

BOSS BX-8/16

SERVICE NOTES *First Edition*

SPECIFICATIONS

Common for the BX-8 and BX-16

Input Level

Rated: -50dBm to -10dBm

Input Impedance

$1.5\text{k}\Omega$ to $100\text{k}\Omega$

Output Level (Standard Phone Jack)

Rated: $+4\text{dBm}/-10\text{dBm}$
Maximum: $+21\text{dBm}$

Output Level (Pin Jack)

Rated: -10dBm
Maximum: $+7\text{dBm}$

Output Load Impedance

More than $10\text{k}\Omega$

Effect Send

Output Level (Rated): -20dBm
Output Load Impedance: more than $10\text{k}\Omega$

Effect Return

Input Level (Rated): -20dBm
Input Impedance: $47\text{k}\Omega$

Equalizer

Treble: $\pm 10\text{dBm}/10\text{kHz}$
Bass: $\pm 10\text{dBm}/100\text{Hz}$

Headphones

$50\text{mW}/30\Omega$

Equivalent Input Noise

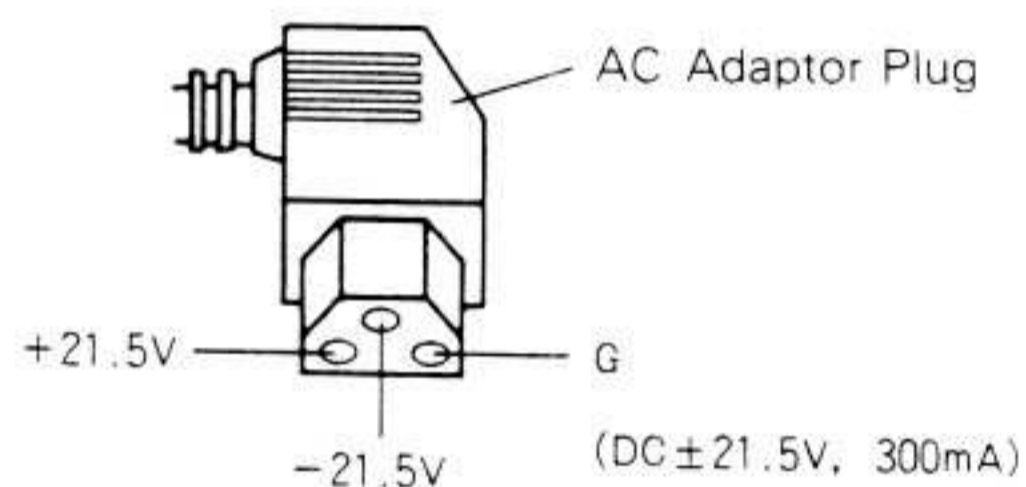
-115dBm (IHF-A)

Frequency Response (at the minimum gain)

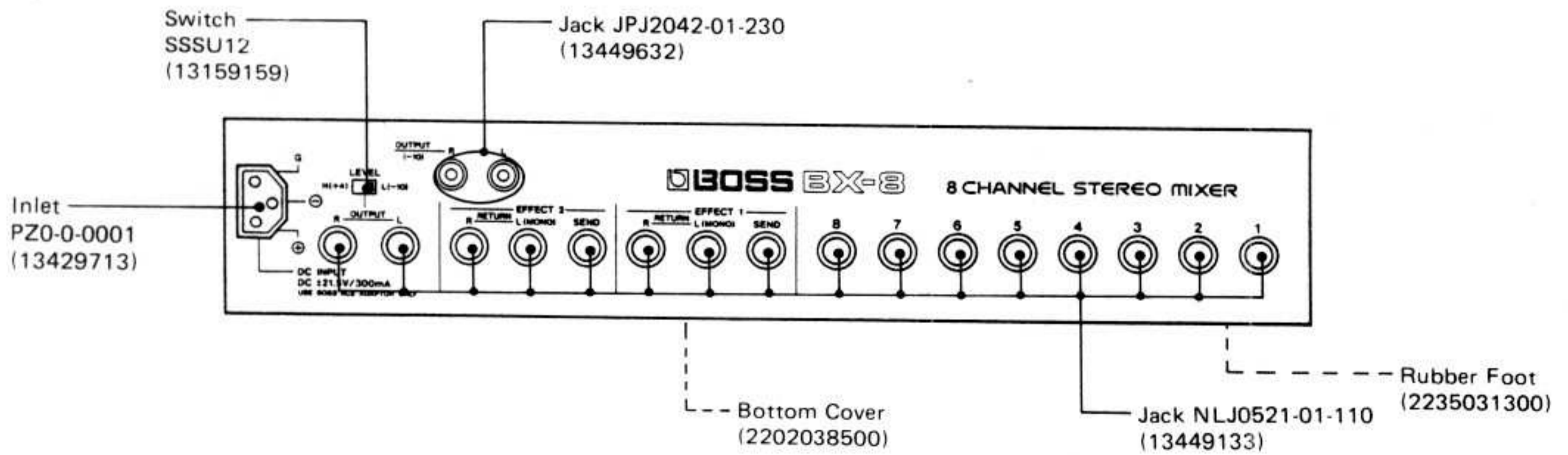
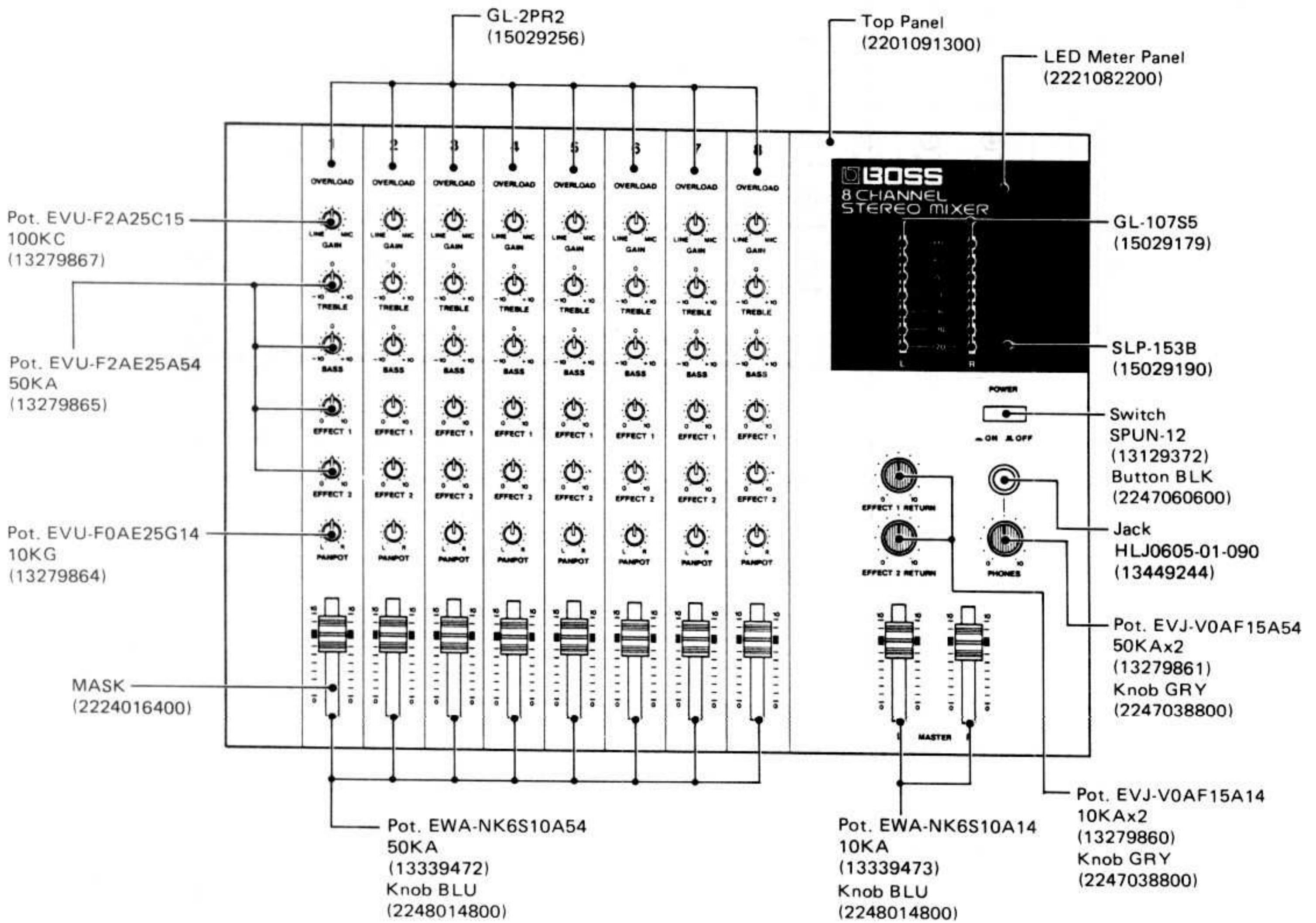
20Hz to 40kHz ($+0$ to -3dB)
@ $0\text{dBm} = 0.775\text{V}$

Accessory

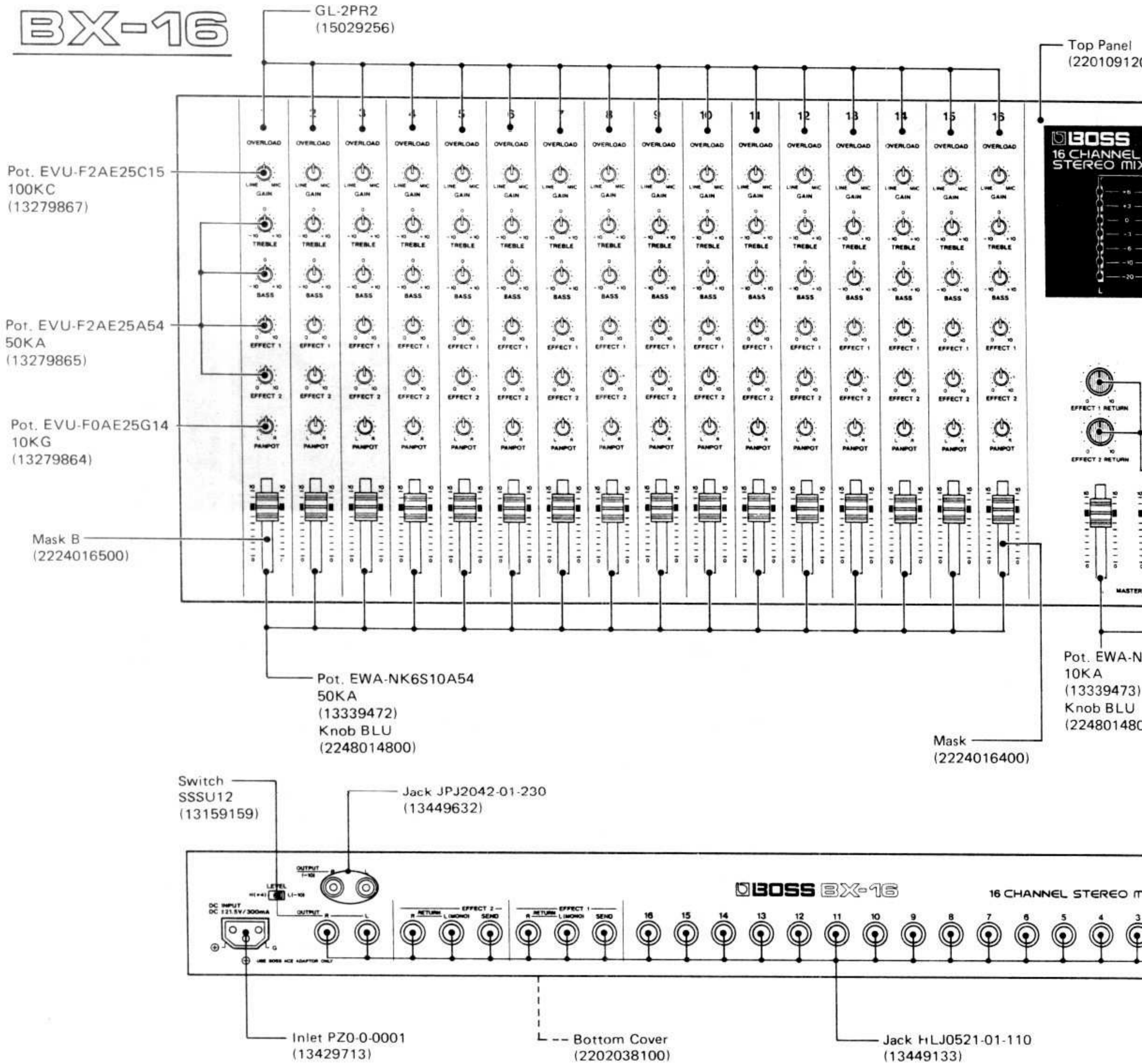
AC Adaptor (BOSS ACE-100, 120, 220, 240A or 240E)



BX-8



BX-16



PARTS LIST

EXCLUSIVE PARTS BX-8 CASING

2201091300	Top Panel
2202038500	Bottom Cover
2221082200	LED Meter Panel
2235031300	Rubber Foot

MISCELLANEOUS

2220015400	Jack Holder
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BX-16 CASING

2201091200	Top Panel
2202038100	Bottom Cover
2221082300	LED Meter Panel
2235031200	Rubber Foot

PCB ASSY

7116460000	CH Board	(pcb)
Replacement CH Board includes CH JK Board		
補修用 CH BOARDはCH JK BOARDを含みます		
CH JK Board		

MISCELLANEOUS

2220014000	Jack Holder A
2224016500	Mask B

COMMON PARTS KNOB

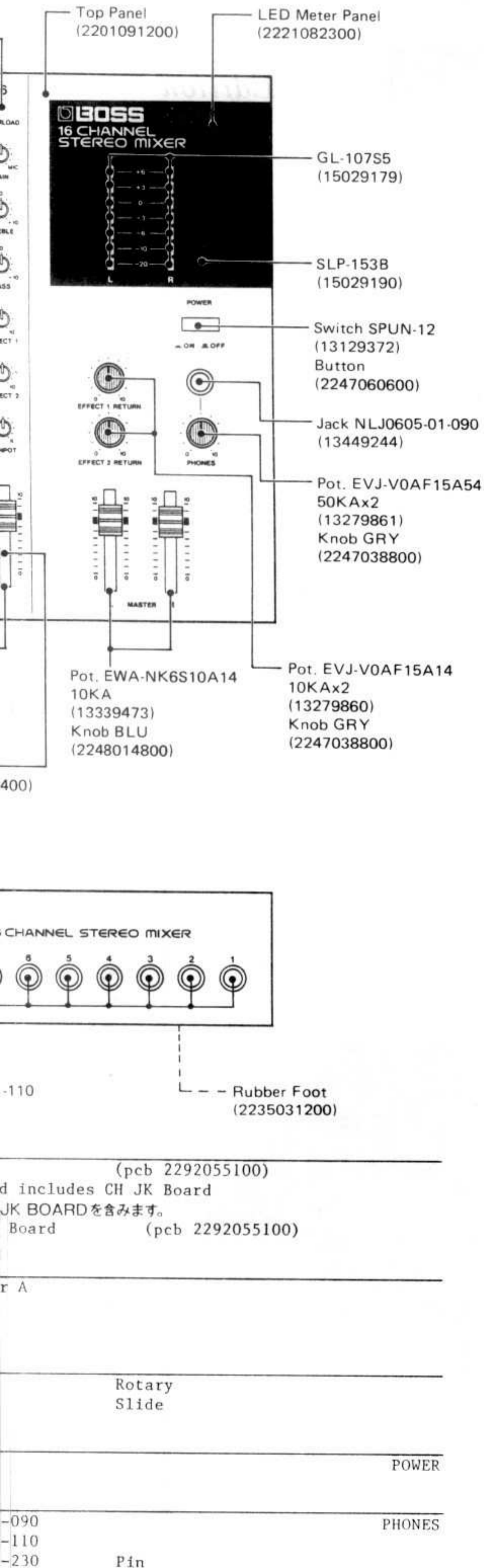
2247038800	GRY	Rotary
2248014800	BLU	Slider

BUTTON

2247060600	BLK
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JACK

13449244	HLJ0605-01-090	
13449133	HLJ0521-01-110	
13449632	JPJ2042-01-230	Pin



PCB ASSY

7116453000	MT Board	(pcb 2292055200)
Replacement MT Board includes PIN JK Board.		
補修用 MT BOARDはPIN JK BOARDを含みます。		
	PIN JK Board	(pcb 2292055200)
7116465100	PS Board	(pcb 2292055300)
Replacement PS Board includes Phone JK Board, SW Board and Inlet Board.		
補修用 PS BOARDは下記の基板を含みます。		
	Phone JK Board	(pcb 2292055300)
	SW Board	(pcb 2292055300)
	Inlet Board	(pcb 2292055300)

IC

15189136	M5218L	OP amp
15189150	M5220L	OP amp
15219116	IR2E02	LED driver

TRANSISTOR

15119814	2SB-1015-0	
15129827	2SD-1406-0	
15129136	2SC2878A	
15199144	2SA1048GR-TPE4	
	or 15119105	2SA733P
15129179	2SC2458GR-TPE4	
	or 15129108	2SC945P

DIODE

15029256	GL-2PR2	LED	OVERLOAD
15029179	GL-107S5	LED (7 dot)	LEVEL
15029190	SLP-153B	LED	POWER
15019125	1SS-133		
15019535	RD8.2EB-3	Zener	
15019560	RD16EB-2	Zener	

RESISTOR

13829252	68Ω	2W	Metal oxide
12559803	33Ω		Fuse resistor

POTENTIOMETER

13279867	EVU-F2AE25C15	100KC	GAIN	
13279865	EVU-F2AE25A54	50KA	TREBLE, BASS, SEND	
13279864	EVU-F0AE25G14	10KG	PANPOT	
13279860	EVJ-V0AF15A14	10KAx2	RETURN	
13279861	EVJ-V0AF15A54	50KAx2	PHONES	
13339472	EWA-NK6S10A54	50KA	CH FADER	
13339473	EWA-NK6S10A14	10KA	MASTER FADER	
13299206	EVND4AA00B24	20KB	Trimmer	
	or 13299155	H1051A015	22KB	Trimmer

SWITCH

13159159	SSSU12	Slide	LEVEL
13129372	SPUN-12	Push	POWER

CONNECTOR

2341060800	Wiring Assy #608	6P 2.5mm pitch	l = 150
2341060900	Wiring Assy #609	7P 2.5mm pitch	l = 150
2341061000	Wiring Assy #610	8P 2.5mm pitch	l = 250
2341061100	Wiring Assy #611	9P 2.5mm pitch	l = 150
13439335	IL-S-6P-S2T2-EF	6P Connector	
13439296	IL-S-7P-S2T2-EF	7P Connector	
13439297	IL-S-8P-S2T2-EF	8P Connector	
13439345	IL-S-9P-S2T2-EF	9P Connector	
2347024700	Flat Cable	7P L = 40	
2349074000	Shielded Cord Assy #740	L = 150	

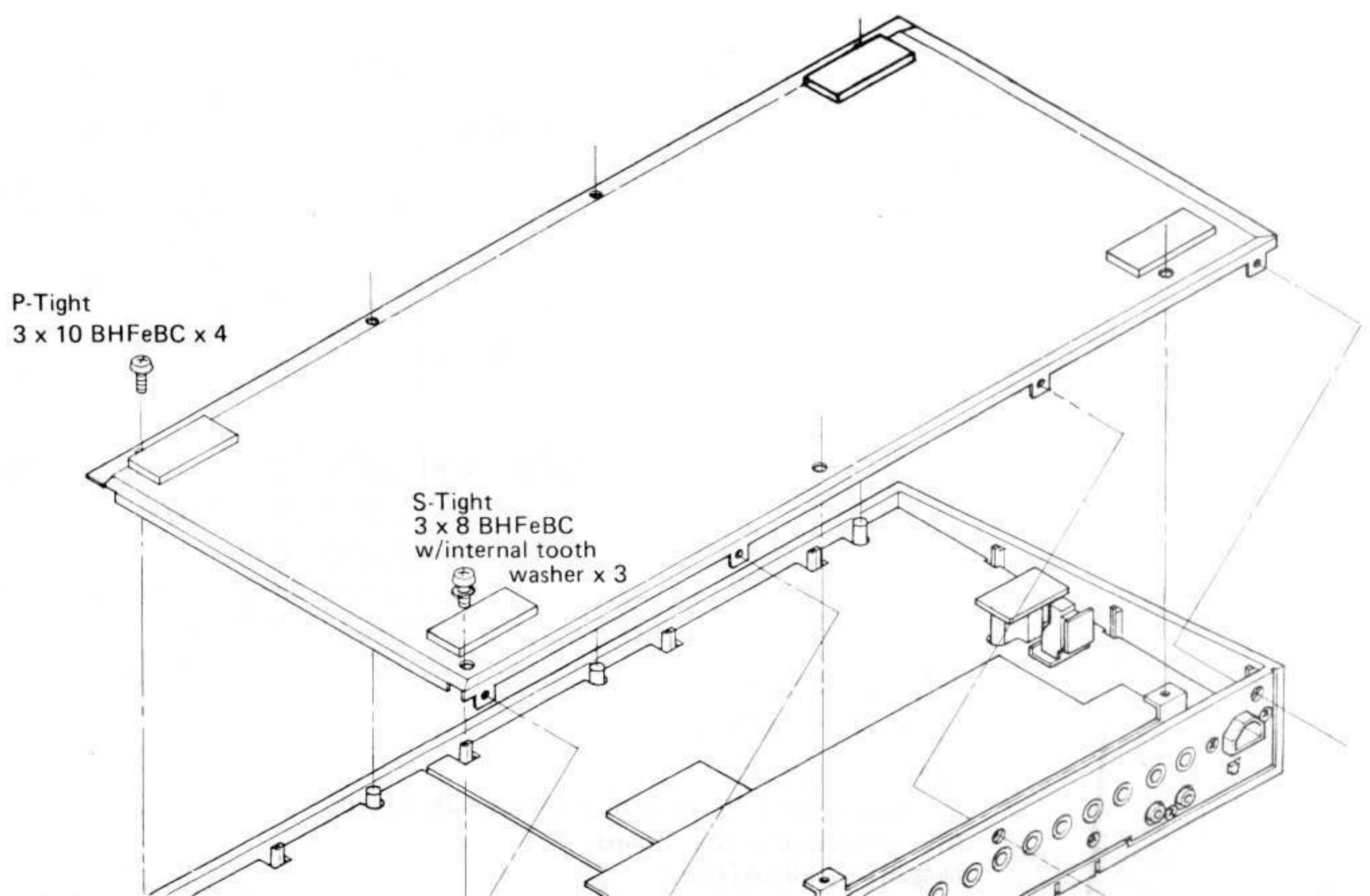
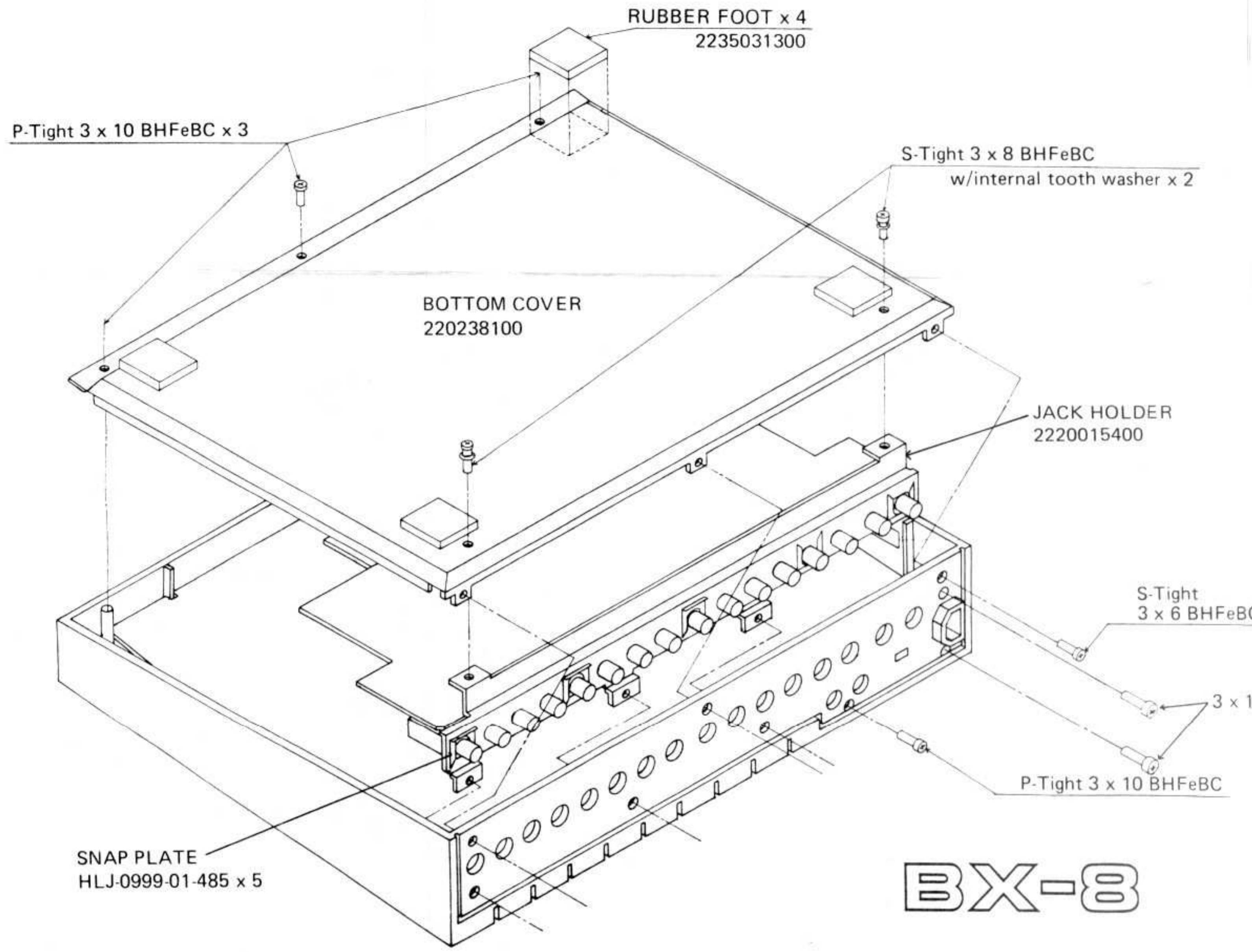
AC ADAPTOR

