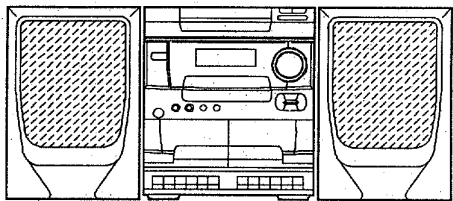


# aiwa



NSX-V300  
NSX-V390  
NSX-V500  
NSX-V3000  
NSX-V3001  
XG-V300



COMPACT DISC STEREO  
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : TN-591SW-103 (300/390/500)  
TN-21ZSW-1370 (3000/3001)
- BASIC CD MECHANISM : 4ZG-1 ZDNM
- TYPE: D,HE,HR,LH,U

製品コード : 86NY7-0110  
86NY7-0210

| SYSTEM              | CD - CASSEIVER                  | SPEAKER     |
|---------------------|---------------------------------|-------------|
| NSX-V300<br>XG-V300 | CX-NV300<br>(TYPE : D,HE,HR,LH) | SX - NV300  |
| NSX-V3000           | CX-NV3000<br>(TYPE : U)         | SX - NV3000 |
| NSX-V500            | CX-NV500<br>(TYPE : LH)         | SX - NV500  |
| NSX-V390            | CX-NV390<br>(TYPE : LH)         | SX - NV300  |
| NSX-V3001           | CX-NV3001<br>(TYPE : U)         | SX - NV3001 |

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-963-128-10T.
- このサービスマニュアルにはCDメカニズムの説明が含まれていません。CDメカニズムについては、4ZG-1, S/M Code No. 09-963-128-10Tのマニュアルを参照してください。
- If requiring information about the Speaker, see Service Manual of SX-ANV900/SX-NAV900, S/M Code No. 09-964-137-8FP.
- このサービスマニュアルにはスピーカーの説明が含まれていません。スピーカーについては、SX-ANV900/SX-NAV900, S/M Code No. 09-964-137-8FPのマニュアルを参照してください。

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## SPECIFICATIONS (D)

### 本体 CX-NV300

#### チューナー部

##### <FM部>

受信周波数： 76MHz-108MHz

アンテナ： 75Ω (不平衡)

##### <AM部>

受信周波数： 531kHz-1602kHz

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

スリープタイマー： 10分単位で設定可、最大240分

時計表示： 12時間/24時間表示

#### アンプ部

定格出力： 30W+30W (1kHz、6Ω、10%) EIAJ

入力端子： VIDEO/AUX IN端子 400mV

MD IN端子 400mV

MIC 1, 2端子 1.3mV/10kΩ

出力端子： SUPER WOOFER端子 1.4V

SURROUND SPEAKERS端子

REC OUT端子 200mV

#### 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： ノーマルテープ50-15000Hz

#### 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)

復号化： 1bitデュアル

ワウフラッター： 測定限界以下

#### 共通部

電源： AC 100V、50/60Hz

消費電力： 70W

本体最大外形寸法： 260 (幅) × 305.5 (高) × 335 (奥行) mm

本体質量： 6.5kg

#### スピーカー SX-NV300

型式： 3ウェイバスレフタイプ (防磁型： EIAJ)

インピーダンス： 6Ω

出力音圧レベル： 87dB/W/m

使用スピーカー： ウーハー14cmコーン型 ツイーター6cm スーパーツイーター2cm

最大外形寸法： 235 (幅) × 302 (高) × 250 (奥行) mm

質量： 3.1kg

・仕様および外観は、予告なく変更する場合がありますので、ご了承ください。

# SPECIFICATIONS

## <FM Tuner section>

**Tuning range** 87.5 MHz to 108 MHz  
**Usable sensitivity (IHF)** 13.2 dBf  
**Antenna terminals** 75 ohms (unbalanced)

## <AM Tuner section>

**Tuning range** 531 kHz to 1602 kHz (9 kHz step)  
 530 kHz to 1710 kHz (10 kHz step)  
**Usable sensitivity** 350  $\mu$ V/m  
**Antenna** Loop antenna

## <SW Tuner section> (HE, HR only)

**Tuning range** 5.90 MHz ~ 17.9 MHz  
**Antenna** Wire antenna

## <Amplifier section>

**Power output \*** HE, HR :  
 Rated : 25 W + 25 W  
 (6 ohms, T.H.D. 1%, 1 kHz)  
 Reference : 30 W + 30 W  
 (6 ohms, T.H.D. 10%, 1 kHz)  
 U :  
 30 watts per channel, Min.  
 RMS at 6 ohms, from 50Hz to  
 20kHz, with no more than 1% Total  
 Harmonic Distortion  
 LH (300) :  
 Rated : 16 W + 16 W  
 (6 ohms, T.H.D. 1%, 1 kHz)  
 Reference : 20 W + 20 W  
 (6 ohms, T.H.D. 10%, 1 kHz)  
 LH (390/500) :  
 40 W + 40 W  
 (6 ohms, T.H.D. 1%, 1 kHz)  
 Reference : 50 W + 50 W  
 (6 ohms, T.H.D. 10%, 1 kHz)

\* (without connecting to the SURROUND SPEAKERS)  
**Total harmonic distortion** HE, HR, U :  
 0.1% (15 W, 1 kHz, 6 ohms)  
 LH (300) :  
 0.1% (10W, 1 kHz, 6 ohms)  
 LH (390/500) :  
 0.1% (25 W, 1 kHz, 6 ohms)

## Inputs

HE, HR, U :  
 VIDEO/AUX : 400 mV  
 LH (390/500) :  
 VIDEO /AUX : 400mV (24 kohms)  
 HE, HR :  
 MIC 1, MIC 2 : 1.0 mV (10 kohms)  
 LH, U :

## Outputs

MIC 1, MIC 2 : 1.7 mV (10 kohms)  
 CD DIGITAL OUT (OPTICAL)  
 HE,HR :  
 SUPER WOOFER : 1.4 V  
 LH (300) :  
 SUPER WOOFER : 1.0 V  
 U :  
 SUPER WOOFER : 1.2 V  
 LH (390/500) :  
 SUPER WOOFER : 1.8 V  
 SPEAKERS: accept speakers of  
 6 ohms or more  
 SURROUND SPEAKERS :  
 accept speakers of 16 ohms or  
 more  
 PHONES (  $\varnothing$  6.3mm stereo jack) :  
 accepts headphones of 32 ohms  
 or more

## <Cassette deck section>

**Track format** 4 tracks, 2 channels stereo  
**Frequency response** Normal tape : 50 Hz -15000 Hz  
**Signal-to-noise ratio** 48 dB  
**Recording system** AC bias  
**Heads** Deck 1 : Recording/playback/  
 erase head x 1  
 Deck 2 : Playback head x1

## <Compact disc player section>

**Laser** Semiconductor laser ( $\lambda$  =780 nm)  
**D-A converter** 1 bit dual  
**Signal-to-noise ratio** 85 dB (1 kHz, 0 dB)  
**Harmonic distortion** 0.03% (1 kHz, 0 dB)  
**Wow and flutter** Unmeasurable

## <Speaker system SX-NV300/3000/3001>

**Cabinet type** 3 way, bass reflex  
 (magnetic sealed type)  
**Speakers** Woofer :  
 140 mm (5<sup>5</sup>/<sub>8</sub> in.) cone type  
 Tweeter :  
 60 mm (2<sup>3</sup>/<sub>8</sub> in.) cone type  
 Super tweeter :  
 20 mm (1<sup>3</sup>/<sub>16</sub> in.) ceramic type  
 6 ohms  
**Impedance**  
**Output sound pressure level** 87 dB/W/m  
**Dimensions (W x H x D)** 235 x 302 x 250 mm  
 (9<sup>3</sup>/<sub>8</sub> x 12 x 9<sup>7</sup>/<sub>8</sub> in.)  
**Weight** 3.1 kg (6 lbs 13 oz.)

## <Speaker system SX-FNV500>

**Cabinet type** 3 way, bass reflex with surround  
 speaker (magnetic sealed type)  
**Speakers** Woofer :  
 140 mm (5<sup>5</sup>/<sub>8</sub> in.) cone type  
 Tweeter :  
 80 mm (3<sup>1</sup>/<sub>4</sub> in.) cone type  
 Super tweeter :  
 50 mm (2 in.) ceramic type  
 Surround speaker :  
 80 mm (3<sup>1</sup>/<sub>4</sub> in.) cone type  
**Impedance** Front speaker : 6 ohms  
 Surround speaker : 16 ohms  
**Output sound pressure level** 87 dB/W/m  
**Dimensions (W x H x D)** 235 x 302 x 270 mm  
 (9<sup>3</sup>/<sub>8</sub> x 12 x 10<sup>3</sup>/<sub>4</sub> in.)  
**Weight** 3.8 kg (8 lbs 6 oz.)

## <General>

**Power requirements** LH, HE, HR :  
 120 V/ 220 - 240 V AC, switchable  
 50/60 Hz  
 U : 120 V AC, 60Hz, fixed  
**Power consumption** HE, HR : 80 W  
 LH (300) : 60 W  
 U : 90 W  
 LH (390/500) : 115 W  
**Dimensions of main unit**  
**(W x H x D)** 260 x 305.5 x 335 mm  
 (10<sup>1</sup>/<sub>4</sub> x 12<sup>1</sup>/<sub>8</sub> x 13<sup>1</sup>/<sub>4</sub> in.)  
**Weight of main unit** HE, HR : 6.5 kg (14 lbs 5 oz.)  
 LH (300) : 6.1 kg (13 lbs 7 oz.)  
 U : 6.9 kg (15 lbs 3 oz.)  
 LH (390/500) : 7.2 kg  
 (15 lbs 14 oz.)

• Design and specifications are subject to change without notice.

# 安全に修理(補修)をするために

修理の前に「安全に修理(補修)をするために」をよくお読みの上、正しく修理を行ってください。このサービスマニュアルでは、お客様が製品を安全に正しくお使いいただき、お客様や他の人々への危害や財産への損害を未然に防止するために、修理する場合必ず下記の項目をお守りください。

## 警告

警告に示された次の内容を必ずお守りください。

もし守られないと、火災や感電、けがなどの重度の損害を負う原因となります。

### 1. 安全規格部品注意文

・製品の安全性を維持する為の重要部品で、安全上特別な規格で作られています。

このマークの部品を交換する時は必ず指定の部品を使用してください。

### 2. 指定部品を使用すること。

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用すること。特に回路図、部品表に△印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

### 3. 電源コードを含むAC1次側のリード線の被覆を傷つけたり、溶かしたりしないこと。

### 4. 感電に注意すること。

内部には高電圧の部分がありますので通電時の取り扱いに際しては注意してください。

### 5. 次の各項目は修理前と必ず同じであること。

- 1) ワイヤーの半田付け状態（特にAC1次側の空間距離）
- 2) ワイヤーの引き回しおよび束線状態等
- 3) ワイヤーの種類
- 4) 各種絶縁物の取付状態

### 7. 部品の取り付けや配線の引き回しはもとどおりにすること。

安全上、チューブやテープなどの絶縁材料を使用したり、プリント基板から浮かしてとりつけた部品があります。また、内部配線は引き回しやクランプによって発熱部品や高圧部品に接近しないよう配慮されていますので、これらは必ずもとどおりにすること。

## 注意

この表示を無視して、誤った取り扱いをすると、人が傷害を負ったり物的損害が発生する可能性があります。

### 1. 注意事項を守ること。

サービスの時特に注意を要する箇所につきましては、キャビネット、シャーシ、部品などにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書等の注意事項を必ず守ること。

### 2. スペック銘板・注意ラベル・ヒューズラベル等の表示文字を汚して読みにくくならないこと。

### 3. 基板パターンの裏付け部品の修理等を行う場合、パターンや部品にボンドを塗布してプリント基板にしっかり固定すること。

### 4. サービス後は安全点検すること。

サービスのために取り外したネジ、部品、配線がもとどおりになっているか、サービスした個所の周辺を劣化させてしまったところがないかなどを点検すること。（ワイヤーの半田付け、引き回し、束線、種類、空間距離）

### 5. 修理（補修）時に、レーザー出力部に接近しないでください。やむなく接近する場合は、目を閉じてください。レーザービームに接近することが必要になった場合、光学ピックアップブロックの対物レンズの表面から30cm以上離れていることを確認してください。

# 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 ylit-tävälle 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

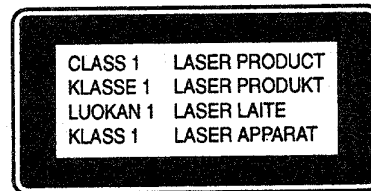
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

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

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



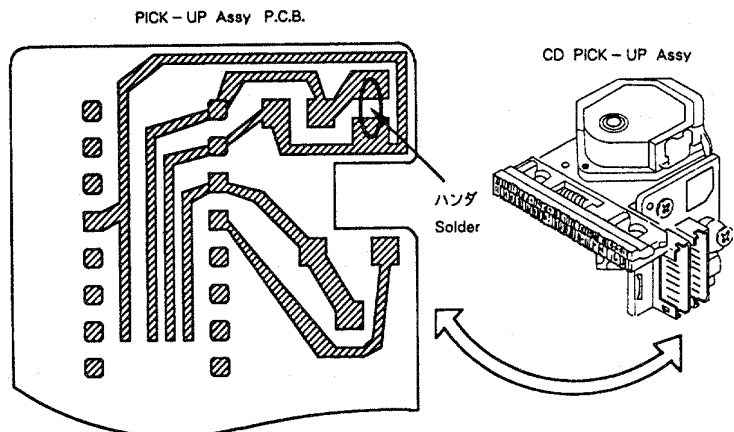
## Precaution to replace Optical block (KSS - 210A)

### 光学ブロック (KSS-210A) 交換時の注意

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。

# ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO.          | PART NO.       | KANRI NO.      | DESCRIPTION                   | REF. NO.                       | PART NO.       | KANRI NO.      | DESCRIPTION                         |                   |
|-------------------|----------------|----------------|-------------------------------|--------------------------------|----------------|----------------|-------------------------------------|-------------------|
| <b>IC</b>         |                |                |                               | C141                           | 87-010-384-089 |                | CAP,E 100-25 SME<LH>                |                   |
|                   | 87-070-163-019 |                | IC,STK405-030<LH>             | C141                           | 87-010-385-089 |                | CAP,E 220-25 SME<U,500LH,390LH>     |                   |
|                   | 87-070-267-019 | 2A             | IC,STK405-050<HE,HR,D>        | C141                           | 87-016-582-089 | 0E             | CAP,E 47-25 SSL<HE,HR,D>            |                   |
|                   | 87-A20-102-019 |                | IC,STK405-090A<500LH,390LH>   | C142                           | 87-010-384-089 | 0E             | CAP,E100-25SME<EXPT U,500LH,390LH>  |                   |
|                   | 86-NF7-652-010 |                | IC,UPD78044BGF-028<EXCEPT D>  | C142                           | 87-010-385-089 |                | CAP,E 220-25 SME<U,500LH,390LH>     |                   |
|                   | 86-NF7-653-010 | 2M             | IC,UPD78044HGF-015<D>         | C143                           | 87-010-764-089 | 0E             | CAP,E 47-63V                        |                   |
|                   | 87-A20-101-019 |                | IC,STK405-070A<U>             | C144                           | 87-010-196-089 |                | C-CAP,S 0.1-25 F<U,500LH,390LH>     |                   |
|                   | 87-070-083-019 | 1D             | IC,GPIU281X                   | C145                           | 87-010-196-089 |                | C-CAP,S 0.1-25 F<U,500LH,390LH>     |                   |
|                   | 87-070-121-010 | 1F             | IC,HAL2185NT                  | C146                           | 87-010-390-099 |                | CAP,ELECT 3300-25SME<U,500LH,390LH> |                   |
|                   | 87-017-804-019 | 1B             | IC,BU4052BC                   | C151                           | 87-012-368-089 | 0E             | C-CAP S 0.1-50F                     |                   |
|                   | 87-A20-107-019 | 1C             | IC,BA3836                     | C152                           | 87-012-368-089 | 0E             | C-CAP S 0.1-50F                     |                   |
|                   | 87-017-022-089 | 1A             | IC,NJM2068M-D(T1)             | C153                           | 87-016-473-099 | 1B             | CAP,E3300-35SME<EXPT U,500LH,390LH> |                   |
|                   | 87-017-914-019 | 1B             | IC,BU4094 BC                  | C153                           | 87-016-474-099 |                | CAP,E 3300-50<U,500LH,390LH>        |                   |
|                   | 87-017-698-080 |                | IC,M65843FP<HE,HR>            | C154                           | 87-016-595-099 | 1A             | CAP,E2200-35SSL<EXPT U,500LH,390LH> |                   |
|                   | 87-070-127-119 | 1D             | IC,LC72131D                   | C154                           | 87-016-474-099 |                | CAP,E 3300-50<U,5LH,39LH>           |                   |
|                   | 87-002-642-089 | 1E             | IC,TAB124 F<D>                | C161                           | 87-010-401-089 | 0E             | CAP,E 1-50 SME                      |                   |
|                   | 87-017-714-119 | 1F             | IC,LA1836L                    | C171                           | 87-010-263-089 |                | CAP,E 100-10 SME 5X11<U>            |                   |
|                   | 87-002-727-019 |                | IC,NJM4558L<500LH,390LH>      | C172                           | 87-012-140-089 | 0E             | C-CAP,S 470P-50 CH                  |                   |
|                   | 87-A20-069-049 | 1D             | IC,BA3842F                    | C173                           | 87-010-405-089 | 0E             | CAP,E 10-50 SME                     |                   |
|                   |                |                |                               | C181                           | 87-016-575-089 | 0E             | CAP,E 220-16 SSL                    |                   |
| <b>TRANSISTOR</b> |                |                |                               | C182                           | 87-010-381-089 | 0E             | CAP,E 330-16 SME                    |                   |
|                   | 87-026-610-089 | 0E             | TR,KTC3198GR                  | C197                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 89-327-125-089 | 0E             | C-TR,2SC2712GR                | C198                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 89-111-625-089 |                | C-TR,2SA1162GR<EXCEPT LH,D>   | C201                           | 87-010-404-089 | 0E             | CAP,E 4.7-50 SME                    |                   |
|                   | 87-026-609-089 | 0E             | TR,KTA1266GR                  | C202                           | 87-010-404-089 | 0E             | CAP,E 4.7-50 SME                    |                   |
|                   | 89-213-702-019 | 1A             | TR,2SB1370E                   | C203                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL                  |                   |
|                   | 89-332-665-089 | 1A             | TR,2SC3266GR                  | C204                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL                  |                   |
|                   | 89-420-052-089 |                | TR,2SD2005Q<U>                | C205                           | 87-010-180-089 |                | C-CAP,S 1500P-50 B<500LH,390LH>     |                   |
|                   | 87-026-462-089 | 0E             | TR,2SC1740S (RS)              | C205                           | 87-010-181-089 | 0E             | C-CAP,S 1800P-50 B<HE,HR,U,D>       |                   |
|                   | 89-406-555-089 | 0E             | TR,2SD655E                    | C205                           | 87-010-183-089 |                | C-CAP,S 2700P-50 B<LH>              |                   |
|                   | 87-026-286-089 | 0E             | TR,DTA143ES                   | C206                           | 87-010-180-089 |                | C-CAP,S 1500P-50 B<500LH,390LH>     |                   |
|                   | 89-502-465-089 | 0E             | FET,2SK246GR                  | C206                           | 87-010-181-089 | 0E             | C-CAP,S 1800P-50 B<HE,HR,U,D>       |                   |
|                   | 89-333-317-089 | 0E             | TR,2SC3331T                   | C206                           | 87-010-183-089 |                | C-CAP,S 2700P-50 B<LH>              |                   |
|                   | 87-026-463-089 | 0E             | TR,2SA933S (RS)               | C207                           | 87-010-402-089 | 0E             | CAP,E 2.2-50 SME                    |                   |
|                   | 87-026-215-089 | 0E             | TR,DTC114YS<D>                | C208                           | 87-010-402-089 | 0E             | CAP,E 2.2-50 SME                    |                   |
|                   | 89-316-236-089 | 1A             | TR,2SC1623L6<EXCEPT U>        | C209                           | 87-010-405-089 | 0E             | CAP,E 10-50 SME                     |                   |
|                   | 87-026-227-089 | 0E             | C-TR,DTA114EK<EXCEPT U>       | C210                           | 87-010-405-089 | 0E             | CAP,E 10-50 SME                     |                   |
|                   | 89-113-187-889 | 0E             | TR,2SA1318TU                  | C213                           | 87-010-147-089 | 0E             | C-CAP,S 3P-50 CH                    |                   |
|                   | 89-328-785-089 |                | TR,2SC2878-A (E2-M)<HE,HR>    | C214                           | 87-010-147-089 | 0E             | C-CAP,S 3P-50 CH                    |                   |
|                   | 87-026-219-089 | 0E             | TR,DTA144ES                   | C215                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 87-026-269-089 | 0E             | TR,DTA114ES<HE,HR,D>          | C216                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 87-026-211-089 | 0E             | C-TR,DTA144EK T147<D>         | C217                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 87-026-214-089 | 0E             | TR,DTA114YS                   | C218                           | 87-010-196-089 | 0E             | C-CAP,S 0.1-25 F                    |                   |
|                   | 87-026-213-089 | 0E             | C-TR,DTC114YK<D>              | C219                           | 87-010-198-089 | 0E             | C-CAP,S 0.022-25 B                  |                   |
|                   | 89-327-143-089 | 0E             | C-TR,2SC2714 (O)              | C220                           | 87-010-198-089 | 0E             | C-CAP,S 0.022-25 B                  |                   |
|                   | 89-503-602-089 | 0E             | C-FET,2SK360E                 | C221                           | 87-010-194-089 | 0E             | C-CAP,S 0.047-25 F                  |                   |
|                   | 89-505-434-589 | 0E             | C-FET,2SK543(4/5)             | C222                           | 87-010-384-089 | 0E             | CAP,E100-25SME<EXPT U,500LH,390LH>  |                   |
|                   |                |                |                               | C301                           | 87-010-197-089 | 0E             | C-CAP,S 0.01-25 B                   |                   |
|                   |                |                |                               | C311                           | 87-010-178-089 |                | C-CAP,S 1000P-50 B<U>               |                   |
|                   |                |                |                               | C311                           | 87-012-140-089 | 0E             | C-CAP,S 470P-50 CH<EXCEPT U>        |                   |
| <b>DIODE</b>      |                |                |                               | C312                           | 87-010-178-089 |                | C-CAP,S 1000P-50 B<U>               |                   |
|                   | 87-020-027-089 | 0E             | C-DIODE,1SS184                | C312                           | 87-012-140-089 | 0E             | C-CAP,S 470P-50 CH<EXCEPT U>        |                   |
|                   | 87-020-125-089 |                | C-DIODE,1SS181<U,500LH,390LH> | C313                           | 87-010-176-089 |                | C-CAP,S 680P-50 SL<U>               |                   |
|                   | 87-070-274-086 | 0E             | DIODE,1N4003 SEM              | C313                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL<EXCEPT U>        |                   |
|                   | 87-001-559-089 | 0E             | DIODE,ISS131 (T-72)           | C314                           | 87-010-176-089 |                | C-CAP,S 680P-50 SL<U>               |                   |
|                   | 87-A40-116-069 | 1B             | DIODE,RS403L-B-D-51           | C314                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL<EXCEPT U>        |                   |
|                   | 87-027-451-089 | 0E             | ZENER,HZ27-2L                 | C321                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL                  |                   |
|                   | 87-017-437-089 | 0E             | DIODE,1N4148M                 | C322                           | 87-010-177-089 | 0E             | C-CAP,S 820P-50 SL                  |                   |
|                   | 87-017-933-089 | 0E             | ZENER,MTZJ10D                 | C323                           | 87-012-154-089 | 0E             | C-CAP,S 150P-50 CH                  |                   |
|                   | 87-070-345-086 | 0E             | DIODE,1N4148                  | C324                           | 87-012-154-089 | 0E             | C-CAP,S 150P-50 CH                  |                   |
|                   | 87-017-932-089 | 0E             | ZENER,MTJ6.2B                 | C333                           | 87-012-365-089 | 0E             | C-CAP,S 0.027-25V BK                |                   |
|                   | 87-001-911-089 | 0E             | ZENER,UTZJ4.7A (TAPG)         | C334                           | 87-012-365-089 | 0E             | C-CAP,S 0.027-25V BK                |                   |
|                   | 87-070-136-089 |                | ZENER,MTZJ5.1B<HE,HR>         | C335                           | 87-010-189-089 | 0E             | C-CAP,S 8200P-50 B                  |                   |
|                   | 87-001-912-089 | 0E             | ZENER,UTZJ5.1B                | C336                           | 87-010-189-089 | 0E             | C-CAP,S 8200P-50 B                  |                   |
|                   |                |                |                               | C337                           | 87-010-401-089 | 0E             | CAP,E 1-50 SME                      |                   |
| <b>MAIN C.B</b>   |                |                |                               | C338                           | 87-010-401-089 | 0E             | CAP,E 1-50 SME                      |                   |
|                   | C131           | 87-010-403-089 | 0E                            | CAP,E 3.3-50 SME               | C339           | 87-016-572-089 | 0E                                  | CAP,E 470-6.3 SSL |
|                   | C132           | 87-016-582-089 |                               | CAP,E 47-25 SSL<U,500LH,390LH> | C340           | 87-010-196-089 | 0E                                  | C-CAP,S 0.1-25 F  |
|                   |                |                |                               |                                | C353           | 87-010-401-089 | 0E                                  | CAP,E 1-50 SME    |
|                   |                |                |                               |                                | C354           | 87-010-401-089 | 0E                                  | CAP,E 1-50 SME    |

