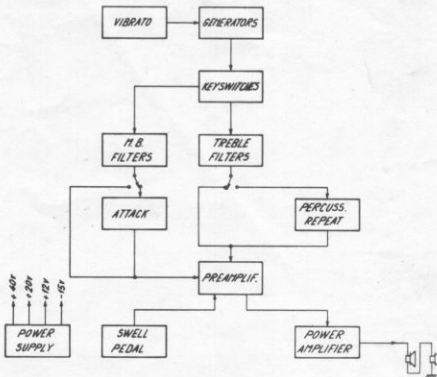
FARFISA

ELECTRONIC ORGAN

matador - R

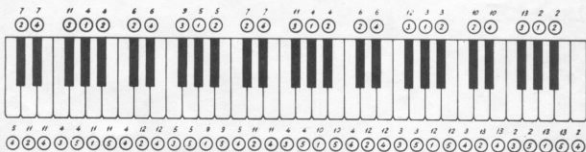
SCHEMATIC DIAGRAMS

BLOCK DIAGRAM



REFERENCE TABLE

KEY TO GENERATOR BOARD



Notes:

- 1) The tone generator of the keyboard notes are indicated with two numbers. The circled number, that appears also on the printed circuit board PA-362/A, indicates the integrated circuit. The second number indicates the integrated circuit pin.
- 2) Assembly of the I.C.s. should be made as shown in figures 1 and 2.

Fig. 1

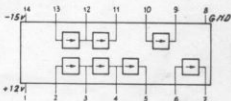
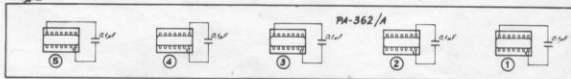


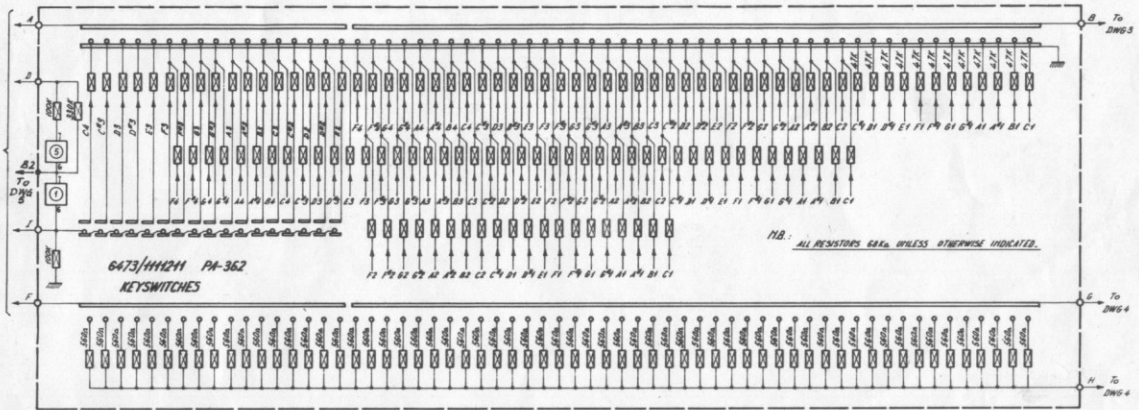
Fig. 2



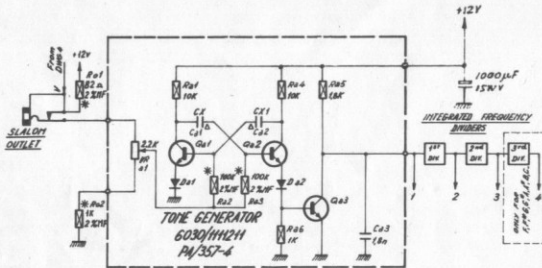
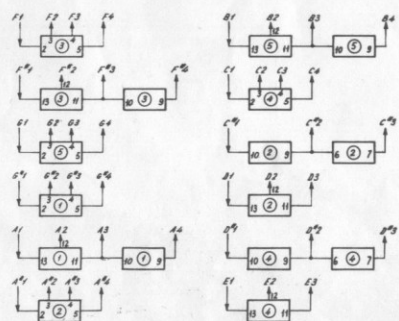
MODEL NO.	PA-362/A
REVISION	1
DATE	
DESIGNED BY	
CHECKED BY	
DATE	
APPROVED BY	
DATE	

NOTES:
 1) All resistors are 1/8W unless otherwise indicated.
 2) All capacitors are electrolytic unless otherwise indicated.
 3) All electrolytic capacitors are 50V minimum.
 4) Use care in the layout for component part numbers.

