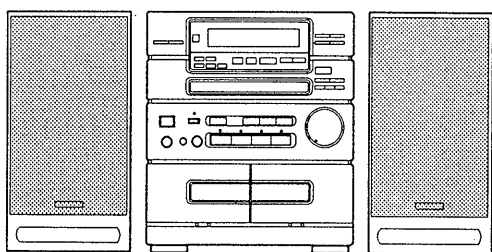


# aiwa

## XG - 320 NSX - 320 CX - N3100



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM - 3 PR3
- BASIC CD MECHANISM : KSL - 2101ABM
- TYPE. D(XG-320), U(CX-3100)
- TYPE. HE, LH, E, K, Z, U(NSX-320)

製品コード : 83NX2 - 0110

| SYSTEM    | CD - CASSEIVER | REMOTE<br>CONTROLLER | SPEAKER   |
|-----------|----------------|----------------------|-----------|
| XG - 320  | CX - N320      | RC - TN320           | SX - N320 |
| NSX - 320 | CX - N320      | RC - TN320           | SX - N320 |

MANUAL  
SERVICE

## TABLE OF CONTENTS

|                                                                             |      |
|-----------------------------------------------------------------------------|------|
| • SPECIFICATIONS .....                                                      | 3, 4 |
| • PROTECTION OFF EYES FROM LASER BEAM DURING SERVICING .....                | 5    |
| • ELECTRICAL MAIN PARTS LIST .....                                          | 6    |
| • CHIP RESISTOR PART CODE .....                                             | 10   |
| • TRANSISTOR ILLUSTRATION .....                                             | 11   |
| • FL DIAGRAM .....                                                          | 12   |
| • BLOCK DIAGRAM—1 ~6 .....                                                  | 13   |
| • SCHEMATIC DIAGRAM—1 (D Model) .....                                       | 25   |
| • WIRING—1 (D Model) .....                                                  | 27   |
| • SCHEMATIC DIAGRAM—2 (LH, HE, U Models) .....                              | 29   |
| • WIRING—2 (HE, LH, U Models) .....                                         | 31   |
| • SCHEMATIC DIAGRAM—3 (E, K Models) .....                                   | 33   |
| • WIRING—3 (E, K Models) .....                                              | 35   |
| • SCHEMATIC DIAGRAM—4 (Z Model) .....                                       | 37   |
| • WIRING—4 (Z Model) .....                                                  | 39   |
| • SCHEMATIC DIAGRAM—5 .....                                                 | 41   |
| • WIRING—5 .....                                                            | 43   |
| • SCHEMATIC DIAGRAM—6 .....                                                 | 45   |
| • WIRING—6 .....                                                            | 47   |
| • WIRING—7 .....                                                            | 49   |
| • ADJUSTMENT 1~3 .....                                                      | 50   |
| • MECHANICAL EXPLODED VIEW—1~2 /<br>MECHANICAL PARTS LIST—1~2 .....         | 62   |
| • DECK MECHANISM EXPLODED VIEW—1~2 /<br>DECK MECHANISM PARTS LIST—1~2 ..... | 66   |
| • CD MECHANISM EXPLODED VIEW—1~2 /<br>CD MECHANISM PARTS LIST—1~2 .....     | 70   |
| • SPRING APPLICATION POSITION .....                                         | 73   |
| • SPEAKER EXPLODED VIEW / SPEAKER PARTS LIST .....                          | 74   |
| • ACCESSORIES / PACKAGE LIST .....                                          | 75   |
| • REFERENCE NAME LIST .....                                                 | 76   |

# SPECIFICATION

|                                            |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>&lt;FM section&gt;</b>                  |                                                                                                                                                                                                                                                                                                                                | <b>Wow/flutter</b>                                                | Unmeasurable                                                                                                                                                                                                                                                                                            |
| <b>Frequency range</b>                     | 87.5 MHz to 108 MHz                                                                                                                                                                                                                                                                                                            | <b>Signal-to-noise ratio</b>                                      | 90 dB (1 kHz, 0 dB)                                                                                                                                                                                                                                                                                     |
| <b>Usable sensitivity (IHF)</b>            | 1.3 $\mu$ V (75 ohms) 13.2 dBf                                                                                                                                                                                                                                                                                                 | <b>Harmonic distortion</b>                                        | 0.05% (1 kHz, 0 dB)                                                                                                                                                                                                                                                                                     |
| <b>Alternate channel selectivity</b>       | 50 dB ( $\pm$ 400 kHz)                                                                                                                                                                                                                                                                                                         | <b>&lt;Speaker SX-N320&gt;</b>                                    |                                                                                                                                                                                                                                                                                                         |
| <b>Signal-to-noise ratio</b>               | 70 dB (STEREO), 76 dB (MONO)                                                                                                                                                                                                                                                                                                   | <b>Cabinet type</b>                                               | 3-way, bass reflex (Magnetism sealed type)                                                                                                                                                                                                                                                              |
| <b>Harmonic distortion</b>                 | 0.3 % (MONO), 1 kHz<br>0.5 % (STEREO, L-R), 1 kHz                                                                                                                                                                                                                                                                              | <b>Speaker</b>                                                    | 130 mm (5 <sup>1</sup> / <sub>8</sub> in.) cone type woofer<br>50 mm (2 in.) cone type tweeter<br>20 mm ( <sup>13</sup> / <sub>16</sub> in.) ceramic type super tweeter                                                                                                                                 |
| <b>Frequency response</b>                  | 30 Hz to 15 kHz (+0.5 dB, - 3 dB)                                                                                                                                                                                                                                                                                              | <b>Impedance</b>                                                  | 6 ohms                                                                                                                                                                                                                                                                                                  |
| <b>Stereo separation</b>                   | 33 dB at 1 kHz                                                                                                                                                                                                                                                                                                                 | <b>Music power</b>                                                | 40 W                                                                                                                                                                                                                                                                                                    |
| <b>Antenna</b>                             | 75 ohms (unbalanced)                                                                                                                                                                                                                                                                                                           | <b>Output sound pressure level</b>                                | 87 dB/W/m                                                                                                                                                                                                                                                                                               |
| <b>&lt;AM (MW) section&gt;</b>             |                                                                                                                                                                                                                                                                                                                                | <b>Dimensions (W <math>\times</math> H <math>\times</math> D)</b> | 180 $\times$ 302.5 $\times$ 200 mm<br>(7 <sup>1</sup> / <sub>8</sub> $\times$ 12 $\times$ 7 <sup>7</sup> / <sub>8</sub> in.)                                                                                                                                                                            |
| <b>Frequency range</b>                     | NSX-320HE, E, K, Z: 9/(10) kHz steps<br>AM 531 (530) kHz to 1,602 (1,710) kHz<br>NSX-320LH, NSX-3100U: 10/(9) kHz steps<br>AM 530 (531) kHz to 1,710 (1,602) kHz                                                                                                                                                               | <b>Weight</b>                                                     | 2.6 kg (5.7 lb.)                                                                                                                                                                                                                                                                                        |
| <b>Usable sensitivity</b>                  | 350 $\mu$ V/m                                                                                                                                                                                                                                                                                                                  | <b>&lt;General&gt;</b>                                            |                                                                                                                                                                                                                                                                                                         |
| <b>Selectivity</b>                         | 22 dB (9 kHz)                                                                                                                                                                                                                                                                                                                  | <b>Power requirements</b>                                         | NSX-320LH, HE:<br>AC 120 V/220-240 V, switchable 50/60 Hz<br>NSX-320E, Z:<br>AC 230 V, 50 Hz<br>NSX-320K:<br>AC 240 V, 50 Hz<br>NSX-3100 U:<br>AC 120 V, 60 Hz<br>NSX-320HE, LH: 55 W<br>NSX-320E, K, Z: 125 W<br>NSX-3100U: 60 W                                                                       |
| <b>Signal-to-noise ratio</b>               | 53 dB (100 dB input)                                                                                                                                                                                                                                                                                                           | <b>Power consumption</b>                                          | Main unit:<br>260 $\times$ 302.5 $\times$ 329.5 mm<br>(10 <sup>1</sup> / <sub>4</sub> $\times$ 12 $\times$ 13 in.)<br>System:<br>620 $\times$ 302.5 $\times$ 329.5 mm<br>(24 <sup>1</sup> / <sub>2</sub> $\times$ 12 $\times$ 13 in.)<br>Center unit: 6.2 kg (13.64 lb.)<br>System: 11.4 kg (25.08 lb.) |
| <b>Antenna</b>                             | Loop antenna                                                                                                                                                                                                                                                                                                                   | <b>Dimensions (W <math>\times</math> H <math>\times</math> D)</b> |                                                                                                                                                                                                                                                                                                         |
| <b>&lt;LW section&gt; (NSX-320E, K, Z)</b> |                                                                                                                                                                                                                                                                                                                                | <b>Weight</b>                                                     |                                                                                                                                                                                                                                                                                                         |
| <b>Frequency range</b>                     | 144 kHz to 290 kHz                                                                                                                                                                                                                                                                                                             |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Sensitivity</b>                         | 1,400 $\mu$ V/m                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Antenna</b>                             | Loop antenna                                                                                                                                                                                                                                                                                                                   |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>&lt;Timer section&gt;</b>               |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Program timer</b>                       | On-timer, capable of free setting                                                                                                                                                                                                                                                                                              |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Sleep timer</b>                         | Capable of setting in 10-minute increments, 240 minutes max.                                                                                                                                                                                                                                                                   |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>&lt;Amplifier section&gt;</b>           |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Power output</b>                        | NSX-320LH, HE:<br>20W + 20W (6 ohms, T.H.D. 10 % 1 kHz) EIAJ<br>NSX-320E, K, Z:<br>20W + 20W (6 ohms, T.H.D. 1 % 1 kHz) DIN<br>FTC RULE (NSX-3100 U)<br>20 watts per channel, Min.<br>RMS at 6 ohms, from 65 Hz to 15 kHz, with no more than 1% Total Harmonic Distortion<br>0.055% (10 W, 1 kHz, 6 ohms)<br>VIDEO/AUX: 400 mV |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Harmonic distortion</b>                 |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Input sensitivity</b>                   |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>&lt;Cassette deck section&gt;</b>       |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Track format</b>                        | 4 tracks, 2 channels                                                                                                                                                                                                                                                                                                           |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Frequency response</b>                  | CrO <sub>2</sub> tape: 50 - 16,000 Hz<br>Normal tape: 50 - 15,000 Hz                                                                                                                                                                                                                                                           |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Signal-to-noise ratio</b>               | 60 dB (DOLBY NR ON, CrO <sub>2</sub> tape peak level)                                                                                                                                                                                                                                                                          |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Tape speed</b>                          | 4.8 cm/sec. (1 <sup>7</sup> / <sub>8</sub> ips)                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Recording system</b>                    | AC bias                                                                                                                                                                                                                                                                                                                        |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Erase system</b>                        | AC erase                                                                                                                                                                                                                                                                                                                       |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Motor</b>                               | DC servomotor $\times$ 1                                                                                                                                                                                                                                                                                                       |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Heads</b>                               | Playback head $\times$ 1 (deck 1)<br>Recording/playback/erase head $\times$ 1 (deck 2)                                                                                                                                                                                                                                         |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>&lt;CD player section&gt;</b>           |                                                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Disc</b>                                | Compact disc                                                                                                                                                                                                                                                                                                                   |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Scanning method</b>                     | Non-contact optical scanner (semiconductor laser application)                                                                                                                                                                                                                                                                  |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Laser</b>                               | Semiconductor laser ( $\lambda$ = 780 nm)                                                                                                                                                                                                                                                                                      |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Rotation speed</b>                      | Approx. 500 rpm - 200 rpm (CLV)                                                                                                                                                                                                                                                                                                |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>Error correction</b>                    | Cross Interleave, Reed Solomon code                                                                                                                                                                                                                                                                                            |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>No. of channels</b>                     | 2                                                                                                                                                                                                                                                                                                                              |                                                                   |                                                                                                                                                                                                                                                                                                         |
| <b>D-A conversion</b>                      | 16-bit linear                                                                                                                                                                                                                                                                                                                  |                                                                   |                                                                                                                                                                                                                                                                                                         |

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
- Under license from BBE Sound, Inc.

## SPECIFICATIONS

### チューナー部

<F M 部>

受信周波数: 76 MHz~108 MHz

実用感度: 1.8 $\mu$ V (75 $\Omega$ ) 16.2 dBf (IHF)

実効選択度: 50 dB ( $\pm$ 400 kHz)

S N 比: 70 dB (STEREO) 78 dB (MONO)

高調波歪率: MONO 0.3 % (1 kHz)

STEREO 0.8 % (1 kHz)

周波数特性: 20 Hz~15,000 Hz (+0.5 dB、-3 dB)

ステレオセパレーション: 35 dB (1 kHz)

アンテナ: 75 $\Omega$  (不平衡)

<A M 部>

受信周波数: 531 kHz~1602 kHz

実用感度: ループアンテナ300 $\mu$ V/m

選択度: 18 dB

S N 比: 53 dB (100 dB入力) (MONO)

ステレオセパレーション: 20 dB (1 kHz)

アンテナ: ループアンテナ

<タイマー部>

プログラムタイマー: オン・タイマー、任意に設定可

オフ・タイマー、10分単位で設定可、

最大240分

スリープタイマー: 10分単位で設定可、最大240分

### アンプ部

定格出力: 20W + 20 W (1 kHz、10 %) EIAJ

高調波歪率: 0.055 % (10 W、1 kHz、6 $\Omega$ )

入力感度: VIDEO/AUX: 400 mV

### カセットデッキ部

トラック方式: 4トラック2チャンネル

周波数特性:

| テープの種類               | 周波数特性        |
|----------------------|--------------|
| CrO <sub>2</sub> テープ | 50~16,000 Hz |
| ノーマルテープ              | 50~15,000 Hz |

S N 比: 60 dB (DOLBY B NR ON、CrO<sub>2</sub> テープ  
ピークレベル)

テープ速度: 4.8 cm/sec

モーター: DCサーボモーター×1 (キャプスタン用)

ヘッド: 再生ヘッド×1 (デッキ1)

録再・消去コンビネーションヘッド×1

(デッキ2)

### CDプレーヤー部

ディスク: コンパクトディスク

読み取り方式: 非接触光学式読み取り

(半導体レーザー使用)

レーザー: 半導体レーザー $\lambda=780$  nm

回転数: 約 500 rpm ~ 200 rpm (CLV)

エラー訂正方式: クロスインターリーブ リード ソロモンコード

チャンネル数: 2チャンネル

復号化: 16 bit 直線

S N 比: 90 dB (1kHz)

高調波歪率: 0.05 % (1kHz)

ワウフラッター: 測定限界以下

### スピーカー

型式: 3 ウェイバスレフタイプ

(磁気シールドタイプ: EIAJ)

インピーダンス: 6  $\Omega$

最大入力: 40 W (ミュージックパワー)

出力音圧レベル: 87 dB/W/m

使用スピーカー: ウーハー13 cm コーン型

ツイーター 5 cm コーン型

スーパーツイーター 2 cm

寸法: 180 (W) × 302.5 (H) × 220 (D) mm

重量: 2.6 kg

### 共通部

電源: AC 100 V、50 / 60 Hz

消費電力: 55 W

本体寸法: 260 (W) × 302.5 (H) × 329.5 (D) mm

本体重量: 6.2 kg

システム寸法: 620 (W) × 302.5 (H) × 329.5 (D) mm

システム重量: 11.4 kg

- 外観及び仕様は予告なく変更する場合があります。
- ドルビーノイズリダクションはドルビーラボラトリーズライセンスニングコーポレーションからの実施権に基づき製造されています。  
ドルビー、DOLBY及びダブルD記号  はドルビーラボラトリーズライセンスニングコーポレーションの商標です。
- B B E および B B E シンボルマークはB B E・サウンド・インコーポレイテッドの商標です。
- B B E・サウンド・インコーポレイテッドにより実施権を許諾された商品です。

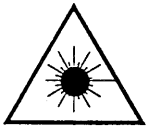


## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

### WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion.  
Undgå udsættelse for stråling.

### VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

### WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1  
LASER PRODUCT

LUOKAN 1  
LASERLAITE

KLASS 1  
LASER APPARAT

## Precaution to replace Optical block 光学ブロック (KSS - 210A) 交換時の注意

### (KSS - 210A)

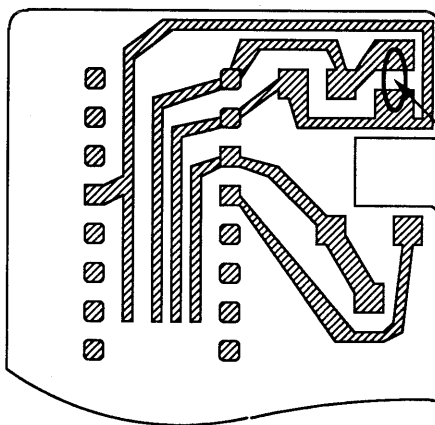
Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in figure below.

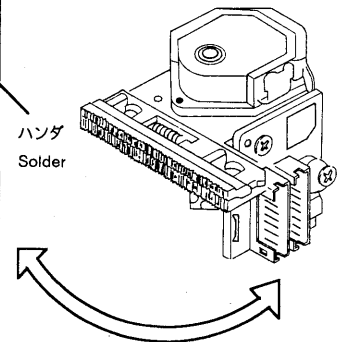
光学系ブロック内のレーザーダイオードは、衣服や人体に帯電した静電荷等で電位差を生じることにより、静電破壊することがあります。人体アース、作業台のアースをとり、衣服が触れぬよう注意して下さい。

- 1) コネクターを接続後、右図に示すハンダ付けを取り除いて下さい。

PICK - UP Assy P.C.B.



CD PICK - UP Assy



# ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO    | PART NO.       | カリ<br>NO. | DESCRIPTION               | REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION                       |
|------------|----------------|-----------|---------------------------|---------|----------------|-----------|-----------------------------------|
| IC         |                |           |                           |         |                |           |                                   |
|            | 87-001-196-080 | 1A        | IC, ICP-N10 T104          |         | 81-653-648-010 |           | ANT TERM EARTH PAL (Z, K, E)      |
|            | 82-NE8-605-110 | 2P        | IC, UPD78043GF-024        |         | 81-653-638-110 | 0E        | ANT TERMINAL EARTH (D, LH, HE, U) |
|            | 82-NE6-617-010 | 1E        | IC, GP1U581X              |         | 81-689-212-010 | 0E        | PLATE, EARTH                      |
|            | 87-020-899-010 | 2M        | IC, STK4122-MK2           | BPF731  | 82-794-697-010 |           | FILTER ANTI BIRDIE (Z)            |
|            | 87-020-758-010 | 1A        | IC, NJM 2068 SD           | BPF831  | 87-030-105-010 |           | FLTR, BPMBGA (Z)                  |
|            | 87-002-727-010 | 1A        | IC, NJM4558L              |         |                |           |                                   |
|            | 87-017-375-080 | 1B        | IC, TC4094BF              | C101    | 87-010-398-090 | 0E        | CAP, E 2200-35V                   |
|            | 87-001-874-010 | 1B        | IC, HA12134A              | C102    | 87-010-390-090 | 0E        | CAP, E 3300-25 SME                |
|            | 87-027-827-010 | 0E        | IC, TC4069UBP             | C104    | 87-010-980-080 | 0E        | CAP, E 330-16 FS                  |
|            | 87-002-218-010 |           | IC, XRC5451AP (EXCEPT D)  | C105    | 87-010-101-080 | 0E        | CAP, E 220-16 SME                 |
|            | 87-017-374-010 | 1B        | IC, TC4094BP              | C106    | 87-010-408-080 | 0E        | CAP, E 47-50 SME                  |
|            | 87-027-666-010 | 1B        | IC, TC4052BP              |         |                |           |                                   |
|            | 87-001-607-080 | 1A        | IC, NJM4558M              | C107    | 87-010-408-080 | 0E        | CAP, E 47-50 SME                  |
|            | 87-002-607-010 | 1D        | IC, LM7001                | C108    | 87-010-408-080 | 0E        | CAP, E 47-50 SME                  |
|            | 87-020-446-010 | 1B        | IC, TA7343AP              | C109    | 87-010-263-080 | 0E        | CAP, E 100-10                     |
|            | 87-001-942-010 | 1D        | IC, LA1265 (S)            | C110    | 87-010-263-080 | 0E        | CAP, E 100-10                     |
|            | 87-002-641-010 | 1E        | IC, TA8124P (D)           | C112    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 87-002-272-080 | 1B        | IC, TC4052 BF             |         |                |           |                                   |
| TRANSISTOR |                |           |                           | C113    | 87-010-403-080 | 0E        | CAP, E 3.3-50 SME                 |
|            | 89-213-702-010 | 1A        | TR, 2SB1370E              | C115    | 87-018-208-080 | 0E        | CAP, TC-U 0.047-50 F (D)          |
|            | 89-332-665-080 | 0E        | TR, 2SC3266GR             | C116    | 87-018-214-080 |           | CAP, TC-U 0.1-50 F (Z)            |
|            | 89-318-155-080 | 0E        | TR, 2SC1815GR             | C118    | 87-018-127-080 | 0E        | CAP, TC-U 470P-50 B               |
|            | 87-026-462-080 | 0E        | TR, 2SC1740S (RS)         | C118    | 87-018-208-080 | 0E        | CAP, TC-U 0.047-50 F (D)          |
|            | 89-110-155-080 | 0E        | TR, 2SA1015GR             |         |                |           |                                   |
|            | 89-113-187-880 | 0E        | TR, 2SA1318 TU            | C118    | 87-018-214-080 |           | CAP, TC-U 0.1-50 F (Z)            |
|            | 89-406-555-080 | 0E        | TR, 2SD655E               | C213    | 87-010-404-080 | 0E        | CAP, E 4.7-50 SME                 |
|            | 87-026-292-080 | 0E        | TRANSISTOR, DTA 144WS     | C214    | 87-010-404-080 | 0E        | CAP, E 4.7-50 SME                 |
|            | 87-026-226-080 | 0E        | C-TR, DTA143EK            | C215    | 87-018-131-080 | 0E        | CAP, TC-U 1000P-50 B              |
|            | 87-026-218-080 | 0E        | TR, DTC144ES              | C216    | 87-018-131-080 | 0E        | CAP, TC-U 1000P-50 B              |
|            | 89-502-466-080 | 1A        | TR FET 2SK246-BL (TPE2)   |         |                |           |                                   |
|            | 87-026-463-080 | 0E        | TR, 2SA933S (RS)          | C217    | 87-010-401-080 | 0E        | CAP, E 1-50 SME                   |
|            | 87-026-238-080 | 0E        | C-TR, DTC144WK            | C218    | 87-010-401-080 | 0E        | CAP, E 1-50 SME                   |
|            | 89-333-317-080 | 0E        | TR, 2SC3331T              | C221    | 87-010-402-080 | 0E        | CAP, E 2.2-50 SME                 |
|            | 89-109-705-080 | 0E        | TR, 2SA970GR (D, Z, K, E) | C222    | 87-010-402-080 | 0E        | CAP, E 2.2-50 SME                 |
|            | 87-026-289-080 | 0E        | TR, DTC 143 XS (TP)       | C223    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 89-109-521-080 | 0E        | TR, 2SA952K               |         |                |           |                                   |
|            | 87-026-211-080 | 0E        | C-TR, DTA144EK T147       | C224    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 87-026-213-080 | 0E        | C-TR, DTC114YK T147       | C225    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 89-502-464-080 | 0E        | FET, 2SK246Y              | C226    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 89-318-154-080 | 0E        | TR, 2SC1815Y              | C227    | 87-018-214-080 | 0E        | CAP, TC U 0.1-50 F                |
|            | 87-026-214-080 | 0E        | TR, DTA114YS              | C228    | 87-018-214-080 | 0E        | CAP, TC U 0.1-50 F                |
|            | 87-026-219-080 | 0E        | TR, DTA144ES (D)          |         |                |           |                                   |
|            | 87-026-215-080 | 0E        | TR, DTC114YS (D)          | C236    | 87-010-408-080 | 0E        | CAP, E 47-50 SME                  |
|            | 89-319-233-080 | 0E        | TR, 2SC1923 (O)           | C241    | 87-018-134-080 |           | CAP, TC-U 0.01-16 Y (Z)           |
|            | 89-502-415-080 | 1A        | FET, 2SK241GR             | C242    | 87-018-134-080 |           | CAP, TC-U 0.01-16 Y (Z)           |
|            | 89-501-615-080 | 0E        | TR 2SK161-GR (TPE4)       | C243    | 87-018-104-080 | 0E        | CAP, TC-U 10P-50 SL               |
|            | 87-026-318-080 | 0E        | C-TR, DTC363EK            | C244    | 87-018-104-080 | 0E        | CAP, TC-U 10P-50 SL               |
|            | 89-320-011-080 |           | TR, 2SC2001K (Z, K, E)    |         |                |           |                                   |
| DIODE      |                |           |                           | C303    | 87-018-124-080 | 0E        | CAP, TC-U 270P-50 B               |
|            | 87-002-225-010 | 1B        | DIODE DBF 40C-K10         | C304    | 87-018-124-080 | 0E        | CAP, TC-U 270P-50 B               |
|            | 87-001-574-080 | 0E        | DIODE 1SR139-200          | C309    | 87-018-134-080 | 0E        | CAP, TC-U 0.01-16 Y               |
|            | 87-020-691-080 | 0E        | DIODE, 1SS132             | C310    | 87-018-134-080 | 0E        | CAP, TC-U 0.01-16 Y               |
|            | 87-001-916-080 | 0E        | ZENER UTZJ10B             | C313    | 87-018-205-080 | 0E        | CAP, TC-U 0.022-25 F              |
|            | 87-002-743-080 | 0E        | ZENER, MTZJ 33B           |         |                |           |                                   |
|            | 87-001-914-080 | 0E        | ZENER UTZJ 6.2B           | C314    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 87-001-911-080 | 0E        | ZENER, UTZJ4.7A (TAPG)    | C351    | 87-018-121-080 | 0E        | CAP, TC-U 150P-50 B               |
|            | 87-020-027-080 | 0E        | C-DIODE, 1SS184           | C352    | 87-018-121-080 | 0E        | CAP, TC-U 150P-50 B               |
|            | 87-020-465-080 | 0E        | DIODE, 1SS133             | C353    | 87-018-124-080 | 0E        | CAP, TC-U 270P-50 B               |
|            | 87-020-125-080 | 0E        | C-DIODE, 1SS181           | C354    | 87-018-124-080 | 0E        | CAP, TC-U 270P-50 B               |
|            | 87-001-559-080 | 0E        | DIODE ISS 131 (T-72)      |         |                |           |                                   |
|            | 87-001-913-080 | 0E        | ZENER UTZJ5.6B            | C355    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            | 87-002-843-080 | 0E        | DIODE, 1SS108             | C361    | 87-018-134-080 | 0E        | CAP, TC-U 0.01-16 Y               |
|            |                |           |                           | C362    | 87-018-134-080 | 0E        | CAP, TC-U 0.01-16 Y               |
|            |                |           |                           | C365    | 87-018-205-080 | 0E        | CAP, TC-U 0.022-25 F              |
|            |                |           |                           | C367    | 87-018-214-080 | 0E        | CAP, TC-U 0.1-50 F                |
|            |                |           |                           |         |                |           |                                   |
|            |                |           |                           | C401    | 87-010-402-080 | 0E        | CAP, E 2.2-50 SME                 |
|            |                |           |                           | C402    | 87-010-402-080 | 0E        | CAP, E 2.2-50 SME                 |
|            |                |           |                           | C407    | 87-010-401-080 | 0E        | CAP, E 1-50 SME                   |
|            |                |           |                           | C408    | 87-010-401-080 | 0E        | CAP, E 1-50 SME                   |
|            |                |           |                           | C415    | 87-018-121-080 | 0E        | CAP, TC-U 150P-50 B               |
|            |                |           |                           |         |                |           |                                   |
|            |                |           |                           | C416    | 87-018-121-080 | 0E        | CAP, TC-U 150P-50 B               |
|            |                |           |                           | C451    | 87-018-123-080 | 0E        | CAP, TC-U 220P-50 B               |
|            |                |           |                           | C452    | 87-018-123-080 | 0E        | CAP, TC-U 220P-50 B               |
|            |                |           |                           | C453    | 87-018-131-080 | 0E        | CAP, TC-U 1000P-50 B              |
|            |                |           |                           | C455    | 87-018-131-080 | 0E        | CAP, TC-U 1000P-50 B (D, Z, K, E) |
|            |                |           |                           |         |                |           |                                   |
|            |                |           |                           | C456    | 87-010-260-080 | 0E        | CAP, E 47-25 SME                  |
|            |                |           |                           | C459    | 87-018-198-080 | 0E        | CAP, TC-U 2700P-16 X              |
|            |                |           |                           | C501    | 87-010-405-080 | 0E        | CAP, E 10-50 SME                  |
|            |                |           |                           | C502    | 87-010-405-080 | 0E        | CAP, E 10-50 SME                  |
|            |                |           |                           | C503    | 87-018-195-080 | 0E        | CAP, TC-U 1200P-16 X              |
| MAIN C.B   |                |           |                           |         |                |           |                                   |

