

# PK-5

DYNAMIC MIDI PEDAL

## SERVICE NOTES

First Edition

### SPECIFICATIONS/仕様

- ◎PEDAL BOARD ..... : 13 keys polyphonic/Monophonic pedalboard.
- ◎MIDI CHANNEL ..... : 1 - 16 channel.
- ◎POWER REQUIREMENTS ..... : DC 9V, Alkaline Battery (MN1500 or SUM-3S) x 6pcs.  
(POWER SOURCE) or AC Adaptor ACA series
- ◎CURRENT DRAW ..... : 50mA DC at 9V
- ◎POWER CONSUMPTION ..... : 450mW  
消費電力
- ◎Battery Life ..... : Approx. 30 hours (Alkaline type):  
約30時間 (アルカリ電池)
- ◎DIMENSIONS ..... : 16-47/64(W) x 22-3/64(D) x 4-23/32(H) inch  
425(W) x 560(D) x 120(H) mm.
- ◎WEIGHT ..... : 8 kg / 17 lb 10 oz.
- ◎ACCESSORIES ..... : Alkaline Battery (MN1500) x 6pcs.  
MIDI Cable 1.5mm: 23485228  
Owner's Manual : 26048193  
(English/Germany/French/Italy/Japanese)

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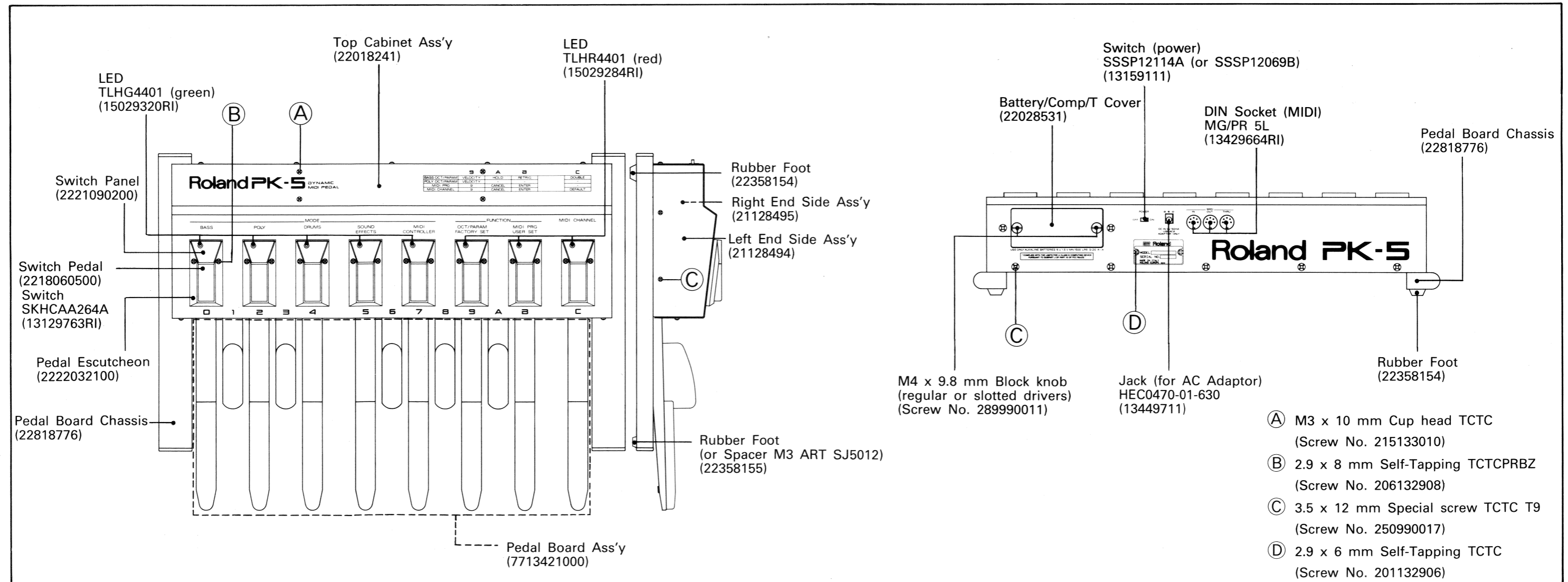
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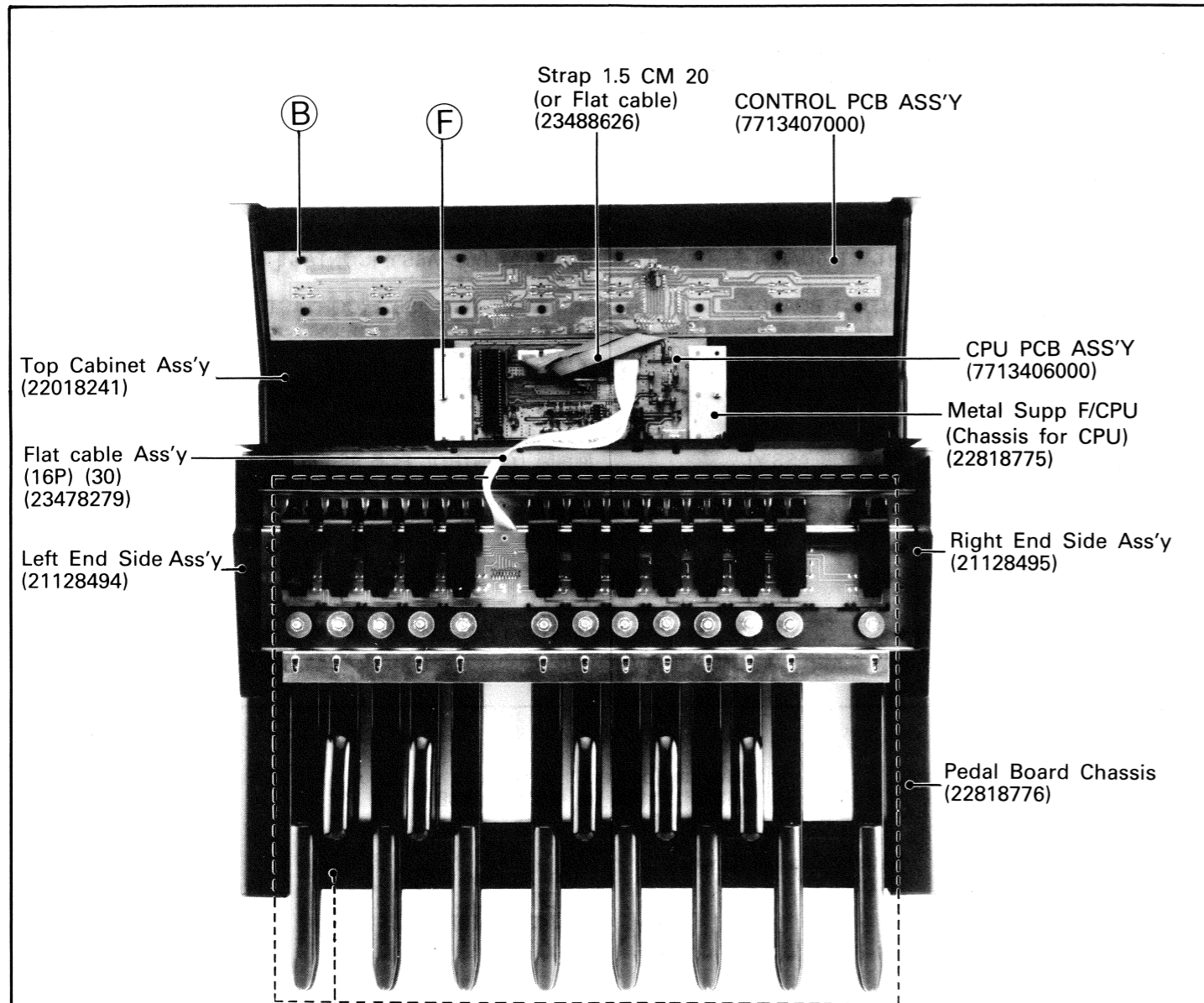
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**EXPLODED VIEW/分解図**