TO MATADOR-R
TO MATADOR



NOTE: ALL RESISTORS 60K UNLESS OTHERWISE INDICATED.

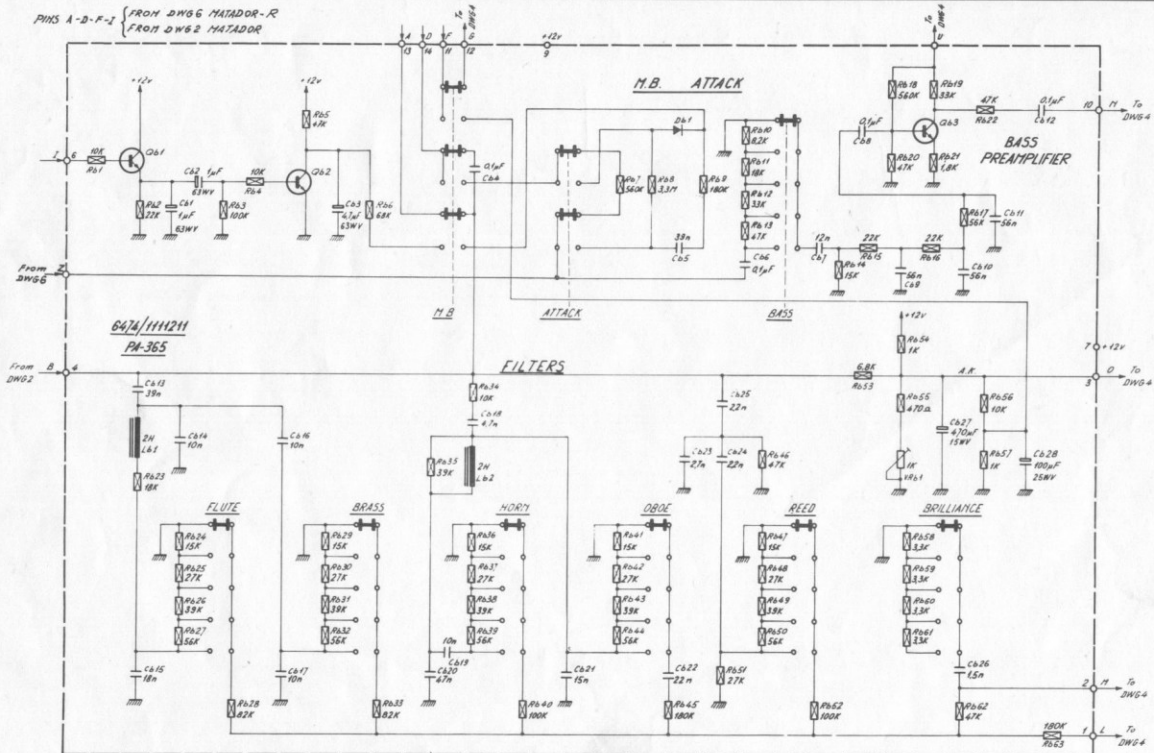


* METAL FILM RESISTORS
Δ POLYSTYRENE FILM CAPACITORS

NOTE	FREQUENCY	CR-CX1
DO ¹ C ¹	1109	5900
RE ¹ D ¹	1175	5575
RE ² E ¹	1244	5255
MI ¹ F ¹	1318	4930
FA ¹ F ²	1397	4605
FA ² F ³	1480	4475
SOX G ¹	1568	4465
SOC ¹ G ²	1651	3940
LA ¹ A ¹	1760	3715
LA ² A ²	1865	3500
SI ¹ B ¹	1978	3310
DO ² C ²	2093	3125

