

JC-120/JC-120A R&P, JC-160

SERVICE NOTES

APPLICABLE TO FOLLOWING SERIAL NUMBERS

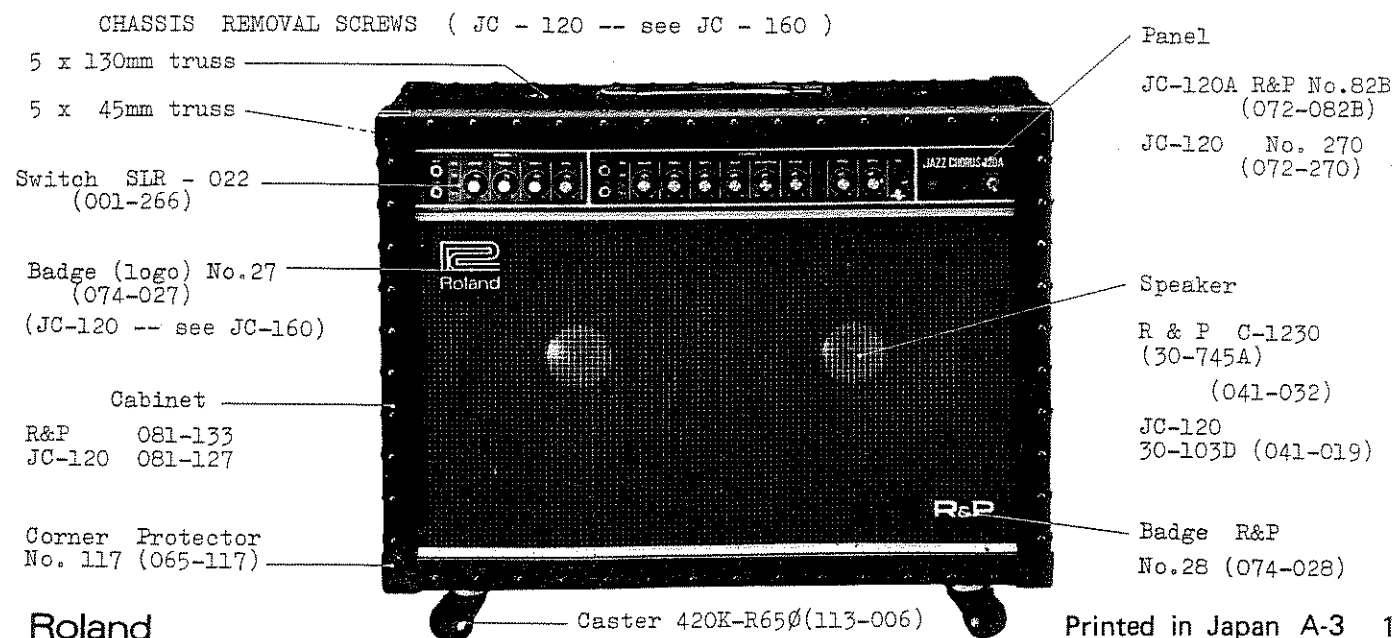
JC-120 ————— 789500 and up
 JC-120A R&P ————— 810600 and up
 JC-160 ————— 782921 and up

