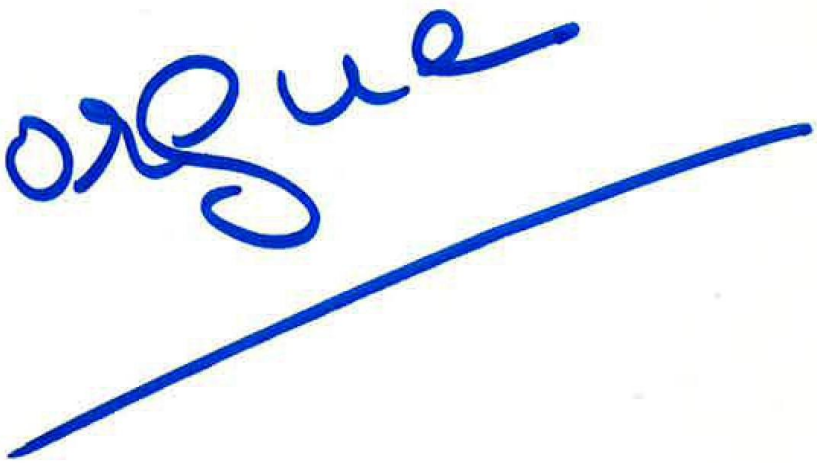
SCHEMATIC DIAGRAMS
MOD.

Sprinter 49 B

ELECTRONIC ORGAN



GEM® A PRODUCT OF

general electro music

COD. 27322

MONDAINO · FO · ITALY

CALIBRATION PROCEDURE "SPRINTER 49B"

INITIAL CONDITIONS: INSTRUMENT SWITCHED-ON, ALL TABS OFF, TWO VOLUME FULLY.

INSTRUMENT	TEST POINT	MEASUREMENT CONDITIONS	TRIMMER	DIAGRAM REF.	READING
MASTER TUNE					
BY EAR	MASTER TUNE	FLUTE 8' ON A2 PRESSED	F	R 84-76.476	ZERO BEAT
COUNTER	PIN 1 IC1 76.477	A2 PRESSED	F	R 84-76.476	440 HZ.
AMPLIFIER					
OSCILLOSCOPE 0,5 V/DIV.	AMPLIFIER PIN A-76.474	FLUTE 8' ON F2 PRESSED	I	R 5-76.474	2,5 VPP.
DRUM					
OSCILLOSCOPE 2V/DIV.	DRUM PIN A-76.474	LATIN ON DRUM ON TEMPO FULLY	A	R 6-76.475	14 VPP.
ORCHESTRA					
BY EAR	ORCHESTRA	LATIN ON ORCHESTRA ON MAGIC CHORD ON	B	R 8-76.475	OPT. LEVEL
VIBRATO					
OSCILLOSCOPE 2V/DIV. 20 MS/DIV.	VIBRATO PIN 7 IC8 76.476		G	R 93-76.476	160 MS.
CHORD					
BY EAR	CHORD	LATIN ON MAGIC CHORD ON	E	R 100-76.476	OPT. LEVEL
CHORD DECAY					
DIGITAL VOLT.	CHORD DECAY TR 4 COLLECTOR 76.476	LATIN ON MAGIC CHORD ON TOUCH ON	D	R 33-76.476	4 VD.C.
BASS DECAY					
DIGITAL VOLT.	BASS DECAY TR 2 COLLECTOR 76.476	LATIN ON MAGIC CHORD ON TOUCH ON	C	R 23-76.476	3,1 VD.C.
SYNTHY WAH					
BY EAR	SYNTHY WAH	SYNTHY WAH ON	H	R 108-76.477	OPT. U/A

PART LIST "SPRINTER 49B"