Note : This parts is only used for prototype. Therefore, this parts don't supply for replancement.

注：このパーツは試作品だけで使用されました。補修用としては供給しません。

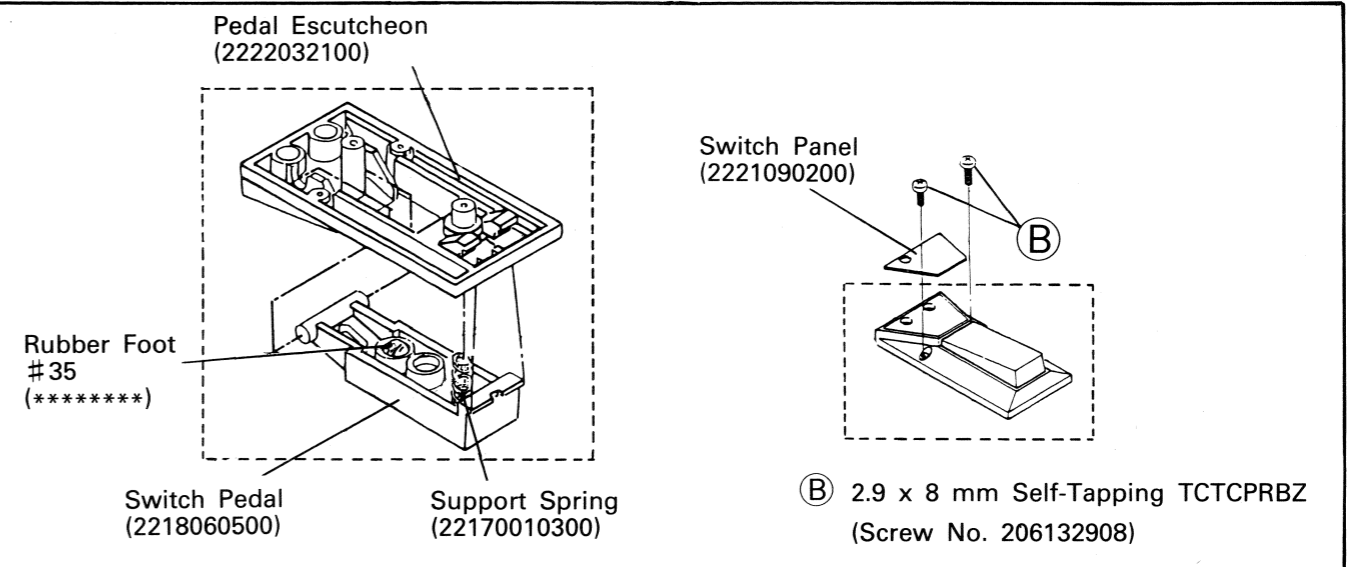
Pedal Board Ass'y (7713421000)

Note : Refer to the "PEDAL BOARD PARTS LIST" (P. 3) for details.

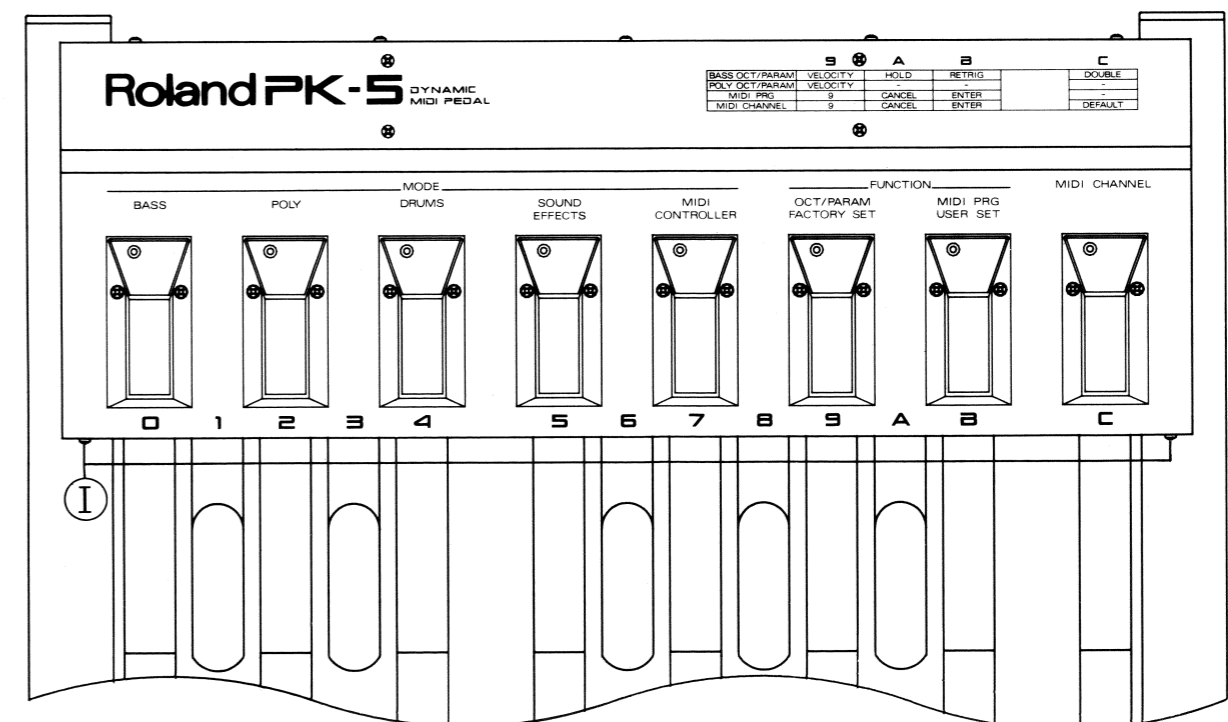
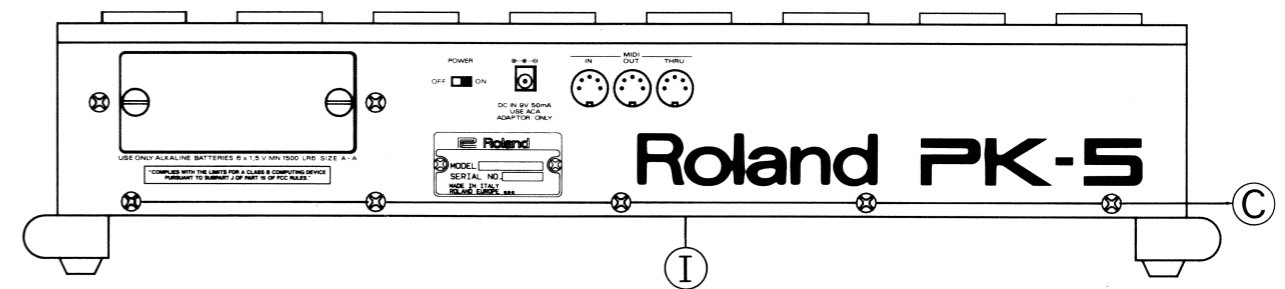
注：詳細は、「PEDAL BOARD PARTS LIST」(P. 3)を参照して下さい。