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                    | REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                        |
|---------|----------------|------------|--------------------------------|---------|----------------|------------|------------------------------------|
| C504    | 87-018-195-080 | 0E         | CAP, TC-U 1200P-16 X           | C728    | 87-010-402-080 |            | CAP, E 2. 2-50 SME(Z)              |
| C505    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                | C729    | 87-010-402-080 |            | CAP, E 2. 2-50 SME(Z)              |
| C506    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                | C731    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(EXCEPT D)     |
| C507    | 87-018-131-080 | 0E         | CAP, TC-U 1000P-50 B           | C732    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(Z, K, E)      |
| C508    | 87-018-131-080 | 0E         | CAP, TC-U 1000P-50 B           | C733    | 87-018-205-080 |            | CAP, TC-U 0. 022-25 F(Z, K, E)     |
| C509    | 87-010-371-080 | 0E         | CAP, E 470-6. 3                | C741    | 87-010-402-080 | 0E         | CAP, E 2. 2-50 SME                 |
| C515    | 87-010-545-080 | 0E         | CAP, E 0. 22-50 SME            | C742    | 87-018-125-080 | 0E         | CAP, TC-U 330P-50 B                |
| C516    | 87-010-545-080 | 0E         | CAP, E 0. 22-50 SME            | C743    | 87-010-382-080 | 0E         | CAP, E 22-25 SME                   |
| C517    | 87-010-400-080 | 0E         | CAP, E 0. 47-50 SME            | C744    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C518    | 87-010-400-080 | 0E         | CAP, E 0. 47-50 SME            | C745    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C520    | 87-018-133-080 | 0E         | CAP, TC-U 4700P-16 X           | C746    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                    |
| C521    | 87-018-100-080 | 0E         | CAP, TC-U 4. 7P-50 SL          | C748    | 87-010-404-080 | 0E         | CAP, E 4. 7-50 SME                 |
| C522    | 87-018-100-080 | 0E         | CAP, TC-U 4. 7P-50 SL          | C749    | 87-010-405-080 | 0E         | CAP, E 10-50 SME                   |
| C523    | 87-018-131-080 | 0E         | CAP, TC-U 1000P-50 B           | C750    | 87-010-544-080 | 0E         | CAP, E 0. 1-50                     |
| C524    | 87-018-131-080 | 0E         | CAP, TC-U 1000P-50 B           | C751    | 87-010-403-080 | 0E         | CAP, E 3. 3-50 SME                 |
| C525    | 87-018-121-080 | 0E         | CAP, TC-U 150P-50 B            | C752    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(EXCEPT D)     |
| C526    | 87-010-260-080 | 0E         | CAP, E 47-25 SME               | C754    | 87-010-260-080 |            | CAP, E 47-25 SME(EXCEPT D)         |
| C527    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                | C755    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                    |
| C528    | 87-018-100-080 | 0E         | CAP, TC-U 4. 7P-50 SL          | C756    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C581    | 87-010-405-080 |            | CAP, E 10-50 SME(EXCEPT D)     | C760    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y(EXCEPT Z)     |
| C582    | 87-010-405-080 |            | CAP, E 10-50 SME(EXCEPT D)     | C770    | 87-010-402-080 | 0E         | CAP, E 2. 2-50 SME(D)              |
| C601    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C773    | 87-010-263-080 | 0E         | CAP, E 100-10(D)                   |
| C602    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C774    | 87-010-545-080 | 0E         | CAP, E 0. 22-50 SME(D)             |
| C605    | 87-018-121-080 |            | CAP, TC-U 150P-50 B(EXCEPT D)  | C775    | 87-018-205-080 | 0E         | CAP, TC-U 0. 022-25 F(D)           |
| C606    | 87-018-121-080 |            | CAP, TC-U 150P-50 B(EXCEPT D)  | C776    | 87-010-404-080 | 0E         | CAP, E 4. 7-50 SME(D)              |
| C607    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(EXCEPT D) | C777    | 87-010-757-080 | 0E         | C-CAP, U 0. 047-25F(D)             |
| C608    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(EXCEPT D) | C778    | 87-010-757-080 | 0E         | C-CAP, U 0. 047-25F(D)             |
| C609    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C779    | 87-010-263-080 | 0E         | CAP, E 100-10(D)                   |
| C610    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C780    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y(D)            |
| C611    | 87-010-404-080 |            | CAP, E 4. 7-50 SME(EXCEPT D)   | C781    | 87-018-107-080 | 0E         | CAP, TC-U 18P-50 SL(D)             |
| C612    | 87-010-404-080 |            | CAP, E 4. 7-50 SME(EXCEPT D)   | C783    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C615    | 87-018-198-080 |            | CAP, TC-U 2700P-16 X(EXCEPT D) | C784    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C616    | 87-018-198-080 |            | CAP, TC-U 2700P-16 X(EXCEPT D) | C785    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C617    | 87-018-122-080 |            | CAP, TC-U 180P-50 B(EXCEPT D)  | C786    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C618    | 87-018-122-080 |            | CAP, TC-U 180P-50 B(EXCEPT D)  | C787    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C621    | 87-010-400-080 |            | CAP, E 0. 47-50 SME(EXCEPT D)  | C788    | 87-010-544-080 | 0E         | CAP, E 0. 1-50(D)                  |
| C622    | 87-010-400-080 |            | CAP, E 0. 47-50 SME(EXCEPT D)  | C802    | 87-018-105-080 |            | CAP, TC-U 12P-50 SL(Z)             |
| C623    | 87-010-404-080 |            | CAP, E 4. 7-50 SME(EXCEPT D)   | C802    | 87-018-097-080 | 0E         | CAP, TC-U 2. 2P-50 SL(D)           |
| C624    | 87-010-404-080 |            | CAP, E 4. 7-50 SME(EXCEPT D)   | C802    | 87-018-102-080 |            | CAP, TC-U 6. 8P-50 SL(EXCEPT D, Z) |
| C628    | 87-010-404-080 | 0E         | CAP, E 4. 7-50 SME             | C804    | 87-018-102-080 | 0E         | CAP, TC-U 6. 8P-50 SL(EXCEPT Z)    |
| C630    | 87-010-405-080 |            | CAP, E 10-50 SME(EXCEPT D)     | C805    | 87-018-097-080 |            | CAP, TC-U 2. 2P-50 SL(Z)           |
| C631    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C805    | 87-018-098-080 | 0E         | CAP, TC-U 3. 3P-50 SL(EXCEPT Z)    |
| C632    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C806    | 87-018-096-080 | 0E         | CAP, TC-U 1P-50 SL                 |
| C633    | 87-010-101-080 |            | CAP, E 220-16 SME(EXCEPT D)    | C807    | 87-018-106-080 |            | CAP, TC-U 15P-50 SL(Z)             |
| C635    | 87-010-405-080 |            | CAP, E 10-50 SME(EXCEPT D)     | C807    | 87-018-100-080 | 0E         | CAP, TC-U 4. 7P-50 SL(EXCEPT Z)    |
| C636    | 87-010-404-080 | 0E         | CAP, E 4. 7-50 SME             | C808    | 87-018-119-080 | 0E         | CAP, TC-U 100P-50 B                |
| C681    | 87-010-405-080 | 0E         | CAP, E 10-50 SME               | C809    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C700    | 87-010-221-080 | 0E         | CAP, E 470-10                  | C810    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C701    | 87-010-384-080 | 0E         | CAP, E 100-25 SME              | C811    | 87-018-106-080 | 0E         | CAP, TC-U 15P-50 SL(D)             |
| C702    | 87-010-404-080 | 0E         | CAP, E 4. 7-50 SME             | C811    | 87-018-116-080 |            | CAP, TC-U 56P-50 SL(EXCEPT D)      |
| C703    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y           | C812    | 87-018-107-080 |            | CAP, TC-U 18P-50 SL(EXCEPT D)      |
| C705    | 87-010-248-080 | 0E         | CAP, E 220-10 SME              | C812    | 87-018-102-080 | 0E         | CAP, TC-U 6. 8P-50 SL(D)           |
| C706    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y           | C813    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C707    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y           | C814    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C708    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y           | C815    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C710    | 87-018-149-080 | 0E         | CAP, TC-U 15P-50 CH            | C816    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C713    | 87-018-199-080 | 0E         | CAP, TC-U 3300P-16 X           | C817    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C714    | 87-018-199-080 | 0E         | CAP, TC-U 3300P-16 X           | C818    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C715    | 87-018-195-080 | 0E         | CAP, TC-U 1200P-16 X           | C819    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C716    | 87-018-195-080 | 0E         | CAP, TC-U 1200P-16 X           | C820    | 87-010-260-080 | 0E         | CAP, E 47-25 SME                   |
| C720    | 87-018-121-080 | 0E         | CAP, TC-U 150P-50 B            | C821    | 87-018-134-080 | 0E         | CAP, TC-U 0. 01-16 Y               |
| C721    | 87-010-400-080 | 0E         | CAP, E 0. 47-50 SME(D)         | C822    | 87-018-103-080 | 0E         | CAP, TC-U 8. 2P-50 SL              |
| C721    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C823    | 87-018-107-080 | 0E         | CAP, TC-U 18P-50 SL                |
| C722    | 87-010-400-080 | 0E         | CAP, E 0. 47-50 SME(D)         | C826    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(Z, K, E)      |
| C722    | 87-010-401-080 |            | CAP, E 1-50 SME(EXCEPT D)      | C830    | 87-018-134-080 |            | CAP, TC-U 0. 01-16 Y(Z)            |
| C723    | 87-010-405-080 | 0E         | CAP, E 10-50 SME               | C830    | 87-018-214-080 |            | CAP, TC-U 0. 1-50 F(K, E)          |
| C724    | 87-014-057-080 | 0E         | CAP, PP 1000P-100 J            | C831    | 87-018-105-080 |            | CAP, TC-U 12P-50 SL(Z)             |
| C725    | 87-010-401-080 | 0E         | CAP, E 1-50 SME                | C831    | 87-018-097-080 | 0E         | CAP, TC-U 2. 2P-50 SL(D)           |
| C726    | 87-010-403-080 | 0E         | CAP, E 3. 3-50 SME             | C831    | 87-018-102-080 |            | CAP, TC-U 6. 8P-50 SL(EXCEPT D, Z) |
| C727    | 87-010-248-080 | 0E         | CAP, E 220-10 SME              | C832    | 87-018-108-080 |            | CAP, TC-U 20P-50 SL(Z)             |

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                         |
|---------|----------------|------------|-------------------------------------|
| C833    | 87-018-134-080 |            | CAP, TC-U 0.01-16 Y(K, E)           |
| C833    | 87-018-205-080 |            | CAP, TC-U 0.022-25 F(Z)             |
| C834    | 87-018-103-080 |            | CAP, TC-U 8.2P-50 SL(Z)             |
| C839    | 87-018-134-080 |            | CAP, TC-U 0.01-16 Y(EXCEPT D)       |
| C941    | 87-018-134-080 |            | CAP, TC-U 0.01-16 Y(Z, K, E)        |
| C942    | 87-018-105-080 |            | CAP, TC-U 12P-50 SL(Z, K, E)        |
| C944    | 87-018-104-080 |            | CAP, TC-U 10P-50 SL(Z, K, E)        |
| C944    | 87-018-105-080 | OE         | CAP, TC-U 12P-50 SL(D, LH, HE, U)   |
| C945    | 87-014-050-080 |            | CAP, PP 510P-100 J(Z, K, E)         |
| C946    | 87-010-401-080 | OE         | CAP, E 1-50 SME                     |
| C949    | 87-018-214-080 |            | CAP, TC-U 0.1-50 F(Z, K, E)         |
| C983    | 87-010-544-080 | OE         | CAP, E 0.1-50                       |
| C990    | 87-018-134-080 | OE         | CAP, TC-U 0.01-16 Y                 |
| CF741   | 82-794-670-010 | OE         | BFU, 450C4N                         |
| CF801   | 82-799-621-010 |            | CF, MS2-A(Z)                        |
| CF801   | 87-008-261-010 | OE         | FLTR, SFE10.7MA5-A(EXCEPT Z)        |
| CF802   | 87-008-261-010 | OE         | FLTR, SFE10.7MA5-A                  |
| CF803   | 87-008-261-010 |            | FLTR, SFE10.7MA5-A(Z)               |
| J250    | 87-049-855-010 | 1B         | JACK, 6.3 W/S                       |
| J254    | 87-033-215-010 | 1B         | TERMINAL SP 4P R                    |
| J652    | 80-MT3-616-010 | 1B         | JACK, PIN 2P                        |
| J801    | 81-631-646-010 |            | ANT TERM 2P PAL(Z, K, E)            |
| J801    | 87-033-214-010 | 1B         | ANT TERM 4P(*) (D, LH, HE, U)       |
| J902    | 81-754-629-010 |            | CONNECTOR XH M 2P (UL) (K, E)       |
| L201    | 87-005-366-010 |            | COIL, 1UH(Z)                        |
| L202    | 87-005-366-010 |            | COIL, 1UH(Z)                        |
| L401    | 87-005-580-080 | 1A         | COIL, 10MHJ                         |
| L402    | 87-005-580-080 | 1A         | COIL, 10MHJ                         |
| L403    | 87-005-525-080 | 1A         | COIL, 22MH-J                        |
| L404    | 87-005-525-080 | 1A         | COIL, 22MH-J                        |
| L451    | 87-007-300-010 | 1A         | COIL, OSC BIAS 85K                  |
| L701    | 81-631-643-010 | 1A         | COIL 1 POLE MPX                     |
| L702    | 81-631-643-010 | 1A         | COIL, 1 POLE MPX                    |
| L703    | 87-003-050-080 | OE         | COIL, 47UH(D)                       |
| L741    | 81-631-611-010 | 1A         | COIL, QUAD (SINGLE)                 |
| L742    | 87-008-491-010 |            | FLTR, PACFAZ 450 (EXCEPT D)         |
| L742    | 81-MT3-656-010 | 1B         | FLTR, PCFMT-039450(D)               |
| L801    | 87-006-219-010 | OE         | COIL, ANT FM 3/4T, S                |
| L802    | 87-006-198-010 |            | COIL, ANT FM 2-3/4TS, L5 (EXCEPT D) |
| L802    | 87-006-218-010 | OE         | COIL, ANT FM 3-3/4TS(D)             |
| L803    | 87-006-200-010 | OE         | COIL, RF FM 3-1/2T, L5              |
| L804    | 87-006-220-010 |            | COIL, RF FM 3-1/2T, L5 S (EXCEPT D) |
| L804    | 87-006-217-010 | OE         | COIL, RF FM 4-1/2TS(D)              |
| L805    | 87-003-098-080 | OE         | COIL, 2.2UH                         |
| L806    | 87-003-145-080 | OE         | COIL, 8.2UH LAL02                   |
| L807    | 87-007-259-010 |            | COIL, FM (EXCEPT D)                 |
| L807    | 87-006-222-010 | 1A         | COIL, OSC FM(7K)D, 2(D)             |
| L831    | 87-006-202-010 |            | COIL, RF FM4TSR, L5(Z)              |
| L832    | 87-003-098-080 | OE         | COIL, 2.2UH                         |
| L941    | 87-006-208-010 |            | COIL, ANT LW(Z, K, E)               |
| L942    | 87-007-305-010 |            | COIL, OSC LW S(Z, K, E)             |
| R105    | 87-022-050-080 | OE         | RES, METAL 1W-0.22J                 |
| R106    | 87-022-050-080 | OE         | RES, METAL 1W-0.22J                 |
| R243    | 87-022-184-080 | OE         | RES METAL 0.33-1W (EXCEPT U)        |
| R244    | 87-022-184-080 | OE         | RES METAL 0.33-1W (EXCEPT U)        |
| SFR301  | 87-024-349-080 | OE         | SFR, 1K DIA6 H                      |
| SFR302  | 87-024-349-080 | OE         | SFR, 1K DIA6 H                      |
| SFR351  | 87-024-349-080 | OE         | SFR, 1K DIA6 H                      |
| SFR352  | 87-024-349-080 | OE         | SFR, 1K DIA6 H                      |
| SFR401  | 87-024-352-080 | OE         | SFR, 4.7K DIA6 H                    |
| SFR402  | 87-024-352-080 | OE         | SFR, 4.7K DIA6 H                    |
| SFR451  | 87-024-356-080 | OE         | SFR, 47K DIA6 H                     |
| SFR452  | 87-024-356-080 | OE         | SFR, 47K DIA6 H                     |
| SFR721  | 87-024-352-080 | OE         | SFR, 4.7K DIA6 H                    |
| SFR722  | 87-024-355-080 | OE         | SFR, 33K DIA6 H                     |
| TC701   | 87-011-221-080 | 1A         | TRIMER. 30P VCT51                   |
| TC801   | 87-011-219-080 | 1A         | CAP, TRIMMER 10P VCT                |
| TC802   | 87-011-219-080 | 1A         | CAP, TRIMMER 10P VCT                |
| TC803   | 87-011-219-080 |            | CAP, TRIMMER 10P VCT(Z)             |
| TC942   | 87-011-221-080 |            | TRIMER. 30P VCT51 (Z, K, E)         |

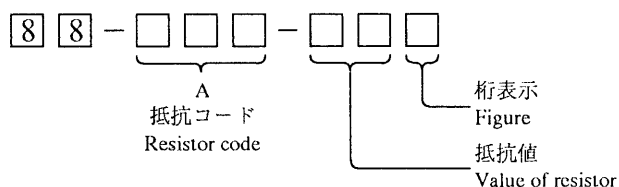
| REF. NO    | PART NO.       | カンリ<br>NO. | DESCRIPTION                       |
|------------|----------------|------------|-----------------------------------|
| TU101      | 81-MX4-620-010 | 1F         | AM PACK 3, S(D, LH, HE, U)        |
| TU101      | 81-MX4-619-010 |            | AM PACK 4(Z, K, E)                |
| VC801      | 87-027-900-010 |            | VARI-CAP, 1SV147 (EXCEPT D)       |
| VC801      | 87-002-730-010 | 1A         | VARI-CAP, SVC203 SPA(D)           |
| VC802      | 87-027-900-010 |            | VARI-CAP, 1SV147 (EXCEPT D)       |
| VC802      | 87-002-730-010 | 1A         | VARI-CAP, SVC203 SPA(D)           |
| VC803      | 87-027-900-010 |            | VARI-CAP, 1SV147 (EXCEPT D)       |
| VC803      | 87-002-730-010 | 1A         | VARI-CAP, SVC203 SPA(D)           |
| VC804      | 87-027-900-010 |            | VARI-CAP, 1SV147 (Z)              |
| WH101      | 83-NE2-618-010 | 1A         | F-CABLE, 5P-2.5                   |
| WH601      | 81-MX4-645-210 | 1A         | F-CABLE, 7P-2.0 (EXCEPT Z, E)     |
| WH601      | 81-MX4-705-010 |            | F-CABLE, 7P-2.0 G(Z, E)           |
| X701       | 87-030-163-010 | 1B         | VIB, XTAL 7.2MHZ (NDK)            |
| X702       | 87-030-283-010 | 1A         | VIB, CER CSA 3.60MGF N(D)         |
| FRONT C. B |                |            |                                   |
| WH602      | 81-MX4-653-010 | 1C         | CABLE, FFC 1.25-13P (EXCEPT Z, E) |
| WH602      | 81-MX4-655-010 |            | CABLE, FFC 1.25-13P G(Z, E)       |
| C201       | 87-010-392-040 | OE         | CAP, E 33-35 SME                  |
| C202       | 87-010-545-080 | OE         | CAP, E 0.22-50 SME                |
| C203       | 87-010-545-080 | OE         | CAP, E 0.22-50 SME                |
| C204       | 87-010-263-040 | OE         | CAP, E 100-10                     |
| C205       | 87-010-401-040 | OE         | CAP, E 1-50 SME                   |
| C206       | 87-015-695-040 | OE         | E/CAP 1UF 50V TAPG                |
| C207       | 87-010-248-040 | OE         | CAP, E 220-10 SME                 |
| C208       | 87-010-405-040 | OE         | CAP, E 10-50 SME                  |
| C209       | 87-010-196-080 | OE         | C-CAP, S 0.1-25 F                 |
| C210       | 87-010-196-080 | OE         | C-CAP, S 0.1-25 F                 |
| C211       | 87-010-180-080 | OE         | C-CAP, S 1500P-50 B               |
| C401       | 87-010-196-080 | OE         | C-CAP, S 0.1-25 F                 |
| C501       | 87-010-384-040 | OE         | CAP, E 100-25 SME                 |
| C701       | 87-010-196-080 | OE         | C-CAP, S 0.1-25 F                 |
| C702       | 87-010-179-080 | OE         | C-CAP, S 1200P-50 B               |
| C703       | 87-010-401-040 | OE         | CAP, E 1-50 SME                   |
| C704       | 87-010-400-040 | OE         | CAP, E 0.47-50                    |
| C705       | 87-010-172-080 | OE         | C-CAP, S 330P-50 SL               |
| C706       | 87-015-692-040 | OE         | CAP, E 0.22-50V TAPG              |
| C707       | 87-010-544-040 | OE         | CAP, E 0.1-50 SME                 |
| C708       | 87-010-172-080 | OE         | C-CAP, S 330P-50 SL               |
| C709       | 87-010-248-040 | OE         | CAP, E 220-10 SME                 |
| C825       | 87-010-402-040 | OE         | CAP, E 2.2-50 SME                 |
| C826       | 87-010-402-040 | OE         | CAP, E 2.2-50 SME                 |
| C901       | 87-015-696-040 | OE         | CAP, E 2.2-50 7L                  |
| FL201      | 83-NE2-601-010 | 2M         | FL, 10-BT-118GK (D)               |
| FL201      | 82-MA2-633-010 |            | FL, 10BT-101GK (EXCEPT D)         |
| J701       | 81-MX4-630-010 | 1A         | JACK, 3.5                         |
| L201       | 87-005-154-080 | OE         | COIL, 220UH LAL03                 |
| LED401     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED402     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED403     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED404     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED405     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED406     | 87-002-816-080 | OE         | LED, SEL 2415E GRN                |
| LED407     | 87-002-738-080 | OE         | LED, SEL2210R TP6                 |
| LED408     | 87-002-738-080 | OE         | LED, SEL2210R TP6                 |
| LED409     | 87-002-738-080 | OE         | LED, SEL2210R TP6                 |
| LED410     | 87-002-738-080 | OE         | LED, SEL2210R TP6                 |
| S301       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S301       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |
| S302       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S302       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |
| S303       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S303       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |
| S304       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S304       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |
| S305       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S305       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |
| S306       | 87-036-215-080 | OE         | SW, TACT EVQ21404M (EXCEPT Z, E)  |
| S306       | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)            |

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                      | REF. NO      | PART NO.       | カンリ<br>NO. | DESCRIPTION            |
|---------|----------------|------------|----------------------------------|--------------|----------------|------------|------------------------|
| S307    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C38          | 87-010-186-080 | 0E         | C-CAP, S 4700P-50 B    |
| S307    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C39          | 87-010-401-080 | 0E         | CAP, E 1-50 SME        |
| S308    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C40          | 87-015-819-080 | 0E         | C-CAP, 0.01-50 B K     |
| S308    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C41          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S309    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C42          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S309    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C43          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S310    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C44          | 87-010-314-080 | 0E         | C-CAP, S 22P-50 CH     |
| S310    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C45          | 87-010-315-080 | 0E         | C-CAP, S 27P-50 CH     |
| S311    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C51          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S311    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C52          | 87-010-263-080 | 0E         | CAP, E 100-10          |
| S312    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C53          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S312    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C54          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S313    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C55          | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| S313    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C56          | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| S314    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C57          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S314    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C61          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S315    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C62          | 87-010-371-080 | 0E         | CAP, E 470-6.3         |
| S315    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C65          | 87-010-402-080 | 0E         | CAP, E 2.2-50 SME      |
| S316    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C66          | 87-010-402-080 | 0E         | CAP, E 2.2-50 SME      |
| S316    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C69          | 87-010-178-080 | 0E         | C-CAP, S 1000P-50 B    |
| S317    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C70          | 87-010-178-080 | 0E         | C-CAP, S 1000P-50 B    |
| S317    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C80          | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| S318    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C81          | 87-010-221-080 | 0E         | CAP, E 470-10          |
| S318    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C82          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S319    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C82          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S319    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C83          | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| S320    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C84          | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| S320    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C85          | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| S321    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C86          | 87-010-248-080 | 0E         | CAP, E 220-10 SME      |
| S321    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C87          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S322    | 87-036-215-080 | 0E         | SW, TACT EVQ21404M(EXCEPT Z, E)  | C88          | 87-010-221-080 | 0E         | CAP, E 470-10          |
| S322    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C89          | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| S323    | 87-036-215-080 |            | SW, TACT EVQ21404M(LH, HE, K, U) | C90          | 87-010-404-080 | 0E         | CAP, E 4.7-50 SME      |
| S323    | 87-036-259-080 |            | SW, TACT SKHVBB (Z, E)           | C91          | 87-010-137-010 | 0E         | CAP, E 22-16 BP        |
| VR701   | 81-MX4-637-010 | 1B         | VR 10KA RK11K1130                | C100         | 87-010-260-080 | 0E         | CAP, E 47-25 SME       |
| X201    | 87-008-394-080 | 1A         | CF CST 4.19 MGW                  | C101         | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| CD C. B |                |            |                                  | C102         | 87-010-221-080 | 0E         | CAP, E 470-10          |
| C2      | 87-010-146-080 | 0E         | C-CAP, S 2P-50 CH                | C103         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C3      | 87-010-154-080 | 0E         | C-CAP, S 10P-50 CH               | C104         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C4      | 87-010-263-080 | 0E         | CAP, E 100-10                    | C105         | 87-010-196-080 | 0E         | C-CAP, S 0.1-25 F      |
| C5      | 87-010-178-080 | 0E         | C-CAP, S 1000P-50 B              | C106         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C6      | 87-010-382-080 | 0E         | CAP, E 22-25 SME                 | C107         | 87-010-263-080 | 0E         | CAP, E 100-10          |
| C7      | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | C108         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C8      | 87-010-248-080 | 0E         | CAP, E 220-10 SME                | C109         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C9      | 87-010-193-080 | 0E         | C-CAP, S 0.033-25 F              | C110         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C10     | 87-010-188-080 | 0E         | C-CAP, S 6800P-50 B              | C111         | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B     |
| C11     | 87-010-192-080 | 0E         | C-CAP, S 0.022-50 F              | C112         | 87-010-384-080 | 0E         | CAP, E 100-25 SME      |
| C12     | 87-010-193-080 | 0E         | C-CAP, S 0.033-25 F              | C113         | 87-010-322-080 | 0E         | C-CAP, S 100P-50 CH    |
| C13     | 87-010-193-080 | 0E         | C-CAP, S 0.033-25 F              | C114         | 87-010-322-080 | 0E         | C-CAP, S 100P-50 CH    |
| C14     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | C115         | 87-010-318-080 | 0E         | C-CAP, S 47P-50 CH     |
| C15     | 87-010-263-080 | 0E         | CAP, E 100-10                    | C116         | 87-012-156-080 | 0E         | C-CAP, S 220P-50 CH    |
| C16     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | EM1          | 87-008-474-080 | 0E         | F-BEAD, EM1 BL02RN1    |
| C17     | 87-010-248-080 | 0E         | CAP, E 220-10 SME                | L1           | 87-003-295-080 | 0E         | COIL, 10UH             |
| C18     | 87-010-400-080 | 0E         | CAP, E 0.47-50 SME               | L2           | 87-003-295-080 | 0E         | COIL, 10UH             |
| C19     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | R28          | 87-022-214-080 | 0E         | C-RES, S 100K-1/10WF   |
| C20     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | R29          | 87-022-214-080 | 0E         | C-RES, S 100K-1/10WF   |
| C21     | 87-010-182-080 | 0E         | C-CAP, S 2200P-50 B              | SFR1         | 87-024-354-080 | 0E         | SFR, 22K DIA6 H        |
| C22     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | SFR2         | 87-024-354-080 | 0E         | SFR, 22K DIA6 H        |
| C25     | 87-010-405-080 | 0E         | CAP, E 10-50 SME                 | SFR3         | 87-024-354-080 | 0E         | SFR, 22K DIA6 H        |
| C27     | 87-010-382-080 | 0E         | CAP, E 22-25 SME                 | SFR4         | 87-024-349-080 | 0E         | SFR, 1K DIA6 H         |
| C28     | 87-010-382-080 | 0E         | CAP, E 22-25 SME                 | X1           | 87-030-270-080 | 1B         | VIB, XTAL 16.9344MHZ   |
| C29     | 87-010-403-080 | 0E         | CAP, E 3.3-50 SME                | MOTOR-1 C. B |                |            |                        |
| C32     | 87-010-197-080 | 0E         | C-CAP, S 0.01-25 B               | M1           | 9X-262-513-210 | 2M         | SLED MOTOR (SLED)      |
| C33     | 87-010-400-080 | 0E         | CAP, E 0.47-50 SME               | M2           | + + +          | 2M         | SLED MOTOR (SPINDLE)   |
| C35     | 87-010-178-080 | 0E         | C-CAP, S 1000P-50 B              | S1           | 91-572-085-110 | 1B         | LEAF SW (INSIDE LIMIT) |
| C36     | 87-010-260-080 | 0E         | CAP, E 47-25 SME                 |              |                |            |                        |
| C37     | 87-010-401-080 | 0E         | CAP, E 1-50 SME                  | MOTOR-2 C. B |                |            |                        |