MISCELLANEOUS

CHEEK BLOCK	15.480
SPEAKER, 8", 4 OHM	22.064
LEG KIT	19.147+19.148
POTENTIOMETER KNOB	15.406
SWITCH KNOB, ORANGE	15.407
GRAY	15.408
LIGHT BLUE	15.409
IVORY	15.410
RED	15.411
BLACK	15.412
GREEN	15.413
PUSH BUTTON 2 KEYS, RED	14.449
BEIGE COVER PRINTED	15.481
BROWN FRAME	15.478
MUSIC STAND, ALUMINIUM	17.458
KEY BOARD COVER, BEIGE	15.486
SWELL PEDAL ASSY	79.004
DIODE, LED, RED (TIL221-2)	08.703

KEYBOARD

KEYBOARD ASSY	72.079
KEYBOARD MECHANICS ONLY	80.024
P.C. BOARD 24.845	81.035
SHARP KEY, BLACK	15.999
NATURAL KEY, WHITE	15.998
SPRING FOR WHITE KEY	16.002
SPRING FOR BLACK KEY	16.001
DIODE, SI., SIGNAL (FDH 999)	08.103
SPRING CONTACT	16.055
BUS BAR L, SILVERED	16.086
BUS BAR U, SILVERED	16.085
CONTACT ACTUATOR	15.225

POWER SUPPLY & AMPLIFIER

POWER SUPPLY ASSY	73.593
MAINS TRANSFORMER, EUROPE	23.078
MAINS TRANSFORMER, U.L. & C.S.A.	23.079
MAINS SWITCH, EUROPE	11.278
MAINS SWITCH, U.L. & C.S.A.	11.237
POWER CORD, EUROPE	13.294
VOLTAGE SELECTOR SWITCH	11.241
JACK	14.200
SOCKET, 3 POLES	14.101
P.C. BOARD 24.913 ASSY	76.473
P.C. BOARD 24.844 ASSY	76.474
DIODE, RECTIFIER (IN 4002)	08.156
BRIDGE RECTIFIER (2W02)	08.168
VOLTAGE REGULATOR (78M12)	10.045
POWER AMPLIFIER (TDA 2030)	10.028
TRIMMER ORIZ. 100K OHM	07.241