Fourth Edition

SPECIFICATIONS

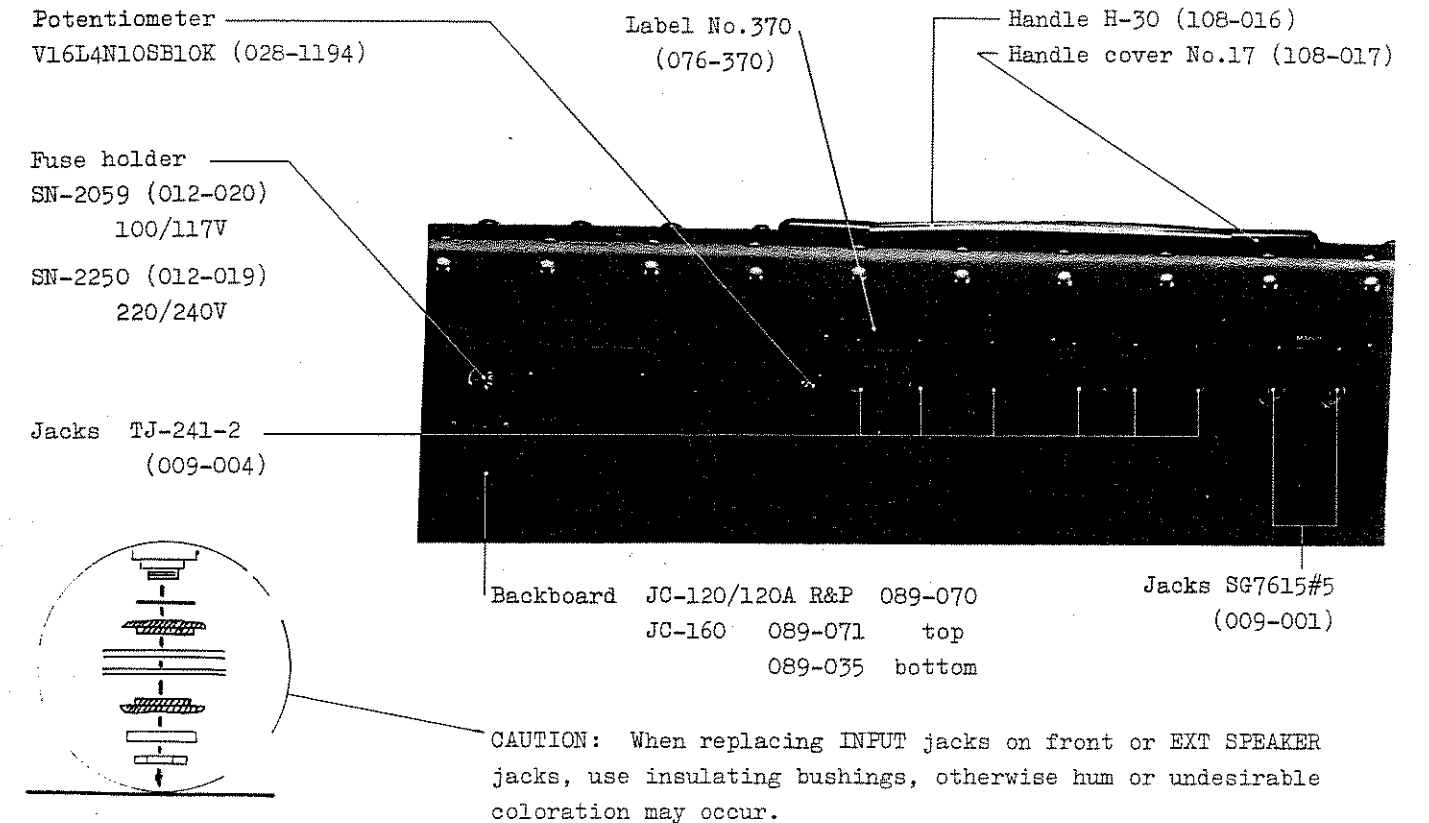
OUTPUT POWER -----	22V RMS	per channel	into 8-ohm
INPUT SENSITIVITY -----	HIGH	LOW	MAIN IN
	22mV	72mV	@ 1kHz
	38mV		@ 100Hz
	11mV		@ 10kHz
INPUT IMPEDANCE -----	220k-ohm	82k-ohm	@ 1kHz
			MAIN IN
			68k-ohm
LINE OUTPUT -----	Level	100mV	@ 1kHz
			IMPEDANCE
			100-ohm
RESIDUAL NOISE -----	9---20mV	per channel (varies with controls setting)	
TONE CONTROL RANGE -----	TREBLE	38dB	@ 10kHz
	MIDDLE	2dB	@ 1kHz
	BASS	18dB	@ 100Hz
	BRIGHT	4dB	@ 10kHz
			VOLUME at center
POWER CONSUMPTION -----	500VA		
DIMENSIONS -----	JC-120	750W x 540H x 270Dmm(29.6 x 21.2 x 10.6 in.)	
	JC-120A R & P	774W x 634H x 270Dmm(30.5 x 25 x 10.6 in.)	
	JC-160	750W x 700H x 240/300Dmm(29.5x27.6x94/118 in.)	
WEIGHT -----	JC-120	28Kg (62 lbs)	JC-120A R&P 40Kg(88 lbs)
	JC-160	35Kg (77 lbs)	

JC-120/JC-120A R&P (Photo)