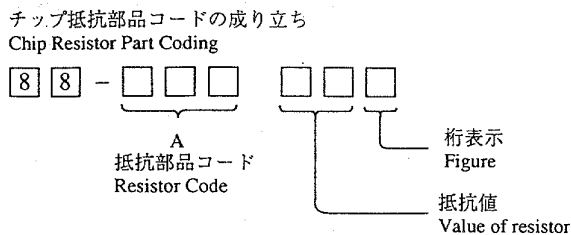
| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION              | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                   |
|----------|----------------|-----------|--------------------------|----------|----------------|-----------|-------------------------------|
| C355     | 87-010-401-089 | 0E        | CAP,E 1-50 SME           | C777     | 87-010-400-089 | 0E        | CAP,E 0.47-50 SME             |
| C356     | 87-010-401-089 | 0E        | CAP,E 1-50 SME           | C778     | 87-010-401-089 | 0E        | CAP,E 1-50 SME                |
| C357     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C779     | 87-010-401-089 | 0E        | CAP,E 1-50 SME                |
| C371     | 87-012-156-089 | 0E        | C-CAP,S 220P-50 CH       | C780     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C372     | 87-012-156-089 | 0E        | C-CAP,S 220P-50 CH       | C781     | 87-010-402-089 | 0E        | CAP,E 2.2-50 SME<D>           |
| C373     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C782     | 87-010-402-089 | 0E        | CAP,E 2.2-50 SME<D>           |
| C374     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C783     | 87-010-182-089 | 0E        | C-CAP,S 2200P-50 B<D>         |
| C376     | 87-010-392-089 | 0E        | CAP,E 33-35 SME          | C784     | 87-010-182-089 | 0E        | C-CAP,S 2200P-50 B<D>         |
| C377     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B       | C785     | 87-018-134-089 | 0E        | CAP,TC-U 0.01-16 Y <EXCEPT D> |
| C378     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C789     | 87-012-365-089 | 0E        | C-CAP,S 0.027-25V BK<HE,HR,D> |
| C379     | 87-010-183-089 | 0E        | C-CAP,S 2700P-50 B       | C789     | 87-010-193-089 |           | C-CAP,S0.033-25F<LH,U>        |
| C380     | 87-010-183-089 | 0E        | C-CAP,S 2700P-50 B       | C790     | 87-012-365-089 | 0E        | C-CAP,S 0.027-25V BK<HE,HR,D> |
| C381     | 87-010-183-089 | 0E        | C-CAP,S 2700P-50 B       | C790     | 87-010-193-089 |           | C-CAP,S0.033-25F<LH,U>        |
| C409     | 87-010-405-089 | 0E        | CAP,E 10-50 SME          | C791     | 87-010-401-089 | 0E        | CAP,E 1-50 SME                |
| C523     | 87-010-177-089 | 0E        | C-CAP,S 820P-50 SL       | C792     | 87-010-180-089 | 0E        | C-CAP,S 1500P-50 B            |
| C524     | 87-010-177-089 | 0E        | C-CAP,S 820P-50 SL       | C793     | 87-010-189-089 | 0E        | C-CAP,S 8200P-50 B            |
| C527     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C794     | 87-016-582-089 | 0E        | CAP,E 47-25 SSL               |
| C528     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C795     | 87-010-194-089 | 0E        | C-CAP,S 0.047-25 F            |
| C529     | 87-010-400-089 | 0E        | CAP,E 0.47-50 SME        | C796     | 87-010-403-089 | 0E        | CAP,E 3.3-50 SME              |
| C530     | 87-010-400-089 | 0E        | CAP,E 0.47-50 SME        | C797     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C531     | 87-010-382-089 | 0E        | CAP,E 22-25 SME          | C799     | 87-010-405-089 | 0E        | CAP,E 10-50 SME               |
| C532     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B       | C801     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C551     | 87-010-401-089 | 0E        | CAP,E 1-50 SME           | C802     | 87-010-154-089 | 0E        | C-CAP,S 10P-50 CH<D>          |
| C552     | 87-010-401-089 | 0E        | CAP,E 1-50 SME           | C802     | 87-010-311-089 |           | C-CAP,S 12P-50 CH<EXCEPT D>   |
| C553     | 87-010-195-089 | 0E        | C-CAP,S 0.068-25 F       | C803     | 87-018-134-089 | 0E        | CAP,TC-U 0.01-16 Y            |
| C554     | 87-010-177-089 | 0E        | C-CAP,S 820P-50 SL       | C804     | 87-010-151-089 | 0E        | C-CAP,S 7P-50 CH              |
| C555     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F         | C805     | 87-010-150-089 | 0E        | C-CAP,S 6P-50 CH              |
| C556     | 87-010-263-089 | 0E        | CAP,E 100-10 SME 5X11    | C806     | 87-010-145-089 | 0E        | C-CAP,S 1P-50 CH              |
| C557     | 87-010-992-089 | 0E        | C-CAP,S 0.047-25 B       | C807     | 87-010-149-089 | 0E        | C-CAP,S 5P-50 CH              |
| C558     | 87-010-545-089 | 0E        | CAP,E 0.22-50 SME        | C808     | 87-010-322-089 | 0E        | C-CAP,S 100P-50 CH            |
| C601     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B       | C809     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C641     | 87-010-404-089 | 0E        | CAP,E 4.7-50 SME<D>      | C810     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C642     | 87-010-404-089 | 0E        | CAP,E 4.7-50 SME<D>      | C811     | 87-010-149-089 | 0E        | C-CAP,S 5P-50 CH              |
| C643     | 87-010-805-019 | 0E        | C-CAP,1-16<D>            | C812     | 87-010-314-089 |           | C-CAP,S 22P-50 CH<EXCEPT D>   |
| C701     | 87-010-404-089 | 0E        | CAP,E 4.7-50 SME         | C812     | 87-010-146-089 | 0E        | C-CAP,S 2P-50 CH<D>           |
| C702     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C813     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C703     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C814     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C704     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C815     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C707     | 87-010-546-089 | 0E        | CAP,E 0.33-50 SME        | C820     | 87-016-582-089 | 0E        | CAP,E 47-25 SSL               |
| C708     | 87-010-546-089 | 0E        | CAP,E 0.33-50 SME        | C821     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C711     | 87-010-263-089 | 0E        | CAP,E 100-10 SME 5X11    | C823     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C712     | 87-010-112-089 | 0E        | CAP,E 100-16 11L         | C824     | 87-018-134-089 | 0E        | CAP,TC-U 0.01-16 Y            |
| C722     | 87-010-152-089 | 0E        | C-CAP,S 8P-50 CH         | C825     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F              |
| C723     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C831     | 87-010-311-089 | 0E        | C-CAP,S 12P-50 CH<D>          |
| C725     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B       | C831     | 87-010-312-089 |           | C-CAP,S 15P-50 CH<EXCEPT D>   |
| C727     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F         | C833     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C728     | 87-016-621-089 | 0E        | CAP,E 220-10 SSL         | C835     | 87-010-154-089 |           | C-CAP,S 10P-50 CH<EXCEPT D>   |
| C729     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C835     | 87-010-311-089 | 0E        | C-CAP,S 12P-50 CH<D>          |
| C730     | 87-018-134-089 | 0E        | CAP,TC-U 0.01-16 Y       | C836     | 87-010-312-089 |           | C-CAP,S 15P-50 CH<EXCEPT D>   |
| C741     | 87-010-545-089 | 0E        | CAP,E 0.22-50 SME<D>     | C836     | 87-010-314-089 | 0E        | C-CAP,S 22P-50 CH<D>          |
| C742     | 87-010-154-089 | 0E        | C-CAP,S 10P-50 CH<D>     | C837     | 87-010-312-089 |           | C-CAP,S 15P-50 CH<EXCEPT D>   |
| C743     | 87-010-404-089 | 0E        | CAP,E 4.7-50 SME<B>      | C837     | 87-010-314-089 | 0E        | C-CAP,S 22P-50 CH<D>          |
| C744     | 87-010-263-089 | 0E        | CAP,E 100-10 SME 5X11<D> | C843     | 87-010-146-089 | 0E        | C-CAP,S 2P-50 CH              |
| C745     | 87-010-401-089 | 0E        | CAP,E 1-50 SME<D>        | C849     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C746     | 87-010-401-089 | 0E        | CAP,E 1-50 SME<D>        | C901     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C747     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B<D>     | C941     | 87-010-314-089 |           | C-CAP,S 22P-50 CH<HE,HR>      |
| C748     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B<D>    | C943     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>      |
| C749     | 87-016-621-089 | 0E        | CAP,E 220-10 SSL<D>      | C945     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>      |
| C752     | 87-010-313-089 | 0E        | C-CAP,S 18P-50 CH<D>     | C946     | 87-010-401-089 | 0E        | CAP,E 1-50 SME                |
| C753     | 87-010-402-089 | 0E        | CAP,E 2.2-50 SME<D>      | C952     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>      |
| C761     | 87-010-401-089 | 0E        | CAP,E 1-50 SME<D>        | C953     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>      |
| C762     | 87-010-401-089 | 0E        | CAP,E 1-50 SME<D>        | C954     | 87-010-400-089 |           | CAP,E 0.47-50 SME<HE,HR>      |
| C769     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F         | C955     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B             |
| C770     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B        | C956     | 87-010-263-089 |           | CAP,E 100-10 SME 5X11<HE,HR>  |
| C771     | 87-010-405-089 | 0E        | CAP,E 10-50 SME          | C960     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F              |
| C772     | 87-010-194-089 | 0E        | C-CAP,S 0.047-25 F       | C961     | 87-010-150-089 | 0E        | C-CAP,S6P-50CH<LH,U,D>        |
| C773     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F         | C988     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B            |
| C774     | 87-010-263-089 | 0E        | CAP,E 100-10 SME 5X11    | C999     | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F              |
| C775     | 87-010-405-089 | 0E        | CAP,E 10-50 SME          | CF741    | 87-030-354-019 |           | VIB,CF BFU450C<HE,HR>         |
| C776     | 87-010-197-089 | 0E        | C-CAP,S0.01-25B<LH,U,D>  | CF801    | 87-008-261-089 | 1A        | FLTR SFE 10.7 MA5-A           |



| REF. NO.  | PART NO.       | KANRI NO. | DESCRIPTION                          | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                      |
|-----------|----------------|-----------|--------------------------------------|----------|----------------|-----------|----------------------------------|
| CF802     | 87-008-261-089 | 1A        | FLTR SFE 10.7 MA5-A                  | C225     | 87-010-263-049 | 0E        | CAP,E 100-10                     |
| CON321    | 86-NF7-640-019 | 0E        | CONN ASSY,8P-RPB                     | C226     | 87-010-401-049 | 0E        | CAP,E 1-50 SME                   |
| D801      | 87-002-730-089 | 1A        | VARI-CAP,SVC203SPA                   | C227     | 87-010-248-049 | 0E        | CAP,E 220-10 SME                 |
| D802      | 87-002-730-089 | 1A        | VARI-CAP,SVC203SPA                   | C229     | 87-012-140-089 | 0E        | C-CAP,S 470P-50 CH               |
| D803      | 87-002-730-089 | 1A        | VARI-CAP,SVC203SPA                   | C250     | 87-010-169-089 | 0E        | C-CAP,S 180P-50 SL               |
| IFT806    | 87-A50-018-019 | 0E        | COIL,FM IFT(4T) COI                  | C262     | 87-012-368-089 | 0E        | C-CAP S 0.1-50F                  |
| J241      | 87-A60-024-019 | 1B        | JACK,6.3 BLK W/SW KM                 | C263     | 87-018-209-089 | 0E        | CAP,TC-U 0.1-50 F                |
| J261      | 87-033-227-019 | 1C        | TERMINAL,SP 4P R (Z)                 | C401     | 87-010-545-049 | 0E        | CAP E 0.22-50 SME                |
| J281      | 87-099-913-019 | 1B        | JACK,PIN 3P BLK                      | C402     | 87-010-178-089 | 0E        | C-CAP,S 1000P-50 B               |
| J501      | 87-099-741-019 |           | JACK,PIN 2P (JT)<EXCEPT D>           | C412     | 87-010-408-049 | 0E        | CAP-E 47-50 SME                  |
| J501      | 87-099-814-019 | 1B        | JACK,PIN 3P WWW<D>                   | C413     | 87-010-382-089 | 0E        | CAP,E 22-25 SME                  |
| J502      | 87-099-813-019 | 1B        | JACK,PIN 3P RRR<D>                   | C414     | 87-010-260-049 | 0E        | CAP,E 47-25 SME<EXCEPT U>        |
| J801      | 87-033-235-019 | 1A        | TERMINAL,ANT(H)                      | C508     | 87-010-384-049 | 0E        | CAP,E 100-25 SME                 |
| J850      | 81-754-629-019 |           | CONNECTOR XH M 2P (UL)<HE,HR>        | C600     | 87-010-545-049 | 0E        | CAP E 0.22-50 SME                |
| L261      | 87-003-383-019 | 1A        | COIL,1UH-S                           | C601     | 87-010-321-089 | 0E        | C-CAP,S 82P-50 CH                |
| L262      | 87-003-383-019 | 1A        | COIL,1UH-S                           | C602     | 87-010-544-049 | 0E        | CAP,E 0.1-50 SME                 |
| L351      | 87-A50-049-019 | 1A        | COIL,TRAP 85K(COI)                   | C603     | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B               |
| L352      | 87-A50-049-019 | 1A        | COIL,TRAP 85K(COI)                   | C607     | 87-010-401-089 |           | CAP,E 1-50 SME<HE,HR>            |
| L371      | 87-007-342-019 | 0E        | COIL,OSC 85K BIAS                    | C608     | 87-010-405-049 |           | CAP,E 10-50 SME<HE,HR>           |
| L741      | 87-A50-015-019 | 0E        | COIL,FM DET (TOK)                    | C609     | 87-010-544-089 | 0E        | CAP,E 0.1-50                     |
| L742      | 87-A90-053-019 | 1C        | FLTR, PCFMT-060 (TOK)<D>             | C615     | 87-010-401-049 | 0E        | CAP,E 1-50 SME                   |
| L742      | 87-A90-051-019 |           | FLTR,CPAZ-450 TOK<LH,U>              | C620     | 87-010-405-049 | 0E        | CAP,E 10-50 SME                  |
| L742      | 87-A90-052-019 |           | FLTR,CFMT-450A(TOK)<HE,HR>           | C621     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B                |
| L770      | 87-005-849-089 | 0E        | COIL,10UH(CECS)                      | C630     | 87-010-248-049 | 0E        | CAP,E 220-10 SME                 |
| L801      | 87-006-263-019 | 0E        | COIL,ANT FM3/4TS,L4                  | C631     | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B                |
| L802      | 87-006-251-019 |           | COIL,ANT FM2-3/4TS,L4<EXCEPT D>      | C711     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>         |
| L802      | 87-006-267-019 | 0E        | COIL,ANT FM3-3/4TS<D>                | C712     | 87-010-182-089 |           | C-CAP,S 2200P-50 B<HE,HR>        |
| L803      | 87-006-262-019 | 0E        | COIL,RF FM3-1/2T,L4                  | C713     | 87-010-544-089 |           | CAP,E 0.1-50<HE,HR>              |
| L804      | 87-006-264-019 |           | COIL,RF FM3-1/2TS,L4<EXCEPT D>       | C714     | 87-010-260-089 |           | CAP,E 47-25 SME<HE,HR>           |
| L804      | 87-006-266-019 | 0E        | COIL,RF FM4-1/2TS<D>                 | C718     | 87-010-197-089 |           | C-CAP,S 0.01-25 B<HE,HR>         |
| L805      | 87-003-098-089 | 0E        | COIL,2.2UH                           | C719     | 87-010-182-089 |           | C-CAP,S 2200P-50 B<HE,HR>        |
| L807      | 87-A50-031-019 |           | COIL,FM OSC (TOK)<EXCEPT D>          | C720     | 87-010-401-049 |           | CAP,E 1-50 SME<HE,HR>            |
| L807      | 87-A50-032-019 | 1A        | COIL,FM OSC (TOK),D3<D>              | C721     | 87-010-186-089 |           | C-CAP,S 4700P-50 B<HE,HR>        |
| L832      | 87-005-847-089 | 0E        | COIL,2.2UH(CECS)                     | C722     | 87-010-263-049 |           | CAP,E 100-10<HE,HR>              |
| L941      | 87-A50-022-019 |           | COIL,ANT SW(COI)<HE,HR>              | C723     | 87-010-198-089 |           | C-CAP,S 0.022-25 B<HE,HR>        |
| L942      | 87-A50-021-019 |           | COIL,OSC SW(COI)<HE,HR>              | C724     | 87-010-174-089 |           | C-CAP,S 470P-50 SL<HE,HR>        |
| L943      | 87-005-372-089 |           | COIL S 1 MH TAPG<HE,HR>              | C725     | 87-010-174-089 |           | C-CAP,S 470P-50 SL<HE,HR>        |
| L944      | 87-003-131-089 |           | COIL,10MH J<HE,HR>                   | C726     | 87-010-374-049 |           | CAP,E 47-10<HE,HR>               |
| L981      | 86-NF4-665-019 | 1E        | AM PACK 1 TOK<LH,U,D>                | CON401   | 86-NF7-648-019 | 0E        | CONN ASSY,2P DECK<EXCEPT U>      |
| L981      | 86-NF4-666-019 |           | AM PACK 3 (TOK)<HE,HR>               | D820     | 87-A40-167-089 |           | LED,HLMK-D200 #2CCR<500LH,390LH> |
| R112      | 87-022-050-089 |           | RES METAL 1W-0.22J<U,500LH,390LH>    | FL101    | 86-NF6-609-019 | 2M        | FL,8-ST-18GK                     |
| R177      | 87-022-200-089 |           | RES METAL 0.56-1W<U>                 | J401     | 81-754-629-019 | 0E        | CONNECTOR XHM 2P(UL)<EXCEPT U>   |
| R191      | 87-022-050-089 | 0E        | RESIS METAL 1W-0.22J                 | J600     | 87-A60-235-019 | --        | JACK,3.5 MO-JT                   |
| R192      | 87-022-050-089 | 0E        | RESIS METAL 1W-0.22J                 | J601     | 87-A60-235-019 | --        | JACK,3.5 MO-JT                   |
| RY151     | 87-A90-152-019 |           | RELAY,JW2AHN-B-12V<U,500LH,390LH>    | L201     | 87-A50-050-019 | 0E        | COIL,CLK 4.19M(COI)              |
| RY281     | 87-045-382-019 |           | RELAY,OUAZ-SH-112L<500LH,390LH>      | L701     | 87-005-456-089 |           | COIL,1000UH FLR50,K<HE,HR>       |
| SFR371    | 87-024-175-089 | 0E        | SFR,47K DIA6 V                       | S302     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| SFR372    | 87-024-175-089 | 0E        | SFR,47K DIA6 V                       | S303     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| SFR722    | 87-024-171-089 | 0E        | SFR 4.7K DIA6 V                      | S308     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| TC721     | 87-011-253-089 | 0E        | TRIMMER 30P LAR                      | S309     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| TC801     | 87-011-252-089 | 1A        | TRIMMER 10P LAR                      | S310     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| TC802     | 87-011-252-089 | 1A        | TRIMMER 10P LAR                      | S311     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| TC941     | 87-011-254-089 |           | TRIMER,20P LAR<HE,HR>                | S312     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| TC942     | 87-011-253-089 |           | TRIMMER 30P LAR<HE,HR>               | S315     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| W111      | 83-NEG-679-019 | 0E        | F-CABEL,5P-2.5<EXCEPT U,500LH,390LH> | S316     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| W111      | 83-NEK-601-019 |           | F-CABEL,7P-2.5<U,500LH,390LH>        | S317     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| W511      | 86-NF7-642-019 | --        | CABLE FFC 6P-CD                      | S318     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| X702      | 87-030-283-019 | 1A        | VIB,CER CSA 3.60MGF N<D>             | S319     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| X703      | 87-A70-022-019 | --        | VIB,CER 456KHZ 3X5A(TDK)             | S322     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
| X721      | 87-030-372-019 | 1B        | VIB,XTAL 7.2MHZ                      | S323     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
|           |                |           |                                      | S324     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
|           |                |           |                                      | S325     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
|           |                |           |                                      | S328     | 87-036-397-089 | 0E        | SW,TACT SKQNAB                   |
|           |                |           |                                      | S329     | 87-036-397-089 |           | SW,TACT SKQNAB<500LH,390LH>      |
|           |                |           |                                      | VR600    | 82-NK7-616-019 |           | VR,10KB RK11K1130<HE,HR>         |
|           |                |           |                                      | VR601    | 82-NK7-615-019 | 1B        | VR 10KA RK11K1130                |
|           |                |           |                                      | W104     | 86-NF7-643-019 | --        | CABLE FFC,13P-CD                 |
| FRONT C.B |                |           |                                      |          |                |           |                                  |
| C204      | 87-010-313-089 | 0E        | C-CAP,S 18P-50 CH                    |          |                |           |                                  |
| C205      | 87-010-150-089 | 0E        | C-CAP,S 6P-50 CH                     |          |                |           |                                  |
| C220      | 87-010-544-049 | 0E        | CAP,E 0.1-50 SME                     |          |                |           |                                  |
| C221      | 87-010-544-049 | 0E        | CAP,E 0.1-50 SME                     |          |                |           |                                  |
| C222      | 87-010-408-089 | 0E        | CAP,E 47-50 SME                      |          |                |           |                                  |
| C223      | 87-010-405-049 | 0E        | CAP,E 10-50 SME                      |          |                |           |                                  |
| C224      | 87-010-401-049 | 0E        | CAP,E 1-50 SME                       |          |                |           |                                  |