12449578	ACE-100	100V	
12449579	ACE-120	117V	
12449580	ACE-220	220V	
12449581	ACE-240E	240E	UK
12449582	ACE-240A	240A	Australia

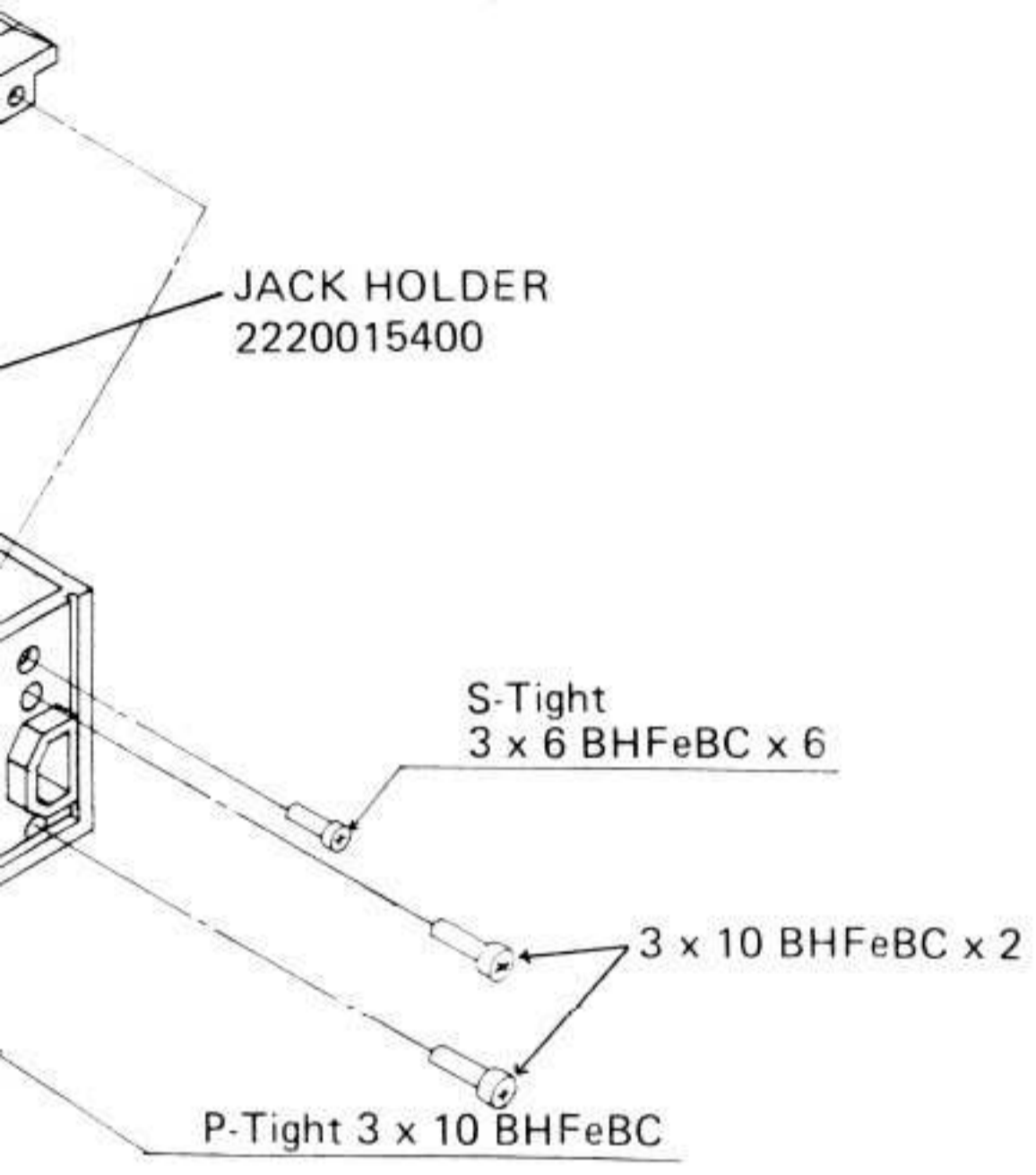
MISCELLANEOUS

13429713	Inlet PZ0-0-0001	3P	
2220017800	Inlet Holder		
2224016400	Mask		
2246012501	Heat Sink		PS Board
-----	Snap Plate	HLJ-0999-01-480	

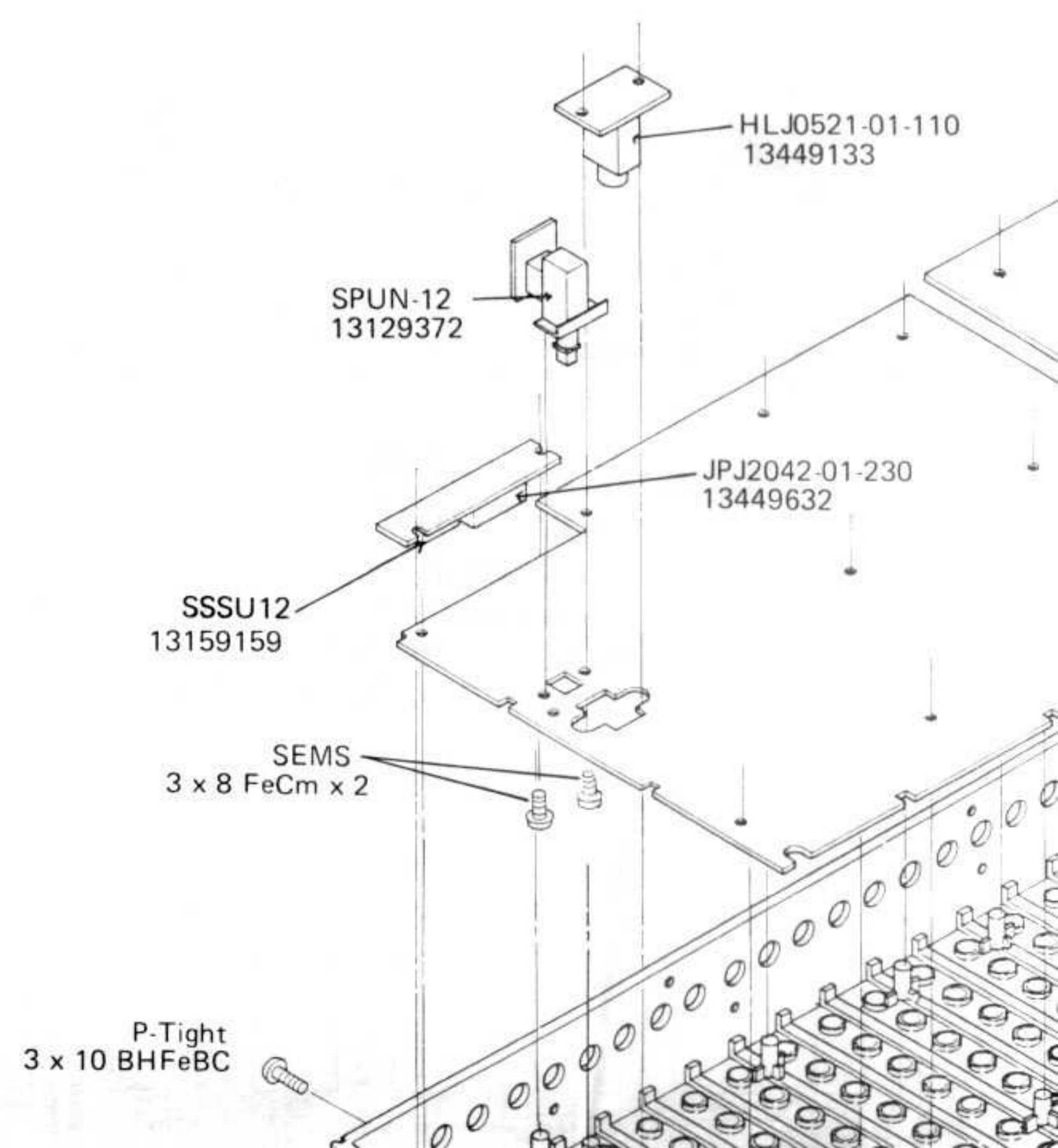
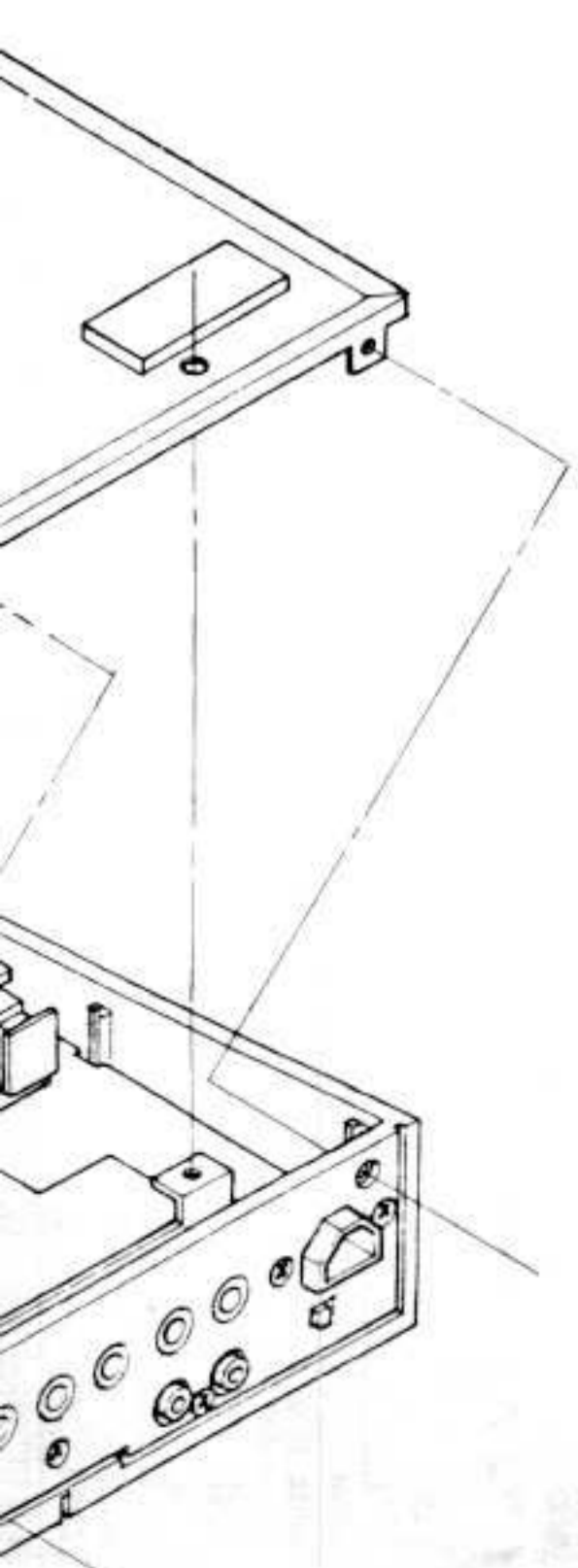
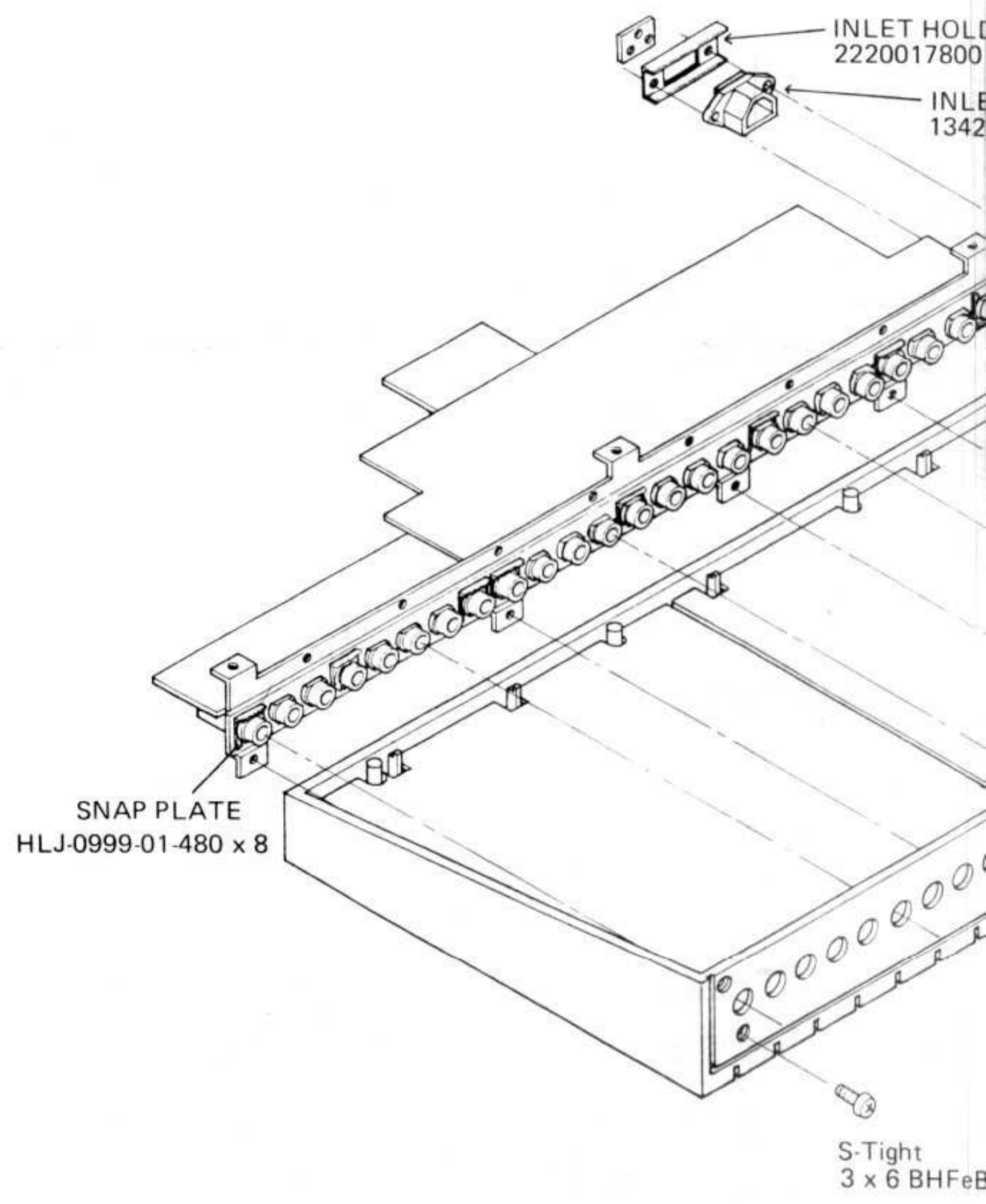
EXPLODED VIEW