Ⓑ 2.9 x 8 mm Self-Tapping TCTCPRBZ (Screw No. 206132908)

Ⓕ MA3 x 4 mm TCTC (Screw No. 215153004)

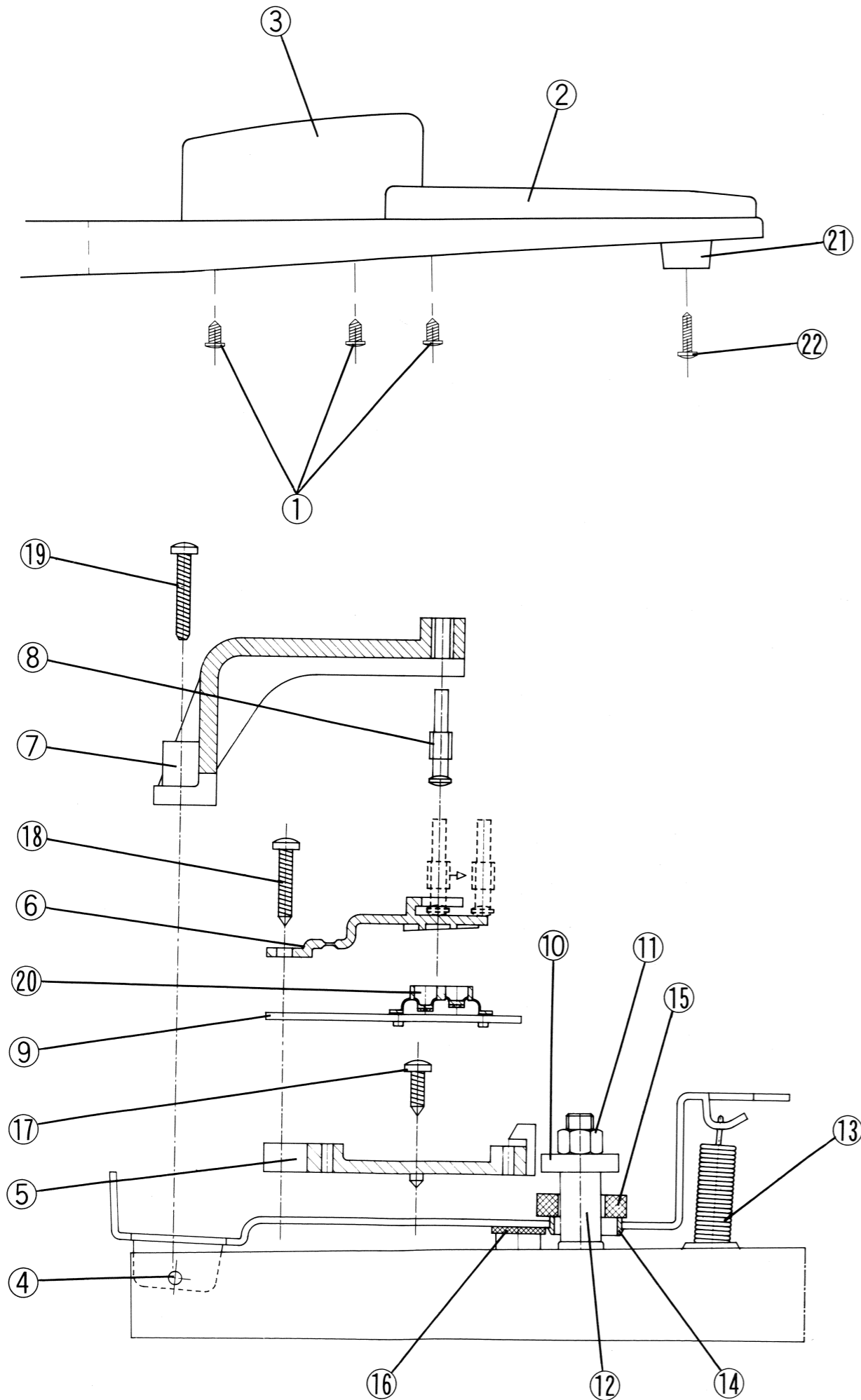


**DISASSEMBLY/分解手順**



**PEDAL BOARD PARTS LIST**

No.	PARTS No.	Parts Name
1	*****	4.2 x 8 mm Special screw (Screw No.250990020)
2	22578345	Plastic Prot. for Long Pedal
3	22578346	Plastic Prot. for Short Pedal
4	22148388	Pedal Axis
5	22818782	Plastic Chassis
6	22178337	Contact Comb
7	22168363	Contact Adjustment Support
8	22148387	Contact Adjustment screw
9	7713405000	Contact PCB Ass'y (Contact Board Ass'y) w/Rubber
10	*****	washer I/D 6 (Screw No.270990005)
11	*****	M6 Hex. Nut (Screw No.260136005)
12	22168362	Iron Spacer
13	22178236	Return Spring
14	22118707	Plastic Frame
15	22158795	Cord Bushing
16	22268524	Felt (white)
17	*****	2.9 x 8 mm Self-Tapping TCTCPRBZ (Screw No. 206132908)
18	*****	2.9 x 13 mm Self-Tapping TCTC (Screw No. 206132913)
19	*****	2.9 x 16 mm Self-Tapping TCTCPRBZ (Screw No. 206132916)
20	23128908	Conductive Rubber (1P) LR13/1
21	22358156	Rubber End Stroke F/long key (or Rubber Foot)
22	*****	4.2 x 14 mm Special screw (Screw No.250990016)



**DISASSEMBLY (Pedal Board) / Pedal Board 分解手順**

◎PEDAL KEY REMOVING PROCEDURE

• Referring to the Pedal board exploded view (P. 3) for details.