| REF. NO         | PART NO.       | カンリ<br>NO. | DESCRIPTION                  | REF. NO       | PART NO.       | カンリ<br>NO.    | DESCRIPTION               |
|-----------------|----------------|------------|------------------------------|---------------|----------------|---------------|---------------------------|
| C91             | 87-010-137-010 | 0E         | CAP, E 22-16 BP              | C807          | 87-010-149-080 | 0E            | C-CAP, S 5P-50 CH         |
| M3              | 9X-262-511-710 | 2M         | MOTOR ASSY (LOADING)         | C808          | 87-010-149-080 | 0E            | C-CAP, S 5P-50 CH         |
| S2              | 91-572-086-110 | 1B         | LEAF SW (OPEN/CLOSE)         | C809          | 87-010-183-080 | 0E            | C-CAP, S 2700P-50 B       |
| S3              | 91-572-086-110 | 1B         | LEAF SW (CLOSE)              | C810          | 87-010-183-080 | 0E            | C-CAP, S 2700P-50 B       |
|                 |                |            |                              | C813          | 87-010-182-080 | 0E            | C-CAP, S 2200P-50 B       |
| AC C. B         |                |            |                              | C814          | 87-010-182-080 | 0E            | C-CAP, S 2200P-50 B       |
| AC VOLTAGE C. B |                |            |                              | C815          | 87-010-316-080 | 0E            | C-CAP, S 33P-50 CH        |
| △SW101          | 87-036-235-010 | SW, SL     | ESD 269(LH, HE)              | C816          | 87-010-316-080 | 0E            | C-CAP, S 33P-50 CH        |
| △F101           | 87-035-413-010 | 1A         | FUSE T1. 6A 250VUL(EXCEPT U) | C817          | 87-010-194-080 | 0E            | C-CAP, S 0. 047-25 F      |
| △F101           | 87-035-411-010 | 1A         | FUSE T1. 0A 250VUL(U)        | C818          | 87-010-194-080 | 0E            | C-CAP, S 0. 047-25 F      |
| DECK-1 C. B     |                |            |                              | C819          | 87-010-182-080 | 0E            | C-CAP, S 2200P-50 B       |
| CON351          | 82-NE8-633-010 | 0E         | CONN, 7P PH H                | C820          | 87-010-182-080 | 0E            | C-CAP, S 2200P-50 B       |
| SOL1            | 82-ZM1-618-010 | 1B         | SOL ASSY, 27                 | C823          | 87-010-176-080 | 0E            | C-CAP, S 680P-50 SL       |
| SW4             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | C824          | 87-010-176-080 | 0E            | C-CAP, S 680P-50 SL       |
| SW5             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | C827          | 87-010-401-040 | 0E            | CAP, E 1-50 SME           |
| SW6             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | C828          | 87-010-401-040 | 0E            | CAP, E 1-50 SME           |
| DECK-2 C. B     |                |            |                              | C841          | 87-010-197-080 | 0E            | C-CAP, S 0. 01-25 B       |
| CON352          | 82-NE8-634-010 | 0E         | CONN, 10P PH H WHT           | C842          | 87-010-197-080 | 0E            | C-CAP, S 0. 01-25 B       |
| M2              | 87-045-348-010 | 1H         | MOT, SHW 2L 70               | MVR801        | 83-NE2-605-010 | 2M            | VR, 50KBX2 RK16812 MG     |
| SFR1            | 87-024-170-080 | 0E         | SFR, 3. 3K DIA 6V            | MISCELLANEOUS |                |               |                           |
| SOL2            | 82-ZM1-618-010 | 1B         | SOL ASSY, 27                 | △             | 87-050-032-010 | AC            | CORD ASSY K 3P S(K)       |
| SW2             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | △             | 87-050-016-010 | AC            | CORD ASSY, E(Z, E)        |
| SW3             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | △             | 87-050-034-010 | AC            | CORD ASSY, E(HE)          |
| SW4             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | △             | 87-050-023-010 | AC            | CORD ASSY, U-2(U)         |
| SW5             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | △             | 87-050-026-010 | 1D            | AC CORD, D 1800MM(D)      |
| SW6             | 87-036-110-010 | 0E         | SW, PUSH SPPB 62             | △             | 87-034-749-010 | AC            | CORD, H W/PLUG(LH)        |
| RELAY-1 C. B    |                |            |                              | △             | 87-085-184-010 | 0E            | BUSHING, AC CORD D(D, LH) |
| RELAY-2 C. B    |                |            |                              | △             | 87-085-185-010 | BUSHING, AC   | CORD E(HE, Z, K, E)       |
| VOLUME C. B     |                |            |                              | △             | 87-085-189-010 | BUSHING, CORD | U(U)                      |
| C801            | 87-010-384-040 | 0E         | CAP, E 100-25 SME            |               | 98-848-127-11Z | 2G            | OPTICAL PICK UP KSS-210A  |
| C802            | 87-010-248-040 | 0E         | CAP, E 220-10 SME            | PH            | 87-046-398-010 | 1F            | HEAD, PH YK50P-BS409(D1)  |
| C804            | 87-010-192-080 | 0E         | C-CAP, S 0. 022-50 F         | △PT101        | 83-NE2-612-010 | 2B            | PT, 3NE2 D(D)             |
| C805            | 87-012-156-080 | 0E         | C-CAP, S 220P CH             | △PT101        | 83-NE2-611-010 | PT, 3NE2      | EKZ(Z, K, E)              |
| C806            | 87-012-156-080 | 0E         | C-CAP, S 220P CH             | △PT101        | 83-NE2-610-010 | PT, 3NE2      | HU(LH, HE, U)             |
|                 |                |            |                              | RPH           | 87-046-399-010 | 2A            | HEAD, RPH YK56R-BS409(D2) |

# ○チップ抵抗部品コード／CHIP RESISTOR PART CODE

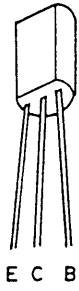
チップ抵抗部品コードの成り立ち  
Chip resistor part coding



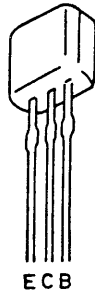
チップ抵抗  
Chip resistor

| Wattage<br>容量 | Type<br>種類 | Tolerance<br>許容誤差 | Symbol<br>記号 | Dimensions／寸法 (mm) |     |      |             | Resistor code : A<br>抵抗コード : A |
|---------------|------------|-------------------|--------------|--------------------|-----|------|-------------|--------------------------------|
|               |            |                   |              | Form/外形            | L   | W    | t           |                                |
| 1/32W         | 1608       | ±5%               | CJ           |                    | 1.6 | 0.8  | 0.35        | 108                            |
| 1/10W         | 2125       | ±5%               | CJ           |                    | 2   | 1.25 | 1.45        | 118                            |
| 1/8W          | 3216       | ±5%               | CJ           |                    | 3.2 | 1.6  | 0.5<br>~0.7 | 128                            |

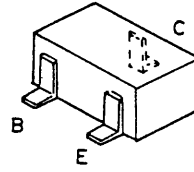
# TRANSISTOR ILLUSTRATION



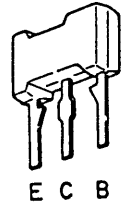
2SA952  
2SA970  
2SA1015  
2SA1318  
2SC1815  
2SC1923  
2SC2001  
2SC3266  
2SC3331  
2SD655



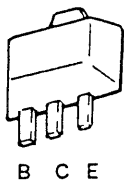
2SA933  
2SC1740  
DTA114YS  
DTA144ES  
DTA144WS  
DTC114YS  
DTC143XS  
DTC144ES



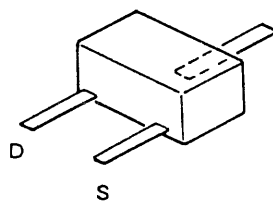
2SC2712  
DTA114TK  
DTA143EK  
DTA144EK  
DTC114YK  
DTC124XK  
DTC144WK  
DTC363EK



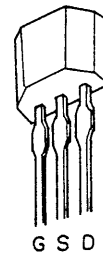
2SB1329



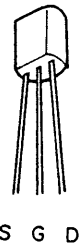
2SB1370



2SK161



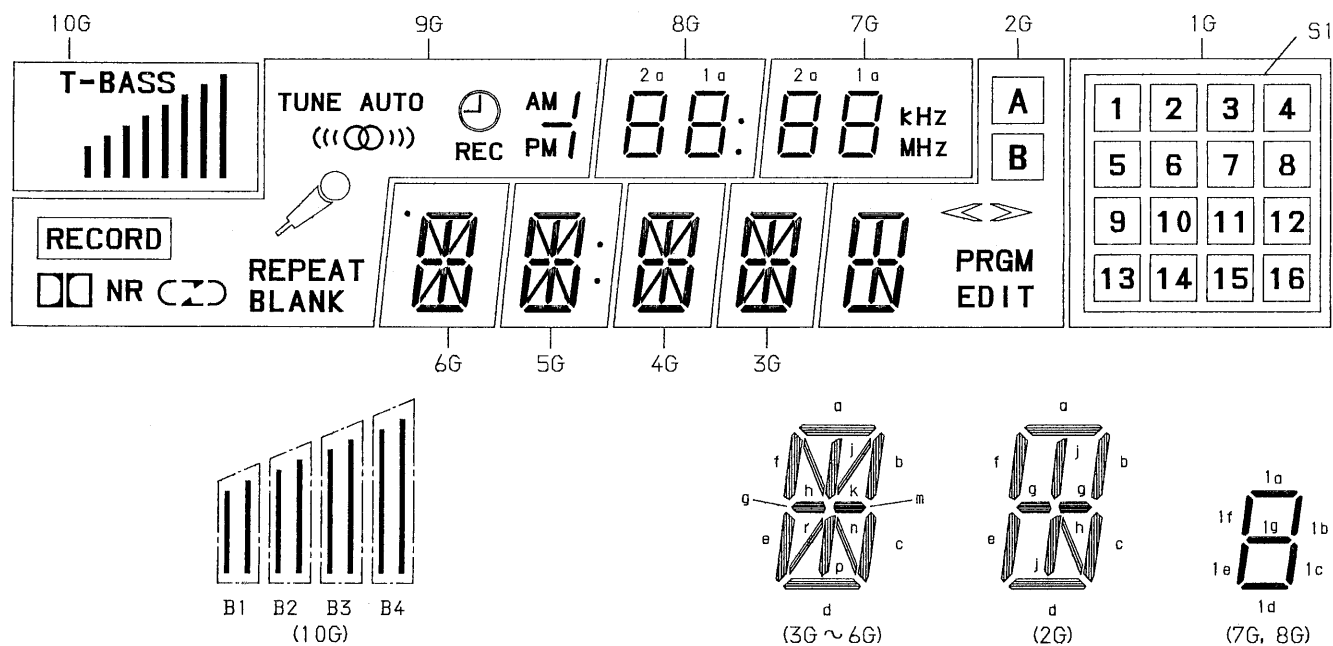
2SK241



2SK246

# FL DIAGRAM

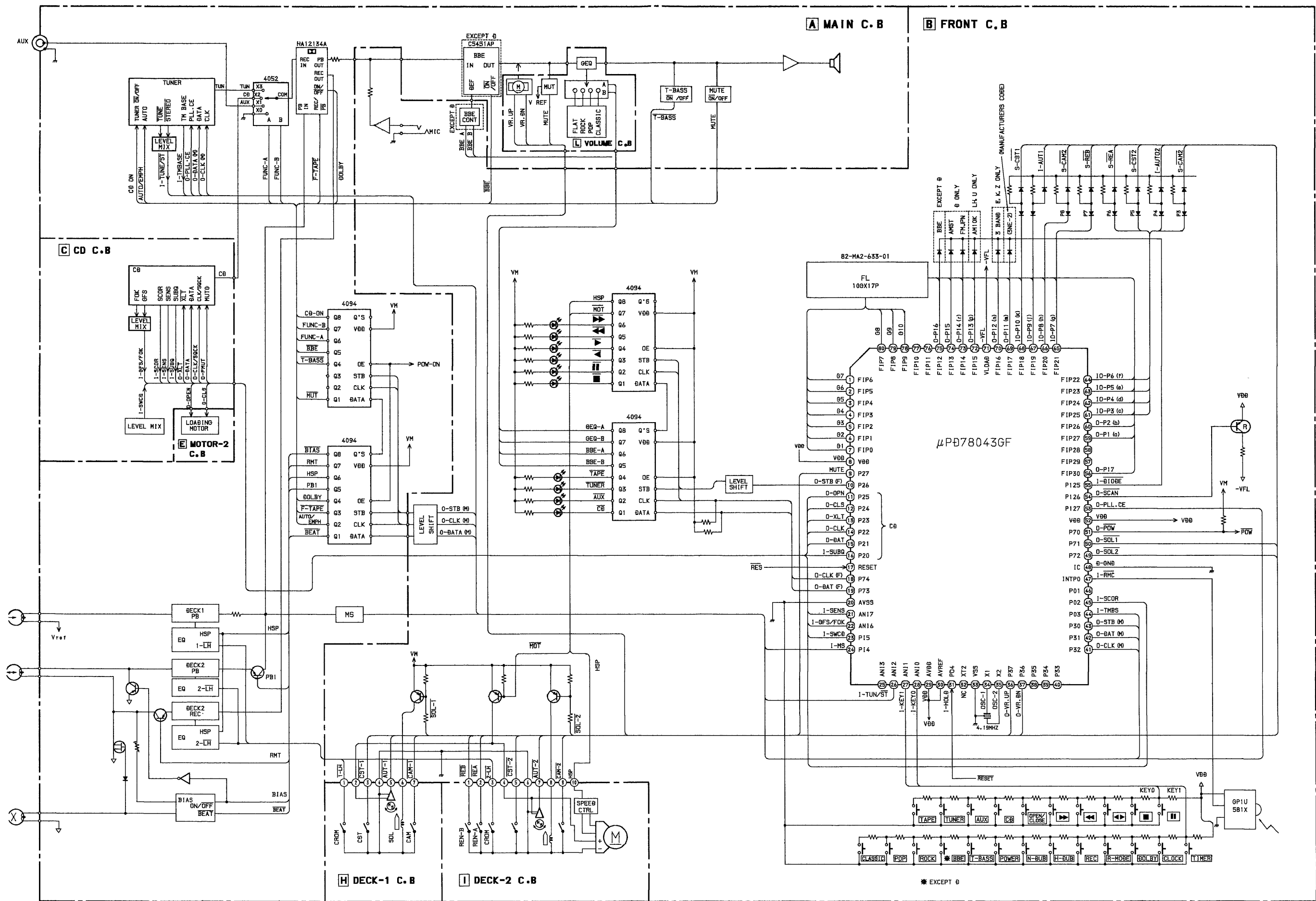
## GRID ASSIGNMENT

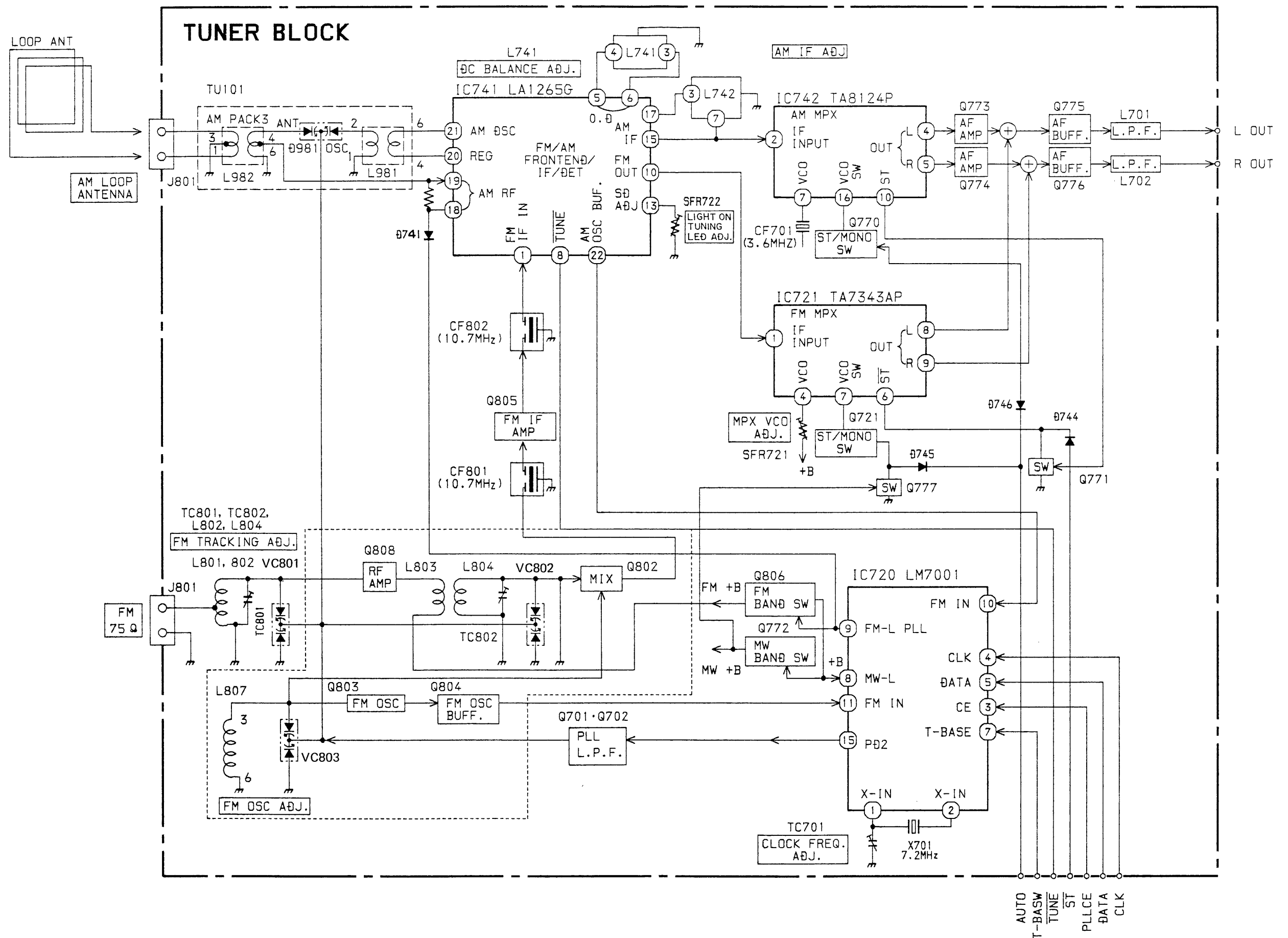


## ANODE CONNECTION

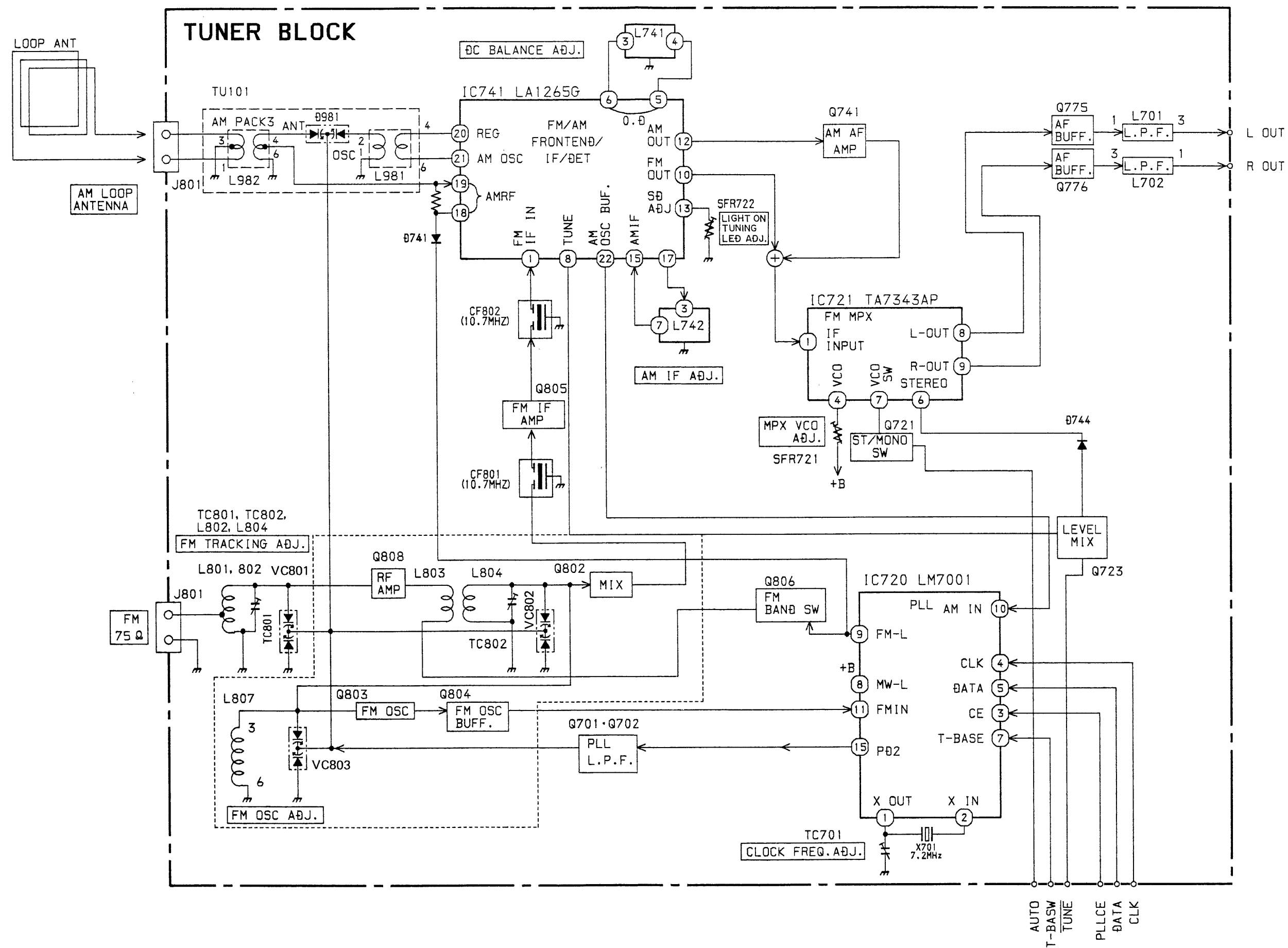
|     | 10G    | 9G       | 8G    | 7G  | 6G | 5G    | 4G | 3G | 2G   | 1G |
|-----|--------|----------|-------|-----|----|-------|----|----|------|----|
| P1  | -      | RECORD   | 2a    | 2a  | a  | a     | a  | a  | a    | 1  |
| P2  | -      | NR       | 2b    | 2b  | b  | b     | b  | b  | b    | 2  |
| P3  | -      | C        | 2c    | 2c  | c  | c     | c  | c  | c    | 3  |
| P4  | -      | )        | 2d    | 2d  | d  | d     | d  | d  | d    | 4  |
| P5  | -      | RANDOM   | 2e    | 2e  | e  | e     | e  | e  | e    | 5  |
| P6  | -      | REPEAT   | 2f    | 2f  | f  | f     | f  | f  | f    | 6  |
| P7  | -      |          | 2g    | 2g  | g  | g     | g  | g  | g    | 7  |
| P8  | -      | TUNE     | O [上] | KHz | h  | h     | h  | h  | h    | 8  |
| P9  | B1     | AUTO     | 1a    | 1a  | j  | j     | j  | j  | j    | 9  |
| P10 | B2     | ((((O))) | 1b    | 1b  | k  | k     | k  | k  | >>   | 10 |
| P11 | B3     |          | 1c    | 1c  | m  | m     | m  | m  | <<   | 11 |
| P12 | B4     | REC      | 1d    | 1d  | n  | n     | n  | n  | -    | 12 |
| P13 | -      | AM       | 1e    | 1e  | p  | p     | p  | p  | PRGM | 13 |
| P14 | -      | PM       | 1f    | 1f  | r  | r     | r  | r  | EDIT | 14 |
| P15 | -      | /        | 1g    | 1g  | O  | O [上] | -  | -  | A    | 15 |
| P16 | -      | -        | O [下] | MHz | -  | O [下] | -  | -  | B    | 16 |
| P17 | T-BASS |          | -     | -   | -  | -     | -  | -  |      | S3 |

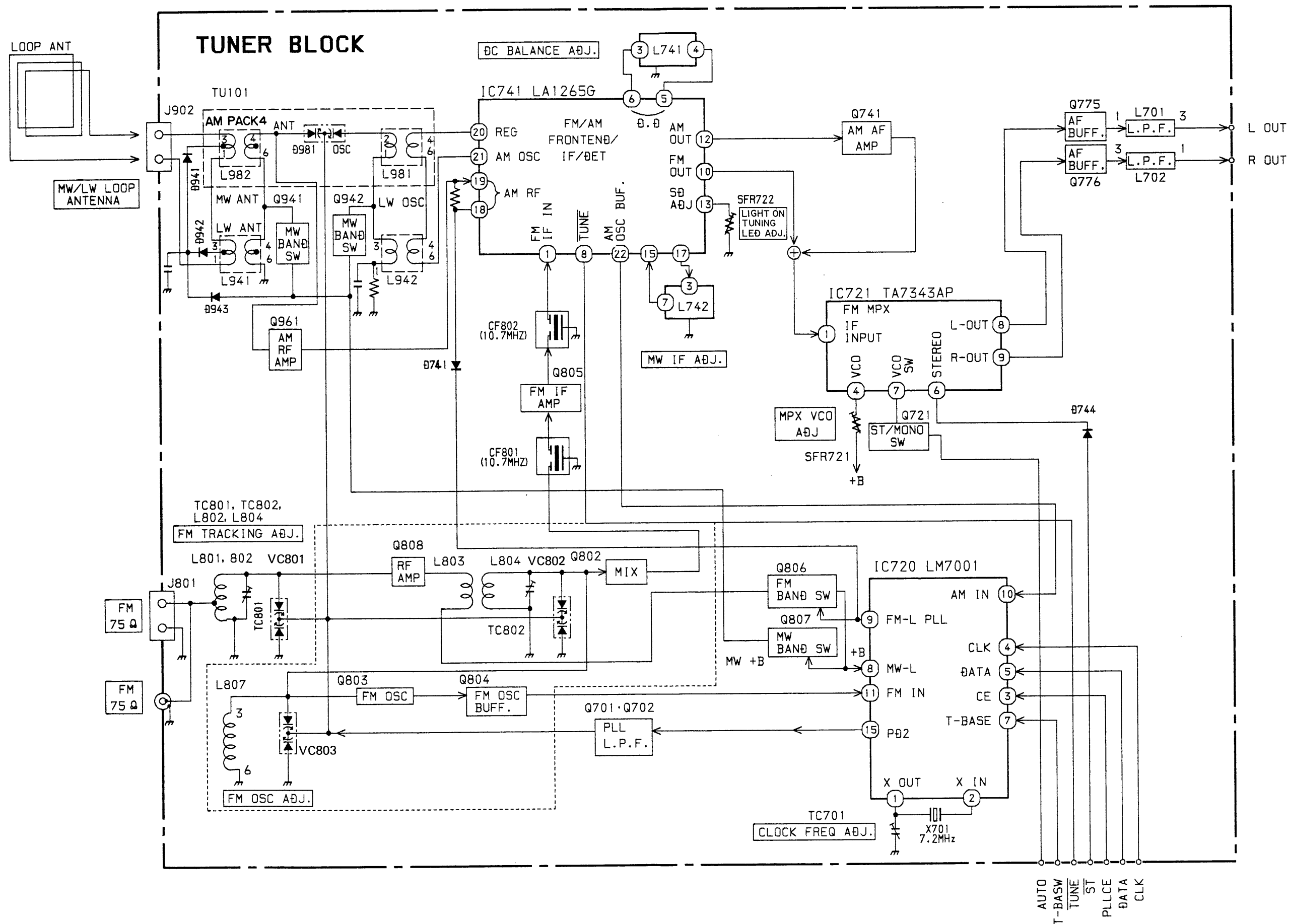


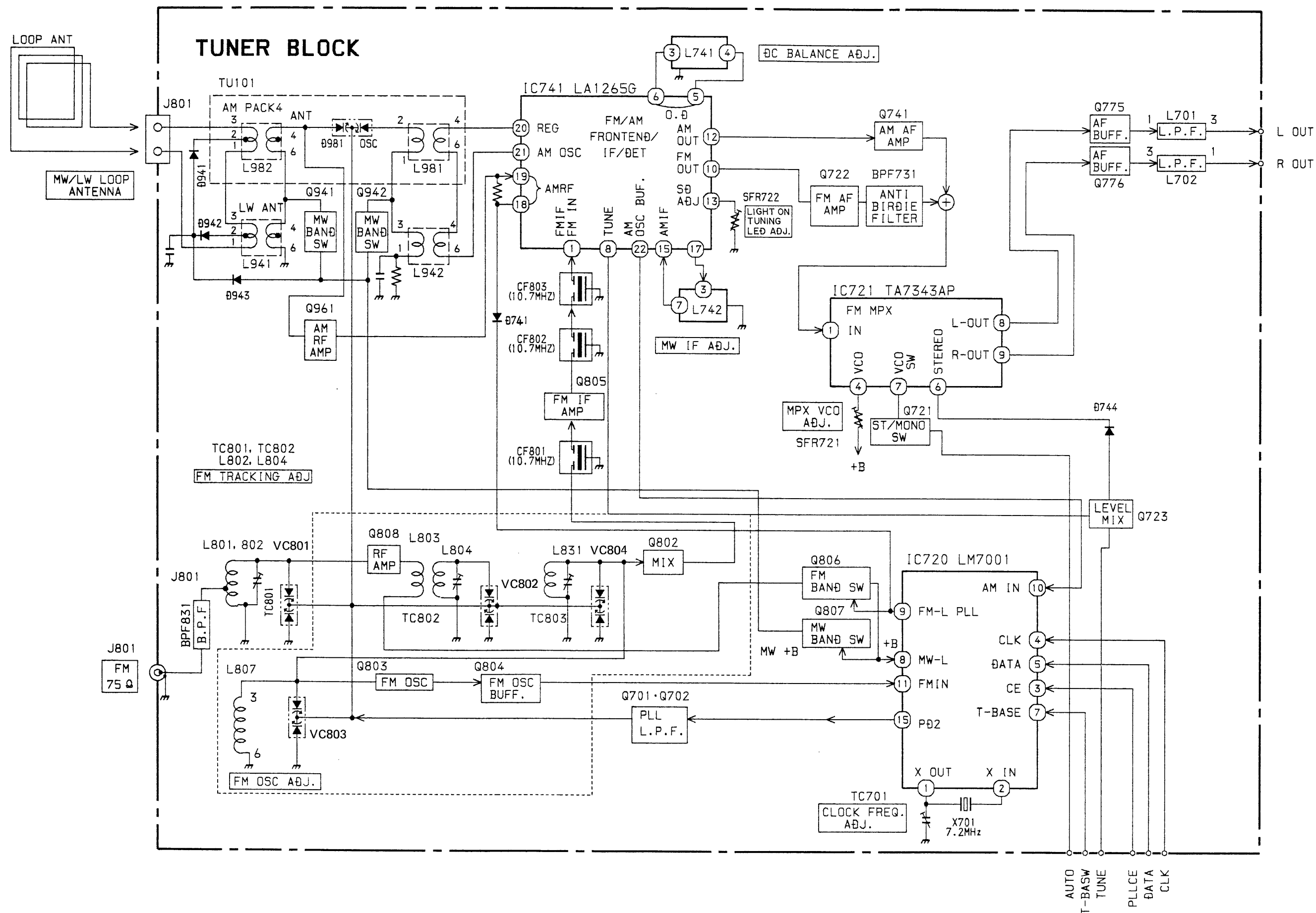




BLOCK DIAGRAM—3 (LH, HE, U MODELS)