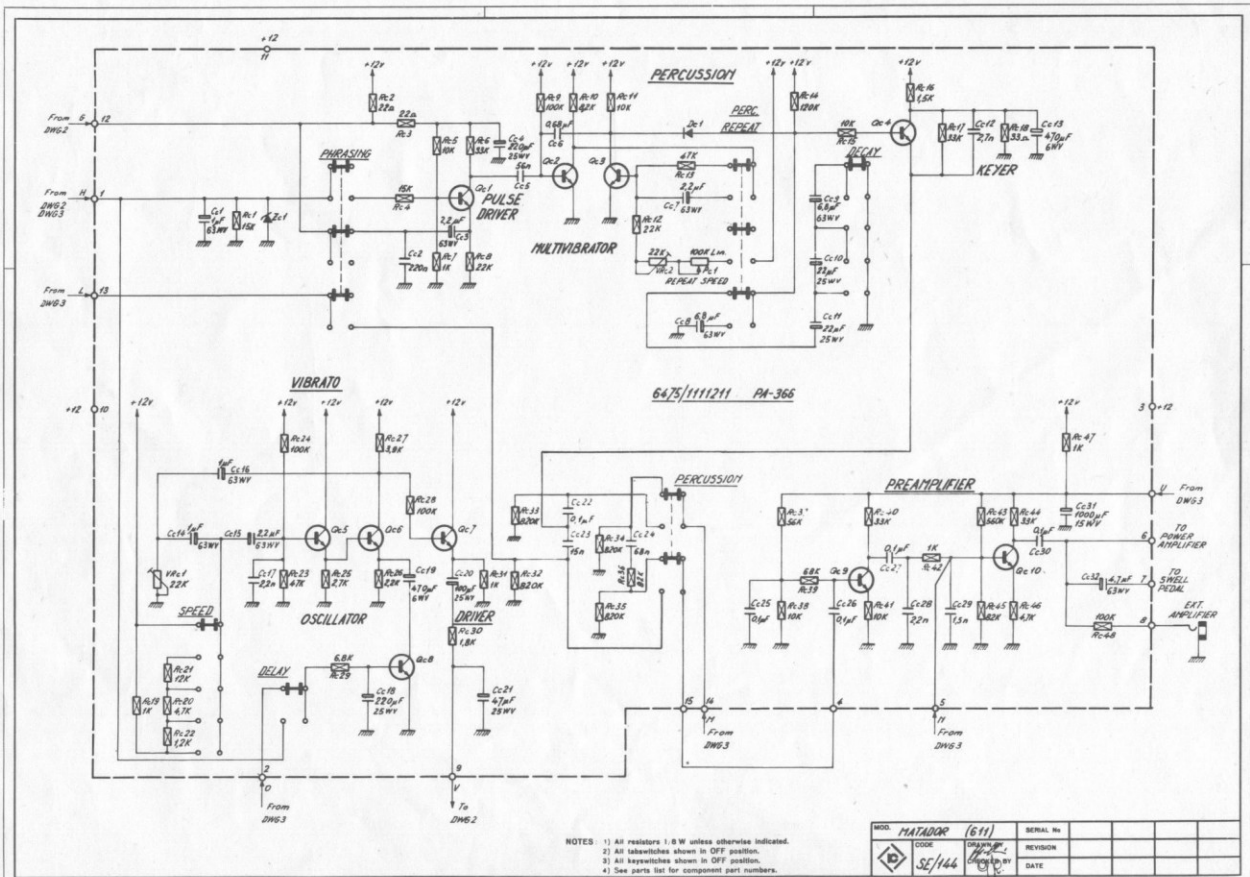
- NOTES: 1) All resistors 1/8W unless otherwise indicated.
2) All leverswitches shown in OFF position.
3) All leverswitches shown in OFF position.
4) See parts list for component part numbers.

