

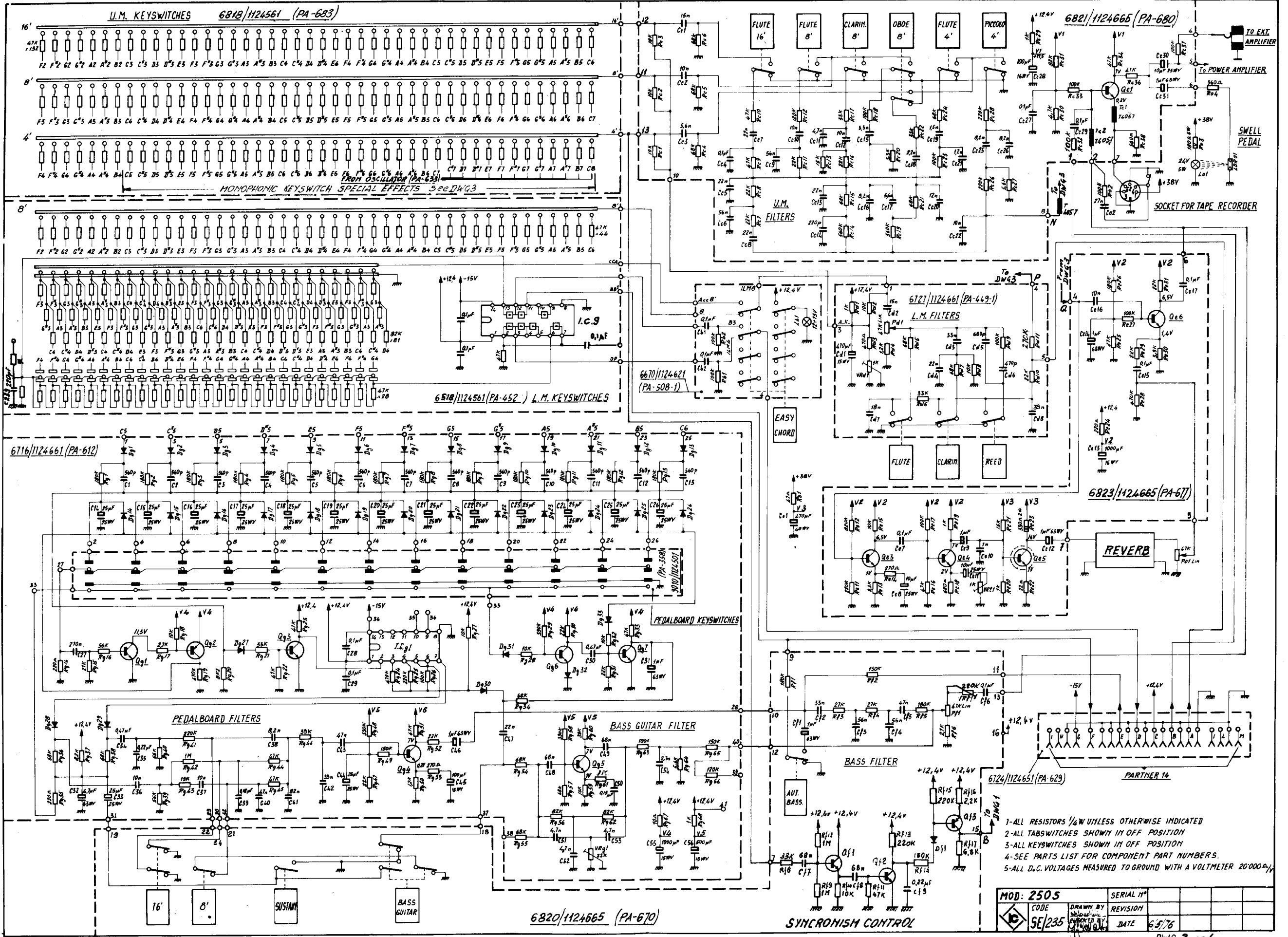
 **FARFISA**

**schematic diagram**

**3<sup>RD</sup> EDITION**

**Electronic Organs**  
**Series 250 S**



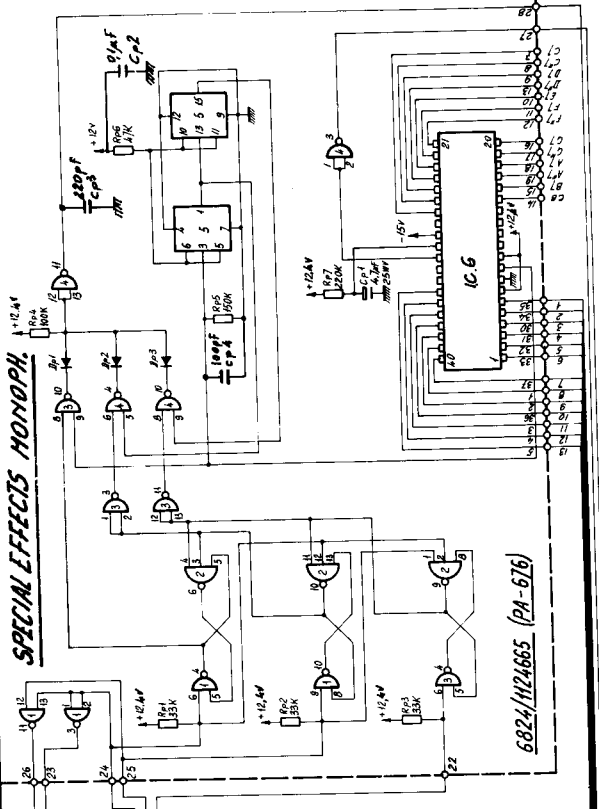
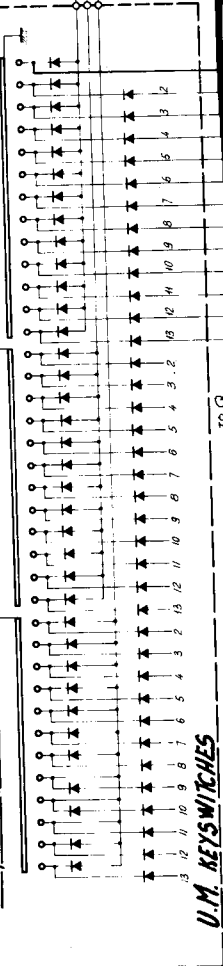


- 1-ALL RESISTORS 1/4 W UNLESS OTHERWISE INDICATED
- 2-ALL TABSWITCHES SHOWN IN OFF POSITION
- 3-ALL KEYSWITCHES SHOWN IN OFF POSITION
- 4-SEE PARTS LIST FOR COMPONENT PART NUMBERS.
- 5-ALL D.C. VOLTAGES MEASURED TO GROUND WITH A VOLTMETER 20,000 Ω