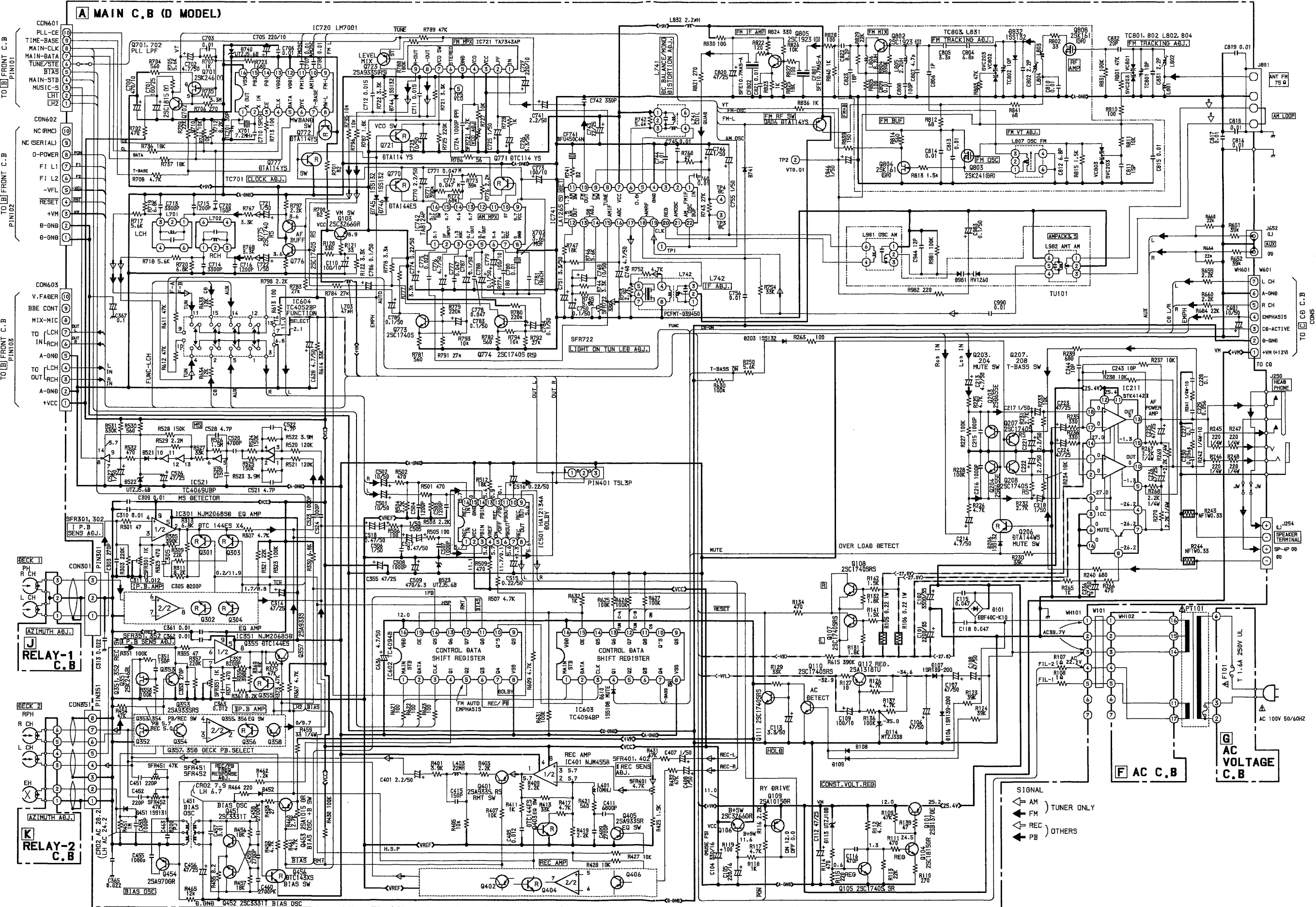








SCHEMATIC DIAGRAM—1 (D MODEL)



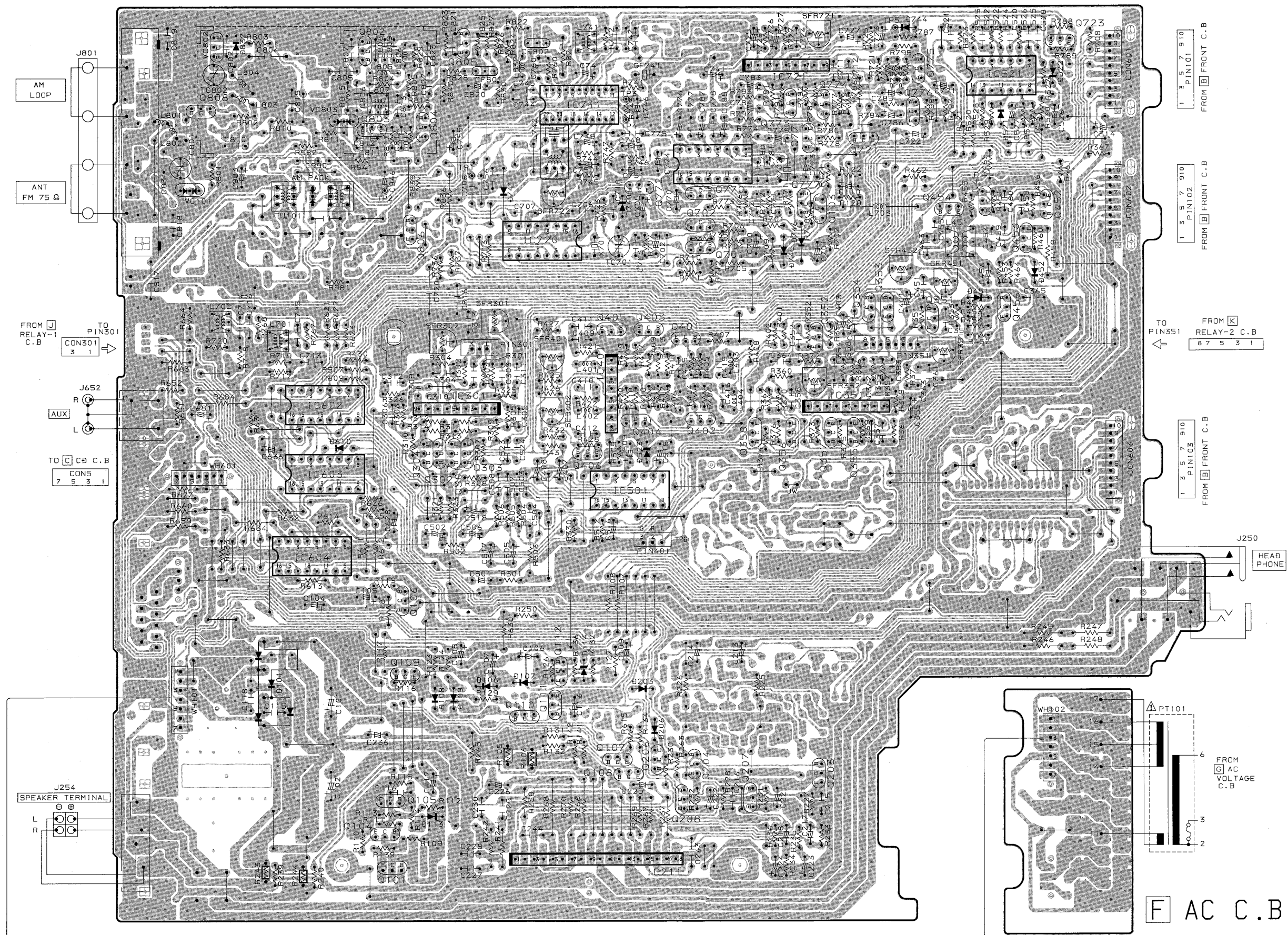


A  
B  
C  
D  
E  
F  
G  
H  
I  
J

# A MAIN C.B (D MODEL)

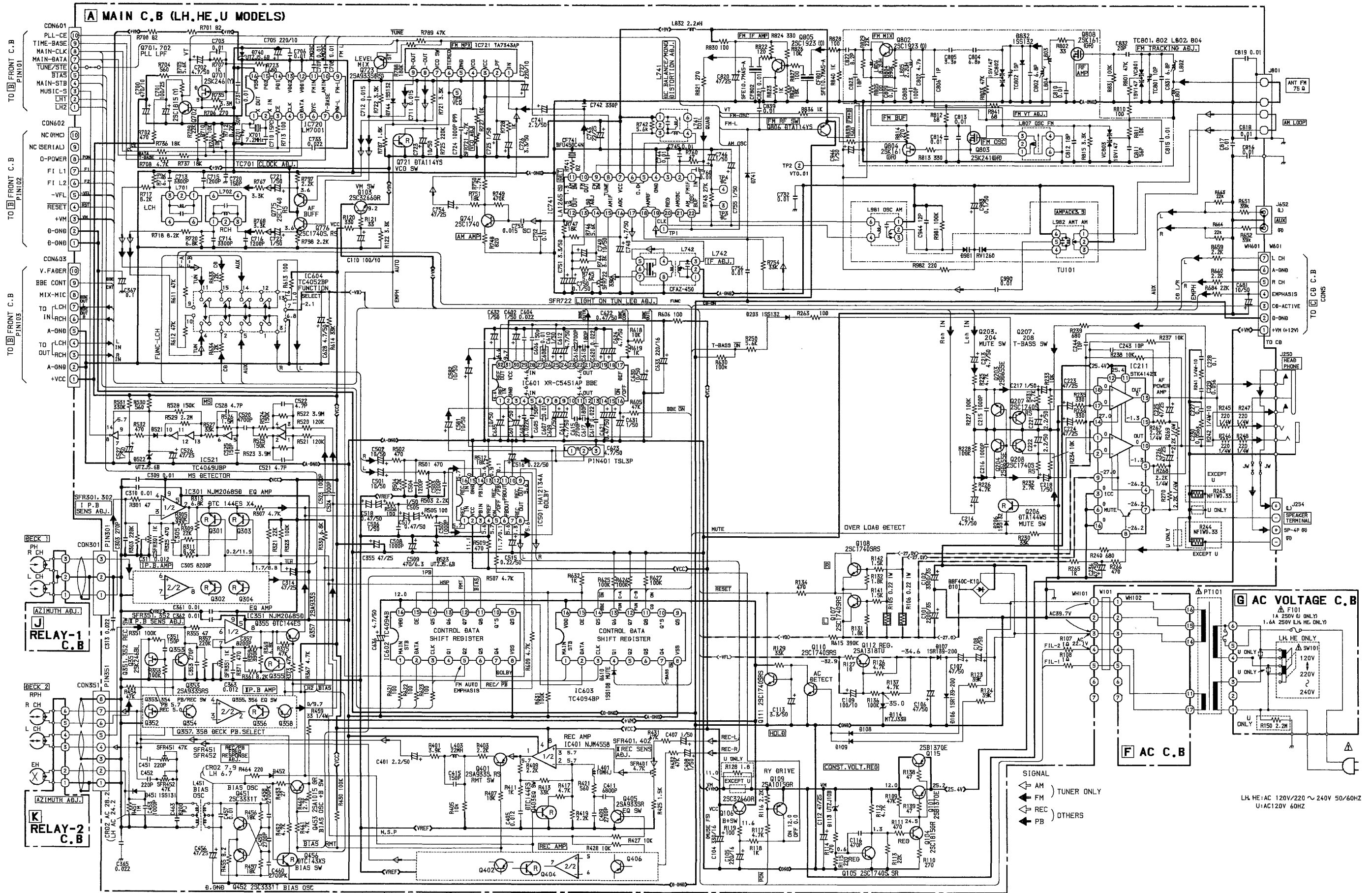
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)





SCHEMATIC DIAGRAM—2 (HE, LH, U MODELS)



(プリント基板内のケミコンの極性表示は⊖表示です。)

1 3 5 7 9 10  
PIN101

1 3 5 7 910  
PIN102  
FROM [B] FRONT C.B

TO FROM K  
PIN351 RELAY-2 C.B  
← 8 7 5 3 1

1 3 5 7 910  
PIN103  
FROM [B] FRONT C.B

J250

HEAD  
PHONE

PT101

6

5

4

3

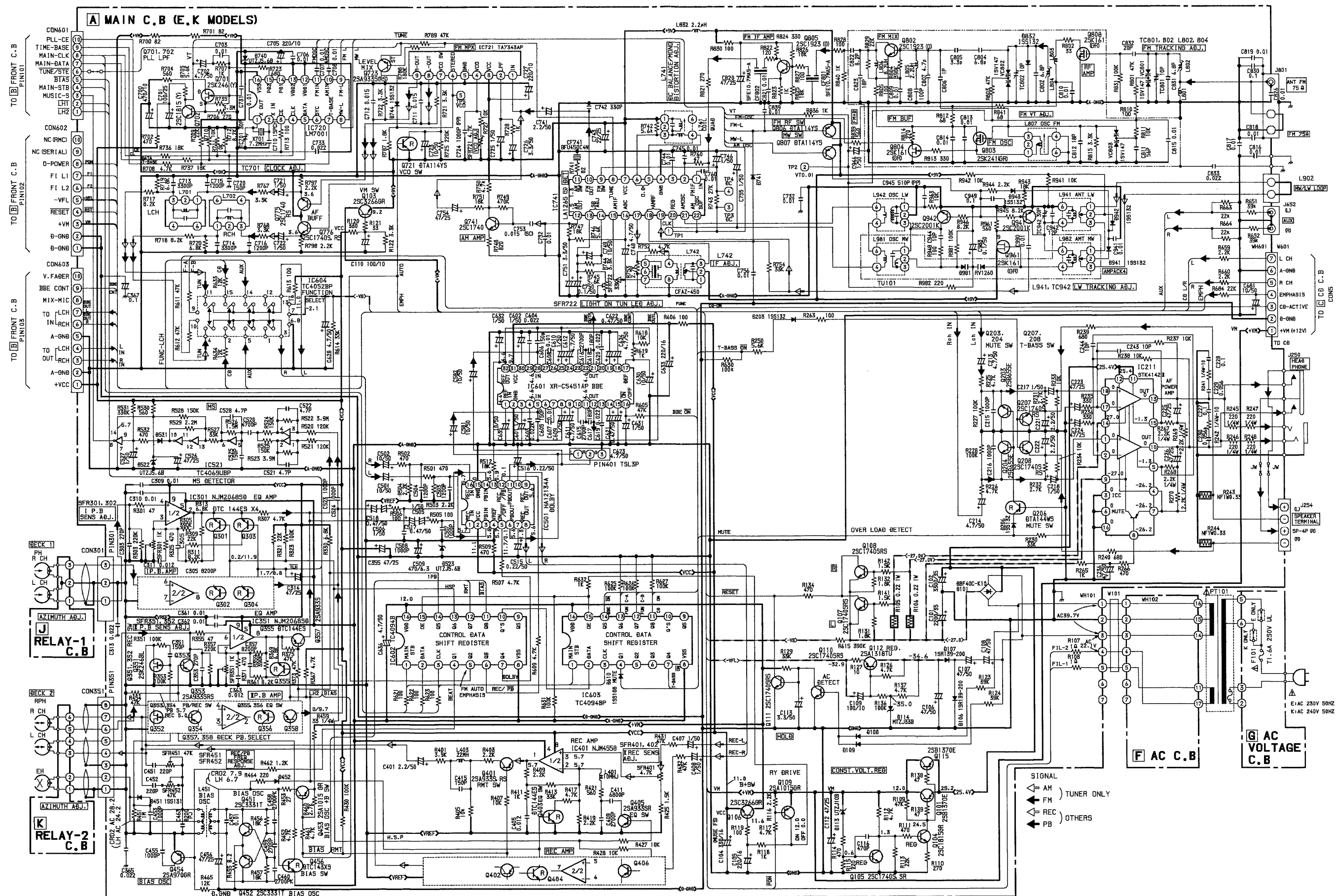
1

FROM G AC VOLTAGE C.B

**F** AC C.B



**SCHEMATIC DIAGRAM—3 (E, K MODELS)**



A

B

C

D

E

F

G

H

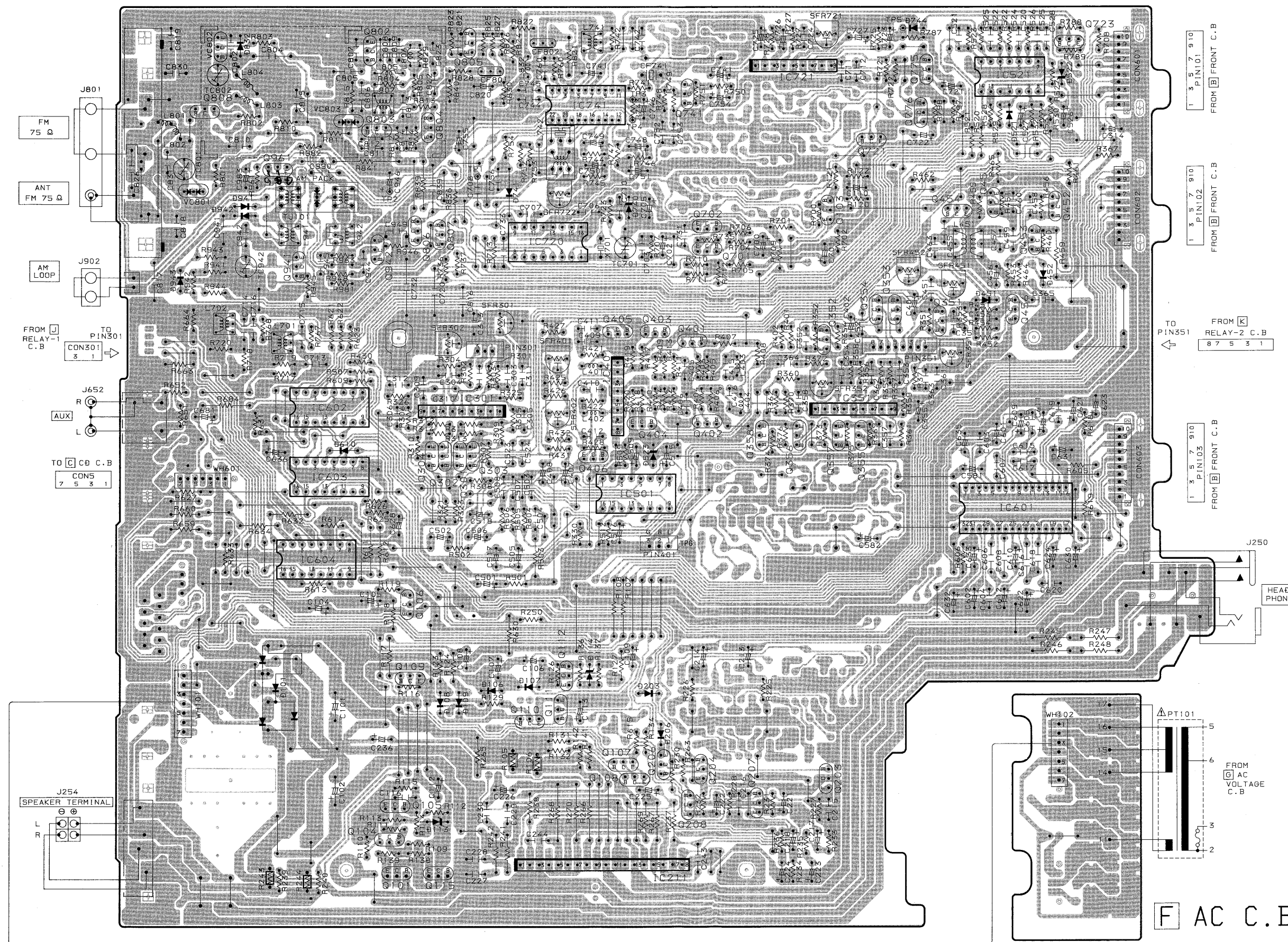
I

J

# A MAIN C.B (E, K MODELS)

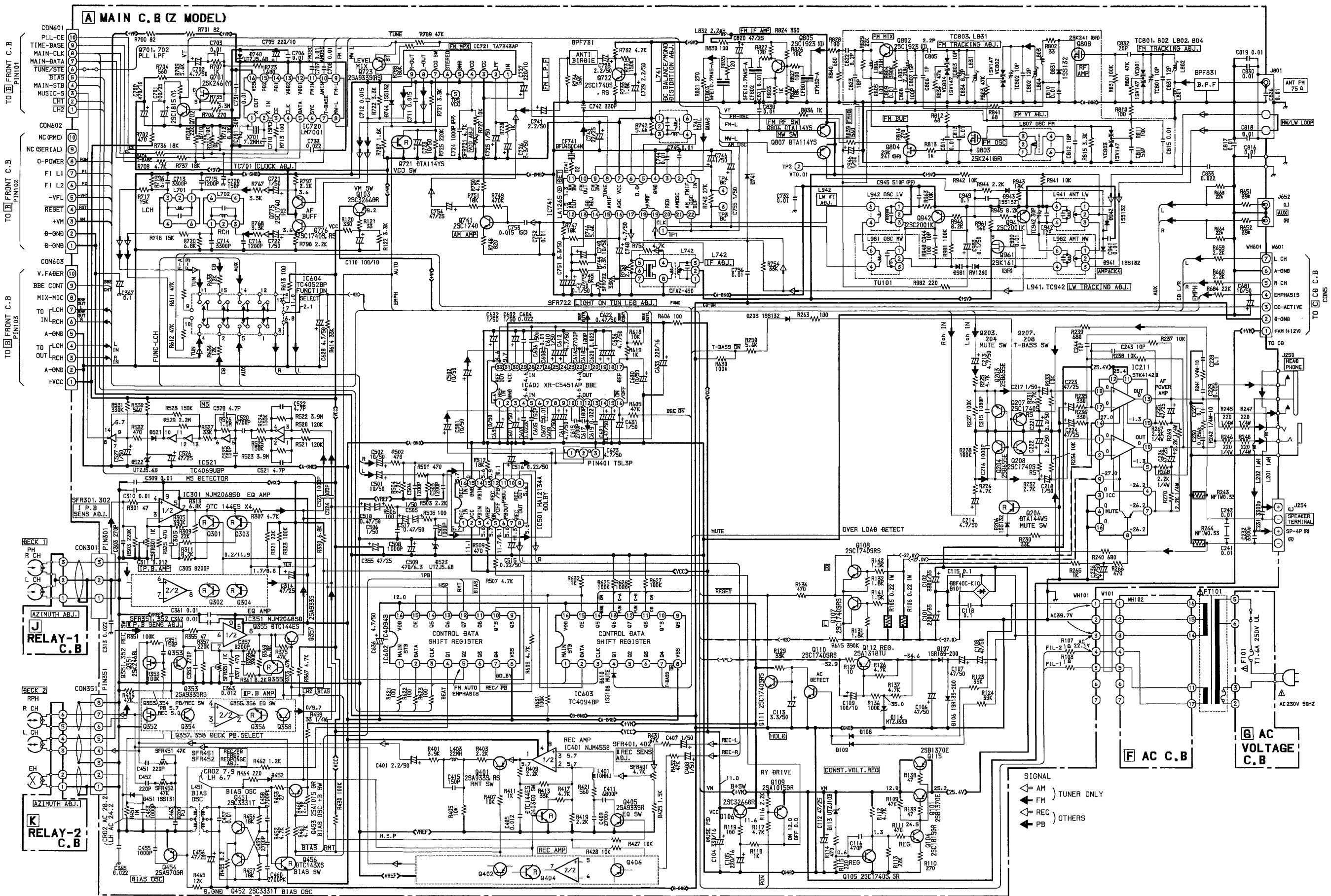
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は⊖表示です。)





SCHEMATIC DIAGRAM—4 (Z MODEL)

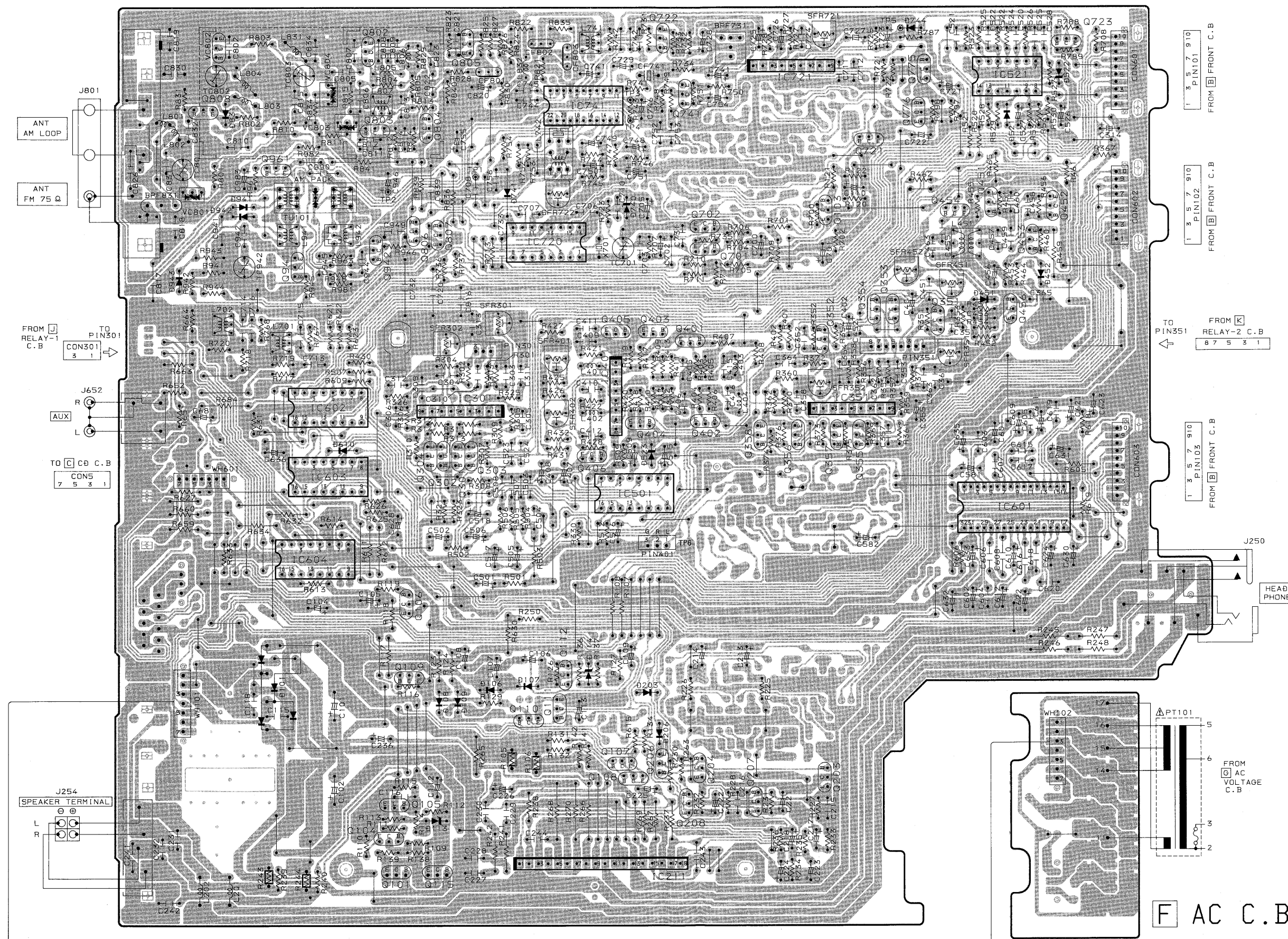


A  
B  
C  
D  
E  
F  
G  
H  
I  
J

# A MAIN C.B (Z MODEL)

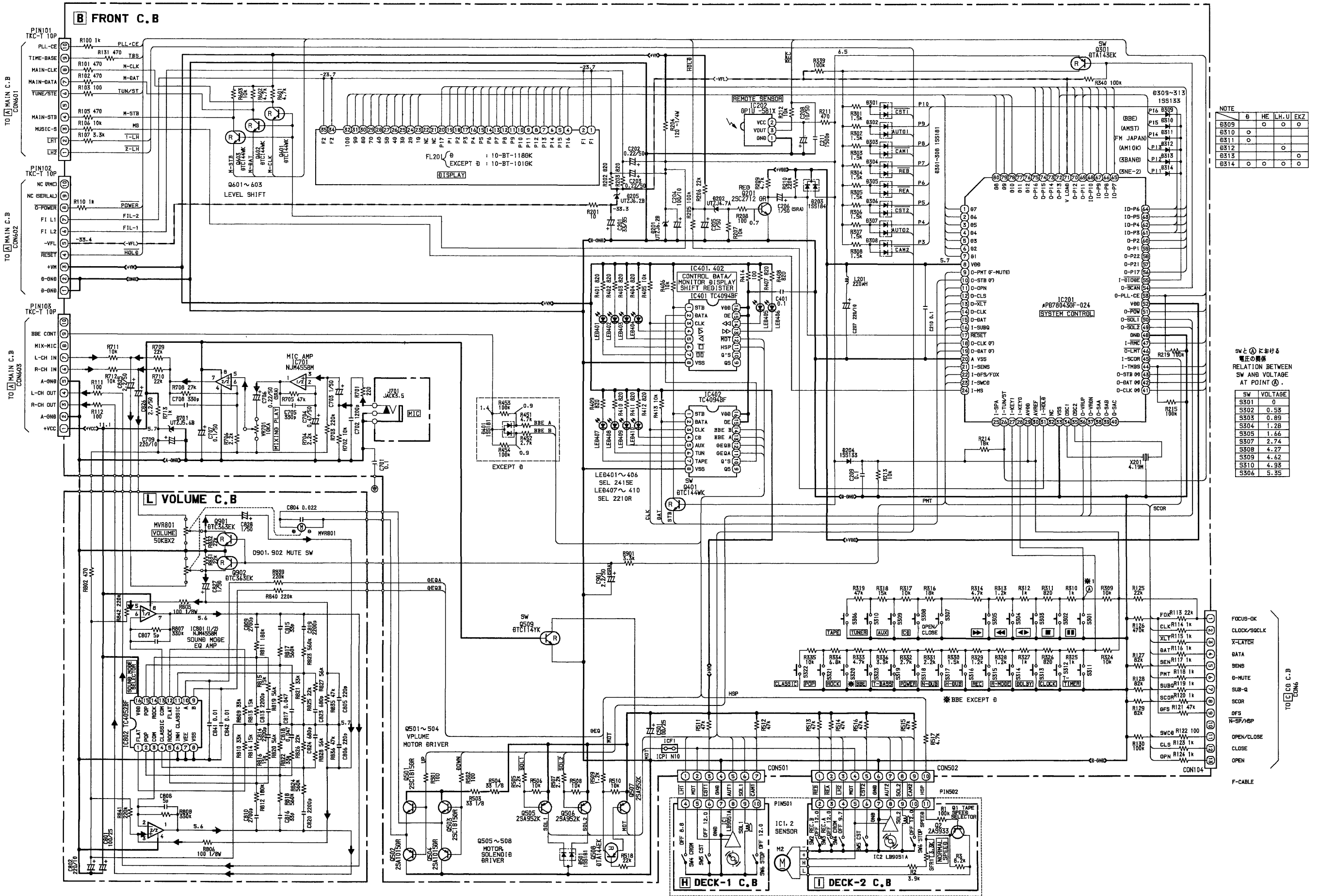
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

