

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
1.5kΩ to 100kΩ

Output Level (Standard Phone Jack)
Rated: +4dBm/-10dBm
Maximum: +21dBm

Output Level (Pin Jack)
Rated: -10dBm
Maximum: +7dBm

Output Load Impedance
More than 10kΩ

Effect Send
Output Level (Rated): -20dBm
Output Load Impedance: more than 10kΩ

Effect Return
Input Level (Rated): -20dBm
Input Impedance: 47kΩ

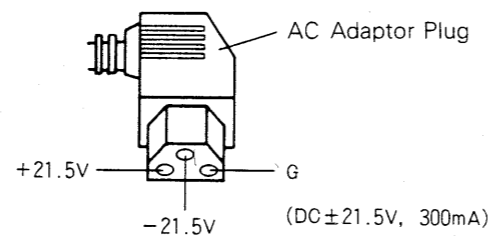
Equalizer
Treble: ±10dBm/10kHz
Bass: ±10dBm/100Hz

Headphones
50mW/30Ω

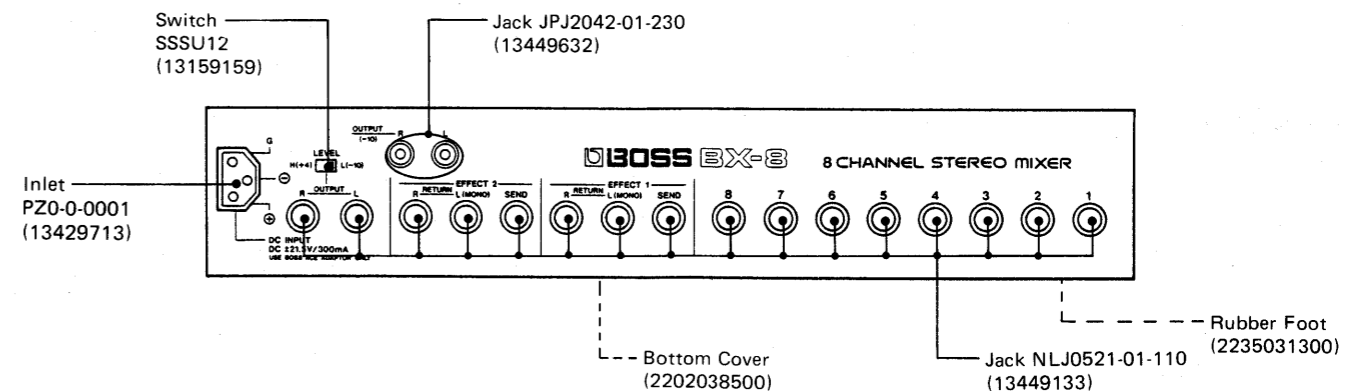
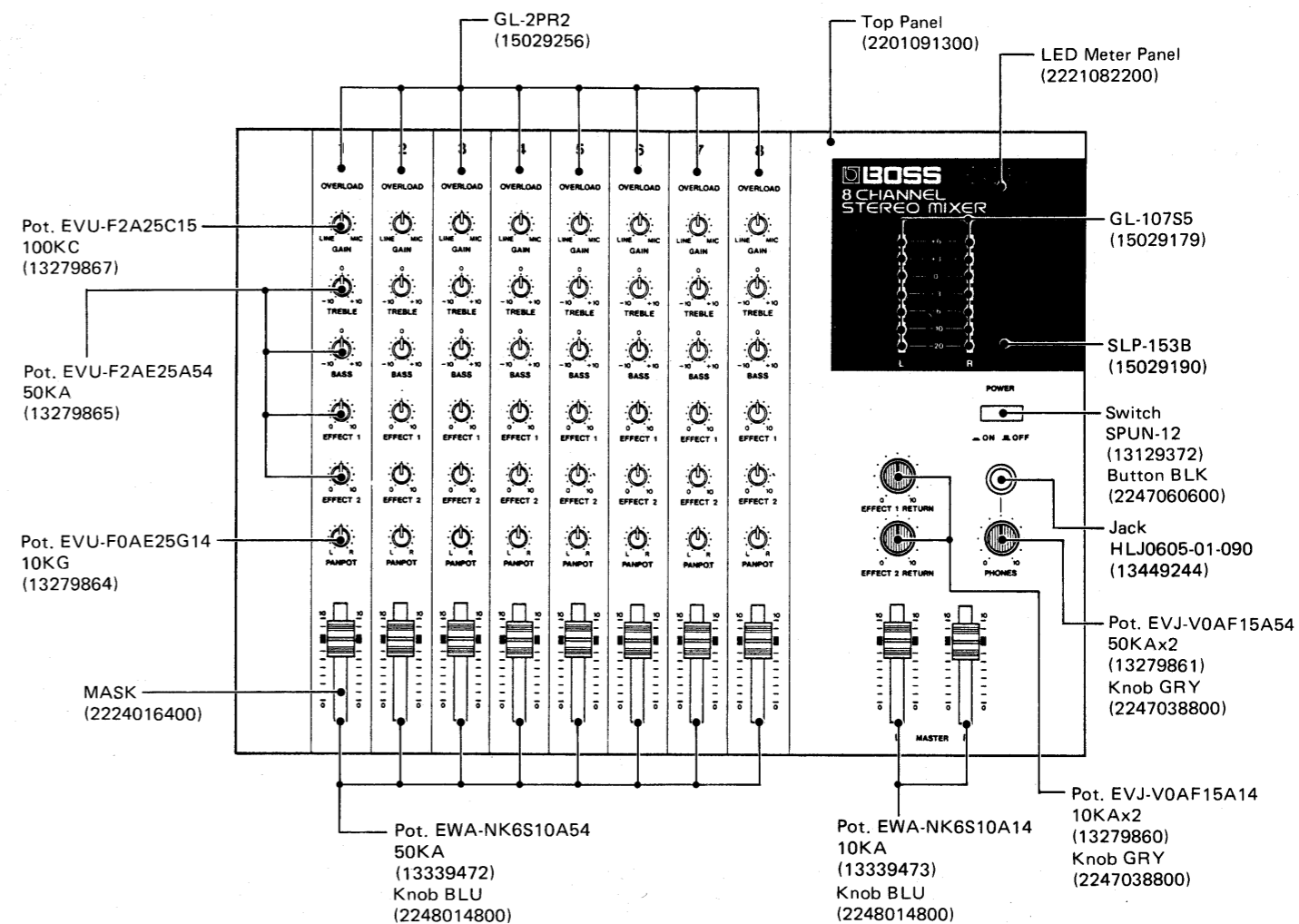
Equivalent Input Noise
-115 dBm (IHF-A)