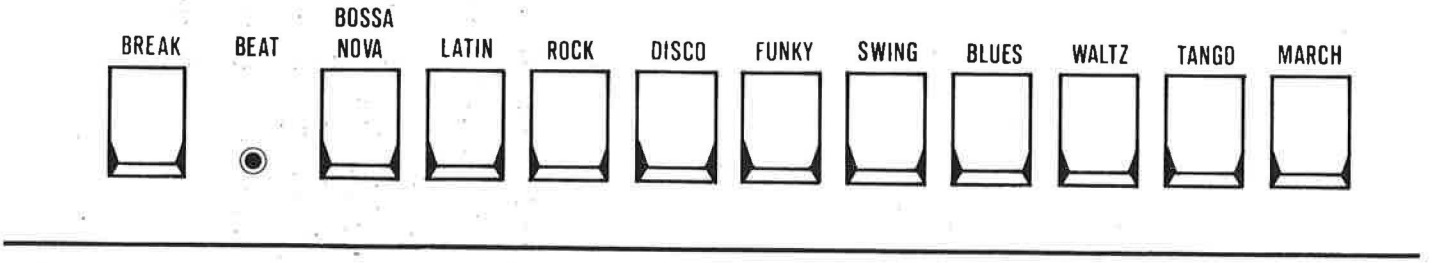
RHYTHM, ACCOMPANIMENT, SOLO

P.C. BOARD 24.889 ASSY (RHYTHM)		76.475
P.C. BOARD 24.890 ASSY (ACCOMP.)		76.476
P.C. BOARD 24.891 ASSY (SOLO)		76.477
RHYTHM GENERATOR	(COP 420)	10.068
QUAD 2-INPUT NOR	(4001)	10.503
QUAD 2-INPUT NAND	(4011)	10.508
QUAD BILAT. SWITCH	(4016)	10.518
DUAL "D" FLIP-FLOP	(4013)	10.513
QUAD 2-INPUT OR	(4071)	10.548
QUAD EXCLUSIVE-OR	(4070)	10.543
TRIPLE 3-INPUT NAND	(4023)	10.564
VOLTAGE REGULATOR	(78L06)	10.069
DUAL OP. AMPL.	(1458)	10.051
TONE GENERATOR	(M 108)	10.015
DUAL MONOSTABLE	(74LS221)	10.030
QUAD OP. AMPL.	(LM 324)	10.056
DUAL O.T.A.	(LM 13700)	10.029
TRANSISTOR, FET, P.CH.	(P 1087)	09.856
TRANSISTOR, NPN	(BC 173C)	09.182
TRANSISTOR, NPN, NOISE GENER.		09.402
TRANSISTOR, PNP,	(BC 212B)	09.193
TRANSISTOR, H.F., NPN	(BF 494)	09.305
DIODE, SI., SIGNAL	(FDH 999)	08.103
SLIDE POTENTIOMETER	470K	07.952
SLIDE POTENTIOMETER	10K	07.903
TRIMMER, HORIZ.,	10K	07.181
TRIMMER, HORIZ.,	22K	07.201
TRIMMER, HORIZ.,	100K	07.241
TRIMMER, STAND,	100K	07.245
TRIMMER, HORIZ.,	470K	07.332
PUSH BUTTON 10 KEYS, INTELOCKED		14.465
PUSH BUTTON 1 KEY, FREE		14.463
PUSH BUTTON 5 KEYS, PUSH-PUSH		14.467
PUSH BUTTON 2 KEYS, PUSH-PUSH		14.446
PUSH BUTTON 7 KEYS, PUSH-PUSH		14.447

ANY REQUEST FOR NOT ABOVE MENTIONED PART MUST ENCOMPASS SPECIFIC DESCRIPTION INCLUDING :

1) MODEL NAME
2) SECTION
3) EVENTUAL CODE & DESCRIPTION
4) SCHEMATIC DIAGRAM REFERENCE

MICROPRO DRUM



ENGLISH

This instrument counter-signed by a B, has a new rhythm unit called MICROPRO DRUM.
The BREAK is an automatic feature which gives you a range of professional drums. To have it just push the button and BREAK will enter into function automatically at the right moment.

ITALIANO

Il Vostro strumento, contrassegnato dalla lettera B, è completato da una nuova unità ritmica denominata MICROPRO DRUM.
Il Break è una prestazione automatica che fornisce una variazione di batteria di tipo professionale. Per ottenerlo premete semplicemente il pulsante ed il Break entrerà automaticamente al momento giusto.

DEUTSCH

Ihr Instrument, mit B gekennzeichnet, hat eine neue Rhythmus Einheit, die MICROPRO DRUM genannt ist.
BREAK ist eine automatische Ausfuehrung, die die Vielseitigkeit eines Schlagzeuges herbeifuehrt.
Um diese zu erreichen druecken Sie einfach den Knopf und BREAK setzt im richtigen Moment automatisch ein.