| REF. NO.    | PART NO.       | KANRI NO. | DESCRIPTION                    | REF. NO.                | PART NO.       | KANRI NO. | DESCRIPTION                    |
|-------------|----------------|-----------|--------------------------------|-------------------------|----------------|-----------|--------------------------------|
| VOLUME C.B. |                |           |                                | AC C.B                  |                |           |                                |
| C411        | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B              |                         |                |           |                                |
| C651        | 87-010-401-089 | 0E        | CAP,E 1-50 SME                 |                         |                |           |                                |
| C652        | 87-010-401-089 | 0E        | CAP,E 1-50 SME                 |                         |                |           |                                |
| C800        | 87-010-198-089 | 0E        | C-CAP,S 0.022-25 B             |                         |                |           |                                |
| C803        | 87-010-405-089 |           | CAP,E 10-50 SME<500LH,390LH>   |                         |                |           |                                |
| C804        | 87-010-408-049 |           | CAP-E 47-50 SME<500LH,390LH>   |                         |                |           |                                |
| C805        | 87-010-197-089 |           | C-CAP,S 0.01-25 B<500LH,390LH> |                         |                |           |                                |
| C810        | 87-010-401-049 |           | CAP,E 1-50 SME<500LH,390LH>    |                         |                |           |                                |
| C811        | 87-010-401-049 |           | CAP,E 1-50 SME<500LH,390LH>    |                         |                |           |                                |
| C812        | 87-010-248-049 |           | CAP,E 220-10 SME<500LH,390LH>  |                         |                |           |                                |
| C813        | 87-010-197-089 |           | C-CAP,S 0.01-25 B<500LH,390LH> |                         |                |           |                                |
| C901        | 87-010-993-089 | 0E        | C-CAP,S 0.056-25 B             |                         |                |           |                                |
| C902        | 87-010-993-089 | 0E        | C-CAP,S 0.056-25 B             |                         |                |           |                                |
| C903        | 87-012-141-089 | 0E        | C-CAP,S 0.22-16 F              |                         |                |           |                                |
| C904        | 87-012-141-089 | 0E        | C-CAP,S 0.22-16 F              |                         |                |           |                                |
| C905        | 87-010-196-089 | 0E        | C-CAP,S 0.1-25 F               |                         |                |           |                                |
| C906        | 87-010-260-049 | 0E        | CAP,E 47-25 SME                |                         |                |           |                                |
| C907        | 87-010-182-089 | 0E        | C-CAP,S 2200P-50 B             |                         |                |           |                                |
| C908        | 87-010-182-089 | 0E        | C-CAP,S 2200P-50 B             |                         |                |           |                                |
| C909        | 87-010-545-049 | 0E        | CAP E 0.22-50 SME              |                         |                |           |                                |
| C910        | 87-010-545-049 | 0E        | CAP E 0.22-50 SME              |                         |                |           |                                |
| C913        | 87-010-408-049 | 0E        | CAP-E 47-50 SME                |                         |                |           |                                |
| C914        | 87-010-405-049 | 0E        | CAP,E 10-50 SME                |                         |                |           |                                |
| C915        | 87-010-405-089 | 0E        | CAP,E 10-50 SME                |                         |                |           |                                |
| C916        | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B              |                         |                |           |                                |
| C917        | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B              |                         |                |           |                                |
| C918        | 87-010-197-089 | 0E        | C-CAP,S 0.01-25 B              |                         |                |           |                                |
| MVR801      | 86-NF7-676-019 | 0E        | VR,50KBX2 RK16812 MG           |                         |                |           |                                |
| PIN103      | 86-NF7-647-019 |           | CONN ASSY,9P MECHA<U>          |                         |                |           |                                |
| PIN103      | 86-NF7-645-019 | 1A        | CONN ASSY,9P MECHA-R<EXCEPT U> |                         |                |           |                                |
| R411        | 87-029-129-099 | 0E        | RES, FUSE 3.3-1/4W             |                         |                |           |                                |
| SFR401      | 87-024-430-089 | 0E        | SFR,2.2K RH063EC               |                         |                |           |                                |
| SW C.B      |                |           |                                | HEAD FLEX C.B<EXCEPT U> |                |           |                                |
| S301        | 87-036-397-089 | 0E        | SW,TACT SKQNAB                 |                         |                |           |                                |
| S304        | 87-036-397-089 | 0E        | SW,TACT SKQNAB                 |                         |                |           |                                |
| S305        | 87-036-397-089 | 0E        | SW,TACT SKQNAB                 |                         |                |           |                                |
| S306        | 87-036-397-089 | 0E        | SW,TACT SKQNAB                 |                         |                |           |                                |
| S307        | 87-036-397-089 | 0E        | SW,TACT SKQNAB                 |                         |                |           |                                |
|             |                |           |                                | CON311                  | 86-NF7-641-089 | --        | CONN ASSY,3P-PB                |
|             |                |           |                                | PH1                     | S6-201-070-260 | 2P        | HEAD P-5044BD-24F<EXCEPT U>    |
|             |                |           |                                | S6                      | S6-403-020-040 | 1C        | SLIDE SWITCH R663167<EXCEPT U> |

○チップ抵抗部品コード/CHIP RESISTOR PART CODE



チップ抵抗  
Chip resistor

| 容量<br>Wattage | 種類<br>Type | 許容誤差<br>Tolerance | 記号<br>Symbol | 寸法/Dimensions (mm) |     |      | 抵抗コード : A<br>Resistor Code: A |     |
|---------------|------------|-------------------|--------------|--------------------|-----|------|-------------------------------|-----|
|               |            |                   |              | 外形/Form            | L   | W    |                               | t   |
| 1/16W         | 1608       | ±5%               | CJ           |                    | 1.6 | 0.8  | 0.45                          | 108 |
| 1/10W         | 2125       | ±5%               | CJ           |                    | 2   | 1.25 | 0.45                          | 118 |
| 1/8W          | 3216       | ±5%               | CJ           |                    | 3.2 | 1.6  | 0.55                          | 128 |

# TRANSISTOR ILLUSTRATION



ECB

2SC2878  
2SC3266  
KTA1266  
KTC3198



SG D

2SK246



ECB

2SD655



ECB

2SA1318  
2SC3331



BCE

2SB1370



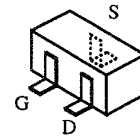
ECB

2SA933  
2SC1740  
DTA114  
DTC114

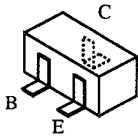


ECB

2SD2005

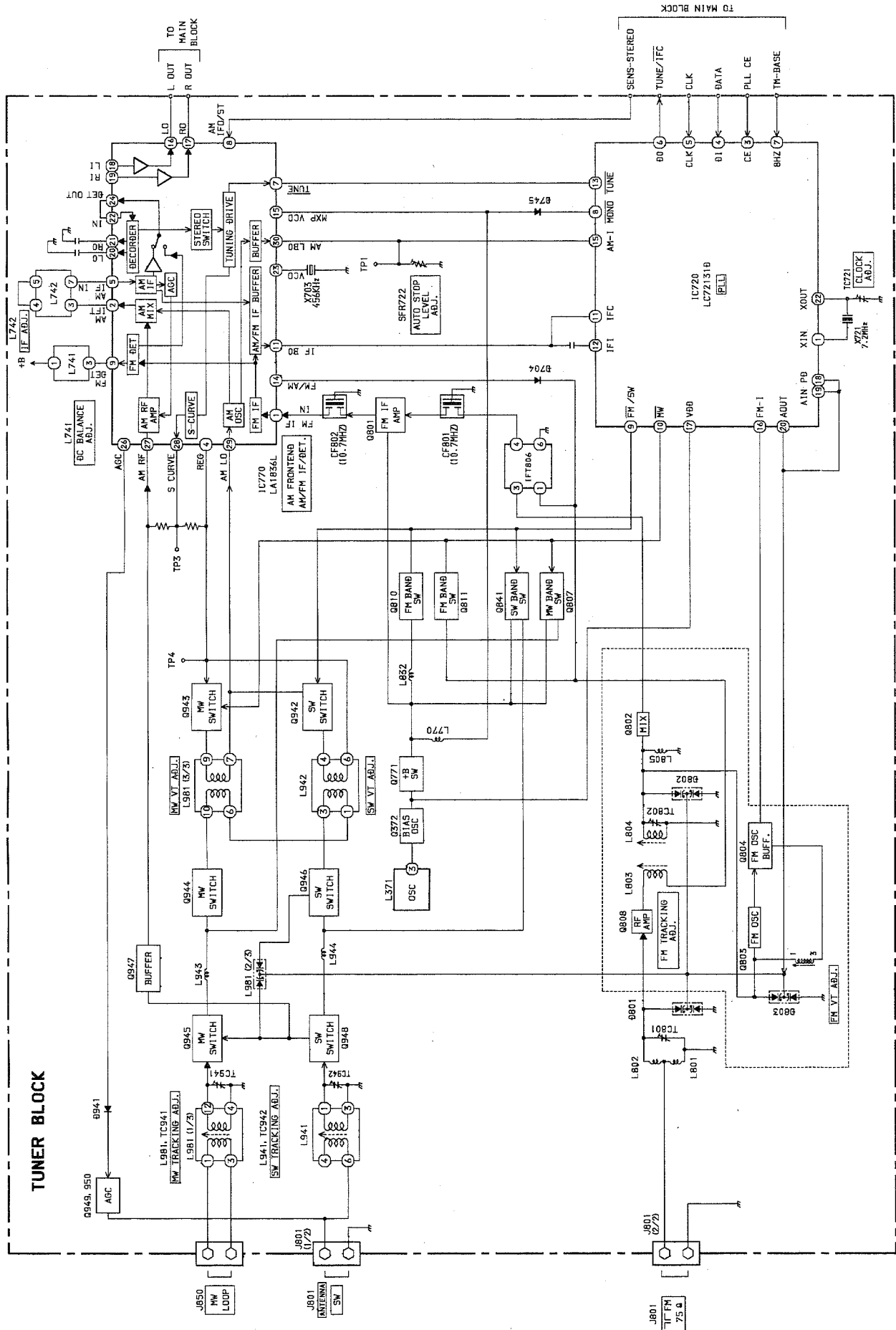


2SK360  
2SK543



2SA1162  
2SC1623  
2SC2712  
2SC2714  
DTA144  
DTA143

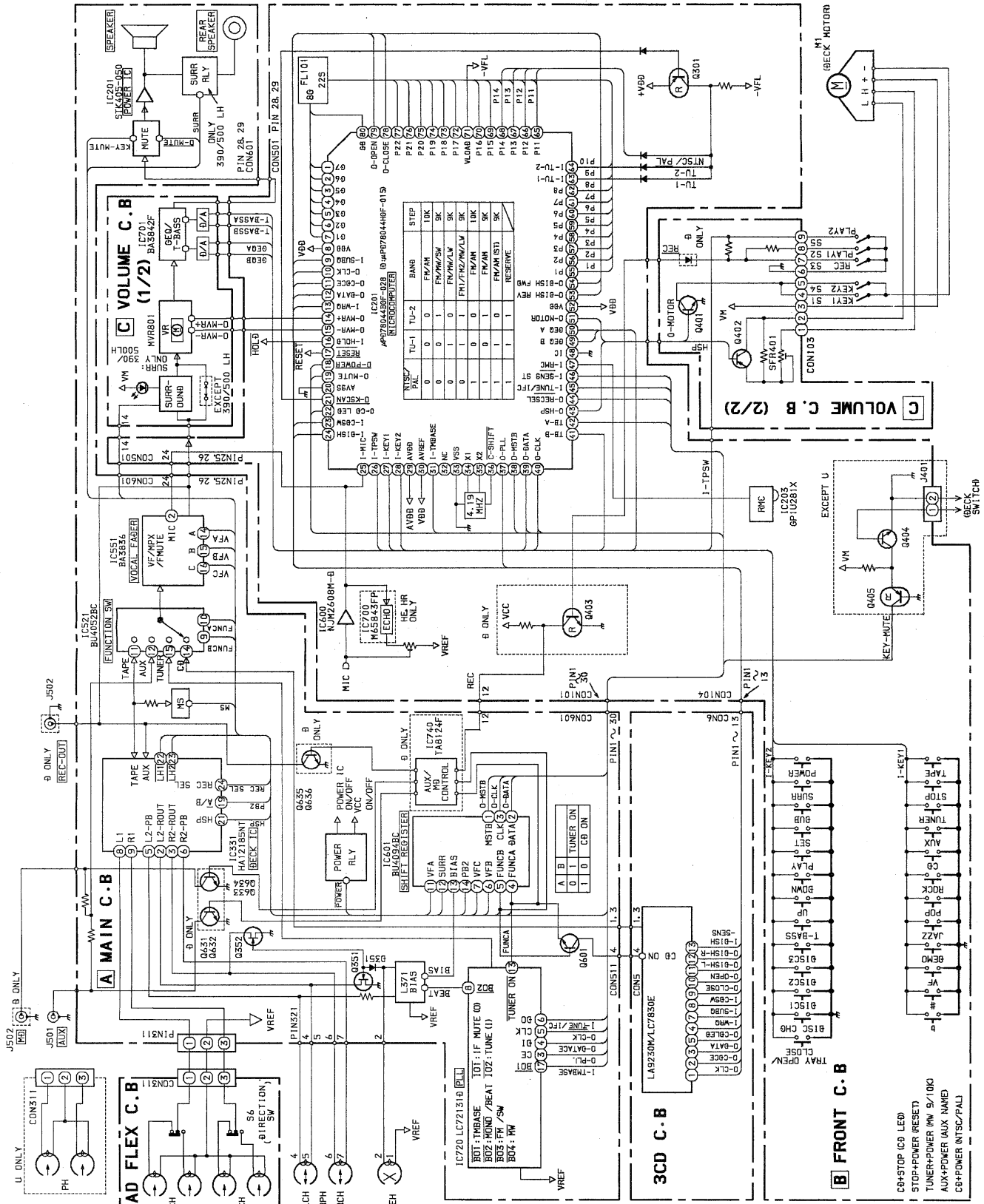
# BLOCK DIAGRAM - 1 (HE, HR)







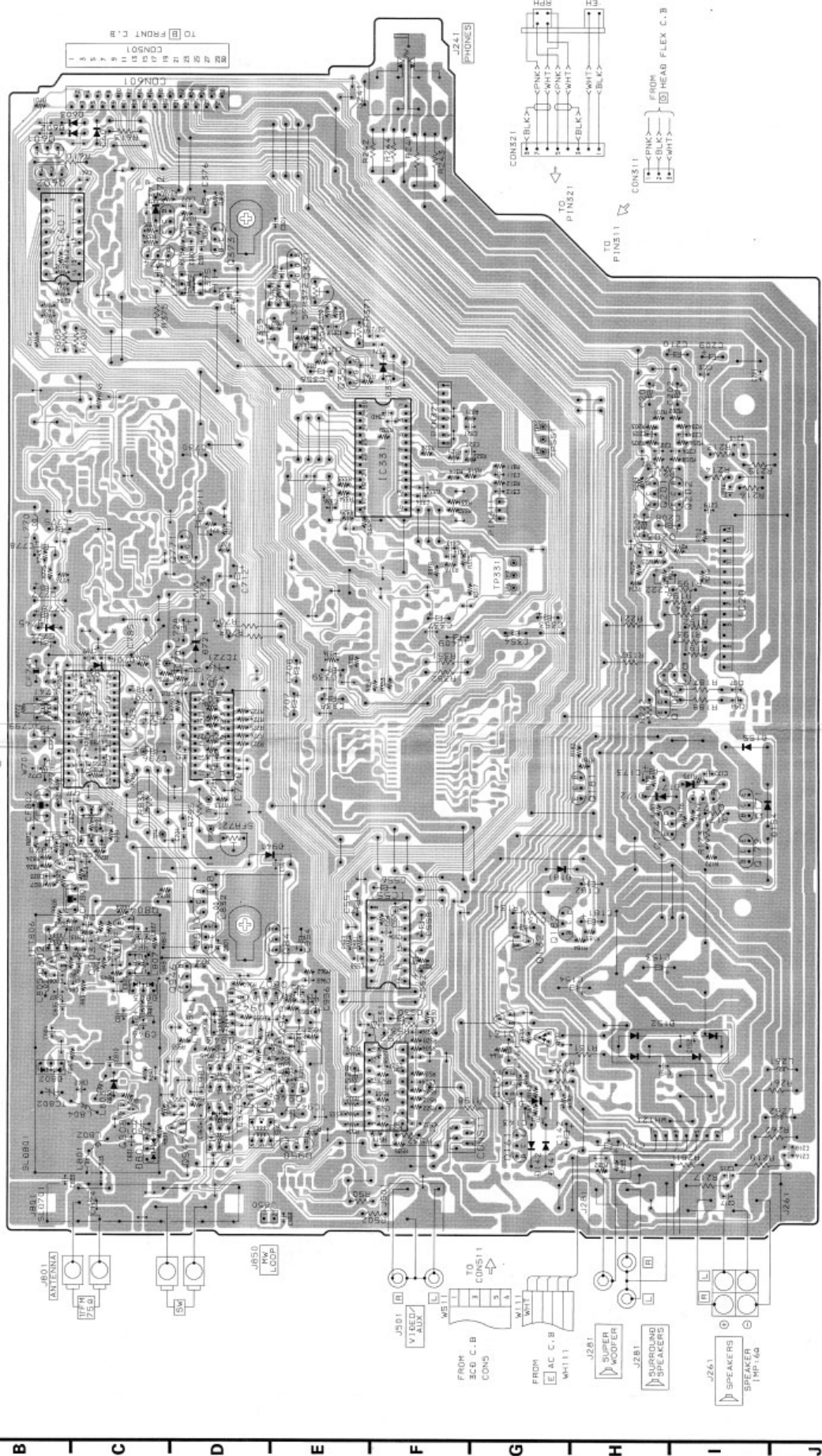
BLOCK DIAGRAM - 4 (MAIN / FRONT)