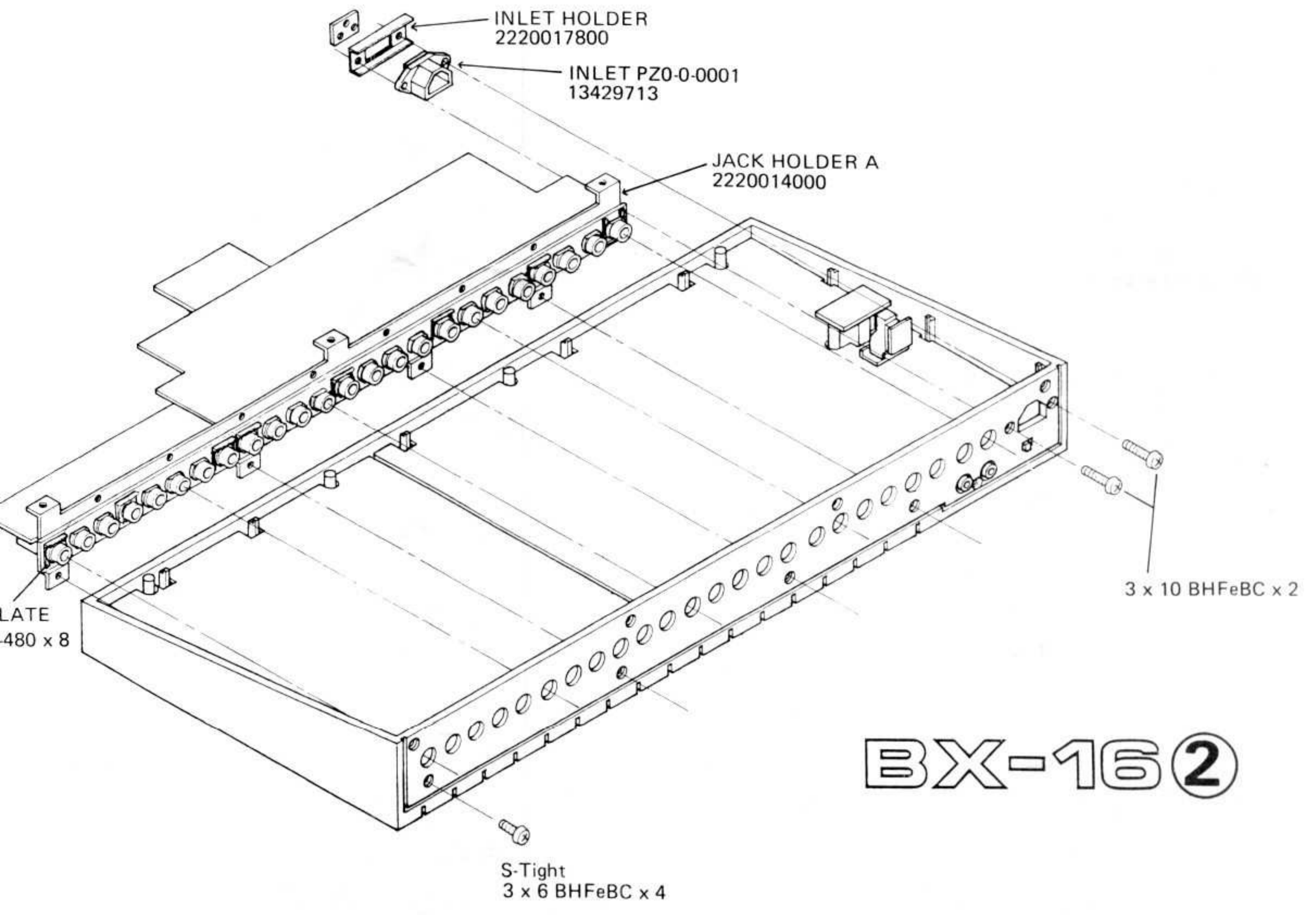


Tight 3 x 8 BHFeBC
w/internal tooth washer x 2

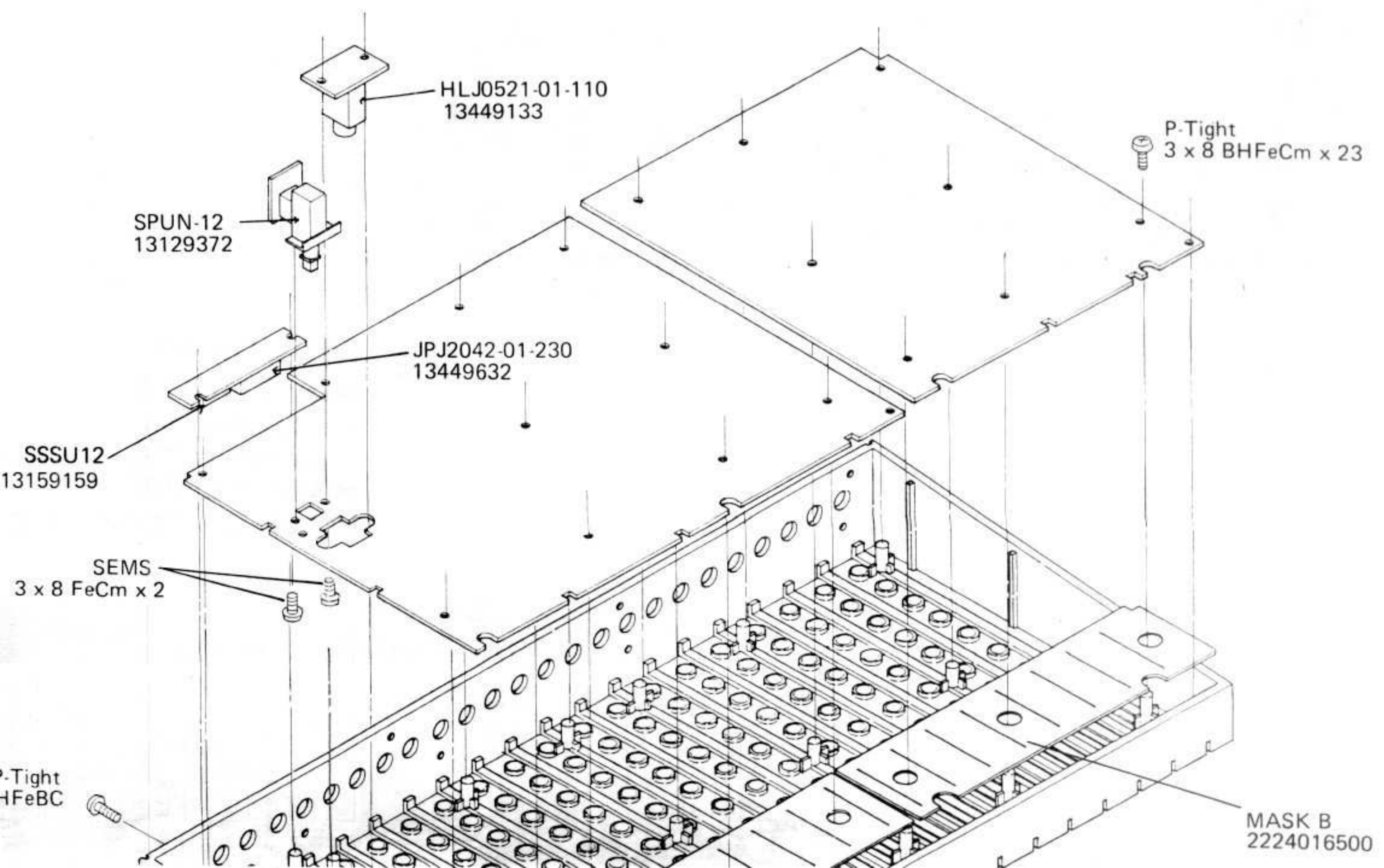


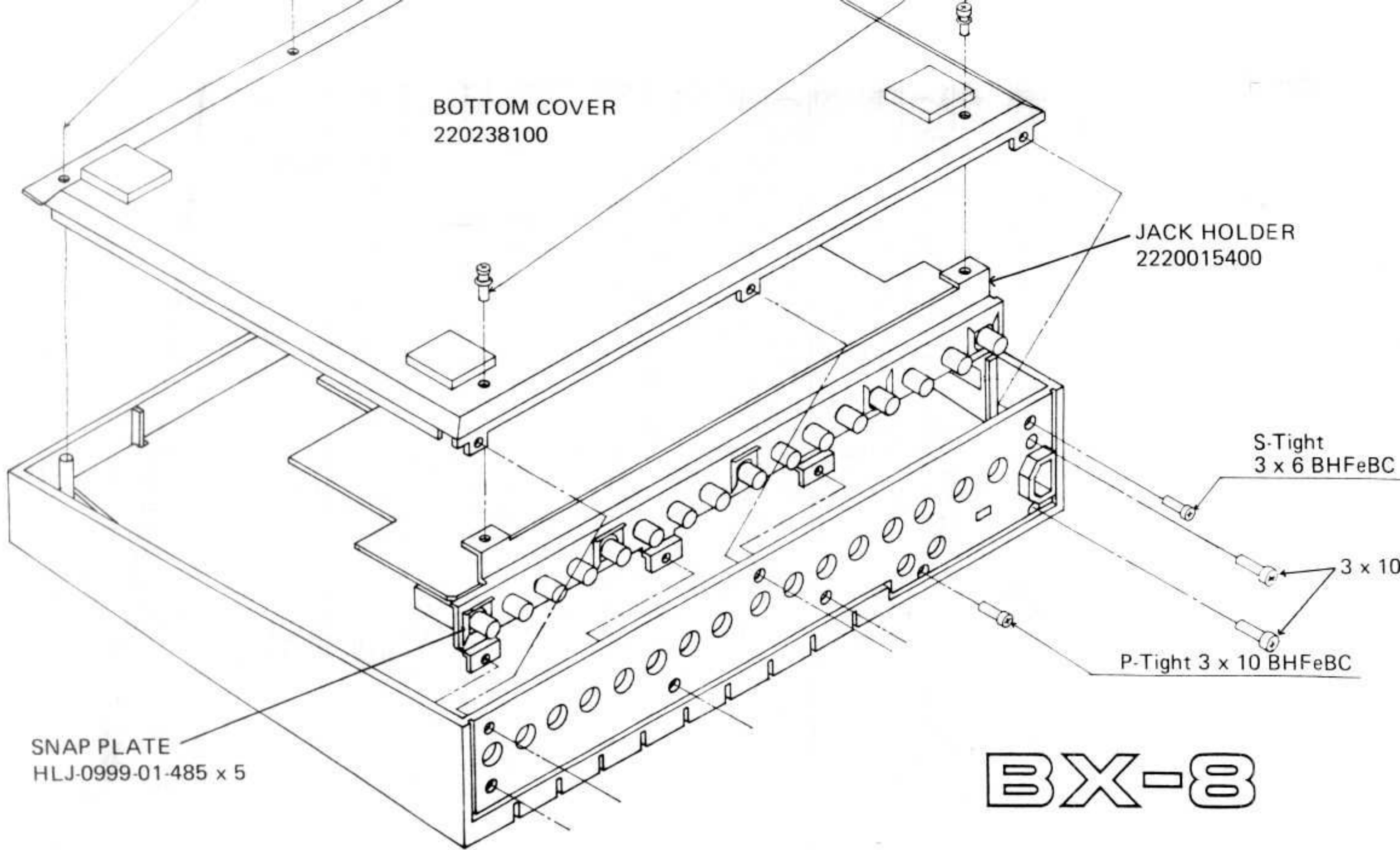
3X-8



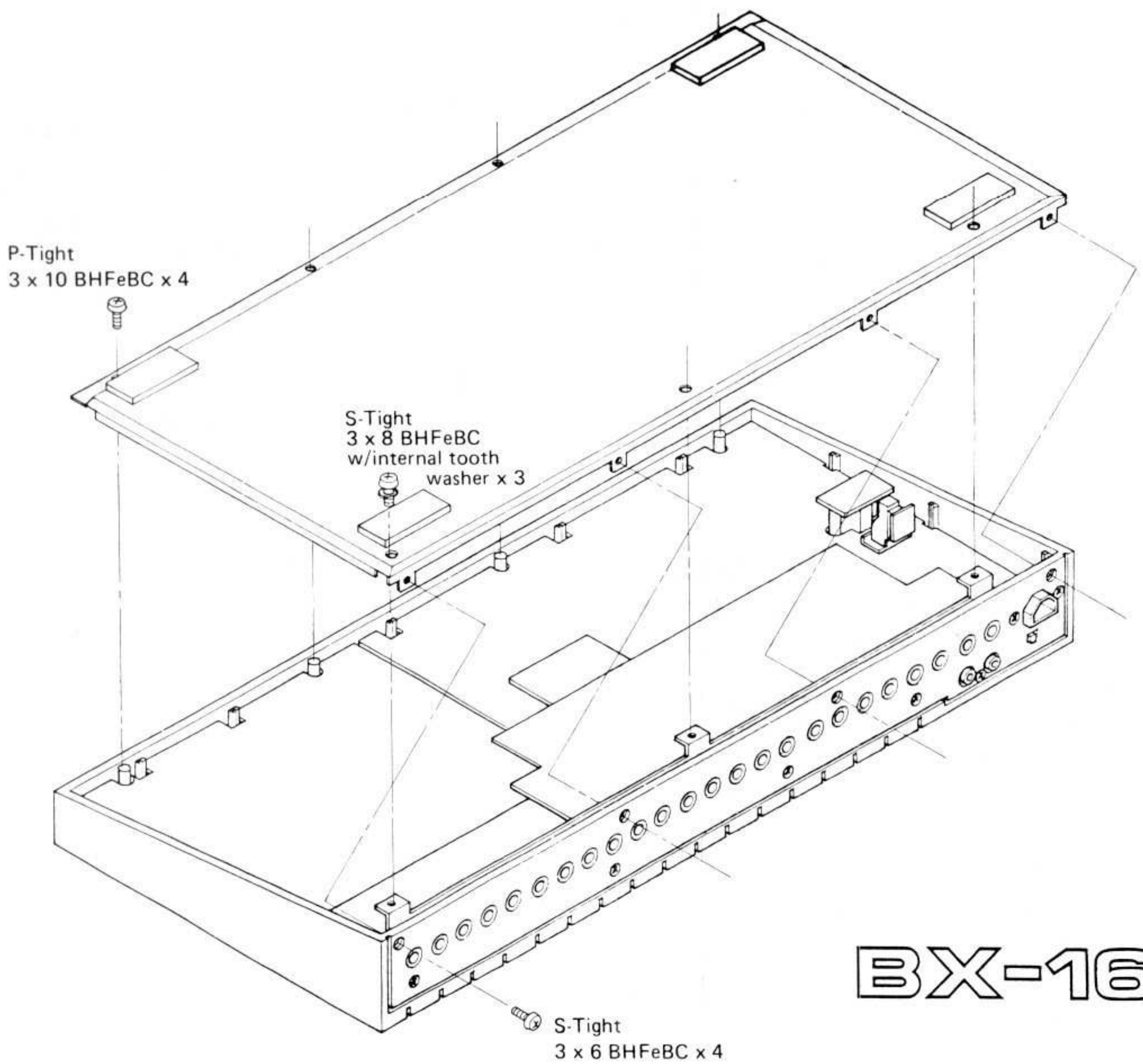


BX-16 2





BX-8



BX-16 1

D
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JACK HOLDER
2220015400

S-Tight
3 x 6 BHFeBC x 6

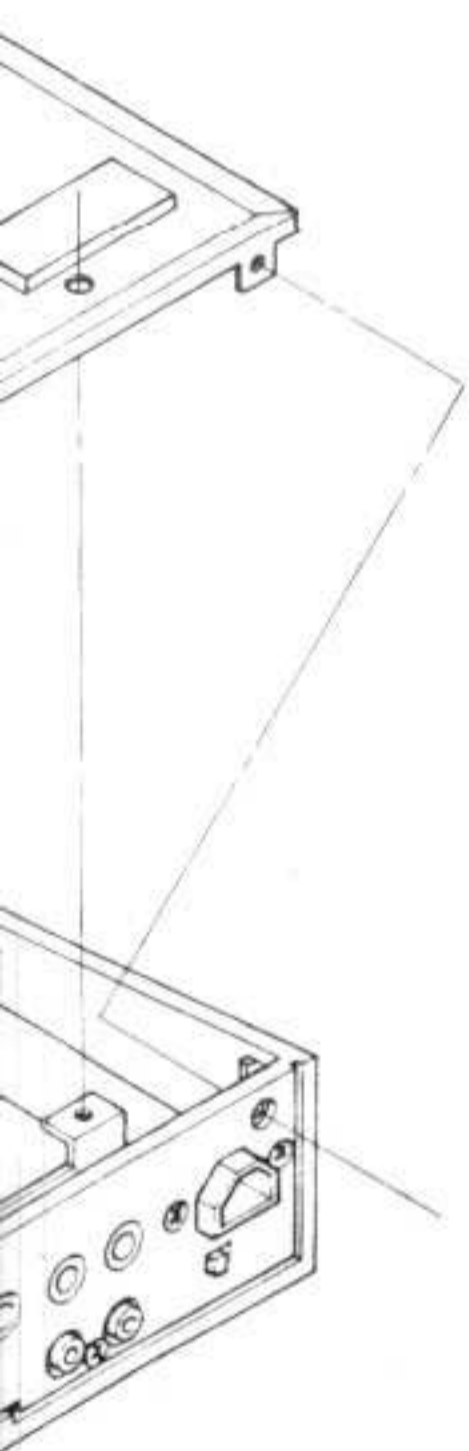
3 x 10 BHFeBC x 2

P-Tight 3 x 10 BHFeBC

SNAP PLATE
HLJ-0999-01-480 x 8

S-Tight
3 x 6 BHFeBC x 4

X-8



HLJ0521-01-110
13449133

SPUN-12
13129372

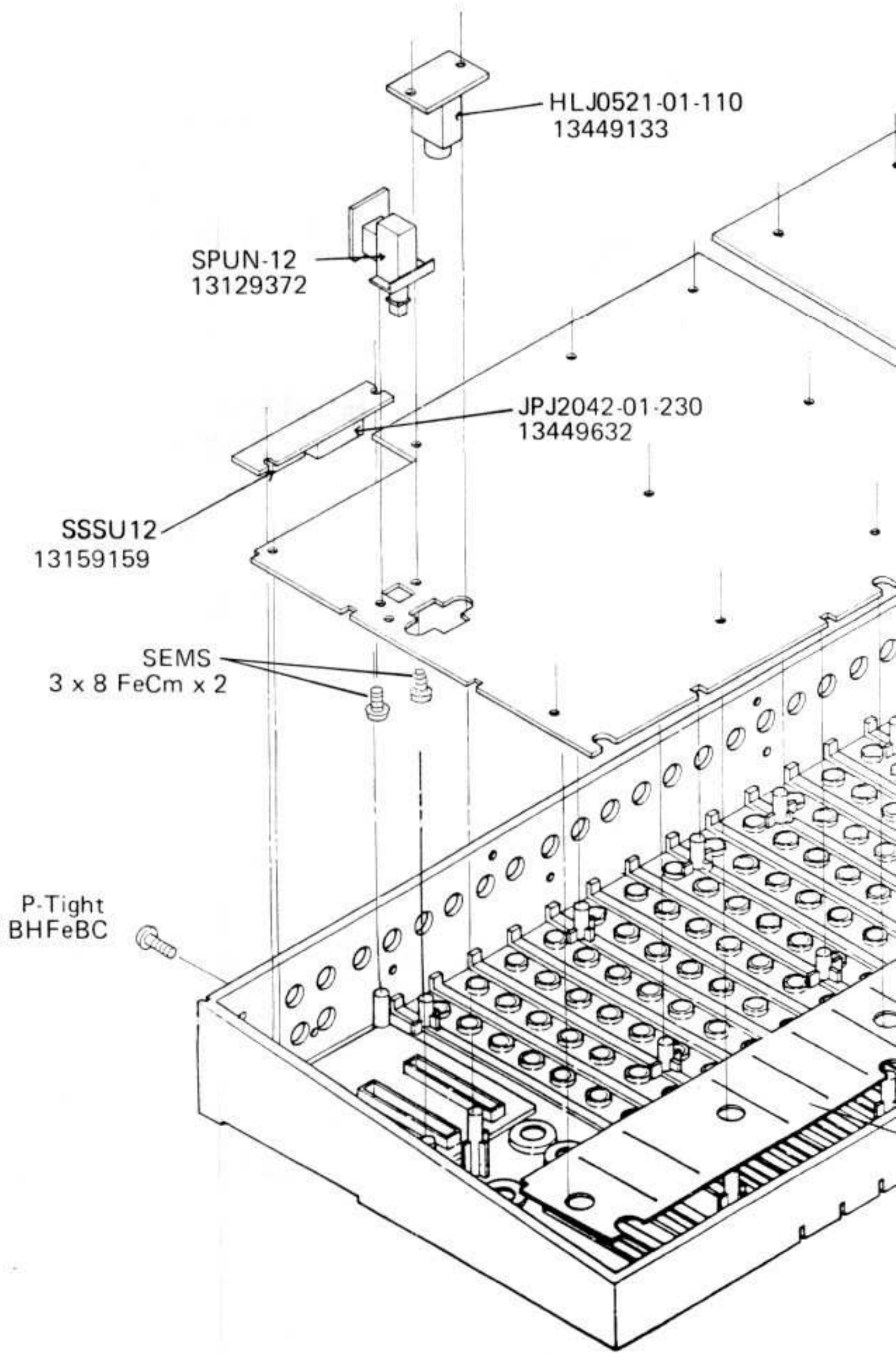
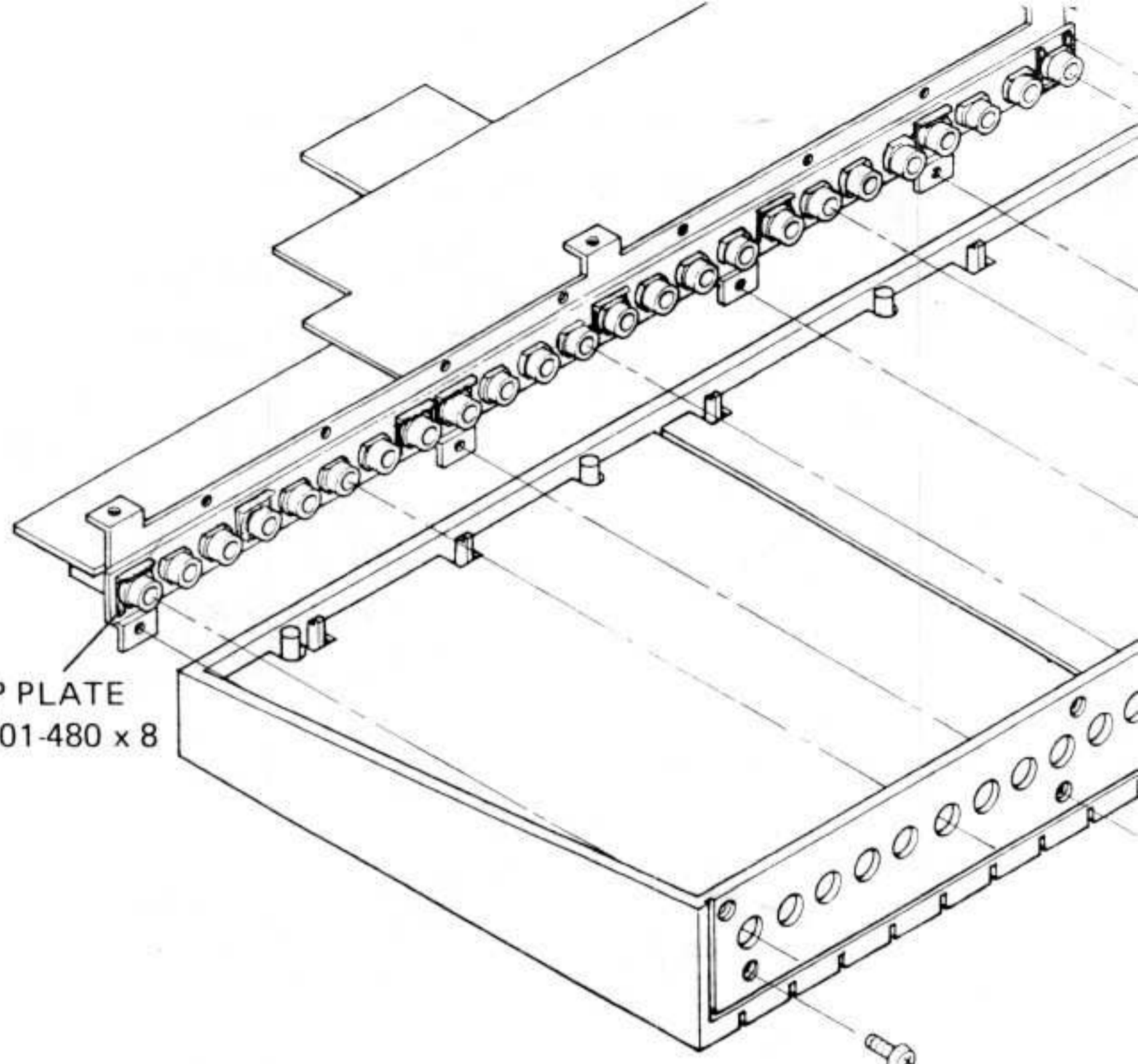
JPJ2042-01-230
13449632