1. Withdraw the Pedal Axis (④) until the key removing.
2. Unscrew the Nut (⑪).
3. Withdraw the parts (⑩) - (⑫) - (⑮).
4. Release the "Return spring" (⑬).
5. Remove the pedal key.

◎PEDAL KEYの外し方

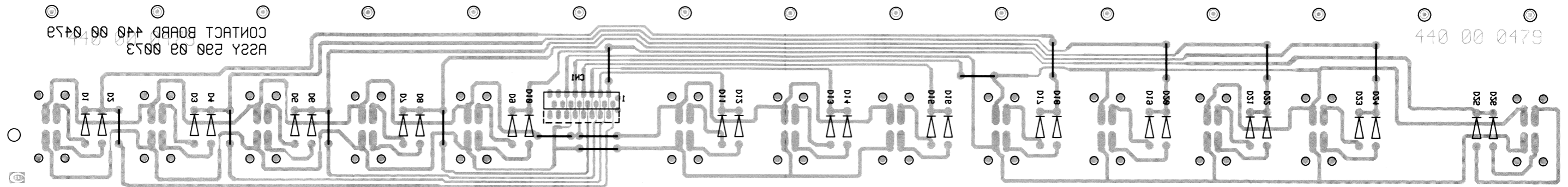
• 詳細は、Pedal boardの分解図 (P. 3) を参照して下さい。

1. キーが外れるまで、“Pedal Axis (④)” を動かす。
2. 六角ナット (⑪) を外す。
3. パーツ (⑩) - (⑫) - (⑮) を外す。
4. “Return spring” (⑬) を外す。
5. 以上で、ペダル・キーが外れます。

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

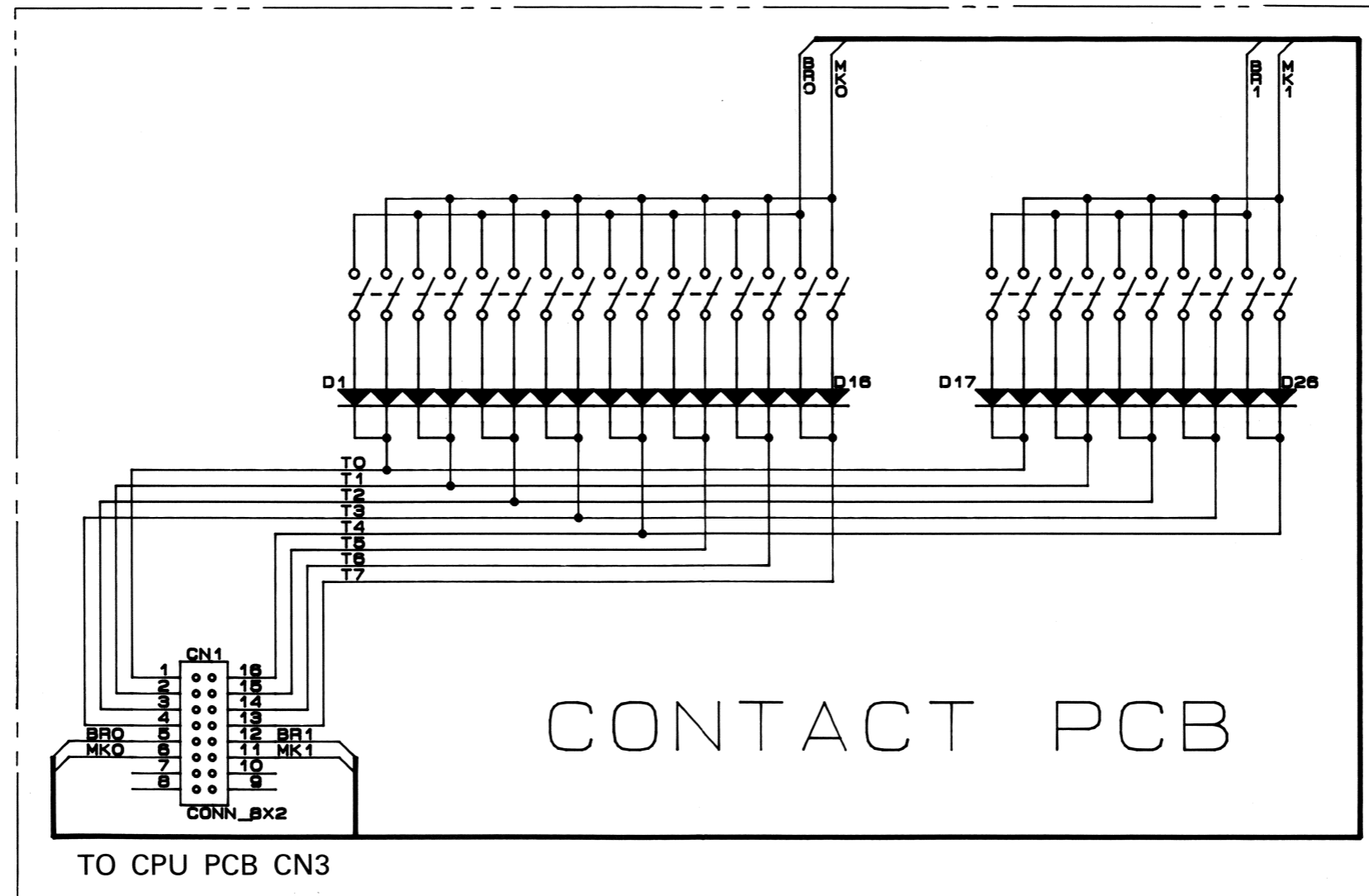
**A CONTACT PCB ASS'Y (CONTACT BOARD)**

w/Rubber  
ASSY 7713405000



View from foil side

**H CIRCUIT DIAGRAM (CONTACT PCB ASS'Y/CONTACT BOARD)**



**PARTS LIST**

**SAFETY PRECAUTIONS:**

The parts marked  $\Delta$  have safety-related characteristics. Use only listed parts for replacement.