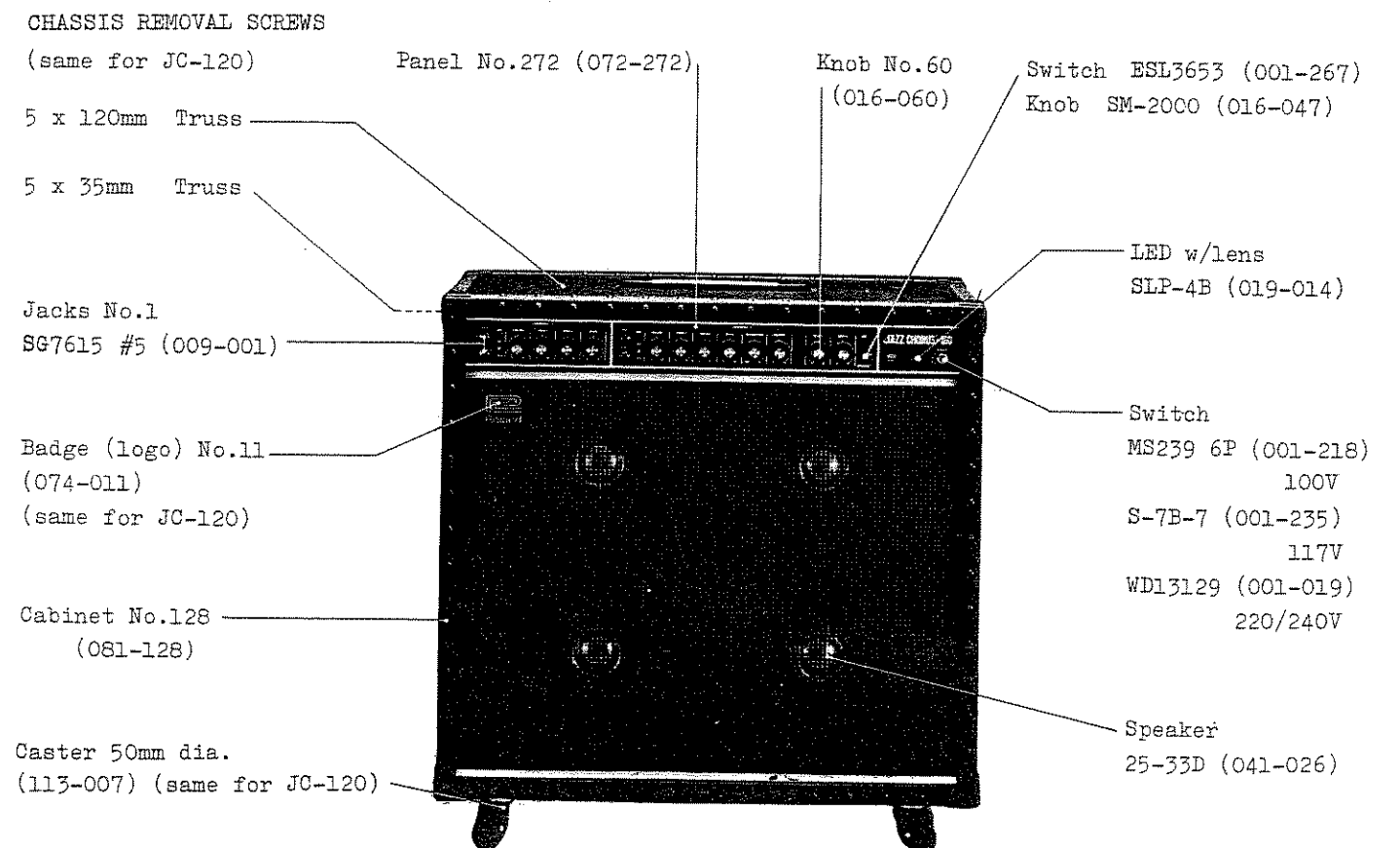


PART COMMON TO JC-120, JC-120A R&P and JC-160

PARTS COMMON to ALL THREE MODELS are only once rather than being shown in each photograph.