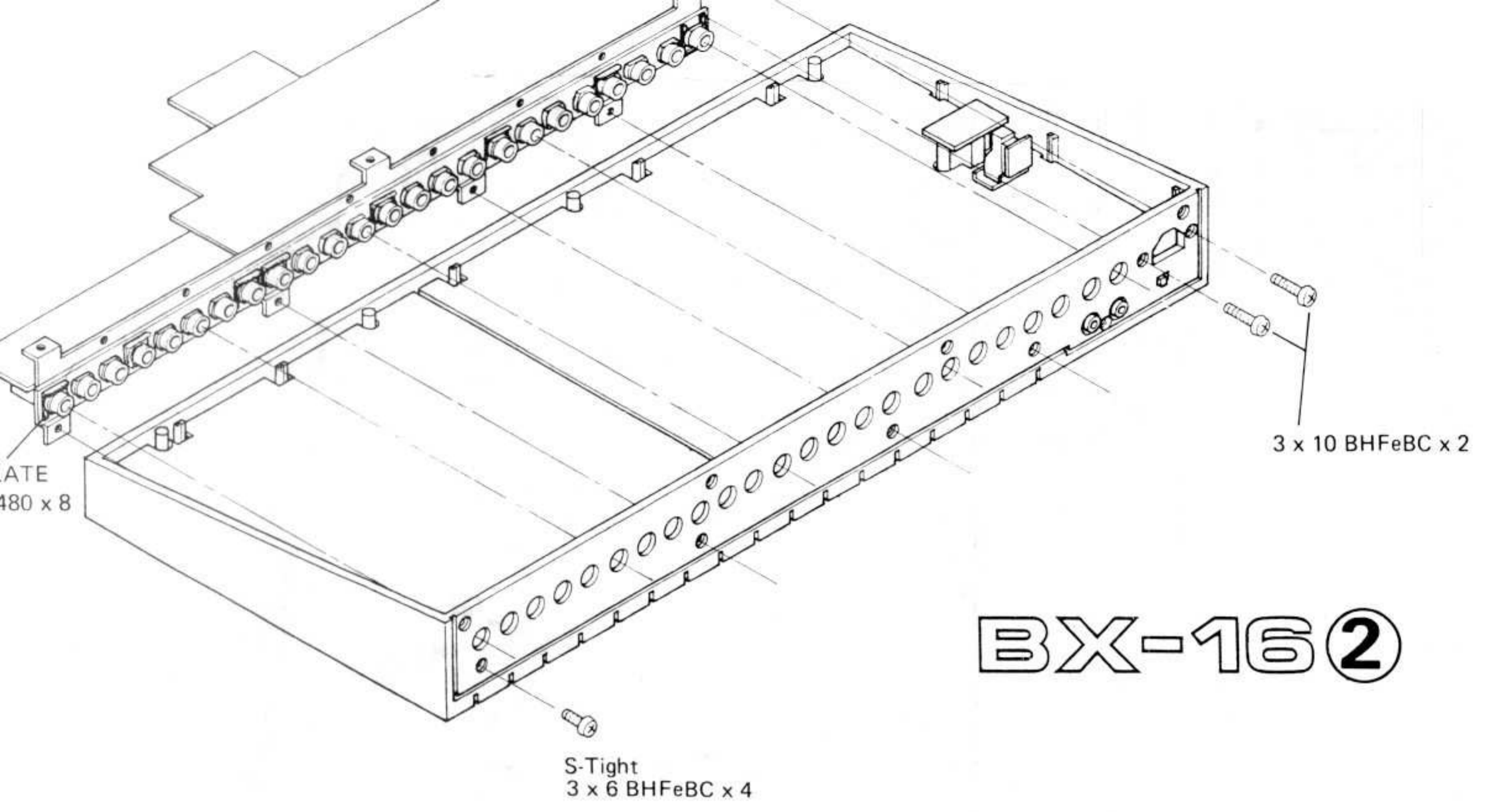
SSSU12
13159159

SEMS
3 x 8 FeCm x 2

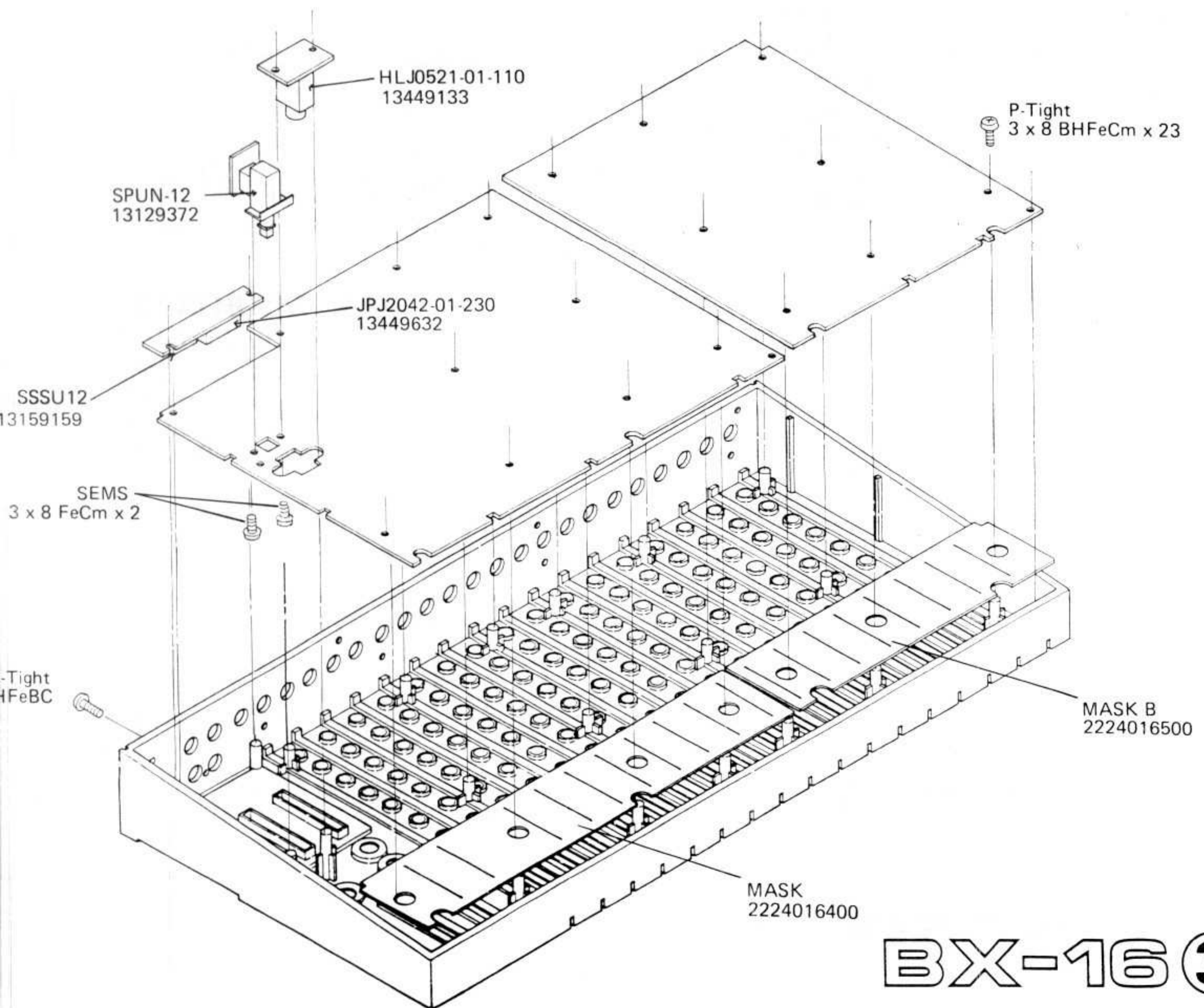
P-Tight
3 x 10 BHFeBC

X-16 ①



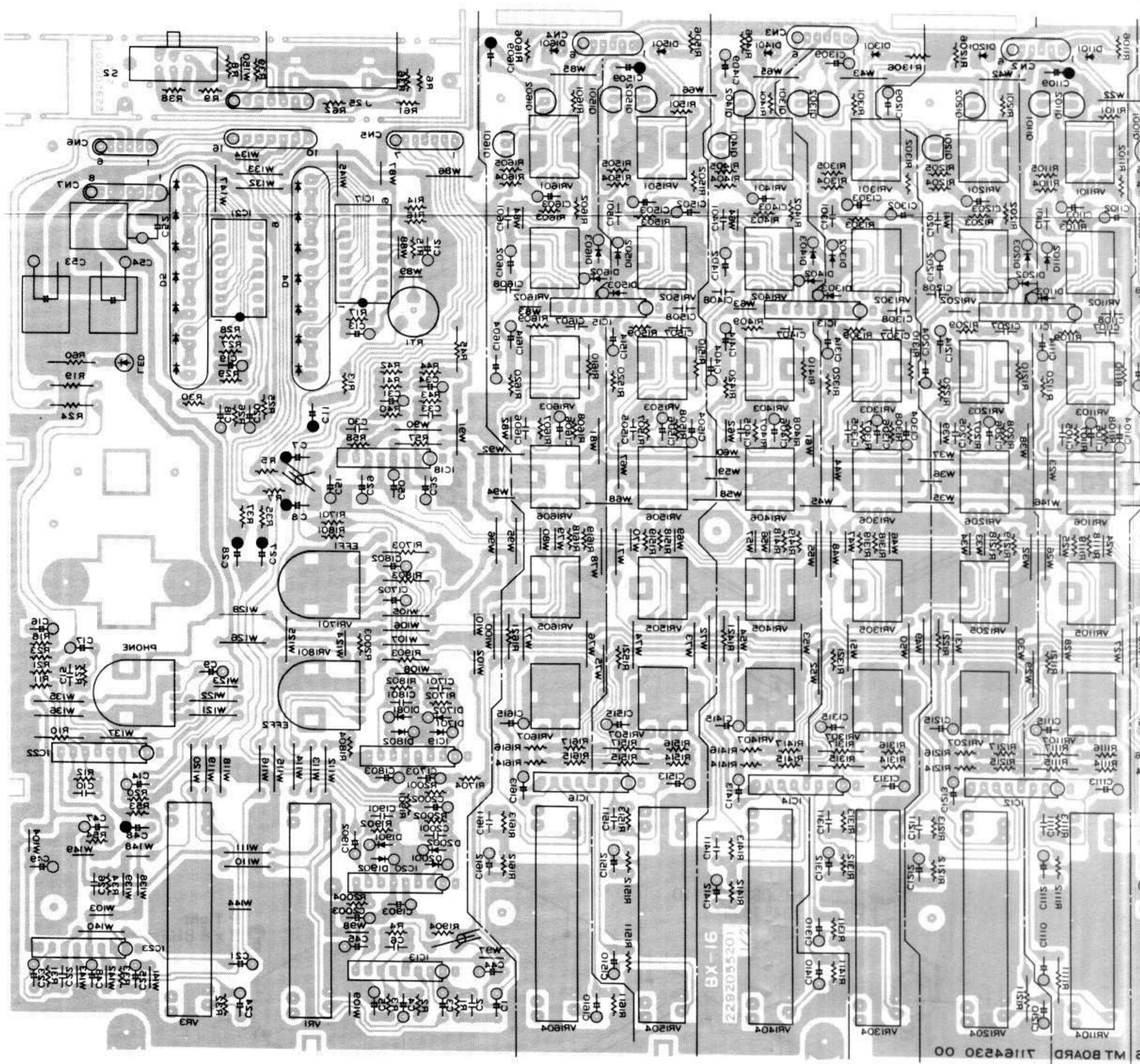


BX-16 ②



BX-16 ③

↓ PIN JK BOARD

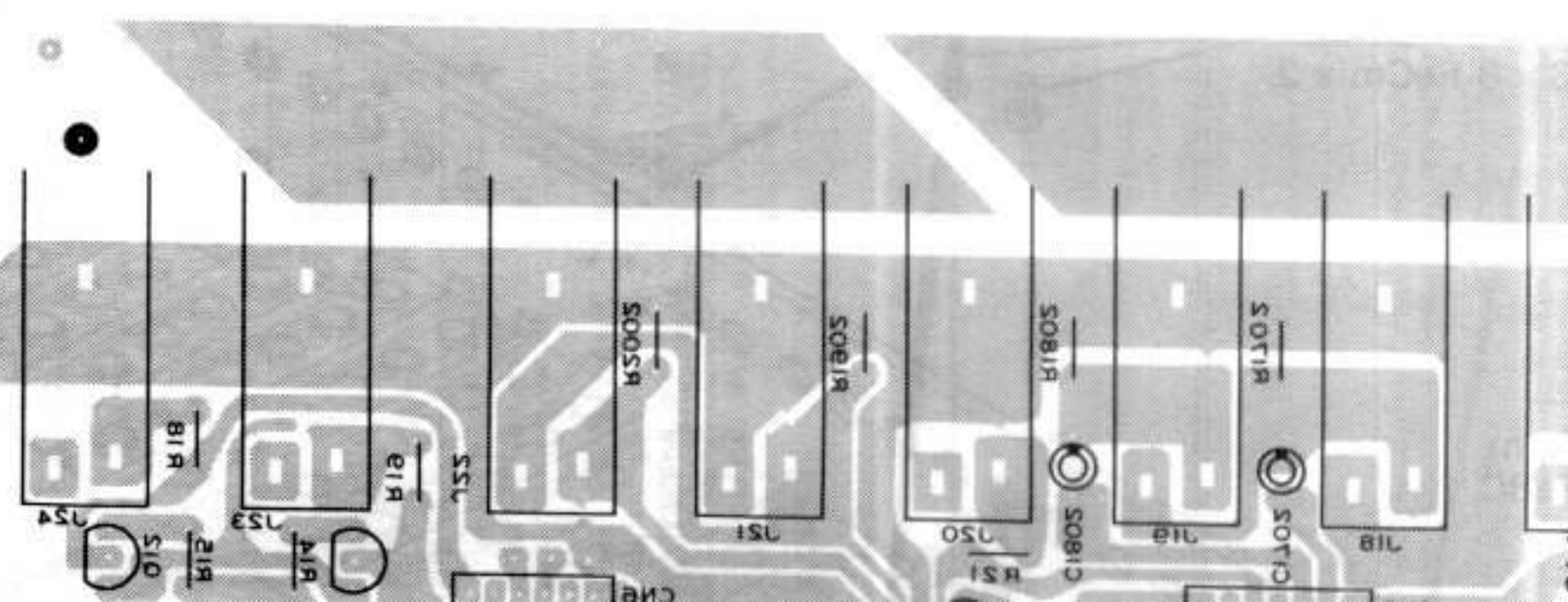


View from foil side.



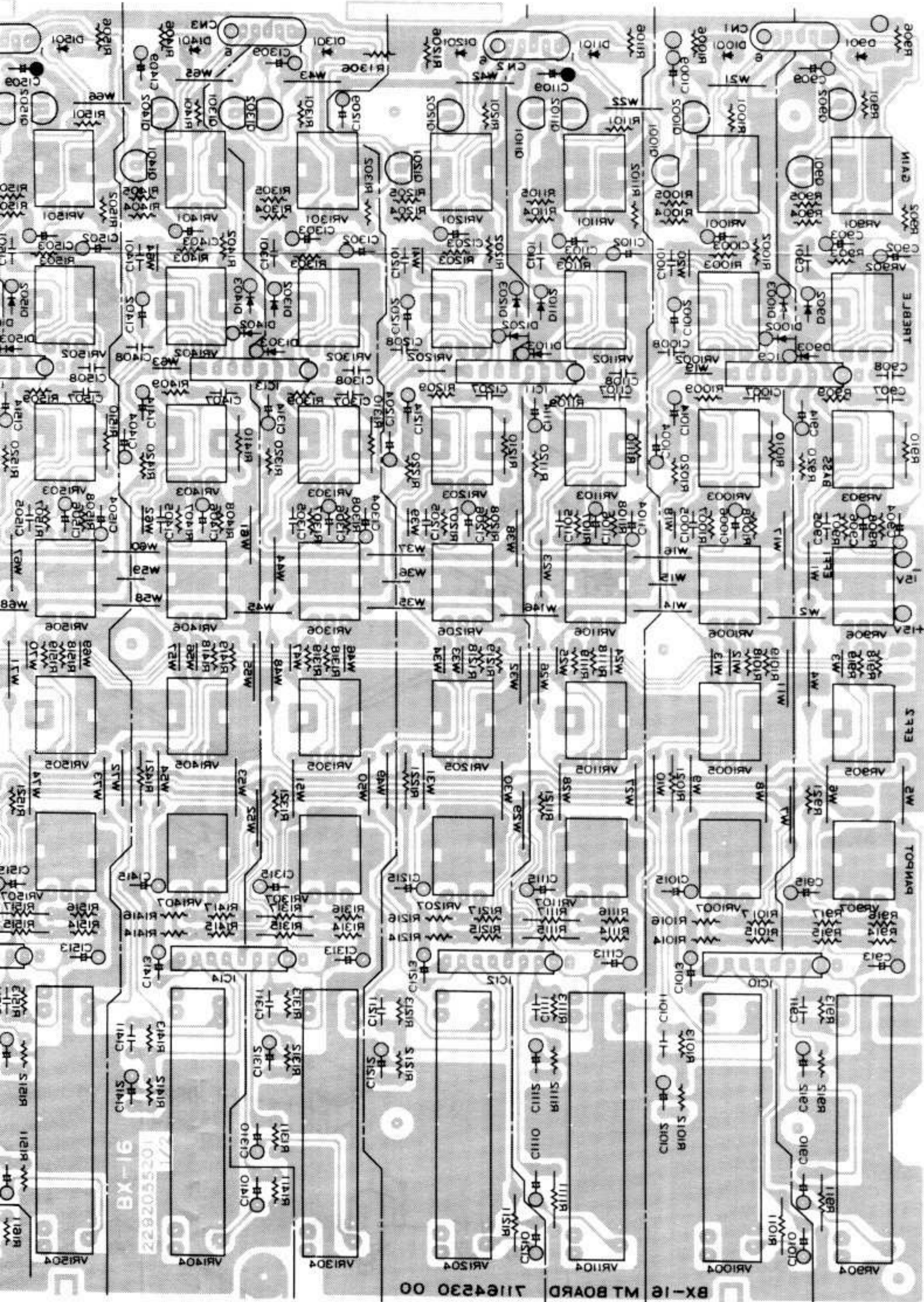
MT BOARD
Assy 7116453000

(pcb 2292055200)
Replacement MT Board includes
補修用MT BOARDは
PIN JK BOARDを含みます。



CH JK BOARD

Only for BX-16



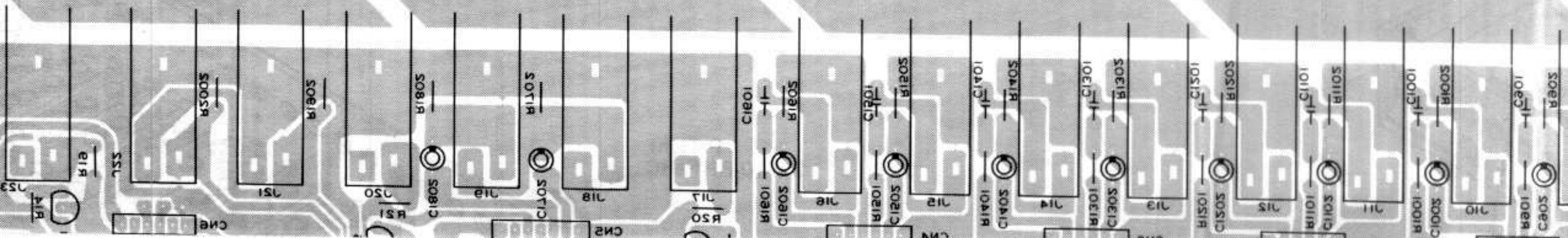
MT BOARD

Assy 7116453000

(pcb 229205200)

Replacement MT Board includes Pin JK Board.

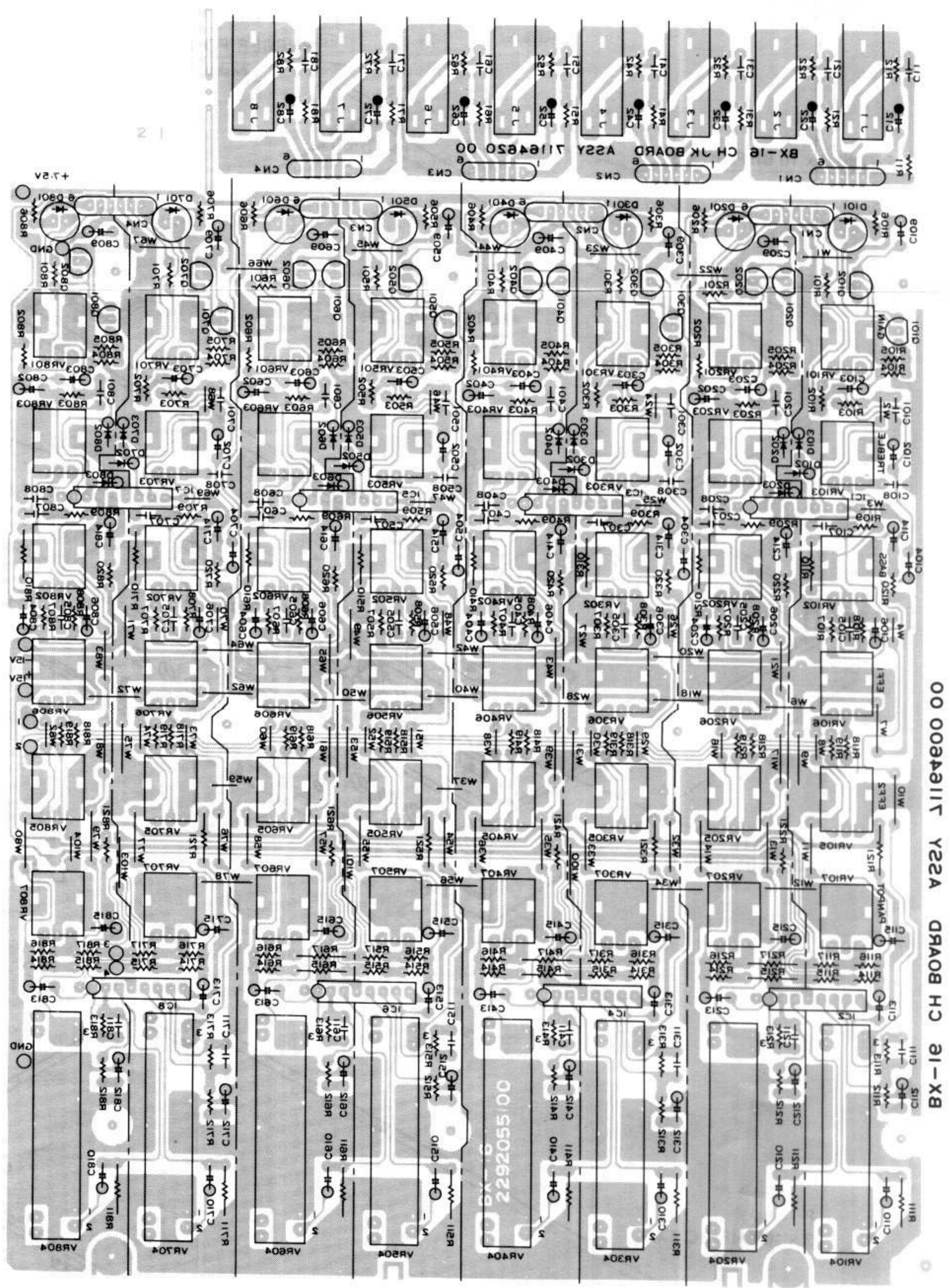
補修用MT BOARDは
PIN JK BOARDを含みます。



View

JK BOARD

for BX-16



00 008A11T Y22A CH BOARD BX-16

View from foil side.



CH BOARD

Only for BX-16

Assy 711646000

(pcb 2292055100)

Replacement CH Board includes CH JK Board.