1 2 3 4 5 6 7 8 9 10 11 12 13 14

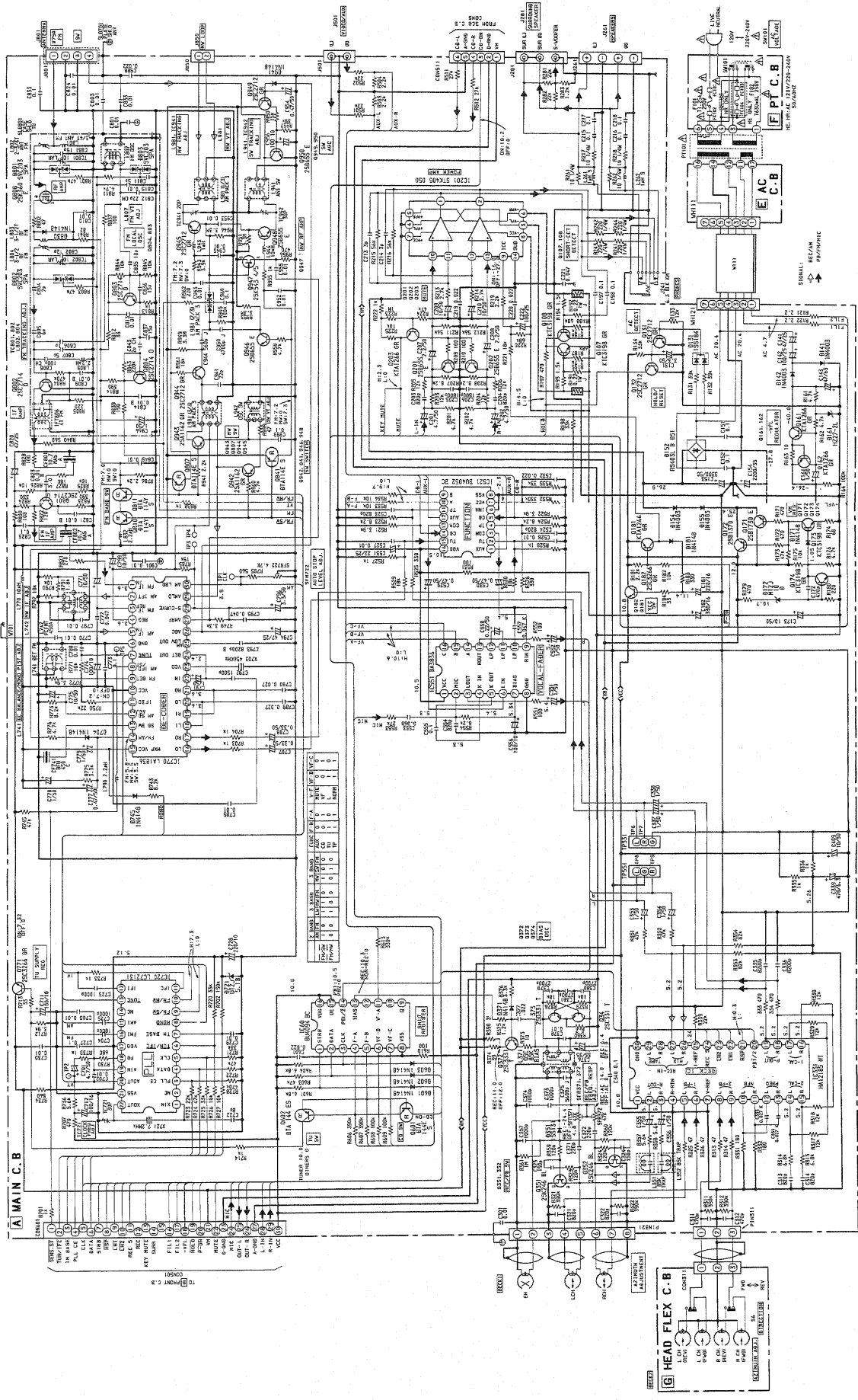
A

A MAIN C.B



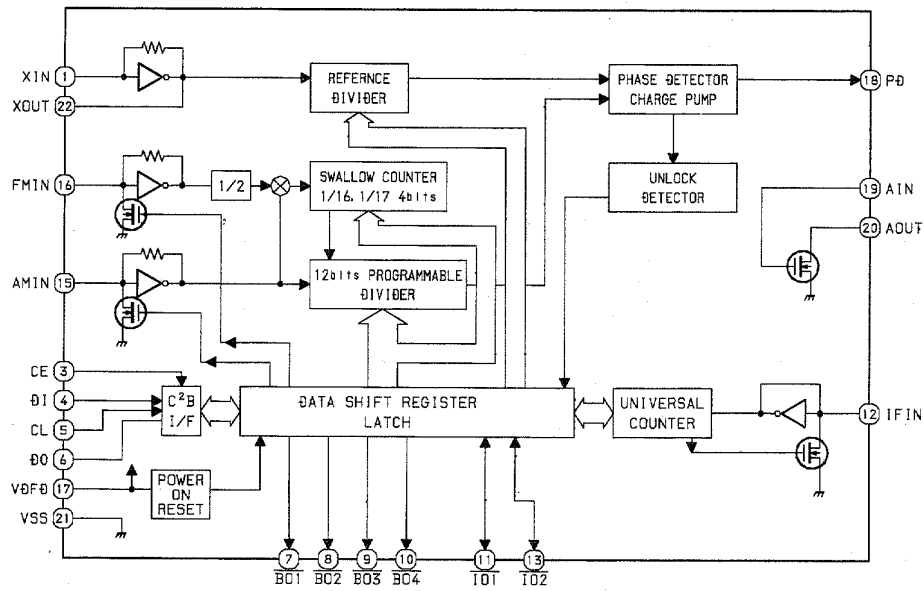


SCHEMATIC DIAGRAM - 1 (HE, HR)

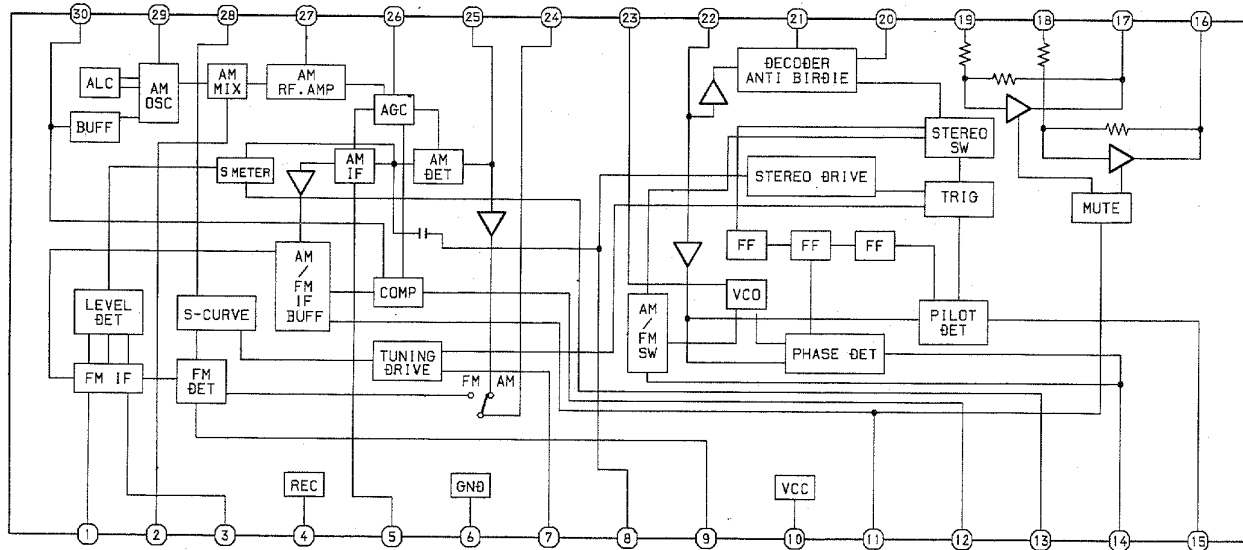


# IC BLOCK DIAGRAM – 1

IC, LC72131

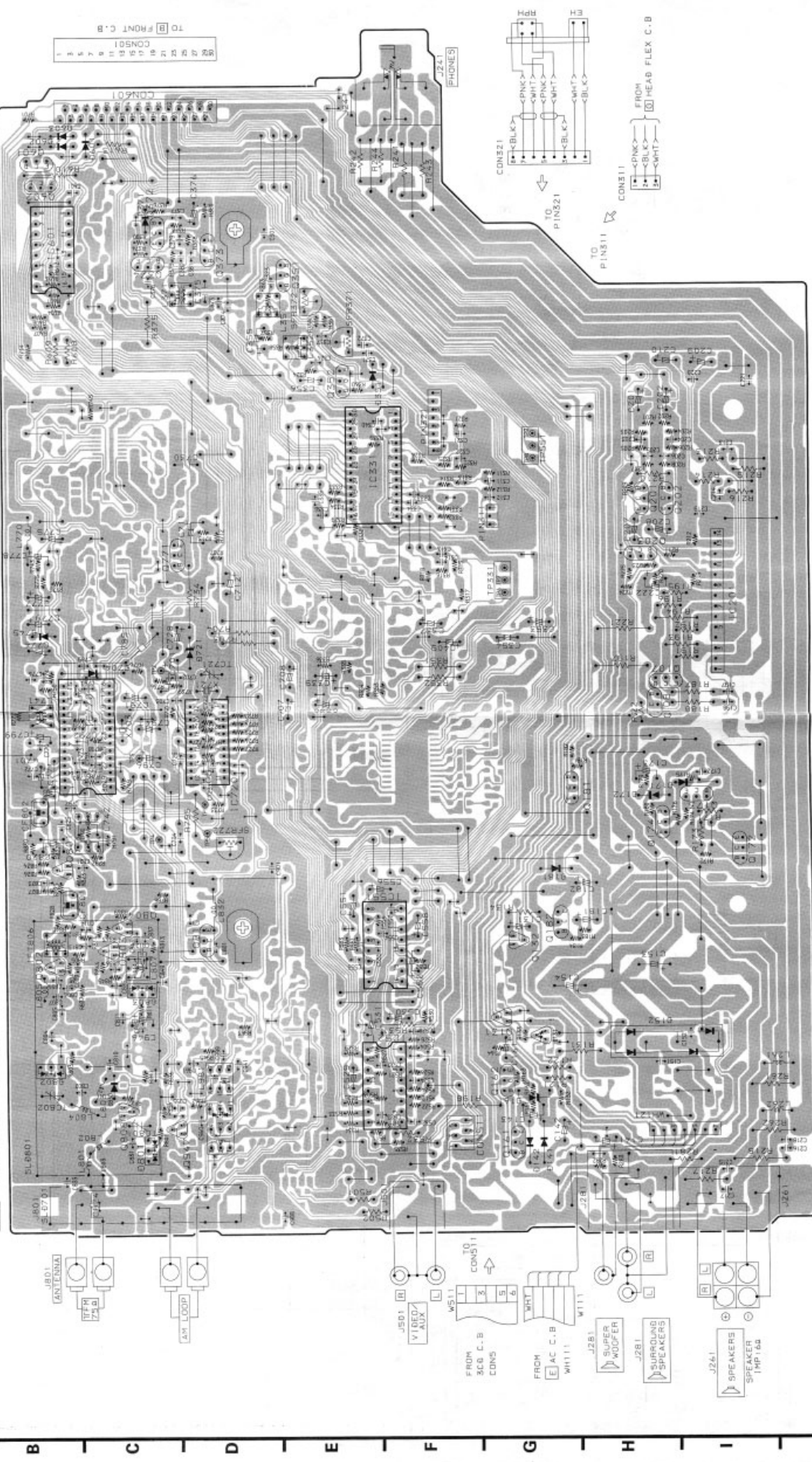


IC, LA1836

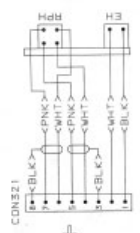


1 2 3 4 5 6 7 8 9 10 11 12 13 14

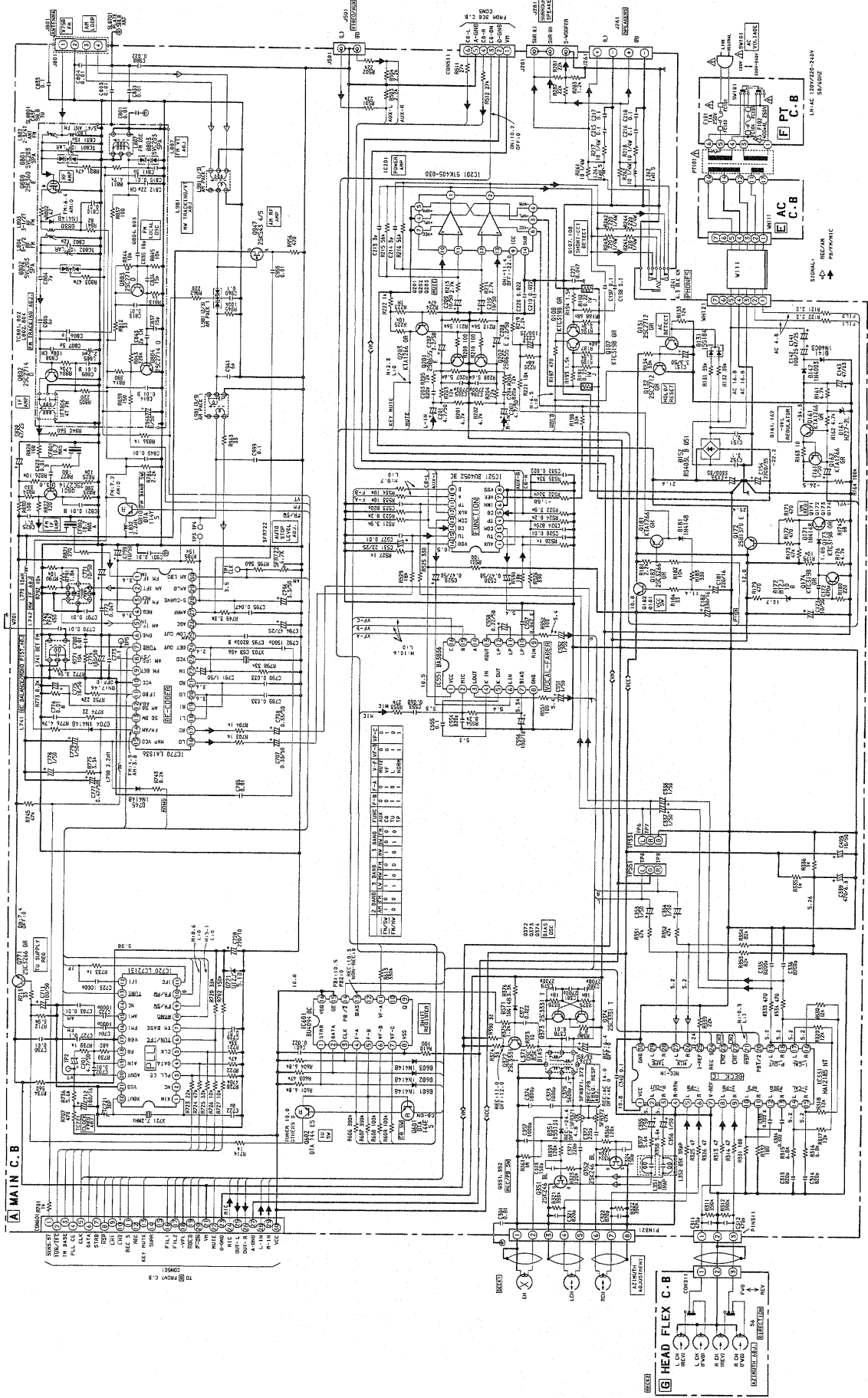
A MAIN C.B



TO FRONT C.B  
 CONS1  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14

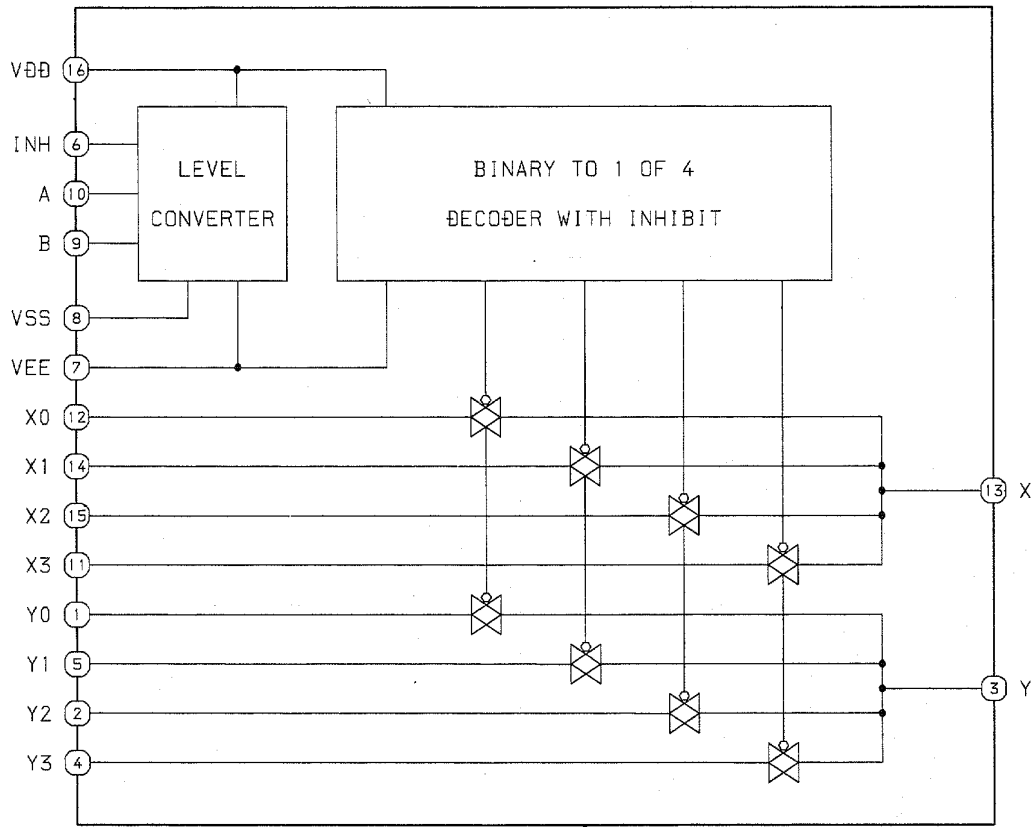


SCHEMATIC DIAGRAM - 2 (300: LH)



IC BLOCK DIAGRAM – 2

IC, BU4052BC



TRUTH TABLE

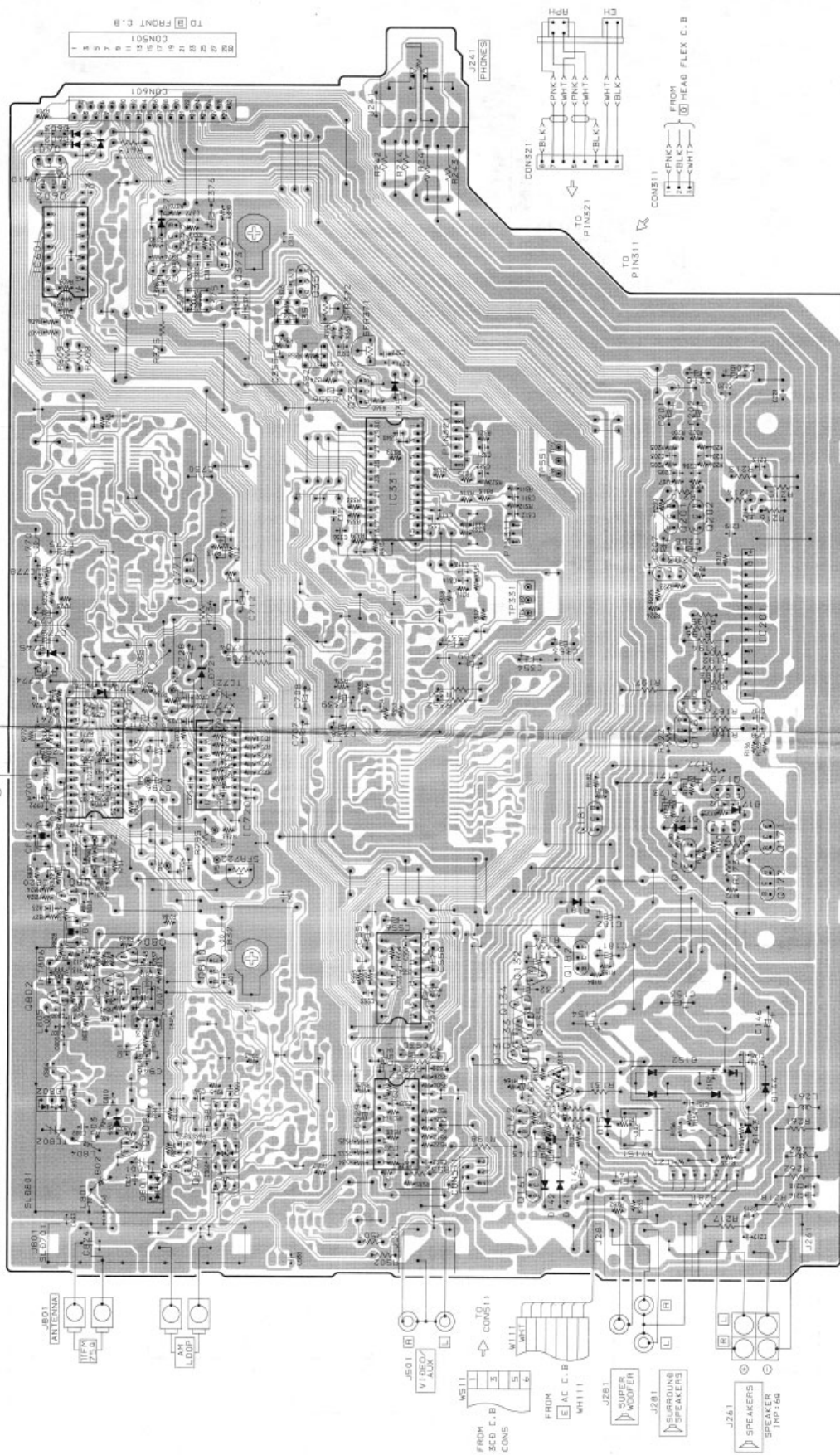
| INHIBIT | A | B | ON SWITCH |
|---------|---|---|-----------|
| L       | L | L | X0 Y0     |
| L       | H | L | X1 Y1     |
| L       | L | H | X2 Y2     |
| L       | H | H | X3 Y3     |
| H       | X | X | NONE      |

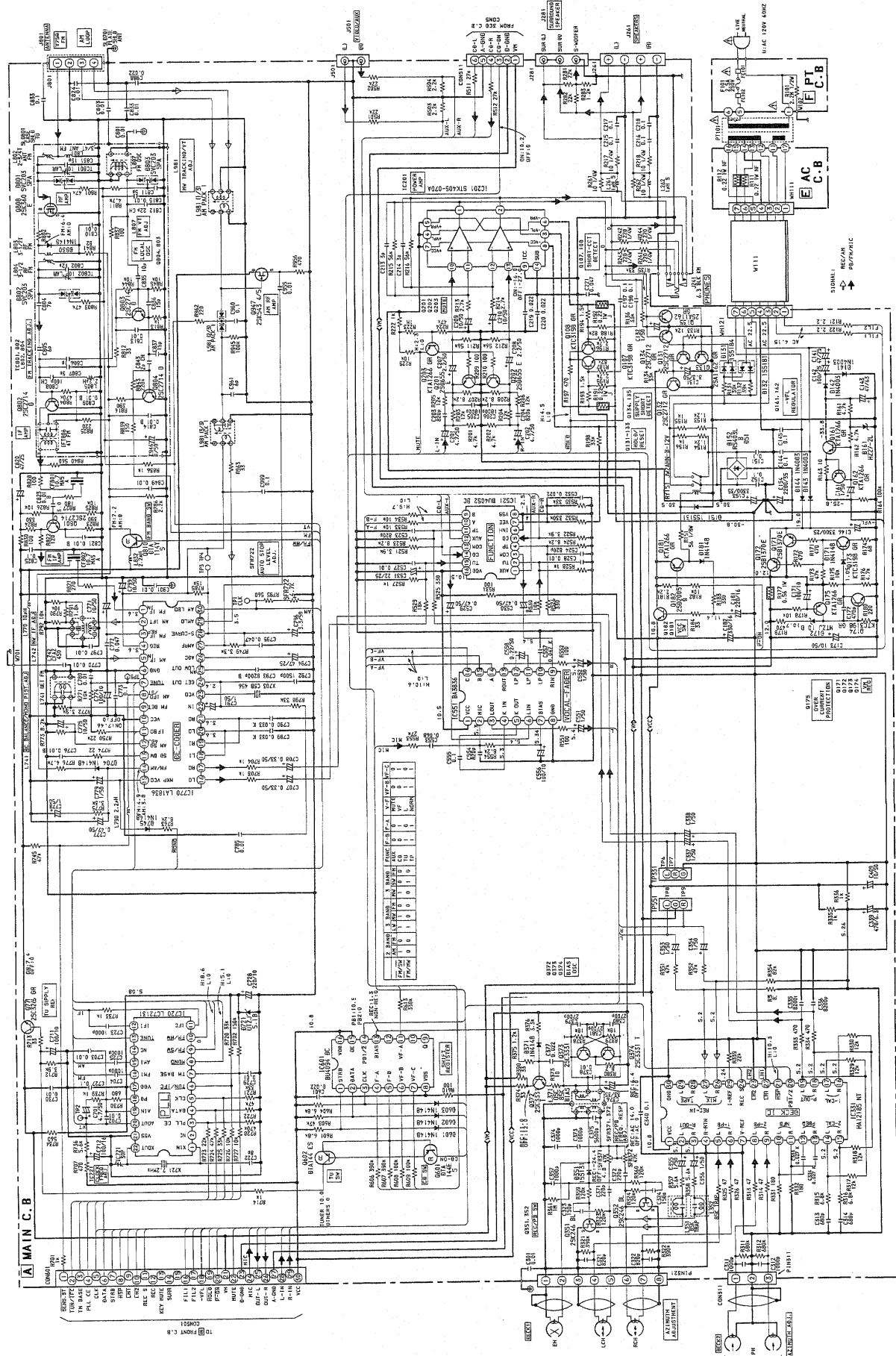
X: DON'T CARE.