Frequency Response (at the minimum gain)
20Hz to 40kHz (+0, -3dB)
@0dBm = 0.775V

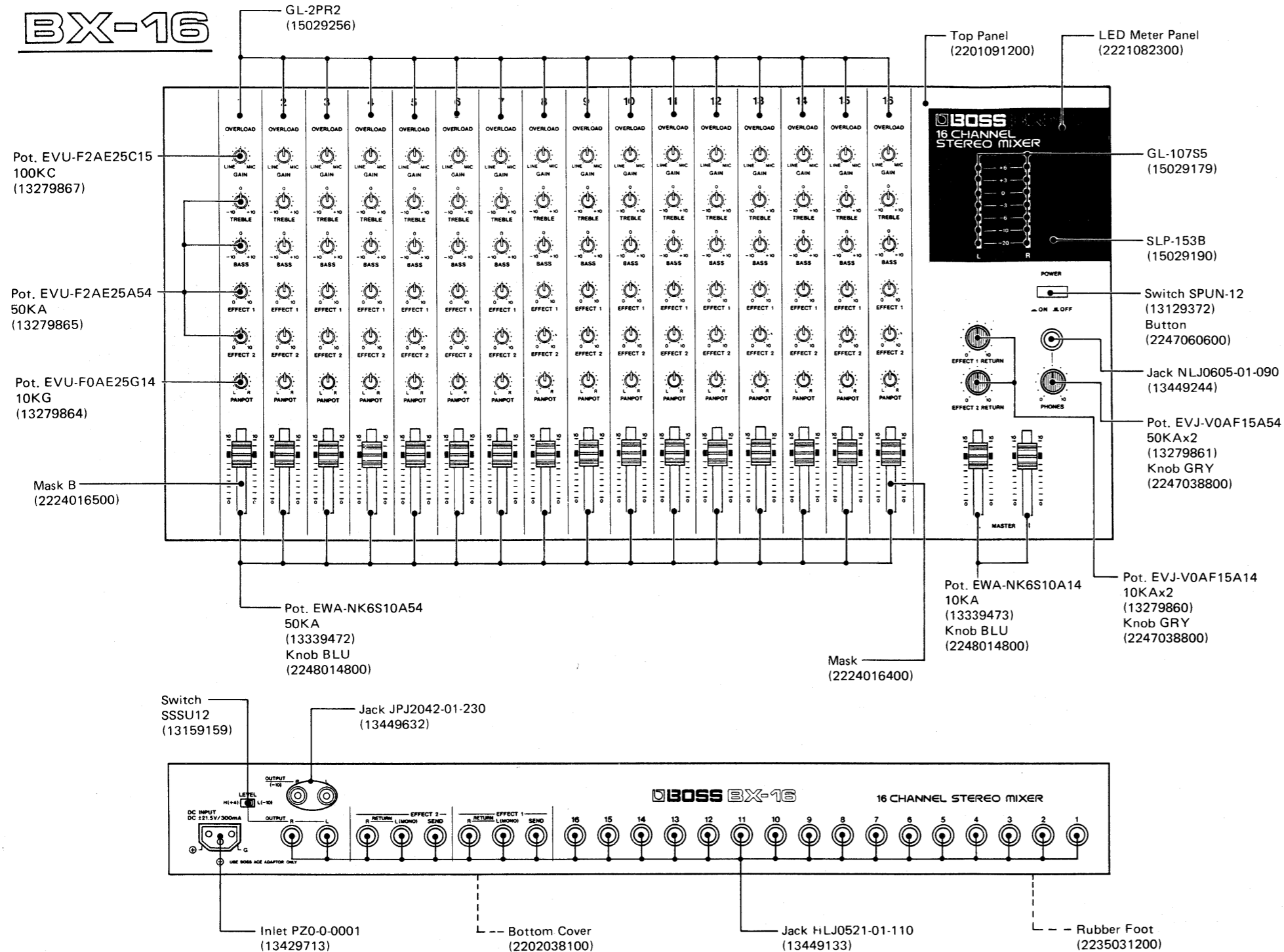
Accessory
AC Adaptor (BOSS ACE-100,120,220,240A or 240E)



BX-8



BX-16



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 | SSU12 | 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 PZO-0-0001 | 3P |
| 2220017800 | Inlet Holder | |
| 2224016400 | Mask | |
| 2246012501 | Heat Sink | |
| ----- | Snap Plate | HLJ-0999-01-480 |