補修用CH BOARDは
CH JK BOARDを含みます。

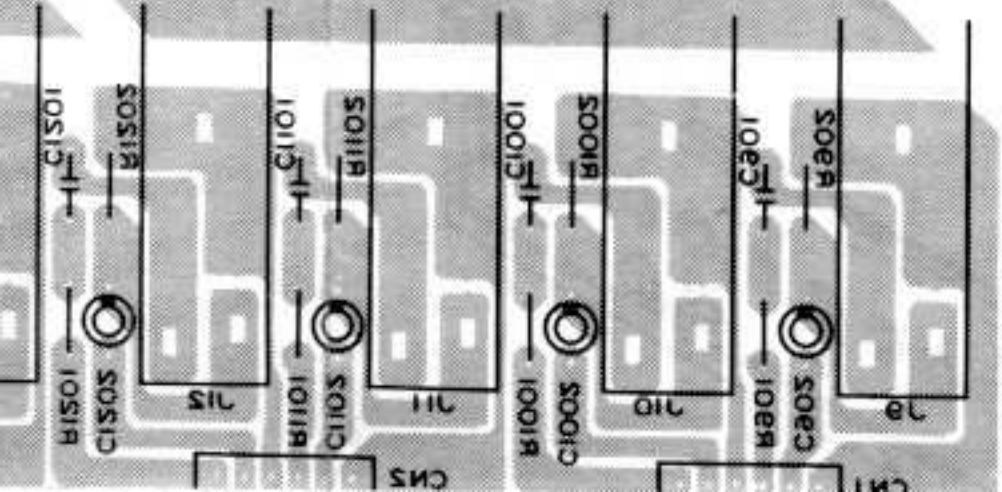
PS BOARD

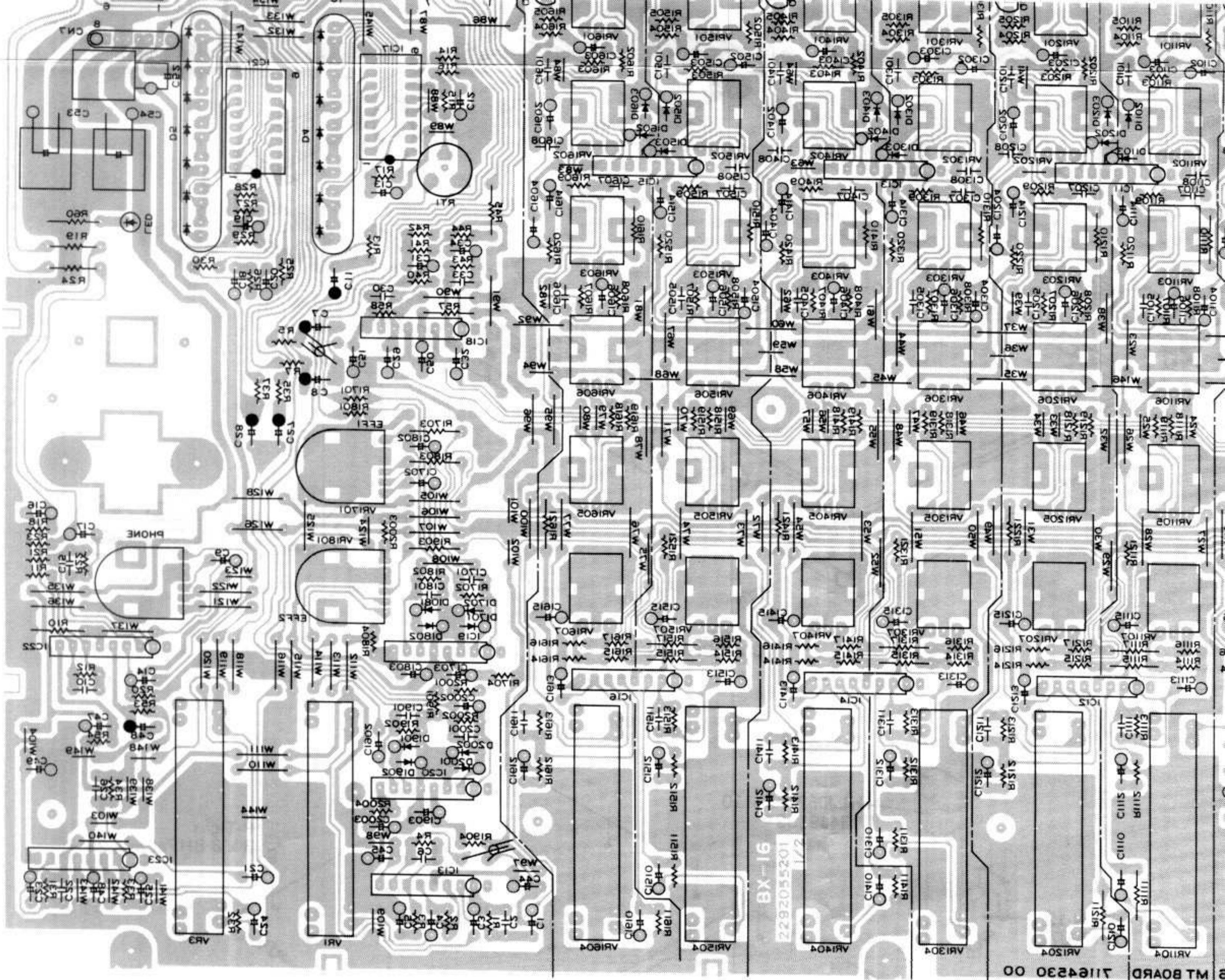
Assy 7116465100

(pcb 2292055300)

Replacement PS Board includes Phone JK Board,
SW BOARD and Inlet Board.

補修用PS BOARDは





View from foil side.



MT BOARD
Assy 7116453000

(pcb 2292055200)

Replacement MT Board includes

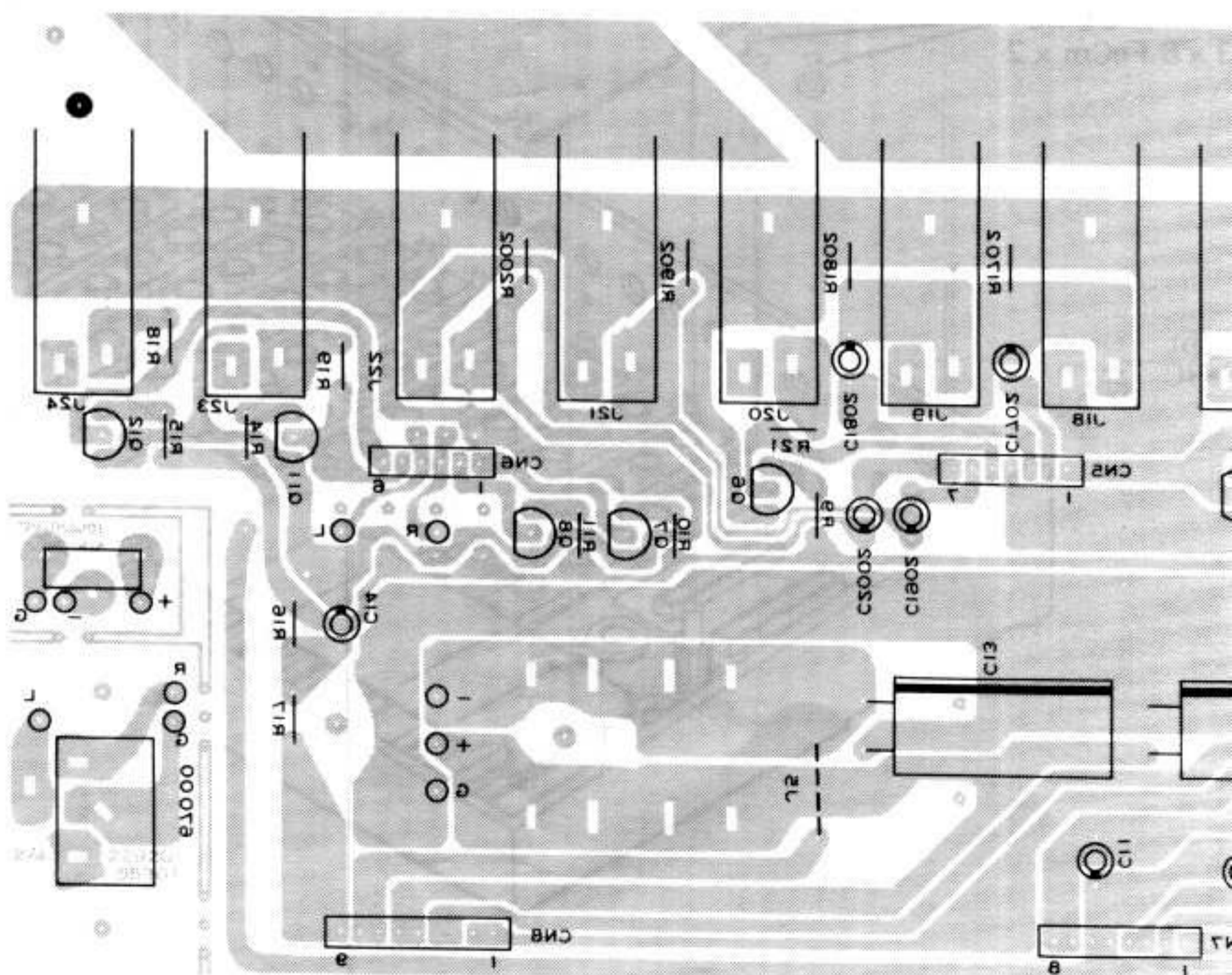
補修用MT BOARDは

PIN JK BOARDを含みます

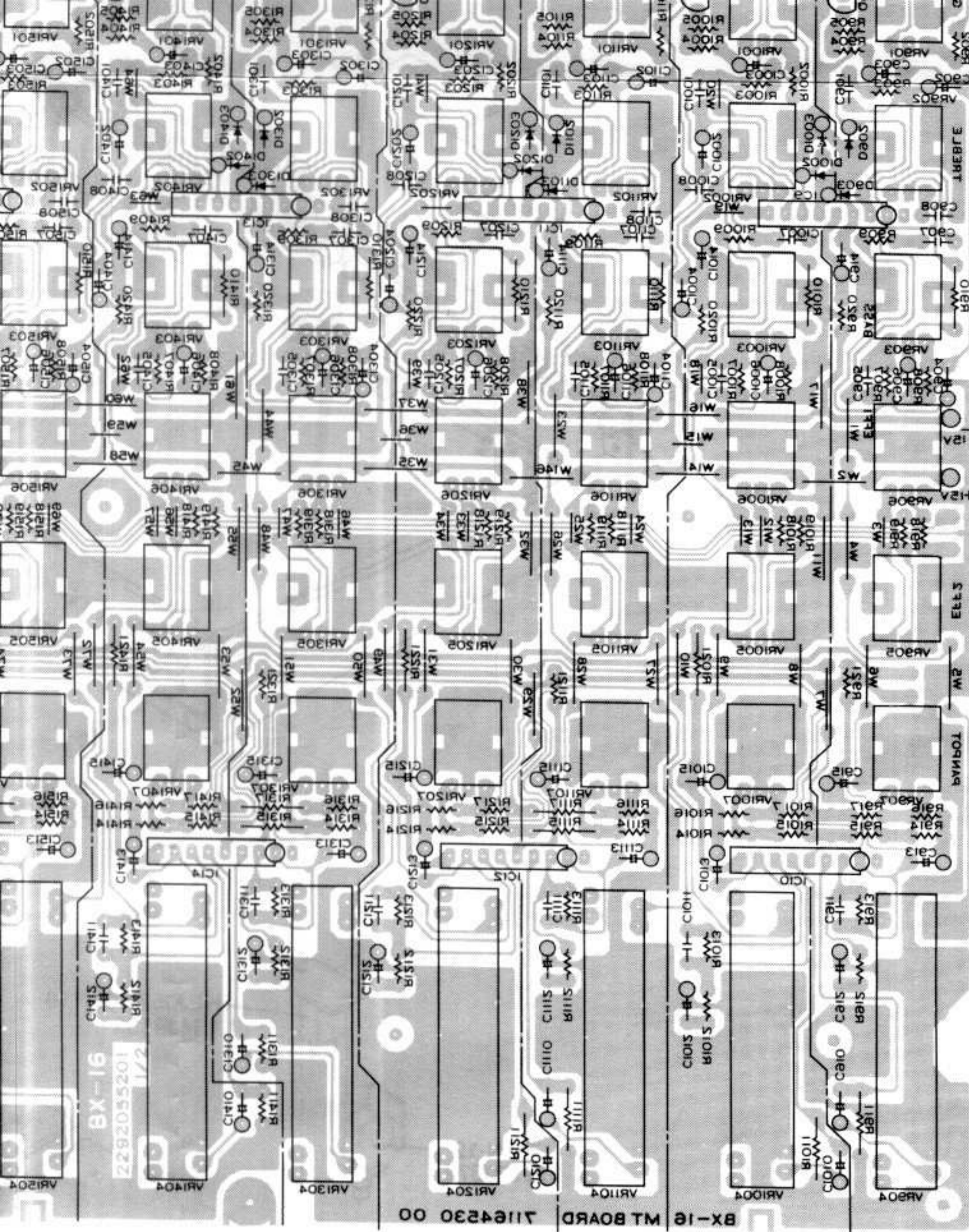
INLET BOARD



PHONE JK BOARD

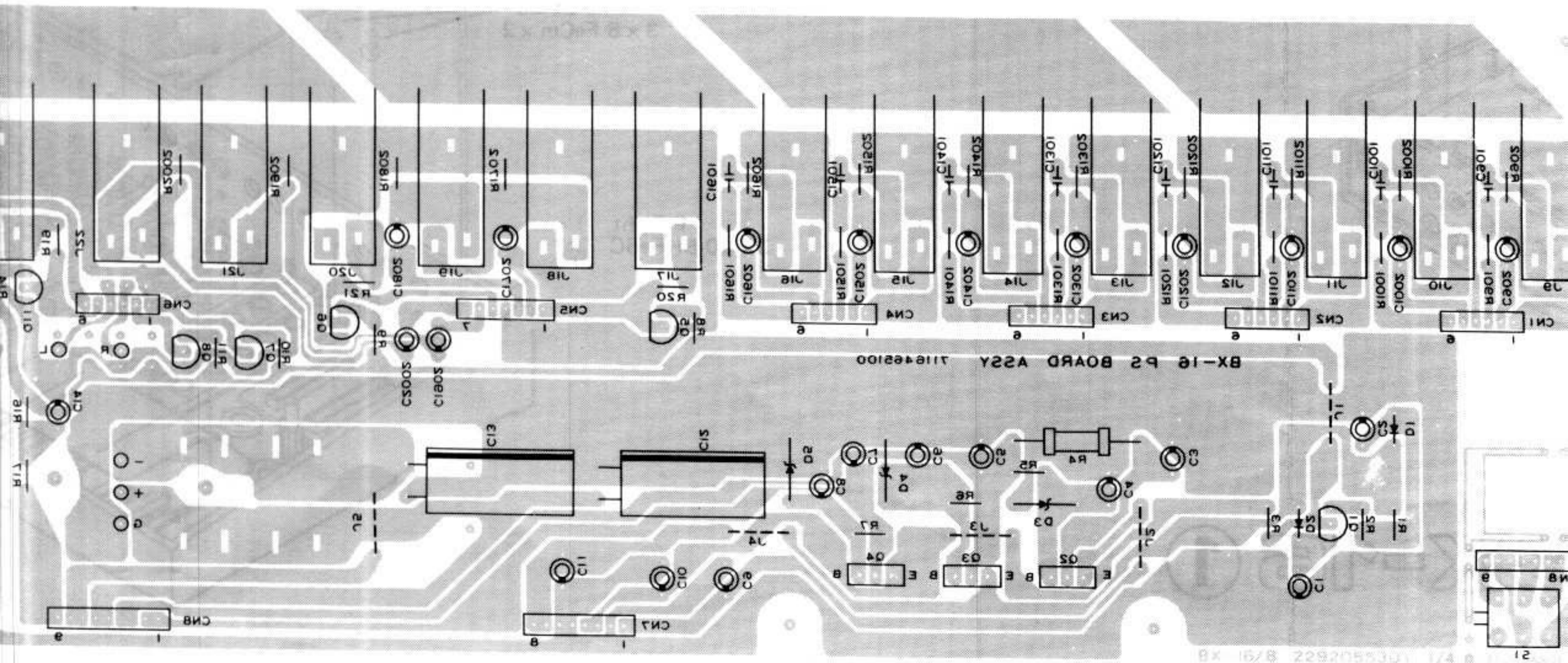


View from foil side.

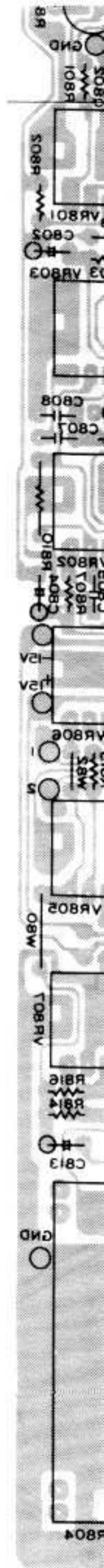


MT BOARD
Assy 7116453000
 (pcb 2292055200)

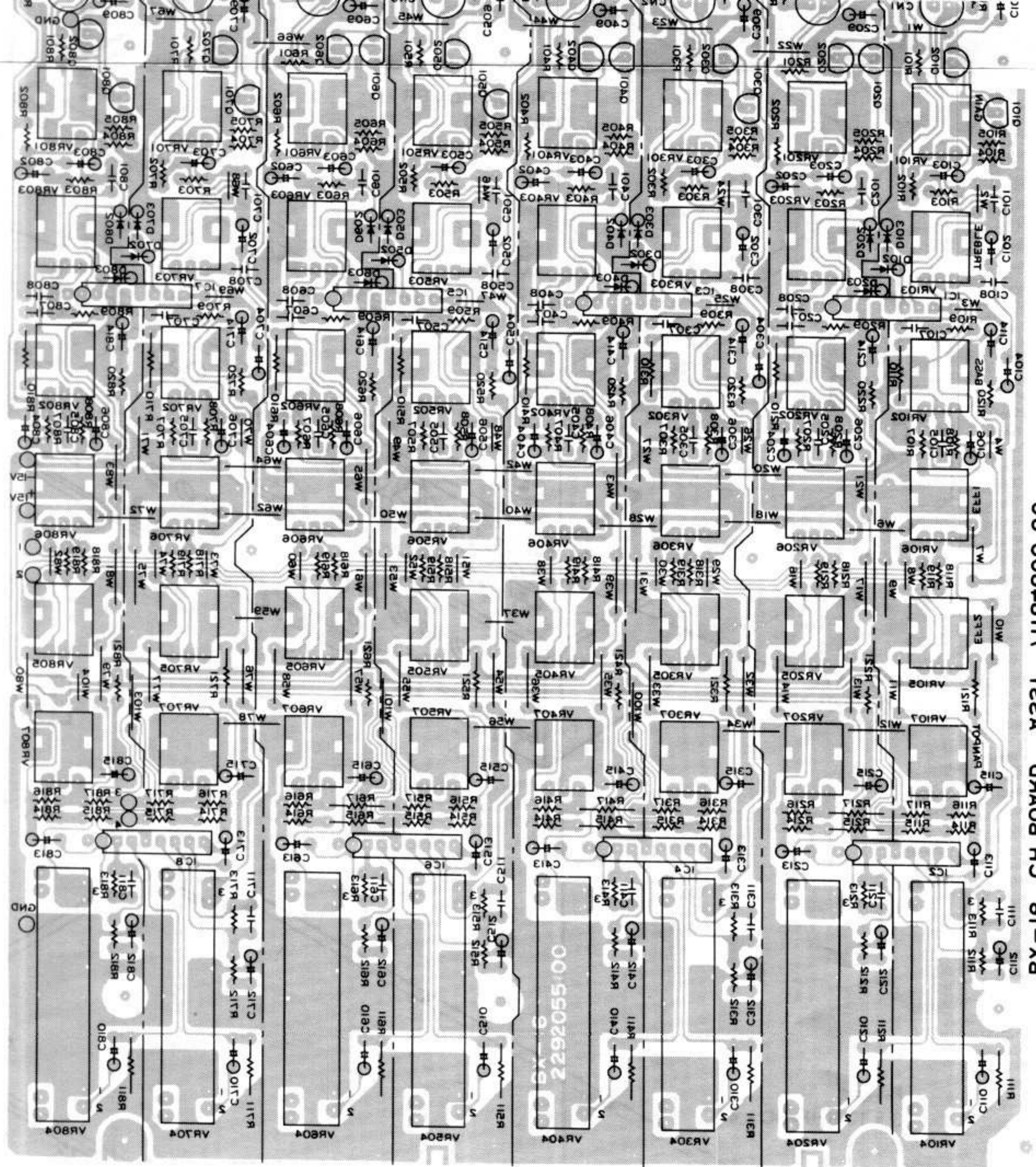
Replacement MT Board includes Pin JK Board.
 補修用MT BOARDは
 PIN JK BOARDを含みます。



View from foil side.



View from



00 004611T Y22A 09A92 CH BOARD BX-16

View from foil side.



CH BOARD

Only for BX-16

Assy 7116460000

(pcb 2292055100)

Replacement CH Board includes CH JK Board.

補修用CH BOARDは
CH JK BOARDを含みます。

PS BOARD

Assy 7116465100

(pcb 2292055300)

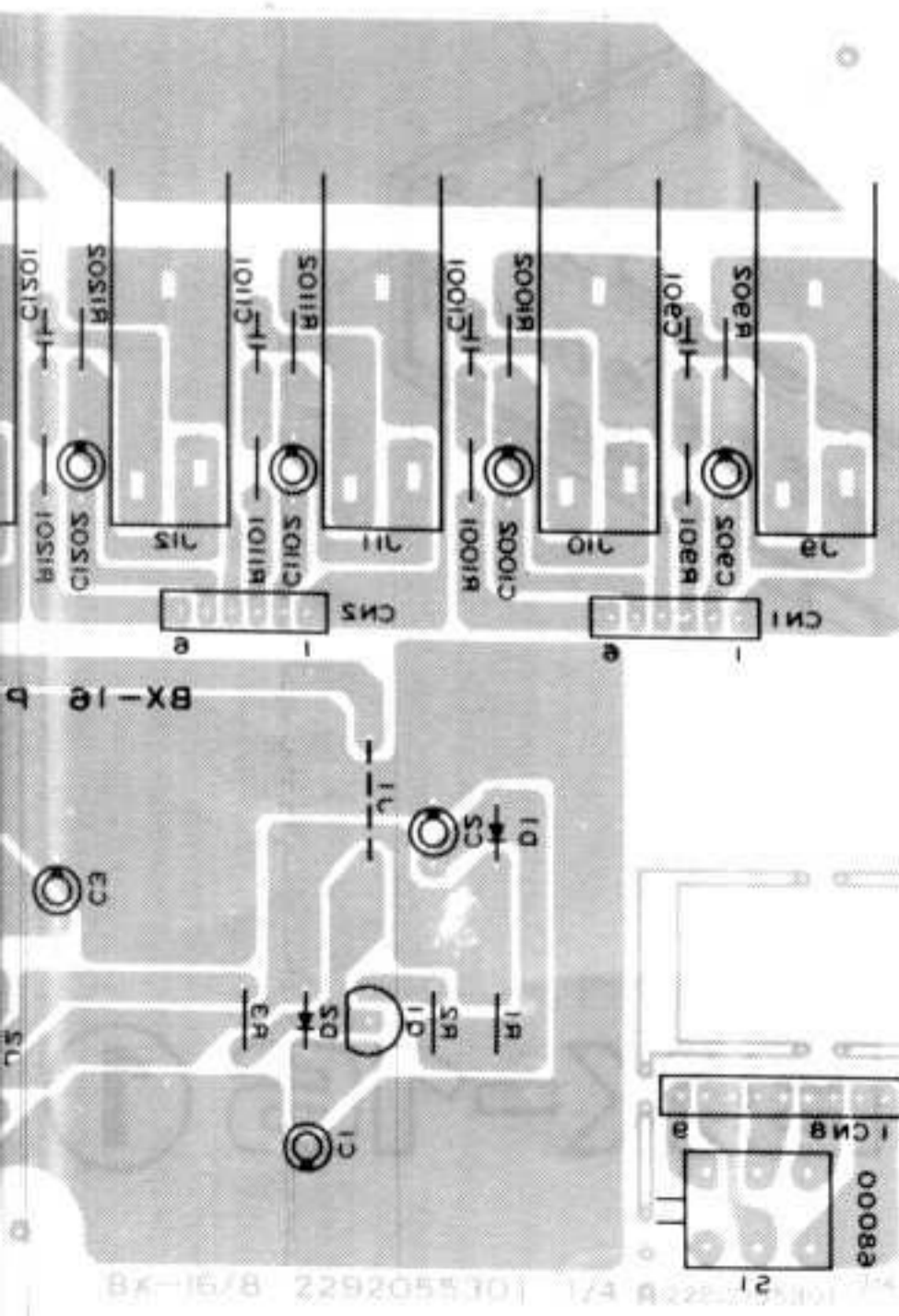
Replacement PS Board includes Phone JK Board,
SW BOARD and Inlet Board.