安全上の注意:

$\Delta$ が付いている部品は、安全上特別な規格でつくられたものです。交換の際は、指定された部品番号以外の部品は使わないようにして下さい。

**CONSIDERATIONS ON PARTS ORDERING**

When ordering any parts listed in the parts list, please specify the following items in the order sheet.

QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex. 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

パーツ発注に関するお願い

オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

必要数	パーツナンバー	品名	使用機種
例) 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

もし記入漏れ、誤記等有る場合、必要部品が発送出来なかつたり、大幅な遅れの原因になります。御協力をお願いします。

CPU -----> CPU PCB ASS'Y  
 CONT -----> CONTROL PCB ASS'Y  
 CONTACT -----> CONTACT PCB ASS'Y (or CONTACT BOARD) : See "PADAL BOARD PARTS LIST" (P. 3)  
 "PADAL BOARD PARTS LIST" (P. 3)参照

**CASING ケース**

22018241	Top Cabinet Ass'y
21128495	Right End side Ass'y
21128494	Left End side Ass'y
2221090200	Switch Panel
2218060500	Switch Pedal
2222032100	Pedal Escutcheon
2217010300	Support Spring
*****	Rubber Foot #35
22028531	Battery Comp/T Cover
22818776	Pedal Board Chassis
22358154	Rubber Foot
22358155	Spacer M3 ART. SJ5012 (or Rubber Foot)

**CHASSIS シャーシ**

22818775	Metal supp. F/CPU (Chassis for CPU)
22818777	Battery Ass'y

**SWITCH スイッチ**

13129763RI	SKHCAA264A	on CONT	
13159111	SSSP12114A	POWER	SW1 on CPU
	(or SSSP12069B)		

**JACK, SOCKET ジャック, ソケット**

13449711	HEC0470-01-630	DC-Supply Soc. (for AC adaptor)	JK1 on CPU
13429664RI	MG/PR 5L	DIN Socket	JK1, 2, 3 on CPU

**KEYBOARD 鍵盤組立**

7713421000	Pedal Board Ass'y including wiring (ワイヤリングを含む。)
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NOTE :Refer to the "PEDAL BOARD PARTS LIST" (P. 3) for details.

注:詳細は、"PEDAL BOARD PARTS LIST" (P. 3)を参照して下さい。

**PCB ASSY 基板組立**

7713406000	CPU PCB ASS'Y
7713407000	CONTROL PCB ASS'Y

**IC 集積回路**

15199732RI	ZC407449CP	Mask CPU	IC3 on CPU
15239124	SSC1000 (Flat)	Gata Array (Key Scan.)	IC2 on CPU
15219183	M51953AL	Reset IC	IC4 on CPU
15229718RI	6N137	Photo coupler (opto-isolator)	IC1 on CPU
15199559RI	TD62506P	Bus Buffer	IC1 on CONT

**TRANSISTOR トランジスタ**

15119155RI	BC/560-B	PNP	Q1, 2 on CPU
15129305RI	BD371C		Q3 on CPU
15119154RI	BC/549-B		Q1 on CONT

**DIODE ダイオード**

15019159RI	1N-4148		D2 on CPU
15019158RI	1N-4001		D1 on CPU
15019345RI	BZX79C5V6	Zener	D3 on CPU
15029320RI	TLHG4401	LED (green)	on CONT
15029284RI	TLHR4401	LED (red)	on CONT

**RESISTOR 抵抗器**

13910103RI	S.L.8X10K +C (RGLD8X103J)	10kohm x8	Resistor Array
13919253RI	S.L.8X15K +C (RGLD8X153J)	15kohm x8	Resistor Array

**CAPACITOR コンデンサー**

13519452	100nF/50VZ (DD306-959-F104Z25)		Ceramic Cond.
13529179RI	100K 20%		Multilayer Ceramic Cond.
13639179RI	100uF/25V		Electric Cond.-V
13639169RI	47uF/25V		Electric Cond.-V
13639206RI	10uF/50V		Electric Cond.-V

**INDUCTOR, COIL, FILTER インダクター, コイル, フィルター**

22448240	BL02RN2-R62	Noise Sup. (EMI Filter)	
12449382RI	PLT1-R53C	Noise Sup. (EMI Filter)	L1 on CPU

**CRYSTAL, RESONATOR クリスタル, 発振子**

15299112RI	8MHz	Ceramic	X1, 2 on CPU
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**CONNECTOR コネクタ**

13419677RI	AMP C/1.27 (16P)	Female	CN3 on CPU CN1 on CONTACT
13439409	C/1.5 (or 52004-0810) (8P)	Female	CN1, 2 on CPU
13369766RI	C/1.5 (8P)	Male	CN1, 2 on CONTROL

**WIRING ワイヤリング**

23488626	Strap 1.5 CM.20 (or Flat Cable) (8P)	CPU - CONT	
23478279	Flat Cable Ass'y (16P) (30)	CPU - CONTACT	

**SCREWS ネジ類**

*****	2.2 x 6 mm	Self-Tapping TCTC	(Screw No.201132206)
*****	2.9 x 6 mm	Self-Tapping TCTC	(Screw No.201132906)
*****	2.9 x 8 mm	Self-Tapping TCTCPRBZ	(Screw No.206132908)
*****	2.9 x 13 mm	Self-Tapping TCTC	(Screw No.206132913)
*****	2.9 x 16 mm	Self-Tapping TCTCPRBZ	(Screw No.206132916)
*****	MA 3 x 4 mm	TCTC	(Screw No.215153004)
*****	M3 x 10 mm	Cup head TCTC	(Screw No.215133010)
*****	3.5 x 12 mm	Special screw TCTC T9	(Screw No.250990017)
*****	M4 x 9.8 mm	Black Knob (regular or slotted drivers)	(Screw No.289990011)

**MISCELLANEOUS その他**

12209532RI	Battery Holder for 6 Batteries
13419723RI	Battery Connection
22168136	Hex.Spacer M6 x 15 mm
13429823RI	Power Socket Block

**MISCELLANEOUS その他**

12209532RI	Battery Holder for 6 Batteries
13419723RI	Battery Connection
22168136	Hex.Spacer M6 x 15 mm
13429823RI	Power Socket Block

**ACCESSORIES 付属品**

26048193	Owner's Manual [English/Germany/French/Italy/Japanese]
23485228	MIDI Cable (black) 1m
*****	Battery MN1500 x 6pcs.