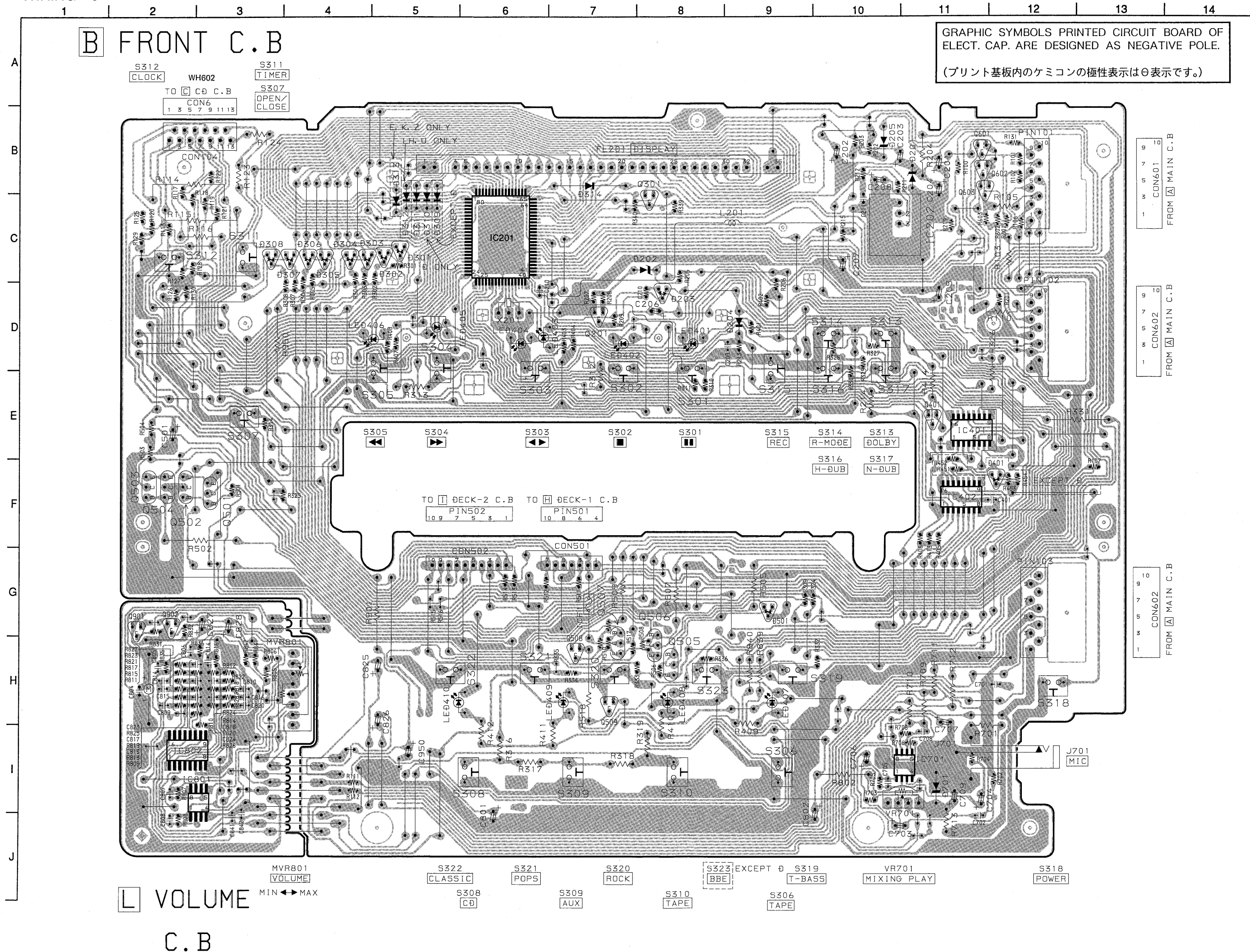
(プリント基板内のケミコンの極性表示は⊖表示です。)



## F AC C.B

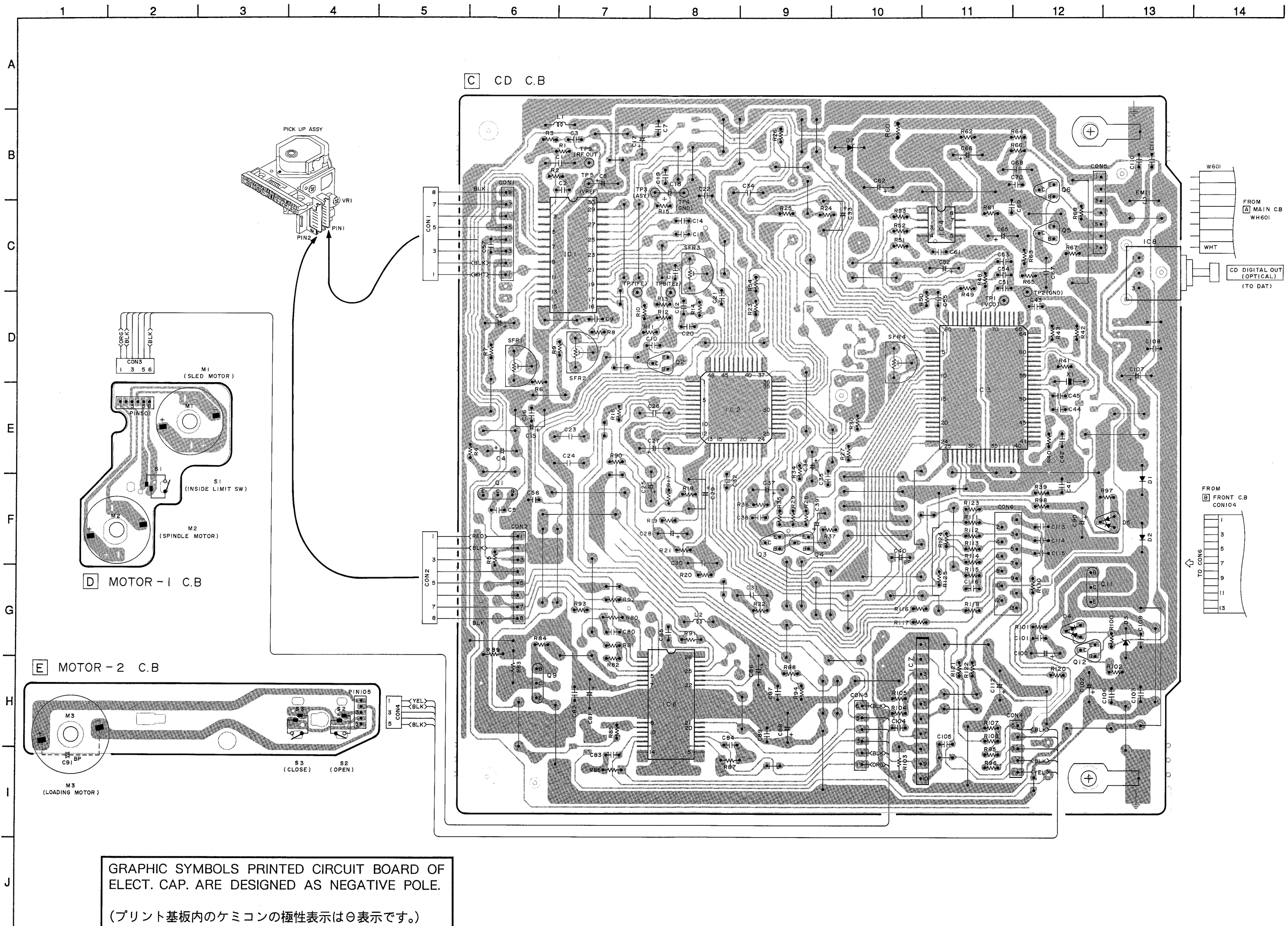




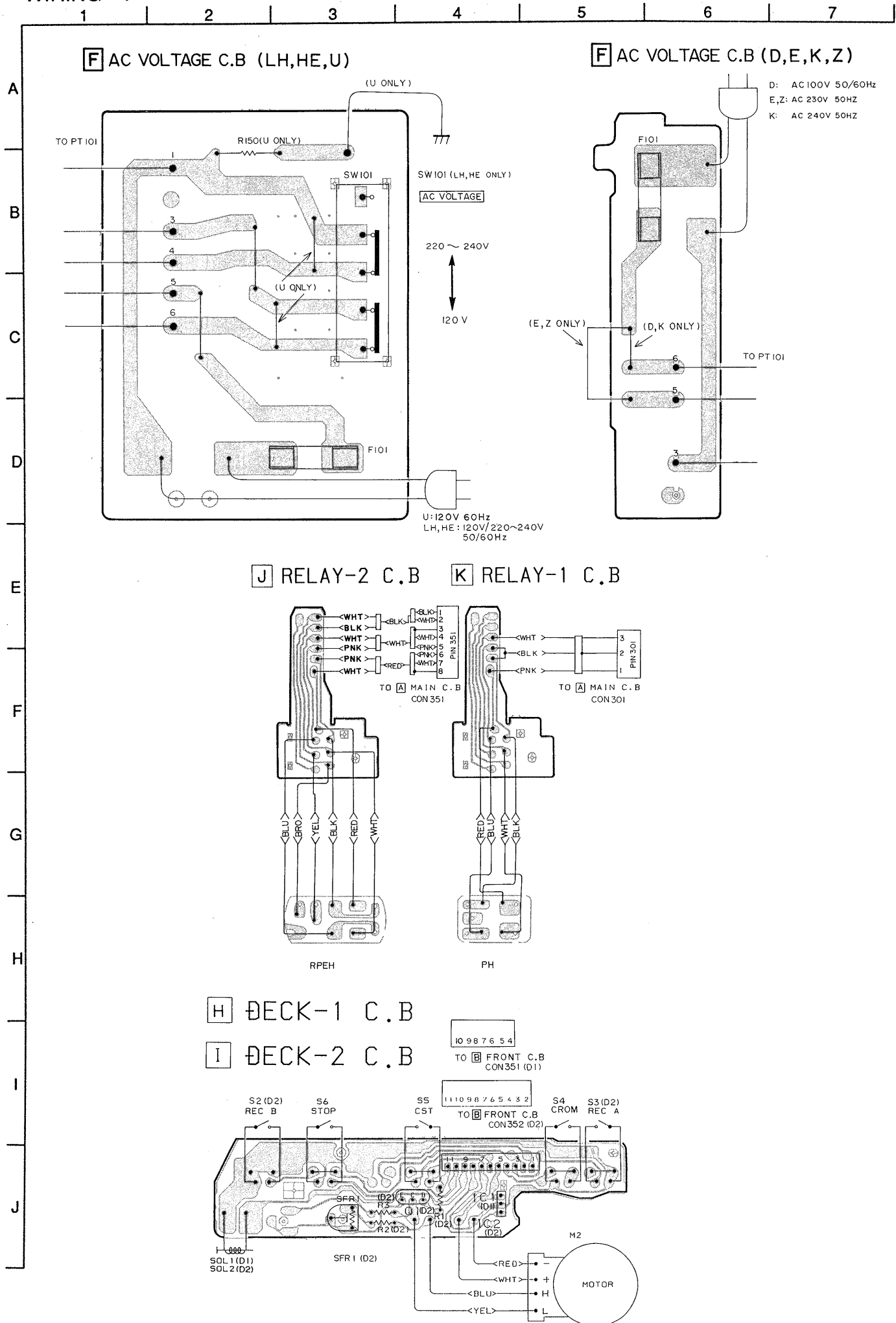








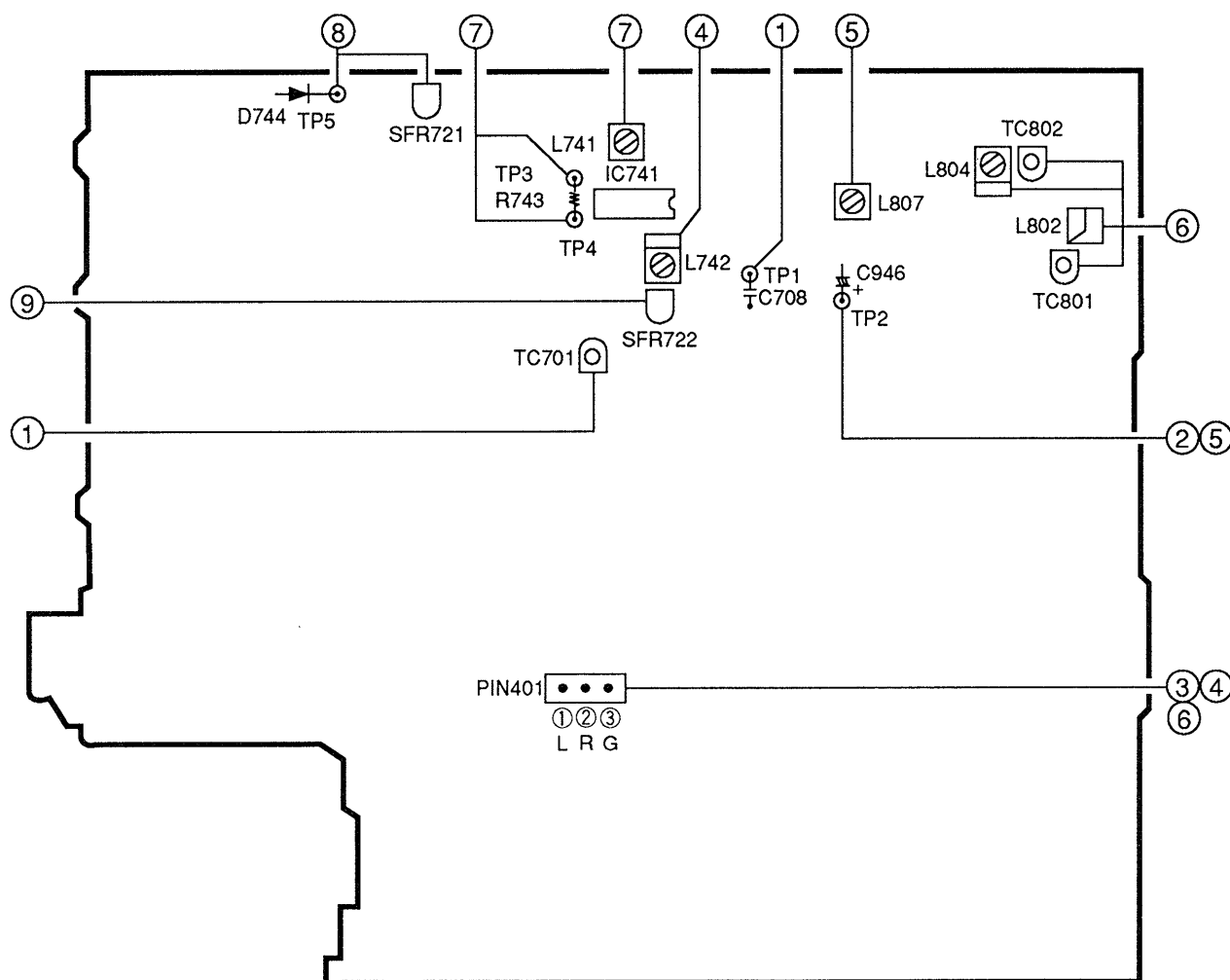
# WIRING-7



## ADJUSTMENT—1<TUNER>

(D Model)

### A MAIN C.B



#### 1. クロック周波数調整

条件：・テストポイント：TP1  
・調整箇所：TC701

方法：AM 1602kHzに設定し、テストポイントTP1の周波数が  
2052±0.01kHzになる様に調整する。

#### 2. AM VT 確認

条件：・テストポイント：TP2

方法：AM 1602kHzに設定し、テストポイントTP2の電圧が6.0  
±1.0Vになることを確認する。

#### 3. AMトラッキング確認

条件：・テストポイント：PIN401

方法：AM 999kHzに設定し、感度が53±6dB、S/N比が20dBに  
なることを確認する。

#### 4. AM IF 調整

条件：・テストポイント：PIN401

L742 ..... 450kHz

#### 5. FM VT 調整

条件：・テストポイント：TP2  
・調整箇所：L807

方法：FM 76.0MHzに設定し、テストポイントTP2の電圧が1.0V  
±0.05Vになる様に調整する。

#### 6. FM トラッキング調整

条件：・テストポイント：PIN401

(L802及びL804) ..... 76.0MHz  
(TC801及びTC802) ..... 108.0MHz

#### 7. DCバランス／モノラルディストーション調整

条件：・テストポイント：TP3及びTP4 (DCバランス)

TP6 (モノラルディストーション)

・調整箇所：L741

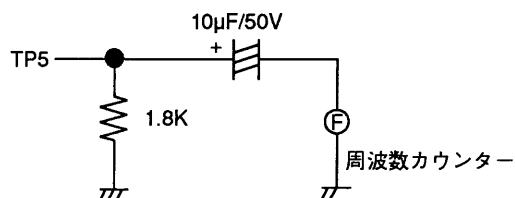
方法：FM 83.0MHzに設定し、テストポイントTP3、TP4間の電  
圧が0±0.02Vになる様にL741を調整する。調整後、TP6  
での歪率が0.9%以下であることを確認する。



## 8. MPX VCO 調整

条件：・テストポイント：TP5  
・調整箇所：SFR721  
・入力レベル：54dB

方法：コンデンサーと抵抗を下图の様に接続する。非変調のFM 83.0MHzに設定し、テストポイントTP5の周波数が $38 \pm 0.05\text{kHz}$ になる様にSFR721を調整する。



## 9. チューニングLED 点灯調整

条件：・入力レベル：16dB  
・調整箇所：SFR722

方法：FM 83.0MHzに設定し、チューニングLEDが点灯する様にSFR722を調整する。その後、入力レベルが2dB下がるとLEDは消灯する。

## PRACTICAL SERVICE FIGURE

### <FM部>

IHF 感度：  $4 \pm 6\text{dB}$  (76/83/90/108MHz時)  
(THD 3%)  
50dB雑音制限感度：  $32 \pm 5\text{dB}$  (76/83/108MHz時)  
S/N比： STEREO 64dB以上 (83MHz時)  
歪率： MONO 0.9%以下 (83MHz時)  
STEREO 1.2%以下 (83MHz時)  
セパレーション： 25dB以上 (83MHz時)  
中間周波数： 10.7MHz

### <AM部>

実用感度：  $54 \pm 6\text{dB}$  (603kHz時)  
(S/N 20dB)  $53 \pm 6\text{dB}$  (999kHz時)  
 $53 \pm 6\text{dB}$  (1404kHz時)  
歪率： 1.5%以下 (999kHz時)  
セパレーション： 20dB (999kHz時)  
中間周波数： 450kHz

(HE, LH, U, E, K, Z Models)

The schematic diagram illustrates the receiver section of the circuit. It features two tuned circuits, each consisting of a transformer (L741, L742) coupled to a variable capacitor (IC741). The first tuned circuit is connected to the antenna through a diode D744 and a trimmer TP5. The second tuned circuit is connected to the first through a coupling capacitor C946. The output of the second tuned circuit is connected to a detector and discriminator stage (TC803) and a limiter and discriminator stage (TC802). The output of TC802 is connected to a push-pull audio amplifier stage (L802, L804, L807, L941, L942) which drives a speaker or earphone. A PIN401 connector provides input for the L, R, and G channels.

### 1. Clock Frequency Adjustment

Settings: · Test point : TP1 (CLK)

- Adjustment location : TC701

Method: Set to AM 1602kHz (HE, E, K, Z), 1710kHz (LH, U) and adjust so that the test point becomes  $2052\text{kHz} \pm 0.01\text{kHz}$  (HE, E, K, Z),  $2160\text{kHz} \pm 0.01\text{kHz}$  (LH, U).

Settings: • Test point : TP2 (VT)

- Adjustment location : L942

Method: Set to LW 144kHz and adjust so that the test point becomes  $1.5V \pm 0.05V$ .

Setting: • Test point : PIN401

L941 . . . . . 144kHz

TC942 . . . . . 290kHz

Settings: • Test point : TP2 (VT)

Method: Set to AM 1602kHz (HE, E, K, Z), 1710kHz (LH, U) and check that the test point becomes  $6.0V \pm 1.0V$  (HE, E, K, Z),  $7.0V \pm 1.0V$  (LH, U).

Settings: • Test point : PIN401

Method: Set to AM 999kHz (HE, E, K, Z), 1000KHz (LH, U) and check that the test point becomes  $53 \pm 6\text{dB}$  and S/N ratio becomes 20dB.

Settings: • Test point : PIN401

L742 . . . . . 450kHz

Settings: • Test point : TP2 (VT)

- Adjustment location : L807

Method: Set to FM 87.5MHz and adjust L807 so that the test point becomes  $2.9V \pm 0.05V$ .

## 8. FM Tracking Adjustment

Settings: • Test point : TP6

L802, L804 . . . . . 87.5MHz (Except Z)

L802, L804, L831 . . . . . 87.5MHz (Z)

TC801, TC802 . . . . . 108MHz (Except Z)

TC801, TC802, TC803 . . . . . 108MHz (Z)

## 9. DC Balance/MONO Distortion Adjustment

Settings: • Test point : TP3, TP4 (DC balance)

TP6 (Distortion)

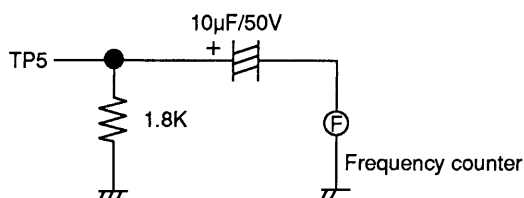
• Adjustment location : L741

• Input level : 54dB

Method: Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes  $0V \pm 0.02V$ .

Next, check that the distortion becomes minimum (less than 0.9%).

## 10. MPX VCO Adjustment



Settings: • Test point : TP5

• MODE SW : STEREO

• Adjustment location : SFR721

• Input level : 54dB

Method: Connect a capacitor and a resistor as below. Set to FM 98.0MHz and adjust so that the frequency at test point becomes  $38kHz \pm 0.05kHz$ .

## 11. Light on tuning LED Adjustment

Settings: • Adjustment location : SFR722

• Input level : 16dB

Method: Set to FM 98.0MHz and adjust TUNING LED to light on by SFR722. After that, LED goes out by 2dB down.

## PRACTICAL SERVICE FIGURE

### <TUNER SECTION>

#### <FM SECTION>

IHF Sensitivity:  $2 \pm 6dB$  (Except Z)  
(THD 3%) (at 87.5, 98.0, 108.0MHz)  
 $7 \pm 6dB$  (Z)  
(at 87.5, 98.0, 108.0MHz)

S/N 50dB Quieting Sensitivity:  
(Except Z)  $32 \pm 5dB$   
(at 87.5, 98.0, 108.0MHz)

S/N 46dB Quieting Sensitivity:  
(Z)  $37 \pm 6dB$   
(at 87.5, 98.0, 108.0MHz)

Signal to Noise Ratio: More than 64dB (Except Z)  
(at 98.0MHz)  
More than 60dB (Z)  
(at 98.0MHz)

Distortion: Less than 1.2%  
(at 98.0MHz)

Stereo Separation: More than 25dB (at 98.0MHz)

Intermediate Frequency: 10.7MHz

### <AM (MW) SECTION>

Sensitivity:  $54 \pm 8dB$   
[at 603kHz (HE, HR, E, K, Z)]  
[at 600kHz (LH, U)]  
 $53 \pm 6dB$   
[at 999/1404kHz (HE, HR, E, K, Z)]  
[at 1000/1400kHz (LH, U)]

Distortion: Less than 1.5%  
[at 999kHz (HE, HR, E, K, Z)]  
[at 1000kHz (LH, U)]

Intermediate Frequency: 450kHz

### <LW SECTION> (E, K, Z)

Sensitivity:  $66 \pm 5dB$  (at 144kHz)  
(S/N 20dB)  $63 \pm 5dB$  (at 198Hz)  
 $62 \pm 5dB$  (at 290kHz)

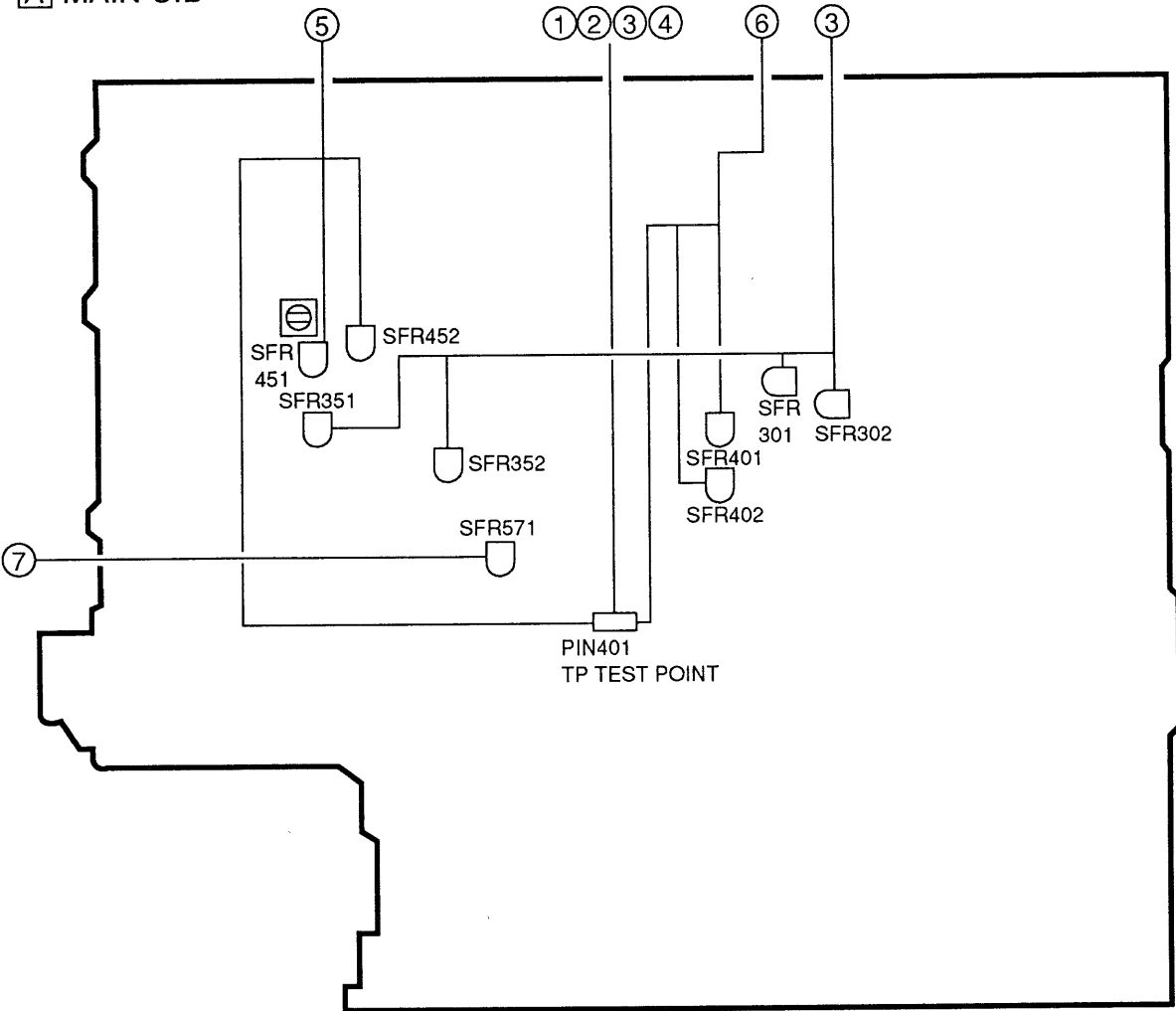
Signal to Noise Ratio: More than 32dB (at 198kHz)