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A

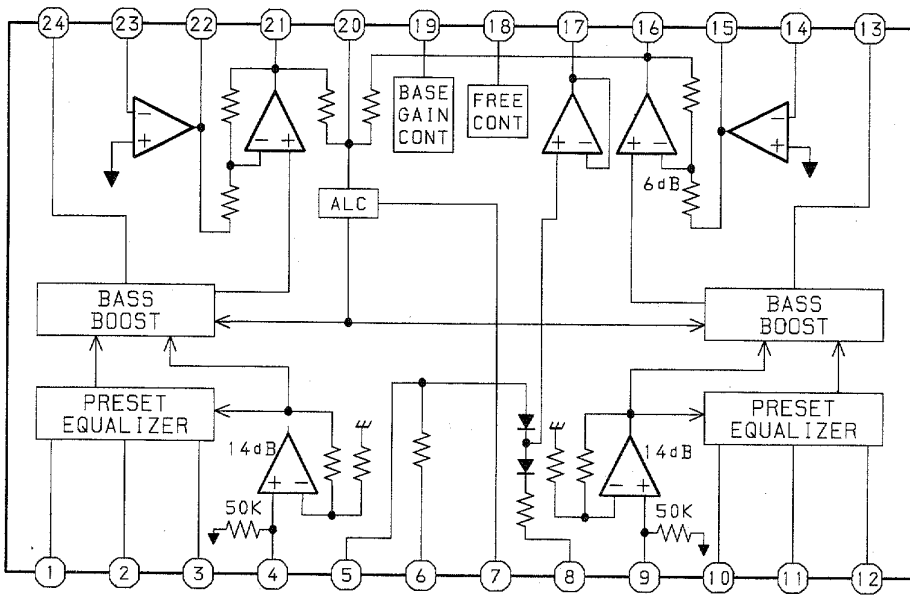
A MAIN C.B.



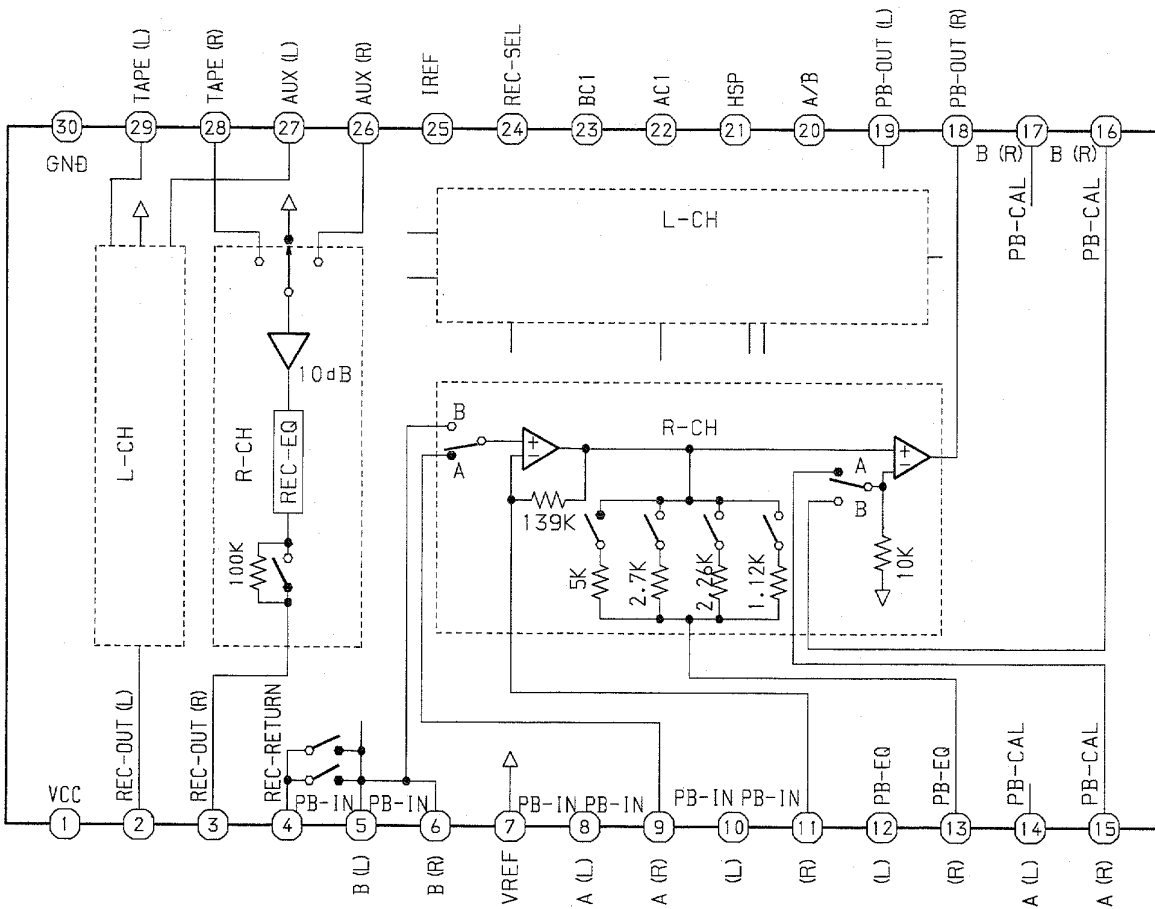


# IC BLOCK DIAGRAM - 3

IC, BA3842F



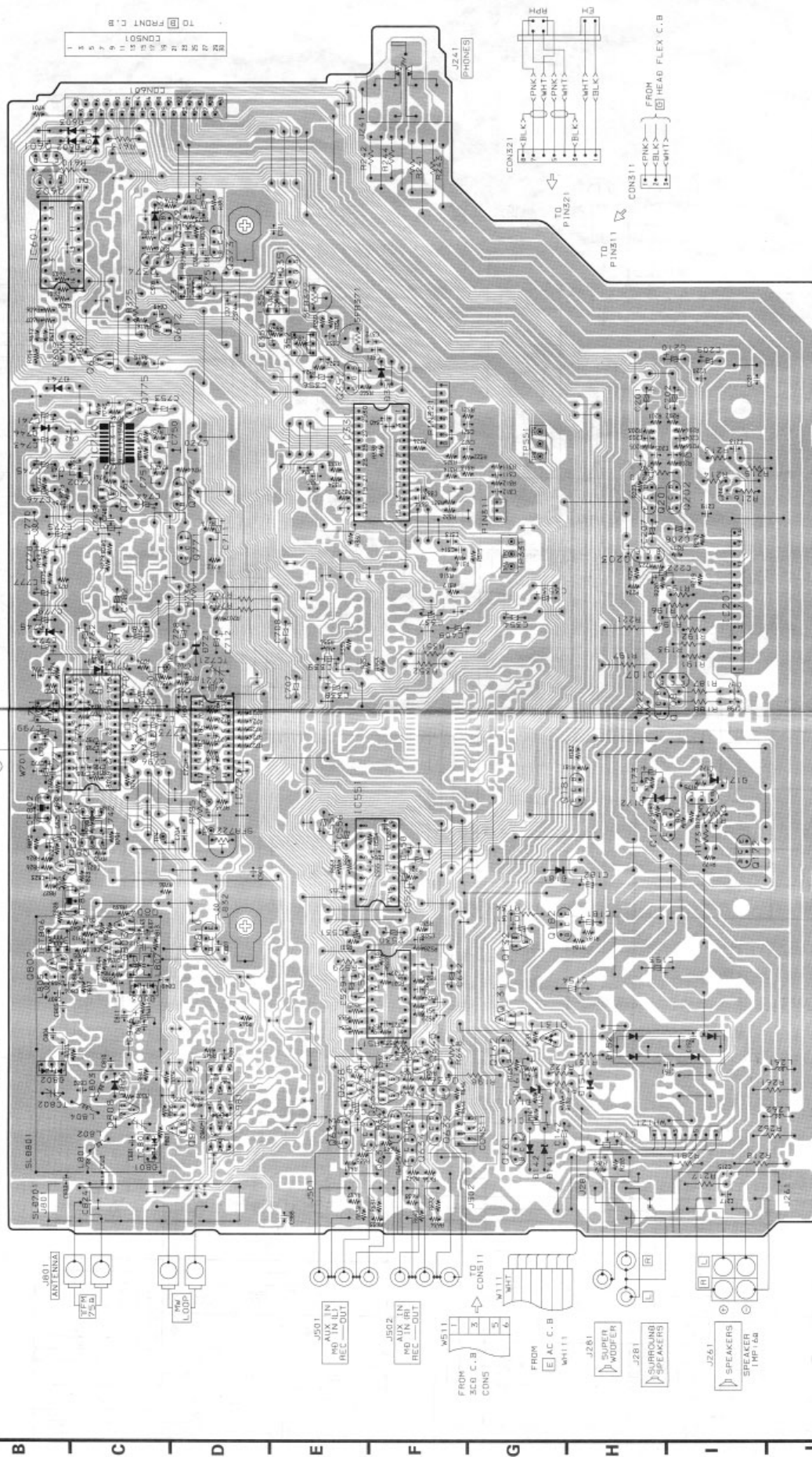
IC, HA1285NT



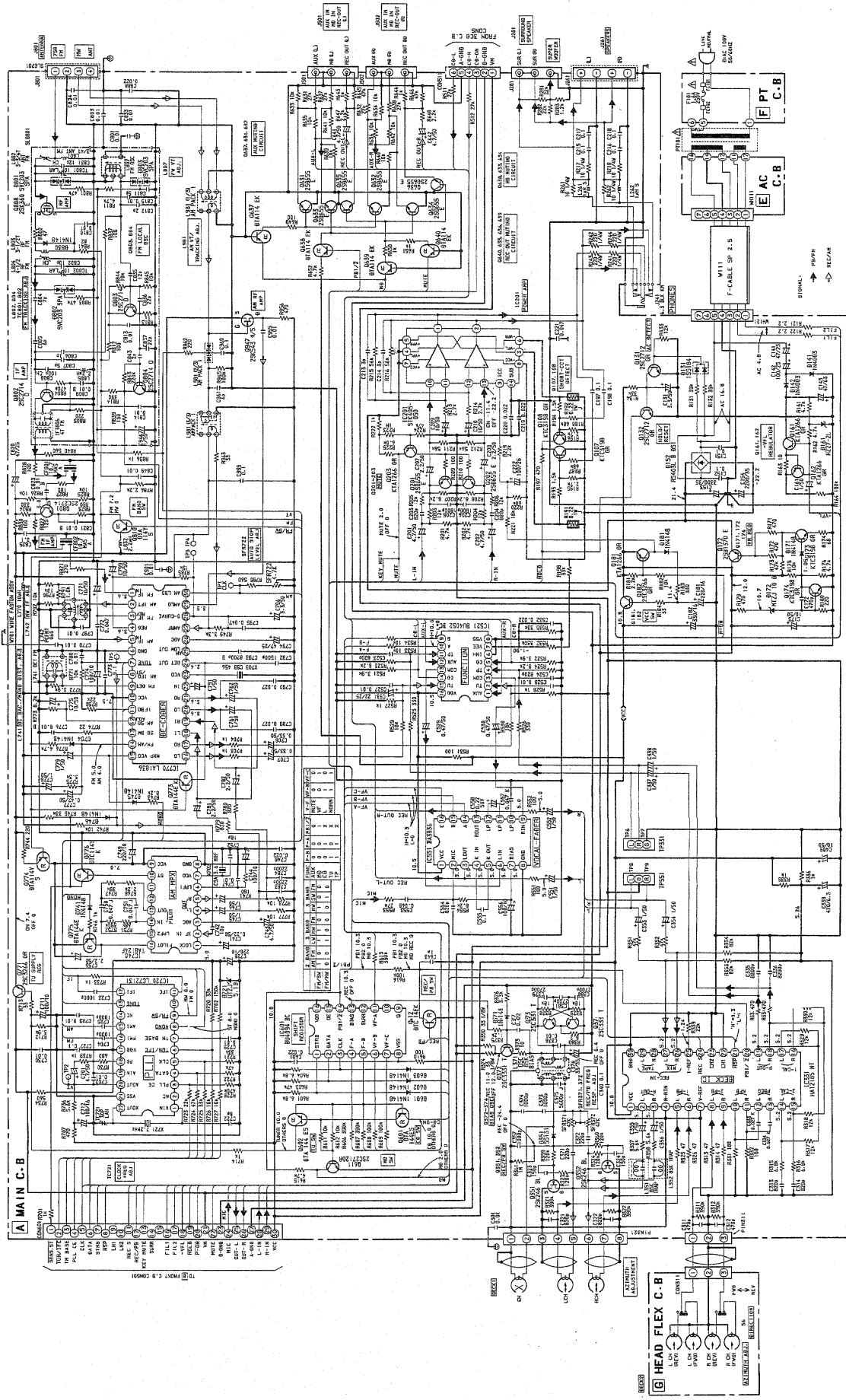


1 2 3 4 5 6 7 8 9 10 11 12 13 14

A MAIN C.B

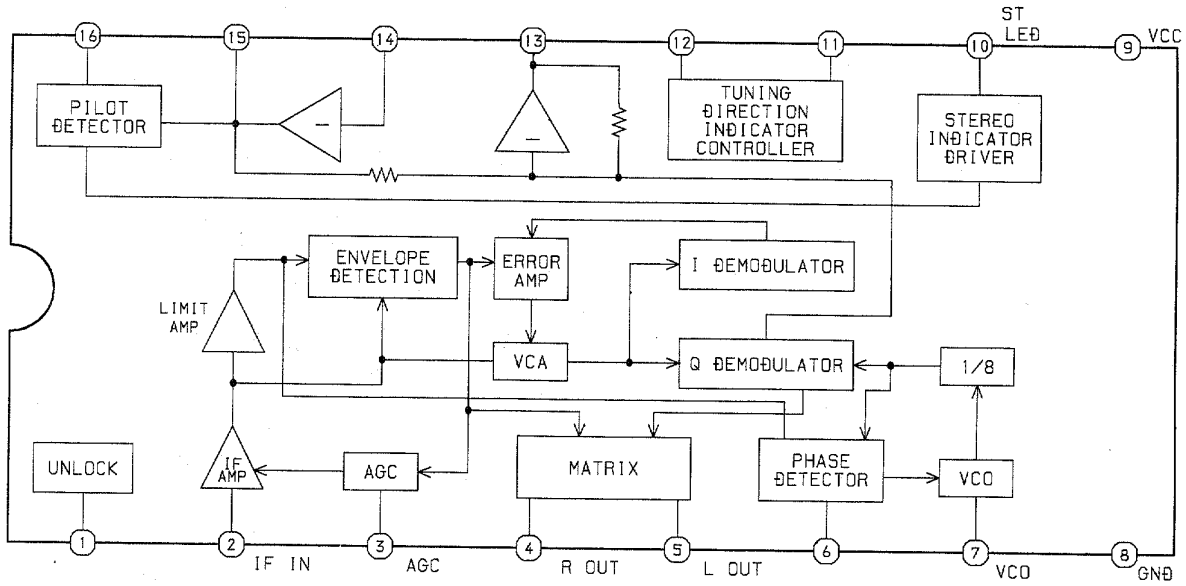


SCHEMATIC DIAGRAM - 4 (D)

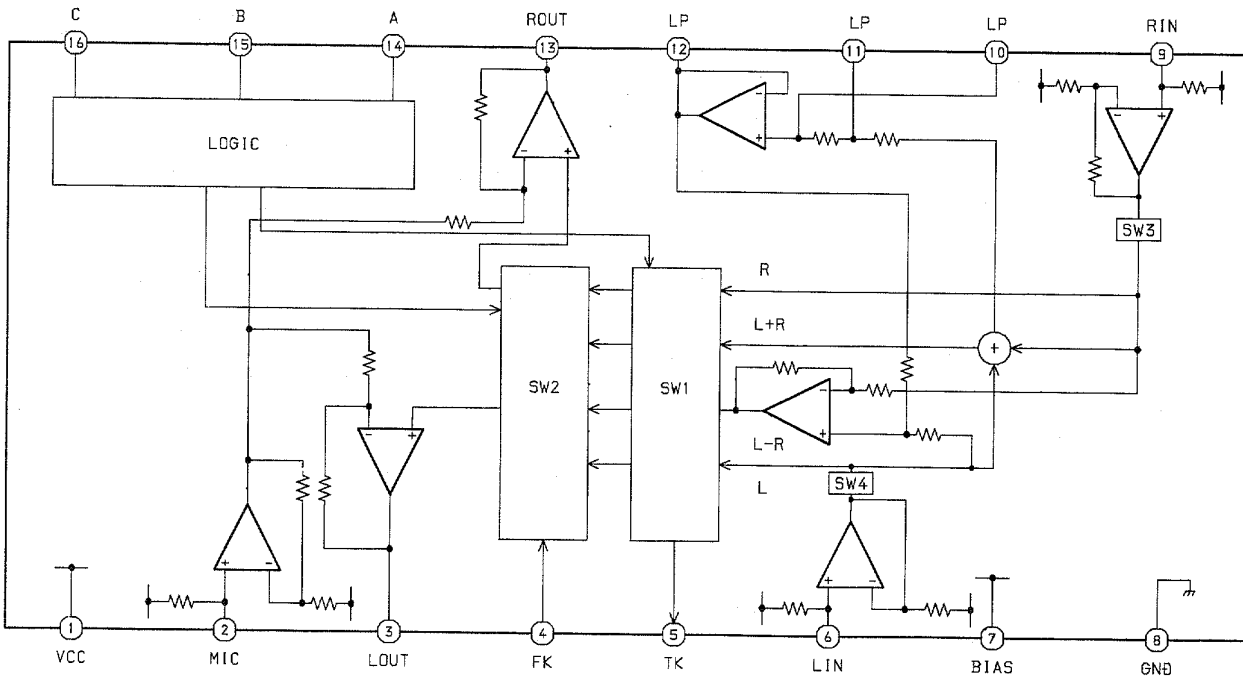


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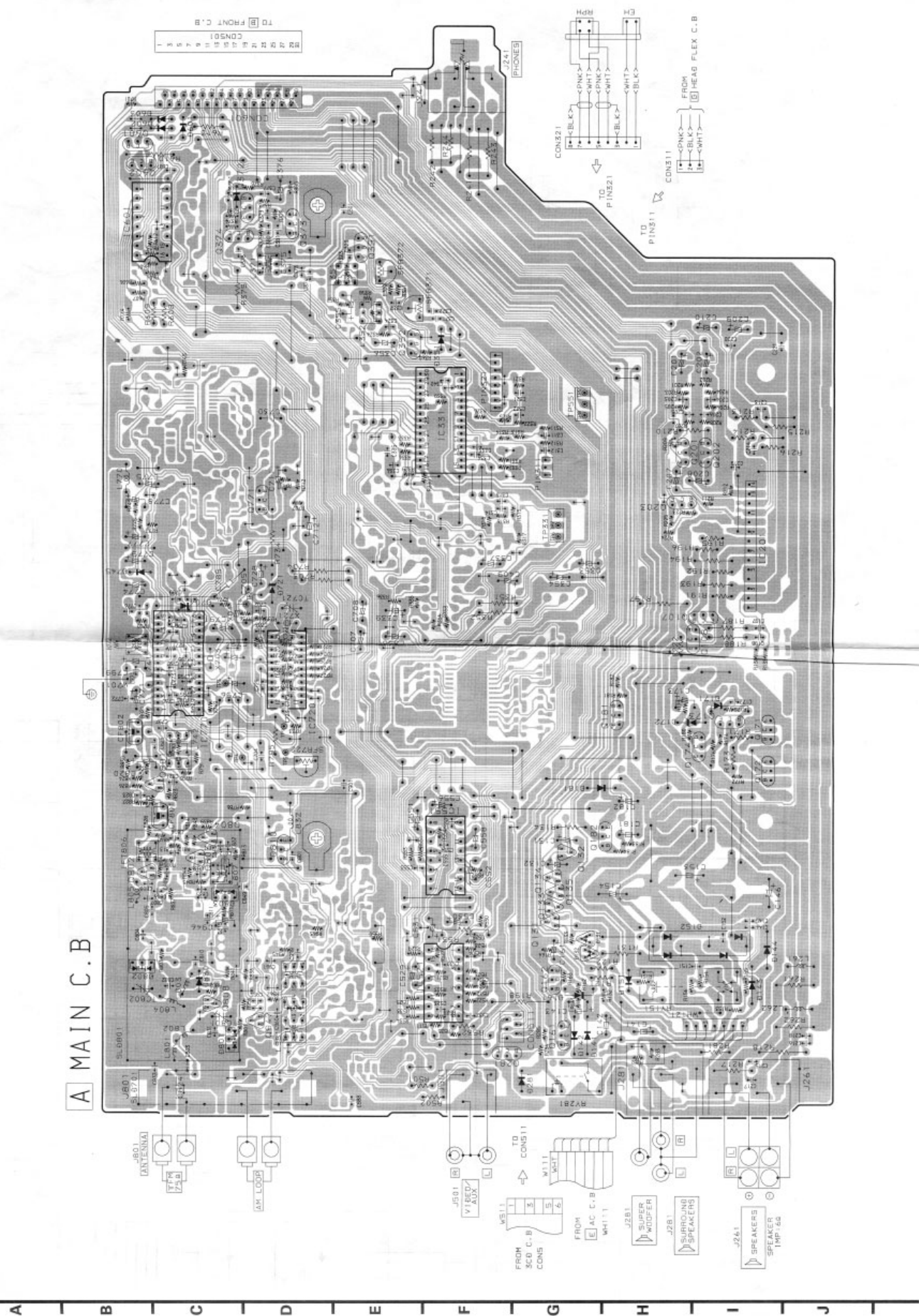
IC, TA8124F