MOD. MATADOR (611) SERIAL No. _____
 CODE: _____ REVISION: _____
 DESIGNED BY: SE/144 DATE: 10-7-72
 CHECKED BY: _____

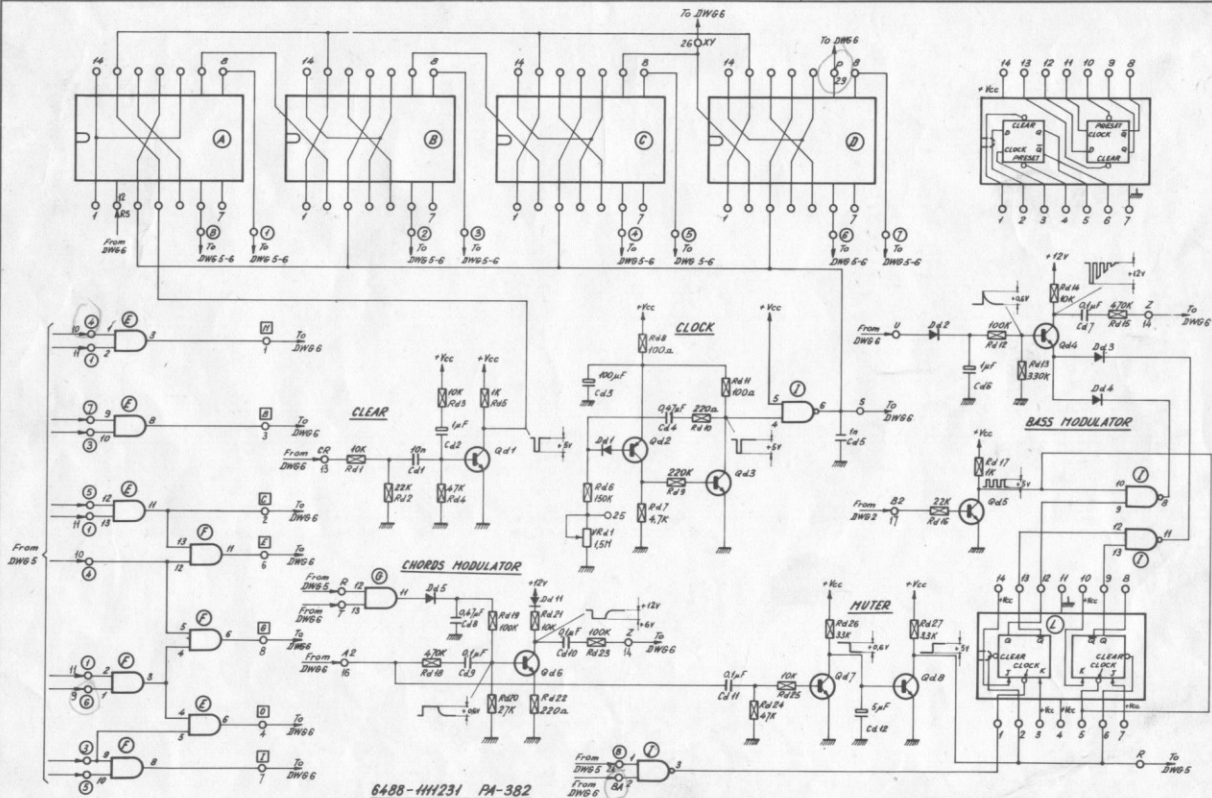


- NOTES: 1) All resistors 1/8W unless otherwise indicated.
 2) All switches shown in OFF position.
 3) All keyswitches shown in OFF position.
 4) See parts list for component part numbers.

MOD.	MATADOR 644	SERIAL No.	REVISION
CODE	SC/444	DRYDEN	
DATE	10/10/61		



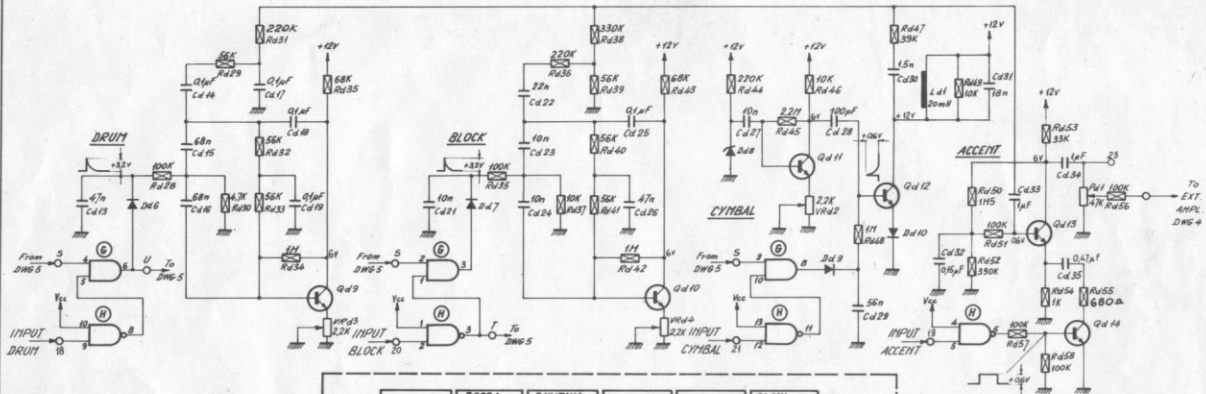
MOD. MATADOR (611)		SERIAL No.		
CODE	DATE	REVISION		
SE/166				
DESIGNED BY	DATE			