MOD: 2505	SERIAL N°
CODE SE/235	REVISION
DRAWN BY	DATE 6/3/76
CHECKED BY	

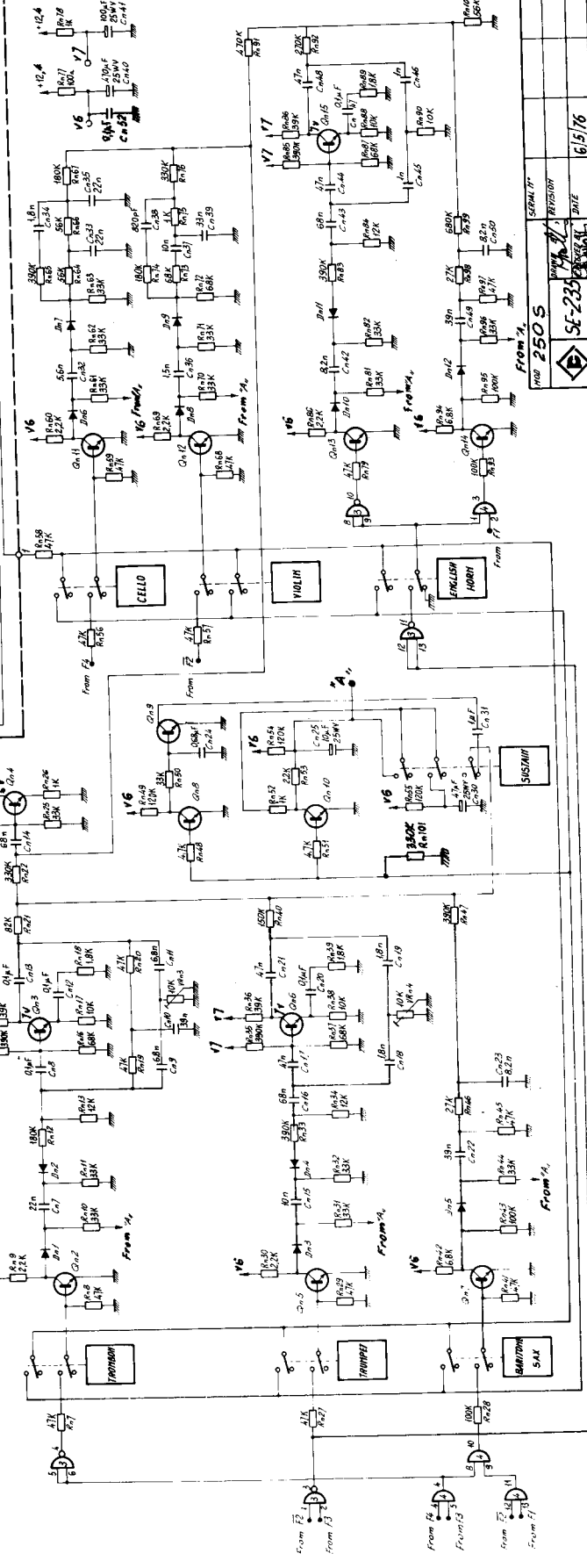
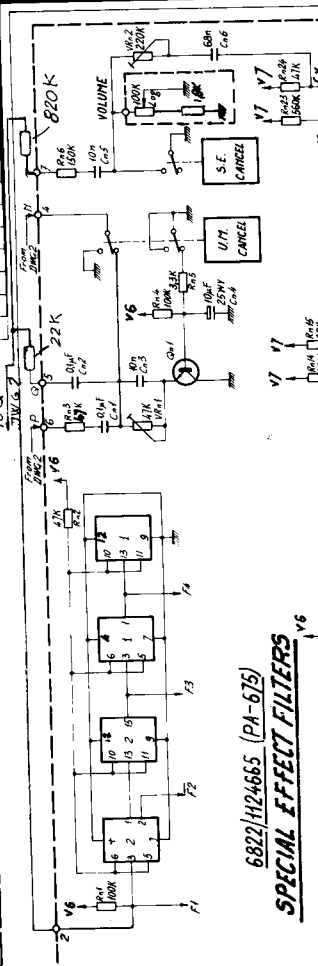
**SPECIAL EFFECTS MONOPH.**

**6819/H24665 (PA-683)**



**6824/H24665 (PA-676)**

**6822/H24665 (PA-675)**



NO. 2505	SERIAL #	REVISION	DATE
			6/15/76
			DMC 3



Schem. Ref.	Circuit	Type	Part Code
<b>CHASSIS</b>	<b>POWER SUPPLY CHASSIS (DWG 4/SE 235)</b>		<b>8000/1124601</b>
		RCA 2N 3055 .....	W/1801
		Westinghouse 2N 3055 .....	W/1801
Q 2	Series Stabilizer .....	Westinghouse 156-043 .....	W/1800
		Soliton H 9340 .....	W/1800
		ITT B 40-C2200 .....	
D 2	Rectifier Birdge .....	SIEMENS B 40-C2200 .....	B/1201
		AEG B 40-C2200 .....	
<b>PA 355</b>	<b>VOLTAGE REGULATOR BOARD (DWG 4/SE 235)</b>		<b>6449/1124601</b>
Q 1	Series Stabilizer .....	SGS BC 286 .....	W/1601
		MISTRAL SFD 182 .....	B/1002
D 1	Rectifier Diode (Bridge) .....	TEXAS 1N 914 .....	
Z 1	Voltage Reference-Diode Zener (13 V - 1 W) .....	IR 1Z 13 .....	B/1418
		MOTOROLA 1N 4743 A .....	
		ITT ZPD 15 .....	B/1319
Z 2	Voltage Reference-Diode Zener (15V - 400 mV) .....	MOTOROLA 1N 5245-B .....	
<b>PA 359-1</b>	<b>POWER AMPLIFIER BOARD (DWG 4/SE 235)</b>		<b>6630/1124601</b>
Q 3	Input preamplifier PNP .....	BC 154 .....	W/1500
		BC 207 A or B .....	W/1401
Q 4	Temperature Compensator .....	MISTRAL BC 209 B or C .....	W/1407 - W/1410
Q 5	Driver Amplifier NPN .....	SGS BC 286 .....	W/1601
Q 6	Driver NPN .....	SGS BC 286 .....	W/1601
Q 7	Driver PNP .....	SGS BC 287 .....	W/1702
		WESTINGHOUSE 150-043 ..	W/1800
Q 8 - Q 9	Power Transistors .....	SOLITRON H 9340 .....	W/1800
<b>PA 680</b>	<b>UPPER MANUAL FILTER BOARD (DWG 2/SE 235)</b>		<b>6821/1124665</b>
		BC 209 B, red dot .....	W/1413
Q c 1	Output Preamplifier .....	BC 239 B, red dot .....	