NOTE :The below parts is supported as replacement instead of above parts

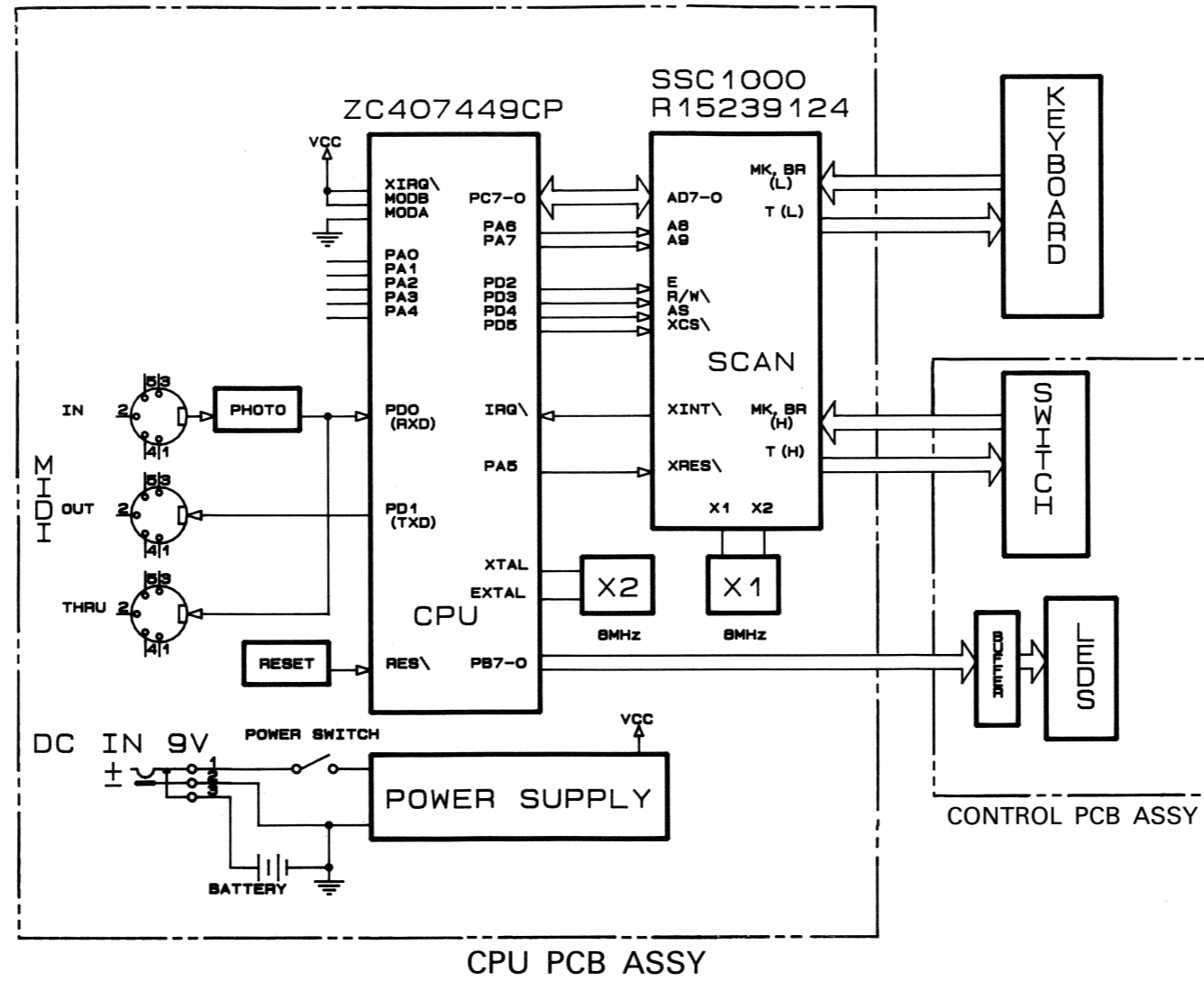
注:上記のパーツは配給しません。補修用としては、下記のパーツをオーダーして下さい。

12569105	Battery SUM-3S
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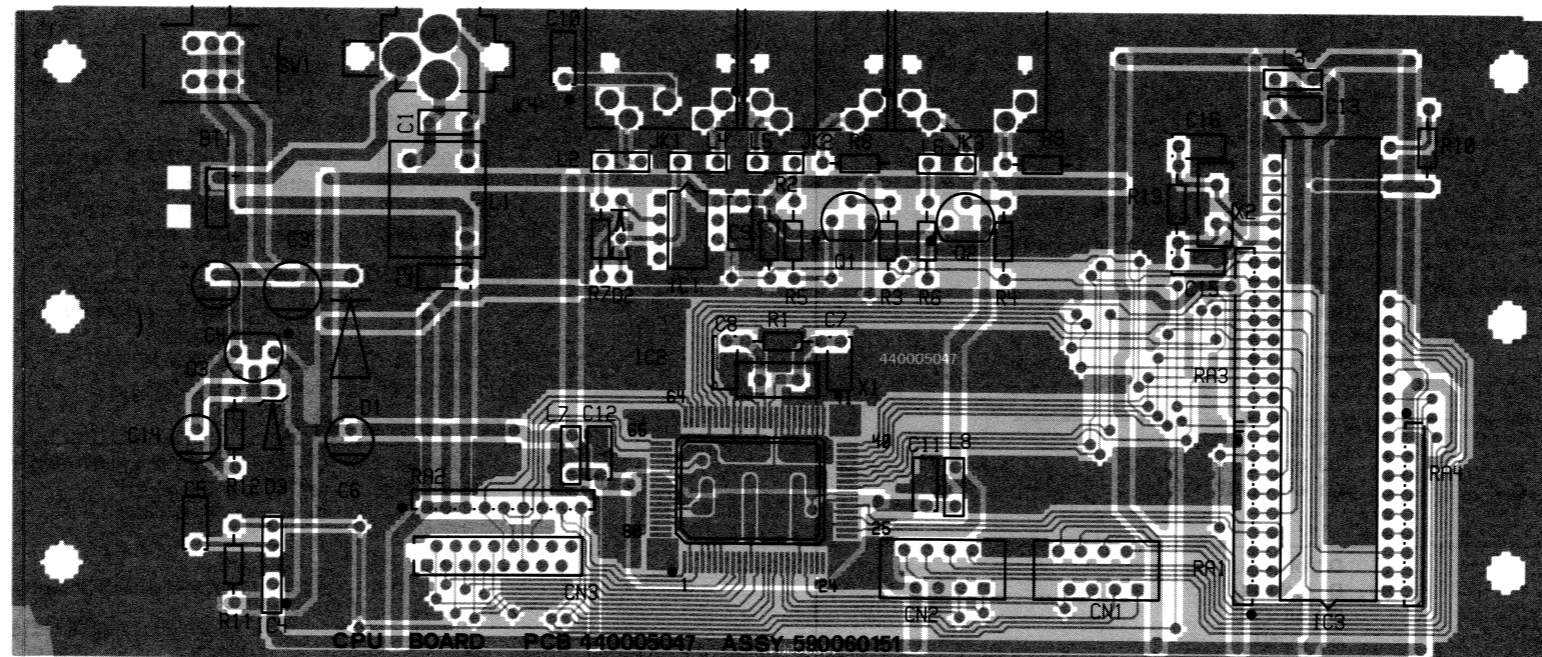
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