Distortion: Less than 1.5% (at 198kHz)

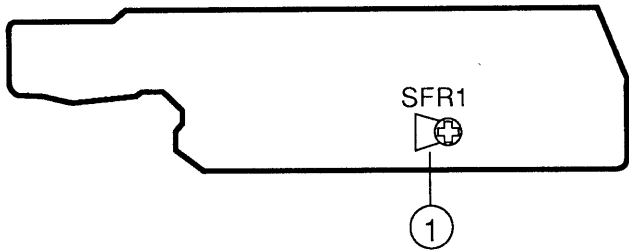
Intermediate Frequency: 450kHz

ADJUSTMENT—2<DECK>

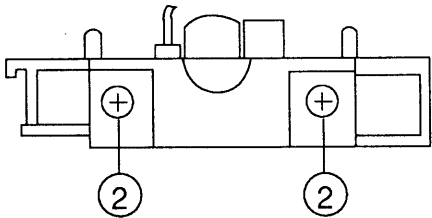
A MAIN C.B



I DECK—2 C.B



DECK 1 P, DECK 2 R/P/E HEAD





### 1. ノーマルスピード調整 (DECK2)

条件：・テストテープ：TTA-100

・テストポイント：PIN401

・調整箇所：SFR1 (DECK2)

方法：テストテープを再生し、再生周波数が $3000 \pm 5$ Hzになる様にSFR1 (DECK2) を調整する。

REV時はFWDに対して $\pm 45$ Hzになる様に調整する。

### 2. アジマス調整 (DECK1及びDECK2)

条件：・テストテープ：TTA-320

・テストポイント：PIN401

・調整箇所：アジマス調整ネジ

方法：テストテープの10kHzを再生し、出力が最大ポイントより-0.5dBになる様に調整する。PLAY及びREV PLAYの各モードにて調整する。

### 3. 再生レベル調整 (DECK1及びDECK2)

条件：・テストテープ：TTA-200

・テストポイント：PIN401

・調整箇所：SFR301 (DECK1 Lch)

SFR302 (DECK1 Rch)

SFR351 (DECK2 Lch)

SFR352 (DECK2 Rch)

方法：テストテープを再生し、出力が300mVになる様に調整する。

### 4. 再生周波数特性確認 (DECK1及びDECK2)

条件：・テストテープ：TTA-320

・テストポイント：PIN401

方法：テストテープの315Hzと10kHzを再生し、10kHzの出力が315Hzの出力に対して $0 \pm 2.0$ dBである事を確認する。

### 5. 録再周波数特性調整 (DECK2)

条件：・テストテープ：TTA-601

・テストポイント：PIN401

・調整箇所：SFR451 (Lch)

SFR452 (Rch)

方法：テストポイントにて21.0mVになる様に、ATTを調整する。テストテープの1kHzと10kHzを録再し、10kHzの出力が1kHzの出力に対して0dB $\pm 0.5$ dBになる様に調整する。

### 6. 録再感度調整 (DECK2)

条件：・テストテープ：TTA-601

・テストポイント：PIN401

・調整箇所：SFR401 (Lch)

SFR402 (Rch)

方法：テストポイントにて21.0mVになる様に、ATTを調整する。テストテープの1kHzを録再し、出力が21.0mV $\pm 0.5$ dBになる様に調整する。

## PRACTICAL SERVICE FIGURE

<DECK>

再生出力：300mV $\pm 1$ dB (LINE OUT)

録再出力：210mV $\pm 2$ dB (LINE OUT)

録再歪率：2.0%以下 (NORM/CrO<sub>2</sub>)

消去率：60dB以上

クロストーク：60dB以上

チャンネルセパレーション：

47dB以上

録再ノイズ：3.3mV/2.3mV以下

(DOLBY OFF/ON NORM)

2.3mV/1.7mV以下

(DOLBY OFF/ON CrO<sub>2</sub>)

再生ノイズ：3.2mV/2.2mV以下

(DOLBY OFF/ON NORM)

2.2mV/1.5mV以下

(DOLBY OFF/ON CrO<sub>2</sub>)

録音バイアス周波数：85kHz

テープスピード：3kHz $\pm 45$ Hz

ワウ・フラッター：0.4%以下 (RMS) (DECK1/2)

巻き取りトルク：35 $\sim$ 60g-cm (DECK1/2)

早送りトルク：75 $\sim$ 160g-cm (DECK1/2)

巻き戻しトルク：75 $\sim$ 160g-cm (DECK1/2)

バックテンション：2 $\sim$ 6g-cm (DECK1/2)

テストテープ：NORMAL TTA-601

CrO<sub>2</sub> TTA-610

#### 1. Normal Speed Adjustment (DECK-2)

- Settings:
- Test tape : TTA-100
  - Test point : TP-OUT (PIN401)
  - Adjustment location : SFR1 (DECK-2)

Method: Play back the test tape, on FWD PLAY SFR1 (DECK-2) adjust for  $3000\text{Hz} \pm 5\text{Hz}$ .  
And to  $\pm 45\text{Hz}$  of the FWD value during the REV mode.

#### 2. Head Azimuth Adjustment (DECK-1, DECK-2)

- Settings:
- Test tape : TTA-320
  - Test point : TP-OUT (PIN401)
  - Adjustment location : Head azimuth adjustment screw

Method: Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

#### 3. PB Sensitivity Adjustment (DECK-1, DECK-2)

- Settings:
- Test tape : TTA-200 (TCC-130, TTA-161)
  - Test point : TP-OUT (PIN401)
  - Adjustment location :
    - SFR301 (DECK-1, Lch)
    - SFR302 (DECK-1, Rch)
    - SFR351 (DECK-2, Lch)
    - SFR352 (DECK-2, Rch)

Method: Play back the test tape and adjust so that the output becomes 300mV.

#### 4. PB Frequency Response Check (DECK-1, DECK-2)

- Settings:
- Test tape : TTA-320
  - Test point : TP-OUT (PIN401)

Method: Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signal is  $0\text{dB} \pm 2\text{dB}$  with respect to that of the 315Hz signal.

#### 5. REC /PB Frequency Response Adjustment (DECK-2)

- Settings:
- Test tape : TTA-601
  - Test point : TP-OUT (PIN401)
  - Adjustment location : SFR451 (Lch)  
SFR452 (R ch)

Method: Apply a 1kHz signal and adjust attenuator so that the level at the TP-OUT is 21.0mV.

Record and play back the 1kHz and 10kHz signals and adjust so that the output level of 10kHz signal is  $0\text{dB} \pm 0.5\text{dB}$  for 1kHz signal.

#### 6. REC /PB Sensitivity Adjustment (DECK-2)

- Settings:
- Test tape : TTA-601
  - Test point : TP-OUT (PIN401)
  - Adjustment location :
    - SFR401 (Lch)
    - SFR402 (R ch)

Method: Apply a 1kHz signal and adjust attenuator so that the level at the TP-OUT is 21.0mV.

Record and play back the 1kHz signal and 10kHz signals and adjust so that the output level is  $21.0\text{mV} \pm 0.5\text{dB}$ .

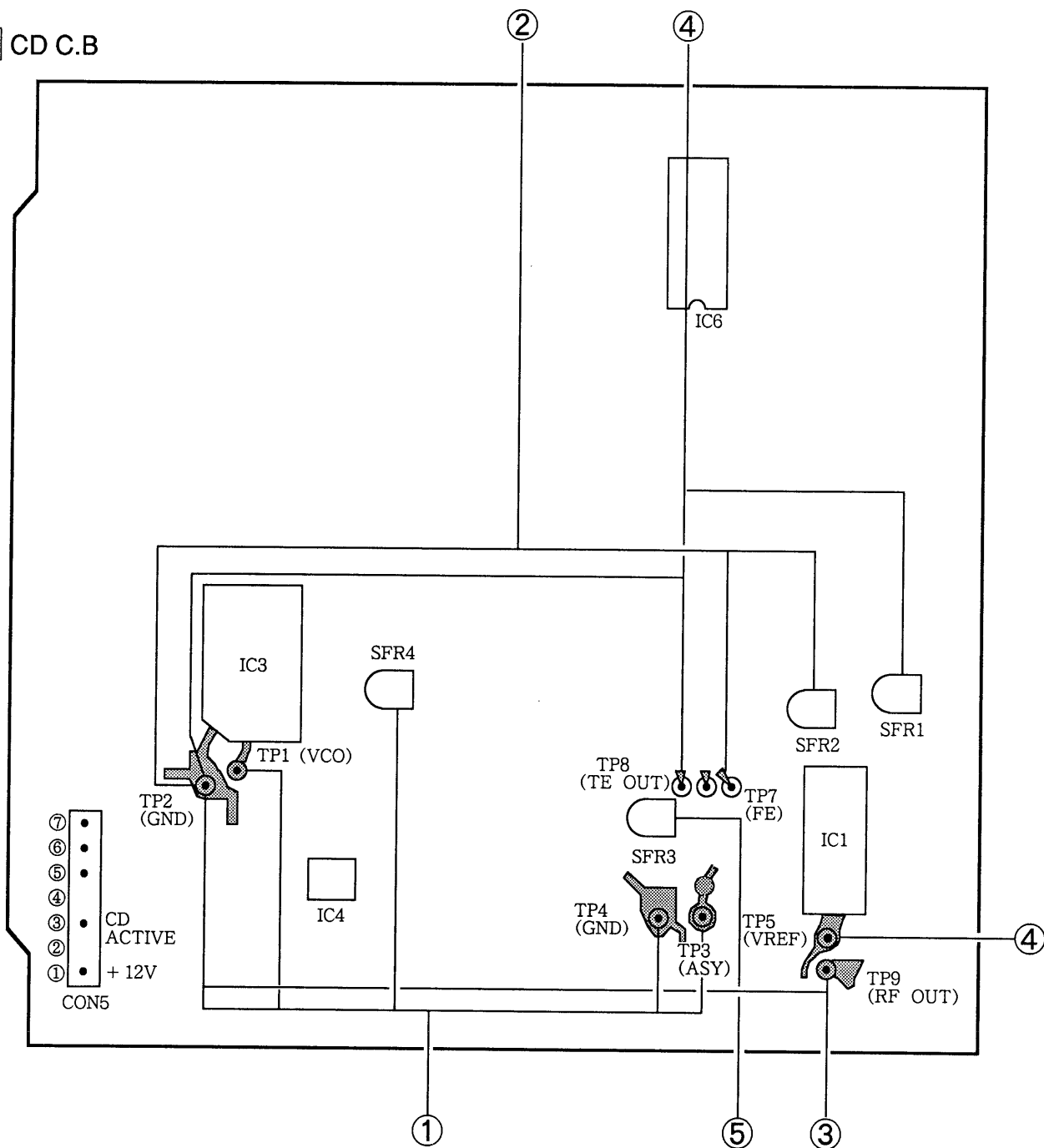
## PRACTICAL SERVICE FIGURE

### <DECK SECTION>

|                           |                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------|
| PB Output Level:          | 300mV $\pm$ 1dB (LINE OUT)                                                                                      |
| REC/PB Output Level:      | 210mV $\pm$ 2dB (LINE OUT)                                                                                      |
| Distortion (REC/PB):      | Less than 2.0% (NORM, CrO <sub>2</sub> )                                                                        |
| Erasing Ratio:            | More than 60dB<br>(TTA-610) (at 125Hz)                                                                          |
| Cross talk:               | More than 60dB                                                                                                  |
| Channel Separation:       | More than 47dB                                                                                                  |
| Noise (PB):               | Less than 3.2mV/2.2mV<br>(DOLBY NR OFF/ON NORM)<br>Less than 2.2mV/1.5mV<br>(DOLBY NR OFF/ON CrO <sub>2</sub> ) |
| Noise (REC/PB):           | Less than 3.3mV/2.3mV<br>(DOLBY OFF/ON NORM)<br>Less than 2.3mV/1.7mV<br>(DOLBY OFF/ON CrO <sub>2</sub> )       |
| Recording Bias Frequency: | 85kHz                                                                                                           |
| Tape speed:               | 3kHz $\pm$ 45Hz                                                                                                 |
| Wow & Flutter:            | Less than 0.4% (DECK-1/2)<br>TTA-100 (TTA-111S)                                                                 |
| Take-up Torque:           | NORM: 35 ~ 60g-cm (DECK-1/2)                                                                                    |
| F.F & REW Torque:         | 75 ~ 160g-cm (DECK-1/2)                                                                                         |
| Back Tension:             | 2 ~ 6g-cm (DECK-1/2)                                                                                            |
| Test Tape:                | NORMAL : TTA-601<br>CrO <sub>2</sub> : TTA-610 (TTA-119H)                                                       |

## ADJUSTMENT—3 <CD>

### C CD C.B



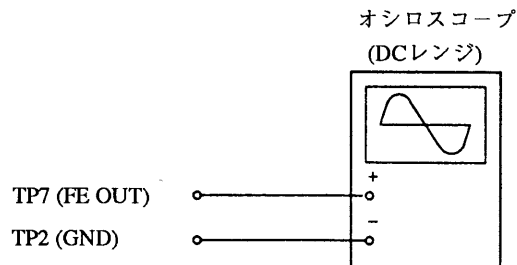
注意: 周波数カウンター又はオシロスコープ (10:1) をテストポイントに接続する。

#### 1. VCO周波数調整

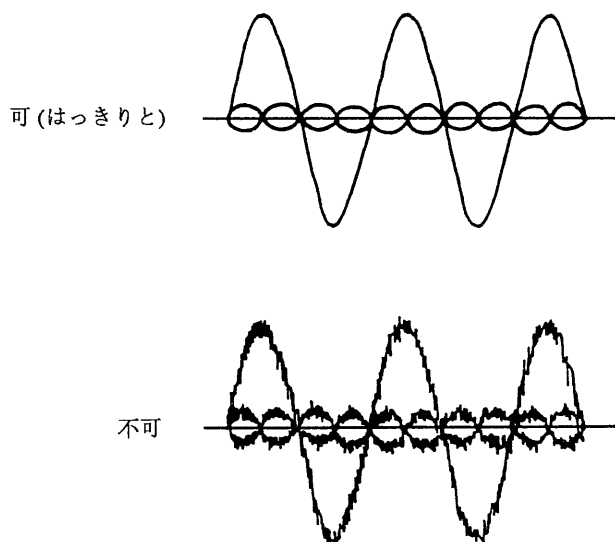
1. CON5の①と③をワイヤーでショートする。
2. TP3 (ASY) とTP4 (GND) を接続し、ショートする。
3. 周波数カウンターをテストポイントTP1 (VCO) とTP2 (GND) に接続する。
4. 周波数カウンターの値が $4.38 \pm 0.01\text{MHz}$ になる様にSFR4 (VCO) を調整する。
5. 調整後、TP2 (GND), TP3 (ASY) 及びTP4からショートクリップを外す。

#### 2. フォーカスバイアス調整

光学ブロックの変換時又は修理時には、必ずフォーカスバイアスを調整する。



1. オシロスコープをテストポイントTP7 (FE OUT) とTP2 (GND) に接続する。
2. 電源スイッチをONにする。
3. テストディスクTCD-782 (YEDS-18) を入れ、2曲目を再生する。
4. テストポイントTP7 (FE OUT) のノイズ (高周波) が最小になる様にSFR2を調整する。

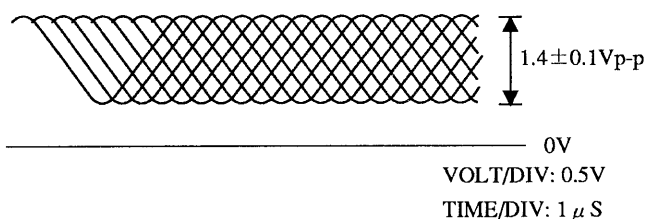


### 3. RF波形確認

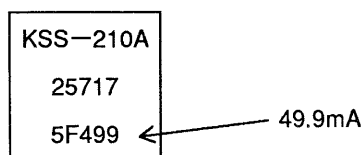
修理の為に光学システムブロックを交換した場合には、RF波形を確認する。

1. オシロスコープをテストポイントTP9 (RF OUT) とTP5 (VREF) に接続する。
2. 電源スイッチをONにする。
3. テストディスクTCD-782 (YEDS-18) を入れ、2曲目を再生する。
4. 波形が下図のように出力することを確認する。

RF信号波形



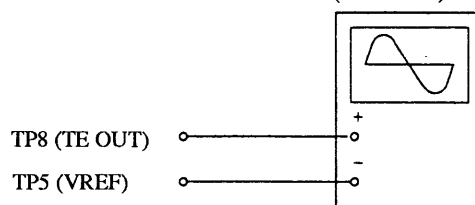
注意: レーザー電流はR4 (10Ω) の両端電圧で確認する。レーザーピックアップ裏側のラベルに示す電流値に対し、±6.0mA以内であること。



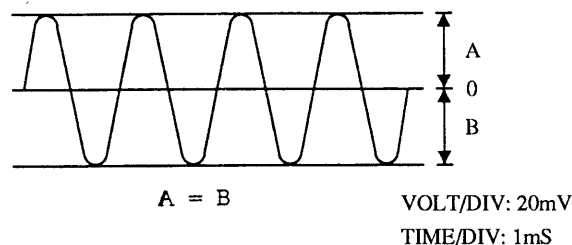
$$\text{レーザー電流 } I_{op} = \frac{R4 \text{ 両端電圧}}{10\Omega}$$

### 4. トラッキングバイアス調整

オシロスコープ (DCレンジ)



1. オシロスコープをテストポイントTP8 (TE OUT) とTP5 (VREF) に接続する。
2. 電源スイッチをONにする。
3. テストディスクTCD-782 (YEDS-18) を入れ、PLAY (▶) ボタンを押す。
4. SFR3の midpoint とTP5 (VREF) をショートする。
5. SFR1を調整し、オシロスコープの波形を下図のように上下対称にする。
6. ショートを外す。



### 5. トラッキングゲイン調整

この調整を正確に行うためにはサーボアナライザーが必要です。また、このゲインはマージンを持っているため、通常では少し位ずれても問題ありません。したがって、この調整は行わないで下さい。2軸デバイス動作時の機械的ノイズと機械的ショックに対し、トラッキングゲインにてピックアップの追従性を決めます。しかし、これは互いに相反するため、両方を満足する点に調整してあります。

- ゲインを上げると、2軸デバイス動作時の雑音が増加する。
- ゲインを下げると、機械的ショックに弱くなり音飛びが起きやすくなる。

そして、ゲインの調整がずれていると、次表の様な症状が現れます。

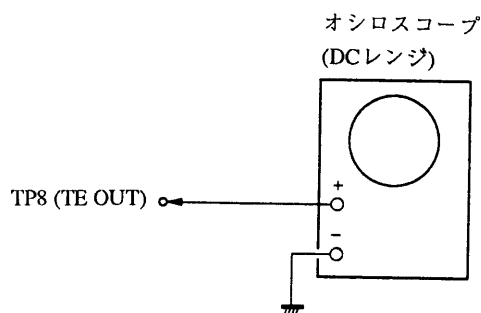
| 症状                                                           | ゲイン | フォーカス  | トラッキング |
|--------------------------------------------------------------|-----|--------|--------|
| ●STOP→▶PLAY時又は自動選曲時 ( ◀、▶  ボタンを押した時)、演奏開始までの時間が長くなる。(通常は約2秒) |     | 低い     | 低い又は高い |
| ●STOP→▶PLAY時又は自動選曲時 ( ◀、▶  ボタンを押した時)、演奏が行われずにディスクだけが回転し続ける。  |     | —      | 低い     |
| ●STOP→▶PLAY時、しばらくすると回転が止まる。                                  |     | 低い又は高い | —      |
| ●演奏中に音が途切れ、タイムカウンター表示が停止する。                                  |     | —      | 低い     |
| ●2軸デバイス動作時、ノイズが多くなる。                                         |     | 高い     | 高い     |

なお、簡易調整として下記の方法があります。

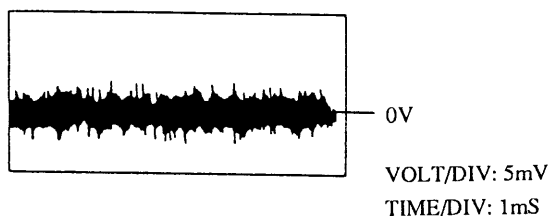
#### —簡易調整—

注意: 正確には調整出来ないため、調整を行う前のボリュームの位置を憶えておいて、簡易調整を行った後のボリュームの位置と比較して、そのずれが小さいときは元のボリュームの位置に戻して下さい。

調整方法:

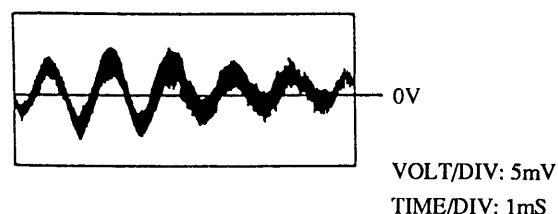


1. セットを水平に置く。(セットを水平に置かないと、2軸デバイスが重力の影響を受けて調整できません。)
2. テストディスクTCD-782(YEDS-18)を入れ、2曲目を再生する。
3. オシロスコープをTP8 (TE OUT) に接続する。
4. SFR3を調整し、オシロスコープの波形を下図の様にする (トラッキングゲイン調整)。



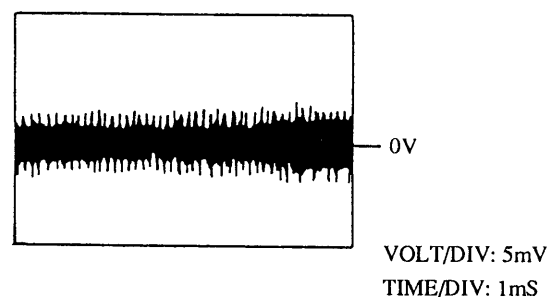
- 悪い例 (調整されている波形と比べて、基本波が現れるようになる。)

トラッキングゲインが低い時



トラッキングゲインが高い時

基本波の周波数はゲインが低い場合より高い





## ADJUSTMENT—3<CD>

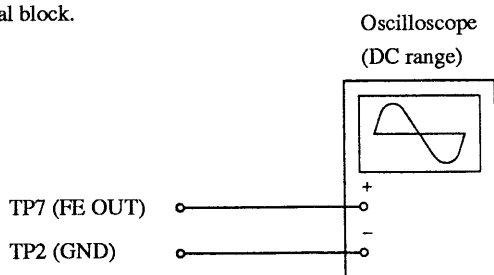
Note: Connect a probe (10:1) of the oscilloscope or the frequency counter to a test point.

### 1. VCO Frequency Adjustment

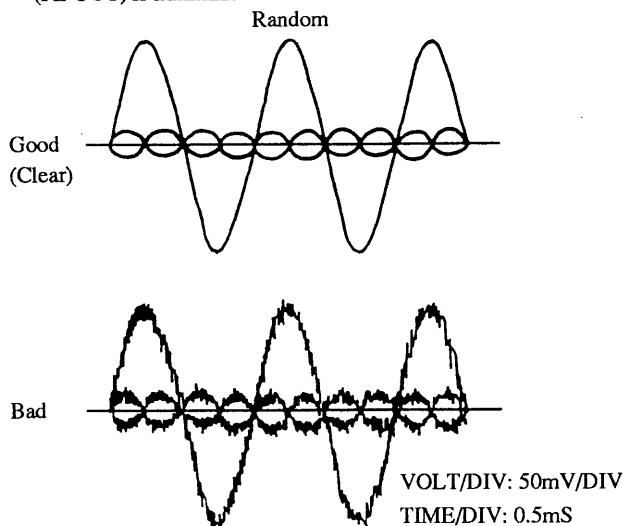
1. Short pin ① and ③ of CON5 with wire.
2. Connect and short between TP3 (ASY) and TP4 (GND).
3. Connect the frequency counter to test points TP1 (VCO) and TP2 (GND).
4. Adjust SFR4 (VCO) so that the frequency counter reading is  $4.38 \pm 0.01\text{MHz}$ .
5. After the adjustment is completed, remove the short lead wires from TP2 (GND), TP3 (ASY) and TP4.

### 2. Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.



1. Connect an oscilloscope to test points TP7 (FE OUT) and TP2 (GND).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Adjust SFR2 so that the noise (high frequency) of test point TP7 (FE OUT) is minimized.

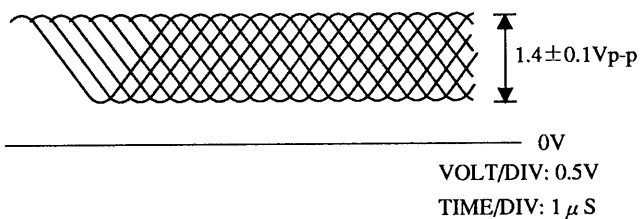


### 3. RF Waveform Check

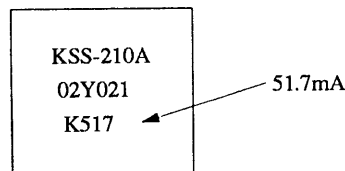
This check should be performed whenever the optical system block is replaced in repair.

1. Connect an oscilloscope to test points TP9 (RF OUT) and TP5 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Check that the waveform appears as shown in the figure below.

RF signal waveform

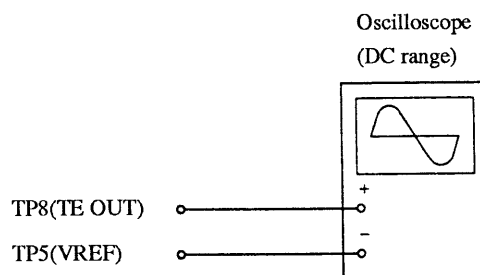


Note: The current of the laser signal can be checked with the voltages on both sides of R4 ( $10 \Omega$ ). The difference for the specified value shown on the label must be within  $\pm 6.0\text{mA}$ .

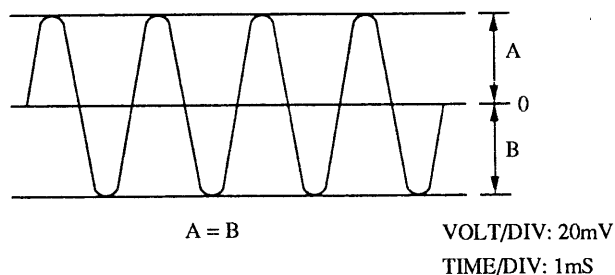


$$\text{Laser current } I_{op} = \frac{\text{Voltage across R4}}{10 \Omega}$$

### 4. Tracking Balance Adjustment



1. Connect an oscilloscope to test points TP8 (TE OUT) and TP5 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and press the PLAY button.
4. Connect the intermediate point of SFR3 to TP5 (VREF).
5. Adjust SFR1 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
6. Remove the connected wire.



### 5. Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment. Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when 2-axis device operates. However, as these gains are reciprocal, the adjustment is performed so that both gains are satisfied.

- When gain is raised, the noise increases when the 2-axis device operates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is not satisfied, the symptoms below appear.

| Symptoms \ Gain                                                                                                                                | (Focus)     | Tracking    |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| ● The time until music starts becomes longer for STOP→▶PLAY or automatic selection (◀◀.▶▶) buttons pressed.) (Normally takes about 2 seconds.) | Low         | Low or High |
| ● Music does not start and disc continues to rotate for STOP→▶PLAY or automatic selection (◀◀.▶▶) buttons pressed.)                            | —           | Low         |
| ● Disc stops to rotate shortly after STOP→▶PLAY.                                                                                               | Low or High | —           |
| ● Sound is interrupted during PLAY. Or time counter display stops.                                                                             | —           | Low         |
| ● More noise during the 2-axis device operation.                                                                                               | High        | High        |

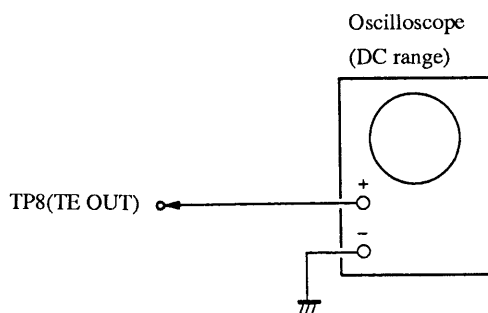
The following is simple adjustment method.

#### - Simple adjustment -

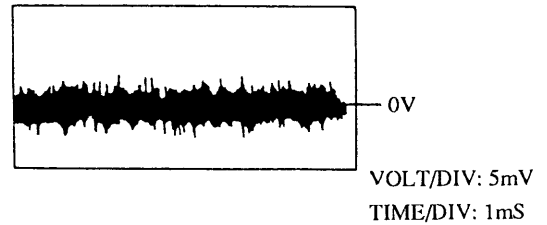
Note: Since the adjustment cannot be performed exactly, remember the positions of the controls before the adjustment and compare the adjusted position and the original position.

If the difference is a little, return the controls to the original position.