PARTS LIST

EXCLUSIVE PARTS

BX-8 CASING

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

MISCELLANEOUS

| | |
|------------|-------------|
| 2220015400 | Jack Holder |
|------------|-------------|

BX-16

CASING

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

PCB ASSY

| | | |
|---|-------------|------------------|
| 7116460000 | CH Board | (pcb 2292055100) |
| Replacement CH Board includes CH JK Board | | |
| 補修用 CH BOARDはCH JK BOARDを含みます。 | | |
| | CH JK Board | (pcb 2292055100) |

MISCELLANEOUS

| | |
|------------|---------------|
| 2220014000 | Jack Holder A |
| 2224016500 | Mask B |

COMMON PARTS

KNOB

| | | |
|------------|-----|--------|
| 2247038800 | GRY | Rotary |
| 2248014800 | BLU | Slide |

BUTTON

| | | |
|------------|-----|-------|
| 2247060600 | BLK | POWER |
|------------|-----|-------|

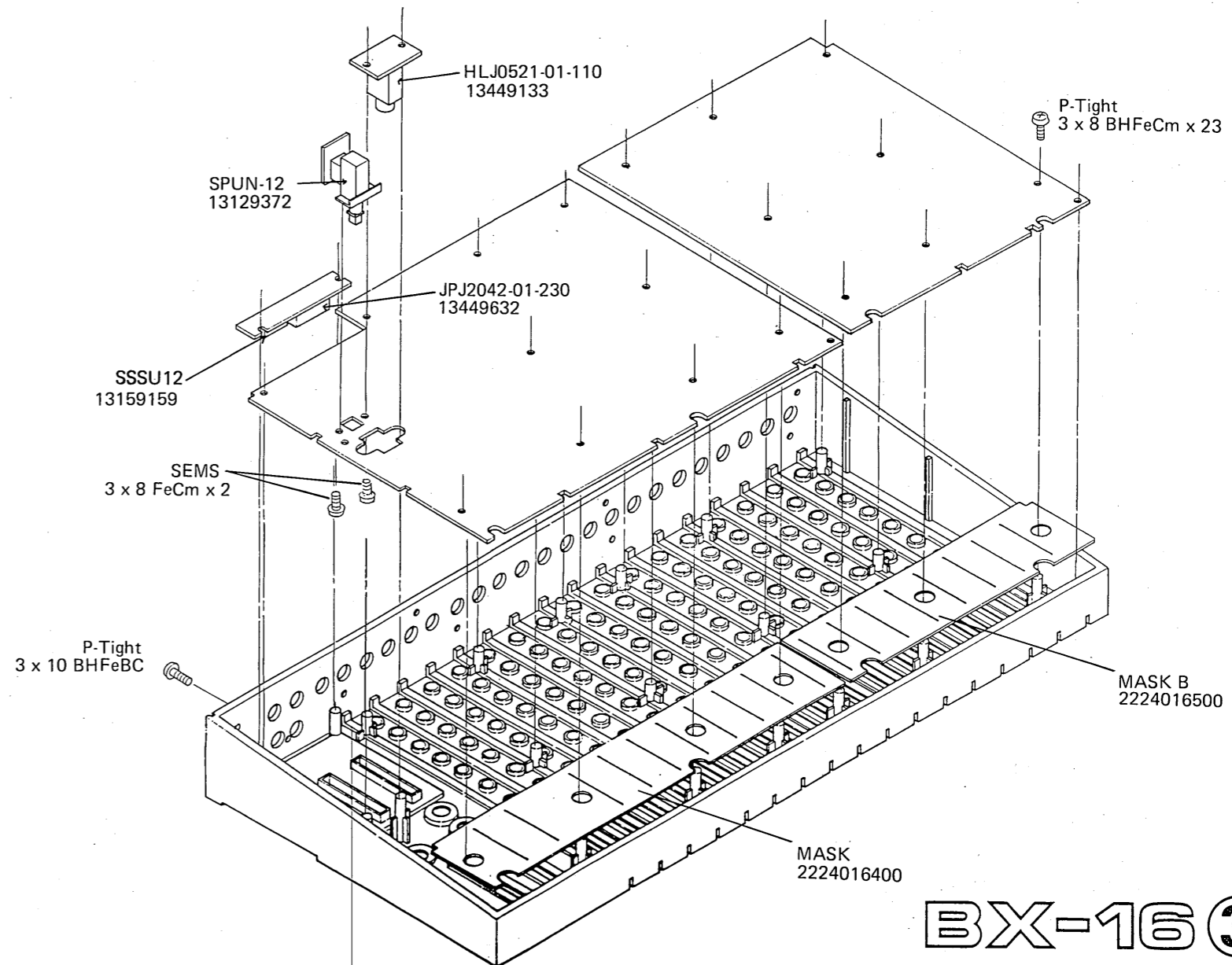
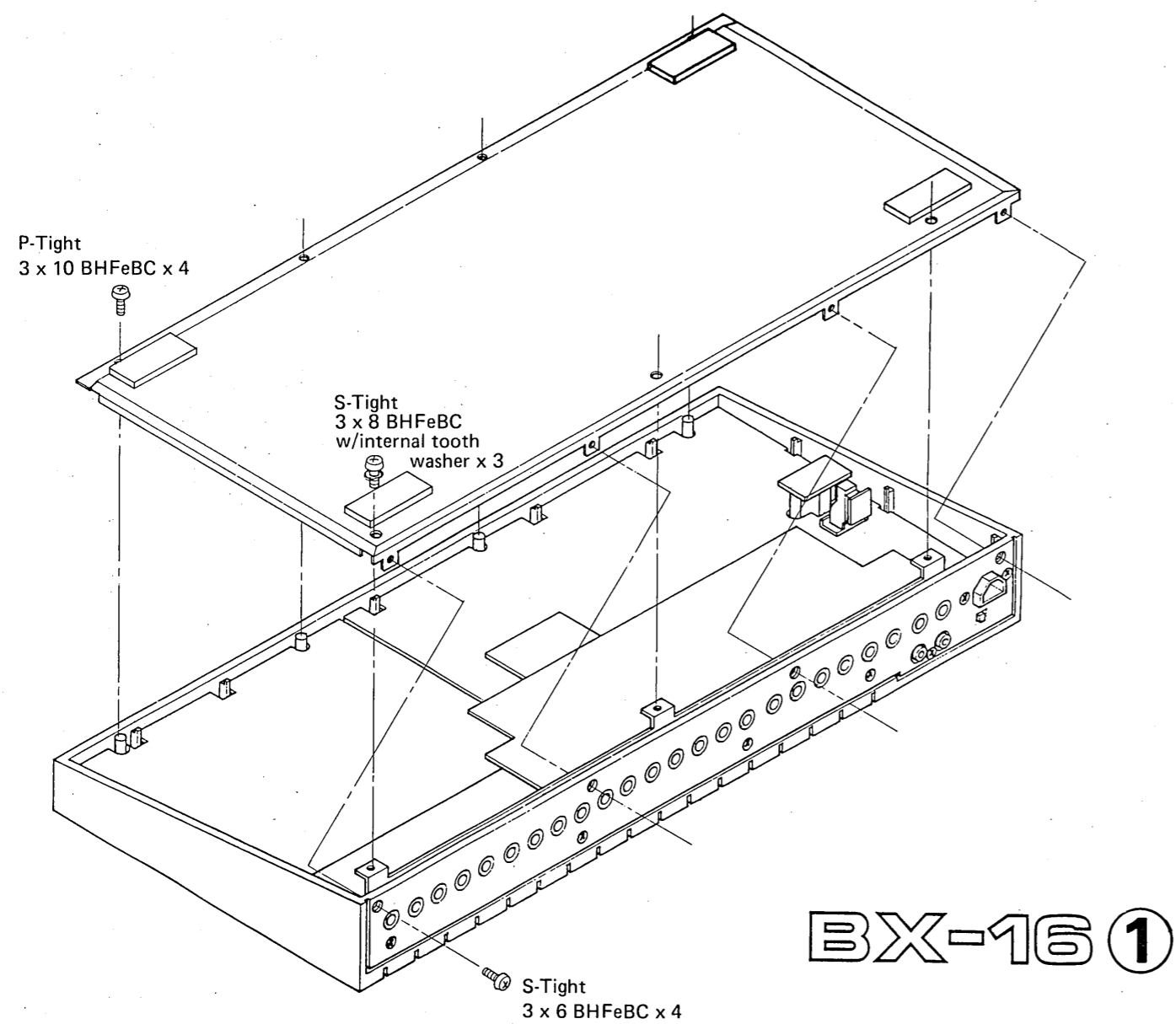
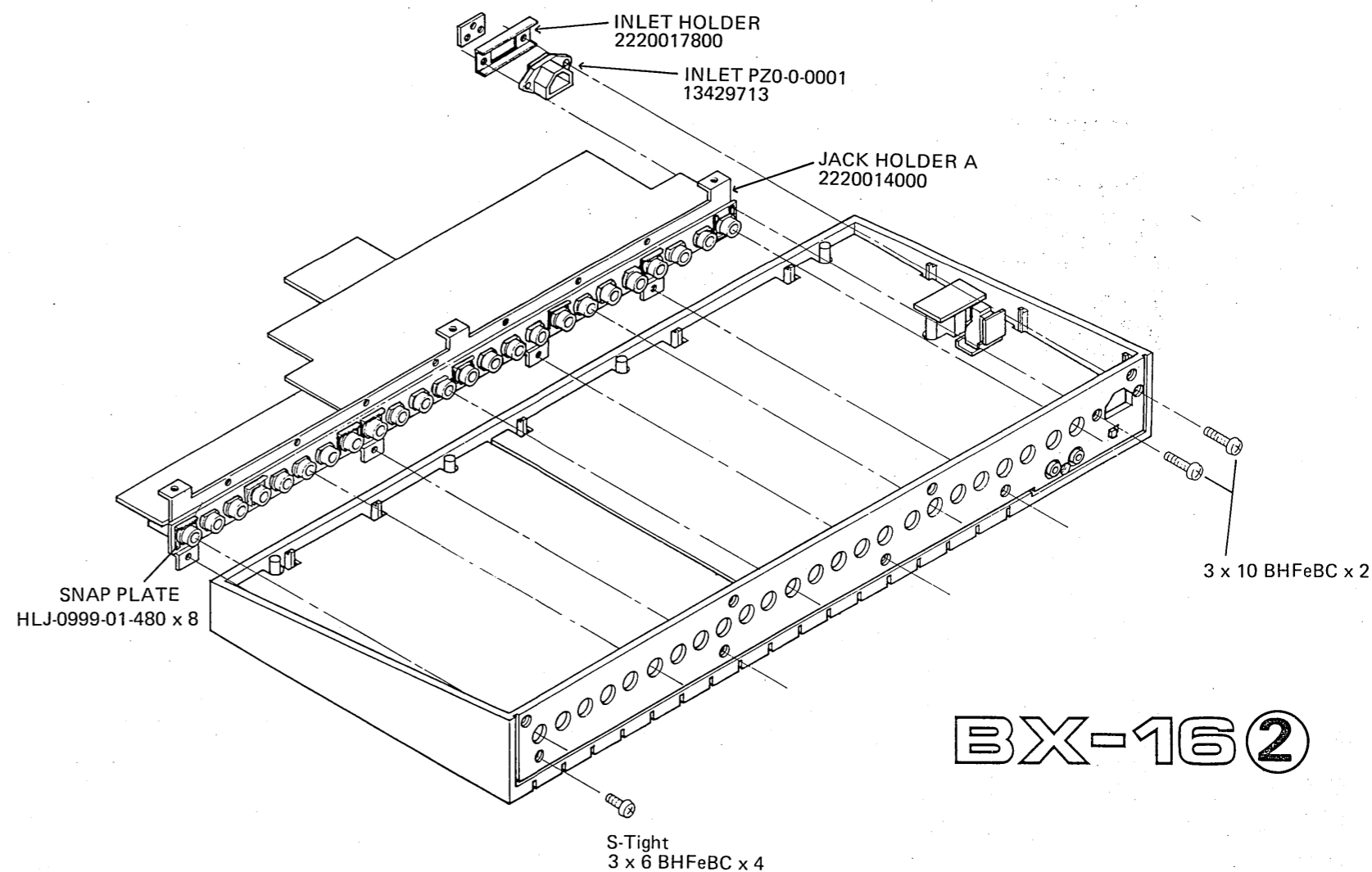
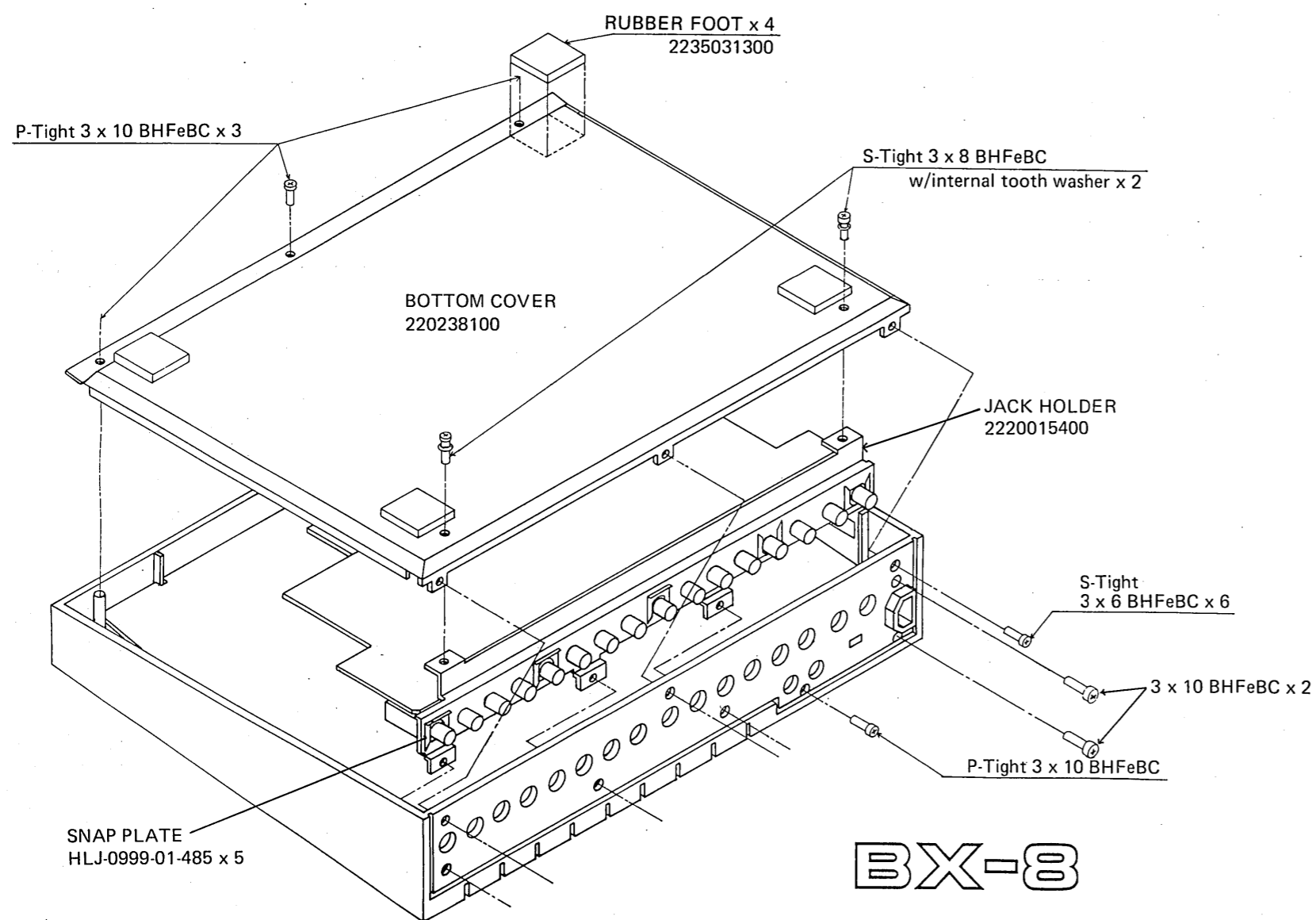
JACK