A BLOCK DIAGRAM/ブロック図

B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U



CPU PCB ASS'Y  
ASSY 7713406000

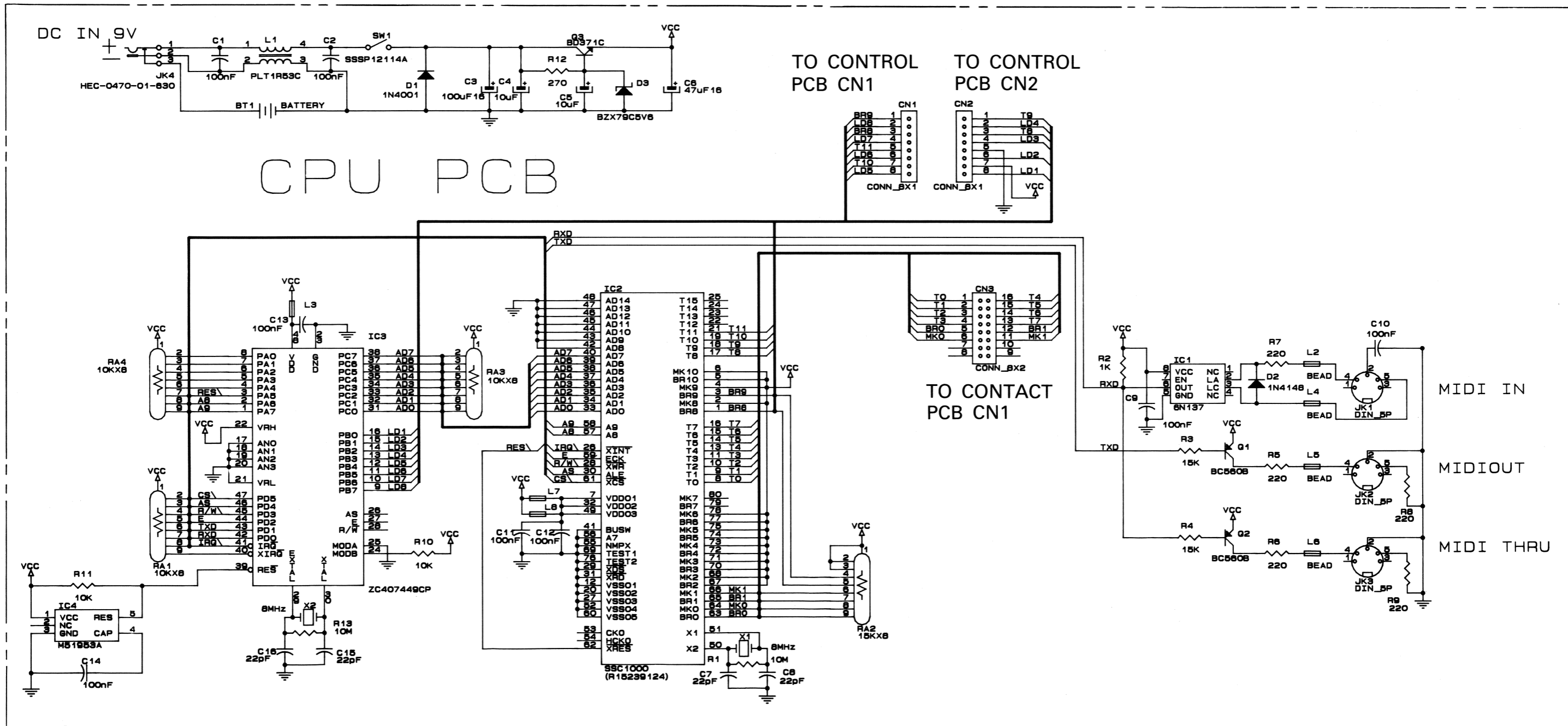


View from component side

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

A **CIRCUIT DIAGRAM (CPU PCB ASS'Y)**

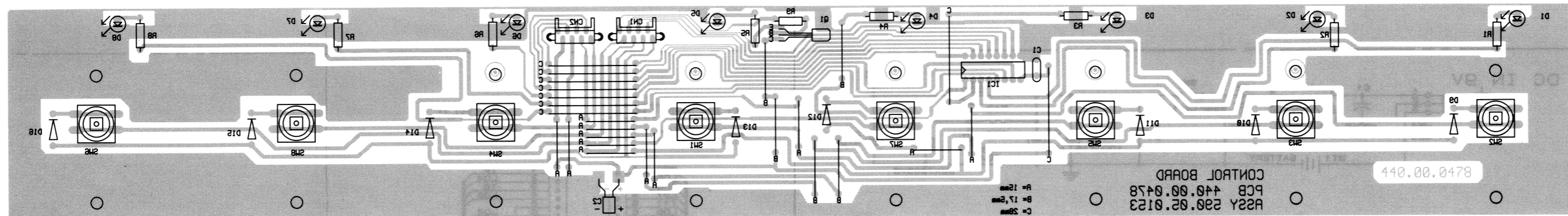
B  
C  
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