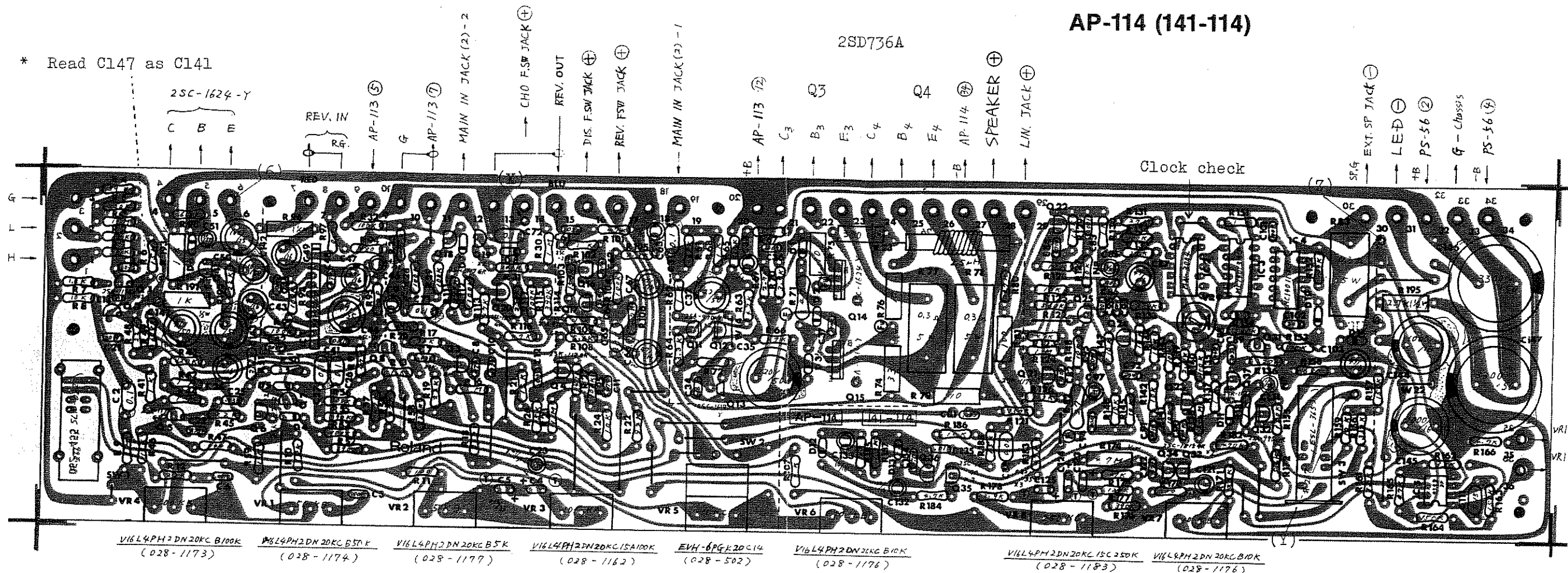


JC-160



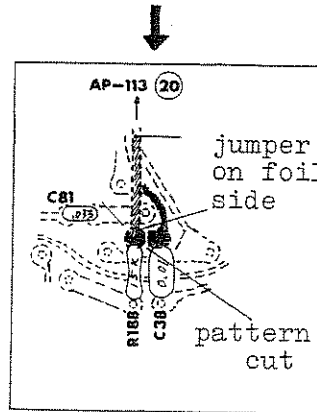
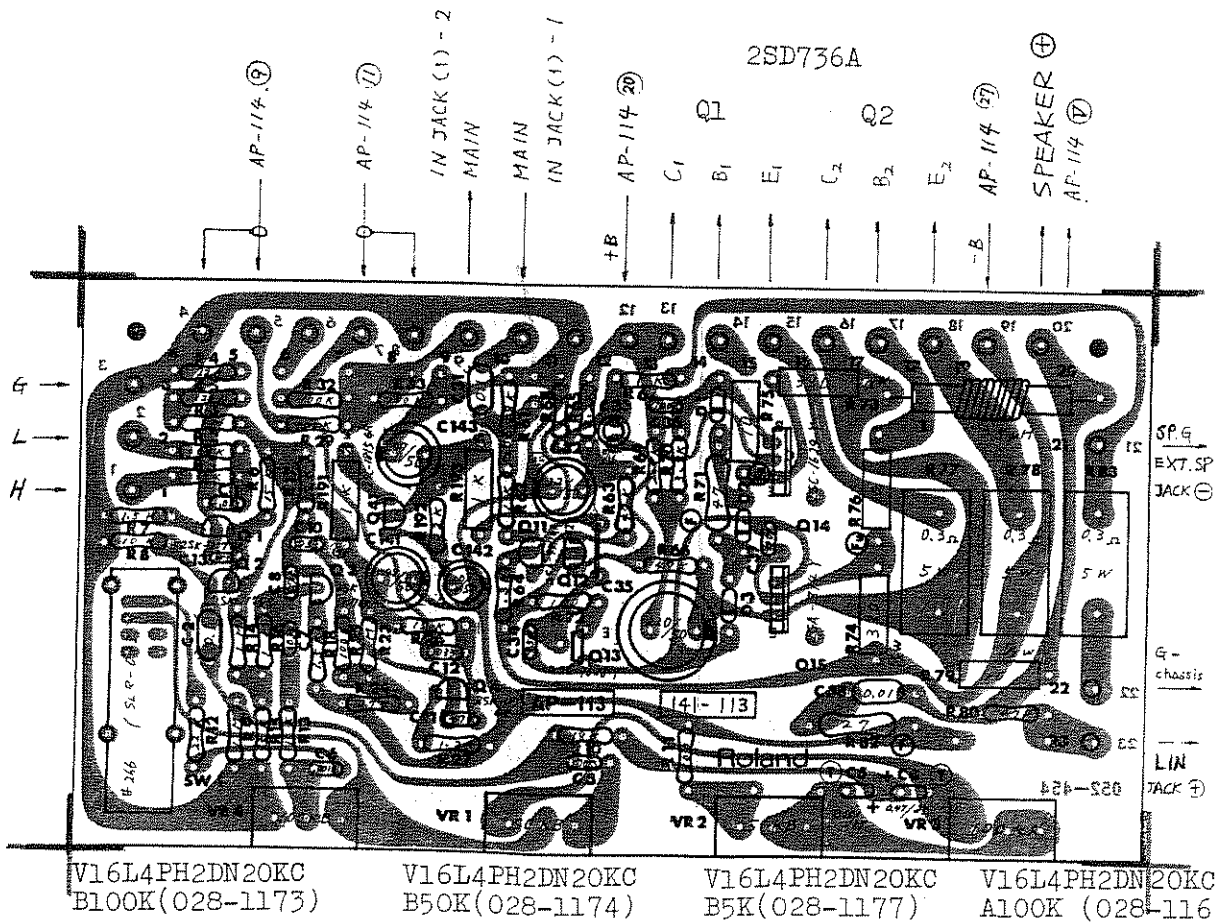
AP-114 (141-114)