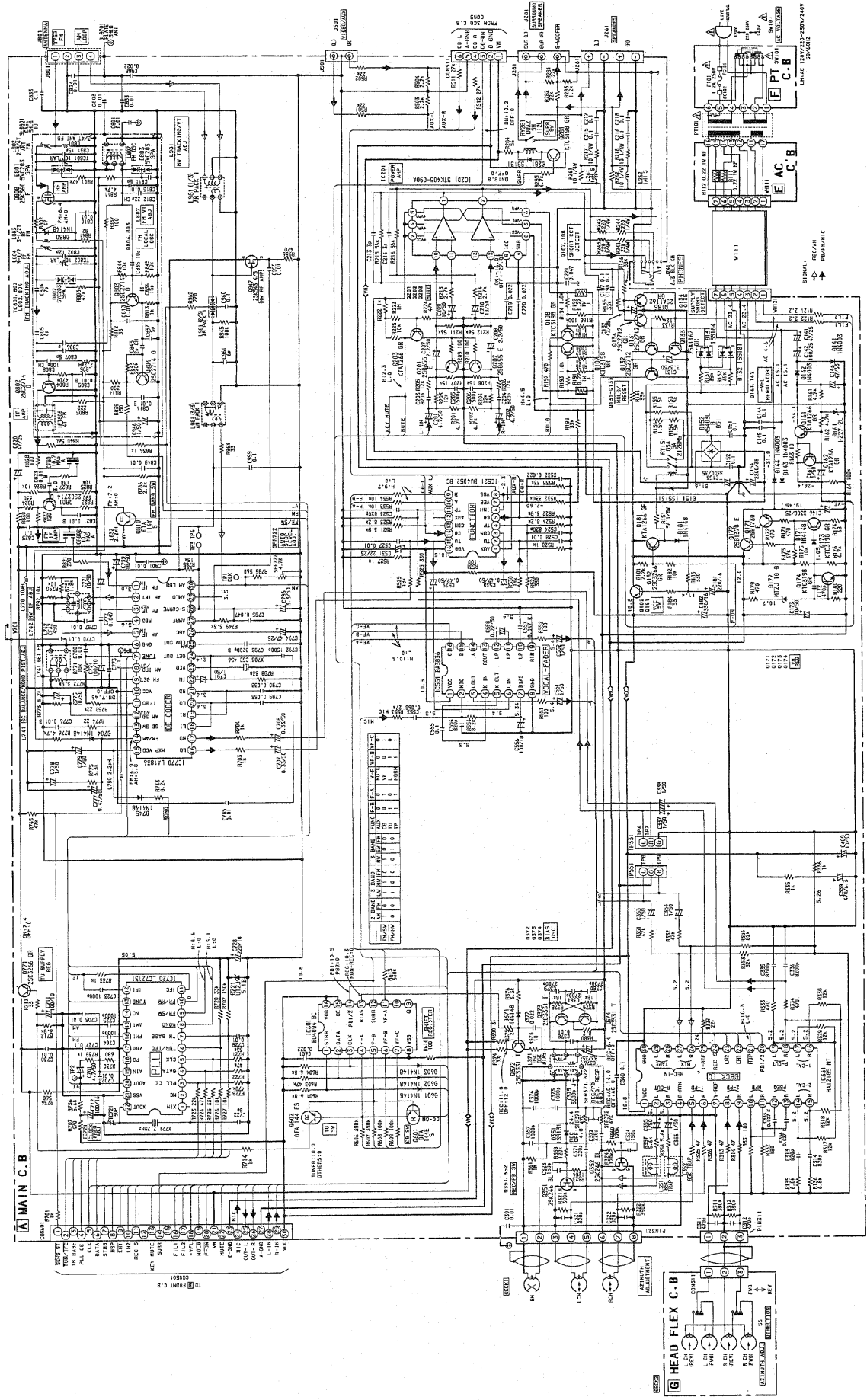


IC, BA3836



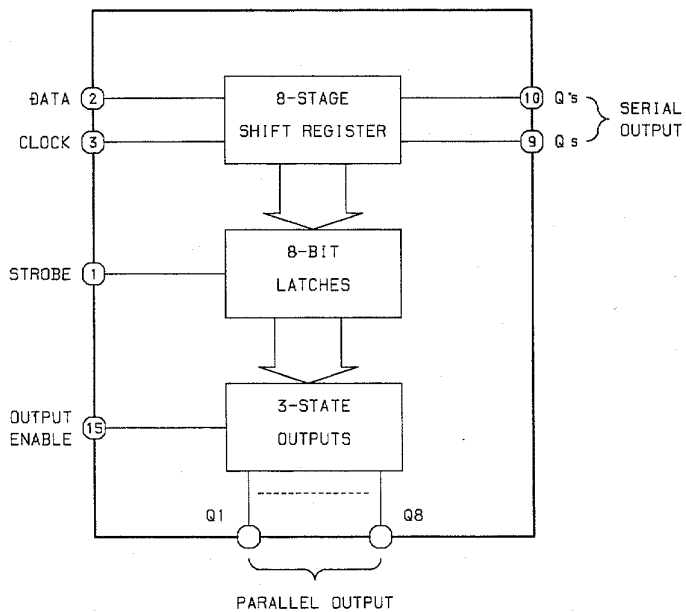
1 2 3 4 5 6 7 8 9 10 11 12 13 14





# IC BLOCK DIAGRAM – 5

IC, BU4094BC

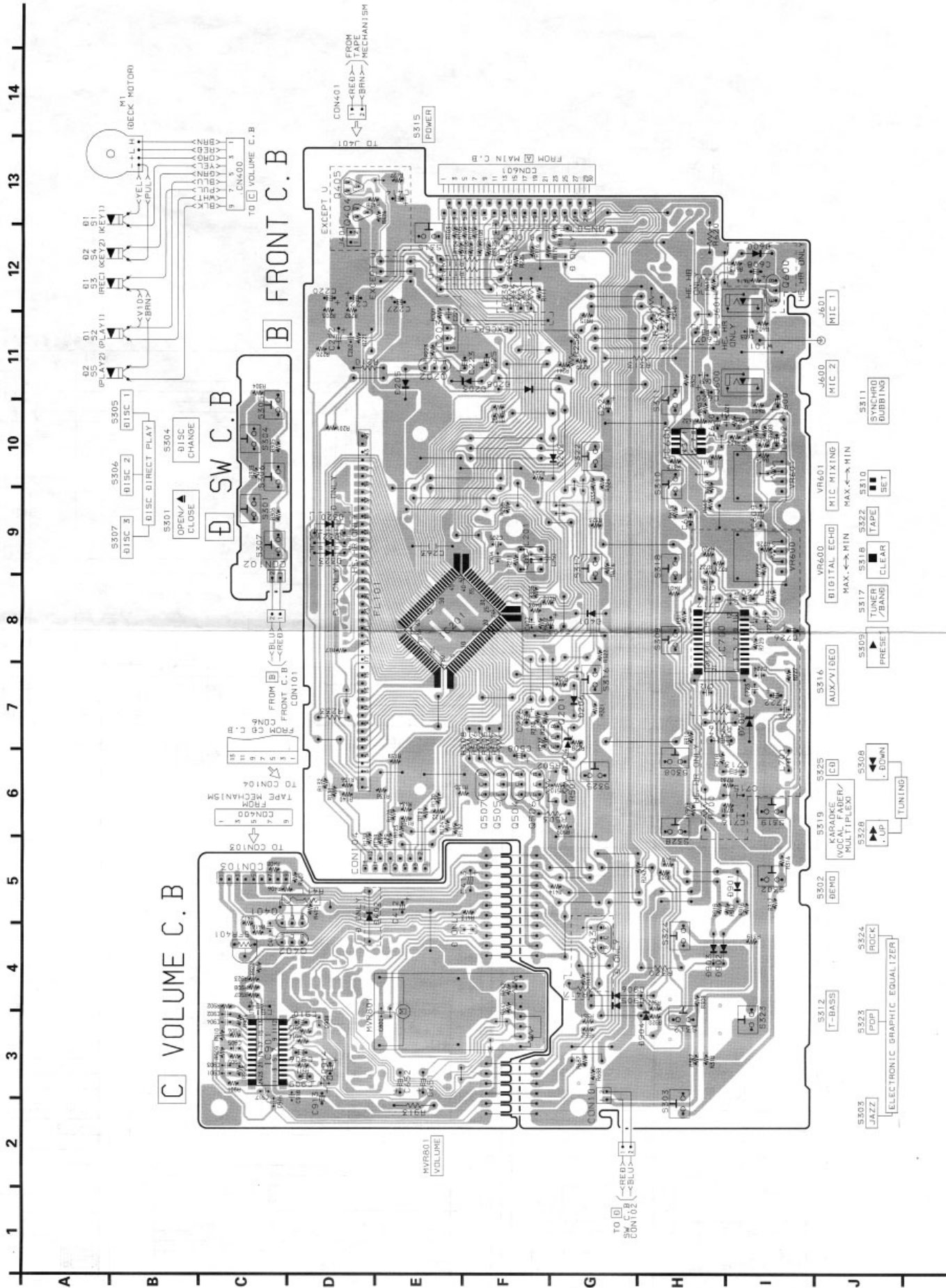


## TRUTH TABLE

| CLOCK | OUTPUT ENABLE | STROBE | DATA | PARALLEL OUTPUTS |         | SERIAL OUTPUTS |         |
|-------|---------------|--------|------|------------------|---------|----------------|---------|
|       |               |        |      | Q1               | Qn      | Qs             | Q's     |
|       | L             | X      | X    | Z                | Z       | Q7             | NO Chg. |
|       | L             | X      | X    | Z                | Z       | No Chg.        | Qs      |
|       | H             | L      | X    | No Chg.          | No Chg. | Q7             | No Chg. |
|       | H             | H      | L    | L                | Qn-1    | Q7             | No Chg. |
|       | H             | H      | H    | H                | Qn-1    | Q7             | No Chg. |
|       | H             | X      | X    | No Chg.          | No Chg. | No Chg.        | Qs      |

Z=High Impedance

X=Don't Care



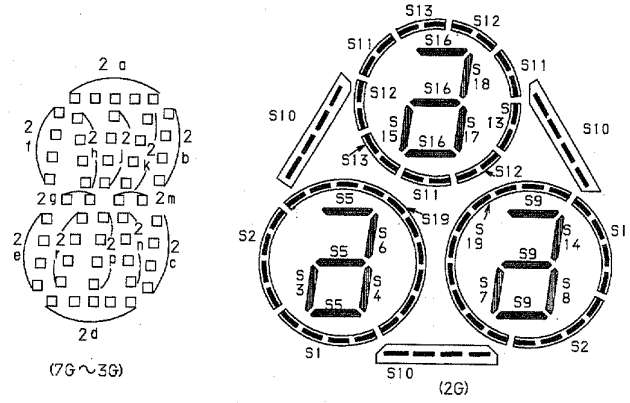
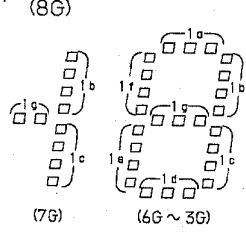
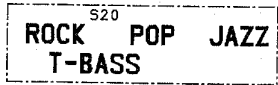
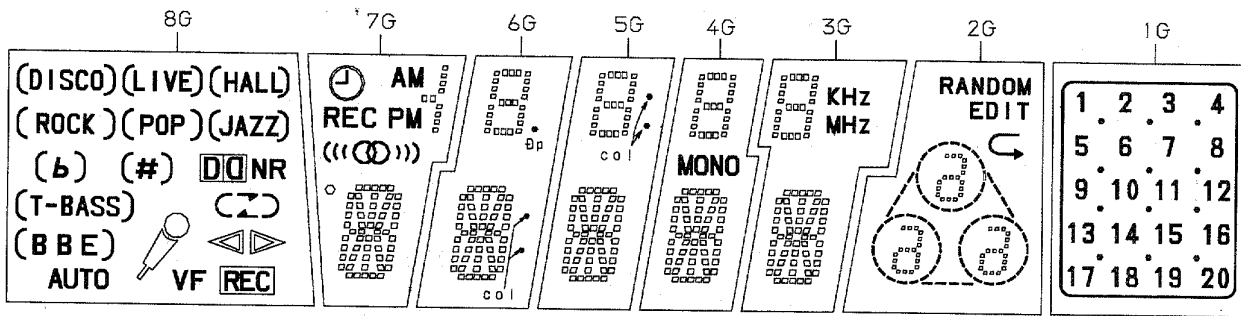




# FL GRID ASSIGNMENT AND ANODE CONNECTION

## GRID ASSIGNMENT

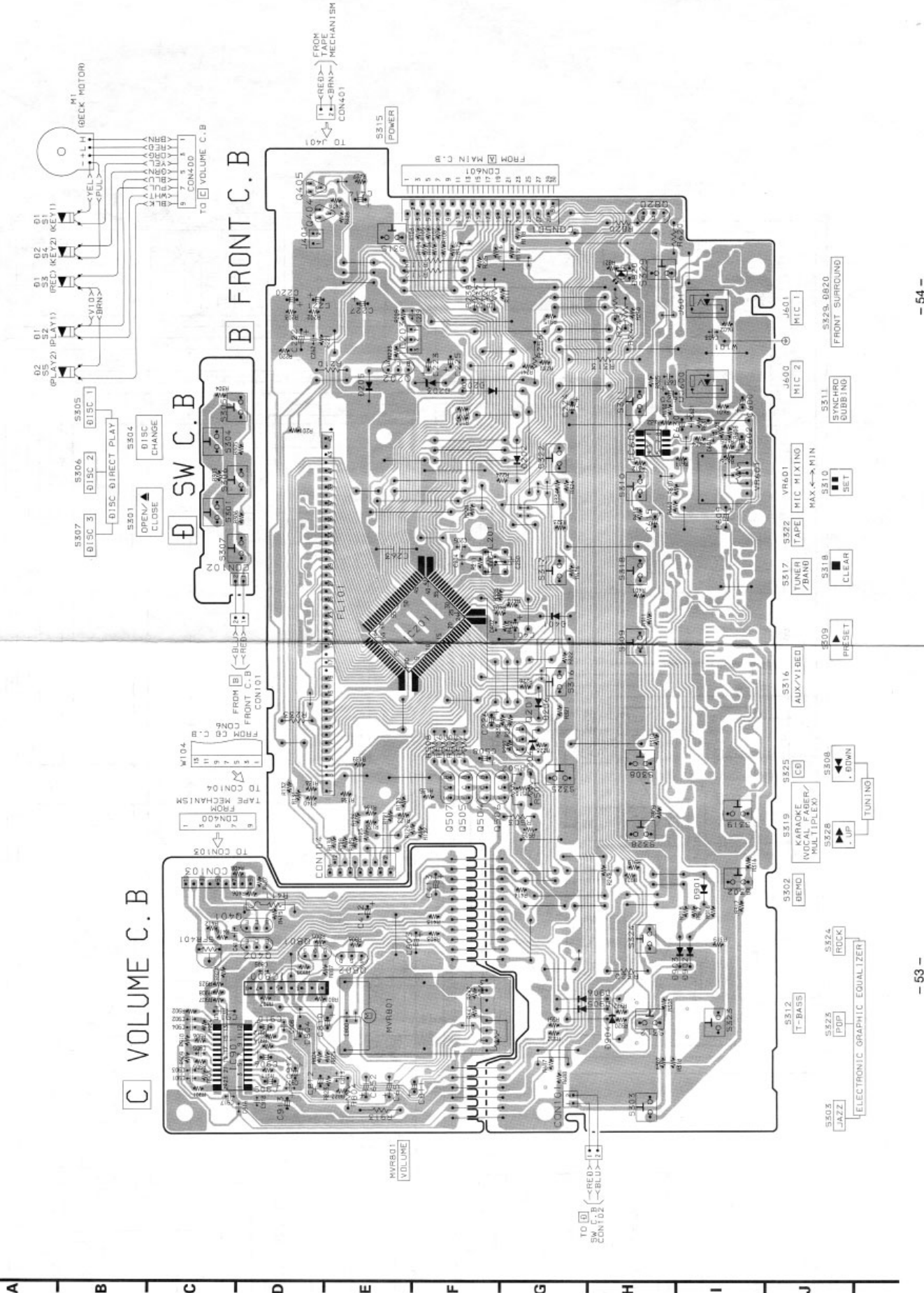
FL, 8-BT-18 GK



## ANODE CONNECTION

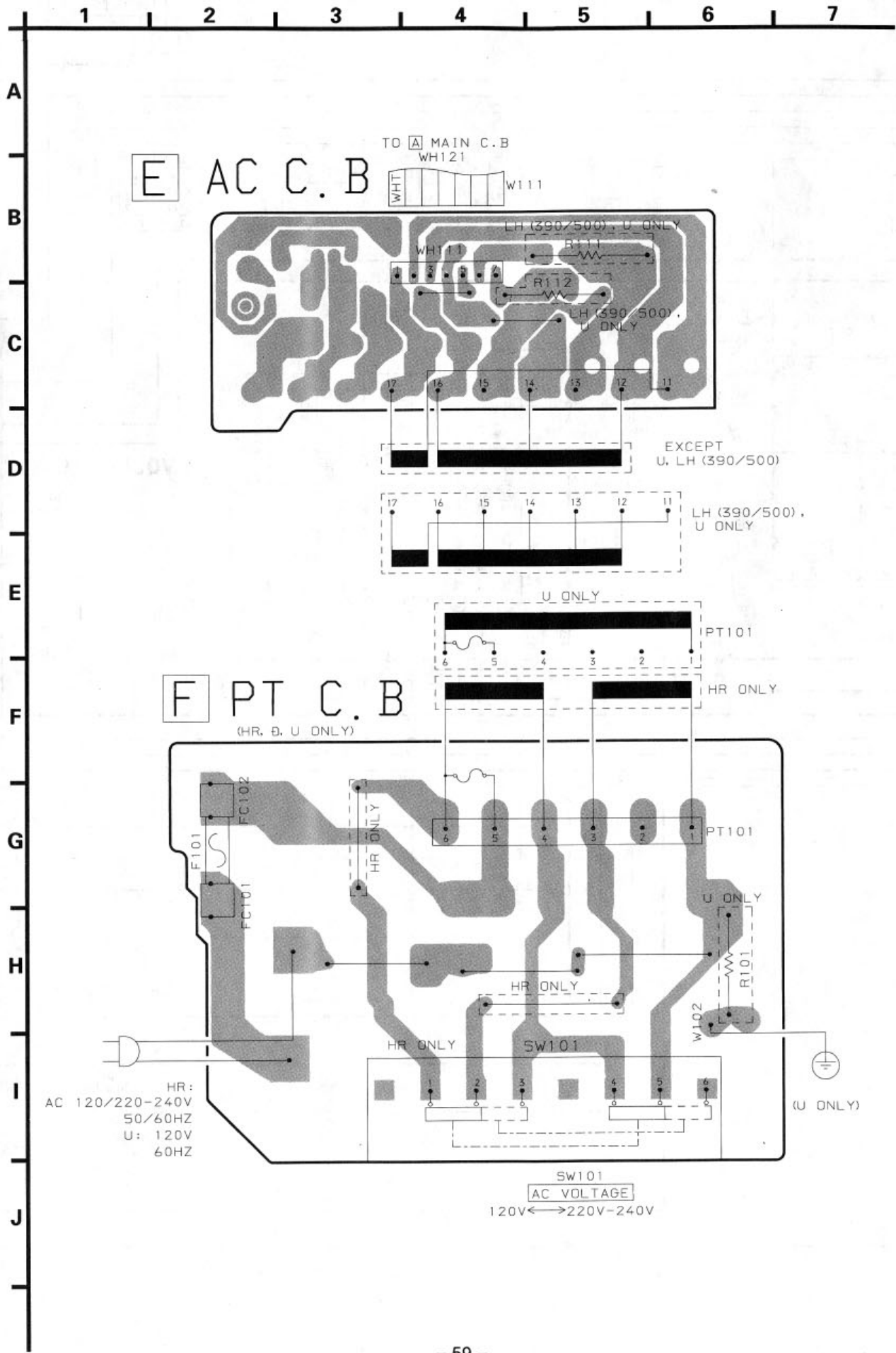
|     | 8G       | 7G     | 6G     | 5G          | 4G     | 3G     | 2G     | 1G        |
|-----|----------|--------|--------|-------------|--------|--------|--------|-----------|
| P1  | (T-BASS) | 2d     | 2d     | 2d          | 2d     | 2d     | S1     | <b>20</b> |
| P2  | (BBE)    | 2j, 2p | 2j, 2p | 2j, 2p      | 2j, 2p | 2j, 2p | S2     | <b>19</b> |
| P3  | (b)      | 2n     | 2n     | 2n          | 2n     | 2n     | S3     | <b>18</b> |
| P4  | AUTO     | 2r     | 2r     | 2r          | 2r     | 2r     | S4     | <b>17</b> |
| P5  | VF       | 2c     | 2c     | 2c          | 2c     | 2c     | S5     | <b>16</b> |
| P6  | (DISCO)  | 2e     | 2e     | 2e          | 2e     | 2e     | S6     | <b>15</b> |
| P7  | (LIVE)   | 2m     | 2m     | 2m          | 2m     | 2m     | S7     | <b>14</b> |
| P8  | (HALL)   | 2g     | 2g     | 2g          | 2g     | 2g     | S8     | <b>13</b> |
| P9  | REC      | 2f     | 2f     | 2f          | 2f     | 2f     | S9     | <b>12</b> |
| P10 | (#)      | 2b     | 2b     | 2b          | 2b     | 2b     | S10    | <b>11</b> |
| P11 | b #      | 2k     | 2k     | 2k          | 2k     | 2k     | S11    | <b>10</b> |
| P12 | ◁        | 2h     | 2h     | 2h          | 2h     | 2h     | S12    | <b>9</b>  |
| P13 | ▷        | 2a     | 2a     | 2a          | 2a     | 2a     | S13    | <b>8</b>  |
| P14 | ∩        | ○      | col    | col (lower) | MONO   | MHz    | S14    | <b>7</b>  |
| P15 | ↔        | ((O))  | θp     | col (upper) | -      | KHz    | S15    | <b>6</b>  |
| P16 | )        | REC    | 1d     | 1d          | 1d     | 1d     | S16    | <b>5</b>  |
| P17 | DQNR     | ⌚      | 1e     | 1e          | 1e     | 1e     | S17    | <b>4</b>  |
| P18 | (ROCK)   | PM     | 1c     | 1c          | 1c     | 1c     | S18    | <b>3</b>  |
| P19 | (POP)    | AM     | 1g     | 1g          | 1g     | 1g     | S19    | <b>2</b>  |
| P20 | (JAZZ)   | 1g     | 1f     | 1f          | 1f     | 1f     | ↪      | <b>1</b>  |
| P21 | S20      | 1b, 1c | 1b     | 1b          | 1b     | 1b     | EDIT   | S22       |
| P22 | S21      | -      | 1a     | 1a          | 1a     | 1a     | RANDOM | -         |
| P23 | BBE      | -      | -      | -           | -      | -      | -      | -         |