Schem. Ref.	Circuit	Type	Part Code
<b>PA 694</b>	<b>TONE GENERATOR (DWG 1/SE 235)</b>		<b>6729/1124661</b>
I.C. a 1	Oscillator .....	SN 29730 N .....	W/1009
I.C. a 2	Top Octave Synthesizer .....	G.I.E. AY-I-0212 .....	W/1105
		A.M.I. ....	
I.C. a 3	Voltage Regulator .....	SN 72723 N .....	W/1209
Q a 1	Buffer .....	BC 208-B-C .....	W/1404
Da 1 ÷ Da 3	Diodes .....	D 525 B-BA 130 .....	B/1000 - B/1003
<b>PA 677</b>	<b>REVERB. VIBRATO (DWG 1-2/SE 235)</b>		<b>6823/1124665</b>
Q e 1	Vibrato Oscillator.....	BC 208-B-C .....	W/1404
Q e 2	Vibrato Buffer .....		
		BC 109 B or C .....	W/1409 - W/1407
Q e 4	Reverberation Preamplifier .....	BC 209 B .....	
Q e 5	Reverberation Driver .....	SGS BC 286 .....	W/1601
Q e 6 - Q e 3	Reverberation Preamplifier .....	BC 109 B or C, red dot .....	W/1415 - W/1413
		BC 209 B red dot .....	
Q e 7	Driver Vibrato Delay .....	BC 209-C .....	W/1426
<b>PA 612</b>	<b>SUSTAIN PEDALBOARD (DWG 2/SE 235)</b>		<b>6716/1124661</b>
I.C. g 1	Divider .....	G.I.E. AY-1-5050 .....	W/1100 - W/1101
Q g 1	Pulse Amplifier .....	BC 208-B-C .....	W/1404
Q g 3 - Q g 6	Buffers .....	BC 209-B .....	W/1407
Q g 7	Modulator .....		
Q g 2	Reset .....	BC 287 .....	W/1702
		BC 209-B red dot .....	W/1413
Q g 4	Preamplifier .....	BC 109-B red dot .....	W/1415
Q g 5	Bass Guitar Filter .....	BC 209-B .....	W/1407
D g 1 ÷ D g 13	Diodes .....	D 525 B - BA 130 .....	B/1000 - B/1003
D g 14 ÷ D g 26	Diodes .....	1N 914 - 1N 4148 .....	B/1002
D g 27 ÷ D g 33	Diodes .....	D 525 B - BA 130 .....	B/1000 - B/1003
<b>PA 683</b>	<b>UPPER MANUAL KEYSWITCH BOARD (DWG 1-2-3/SE 235)</b>		<b>6819/1124665</b>
I.C. 1 ÷ I.C. 8	Integrated Frequency Divider .....	AY-1-5050 .....	W/1101 - W/1100
D 1 ÷ D 73	Diodes .....	D 525 A .....	B/1000 - B/1001
<b>PA 452</b>	<b>LOWER MANUAL KEYSWITCH BOARD (DWG 2/SE 235)</b>		<b>6518/1124561</b>
I.C. 1	Integrated Frequency Divider .....	G.I.E. ....	W/1101 - W/1100