#### Procedure:

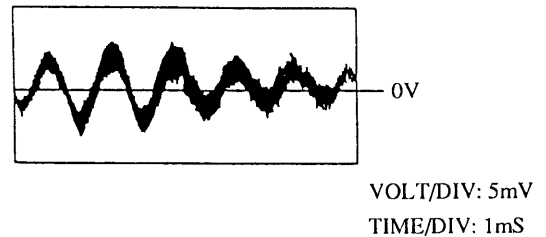


1. Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
3. Connect an oscilloscope to TP8 (TE OUT) of the main board.
4. Adjust SFR3 so that the waveform appears as shown in the figure below. (tracking gain adjustment)



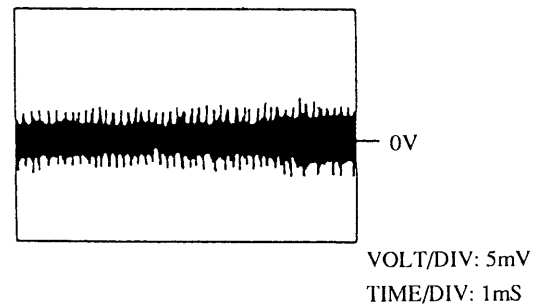
- Incorrect example (The fundamental wave appears as compared with the waveform adjusted.).

#### Low tracking gain

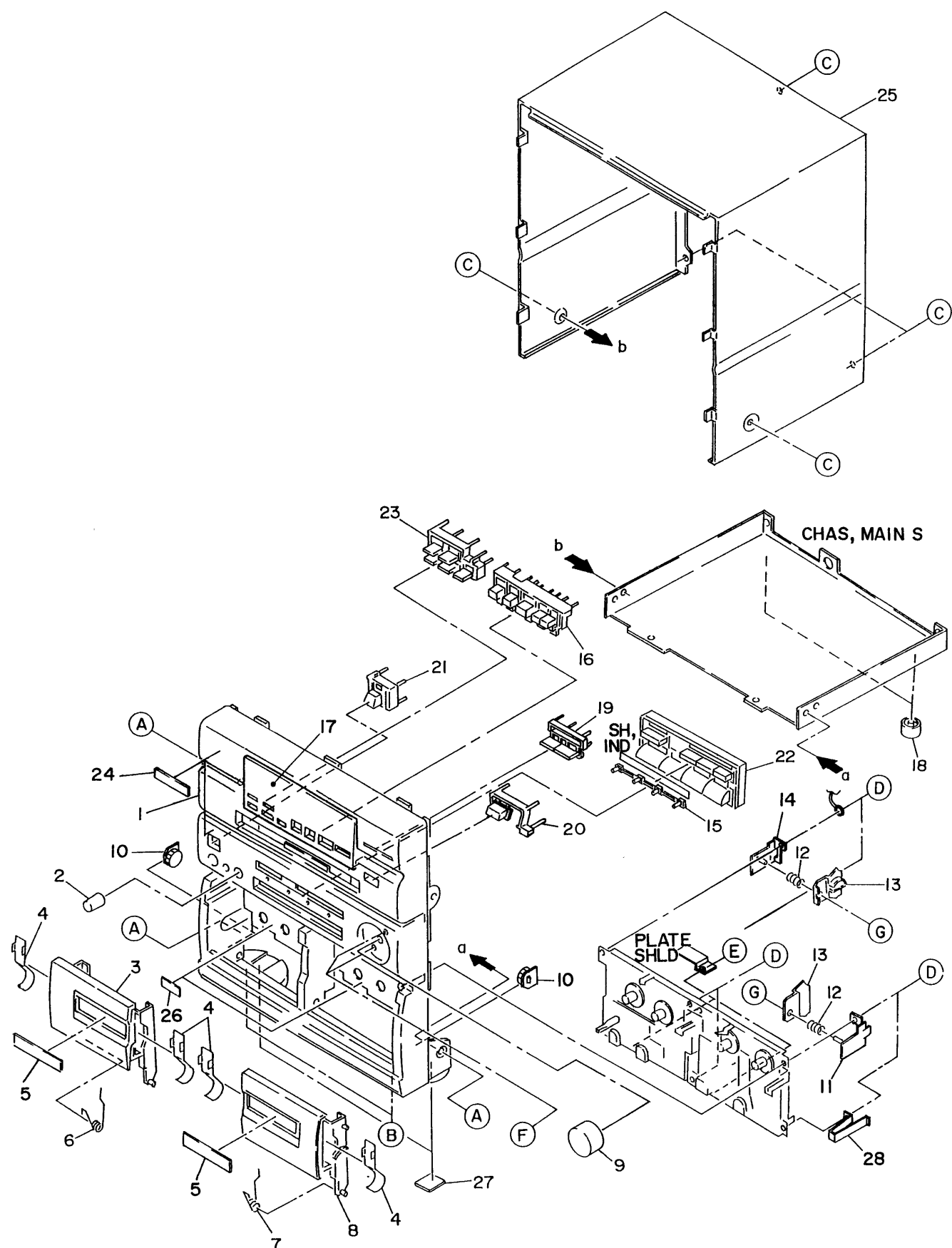


#### High tracking gain

The frequency of the fundamental wave is higher than that in low gain.



MECHANICAL EXPLODED VIEW—1/2

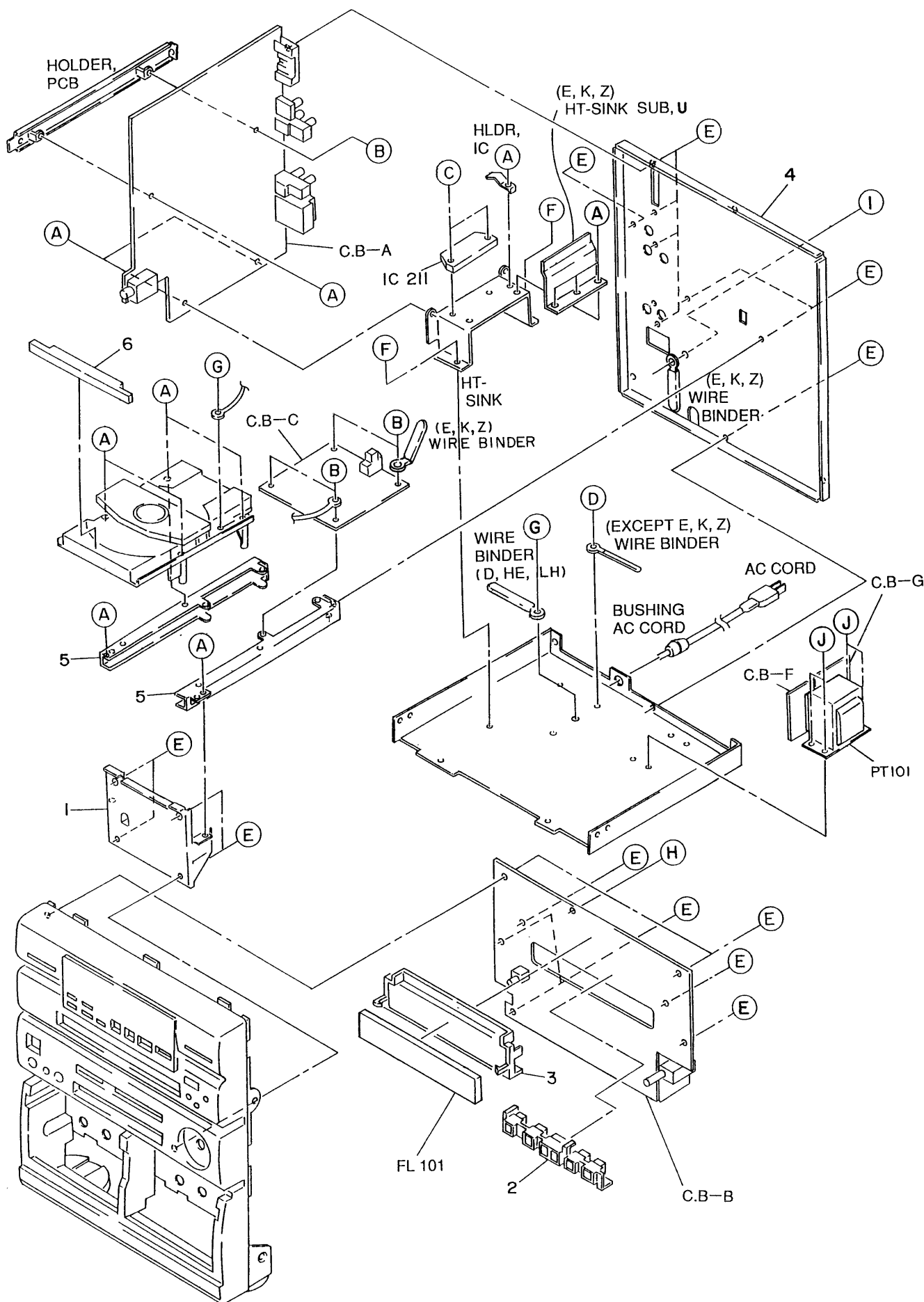


# MECHANICAL PARTS LIST—1/2

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO | PART NO.       | カソリ<br>NO. | DESCRIPTION                                                     |
|---------|----------------|------------|-----------------------------------------------------------------|
| 1       | 83-NE2-001-119 | 2A         | CAB, FR [B] (D)                                                 |
| 1       | 83-NE2-016-119 |            | CAB, FR HE [B] (HE, HR, LH)                                     |
| 1       | 83-NE2-020-119 |            | CAB, FR E [B] (E, EE, K, Z)                                     |
| 1       | 83-NE2-019-119 |            | CAB, FR U [B] (3100U)                                           |
| 1       | 83-NE2-033-119 |            | CAB, FR E SIL [ST] (E)                                          |
| 2       | 81-MX4-019-019 | 0E         | KNOB, MIC                                                       |
| 3       | 83-NE2-006-019 | 1E         | BOX, CASS 1 [B] (D)                                             |
| 3       | 83-NE2-017-019 |            | BOX, CASS 1 EX [B] (HE, HR, LH, E<br>EE, K, Z, 3100U)           |
| 3       | 83-NE2-035-019 |            | BOX, CASS 1 EX SIL [ST] (E)                                     |
| 4       | 81-MX4-223-019 | 0E         | SPR-P, CASS                                                     |
| 5       | 81-MX4-014-119 | 1A         | WINDOW, BOX 1                                                   |
| 6       | 83-NE2-201-019 | 0E         | SPR-T EJECT 1                                                   |
| 7       | 83-NE2-202-019 | 0E         | SPR-T EJECT 2                                                   |
| 8       | 83-NE2-007-019 | 1E         | BOX, CASS 2 [B] (D)                                             |
| 8       | 83-NE2-018-019 |            | BOX, CASS 2 EX [B] (HE, HR, LH, E<br>EE, K, Z, 3100U)           |
| 8       | 83-NE2-036-019 |            | BOX, CASS 2 EX SIL [ST] (E)                                     |
| 9       | 83-NE2-023-019 | 1B         | KNOB ASSY, VOL [B]                                              |
| 9       | 83-NE2-038-019 |            | KNOB ASSY, VOL SIL [ST]                                         |
| 10      | 87-063-165-019 | 1A         | OIL-DMPR 150                                                    |
| 11      | 82-NF5-205-019 | 1A         | HLD R, ASSY, LOCK 2                                             |
| 12      | 80-MV3-210-110 | 0E         | SPR-C, LOCK [B] (D)                                             |
| 12      | 80-MV3-218-019 |            | SPR-C, LOCK SIN [B] (HE, HR, LH, E<br>EE, K, Z, 3100U) [ST] (E) |
| 13      | 80-CD3-233-010 | 0E         | PLATE, LOCK                                                     |
| 14      | 82-NF5-204-019 | 1A         | HLD R, ASSY LOCK 1                                              |
| 15      | 81-MX4-020-019 | 0E         | IND, FUN                                                        |
| 16      | 81-MX4-010-010 | 1C         | KEY, PLAY                                                       |
| 17      | 83-NE2-004-019 | 1E         | WINDOW, DISPLAY                                                 |
| 18      | 87-085-221-010 | 0E         | FOOT, H13.5                                                     |
| 19      | 83-NE2-002-019 | 0E         | KEY, YU                                                         |
| 20      | 83-NE2-003-019 | 0E         | KEY, CD                                                         |
| 21      | 81-MX4-007-019 | 0E         | KEY, POWER                                                      |
| 22      | 83-NE2-025-019 | 1B         | KEY, FUN T [B] (D)                                              |
| 22      | 83-NE2-022-019 |            | KEY, FUN [B] (HE, HR, LH, E, EE, K<br>Z, 3100U)                 |
| 22      | 83-NE2-037-019 |            | KEY, FUN SIL [ST] (E)                                           |
| 23      | 81-MX4-011-019 | 0E         | KEY, DUBB                                                       |
| 24      | 81-MX4-032-019 | 0E         | BADGE, AIWA N                                                   |
| 25      | 83-NE2-046-019 | 2M         | CAB, STEEL [B] (D, HE, HR, LH, EE<br>K, Z, 3100U)               |
| 25      | 83-NE2-047-018 |            | CAB, STEEL G [B] (E)                                            |
| 25      | 83-NE2-040-018 |            | CAB, STEEL SIL [ST] (E)                                         |
| 26      | 81-532-080-019 | 0E         | LBL, CASS COMPT                                                 |
| 27      | 80-VT1-202-019 | 0E         | FELT, 12.5-15.5-2                                               |
| 28      | 82-NF5-216-019 | 0E         | PLATE EARTH MECHA                                               |
| A       | 87-591-094-419 | 0E         | Q1T+3-6 GOLD                                                    |
| B       | 87-067-716-019 | 0E         | BVTT+3-6 BLK                                                    |
| C       | 87-067-641-019 | 0E         | UTT2+3-8 W/O SLOT BLK                                           |
| D       | 87-067-761-019 | 0E         | BVT2+3-10 BLK                                                   |
| E       | 87-571-032-419 | 0E         | VIT+2-3                                                         |
| F       | 87-067-579-019 | 0E         | BVT2+3-8 W/O SLOT                                               |
| G       | 87-081-808-019 | 0E         | PW, 1.7-3.5-0.25                                                |

MECHANICAL EXPLODED VIEW—2/2

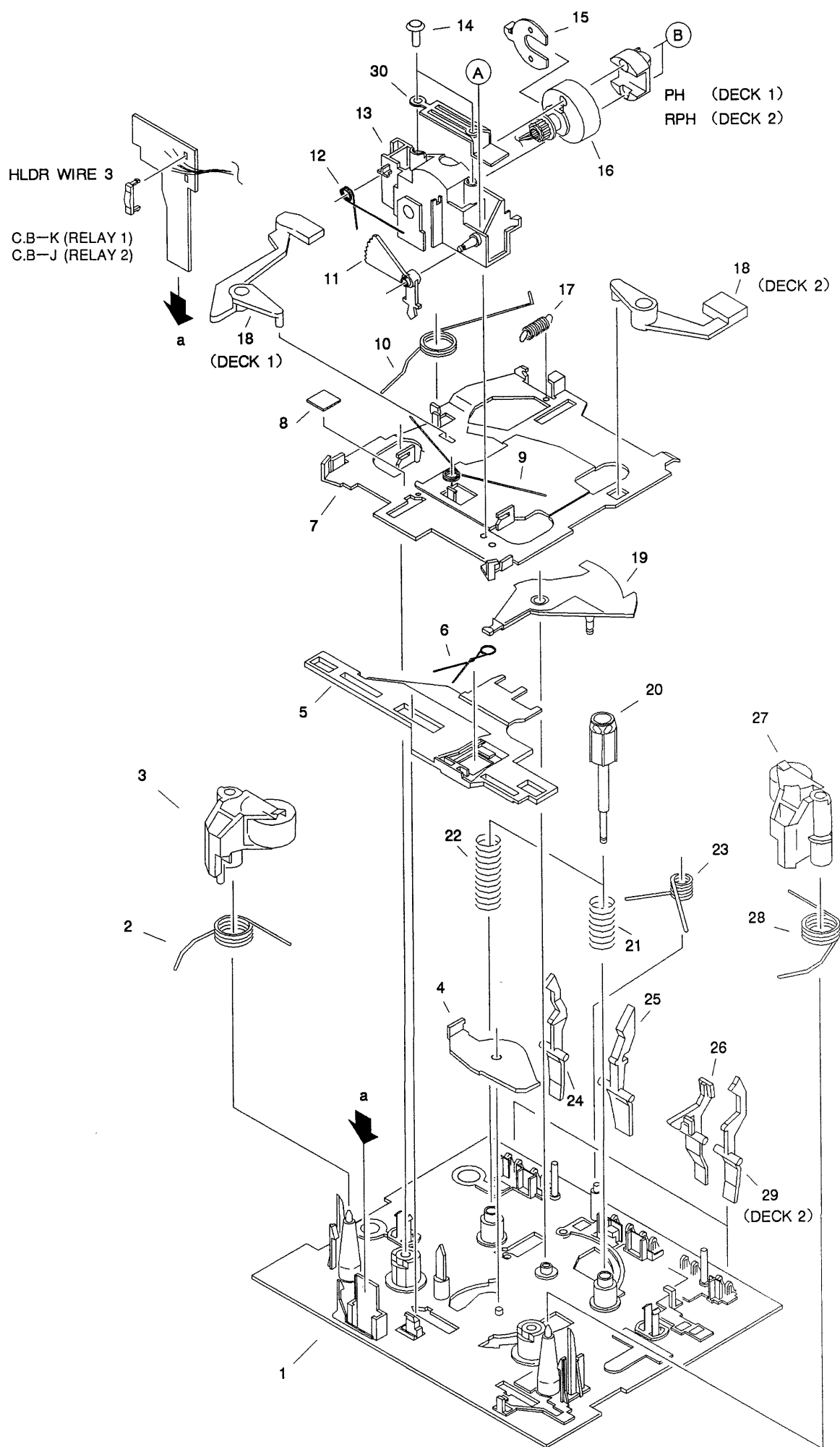




# MECHANICAL PARTS LIST—2/2

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                                      |
|---------|----------------|------------|--------------------------------------------------|
| 1       | 82-NE8-206-019 | 1B         | HLDR, CD 0.8                                     |
| 2       | 81-MX4-210-019 | 0E         | GUIDE, PLAY                                      |
| 3       | 82-MA2-203-019 | 1A         | GUIDE, FL 2                                      |
| 4       | 83-NE2-044-019 | 1H         | PANEL, REAR BJ [B] (D)                           |
| 4       | 83-NE2-009-119 |            | PANEL, REAR HEJBNM [B] (HE)                      |
| 4       | 83-NE2-021-019 |            | PANEL, REAR HRJBNM [B] (HR)                      |
| 4       | 83-NE2-008-119 |            | PANEL, REAR LHJBNM [B] (LH)                      |
| 4       | 83-NE2-011-019 |            | PANEL, REAR EBNE [B, ST] (E)                     |
| 4       | 83-NE2-029-019 |            | PANEL, REAR EBNM [B] (EE)                        |
| 4       | 83-NE2-030-019 |            | PANEL, REAR KBNM [B] (K)                         |
| 4       | 83-NE2-043-019 |            | PANEL, REAR ZBN [B] (Z)                          |
| 4       | 83-NE2-048-019 |            | PANEL, REAR UBN [B] (3100U)                      |
| 5       | 81-MX4-203-119 | 1B         | HLDR, CD3 [B] (D, HE, HR, LH, EE<br>K, Z, 3100U) |
| 5       | 81-MX4-216-118 |            | HLDR, CD3 G [B, ST] (E)                          |
| 6       | 83-NE2-005-019 | 1B         | PANEL, TRAY [B]                                  |
| 6       | 83-NE2-034-019 |            | PANEL, TRAY SIL [ST]                             |
| A       | 87-067-579-019 | 0E         | BVT2+3-8 W/O SLOT                                |
| B       | 87-067-633-019 | 0E         | UTT2+3-8 W/CONVEX                                |
| C       | 87-067-581-019 | 0E         | BVT2+3-15 W/O SLOT                               |
| D       | 87-067-585-019 | 0E         | BVTT+4-6                                         |
| E       | 87-067-761-019 | 0E         | BVT2+3-10 BLK                                    |
| F       | 87-067-584-019 | 0E         | BVT2+3-6 W/O SLOT                                |
| G       | 87-067-688-019 | 0E         | BVTT+3-6                                         |
| H       | 87-067-058-019 | 0E         | FW, 3.2-8-0.5                                    |
| I       | 87-084-077-019 | 0E         | NYLON RIVET DIA 3.5-4.5                          |
| J       | 87-078-019-019 | 0E         | S-SCREW, IT+4.6                                  |

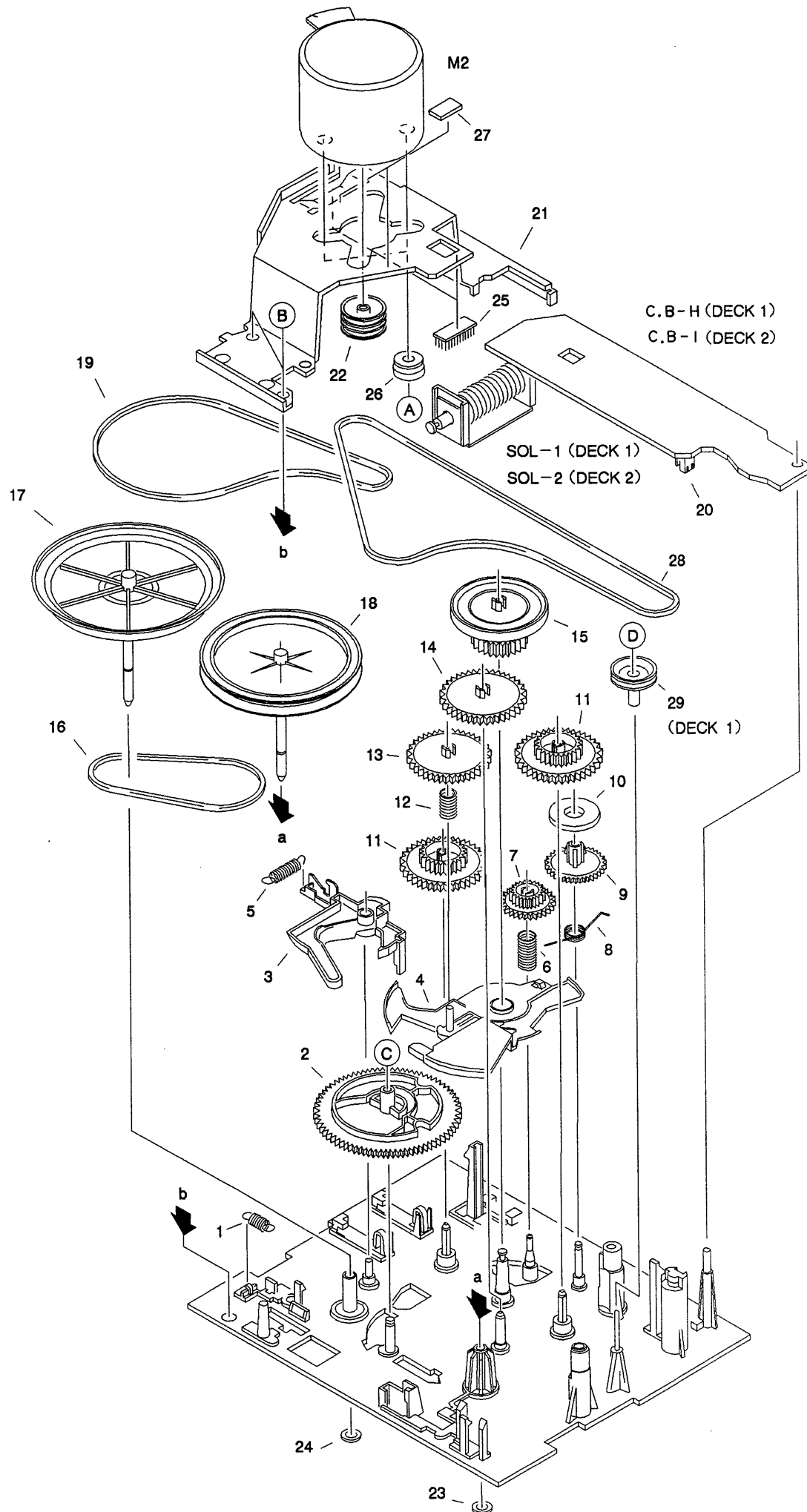
DECK MECHANISM EXPLODED VIEW—1/2



# DECK MECHANISM PARTS LIST—1/2

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION           |
|---------|----------------|------------|-----------------------|
| 1       | 82-ZM3-214-110 | 1D         | CHAS ASSY, P (DECK 1) |
| 1       | 82-ZM1-299-010 | 1D         | CHAS ASSY, R (DECK 2) |
| 2       | 82-ZM1-258-010 | 0E         | SPR-T, PINCH L        |
| 3       | 82-ZM1-248-110 | 1A         | LVR ASSY, PINCH L     |
| 4       | 82-ZM1-295-110 | 0E         | PLATE ASSY, LINK      |
| 5       | 82-ZM1-266-010 | 0E         | LVR, DIR              |
| 6       | 82-ZM1-214-010 | 0E         | SPR-T, DIR            |
| 7       | 82-ZM1-206-010 | 1A         | CHAS, HEAD            |
| 8       | 87-078-014-019 | 0E         | SH, 5-5-0.05          |
| 9       | 82-ZM1-269-010 | 0E         | SPR-T, BRG            |
| 10      | 82-ZM1-219-010 | 0E         | SPR-T, LINK           |
| 11      | 82-ZM1-210-010 | 0E         | GEAR, H T             |
| 12      | 82-ZM1-213-010 | 0E         | SPR-T, HEAD           |
| 13      | 82-ZM1-207-010 | 1A         | GUIDE, TAPE           |
| 14      | 82-ZM1-283-210 | 0E         | S-SCREW, AZIMUTH      |
| 15      | 82-ZM1-209-010 | 0E         | PLATE, HEAD           |
| 16      | 82-ZM1-208-010 | 0E         | HLDR, HEAD            |
| 17      | 82-ZM1-218-010 | 0E         | SPR-E, HB             |
| 18      | 82-ZM1-263-110 | 0E         | LVR, EJECT L (DECK 1) |
| 18      | 82-ZM1-264-010 | 0E         | LVR, EJECT R (DECK 2) |
| 19      | 82-ZM1-222-010 | 0E         | LVR, PLAY             |
| 20      | 82-ZM1-217-010 | 0E         | REEL TABLE            |
| 21      | 82-ZM1-244-010 | 0E         | SPR-C, BT             |
| 22      | 82-ZM1-285-010 | 0E         | SPR-C, BT L           |
| 23      | 82-ZM1-257-010 | 0E         | SPR-T, CAS            |
| 24      | 82-ZM1-241-010 | 0E         | LVR, MC               |
| 25      | 82-ZM1-242-010 | 0E         | LVR, CAS              |
| 26      | 82-ZM1-243-010 | 0E         | LVR, STOP             |
| 27      | 82-ZM1-253-110 | 1A         | LVR ASSY, PINCH R     |
| 28      | 82-ZM1-259-010 | 0E         | SPR-T, PINCH R        |
| 29      | 82-ZM1-240-010 | 0E         | LVR, REC (DECK 2)     |
| 30      | 82-ZM1-298-010 | 0E         | SPR-P, EARTH          |
| A       | 87-585-036-410 | 0E         | UIT+2-8               |
| B       | 80-ZM6-207-019 | 0E         | V+1.6-7               |