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

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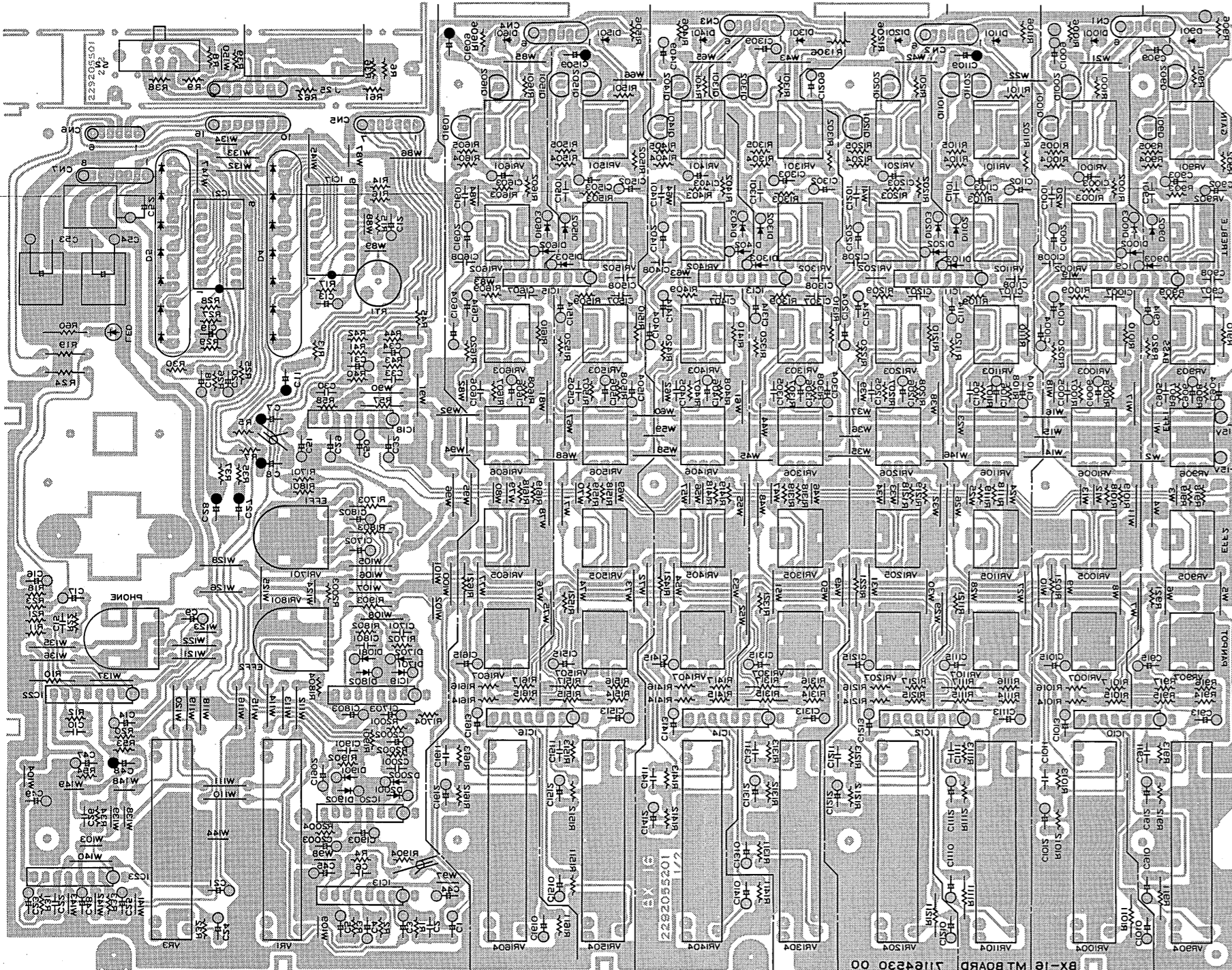
EXPLODED VIEW