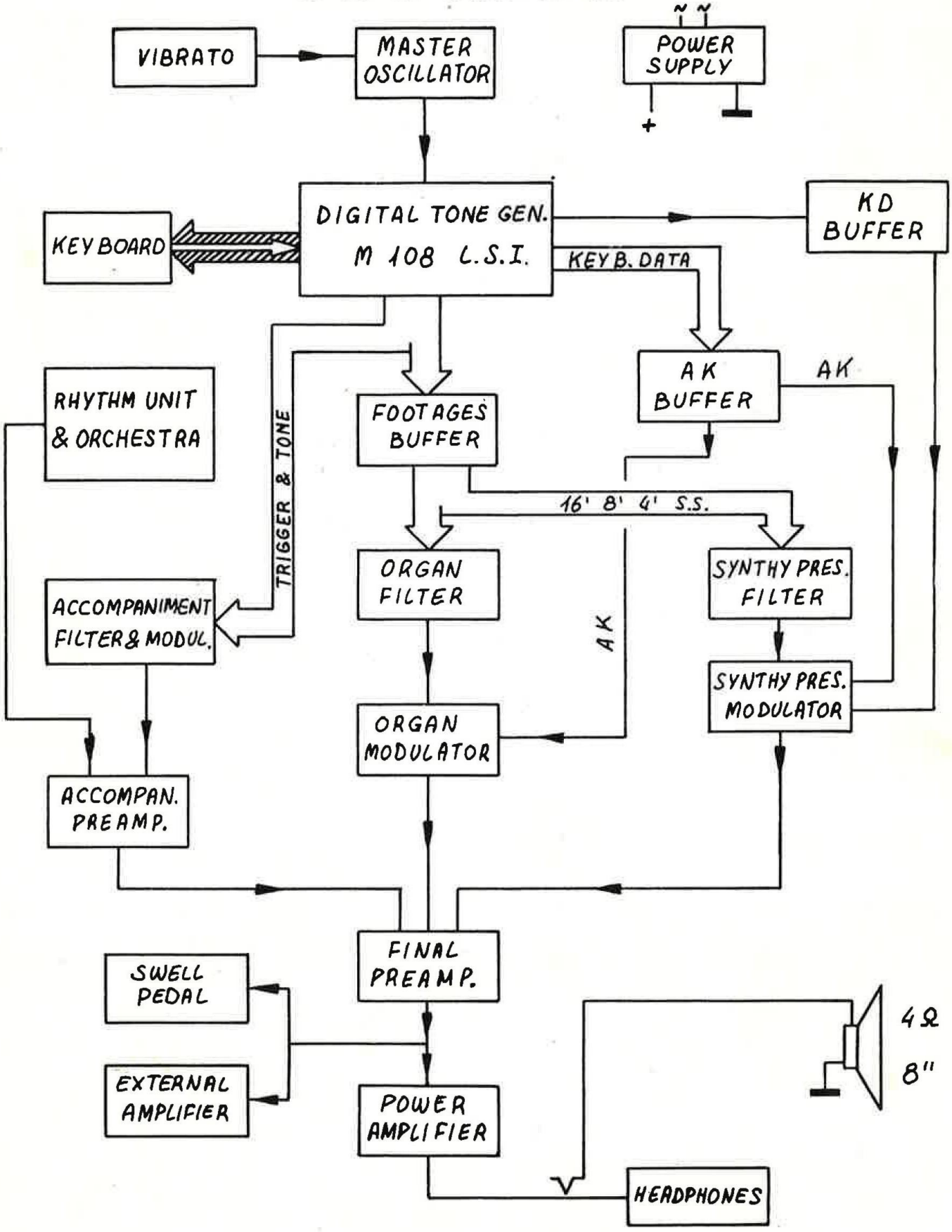
FRANCAIS

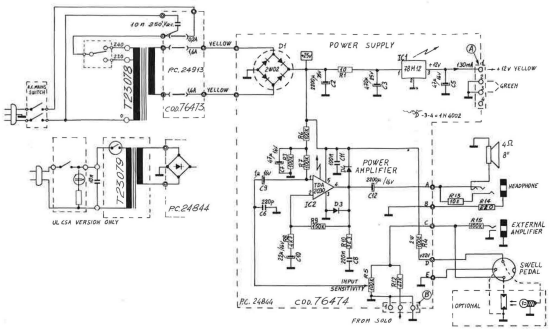
Ce modèle B comporte une nouvelle batterie éléctronique dénomée MICROPRO DRUM.
Le BREAK est un automatisme qui reproduit un roulement de batterie. On peut l'appeler a n'importe quel moment sur la touche BREAK. Il se placera de lui même dans le tempo.