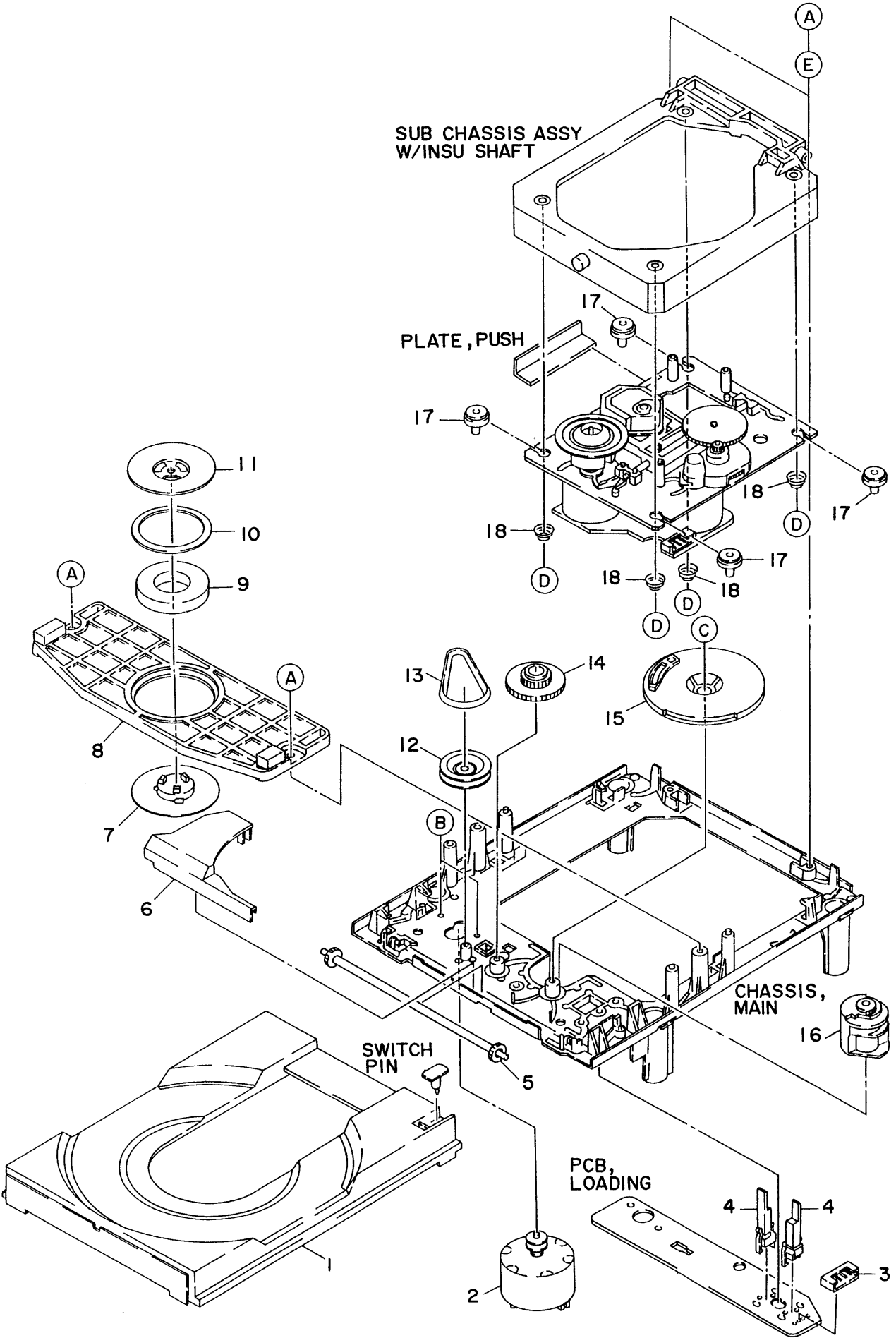
# DECK MECHANISM EXPLODED VIEW—2/2



# DECK MECHANISM PARTS LIST—2/2

| REF. NO | PART NO.       | カソリ<br>NO. | DESCRIPTION               |
|---------|----------------|------------|---------------------------|
| 1       | 82-ZM1-255-110 | 0E         | SPR-E, LVR DIR            |
| 2       | 82-ZM1-221-110 | 0E         | GEAR, CAM                 |
| 3       | 82-ZM1-227-010 | 0E         | LVR, TRIG                 |
| 4       | 82-ZM1-224-010 | 0E         | LVR, FR                   |
| 5       | 82-ZM1-265-010 | 0E         | SPR-E, TRIG               |
| 6       | 82-ZM1-277-010 | 0E         | SPR-C, PLAY               |
| 7       | 82-ZM1-223-010 | 0E         | GEAR, PLAY                |
| 8       | 82-ZM1-256-010 | 0E         | SPR-T, FR                 |
| 9       | 82-ZM1-220-010 | 0E         | GEAR, IDLER               |
| 10      | 80-ZM6-217-010 | 0E         | RING MAGNET 2             |
| 11      | 82-ZM1-216-110 | 0E         | GEAR, REEL                |
| 12      | 82-ZM1-276-010 | 0E         | SPR-C, FR                 |
| 13      | 82-ZM1-225-010 | 0E         | GEAR, FR                  |
| 14      | 82-ZM1-226-010 | 0E         | GEAR, REW                 |
| 15      | 82-ZM1-228-110 | 1B         | SLIP DISK ASSY            |
| 16      | 82-ZM1-261-110 | 0E         | BELT, FR                  |
| 17      | 82-ZM3-209-010 | 1B         | FLY-WHL ASSY, R2 (DECK 1) |
| 17      | 82-ZM1-237-010 | 1B         | FLY-WHL ASSY, R (DECK 2)  |
| 18      | 82-ZM3-207-010 | 1B         | FLY-WHL ASSY, L2 (DECK 1) |
| 18      | 82-ZM1-234-010 | 1B         | FLY-WHL ASSY, L (DECK 2)  |
| 19      | 82-ZM3-206-010 | 0E         | BELT, R                   |
| 20      | 82-ZM1-245-010 | 0E         | HLD, IC                   |
| 21      | 82-ZM3-201-010 | 1A         | HLD, MC                   |
| 22      | 82-ZM3-202-010 | 0E         | PULLEY, MOT 2M            |
| 23      | 82-ZM1-288-010 | 0E         | SH, 1.63-3.2-0.5 SLT      |
| 24      | 80-ZM6-243-010 | 0E         | SH, 1.75-3.6-0.5 SLT      |
| 25      | 80-ZM6-230-010 | 0E         | SH, BELT                  |
| 26      | 86-575-242-010 | 0E         | CUSH-G, DIA 3.7-9-3.2     |
| 27      | 86-575-361-010 | 0E         | CUSH-G, 6-8-0.8           |
| 28      | 82-ZM3-205-010 | 0E         | BELT, L                   |
| 29      | 82-ZM3-204-010 | 0E         | PULLEY COUPLER (DECK 1)   |
| A       | 86-575-243-010 | 0E         | S-SCRW, MOTOR             |
| B       | 87-067-178-019 | 0E         | VTT+2.6-3                 |
| C       | 87-067-932-019 | 0E         | PW, 2.15-6.8-0.5          |
| D       | 87-067-972-019 | 0E         | PW, 1.05-3-0.25 SLT       |

CD MECHANISM EXPLODED VIEW—1/2

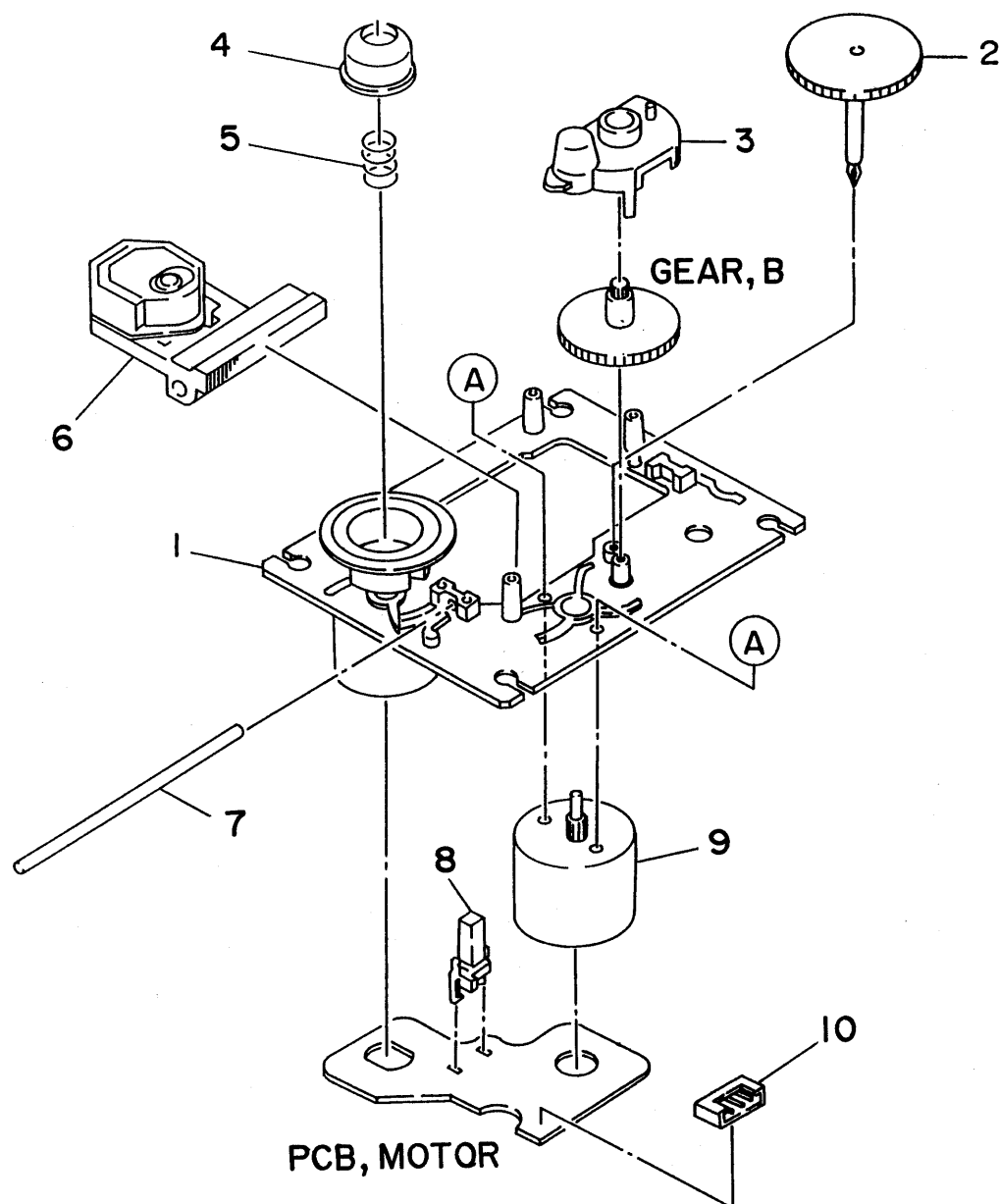




# CD MECHANISM PARTS LIST—1/2

| REF. NO | PART NO.       | カソリ<br>NO. | DESCRIPTION        |
|---------|----------------|------------|--------------------|
| 1       | 92-625-288-040 | 1F         | TRAY               |
| 2       | 9X-262-511-710 | 2M         | LOADING MOTOR ASSY |
| 3       | 91-564-721-110 | 1B         | CONNECTOR 5P       |
| 4       | 91-572-086-110 | 1B         | SWITCH, LEAF       |
| 5       | 92-625-275-030 | 1C         | GEAR, TRAY         |
| 6       | 92-625-282-020 | 1B         | COVER, GEAR        |
| 7       | 92-625-286-030 | 1B         | PULLEY, CHUCKING   |
| 8       | 92-625-284-040 | -          | PLATE, CHUCKING    |
| 9       | 91-452-493-210 | 1D         | MAGNET             |
| 10      | 92-625-541-010 | -          | DAMPER             |
| 11      | 92-625-277-010 | 1B         | YOKE, CHUCK        |
| 12      | 92-625-276-010 | -          | PULLEY, LOADING    |
| 13      | 93-853-387-000 | 1D         | BELT, LM           |
| 14      | 92-625-274-020 | 1B         | GEAR, MEDDLE       |
| 15      | 92-625-285-030 | 1C         | GEAR, DRIVE        |
| 16      | 92-625-283-020 | 1C         | CAM, CONTROL       |
| 17      | 92-625-278-010 | 1F         | INSULATOR          |
| 18      | 92-625-280-010 | 1B         | SPRING             |
| A       | 87-761-074-410 | 0E         | VFT2+2. 6-8        |
| B       | 92-625-279-010 | 0E         | U+2. 6-2. 5        |
| C       | 87-761-079-410 | 0E         | VFT2+2. 6-16       |
| D       | 92-644-410-020 | 0E         | SCREW SWCH16A      |
| E       | 93-641-123-000 | 0E         | WASHER             |

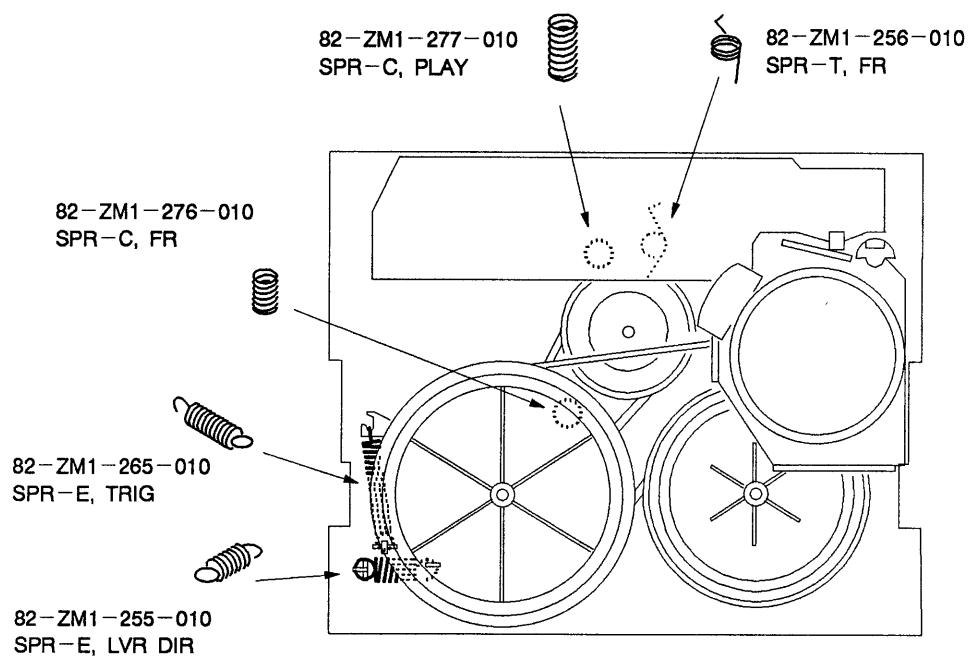
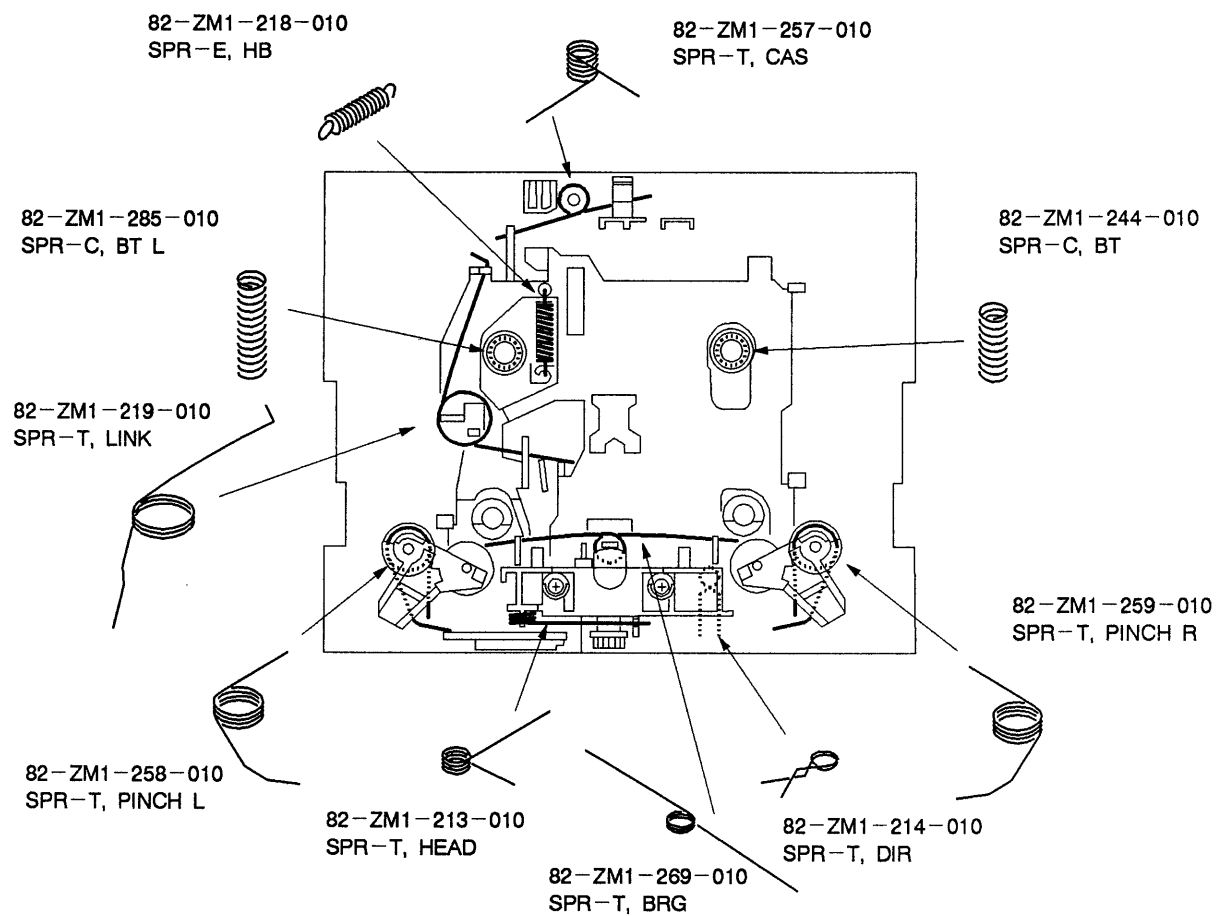
# CD MECHANISM EXPLODED VIEW—2/2



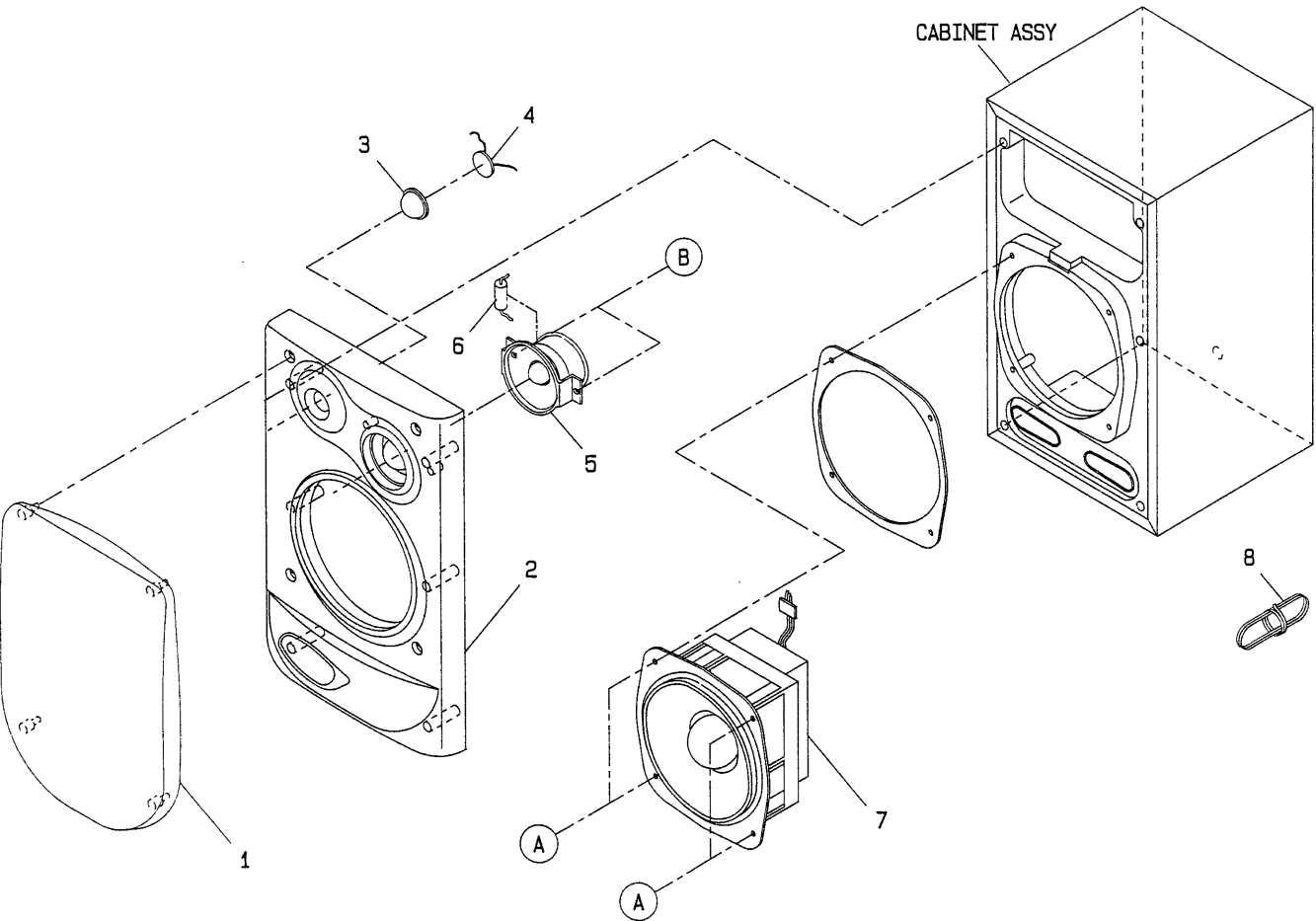
## CD MECHANISM PARTS LIST—2/2

| REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION             |
|---------|----------------|-----------|-------------------------|
| 1       | 9X-262-513-310 | 2C        | T. T CHASS ASSY W/MOTOR |
| 2       | 92-625-188-020 |           | - GEAR A                |
| 3       | 92-625-544-010 |           | - COVER                 |
| 4       | 92-625-187-010 | 1B        | RING, CENTER            |
| 5       | 92-625-191-010 | 1B        | SPRING COMPRESSION      |
| 6       | 98-848-127-110 |           | - PICK UP KSS-210A      |
| 7       | 94-917-565-010 | 1D        | SHAFT SLED              |
| 8       | 91-572-085-110 | 1B        | LEAF SW (LIMIT)         |
| 9       | 9X-262-513-210 | 2M        | SLED MOTOR ASSY         |
| 10      | 91-564-722-110 | 1B        | CONNECTOR 6P            |
| A       | 87-261-032-210 | 0E        | V+2-3                   |

## SPRING APPLICATION POSITION



SPEAKER EXPLODED VIEW



SPEAKER PARTS LIST

DESCRIPTION で判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                | REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION             |
|---------|----------------|------------|----------------------------|---------|----------------|------------|-------------------------|
| 1       | 81-MSE-007-010 | 2B         | GRILL FRAME ASSY(EXCEPT E) | 2       | 82-NS2-012-010 |            | PANEL, FRONT LS(LH, HE) |
| 2       | 82-NS2-002-010 | 2M         | PANEL, FRONT R(D, Z, K, E) | 3       | 82-MSE-610-010 | 1C         | CERAMIC                 |
| 2       | 82-NS2-003-010 | 2M         | PANEL, FRONT L(D, Z, K, E) | 4       | 82-NS2-604-010 | 2P         | SPEAKER, TWEETER        |
| 2       | 82-NS2-004-010 |            | PANEL, FRONT RY(U)         | 5       | 82-NS2-602-010 | 2E         | SPEAKER, WOOFER         |
| 2       | 82-NS2-005-010 |            | PANEL, FRONT LY(U)         | 6       | 83-096-614-010 | 1D         | CORD, SPEAKER           |
| 2       | 82-NS2-011-010 |            | PANEL, FRONT RS(LH, HE)    | A       | 87-343-172-010 | 0E         | UT, +4-12               |
|         |                |            |                            | B       | 87-342-097-010 | 0E         | UT, +3-12               |

## ■ ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                   | REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                |
|---------|----------------|------------|-------------------------------|---------|----------------|------------|----------------------------|
| 1       | 87-006-226-010 |            | AM LOOP ANT CON2<Z, K, E>     | 3       | 83-NE2-903-010 |            | IB, H<LH, HE, K, E>        |
| 1       | 87-006-225-010 | 1D         | AM LOOP ANT NC2<D, LH, HE, U> | 4       | 87-009-724-010 |            | PLUG, ADPTR, IR39<LH>      |
| 2       | 81-748-632-010 | 1B         | FEEDER ANT FMN<EXCEPT Z>      | 4       | 87-042-062-010 |            | PLUG, ADPTR S-I6115<HE>    |
| 2       | 87-043-106-010 |            | FM WIRE ANT<Z><Z>             | 5       | 83-NE2-647-010 | 2P         | RC, RC-TN320<D>            |
| 3       | 83-NE2-901-010 | 1C         | IB, D<D>                      | 5       | 83-NE2-650-010 |            | RC, RC-TN320<EX><EXCEPT D> |
| 3       | 83-NE2-904-010 | 1C         | IB, D<Z>                      |         |                |            |                            |
| 3       | 83-NE2-908-010 | 1C         | IB, D<U>                      |         |                |            |                            |

# REFERENCE NAME LIST

## ELECTRICAL SECTION

| DESCRIPTION | REFERENCE NAME     |
|-------------|--------------------|
| ANT         | ANTENNAS           |
| C-          | CHIP               |
| C-CAP       | CAP, CHIP          |
| C-CAP TN    | CAP, CHIP TANTALUM |
| C-COIL      | COIL, CHIP         |
| C-DI        | DIODE, CHIP        |
| C-DIODE     | DIODE, CHIP        |
| C-FET       | FET, CHIP          |
| C-FOTR      | FILTER, CHIP       |
| C-JACK      | JACK, CHIP         |
| C-LED       | LED, CHIP          |
| C-RES       | RES, CHIP          |
| C-SFR       | SFR, CHIP          |
| C-SLIDE SW  | SLIDE SWITCH, CHIP |
| C-SW        | SWITCH, CHIP       |
| C-TR        | TRANSISTOR, CHIP   |
| C-VR        | VOLUME, CHIP       |
| C-ZENER     | ZENER, CHIP        |
| CAP, CER    | CAP, CERA-SOL      |
| CAP, E      | CAP, ELECT         |
| CAP, M/F    | CAP, FILM          |
| CAP, TC     | CAP, CERA-SOL      |
| CAP, TC-U   | CAP, CERA-SOL SS   |
| CAP, TN     | CAP, TANTALUM      |
| CERA FIL    | FILTER, CERAMIC    |
| CF          | FILTER, CERAMIC    |
| DL          | DELAY LINE         |
| E/CAP       | CAP, ELECT         |
| FILT        | FILTER             |
| FLTR        | FILTER             |
| FUSE RES    | RES, FUSE          |
| MOT         | MOTOR              |
| P-DIODE     | PHOTO DIODE        |
| P-SNSR      | PHOTO SENSER       |
| P-TR        | PHOTO TRANSISTOR   |
| POLY VARI   | VARIABLE CAPACITOR |
| PPCAP       | CAP, PP            |
| PT          | POWER TRANSFORMER  |
| PTR, RES    | PTR, MELF          |
| RC          | REMOTE CONTROLLER  |
| RES NF      | RES, NON-FLAMMABLE |
| RESO        | RESONATOR          |
| SHLD        | SHIELD             |
| SOL         | SOLENOID           |
| SPKR        | SPEAKER            |
| SW, LVR     | SWITCH, LEVER      |
| SW, RTRY    | SWITCH, ROTARY     |
| SW, SL      | SWITCH, SLIDE      |
| THMS        | THERMISTOR         |
| TR          | TRANSISTOR         |
| TRIMMER     | CAP, TRIMMER       |
| TUN-CAP     | VARIABLE CAPACITOR |
| VIB, CER    | RESONATOR, CERAMIC |
| VIB, XTAL   | RESONATOR, CRYSTAL |
| VR          | VOLUME             |
| ZENER       | DIODE, ZENER       |
| サージサプレッサ    | SERGESUPPRESSOR    |
| セラコン        | CAP, CERA          |

## MECHANICAL SECTION

| DESCRIPTION       | REFERENCE NAME       |
|-------------------|----------------------|
| ADHESHIVE         | SHEET ADHESHIVE      |
| AZ                | AZIMUTH              |
| BAR-ANT           | BAR-ANTENNA          |
| BAT               | BATTERY              |
| BAT, CONTACT ASSY | BATTERY CONTACT ASSY |
| BATT              | BATTERY              |
| BRG               | BEARING              |
| BTN               | BUTTON               |
| CAB               | CABINET              |
| CASS              | CASSETTE             |
| CHAS              | CHASSIS              |
| CLR               | COLLAR               |
| CONT              | CONTROL              |
| CRSR              | CURSOR               |
| CU                | CUSHION              |
| CUSH              | CUSHION              |
| DIR               | DIRECTION            |
| DUBB              | DUBBING              |
| FL                | FRONT LOADING        |
| FLY-WHL           | FLYWHEEL             |
| FR                | FRONT                |
| FUN               | FUNCTION             |
| G-CU              | G-CUSHION            |
| HDL               | HANDOL               |
| HIMERON           | CLOTH                |
| HINGE, BAT        | HINGE, BATTERY       |
| HLDR              | HOLDER               |
| HT-SINK           | HEAT SINK            |
| IB                | INSTRUCTION BOOKLET  |
| IDLE              | IDLER                |
| IND, L-R          | INDICATOR, L-R       |
| KEY, CONT         | KEY, CONTROL         |
| KEY, PRGM         | KEY, PROGRAM         |
| KNOB, SL          | KNOB, SLIDE          |
| KNOB, VOL REV     | KNOB, VOLUME REV     |
| LBL               | LABEL                |
| LID, BATT         | LID, BATTERY         |
| LID, CASS         | LID, CASSETTE        |
| LVR               | LEVER                |
| P-SP              | P-SPRING             |
| PANEL, CONT       | PANEL, CONTORL       |
| PANEL, FR         | PANEL, FRONT         |
| PRGM              | PROGRAM              |
| PULLY, LOAD MO    | PULLY, LOADING MOTOR |
| RBN               | RIBBON               |
| S-                | SPECIAL              |
| SEG               | SEGMENT              |
| SH                | SHEET                |
| SHLD-SH           | SHIELD-SHEET         |
| SL                | SLIDE                |
| SP                | SPRING               |
| SP-SCREW          | SPECIAL-SCREW        |
| SPACER, BAT       | SPACER, BATTERY      |
| SPR               | SPRING               |
| SPR-P             | P-SPRING             |
| SPR-PC-PUSH       | P-SPRING, C-PUSH     |
| SW                | SWITCH               |
| T-SP              | T-SPRING             |
| TERM              | TERMINAL             |
| TRIG              | TRIGGER              |
| TUN               | TUNING               |
| VOL               | VOLUME               |
| W                 | WASHER               |
| WHL               | WHEEL                |
| WORM-WHL          | WORM-WHEEL           |
| ジクアーム             | ARM, SHAFT           |
| ジクガイド             | GUIDE, SHAFT         |
| ストラップ             | STRAP                |
| ヒンジ               | HINGE                |

| サービス技術ニュース |      |
|------------|------|
| 番号         | 連絡内容 |
| G - -      |      |
| G - -      |      |
| G - -      |      |

**アイワ株式会社**  
**AIWA CO.,LTD.**

912162

Tokyo Japan