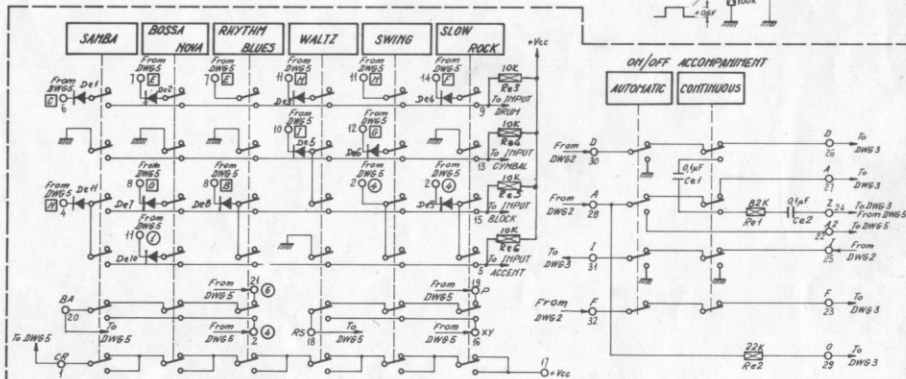
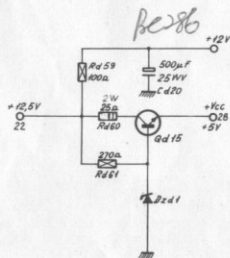
6488-HH231 PA-382

- NOTES: 1) All resistors 1/8 W unless otherwise indicated.
 2) All interconnects shown in OFF position.
 3) All interconnects shown in ON position.
 4) See parts list for component part numbers.

MOD. MATADOR-R		DESIGNED BY	REVISION
DATE	DATE	DATE	DATE
5K-144			



6488-1H1231 PA-302

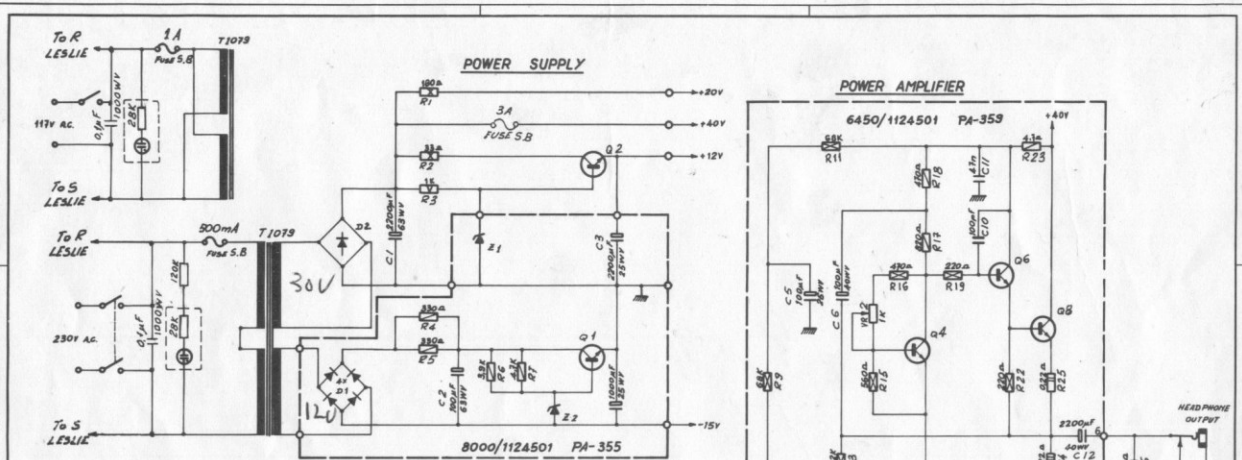


6487-1H1231 PA-301

Del-Dell - 1X909

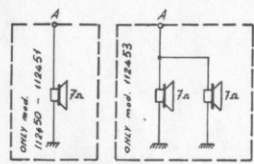
- NOTES: 1) All resistors 1/8W unless otherwise indicated.
 2) All labels/switches shown in OFF position.
 3) All keyswitches shown in OFF position.
 4) See parts list for component part numbers.

