

BOSS PS-2 SERVICE NOTES

First Edition

SPECIFICATIONS

- Power Source** : 9V DC (Battery 6F22 × 1, AC Adapter PSA series or RPW-7)
- Current Draw** : 60mA @ 9V DC
- Pitch Shift** : -1 to +1 octave
- Delay Time** : 30ms to 2s
- Frequency Response** : [Direct] 10Hz to 100kHz (±3 dB)
[Effect] 80Hz to 6KHz (±3 dB)
- Residual Noise** : Less than -90 dBm (IHF-A)
- Input Impedance** : 1MΩ
- Output Load Impedance** : More than 10kΩ
- Dimensions** : 70 (W) × 55 (H) 125 (D) mm
2-3/4 (W) × 2-3/16 (H) × 4-15/16 (D) in.
- Weight** : 450g/1lb

ADJUSTMENT

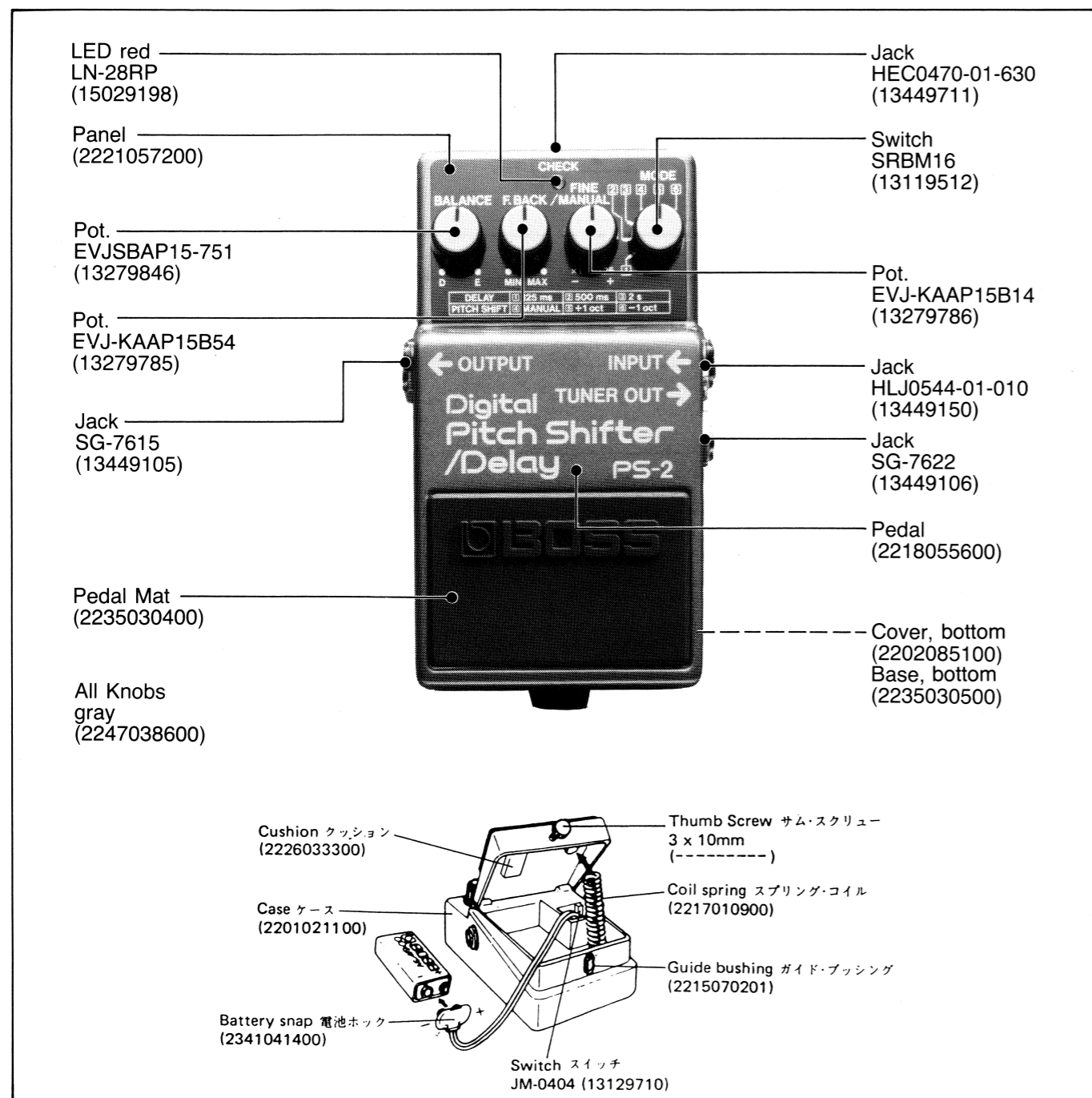
1 CLOCK FREQUENCY (VR5, VR4)