補修用PS BOARDは
以下の基板を含みます。

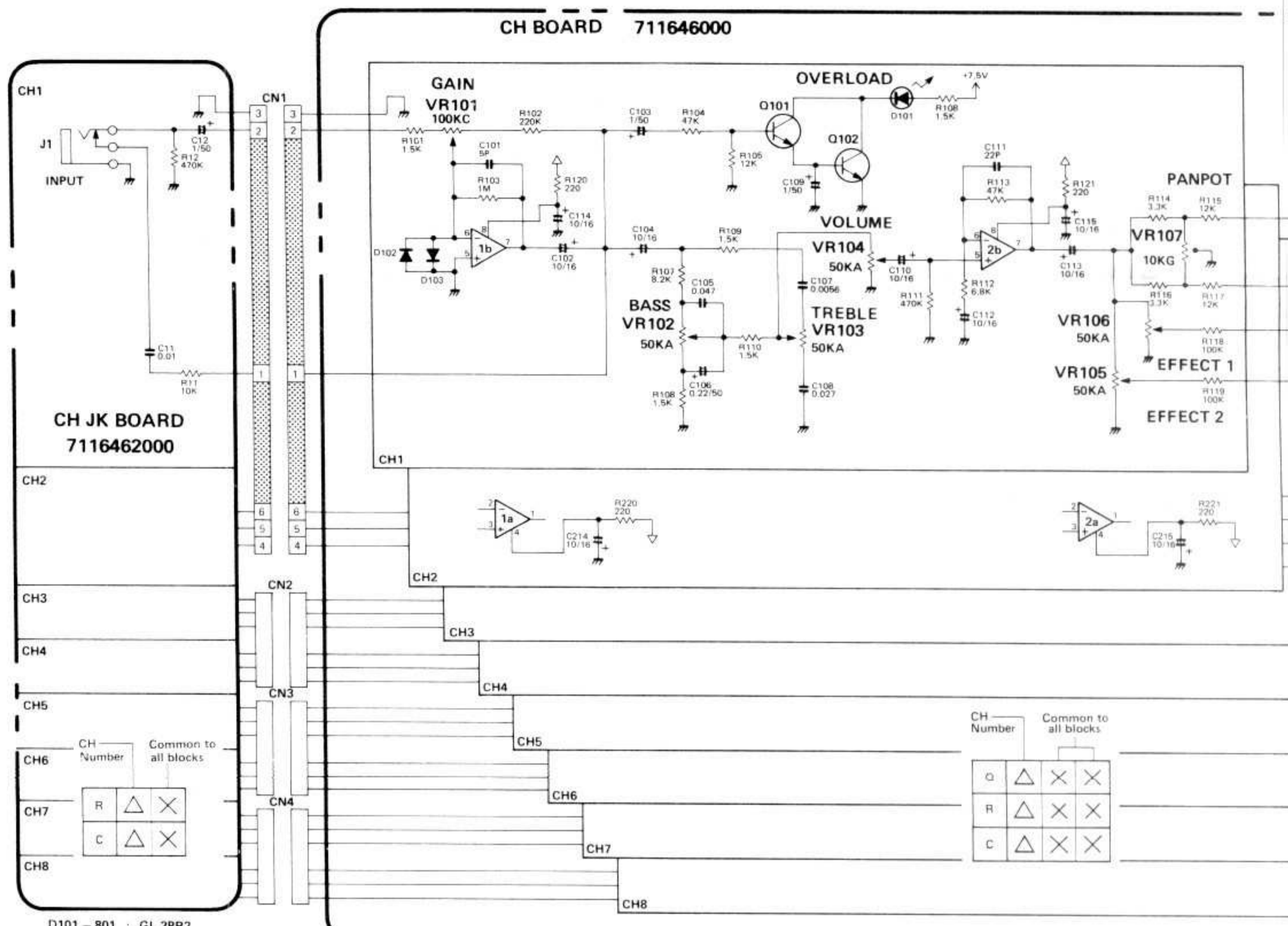
- ・ PHONE JK BOARD
- ・ SW BOARD
- ・ INLET BOARD



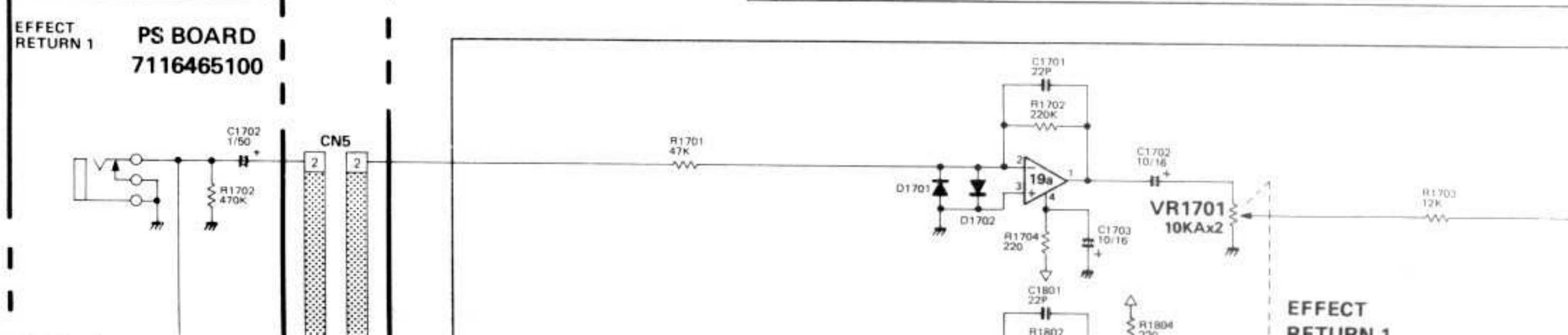
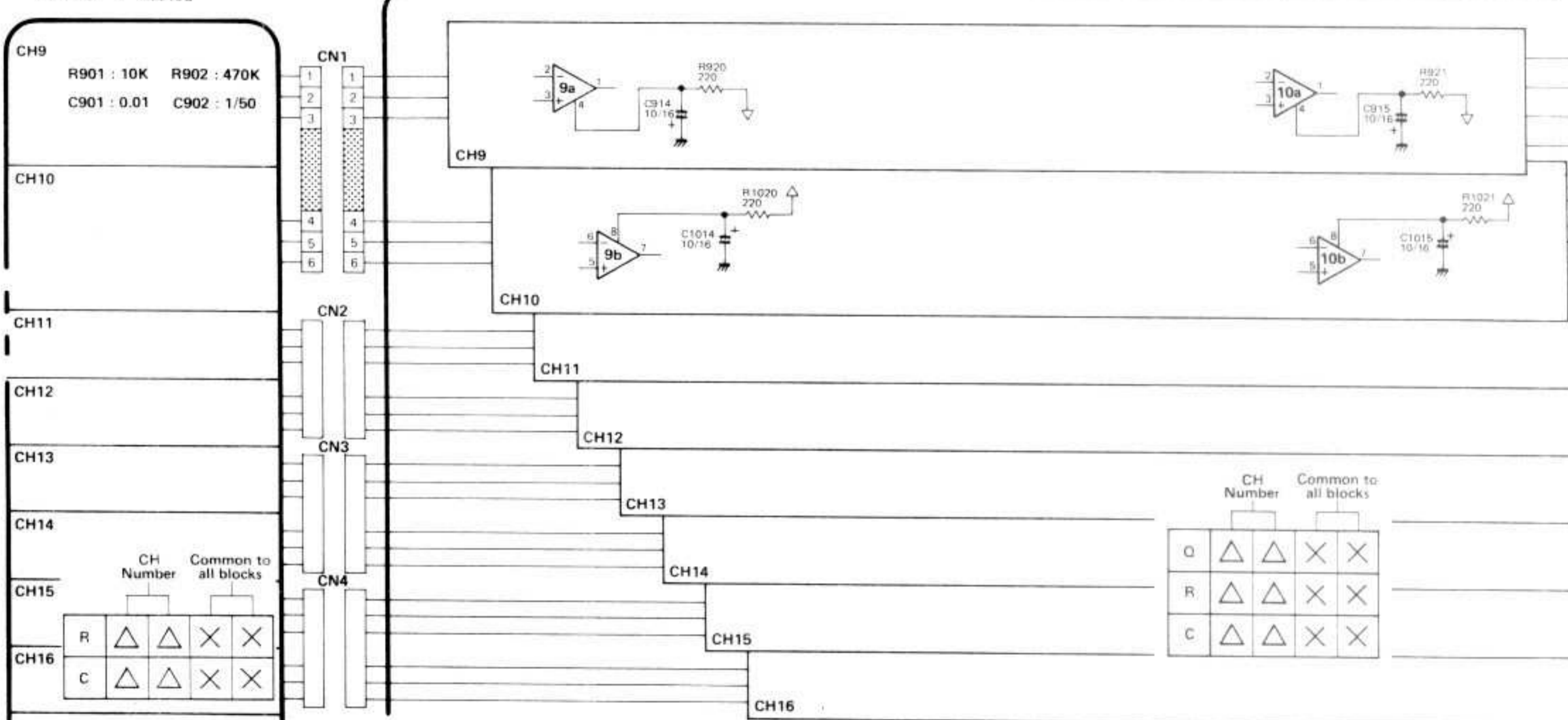
SW BOARD

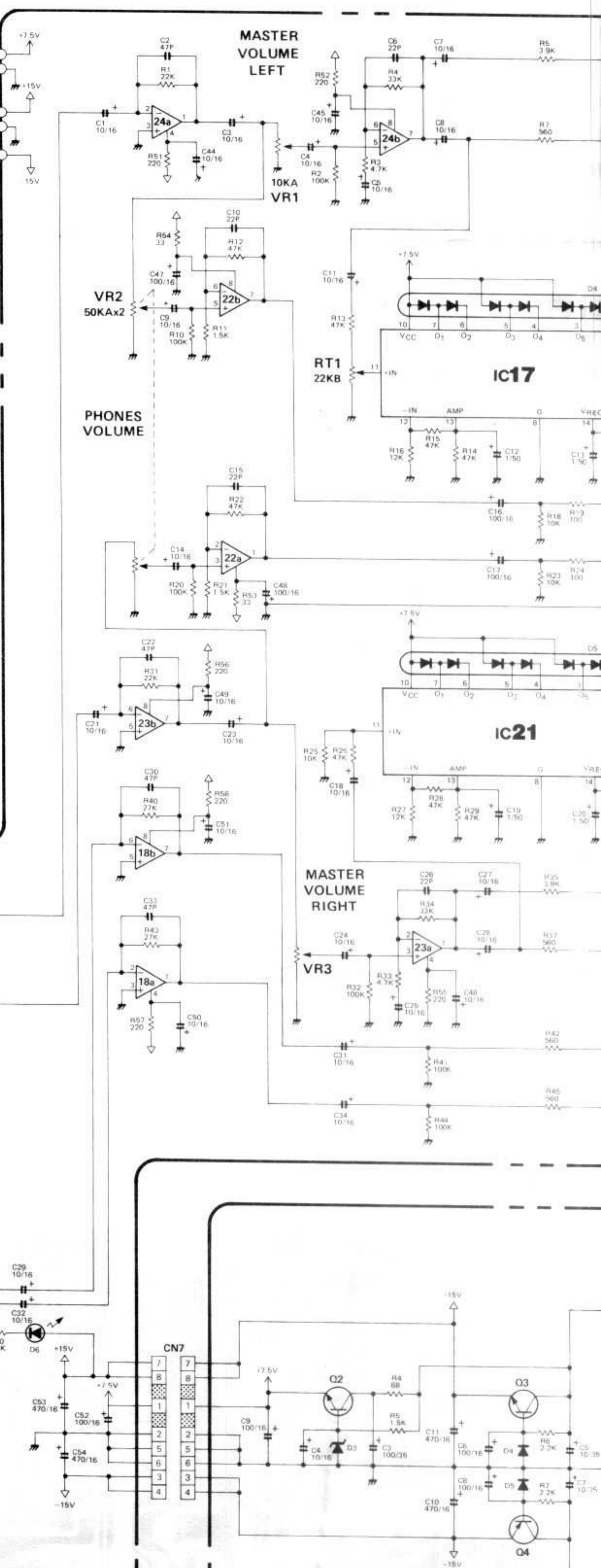
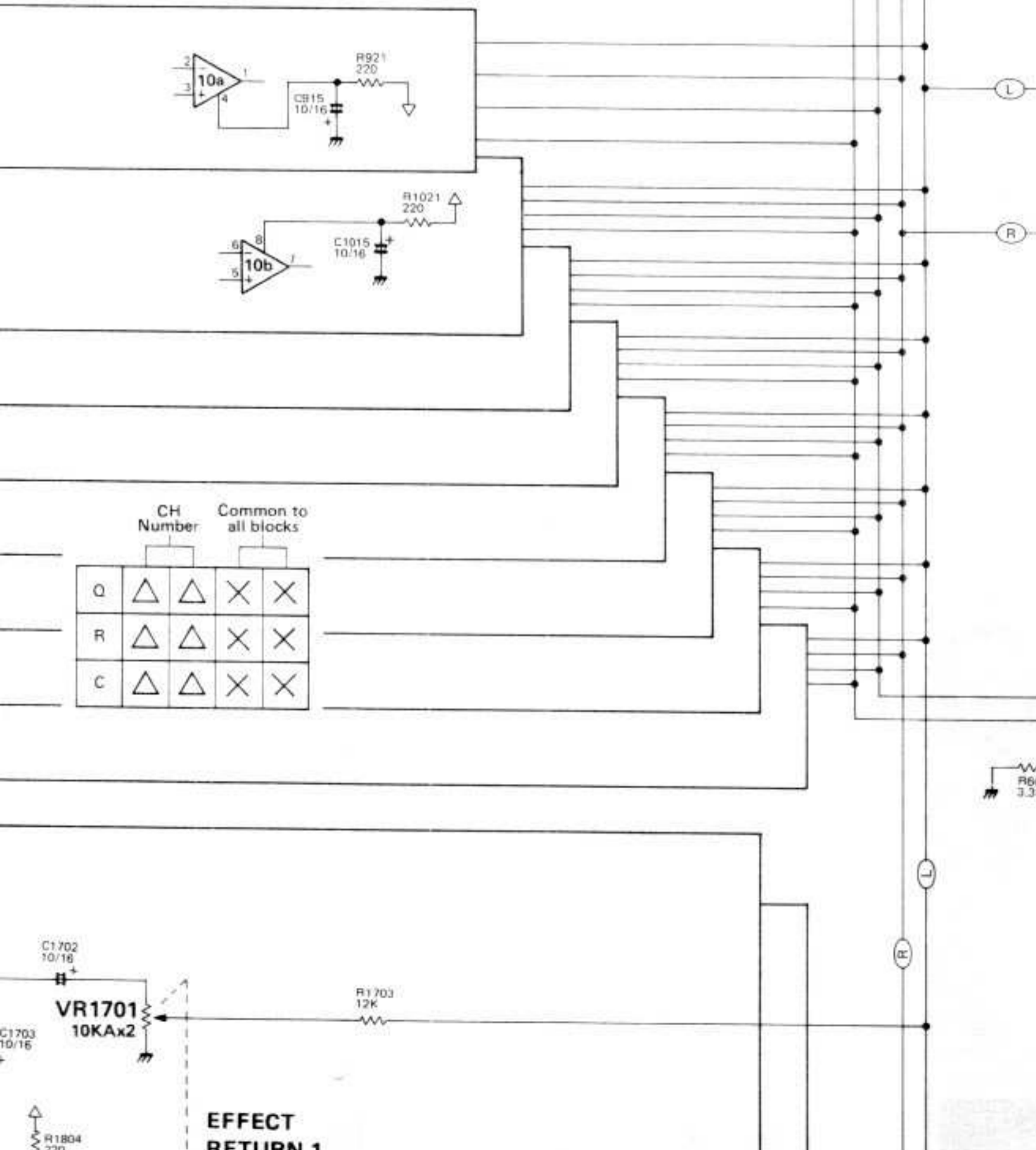
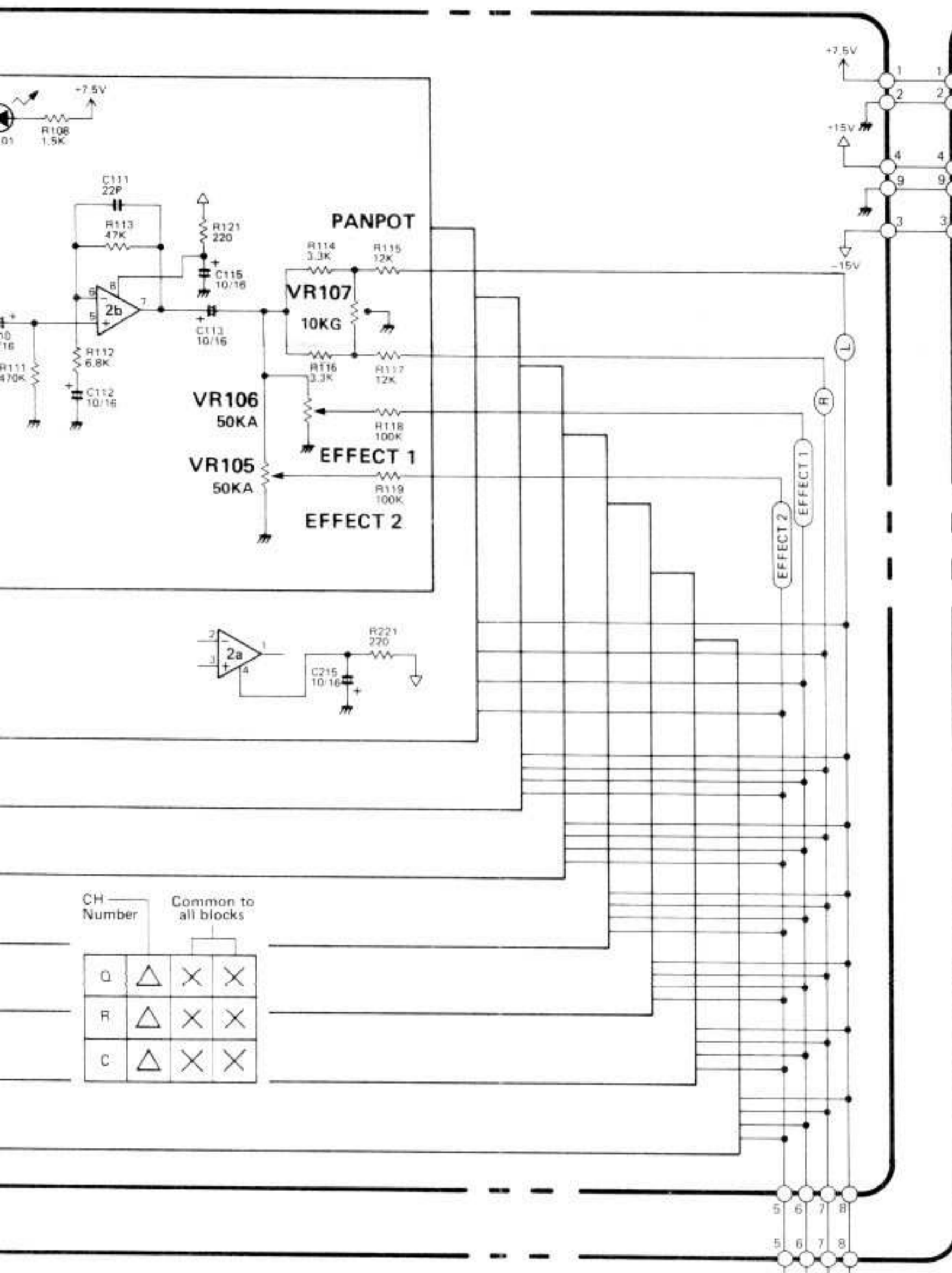