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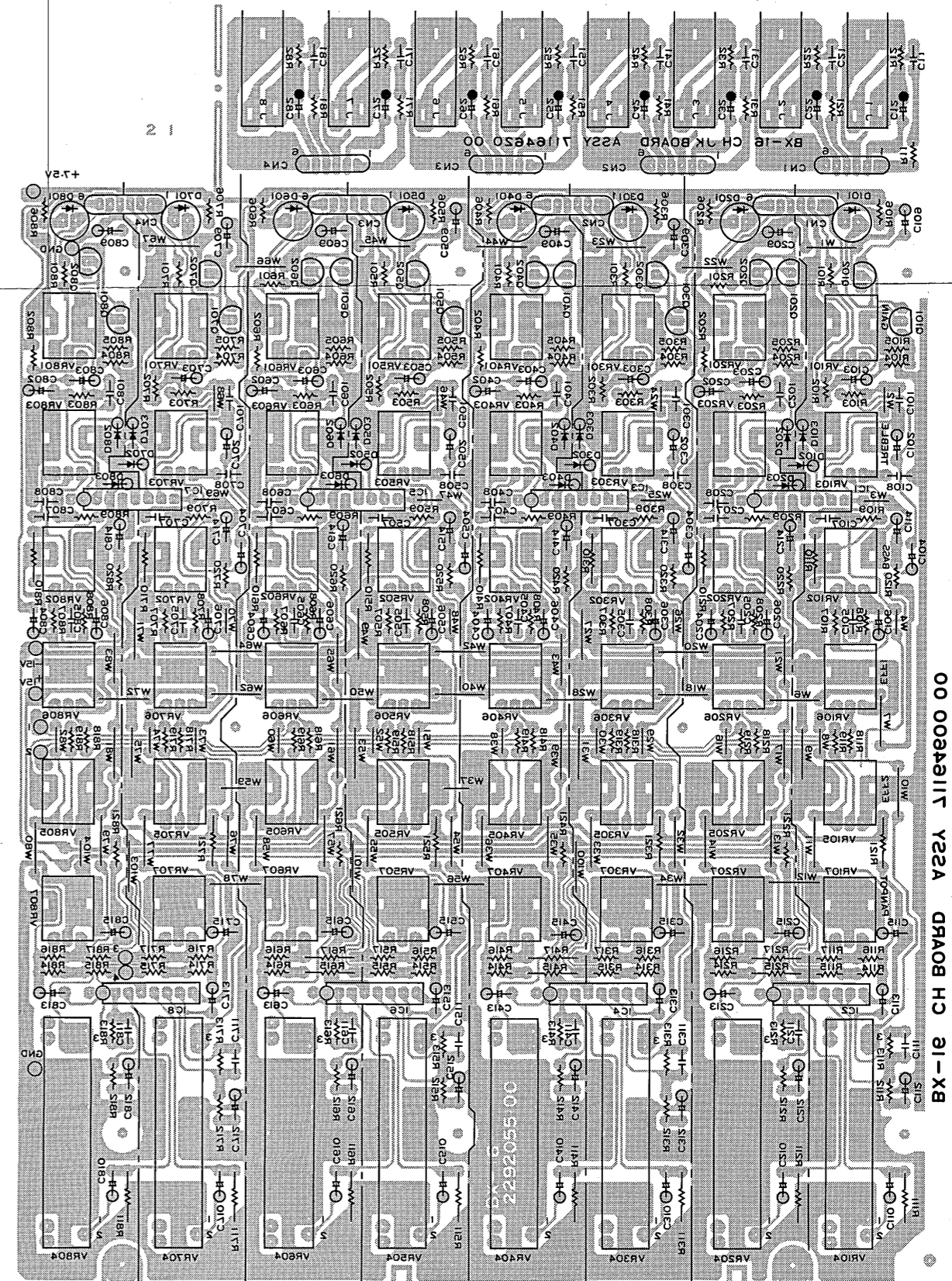
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PIN JK BOARD



View from foil side.

CH JK BOARD
Only for BX-16



View from foil side.

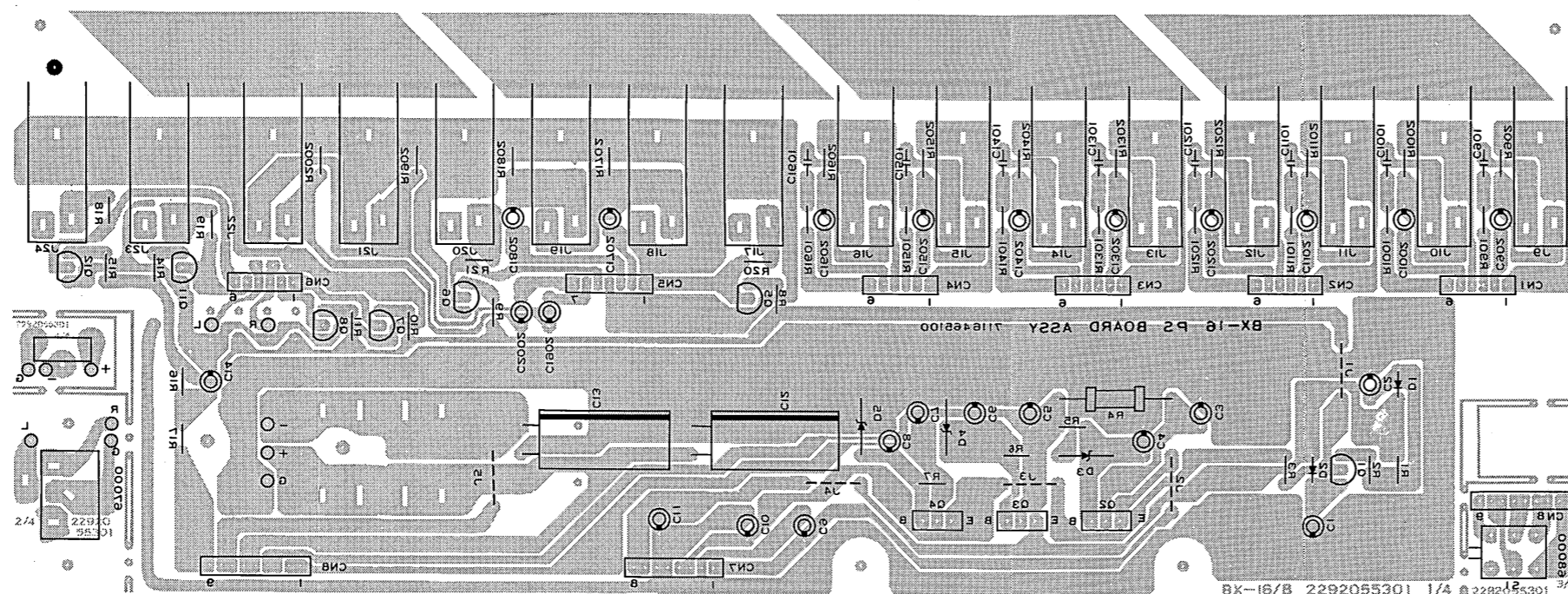
MT BOARD
Assy 711645300
(pcb 2292055200)
Replacement MT Board includes Pin JK Board.
補修用MT BOARDは
PIN JK BOARDを含みます。

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
以下の基板を含みます。
・PHONE JK BOARD
・SW BOARD
・INLET BOARD

INLET BOARD

PHONE JK BOARD



View from foil side.