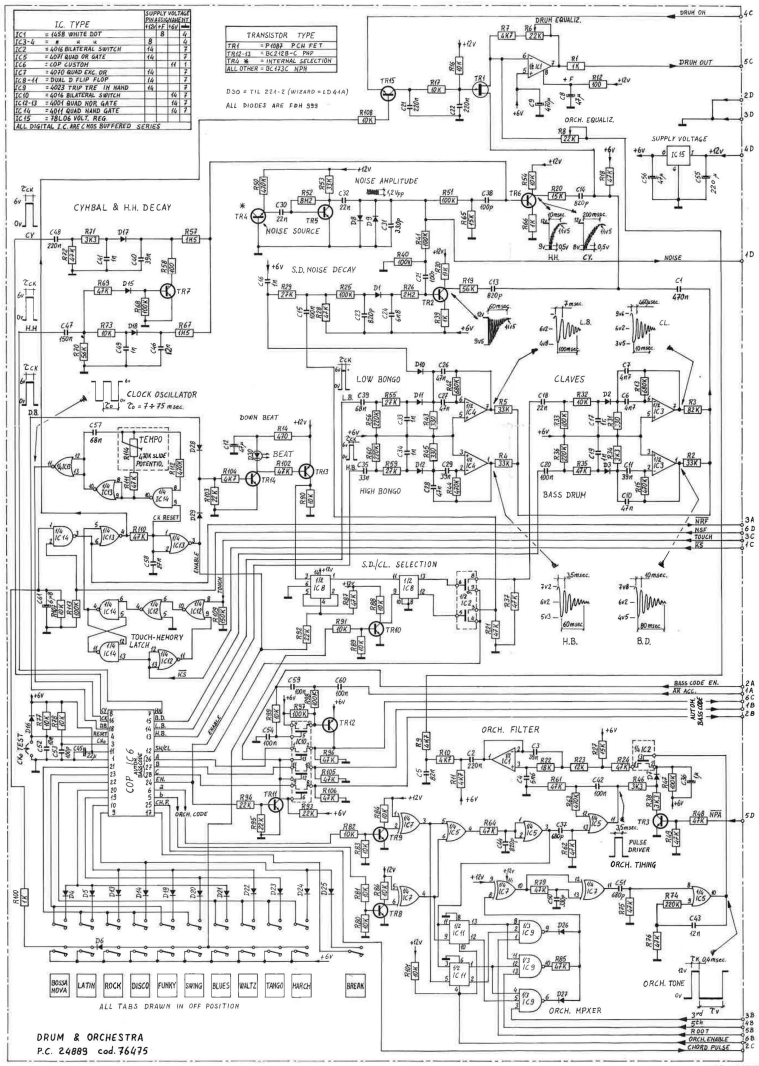
NEDERLANDS

Dit instrument, zoals omschreven onder a B, heeft een nieuw ritme unit genaamd MICROPRO DRUM.
BREAK is een automatisch effekt, dat u een aantal professionele Drumvariaties geeft. U dient enkel de knop in the drukken en de BREAK zal automatisch op het juste moment in werking treden.