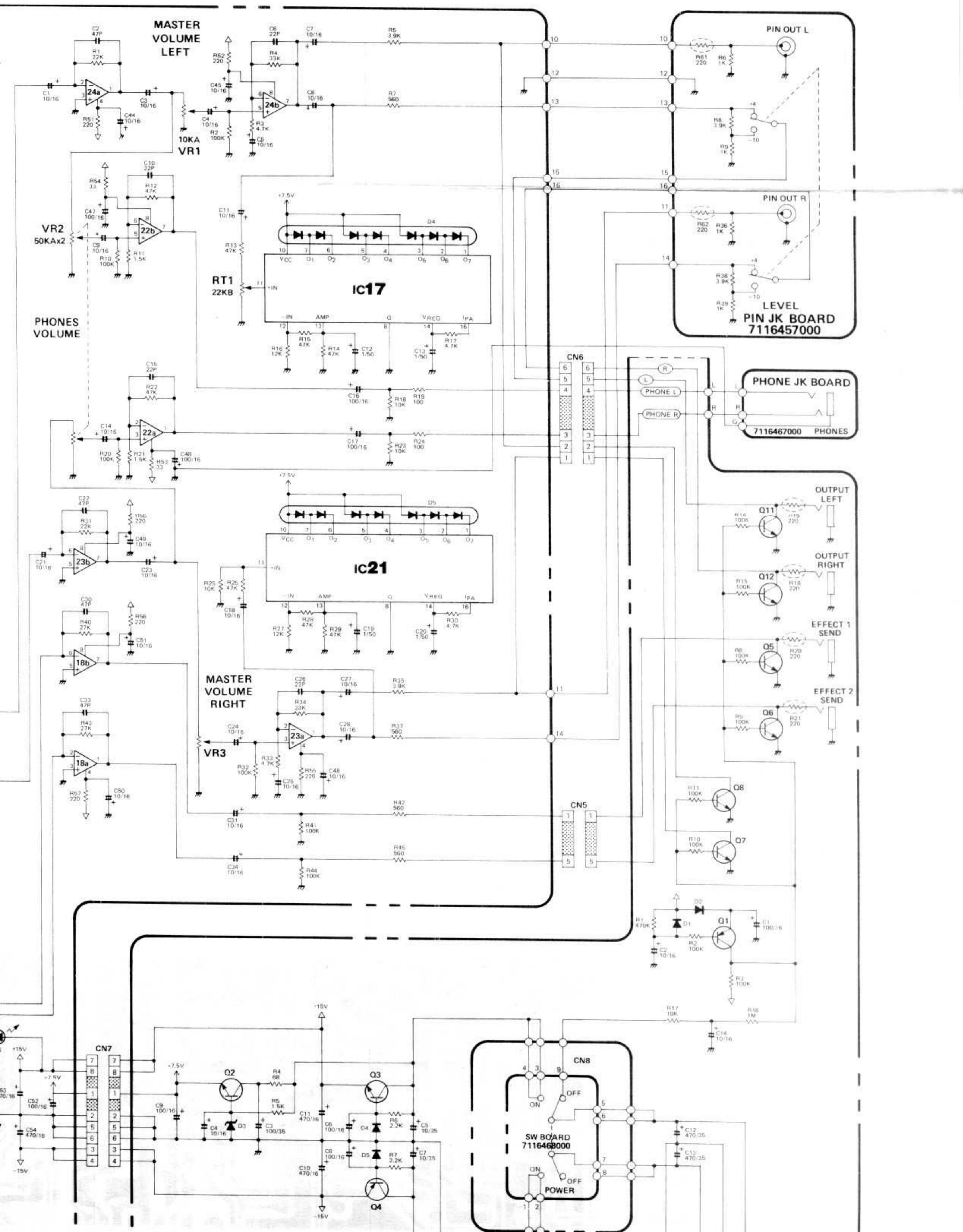
CIRCUIT DIAGRAM



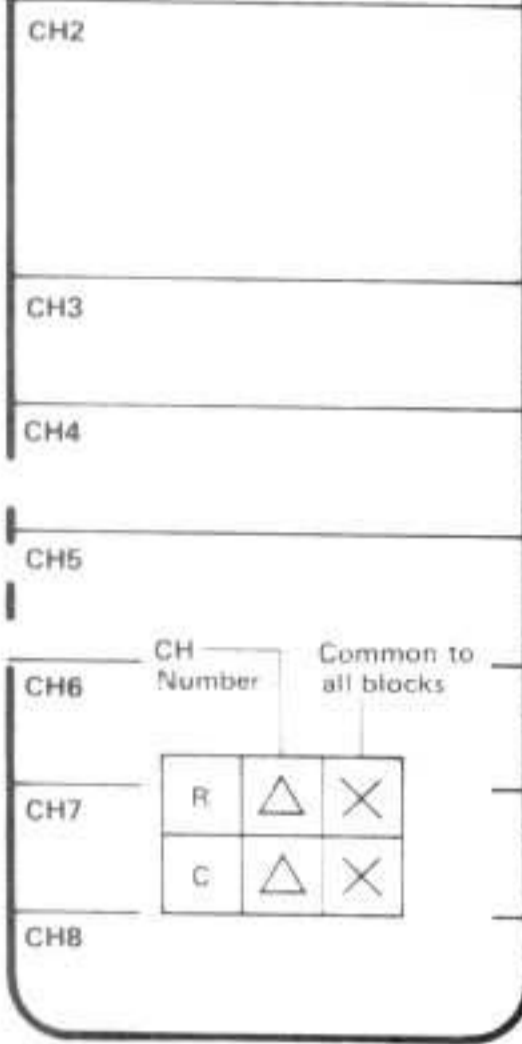
- D101 - 801 : GL-2PR2
- D102 - 802 : 1SS-133
- D103 - 803 : 1SS-133
- Q101 - 801 : 2SC2458GR
- Q102 - 802 or 2SC945 P
- IC1 - 8 : M5218L



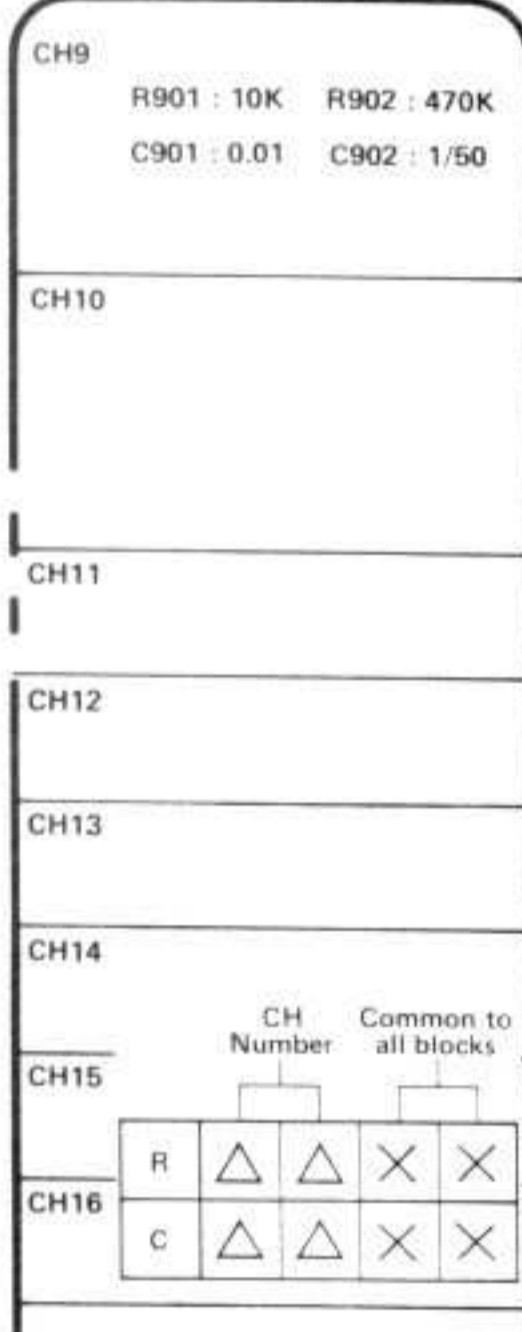
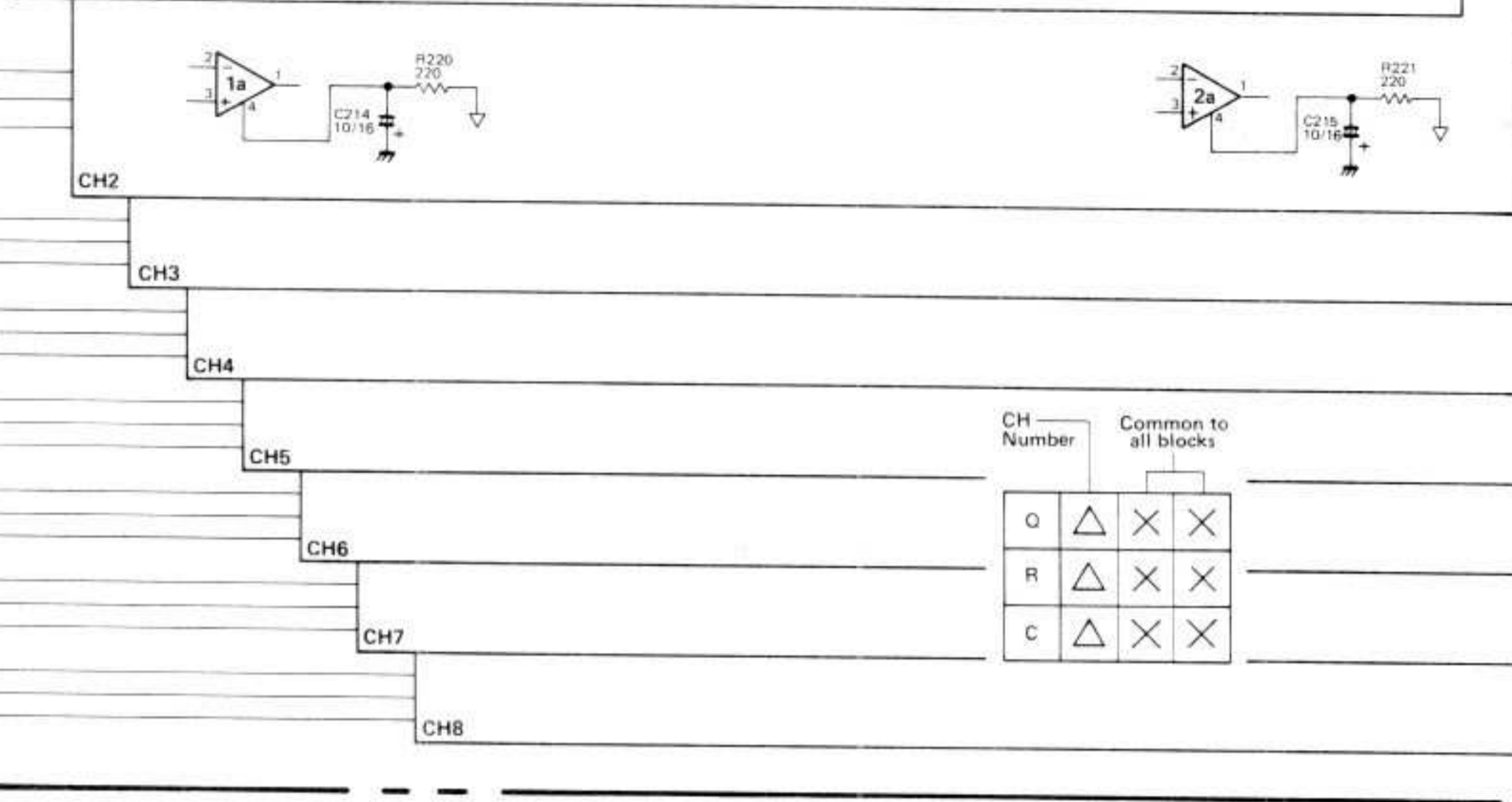
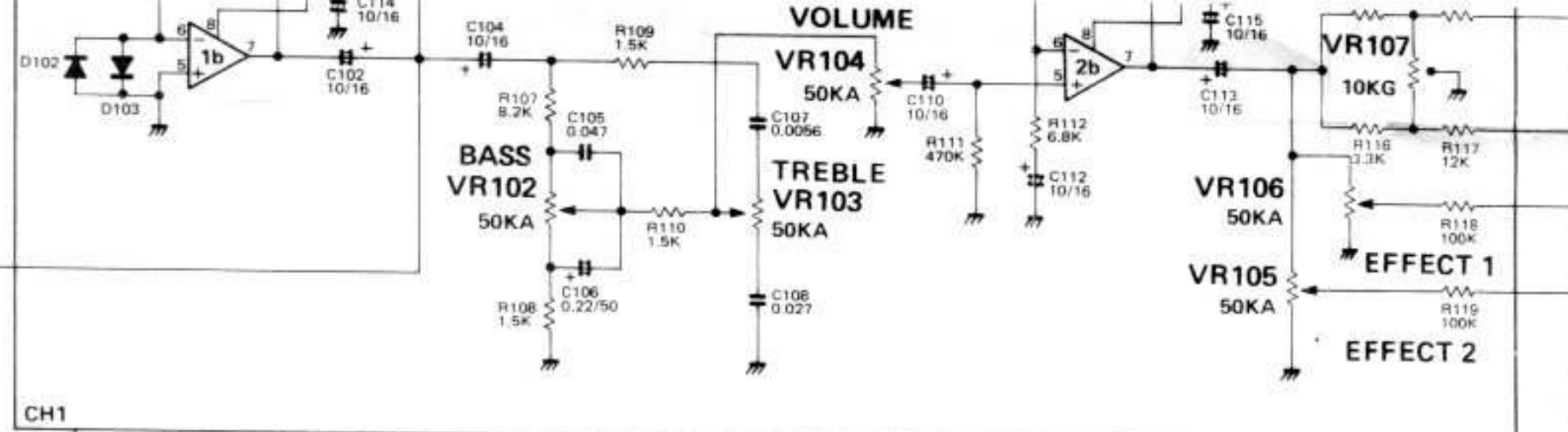




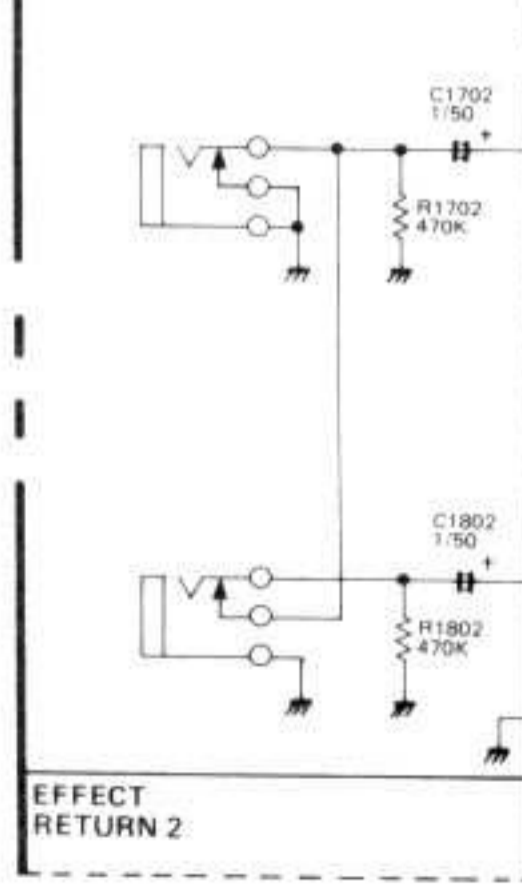
CH JK BOARD
7116462000



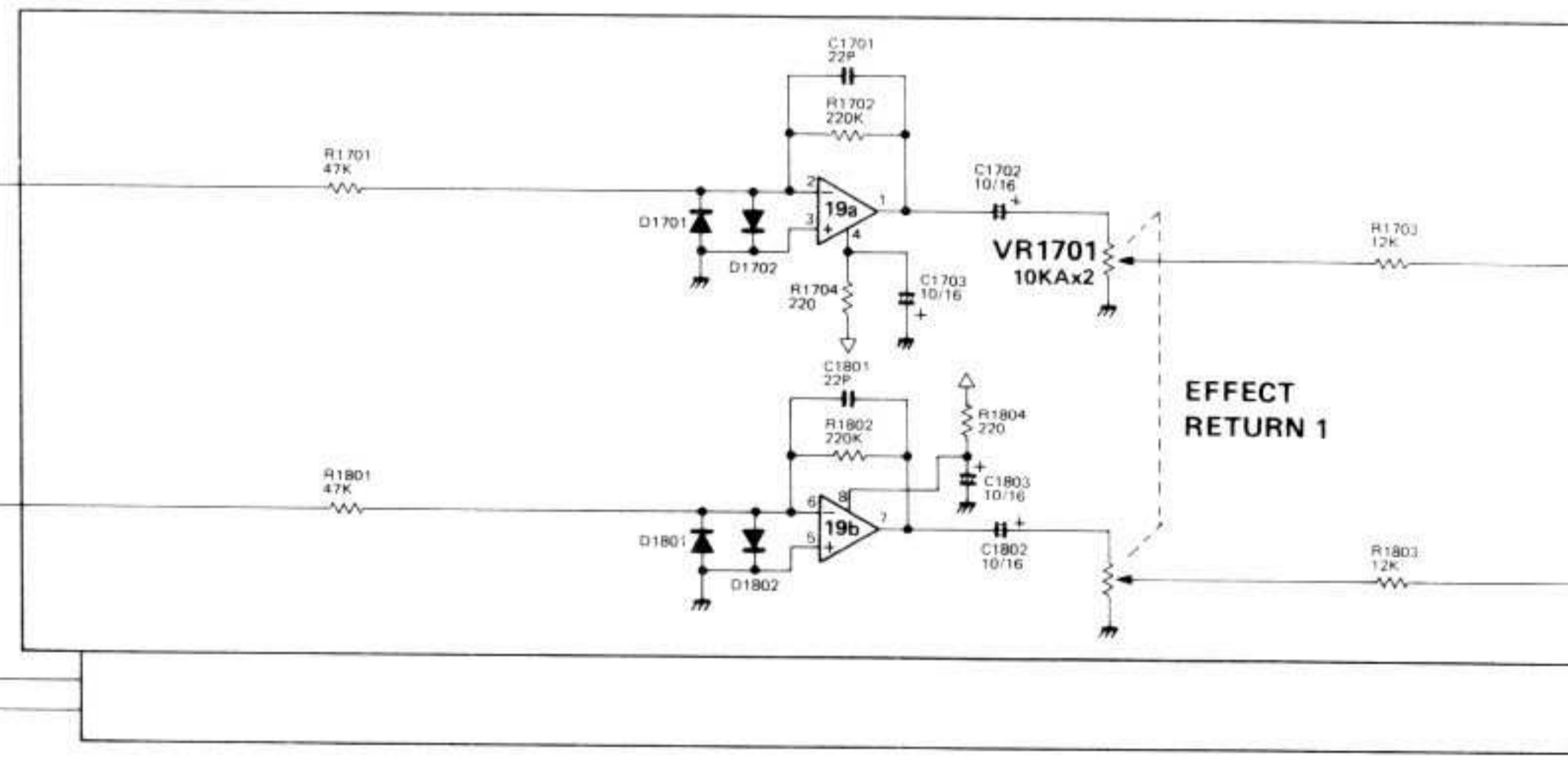
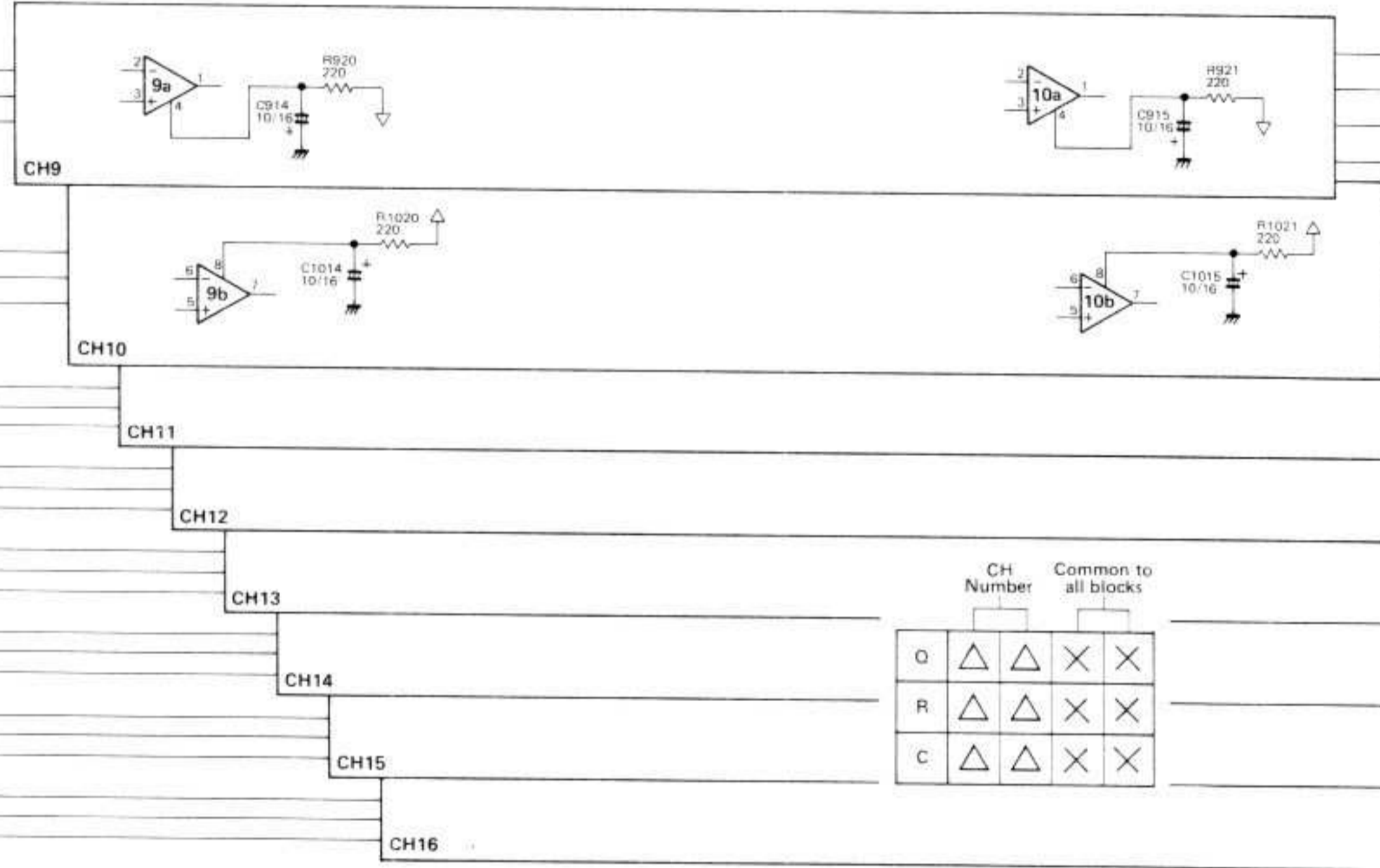
- D101 - 801 : GL 2PR2
- D102 - 802 : 1SS-133
- D103 - 803 : 1SS-133
- Q101 - 801 : 2SC2458GR
- Q102 - 802 : 2SC945-P
- IC1 - 8 : M5218L