1 2 3 4 5 6 7 8 9 10 11 12 13 14







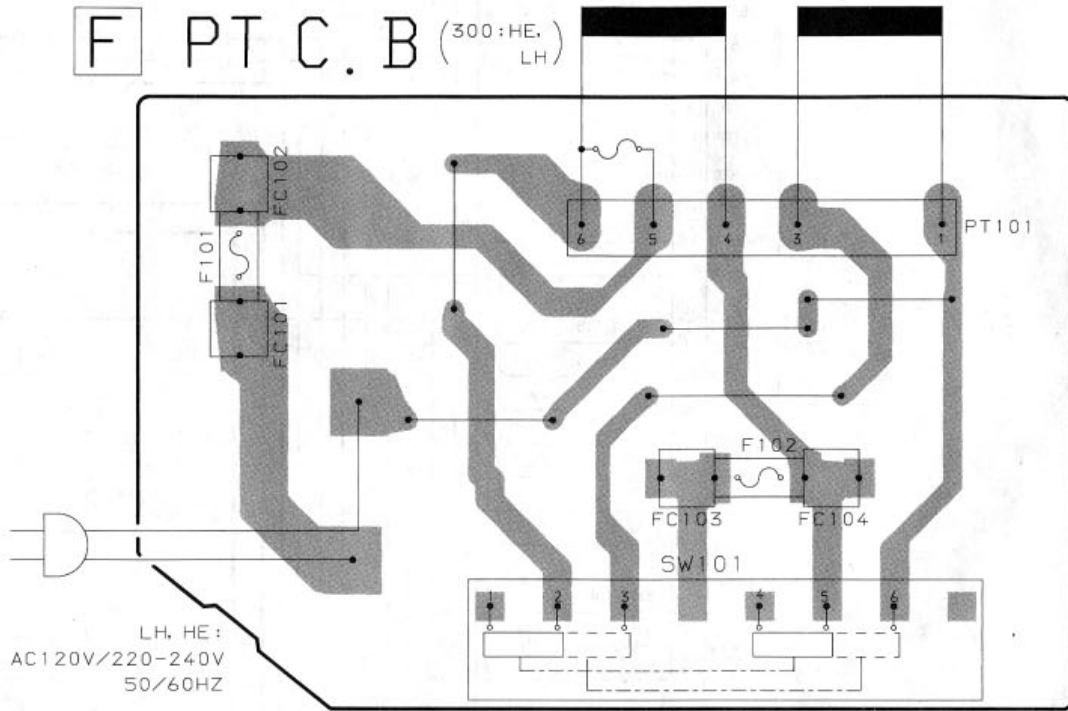


WIRING - 10 (PT)

1 | 2 | 3 | 4 | 5 | 6 | 7

A  
B  
C  
D  
E  
F  
G  
H  
I  
J

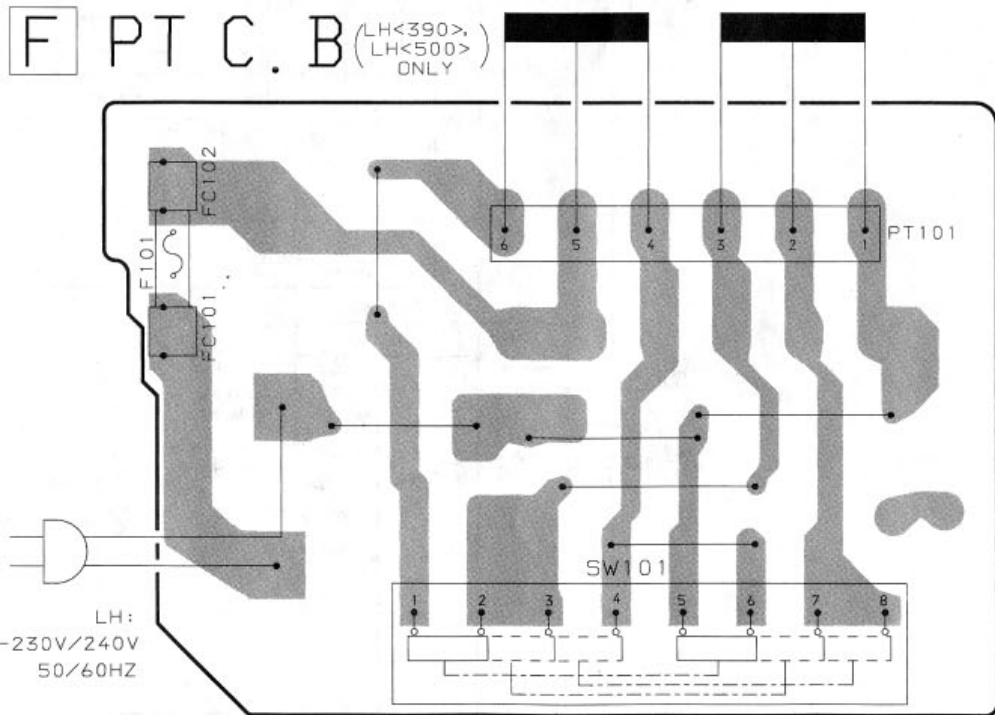
F PT C. B (300:HE.  
LH)



LH, HE:  
AC 120V/220-240V  
50/60HZ

SW101  
AC VOLTAGE  
120V ↔ 220-240V

F PT C. B (LH<390>,  
LH<500>  
ONLY)



LH:  
AC 120V/220-230V/240V  
50/60HZ

SW101  
AC VOLTAGE  
120V ↔ 220-230V ↔ 240V

# IC DESCRIPTION (D)

IC,  $\mu$ PD78044H-015

| 端子番号    | 端子名称        | I/O | 機能説明   |
|---------|-------------|-----|--|
| 1~7, 80 | G7~G1, G8   | O   | FLグリッド出力 G8~G1。                                |
| 8       | VDD         | -   | 電源供給。 (+5.5V)                                  |
| 9       | I-SUBQ      | I   | CD ICよりSUB-Qデータ入力。                             |
| 10      | O-CLK (CD)  | O   | CDコントロールデータ転送クロック出力。                           |
| 11      | O-CDCE      | O   | CDコントロールデータ出力。                                 |
| 12      | O-DATA (CD) | O   | CDコントロールデータ出力。                                 |
| 13      | I-WRQ       | I   | CD ICコントロールデータ入力。                              |
| 14      | O-MVR+      | O   | モーターボリュームコントロール出力。                             |
| 15      | O-MVR-      | O   | モーターボリュームコントロール出力。                             |
| 16      | I-HOLD      | I   | 停電検出入力Lでクロック停止しメモリー保持する。                       |
| 17      | RESET       | I   | リセット入力端子。                                      |
| 18      | O-POWER     | O   | 電源ON/OFFコントロール。                                |
| 19      | O-MUTE      | O   | システムのミュート出力。                                   |
| 20      | AVSS        | -   | GND。   |
| 21      | O-KSCAN     | O   | スイッチスキャンタイミング出力。                               |
| 22      | O-CDLED     | O   | CD LED ON/OFF出力。                               |
| 23      | I-CD. SW    | I   | CDトレイ開/閉スイッチ入力。                                |
| 24      | I-DISH      | I   | CDターンテーブルセンサA/D入力。                             |
| 25      | I-MIC       | I   | マイク入力。   |
| 26      | I-TPSW      | I   | デッキスイッチ信号入力。                                   |
| 27~28   | I-KEY1~2    | I   | キーマトリクス入力。                                     |
| 29      | AVDD        | -   | 電源供給。 (+5.5V)                                  |
| 30      | AVREF       | -   | 電源供給。 (+5.5V)                                  |
| 31      | I-TMBASE    | I   | PLL (LC72131) ICよりクロック (8Hz) 入力。               |
| 32      | -           | -   | 未使用。   |
| 33      | VSS         | -   | GND。   |
| 34, 35  | X1, X2      | -   | 4.19MHz 発振回路。                                  |
| 36      | C-SHIFT     | I   | クロックシフト出力。                                     |
| 37      | O-PLL       | O   | PLL ICチップイネーブル。                                |
| 38      | O-MSTB      | O   | メインシフトレジスタデータラッチストロブ出力。 (4094, MAIN C.B)       |
| 39      | O-DATA      | O   | メインシフトレジスタ, PLL IC データ出力。 (LC72131, MAIN C.B)  |
| 40      | O-CLK       | O   | メインシフトレジスタ, PLL IC クロック出力。 (LC72131, MAIN C.B) |
| 41      | TB-B        | O   | T-BASS コントロール信号。                               |
| 42      | TB-A        | O   | T-BASS コントロール信号。                               |
| 43      | O-HSP       | O   | デッキモーター高速度ON/OFF出力。                            |
| 44      | O-RECSEL    | O   | デッキレック入力端子スイッチ信号。                              |
| 45      | I-TUNE/IFC  | I   | チューナー SD 検出入力。IFカウントシリアルデータ入力。                 |
| 46      | I-SENS ST   | I   | ステレオON信号入力。                                    |
| 47      | I-RMC       | I   | システムリモコン信号入力。                                  |
| 48      | IC          | -   | GND。   |
| 49      | GEQ (B)     | O   | グラフィックイコライザコントロール信号。                           |

| 端子番号  | 端子名称         | I/O | 機能説明                   |
|-------|--------------|-----|------------------------|
| 50    | GEQ (A)      | O   | グラフィックイコライザコントロール信号。   |
| 51    | O-MOTOR      | O   | デッキモーター出力。             |
| 52    | VDD2         | -   | 電源供給。(+5.5V)           |
| 53    | O-DISH RVS   | O   | 3巻CDテーブル回転コントロール出力。    |
| 54    | O-DISH FWD   | O   | 3巻CDテーブル回転コントロール出力。    |
| 55    | P1           | I/O | FLセグメント出力P1。           |
| 56    | P2           | I/O | FLセグメント出力P2。           |
| 57    | P3           | I/O | FLセグメント出力P3。           |
| 58    | P4           | I/O | FLセグメント出力P4。           |
| 59    | P5           | I/O | FLセグメント出力P5。           |
| 60    | P6           | O   | FLセグメント出力P6。           |
| 61    | P7           | O   | FLセグメント出力P7。           |
| 62    | P8           | O   | FLセグメント出力P8。           |
| 63    | P9/TU-1      | O   | FLセグメント出力P9/TU-1。      |
| 64    | P10/TU-2     | I/O | FLセグメント出力P10/TU-2。     |
| 65    | P11/NTSC/PAL | I/O | FLセグメント出力P11/NTSC/PAL。 |
| 66~70 | P12~P16      | O   | FLセグメント出力。             |
| 71    | -VLOAD       | -   | FL表示用電源(-)。            |
| 72~77 | P17~P22      | O   | FLセグメント出力P23~P24。      |
| 78    | O-CLOSE (CD) | O   | CDトレイクローズ出力。           |
| 79    | O-OPEN (CD)  | O   | CDトレイオープン出力。           |



# IC DESCRIPTION

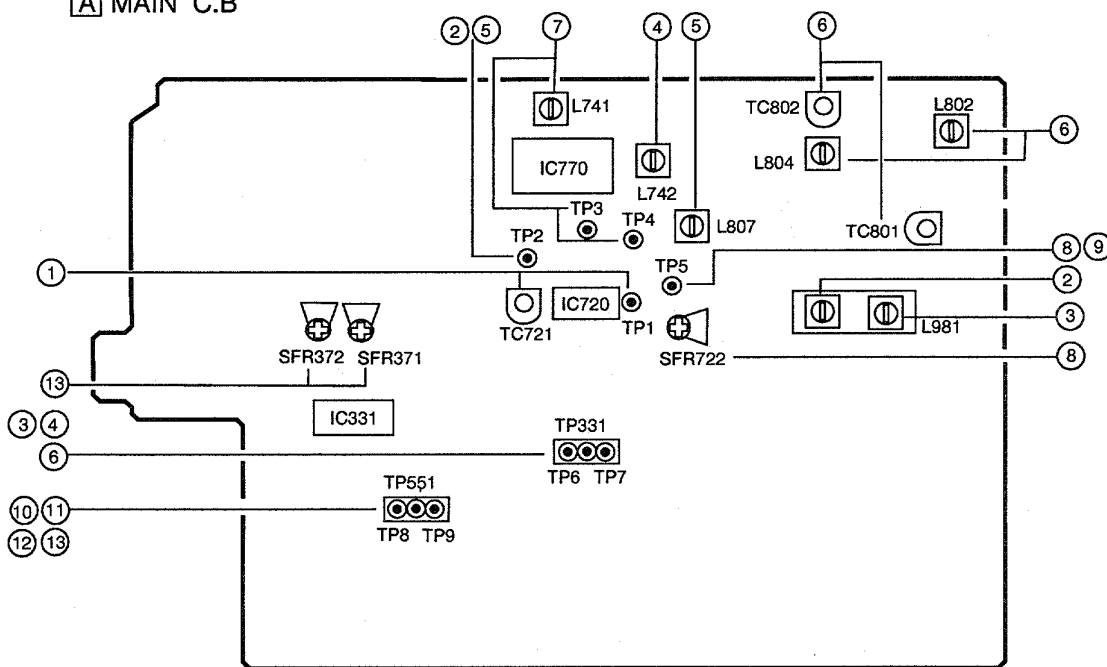
IC,  $\mu$ PD78044BGF-028

| Pin No.                | Pin Name                       | I/O | Description   |              |           |            |         |                        |  |
|------------------------|--------------------------------|-----|---|--------------|-----------|------------|---------|------------------------|--|
| 1~7                    | G7 ~G1                         | O   | Digit output for FL display.  |              |           |            |         |                        |  |
| 8                      | VDD                            | -   | Power supply terminal. (+5V)  |              |           |            |         |                        |  |
| 9                      | I-SUBQ                         | I/O | CD IC control input/output.   |              |           |            |         |                        |  |
| 10                     | O-CLK(CD)                      |     |   |              |           |            |         |                        |  |
| 11                     | O-CD CE                        |     |   |              |           |            |         |                        |  |
| 12                     | O-DATA (CD)                    |     |   |              |           |            |         |                        |  |
| 13                     | I-WRQ                          |     |   |              |           |            |         |                        |  |
| 14                     | O-MVR +                        | O   | Motor volume up output.   |              |           |            |         |                        |  |
| 15                     | O-MVR -                        | O   | Motor volume down output.   |              |           |            |         |                        |  |
| 16                     | $\overline{\text{I-HOLD}}$     | I   | Power failure detected input. (Low when Hold)   |              |           |            |         |                        |  |
| 17                     | $\overline{\text{RESET}}$      | I   | System reset input.   |              |           |            |         |                        |  |
| 18                     | $\overline{\text{O-POWER}}$    | O   | System power supply ON/OFF output.  |              |           |            |         |                        |  |
| 19                     | O-MUTE                         | O   | System mute ON/OFF output.  |              |           |            |         |                        |  |
| 20                     | AVSS                           | -   | GND.  |              |           |            |         |                        |  |
| 21                     | $\overline{\text{O-KSCAN}}$    | O   | Segment input permitted output. (Low active)  |              |           |            |         |                        |  |
| 22                     | O-CD LED                       | O   | CD flash window LED ON/OFF output.  |              |           |            |         |                        |  |
| 23                     | I-CD SW                        | I   | CD Mechanical switch AD input.  |              |           |            |         |                        |  |
| 24                     | I-DISH                         | I   | CD turntable photo sensor A/D input.  |              |           |            |         |                        |  |
| 25                     | I-MIC                          | I   | Mic level A/D input for auto vocal fader.   |              |           |            |         |                        |  |
| 26                     | I-TPSW                         | I   | A/D input of key data from DECK button.   |              |           |            |         |                        |  |
| 27                     | I-KEY 1                        | I   | KEY1 A/D input.   |              |           |            |         |                        |  |
| 28                     | I-KEY 2                        | I   | KEY2 A/D input.   |              |           |            |         |                        |  |
| 29                     | AVDD                           | -   | Power supply terminal.  |              |           |            |         |                        |  |
| 30                     | AVREF                          | I   | Reference voltage. (+5V)  |              |           |            |         |                        |  |
| 31                     | I-TMBASE                       | I   | Input a reference clock signal (8Hz) to the clock.  |              |           |            |         |                        |  |
| 32                     | NC                             | -   | Not Connected.  |              |           |            |         |                        |  |
| 33                     | VSS                            | -   | GND.  |              |           |            |         |                        |  |
| 34                     | X1                             | I   | 4.19MHz clock oscillator input.   |              |           |            |         |                        |  |
| 35                     | X2                             | I   | 4.19MHz clock oscillator input.   |              |           |            |         |                        |  |
| 36                     | $\overline{\text{C-SHIFT}}$    | O   | Shift the clock oscillator frequency.   |              |           |            |         |                        |  |
| 37                     | O-PLL                          | O   | PLL IC chip enable output.  |              |           |            |         |                        |  |
| 38                     | O-MSTB                         | O   | Shift register data latch strobe output.  |              |           |            |         |                        |  |
| 39                     | O-DATA                         | O   | PLL shift register data output.   |              |           |            |         |                        |  |
| 40                     | O-CLK                          | O   | PLL shift register clock output.  |              |           |            |         |                        |  |
| 41                     | TB-B                           | O   | T-BASS control output.  |              |           |            |         |                        |  |
| 42                     | TB-A                           | O   | T-BASS control output.  |              |           |            |         |                        |  |
| 43                     | O-HSP                          | O   | Deck motor high speed ON/OFF output.  |              |           |            |         |                        |  |
| 44                     | O-REC SEL                      | O   | Deck recording input switch.(HiZ-RMT, H-MIX)<br><table border="1" style="margin-left: 20px;"> <tr> <td>"HiZ" (MUTE)</td> <td>"H" (MIX)</td> </tr> <tr> <td>REC muting</td> <td>dubbing</td> </tr> <tr> <td colspan="2" style="text-align: center;">Tuner/Aux/CD Recording</td> </tr> </table> | "HiZ" (MUTE) | "H" (MIX) | REC muting | dubbing | Tuner/Aux/CD Recording |  |
| "HiZ" (MUTE)           | "H" (MIX)                      |     |   |              |           |            |         |                        |  |
| REC muting             | dubbing                        |     |   |              |           |            |         |                        |  |
| Tuner/Aux/CD Recording |                                |     |   |              |           |            |         |                        |  |
| 45                     | $\overline{\text{I-TUNE/IFC}}$ | I   | SD detected input or serial data input of IF count to and from Tuner. (Active low)  |              |           |            |         |                        |  |

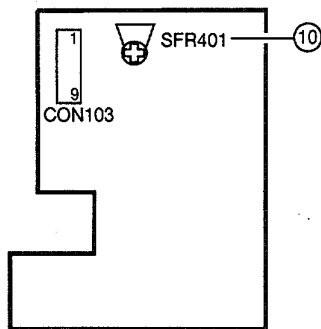
| Pin No. |            | I/O | Description  |
|---------|------------|-----|--|
| 46      | I-SENS ST  | I   | Stereo detected input to and from Tuner. (Active low)                              |
| 47      | I-RMC      | I   | System remote controller input.  |
| 48      | IC         | -   | Internal connection. (connected to GND)  |
| 49      | GEQ-B      | O   | GEQ control line.  |
| 50      | GEQ-A      | O   | GEQ control line.  |
| 51      | O-MOTOR    | O   | Mechanism main motor drive control output to DECKs. "H" when ON.                   |
| 52      | VDD        | -   | Power supply terminal. (+5V)   |
| 53      | O-DISH RVS | O   | Mechanism 3 disc table drive control output to IC203. "H" during forward rotation. |
| 54      | O-DISH FWD | O   | Mechanism 3 disc table drive control output to IC203. "H" during reverse rotation. |
| 55 ~ 70 | P1 ~ P16   | O   | Segment output for FL display.   |
| 71      | VLOAD      | -   | -27V power supply for FL pull down.  |
| 72~77   | P17~22     | O   | Segment output for FL display.   |
| 78      | O-CLOSE    | O   | CD tray close.   |
| 79      | O-OPEN     | O   | CD tray open.  |
| 80      | G8         | O   | Digit output for FL display.   |

# ADJUSTMENT <D : TUNER / DECK>

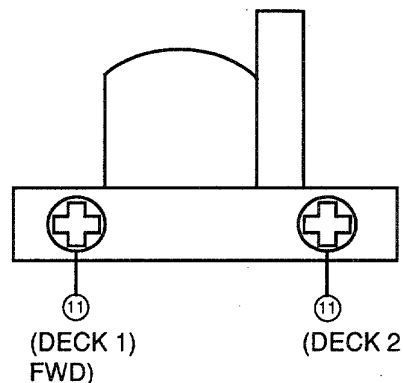
## A MAIN C.B



## C VOLUME C.B



## PH / RPH



### <チューナー セクション>

#### 1. クロック周波数調整

条件：テストポイント：TP1

調整箇所：TC721

方法：AM 1602kHzにセットし、テストポイントの周波数が2052kHz±0.01kHzになるようにTC721を調整する。

#### 2. AM VT調整

条件：テストポイント：TP2 (VT)