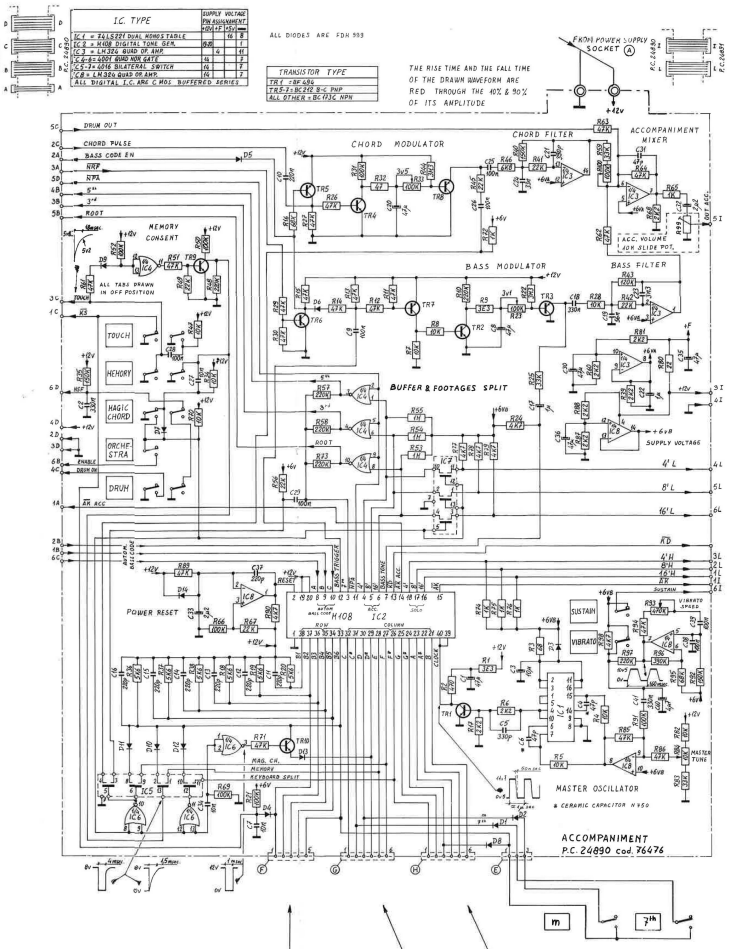
BLOCK DIAGRAM



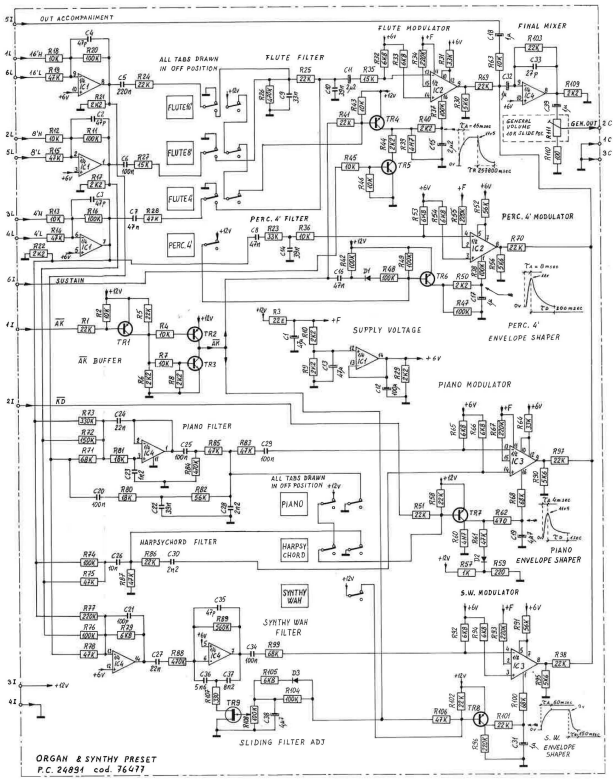




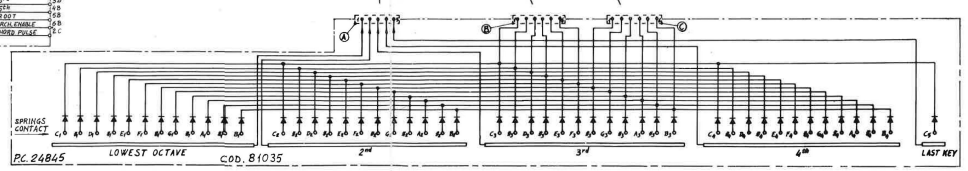
DRUM & ORCHESTRA
P.C. 24889 cod. 76475



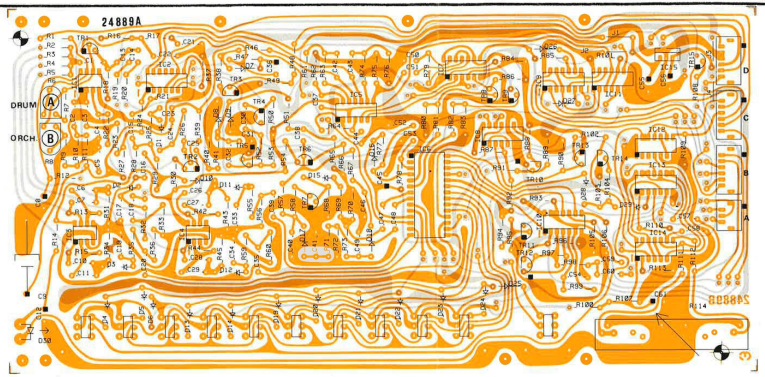
ACCOMPANIMENT
P.C. 24890 cod. 76476

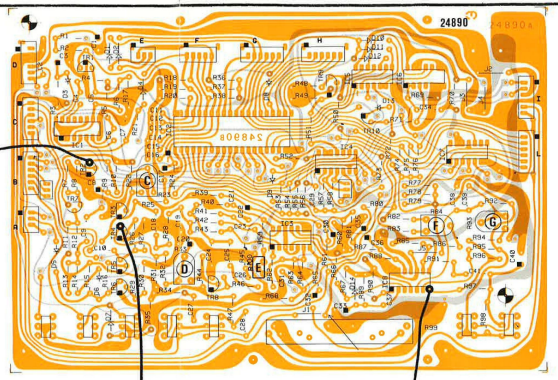


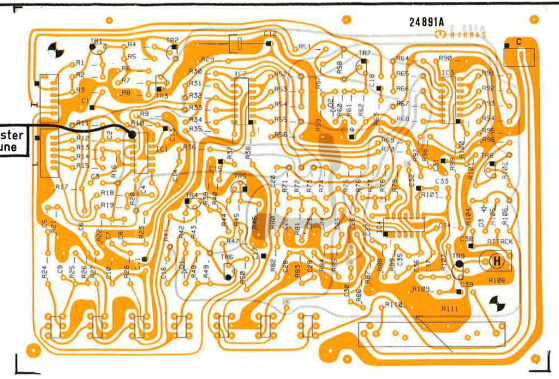