Schem. Ref.	Circuit	Type	Part Code
<b>PA 670</b>	<b>PEDALBOARD (DWG 2/SE 235)</b>		<b>6820/1124665</b>
Q f 1	Buffer .....	BC 208 B-C .....	W/1404
Q f 2	Synchronism Control .....	BC 209 -B .....	W/1407
Q f 3	Synchronism Control .....	BC 154 .....	W/1500
D f 1	Diode .....	D 525 A .....	B/1000 - B/1001
<b>PA 676</b>	<b>SPECIAL EFFECT MONOPHONIC (DWG 3/SE 235)</b>		<b>6824/1124665</b>
* I.C. 1 - I.C. 3 * I.C. 4	Quadruple-2input NAND GATES C/MOS .....	4011 .....	W/1150
* I.C. 2	Triple-3 input NAND GATES C/MOS .....	4023 .....	W/1152
* I.C. 5	Dual JK Flip-Flop C/MOS .....	4027 .....	W/1153
I.C. 6	Priority Latching Circuit .....	G.I.E. AY-1-1313 .....	W/1108
D p 1 ÷ D p 3	Diodes .....	D 525 A .....	B/1000 - B/1001
<b>PA 675</b>	<b>SPECIAL EFFECTS (DWG 3/SE 235)</b>		<b>6822/1124665</b>
* I.C. 1 - I.C. 2	Dual JK Flip-Flop C/MOS .....	4027 .....	W/1153
* I.C. 3	Quadruple-2 input NAND GATES C/MOS .....	4011 .....	W/1150
* I.C. 4	Quadruple-2 input-AND GATES C/MOS .....	4081 .....	W/1156
Q n 1	Upper Manual Cancel .....	BC 209-C .....	W/1426
Q n 2-5-7 11-12-13-14	Buffers .....	BC 208 B-C .....	W/1404
Q n 3	Trombone Filter .....	BC 209 B .....	W/1407
Q n 4	Preamplifier .....	BC 209-B .....	W/1407
Q n 6	Trumpet Filter .....	BC 209-B red dot .....	W/1413
Q n 8 - Q n 9	<b>Effect Modulators.....</b>	BC 209-B .....	W/1407
Q n 10	Effect Modulator .....	BC 209-C MISTRAL.....	W/1426
Q n 15	English horn .....	BC 208-B-C .....	W/1404
D n 1 ÷ D n 12	Diodes .....	BC 209-B .....	W/1407
		D 525 A .....	B/1000 - B/1001

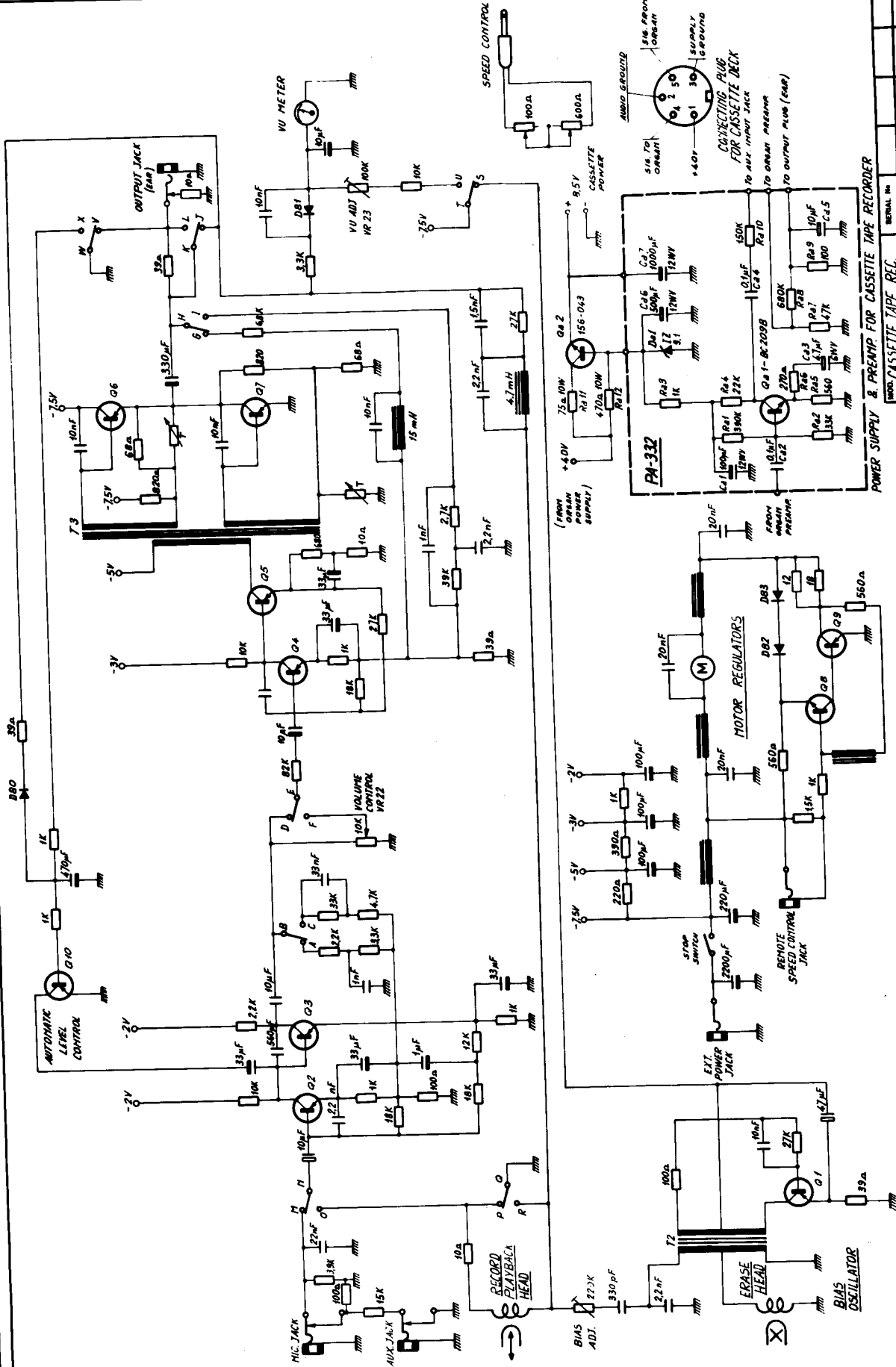
\* Handle with care.