SW BOARD

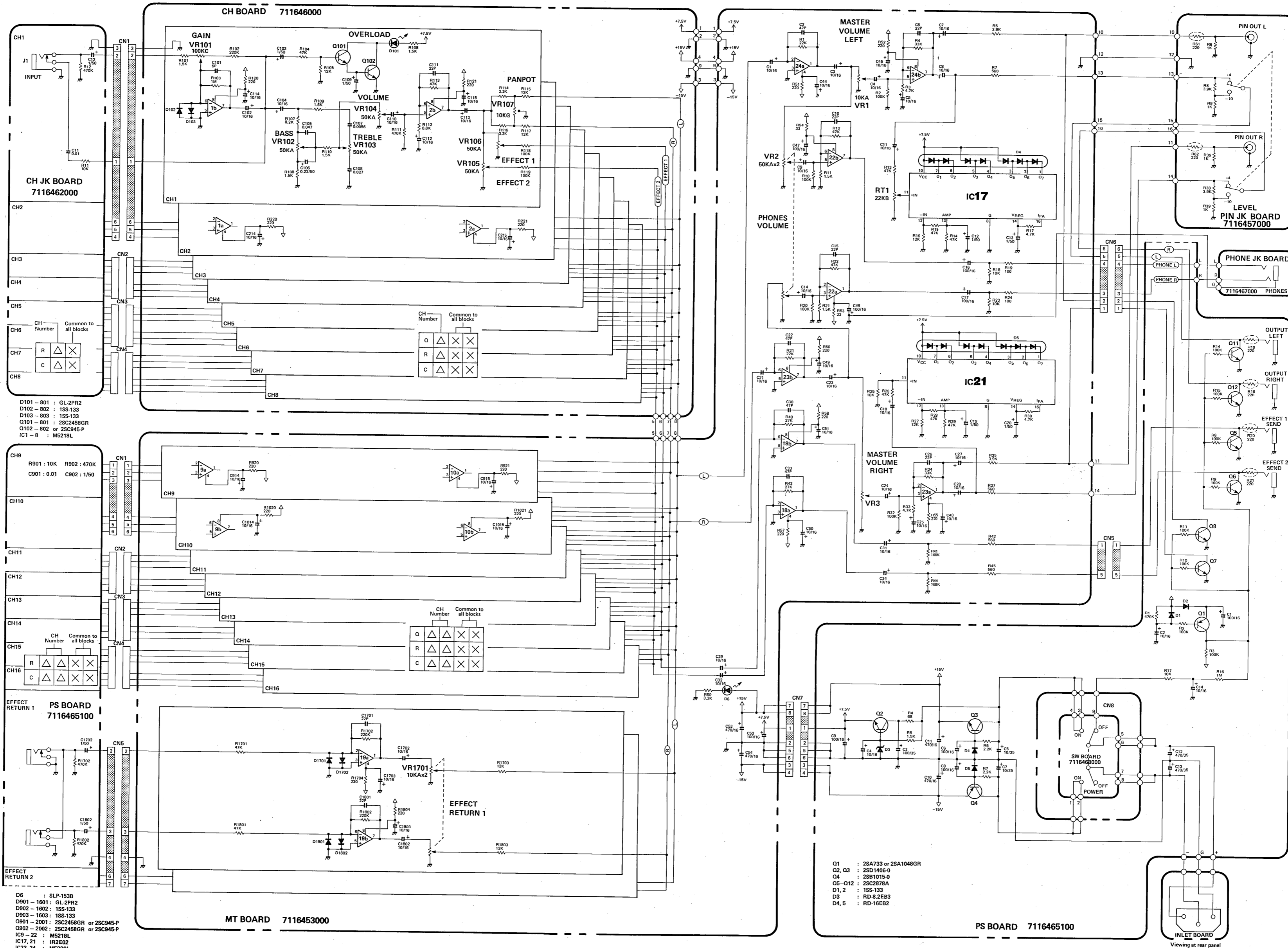
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BX-1E CH BOARD Y22A 11E4800 00

BX-16/B 2292055301 1/4 2292055301 3/4

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 39 40 41 42 43 44 45 46 47

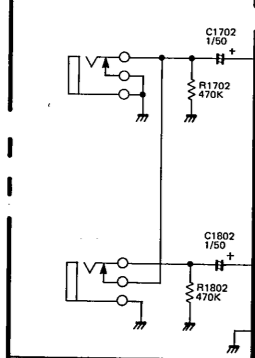
CIRCUIT DIAGRAM



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

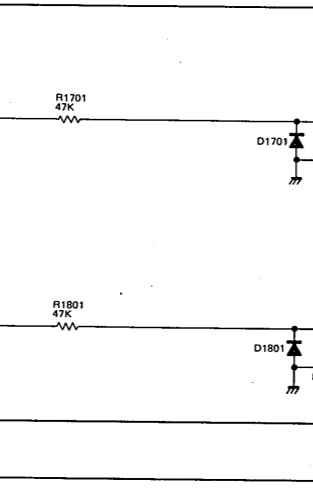
- R901 : 10K R902 : 470K
- C901 : 0.01 C902 : 1/50

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

PS BOARD 7116465100

Viewing at rear panel

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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