- 1-1 Connect a tuner (TU-12, TU-100 etc) or a frequency counter to TUNER OUT jack.
- 1-2 Turn MODE to [4].
- 1-3 Turn FINE/MANUAL full clockwise and adjust VR5 for C# (277.18Hz).
- 1-4 Turn FINE/MANUAL full counterclockwise and adjust VR4 for B (61.735Hz).

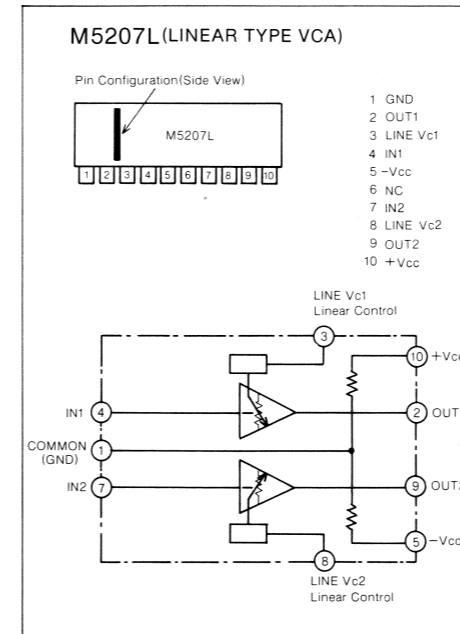
調整仕様

1. クロック調整 (VR5, VR4)

- 1-1 TUNER OUTジャックにチューナー (TU-12, TU-100など) か周波数カウンターを接続する。
- 1-2 MODEを[4]にする。
- 1-3 FINE/MANUALを右(↷)に回しきってチューナーか周波数カウンターの表示がC#(277.18Hz)になる様にVR5を調整する。
- 1-4 FINE/MANUALを左(↶)に回しきってチューナーか周波数カウンターの表示がB(61.735Hz)になる様にVR4を調整する。

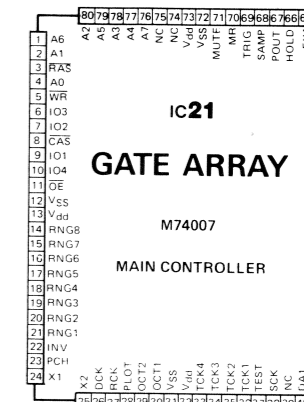


IC DATA



GATE ARRAY M74007

Pin Configuration (Top View)