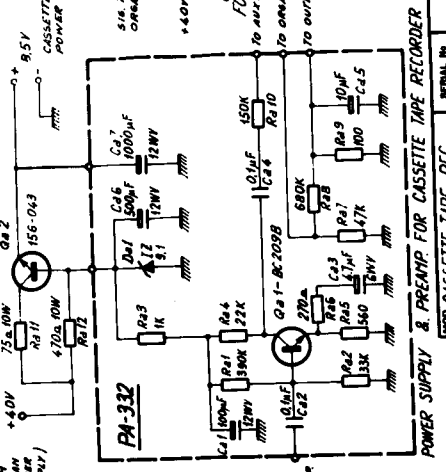
# PARTNER 14S-14SM TRANSISTORS (Q) & DIODES (D) LIST

①

Schem.Ref.	Circuit	Type	Part Code		
<u>PA 690</u>	<u>RHYTHM GENERATOR &amp; CLOCK (DWG 1/SE 243)</u>		<u>6845/1124666</u>		
A	Dual 2- Wide 2- Input and/ or Invert Gate.....	4085 FAIRCHILD.....	W/1158		
B	Quadr. 2- Input and Gate..	4081 FAIRCHILD.....	W/1156		
C	Quadr. 2- Input Nand Gate.	4011 FAIRCHILD.....	W/1150		
D	Dual D - Flip-Flop.....	4013 FAIRCHILD.....	W/1157		
E	Dual Retriggerable Reset. Monostable Multivibrator..	4528 FAIRCHILD.....	W/1159		
F	Rhythm Generator.....	M 256 BIAG.-S.G.S.....	W/1110		
Qa1	Interface.....	} BC 208-B BC 209-B	W/1404 W/1407		
Qa2-Qa3	Bass Modulator.....				
Qa4	Buffer Oscillator.....				
Qa5	Switch Reset.....				
Qa6	Lamp Driver.....				
Qa8-Qa9	Buffer.....				
Qa10	Chord Modulator.....				
Qa11	Chord Modulator.....			BC 209-C-MISTRAL.....	W/1426
Qa7	Lamp Driver.....			BC 154.....	W/1500
Qa12	Switch.....			} BC 209-B BC 149-B	W/1407 W/1408
Qa13	Bass Drum.....				
Qa14	Bongo Oscillator.....				
Qa15	Brush Snare Drum Filter...				
Qa16	Noise Preamplifier.....				
Qa17	Cymbal Filter.....				
Qa18	Blocks Oscillator.....				
Qa19	Rhythm Preamplifier.....	BC 209-B red dot.....	W/1413		
Qa20	Accent Switch.....	BC 209-C MISTRAL.....	W/1426		
Za1	Noise Generator-Zener Diode	IZ 9824.....	B/1600		
Da1+Da18	Diodes.....	D 525 B- BA 130.....	B/1000-B/1003		



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



POWER SUPPLY & PREAMP FOR CASSETTE TAPE RECORDER

CODE	DESIGNED BY	REVISION	SERIAL NO.
SC-143			
	CHECKED BY	DATE	