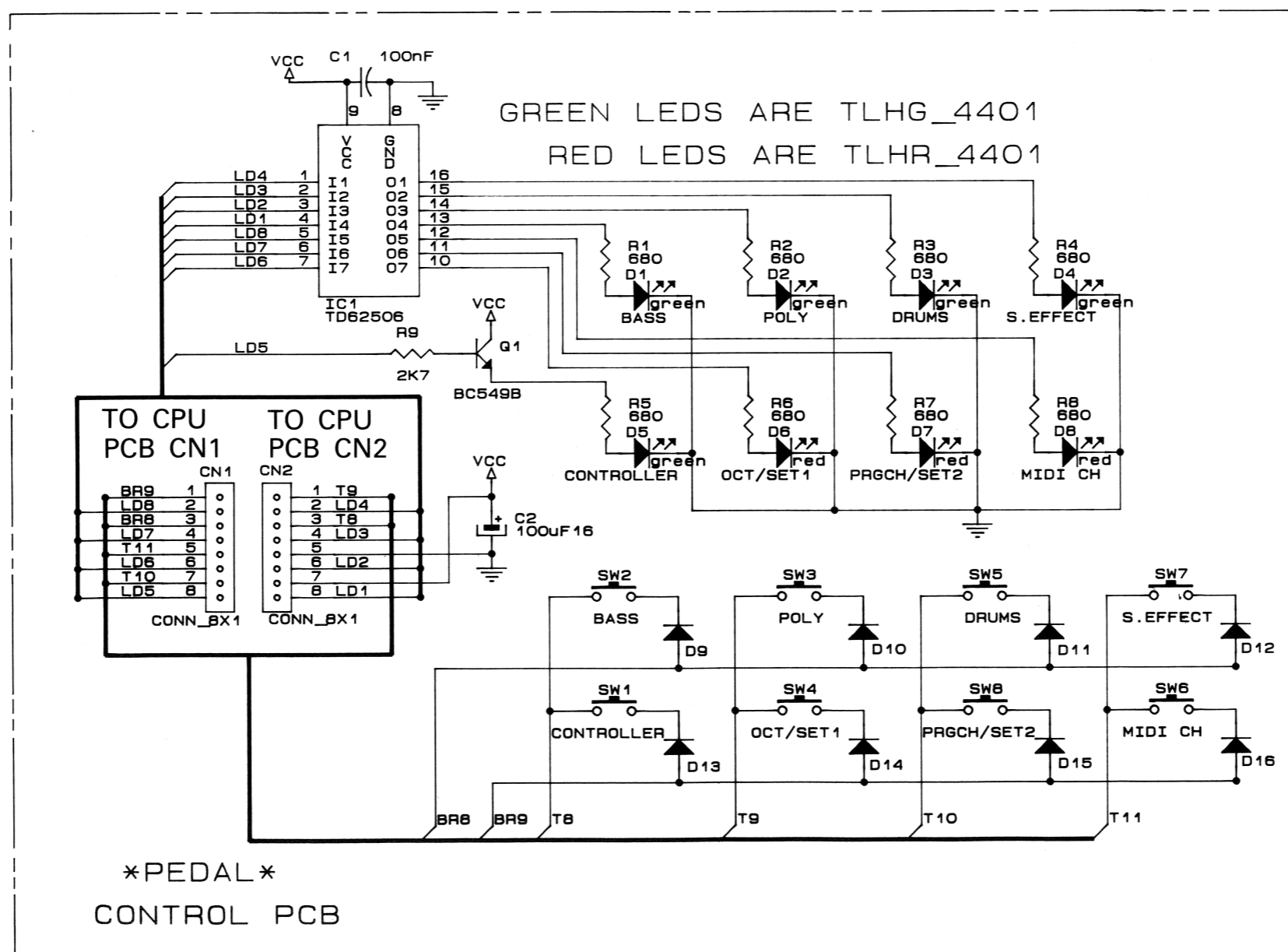
A CONTROL PCB ASS'Y

ASSY 7713407000



View from foil side

H CIRCUIT DIAGRAM (CONTROL PCB ASS'Y)





# RESTORING THE FACTORY PRESETS

## ファクトリー・プリセットのロードの方法

### RESTORING FACTORY PRESETS

CAUTION: Before loading factory presets, take into account the fact that the PK-5 prevents external storing (e.g. memory card, MC-500MK2) of the user's data.

1. Replacing all of the current parameters with factory presettings while depressing the pedal switch FACTORY SET, turn on power. The factory preset data will be loaded within 3 seconds.
2. Replacing the current parameters of a mode while depressing the pedal switch corresponding to to-be-factory preset mode (BASS, POLY, DRUMS, SOUND/EFFECTS and MIDI CONTROLLER), turn power on.

### ファクトリー・プリセットのロードの方法

注意! : PK-5 は、ユーザー・データを他のもの (メモリー・カード、MC-500MK2) に移せませんので注意して下さい。

1. 全パラメーターの設定を工場出荷時の状態に戻す方法。  
 ・ペダル・スイッチ“FACTORY SET”を押しながら、電源をいれる。  
 (約3秒くらいで、ロードする。)
2. モード単位でパラメーターの設定を工場出荷時の状態に戻す方法。  
 工場出荷時に戻したいモード ([BASS], [POLY], [DRUMS], [SOUND/EFFECTS], [MIDI CONTROLLER]) のペダル・スイッチを押しながら、電源をいれる。

◎Factory preset parameters of each mode.

◎各モードのパラメーターの工場出荷時の値。

BASE MODE ベース鍵盤モード	POLY MODE ポリ鍵盤モード	DRUMS MODE ドラム鍵盤モード	SOUND EFFECT MODE サウンド・エフェクト・モード	MIDI CONTROLLER MODE MIDIコントローラー・モード
-MIDI Channel 2 -Velocity ON -Hold OFF -Retrigger ON -Double OFF	-MIDI Channel 1 -Velocity ON	MIDI Channel: -Factory set ch. MIDI 10 -User set ch. MIDI 10	MIDI Channel: -Factory set ch. MIDI 11 -User set ch. MIDI 11	MIDI Channel: -Factory set ch. MIDI 10 -User set ch. MIDI 1

# IC DATA/IC データ

**Reset IC (IC4 on CPU)**  
M51953AL  
(15219183)

**Mask CPU (IC1 on CPU)**  
ZC407449CP  
(15199732RI)

**Gate Array (key Scan)**  
(IC2 on CPU)  
SSC1000  
(15239124)

PIN NO.	NAME	I/O	PIN NO.	NAME	I/O	PIN NO.	NAME	I/O	PIN NO.	NAME	I/O
1	BR8	I	21	T11	0	41	BUSW	I	61	XCS	I
2	MK8	I	22	T12	0	42	ADB	I/O	62	XRES	I
3	BR9	I	23	T13	0	43	AD9	I/O	63	BR0	I
4	MK9	I	24	T14	0	44	AD10	I/O	64	MK0	I
5	BR10	I	25	T15	0	45	AD11	I/O	65	BR1	I
6	MK10	I	26	XINT	0	46	AD12	I/O	66	MK1	I
7	VDD	P	27	VSS	P	47	AD13	I/O	67	BR2	I
8	T0	0	28	XWR	I	48	AD14	I/O	68	MK2	I
9	T1	0	29	XDS	I	49	VDD	P	69	TEST	I
10	T2	0	30	ALE	I	50	X2	0	70	BR3	I
11	T3	0	31	XPD	I	51	X1	I	71	MK3	I
12	VSS	P	32	VRR	P	52	VSS	P	72	BR4	I
13	T4	0	33	AD0	I/O	53	CK0	0	73	MK4	I
14	T5	0	34	AD1	I/O	54	HCK0	0	74	BR5	I
15	T6	0	35	AD2	I/O	55	NMPX	I	75	MK5	I
16	T7	0	36	AD3	I/O	56	A7	I	76	TEST	I
17	T8	0	37	AD4	I/O	57	A8	I	77	BR6	I
18	T9	0	38	AD5	I/O	58	A9	I	78	MK6	I
19	T10	0	39	AD6	I/O	59	ECK	I	79	BR7	I
20	VSS	P	40	AD7	I/O	60	VSS	P	80	MK7	I

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**17059403**

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