* Read C147 as C141



NOTE: AP-114 (X) -- (Y) / (6) -- (Z) jumper wired

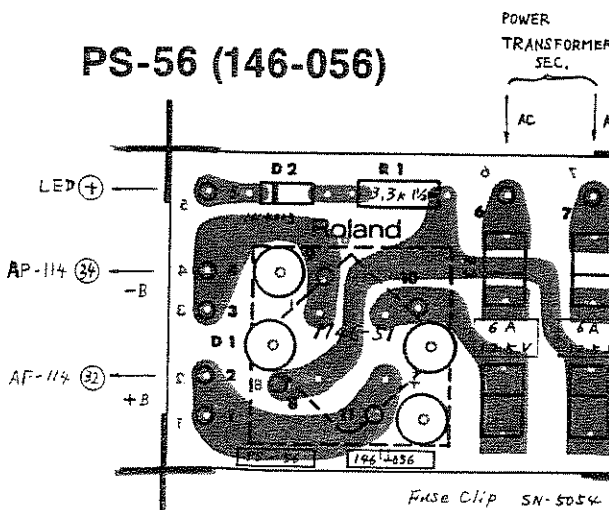
AP-113 (141-113)

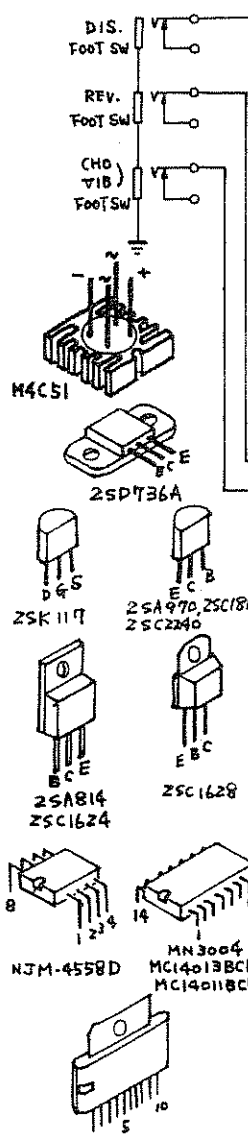
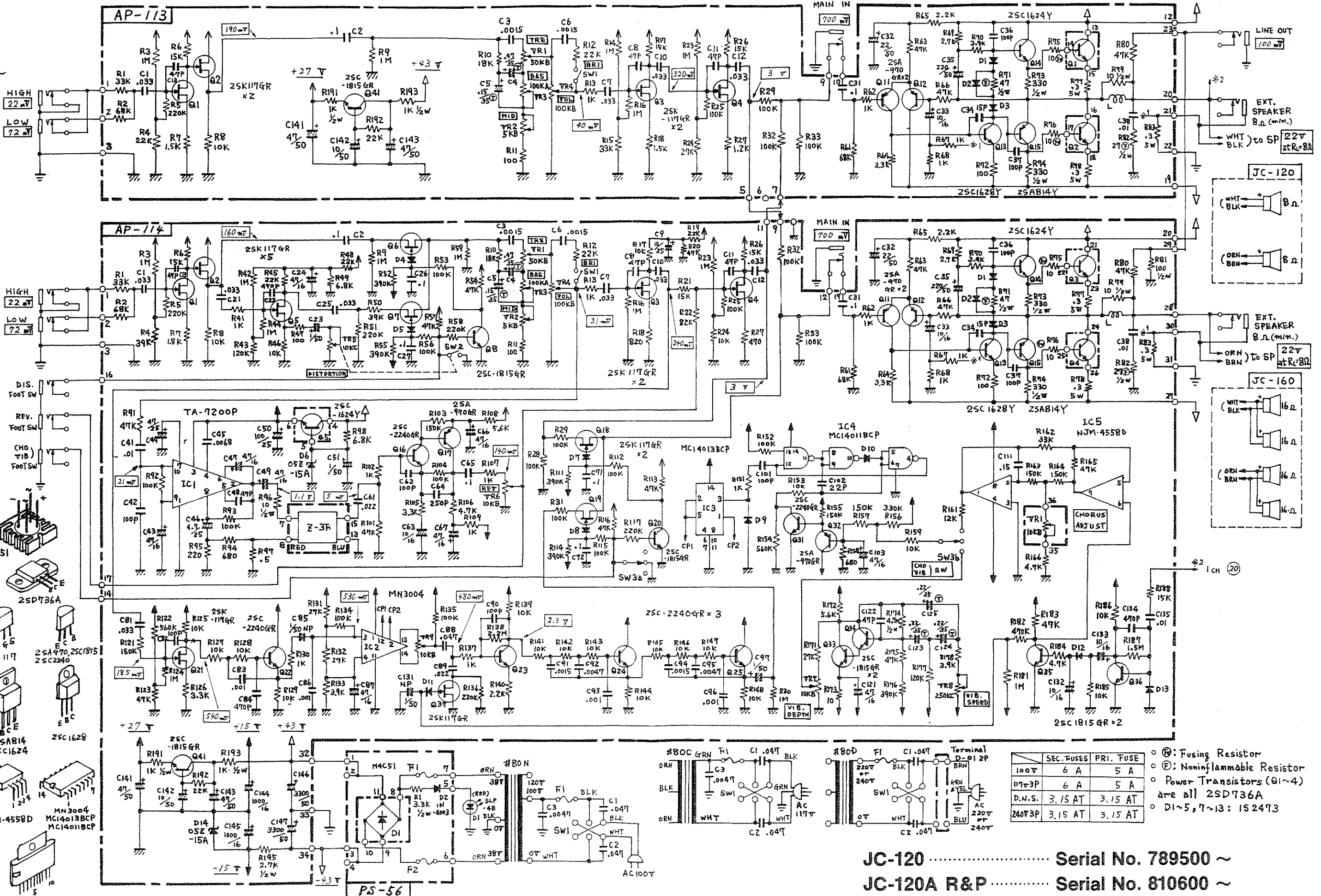