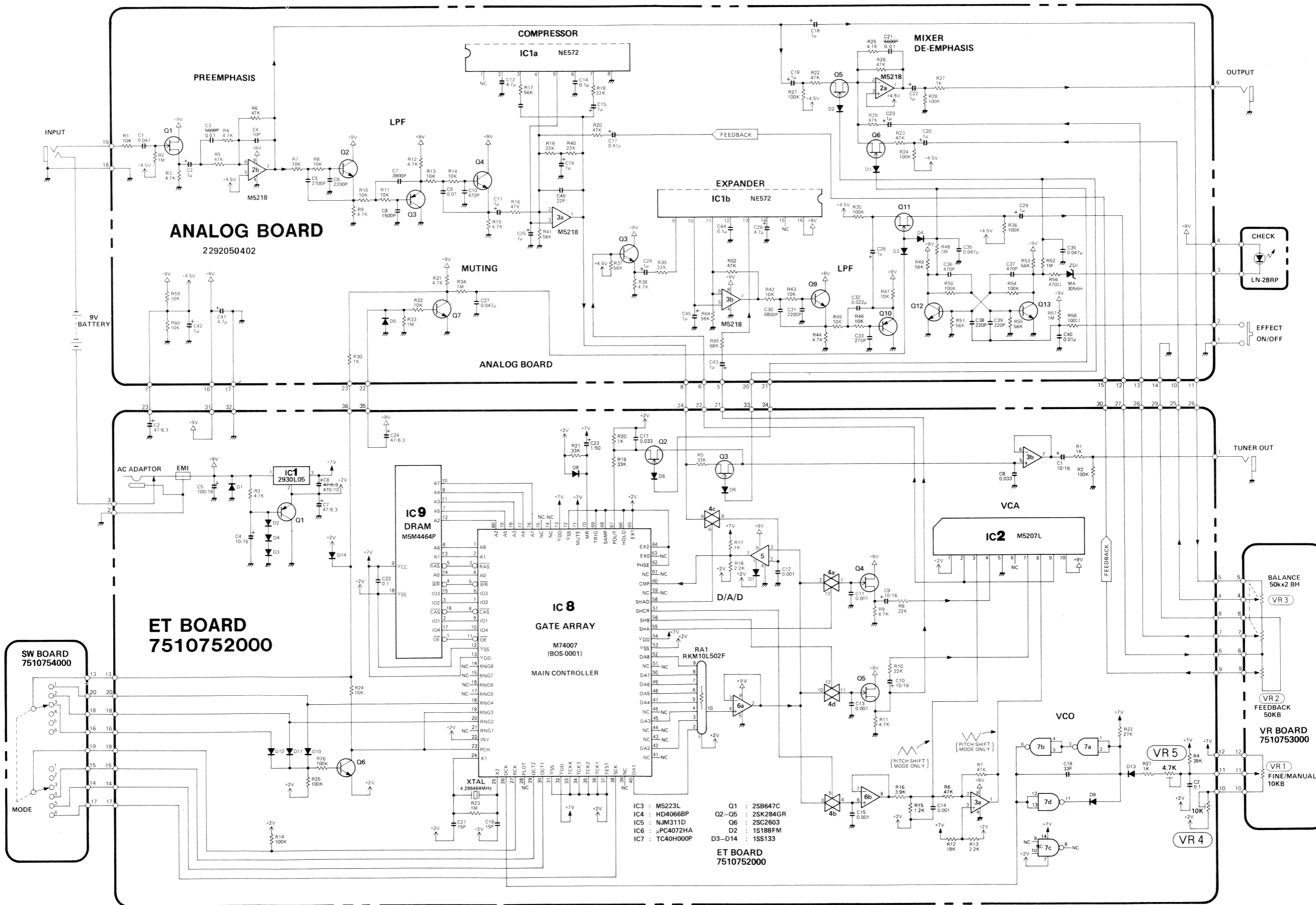


DESIGNATION	PIN No.	DESCRIPTION
Vss	12,31,53,72	input, +2V power supply
Vdd	13,32,54,73	input, +7V power supply
A0 - 7	4,2,80,78,77,79,1,76	output, address A0-A7
RAS	3	output, row address strobe (active low)
WR	5	output, write enable (active low)
CAS	8	output, column address strobe (active low)
I/O1 - 4	9,7,6,10	I/O data bus D1 - D4
OE	11	output, output enable (active low)
RNG1 - 8	14 - 21	input, range 1 - 8 (unused=RNG5 - 8)
INV	22	input, H=INVERT mode, L=NORMAL mode
PCH	23	input, H=PITCH SHIFT mode, L=DELAY mode
X1, X2	24,25	input, XTAL, master clock in PITCH SHIFT mode
DCK	26	input, master clock input in DELAY mode
RCK	27	input, read address counter clock input in PITCH SHIFT mode
PLOT	28	output, clock to PLL (f=1/64RCK)
OCT2	29	octave 2 unused, open
OCT1	30	octave 1 unused, open
TCK4,3,2,1,TEST	33 - 37	test unused, pulled down +2V
SCK	38	clock unused, open (f=1/32DCK)
DA1 - 8	40 - 52	output, data to DA converter
SHA,SHB,SHCR,SHAD	55 - 58	output, sample & hold (D/A/D timing control)
CMF	60	input, comparator input
PHSE	62	input, phase comparator (H=phase invert mode)
EXO - 2	63 - 65	output, exclusive OR gate unused
HOLD	66	input, H=hold, L=normal
POUT	67	output, clock to TUNER OUT (f=1/512RCK)
SAMP	68	input unused, H=SAMPLER mode, L=NORMAL mode
TRIG	69	input unused, trigger input in SAMPLER mode
MR	70	input, master reset
MUTE	71	input, mute signal
NC	39,41,43,44,46 51,59,61,74,75	unused, open

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

CIRCUIT DIAGRAM

A
B
C
D
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

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ET BOARD

ASSY 7510752000
(pcb 2292051100)