MO. # HATADOR-R		REVISION	DATE	DESIGNED BY	CHECKED BY	SERIAL No.
CODE	SE-144					
DATE						10-7-72



TRANSISTORS & DIODES.

Q1	BC 286	W/164
Q2	156-043	W/114
D1	3FD 182	B/77
D2	840-C200	Y/14 - Y/15
Z1	1E13	B/108
Z2	2F15	B/106
Q3	1W 9640	W/89
Q4	BC 201/A-b-BC209b-c	W/109-W/103-W/110-W/111
Q5-Q6	BC 286	W/164
Q7	BC 287	W/65
Q8-Q9	156-043-H9340	W/114-W/164



FOR MODELS 52 AND 54
SEE LESLIE GROUP

RESISTORS

- = 1/8 WATT
- = 1/2 WATT
- = 2 WATT
- = 5 WATT
- = 10 WATT

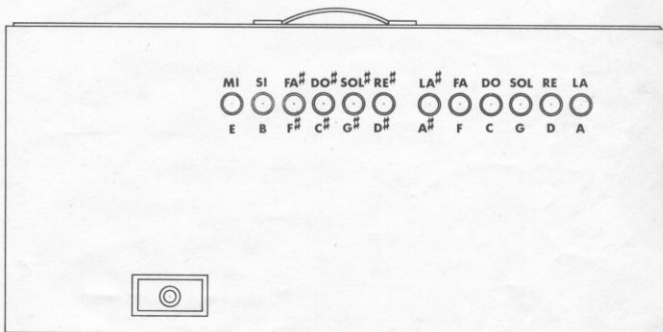


- NOTES: 1) All resistors 1/8 W unless otherwise indicated.
 2) All switches shown in OFF position.
 3) All bypasses shown in OFF position.
 4) See parts list for component part numbers.

112454 - TUNADOR		SERIAL No		
112452 - 112453		REVISON		324
MOO	112450 - 112451	DATE	8-4-77	1-3-72
CODE	SE-140	DRAWN BY	G. J. Barry	DESIGNED BY

DISPOSIZIONE DEGLI OSCILLATORI PER L'ACCORDATURA DELLO STRUMENTO.

POSITION OF THE OSCILLATORS FOR TUNING THE INSTRUMENT.



Model 611 « Matador »

TRANSISTORS (Q) & DIODES (D) LIST

1

Schem. Ref.	Circuit	Type	Part Code
<u>CHASSIS</u>			
<u>POWER SUPPLY CHASSIS (DWG A/ SE 140)</u>			
Q 2	Series Stabilizer.....	WESTINGHOUSE 156-043..... SOLITRON H 9340.....	W/114 W/164
D 2	Rectifier Bridge.....	ITT STANDARD B 40-C 2200 SIEMENS B 40-C 2200 AEG B 40-C 2200	Y/14 - Y/15 Y/14 - Y/15 Y/14 - Y/15
<u>PA 355</u>			
<u>VOLTAGE REGULATOR BOARD (DWG A/ SE 140)</u>			
Q 1	Series Stabilizer.....	SGS BC 286 (ex BC 142)..	W/64
D 1	Rectifier Diode (Bridge).....	MISTRAL SFD 182..... TEXAS IN 914.....	B/77 B 108
Z 1	Voltage Reference-Diode Zener.. (13V-1W)	IRCI 1 Z 13..... MOTOROLA 1N4743.....	B/105 B/105
Z 2	Voltage Reference-Diode Zener.. (15V-400mW)	ITT STANDARD ZF 15..... MOTOROLA 1N5245-B	B/106 B/106
<u>PA 359</u>			
<u>POWER AMPLIFIER BOARD (DWG A/ SE 140)</u>			
Q 3	Input Preamplifier PNP.....	SGS IW 9640.....	W/89
Q 4	Temperature Compensator.....	BC 207 A or B... MISTRAL BC 209 B or C... BC 109 B or C...	W/108 - W/109 W/110 - W/111 W/101 - W/ 98
Q 5	Driver Amplifier NPN	SGS BC 286 (ex BC 142)	W/64
Q 6	Driver NPN.....	SGS BC 286 (ex BC 142)	W/64
Q 7	Driver PNP.....	SGS BC 287.....	W/65
Q 8 - Q 9	Power Transistors.....	WESTINGHOUSE 156-043 ... SOLITRON H 9340.....	W/114 W/164
<u>PA 362-A</u>			
<u>KEYSWITCH BOARD (DWG 1/ SE 444)</u>			
IC 1*5	Integrated Frequency Divider ...		W/163 - W/127