CHECKING & ADJUSTMENT

CHORUS ADJUSTMENT			25V pp (AP-114)
Adjust VR1 (rear panel) for 1.3 sec (0.77Hz) at R161			
SENSITIVITY Chorus starts to effect with 100mV rms output at channel 1 speaker			
BBD OUTPUT ADJUSTMENT			
Clock Composition Elimination			
Adjust VR9 (trimpot) for fig. at R137(AP-114)			
CLOCK OSCILLATOR	15V pp	Vibrato	65k - 130kHz
Sweep Range		Chorus	50k - 220kHz
at IC3 pin 1 (CP-2)			
VIBRATO OSCILLATOR	25V pp	Frequency	at Q33 C 1.8 - 9Hz

PS-56 (146-056)





JC-120 Serial No. 789500 ~
 JC-120A R&P Serial No. 810600 ~
 JC-100 Serial No. 799000 ~

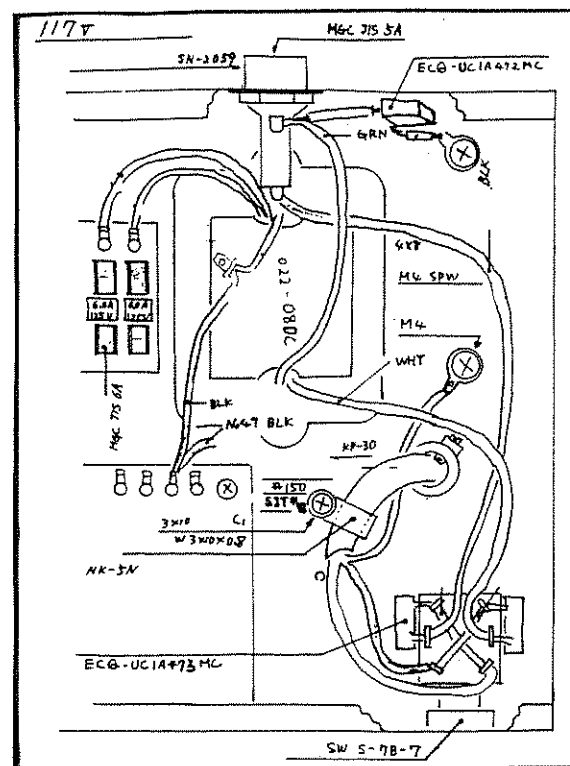
- ⊙: Fusing Resistor
- ⊕: Nonflammable Resistor
- ⊗: Power Transistors (Q1~4)
- are all 2SD736A
- ⊙ D1~5, 7~13: 1S2473