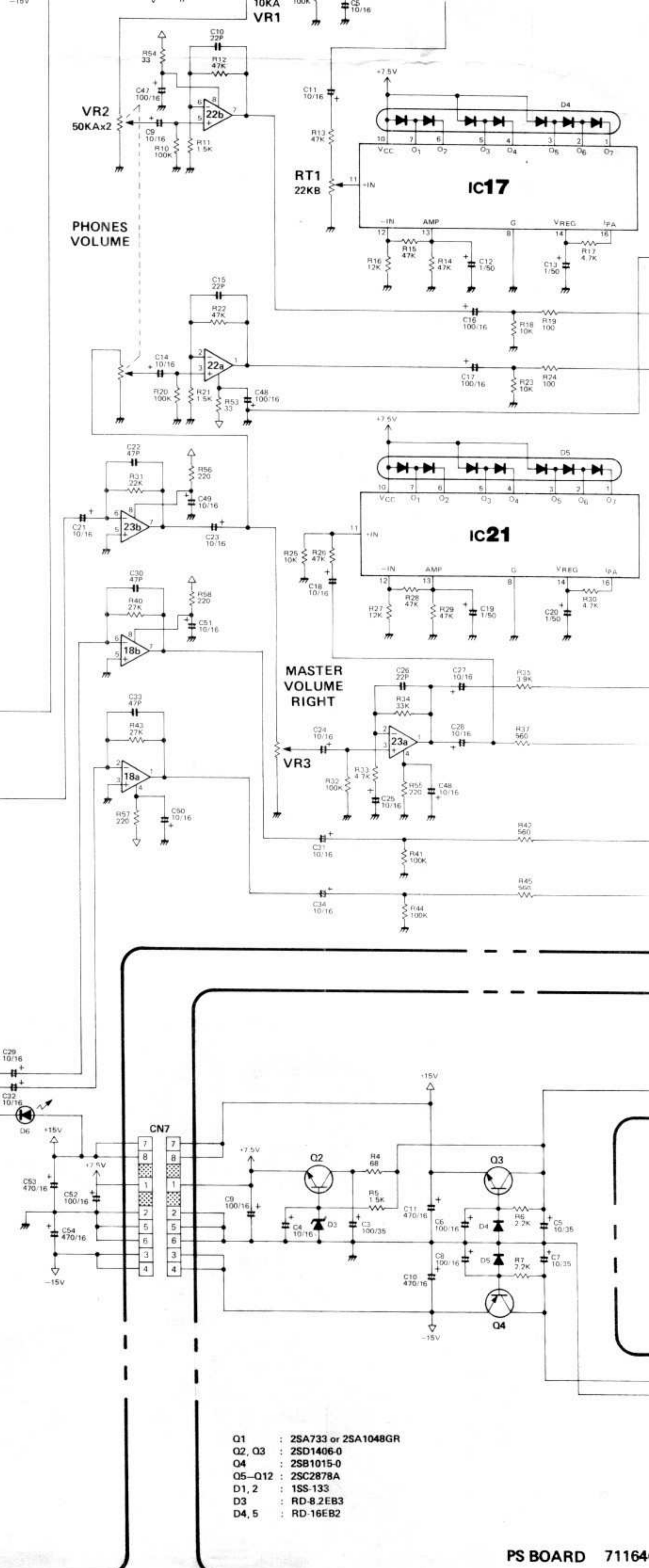
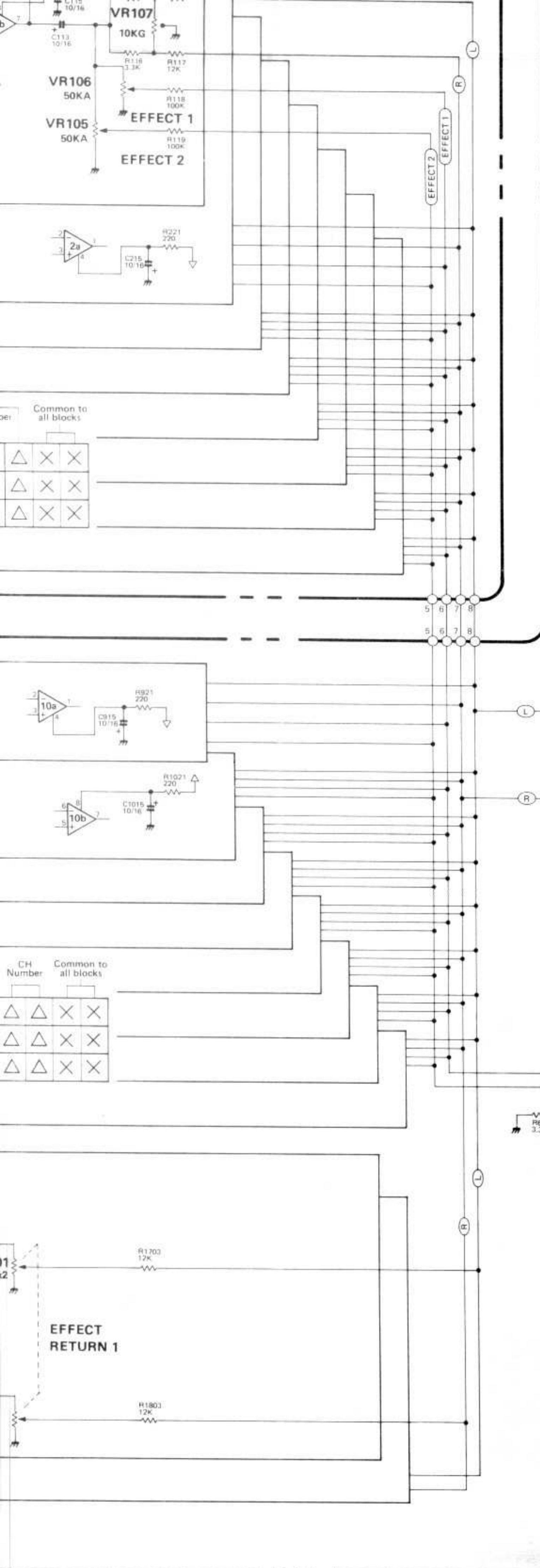
PS BOARD
7116465100



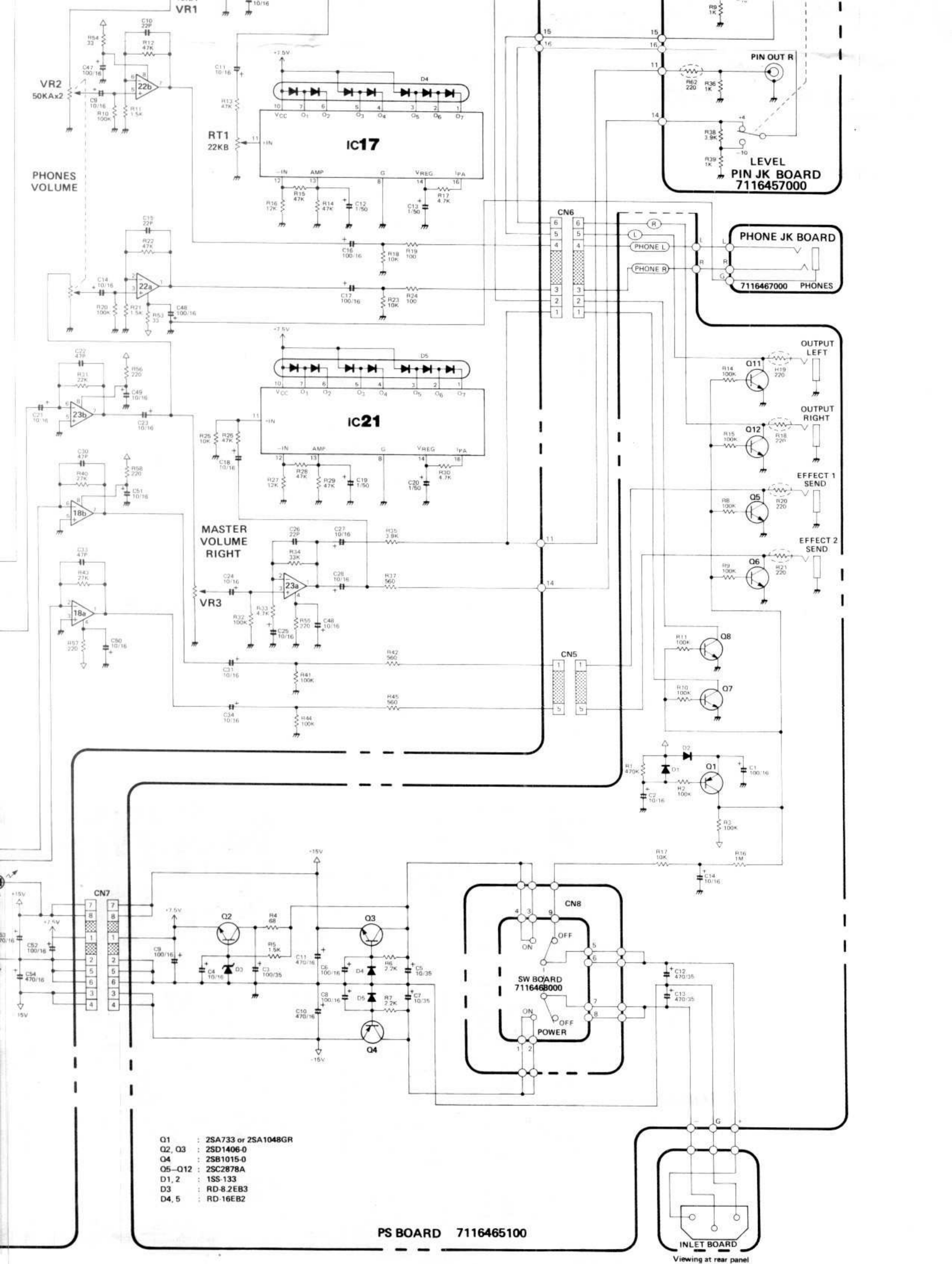
- D6 : SLP-153B
- D901 - 1601 : GL-2PR2
- D902 - 1602 : 1SS-133
- D903 - 1603 : 1SS-133
- Q901 - 2001 : 2SC2458GR or 2SC945-P
- Q902 - 2002 : 2SC2458GR or 2SC945-P
- IC9 - 22 : M5218L
- IC17, 21 : IR2E02
- IC23, 24 : M5220L



MT BOARD 7116453000



- Q1 : 2SA733 or 2SA1048GR
- Q2, Q3 : 2SD1406-0
- Q4 : 2SB1015-0
- Q5-Q12 : 2SC2878A
- D1, 2 : 1SS-133
- D3 : RD-8.2EB3
- D4, 5 : RD-16EB2



- Q1 : 2SA733 or 2SA1048GR
- Q2, Q3 : 2SD1406-0
- Q4 : 2SB1015-0
- Q5-Q12 : 2SC2878A
- D1, 2 : 1SS-133
- D3 : RD-8.2EB3
- D4, 5 : RD-16EB2

PS BOARD 7116465100

INLET BOARD
Viewing at rear panel

ADJUSTMENT

LEVEL INDICATOR CALIBRATION

EFFECT 1 RETURN : 10

MASTER FADER L/R : 10

EFFECT 1 RETURN Jack : -30dBm, 1kHz, sine

Adjust RT-1 so that Left LEVEL METER keeps pace with RIGHT LED as EFFECT RETURN 1 knob is set at different positions.

調整仕様

レベル・インジケータ校正

EFFECT 1 RETURN :10

MASTER FADER L/R :10

EFFECT 1 RETURN Jack:-30dBm, 1kHz, サイン波

EFFECT RETURNを動かした時、LEDレベル・メーターのLの点灯がRと同じレベル表示になる様に、半固定RT-1で調整する。

CHANGE INFORMATION

Add resistors

EFF : BX-8 903600-UP

: BX-16 904000-UP

Add 6 220Ω resistors

変更案内

抵抗追加

PS BOARDのOUTPUT L/R (R18, 19) 220Ω及びEFFECT SEND 1/2 (R20, 21) 220Ωを追加。PIN JK BOARDのPIN OUT L/R (R61, 62) 220Ωを追加。

実施製番:BX-8 903600

BX-16 904000

PS BOARD				PIN JK BOARD	
OUTPUT		EFFECT SEND		PIN OUT	
L	R	1	2	L	R
R19	R18	R20	R21	R61	R62

Reason : prevent electrostatic accumulation.

理由 : 静電保護のため

Change resistors

EFF : BX-8 903600-UP

: BX-16 904000-UP

Change R53 and R54 (330Ω) of MT board to fusing resistor (Part No. 12559803).

Reason : Prevent burning problem due to shorting electro cap (C47 and C48).

MT BOARDのR53, 54をヒューズ抵抗33Ω (PART No. 12559803)に変更

実施製番:BX-8 903600

BX-16 904000

理由 : ケミコン・ショート時の抵抗焼損防止

Change PHONES ground

CAUTION : This modification is mandatory . . .

Must be conducted on all products as retrofit.

EFF : BX-8 881800-UP

: BX-16 881500-UP

Change soldering point of phones return path.

Reason : Eliminate crosstalk.

PHONESグラウンドライン・ワイヤリング取り付け箇所変更

修理等の際は製造番号を確認し、変更が実施されているかを調べて下さい。

実施製番:BX-8 881800

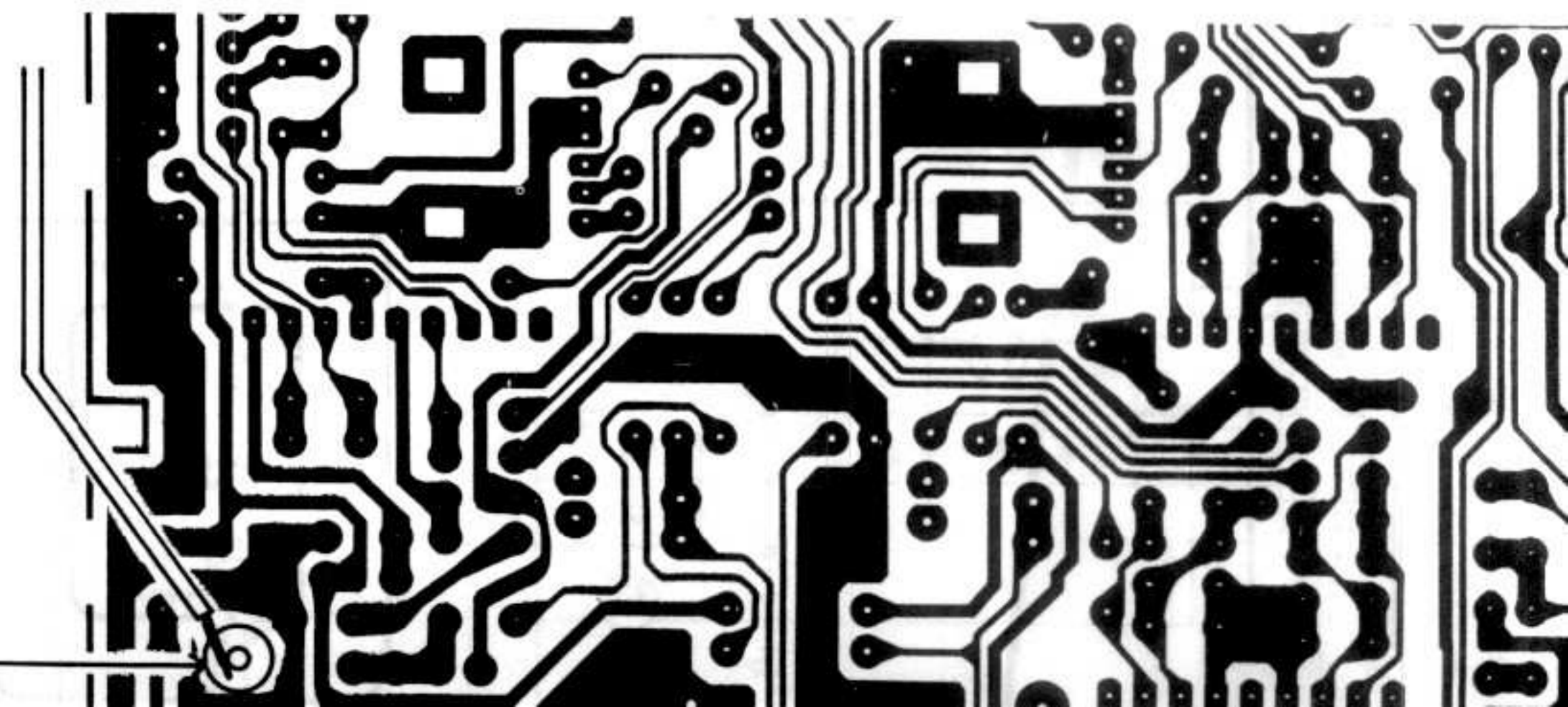
BX-16 881500

理由 : クロストーク改善の為

変更箇所: 下図参照

PHONES
GND
W.No. 3
[ORN]

Solder



CHANGE INFORMATION

Resistors

: BX-8 903600-UP

: BX-16 904000-UP

6 220Ω resistors

変更案内

抵抗追加

PS BOARDのOUTPUT L/R (R18, 19) 220Ω及びEFFECT SEND 1/2 (R20, 21) 220Ωを追加。PIN JK BOARDのPIN OUT L/R (R61, 62) 220Ωを追加。

実施製番: BX-8 903600

BX-16 904000

PS BOARD				PIN JK BOARD	
OUTPUT		EFFECT SEND		PIN OUT	
L	R	1	2	L	R
R19	R18	R20	R21	R61	R62

Prevent electrostatic accumulation.

Resistors

: BX-8 903600-UP

: BX-16 904000-UP

R53 and R54 (330Ω) of MT board to fusing part No. 12559803).

Prevent burning problem due to shorting electro cap (C47 and C48).

理由 : 静電保護のため

MT BOARDのR53, 54をヒューズ抵抗33Ω (PART No. 12559803) に変更

実施製番: BX-8 903600

BX-16 904000

理由 : ケミコン・ショート時の抵抗焼損防止

PHONES ground

This modification is mandatory . . .

conducted on all products as retrofit.

: BX-8 881800-UP

: BX-16 881500-UP

Considering point of phones return path.

Eliminate crosstalk.

PHONESグラウンドライン・ワイヤリング取り付け箇所変更

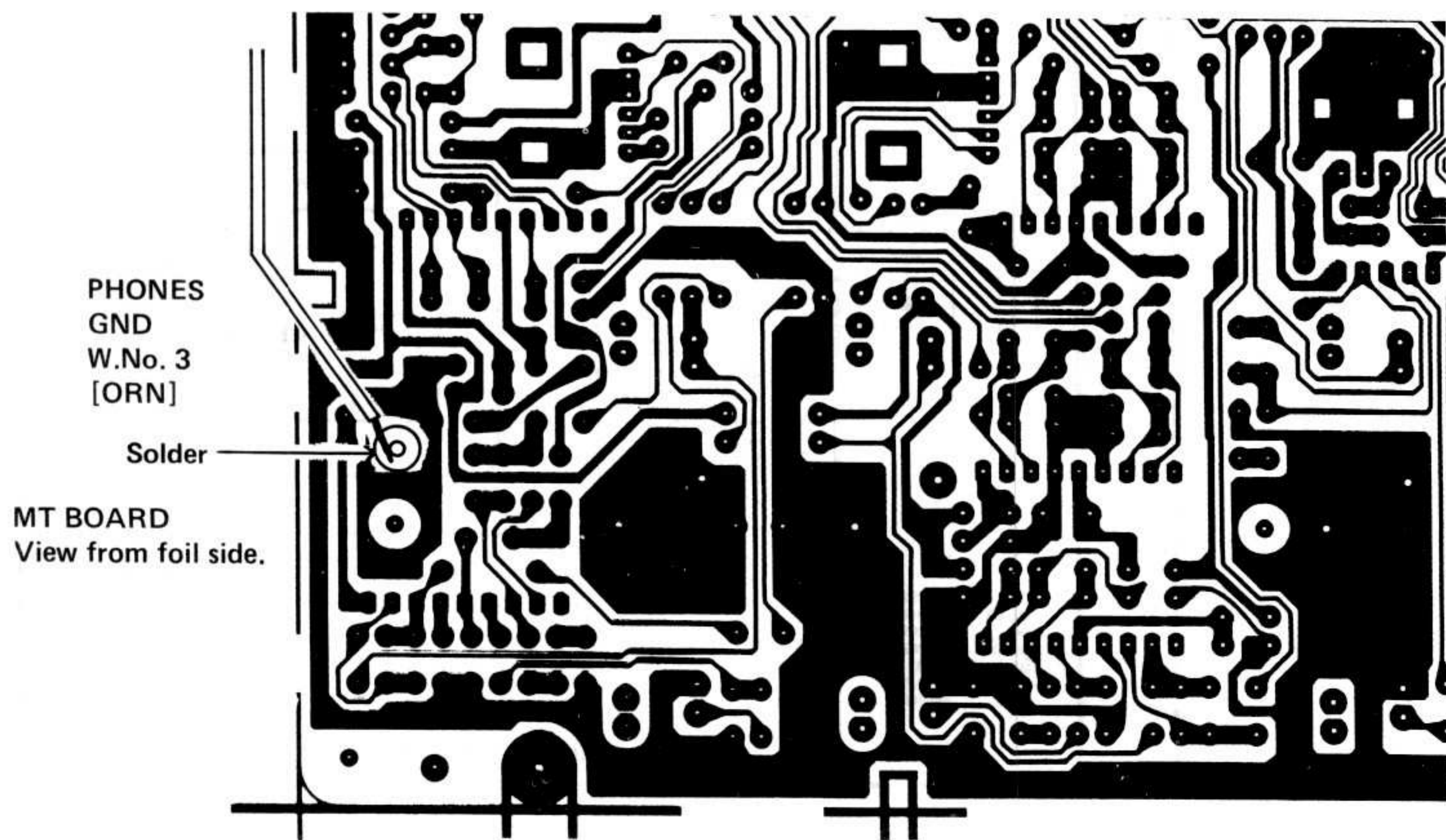
修理等の際は製造番号を確認し、変更が実施されているかを調べて下さい。

実施製番: BX-8 881800

BX-16 881500

理由 : クロストーク改善の為

変更箇所: 下図参照



CHANGE INFORMATION

Add resistors

EFF : BX-8 903600-UP
 : BX-16 904000-UP
 Add 6 220Ω resistors

変更案内

抵抗追加

PS BOARDのOUTPUT L/R (R18, 19) 220Ω及びEFFECT SEND 1/2 (R20, 21) 220Ωを追加。PIN JK BOARDのPIN OUT L/R (R61, 62) 220Ωを追加。

実施製番: BX-8 903600
 BX-16 904000

PS BOARD				PIN JK BOARD	
OUTPUT		EFFECT SEND		PIN OUT	
L	R	1	2	L	R
R19	R18	R20	R21	R61	R62

Reason : prevent electrostatic accumulation.

理由 : 静電保護のため

Change resistors

EFF : BX-8 903600-UP
 : BX-16 904000-UP

Change R53 and R54 (330Ω) of MT board to fusing resistor (Part No. 12559803).

Reason : Prevent burning problem due to shorting electro cap (C47 and C48).

MT BOARDのR53, 54をヒューズ抵抗33Ω (PART No. 12559803) に変更

実施製番: BX-8 903600
 BX-16 904000

理由 : ケミコン・ショート時の抵抗焼損防止

Change PHONES ground

CAUTION : This modification is mandatory . . .

Must be conducted on all products as retrofit.

EFF : BX-8 881800-UP
 : BX-16 881500-UP

Change soldering point of phones return path.

Reason : Eliminate crosstalk.

PHONESグラウンドライン・ワイヤリング取り付け箇所変更

修理等の際は製造番号を確認し、変更が実施されているかを調べて下さい。

実施製番: BX-8 881800
 BX-16 881500

理由 : クロストーク改善の為

変更箇所: 下図参照