Model 611 «Matador»

TRANSISTORS (Q) & DIODES (D) LIST

2

Schem. Ref.	Circuit	Type	Part Code	
<u>PA 357 - 4 TONE GENERATOR (DWG 2 / SE 144)</u>				
Q a 1	MVBTR. Master Oscillators Buffer Amplifier.....	GE. 2N 5172	W 126-	
Q a 2		BC 108 A, B or C	W 105-106-107	
Q a 3		BC 109 B or C	W 101-98	
		BC 208 A, B or C	W 115-116-117	
		BC 209 B or C	W 110-111	
D a 1	Base Breakdown Protection	SGS IX 9809	B/ 34	
D a 2		TEXAS D525 A or B	B 110 - B 111	
<u>PA 365 TREBLE FILTERS - BASS ATTACK & PREAMPLIFIER (DWG 3 / SE 144)</u>				
Q b 1	Attack Control	GE 2N 5172	W 126	
Q b 2	Attack Control	BC 208 B or C	W 116-117	
Q b 3	Bass Preamplifier	BC 209 B or C	W 110-111	
		SGS IX 9809	B 34	
D b 1	Gate	TEXAS D525 A or B ...	B 110- B 111	
<u>PA 366 PERCUSSION - VIBRATO - PREAMPLIFIER (DWG 4 / SE 144)</u>				
Q c 2	Percussion Multivibrators	GE 2N 5172	W 126	
Q c 3		BC 109 B or C	W 101-98	
Q c 5		Vibrato Oscillators	BC 209 B or C	W 110-111
			BC 207 A or B	W 108-109
Q c 1	Percussion Pulse Driver	BC 109 B or C	W 101-98	
Q c 4	Keyer			
Q c 7	Vibrato Driver			W 110-111
Q c 8	Vibrato Delay			W 108-109
Q c 10	General Preamplifier	BC 109 B or C, red dot BC 209 B or C, red dot	W 143-148 W 145-150	
Q c 9	General Preamplifier			
D c 1	Diode	IRCI 10D1 - 10D2	B 50-92	
		IRCI 5D1 - 5D4	B 91-95	
		PAE R/6	B 18	
Z c 1	Zener 5,6 v, 0,4 w	MOTOROLA 1N 5232 B ...	B 69	
		MULLARD BZY 88/C 5V6 ..		
		ITT-STANDARD ZF 5,6 ..		
		IRCI 1N 752 A		

Model 611 « Matador - R »

TRANSISTORS (Q) & DIODES (D) LIST

3

Schem. Ref.	Circuit	Type	Part Code
<u>PA/382</u>	<u>RHYTHM GENERATOR & RHYTHMICAL ACCOMPANIMENT (DWG 5 & 6 / SE 144)</u>		
Q d 3	Clock Generator	SGS 1 W 964	W/89
Q d 1	Clear Generator	} BC 108 B or C W/106 - W/107 BC 109 B or C W/101 - W/98 BC 208 B or C W/116 - W/117 BC 209 B or C W/110 - W/111	
Q d 2	Clock Generator		
Q d 4	Bass Modulator		
Q d 5	Bass Buffer.....		
Q d 6	Chords Modulator		
Q d 7	Muter		
Q d 8	Drum Generator.....		
Q d 9	Block Generator		
Q d 10	Cymbal Generator		
Q d 11	Cymbal Modulator		
Q d 12	Rhythm Preamplifier		
Q d 13	Accent Modulator		
Q d 14			
Q d 15	Series Stabilizer		SGS BC 286 (ex BC 142)..
D= d 1	Voltage reference-Diodo Zener.. (5,6V-0,4W)	MOTOROLA 1N 5232 B MULLARD BZY 88 / C 5V6 ITT-STANDARD ZF 5,6 IRCI 1N 752 A	B/69
(A) (B) (C) (D)	TTL-I Integrated Circuit	SN 7474	W/1003
(E) (F) (G)	idem	SN 7408	W/1001
(H) (I)	idem	SN 7400	W/1000
(L)	idem	SN 7473	W/1002
D d 1+D d 10	Diode	SGS 1X 9809	B/34
		TEXAS D525 A or B	B/110 - B/111