AC CONNECTIONS

PARTS LIST

117V

220/240V

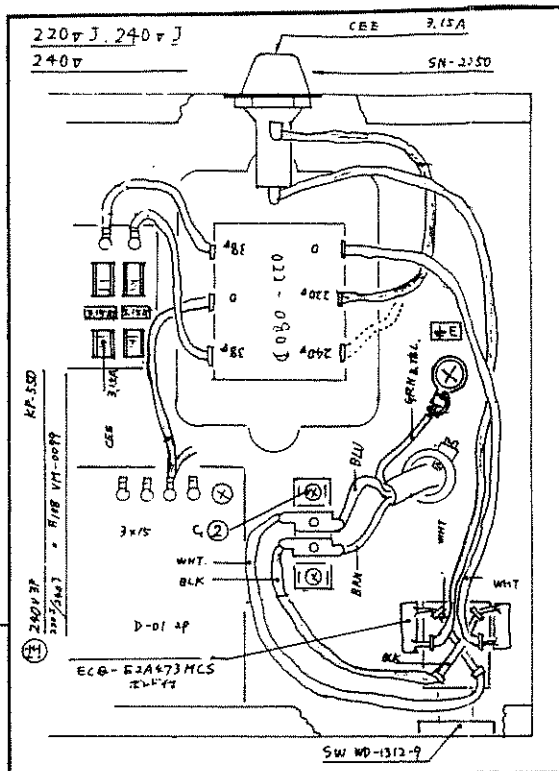


117V
Fuse prim.
MGC JIS 5A (008-009)
sec. MGC JIS 6A (008-010)
Power transformer 022-080C

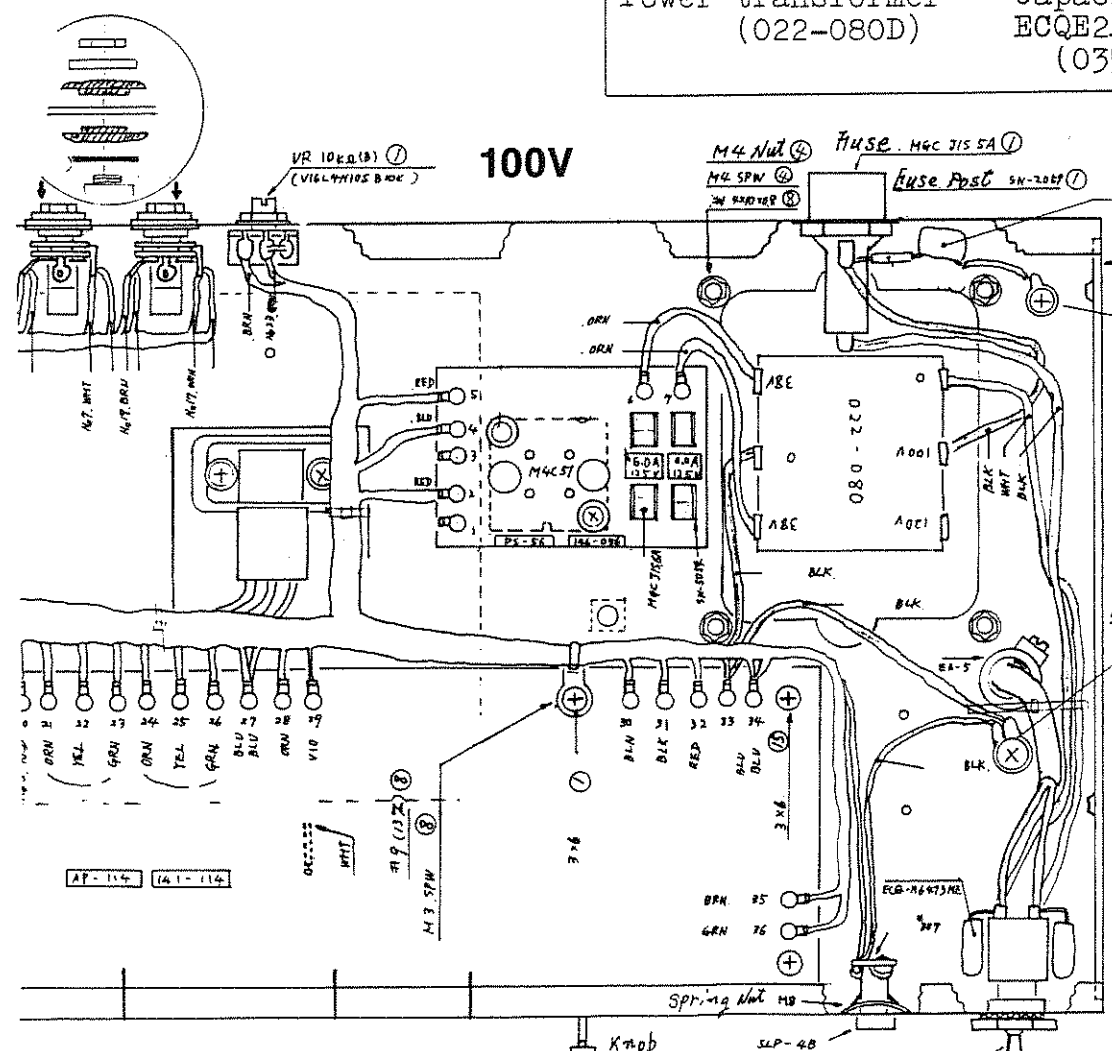
Capacitors
ECQUC1A472MC (035-107)
ECQUC1A473MC (035-108)