SW BOARD

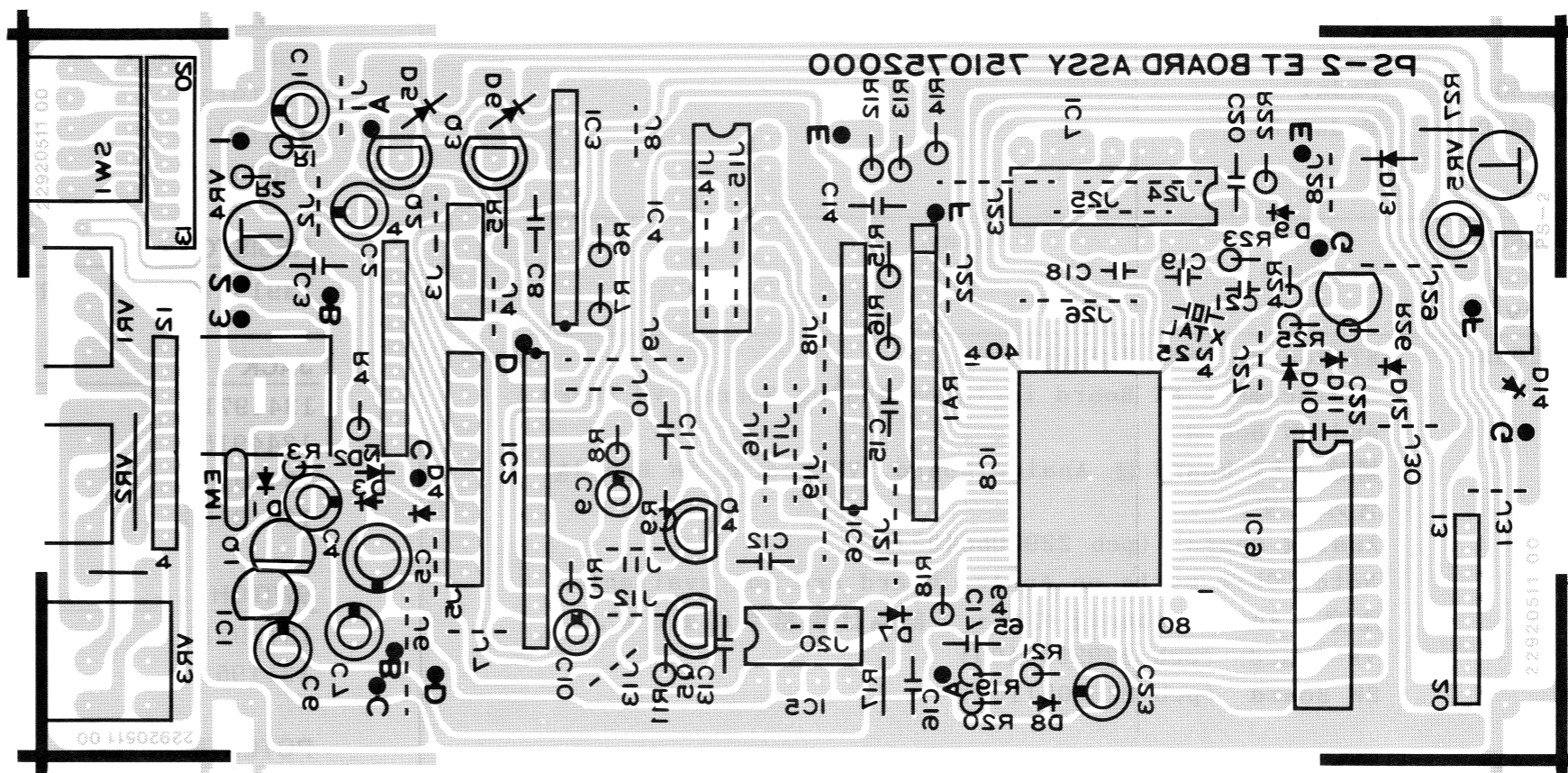
ASSY 7510754000
(pcb 2292051100)

VR BOARD

ASSY 7510753000
(pcb 2292051100)