ORGAN & SYNTHY PRESET
P.C. 24891 cod. 76477

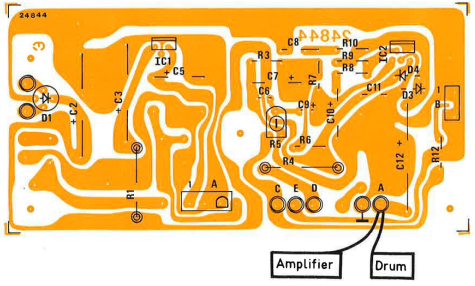


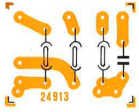
N. 50216	GEM a. r.
cod. 27322	SPRINTER 49B

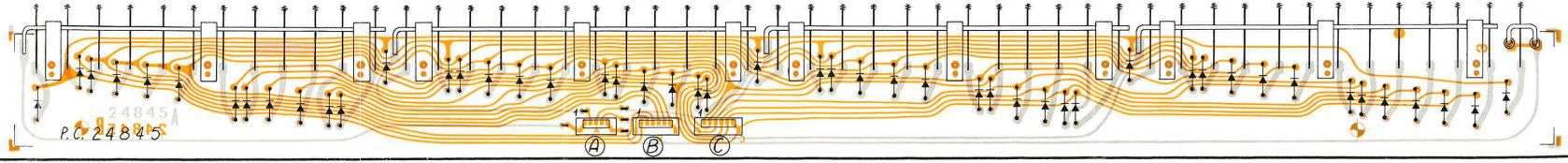

24889A
DRUM
A
ORCH.
B


24890
Bass Decay
Chord Decay
Vibrato


24891A
Master Tune


24844
Amplifier
Drum


24913


P.C. 24845