220/240V
Fuse CEE 3.15AT (008-072)

Power transformer (022-080D)



Capacitor
ECQE2A473MCS (035-310)



100V
Fuses prim.
MGC JIS 5A (008-009)
sec.
MGC JIS 6A (008-010)
Power transformer 022-080

Capacitors
ECQM6472MZ (035-101)
ECQM6473MZ (035-102)

- JC-120
- 081-127 Cabinet no.127
- 089-070 Backboard no.70
- 072-270 Panel no.270
- 131-068 Vinyl cover no.68
- 041-019 Speaker 30-103D

- JC-120A R&P
- 081-133 Cabinet no.133
- 089-070 Backboard no.70
- 072-082B Panel no.82B
- 131-098 Vinyl cover no.98
- 041-032 Speaker C1230(30745A)

- JC-160
- 081-128 Cabinet no.128
- 089-071 Backboard no.71 top
- 089-035 Backboard no.35 bottom
- 072-272 Panel no.272
- 131-073 Vinyl cover no.73
- 041-026 Speaker 25-33D

- 061-247 Chassis no.247
- 048-073 Heatsink no.73 2SD736A
- 053-311 Connector assy no.311 2SD736A

- 053-166 Connector assy no.166 Reverb 2SC1624
- 040-001 Reverb unit Z-3F
- 120-009 Sleeve nut no.9 3x13mm
- 121-017 Spring nut M8 P LED
- 047-025 Line cord strain relief EA-5

- 009-001 Jack SG7615 #5
- 009-004 Jack TJ-241-2
- 016-060 Knob no.60 rotary
- 016-047 Knob SM2000 lever

- POWER TRANSFORMERS
- 022-080 PT no.80 100V
- 022-080C PT no.80C 117V
- 022-080D PT no.80D 220/240V

- SWITCHES
- 001-218 MS239 6P power 100V
- 001-235 S-7B-7 power 117V
- 001-019 WD13129 power 220/240V
- 001-266 SLR-022 lever BRI.
- 001-267 ESL-3653 lever VIB/CHO

- FUSES, FUSE HOLDERS
- 008-009 MGC 5A prim. 100/117V
- 008-010 MGC 6A sec. 100/117V
- 008-072 CEE 3.15AT 220/240V
- 012-020 Holder SN2059 100/117V
- 012-019 Holder SN2250 220/240V
- 012-029 Clip SN5054 sec.

* For the parts on the cabinets, see page 1.
* Resistor of 1/2w. mvlar and

- PCBs
- 052-307 LED mounting less parts
- 141-113 AP-113 etch mask 052-454
- 141-114 AP-114 etch mask 052-455
- 146-056 PS-56 etch mask 052-457

- POTENTIOMETERS
- 028-1177 V16L4PH2DN20KC B5K MID.
- 028-1176 V16L4PH2DN20KC B10K REV.DPT.
- 028-1174 V16L4PH2DN20KC B50K TRE.
- 028-1173 V16L4PH2DN20KC B100K VOL.
- 028-1162 V16L4PH2DN20KC15A100K BASS
- 028-1183 V16L4PH2DN20KC15C250K SPEED
- 028-1194 V16L4N10SB10K CHORUS-adj.
- 028-502 EVH6PGK20C14 10KC w/sw DIS.
- 028-004 EVTR4AA00B14 (SR19R) trim.

- RESISTORS
- 044-253A MO-4P 0.3-ohm 5W wire wound
- 044-398 ERD-12FJ 27-ohm 1/2W nonflam.
- 044-401 ERD-12FJ 47-ohm 1/2W nonflam.
- 008-118 FRNB 10-ohm 1/4W fusing

- CAPACITORS
- 032-092 0.15 mfd. tantalum
- 032-093 0.22 mfd. tantalum
- 032-095 0.47 mfd. tantalum
- 032-195 CE04D1H010NBPE 1 mfd. 50V
- 032-262 ECET50R332SW 3300 mfd 50V electrolytic larg can
- 035-103 ECQM2103KZ 0.01 mfd 200V polyester

- TRANSISTORS
- 017-119 2SA970-GR or 2SA841-GR (except Q32)
- 017-030 2SA814-Y
- 017-123 2SC2240-GR or 2SC1681-GR (except Q31)
- 017-106 2SC1815-GR or 2SC373
- 017-028 2SC1628-Y
- 017-029 2SC1624-Y
- 017-134 2SD736A-(B) or (C)
- 017-103 2SK117-GR FET

- DIODES
- 018-095 M4C-51 rectifier bridge
- 018-014 1S2473
- 018-018 1N4003
- 018-025 05Z-15A zener
- 019-014 SLP-4B LED w/lens

- ICs
- 020-028 TA7200P
- 020-170 MC-14011BCP
- 020-179 MC-14013BCP