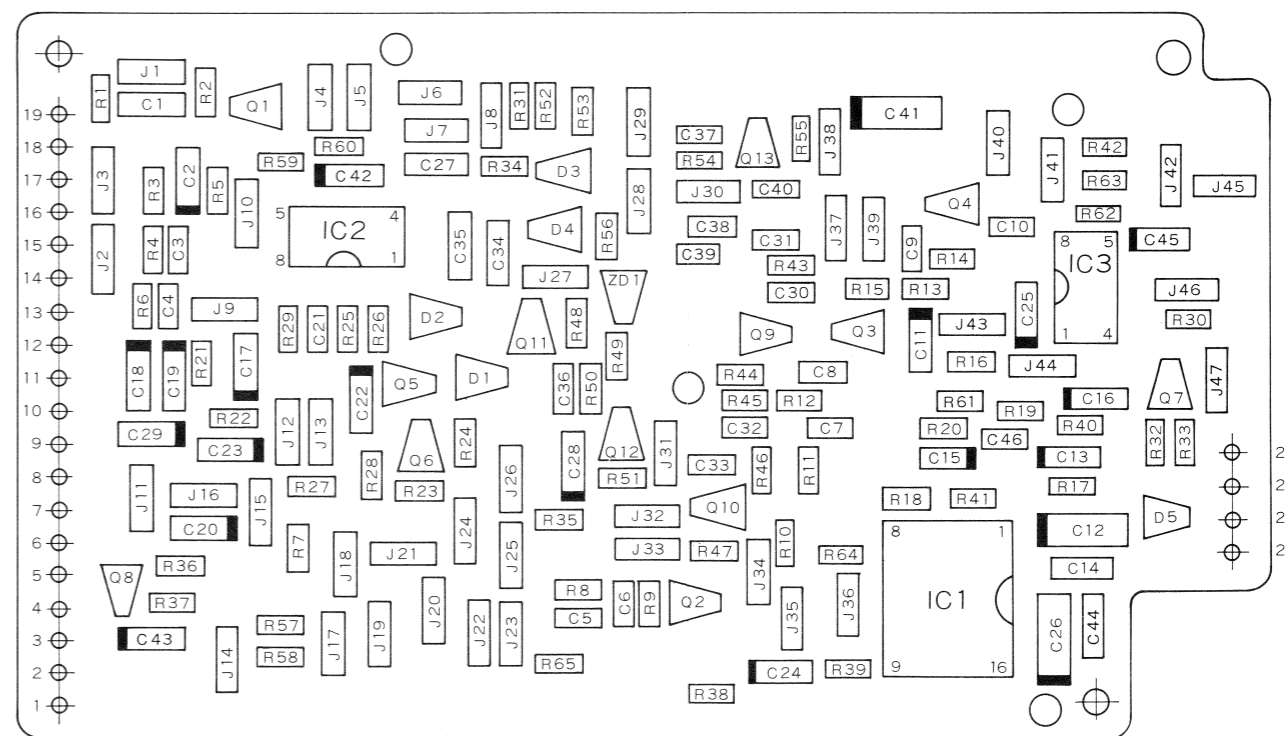
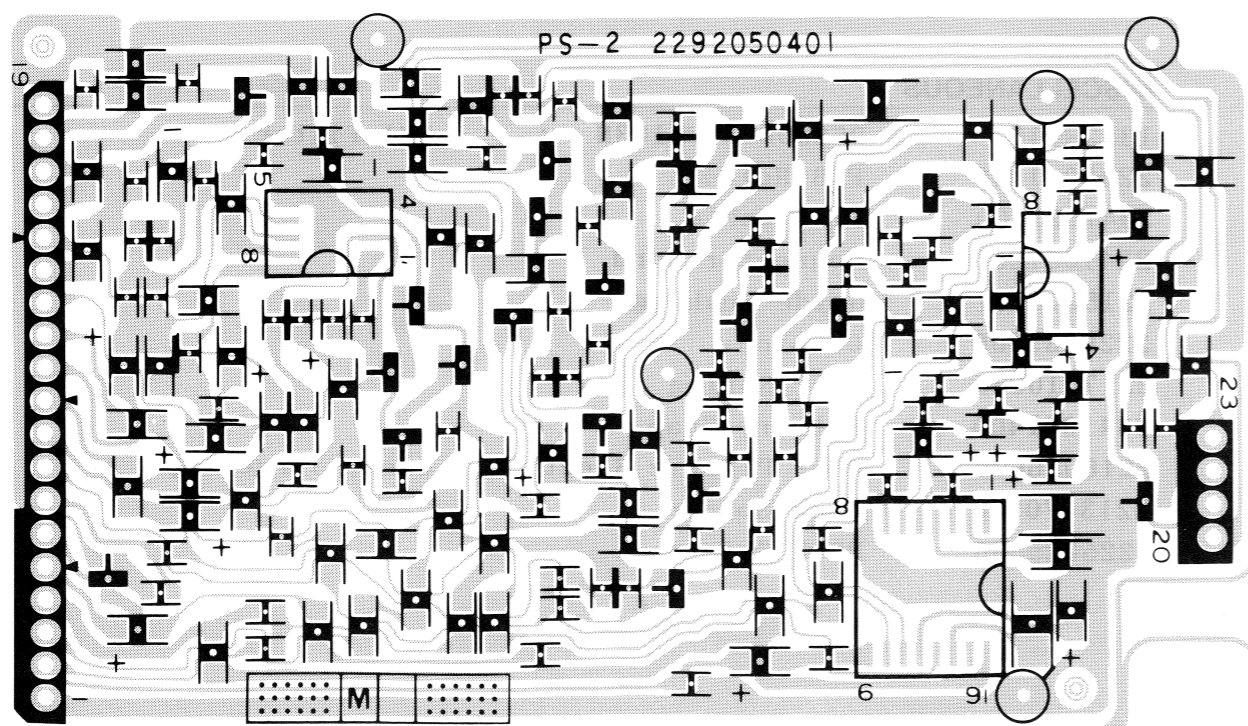
NOTE: ET BOARD (which includes SW BOARD and VR BOARD) and ANALOG BOARD are soldered together and adjusted before shipping.

注意：ET BOARD(SW BOARDとVR BOARDを含む)とANALOG BOARDはハンダ付けされ調整された状態で供給されます。



ANALOG BOARD

ASSY 7510756000
(pcb 2292050402)



PARTS LIST**CASING**

2201021100	Case
2221057200	Panel
2202085100	Cover
2235030500	Base
2218055600	Pedal
2235030400	Pedal Mat

KNOB

2247038600	gray
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PCB ASSY

7510752000	ET Board (pcb 2292051100) Replacement ET Board includes Analog Board, VR Board and SW Board. 補修用ET Boardは Analog Board, VR Board, SW Boardを 含みます。 Analog Board (pcb 2292050402) Note: Chip parts on Analog board are not available. 注意: Analog Board上のチップ部品は供給されません。 VR Board (pcb 2292051100) SW Board (pcb 2292051100)
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***** LED Board(PS-2) (pcb 2292053300)

IC

15229843	M74007 BOS-0001	Gate Array
15179359	M5M4464P	DRAM
15159503	TC40H000	
15159115H0	HD4066BP	
15219181	M5207L01	VCA
15189185	M5223L	OP Amp
15189203	μ PC4072HA	
15189111JI	NJM311	
15199146	NJM2930L05	

TRANSISTOR

15119105	2SA-733P	
15129137	2SC2603-28F	
15119602	2SB647C	
15139131	2SK184GR	FET

CRYSTAL

12389757	4.286464MHz
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DIODE

15019209T0	S5500G	
15019124	1S-188FM1	
15019125	1SS-133	
15029198	LN-28RP	LED

RESISTOR

13919172	RKM10L502	Ladder Network
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JACK

13449711	HEC0470-01-630	AC Adaptor	
13449150	HLJ0544-01-010		INPUT
13449105	SG-7615		OUTPUT
13449106	SG-7622		TUNER OUT

SWITCH

13129710	JM-0404	Key Switch	
13119512	SRBM16		MODE

POTENTIOMETER

13279786	EVJ-KAAP15B14	10kB	FINE/MANUAL
13279785	EVJ-KAAP15B54	50kB	FEEDBACK
13279846	EVJSBAP15-751	50k x 2BH	BALANCE
13299153	H0651	4.7kB	trimmer
13299140	H0651	10kB	trimmer

MISCELLANEOUS

13529145	DSS306-55FZ103N	EMI Filter
2220011800	PCB Holder	
2347023100	Flat Cable	
2341057900	Connector Cord	
2215070201	Guide Bushing	
2226033300	Cushion	
2217010900	Coil Spring	
2341041400	Battery Snap	
2216056000	NS-2 Plastic Sheet	clear large type
2213070900	Jack Spacer	
2225025500	PS-2 Shield	

 Roland®

17059411

UPC

17059411



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 **BOSS**