調整箇所：L981

方法：AM 1602kHzにセットし、テストポイントの電圧が5.3V±1.0VになるようにL981を調整する。

#### 3. AMトラッキング調整

条件：テストポイント：TP6、TP7

調整箇所

L981 .....999kHz

方法：AM 999kHzのレベルにセットし、感度が最大になるようにL981を調整する。

#### 4. AM IF調整

条件：テストポイント：TP6、TP7

L742 .....450kHz

#### 5. FM VT調整

条件：テストポイント：TP2 (VT)

調整箇所：L807

方法：FM 108.0MHzにセットし、テストポイントの電圧が8.5V±0.05VになるようにL807を調整する。

また、FM 76.0MHzにセットし、テストポイントの電圧が0.5V以上になるようにL807を調整する。

#### 6. FMトラッキング調整

条件：テストポイント：TP6、TP7

調整箇所：

L802、L804 .....76.0MHz

TC801、TC802 .....108.0MHz

方法：FM 76.0MHzでテストポイントが4±6dB(76.0MHz)になるようにL802、L804を調整する。また、FM 108MHzでテストポイントが7±4dB (108.0MHz)になるようにTC801、TC802を調整する。

7. DCバランス/モノ歪率調整

条件：テストポイント：TP3、TP4

調整箇所：L741

入力レベル：54dB

方法：FM 83.0MHzにセットし、TP3、TP4間の電圧が $0V \pm 0.04V$  になるように調整する。調整後、歪率が1.3%以下であることを確認する。

8. FMオートストップレベル調整

条件：テストポイント：TP5

調整箇所：SFR722

入力レベル：18dB

方法：FM 83.0MHzにセットし、TP5の電圧が約0.01VになるようにSFR722を調整する。その後、入力レベルを2dB下げ、TP5の電圧が約7.0Vになることを確認する。

9. オートストップレベル確認

AM

条件：テストポイント：TP5

方法：AM 1000kHzにセットし、テストポイントが40~65dBになることを確認する。

FM

条件：テストポイント：TP5

方法：FM 83.0MHzにセットし、テストポイントが $20dB \pm 5dB$  になることを確認する。

<デッキ セクション>

10. テープスピード調整

条件：テストテープ：TTA-100

テストポイント：TP8、TP9

調整箇所：SFR401

方法：テストテープを再生し、周波数カウンターが $3000Hz \pm 10Hz$  になるようにSFR401を調整する。

11. アジマス調整

条件：テストテープ：TTA-330

テストポイント：TP8、TP9

調整箇所：アジマス調整ネジ

方法：テストテープの8kHzを再生し、出力が最大になるポイントよりしめつける方向に0.5dB落ちたところに調整ネジで調整する。その後、FWD、REV共、同様に行なう。

12. 再生F特確認 (DECK 1、DECK 2)

条件：テストテープ：TTA-330

テストポイント：TP8、TP9

方法：テストテープTTA-330の315Hzと8kHzを再生し、8kHzの感度差は $\pm 2.5dB$  であることを確認する。

13. 録再F特調整

条件：テストテープ：TTA-602

テストポイント：TP8、TP9

入力シグナル：1kHz/10kHz (LINE IN)

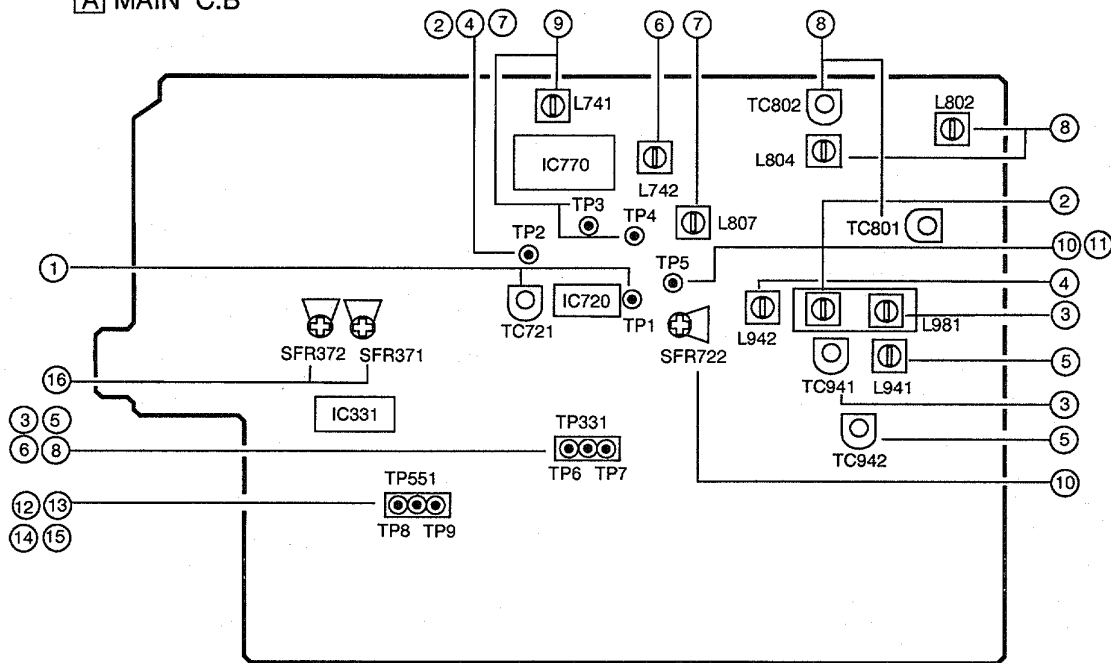
調整箇所：SFR371 (Lch)

SFR372 (Rch)

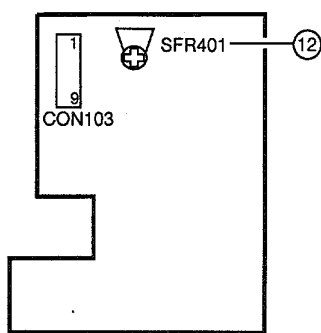
方法：1kHzと10kHzを録再し、10kHzの出力差が $0dB \pm 3dB$  となるようにSFRを調整する。

# ADJUSTMENT <TUNER / DECK>

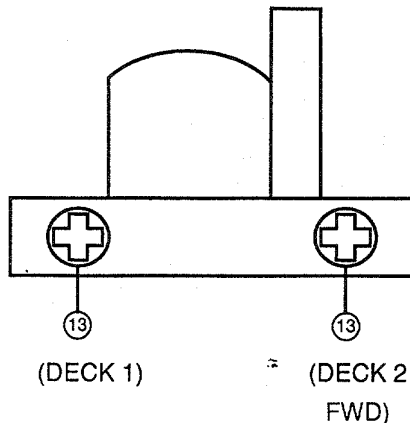
## A MAIN C.B



## C VOLUME C.B



## PH / RPH



### < TUNER SECTION >

1. Clock Frequency Adjustment  
 Settings : • Test point : TP1  
 • Adjustment location : TC721  
 Method : Set to MW 1710kHz and adjust TC721 so that the test point becomes 2160kHz  $\pm$  0.01kHz.
2. MW VT Adjustment  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L981  
 Method : Set to MW 1710kHz and adjust L981 so that the test point becomes 8.5V  $\pm$  0.05V (HE,HR), 6.0V  $\pm$  1.0V (LH,U).  
 <HE,HR>  
 Then set to MW 530kHz and check that the test point is more than 0.3V.
3. MW Tracking Adjustment  
 Settings : • Test point : TP6, TP7  
 • Adjustment location :  
 L981 ..... 600kHz  
 TC941.....1400kHz
4. SW VT Adjustment <HE, HR>  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L942  
 Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes 7.0V  $\pm$  0.05V.
5. SW Tracking Adjustment <HE, HR>  
 Settings : • Test point : TP6, TP7  
 • Adjustment location :  
 L941 ..... 5.9MHz  
 TC942 ..... 17.9MHz  
 Method : Set up TC942 to center before adjustment. The level at 5.9MHz is adjusted to MAX by L941. Then the level at 17.9MHz is adjusted to MAX by TC942.

6. MW IF Adjustment  
 Settings : • Test point : TP6, TP7  
 • Adjustment location :  
 L742..... 450kHz
7. FM VT Adjustment  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L807  
 Method : Set to FM 108.0MHz and adjust L807 so that the test point is  $8.0V \pm 0.05V$ .  
 <HE,HR>  
 Set to FM 87.5MHz, and adjust L807 so that the test point is less than 1.5V.
8. FM Tracking Adjustment  
 Settings : • Test point : TP6, TP7  
 • Adjustment location :  
 L802,L804..... 87.5 MHz  
 TC801,TC802 ..... 108MHz  
 Method : • The level at 87.5MHz is adjusted by L802,L804. Then the level at 108.0MHz is adjusted by TC801,TC802, so that the test point is  $4 \pm 6dB$  (87.5MHz) and  $7 \pm 4dB$  (108MHz).
9. DC Balance / Mono Distortion Adjustment  
 Settings : • Test point : TP3, TP4  
 • Adjustment location : L741  
 • Input level : 54dB  
 Method : Set to FM 98.3MHz and adjust L741 so that the voltage between TP3 and TP4 becomes  $0V \pm 0.04V$ . Next, check that the test point is  $4 \pm 6dB$  (87.5 MHz) and  $7 \pm 4dB$  (108.0 MHz)
10. Auto Stop Level Adjustment  
 Settings : • Test point : TP5  
 • Adjustment location : SFR722  
 • Input level : 18dB  
 Method : Set to FM 98.3 MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) out by 2dB down.
11. Auto Stop Level Check  
 MW  
 Settings : • Test point : TP5  
 • Input level : 50dB  
 Method : Set to MW 1000kHz(LH, U), MW 999kHz (HE,HR) and check that the test point is 45 ~ 65 dB.
- SW<HE, HR>  
 Settings : • Test point : TP5  
 • Input level : 65dB  
 Method : Set to SW12.0 MHz and check that the test point is less than 60 dB.
- FM  
 Settings : • Test point : TP5  
 • Input level : 20dB  
 Method : Set to FM 98.3MHz and check that the test point is  $20 dB \pm 5 dB$ .

< DECK SECTION >

12. Tape Speed Adjustment  
 Settings : • Test tape : TTA-100  
 • Test point : TP8, TP9  
 • Adjustment location : SFR401  
 Method : Play back the test tape and adjust SFR401 so that the frequency counter reads  $3000Hz \pm 10Hz$ .
13. Head Azimuth Adjustment  
 Settings : • Test tape : TTA-330  
 • Test point : TP8, TP9  
 • Adjustment location : Head azimuth adjustment screw  
 Method : Play back the 8kHz signal of the test tape and adjust screw so that the output is 0.5dB lower than the maximum. Next, perform on each FWD PLAY and REV PLAY mode.
14. PB Frequency Response Check (DECK 1, DECK 2)  
 Settings : • Test tape : TTA-330  
 • Test point : TP8, TP9  
 Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is  $\pm 2.5dB$ .
15. REC/PB Frequency Response Adjustment  
 Settings : • Test tape : TTA-602  
 • Test point : TP8, TP9  
 • Input signal : 1kHz / 10kHz (LINE IN)  
 • Adjustment location : SFR371 (Lch)  
 SFR372 (Rch)  
 Method : Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals is  $0dB \pm 3dB$  with respect to that of the 1kHz signal.

# PRACTICAL SERVICE FIGURE

## <TUNER SECTION>

### <FM SECTION>

IHF Sensitivity : 6dB ± 6dB  
(THD 3%) [at 87.5 / 98.0MHz (except D)]  
8dB ± 8dB [at 108.0MHz (except D)]  
4dB ± 6dB  
[at 76.0 / 83.0MHz (D)]  
5dB ± 6dB  
[at 90.0 / 108.0MHz (D)]

S/N 50dB Quieting sensitivity :  
Less than 40dB  
[at 87.5 / 98.0 / 108.0MHz (except D)]  
Less than 42dB  
[at 76.0 / 83.0 / 90.0 / 108.0MHz (D)]

Signal to noise ratio : More than 64dB  
[at 98.0MHz (except D)]  
[at 83.0MHz (D)]

Distortion : Less than 1.4%  
[at 98.0MHz (except D)]  
[at 83.0MHz (D)]

Stereo separation : More than 25dB  
[at 98.0MHz (except D)]  
[at 83.0MHz (D)]

Intermediate frequency : 10.7MHz

### <AM(MW) SECTION>

Sensitivity : Less than 64dB-  
(S/N 20 dB) [at 600kHz (LH, U)]  
[at 603kHz (HE, HR, D)]  
Less than 62dB  
[at 1000 / 1400kHz (LH, U)]  
[at 999 / 1404kHz (HE, HR, D)]

Distortion : Less than 1.8%  
[at 1000kHz (LH, U)]  
[at 999kHz (HE, HR, D)]

Intermediate frequency : 450kHz

### <SW SECTION> (HE, HR only)

Sensitivity : 35 ~ 45dB (5.9MHz)  
(S/N 20dB) 28 ~ 38dB (12.0MHz)  
28 ~ 38dB (17.9MHz)

Distortion : Less than 1.5% (12.0MHz)

Intermediate frequency : 450kHz

## <DECK SECTION>

Tape speed : 3000Hz ± 45Hz

Wow & flutter : Less than 0.35% (R.M.S)

Take-up torque : 30 ~ 60g-cm (FWD, REV)

F.F & REW torque : 55 ~ 140g-cm

Back tension : 2 ~ 5g-cm (FWD, REV)

PB Output level : 300mV ± 1.5dB (SP OUT 2V)

REC/PB Output level : 210mV ± 2dB (SP OUT 2V)

Distortion (REC/PB) : Less than 2.0% (NORM, CrO2)

Noise level (PB) : Less than 180mV (LH)  
Less than 200mV (HE, HR, U, D)  
Less than 300mV (LH<390/500>)  
(DOLBY NR ON / OFF  
NORM. Vol MAX.)

Noise level (REC/PB) : Less than 35mV  
(DOLBY NR ON / OFF  
NORM. WIDEBAND)

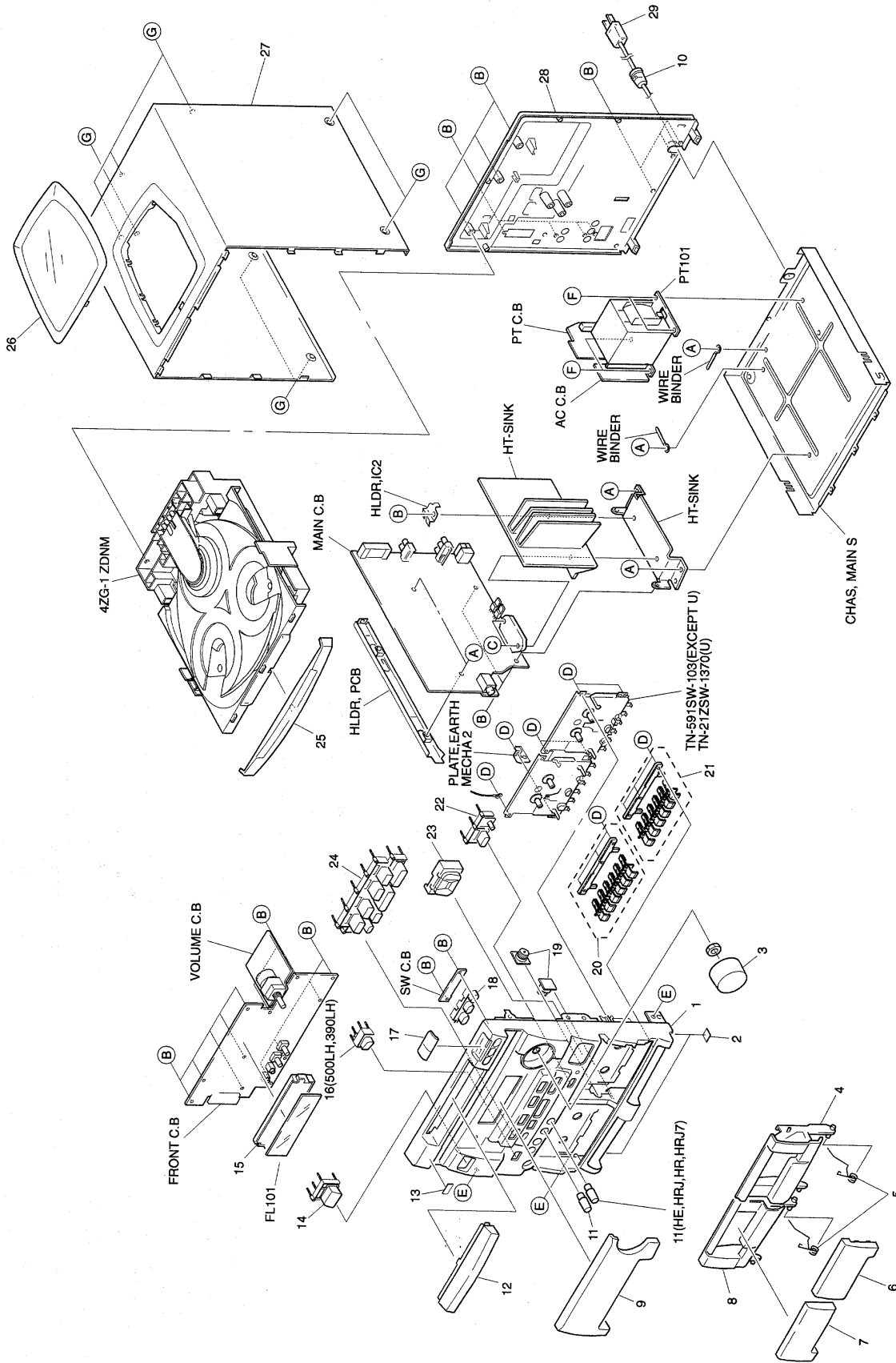
Crosstalk : More than 54dB (1kHz, 0VU)

Channel separation : More than 34dB (1kHz, 0VU)

Erasing ratio : More than 54dB (at 125Hz)

Test tape : NORMAL : TTA-602  
CrO2 : TTA-615

MECHANICAL EXPLODED VIEW 1/1



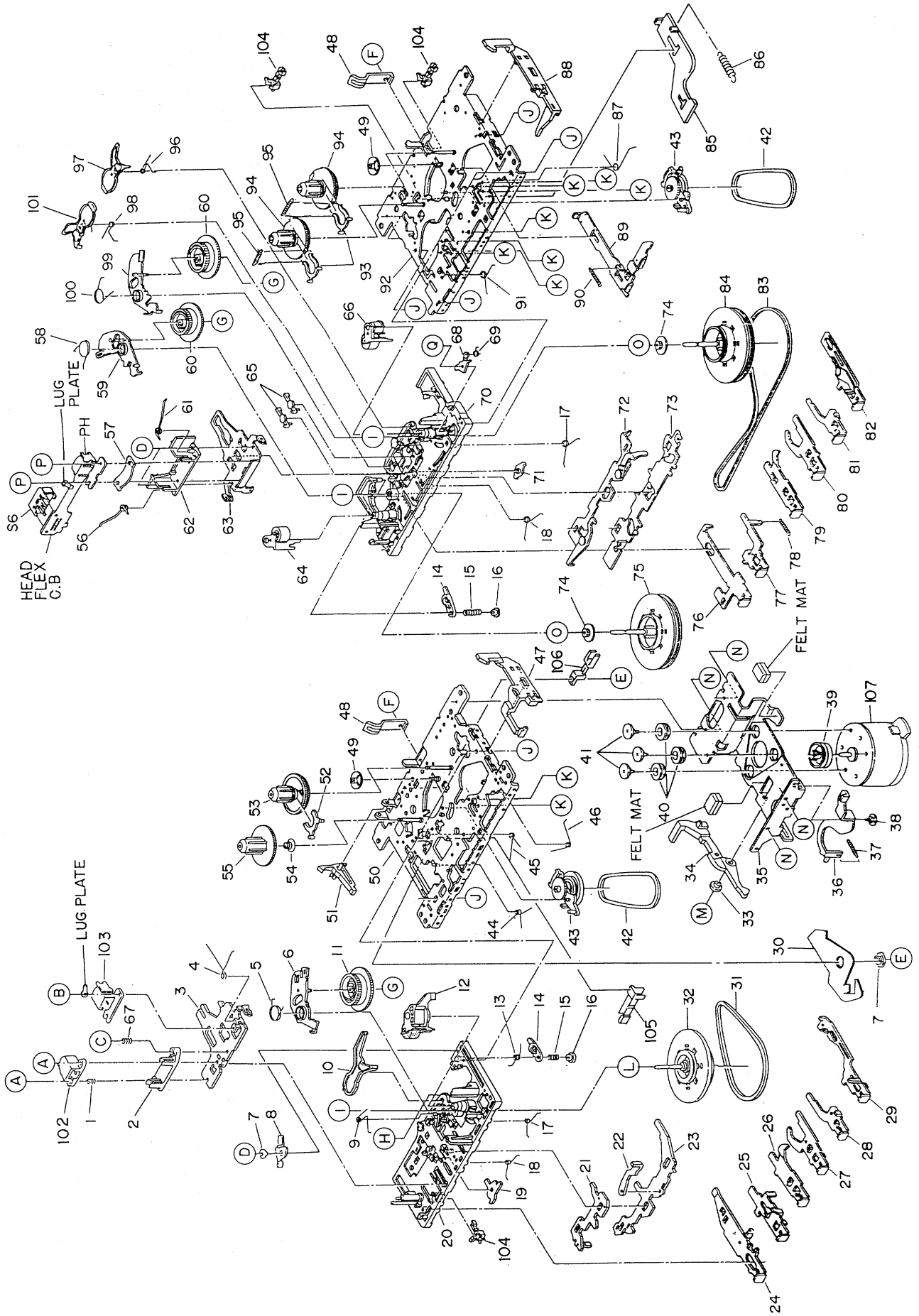


# MECHANICAL PARTS LIST 1/1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                         | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                         |
|----------|----------------|-----------|-------------------------------------|----------|----------------|-----------|-------------------------------------|
| 1        | 86-NF7-003-019 |           | CAB,FR U<3000U>                     | 21       | 86-NF7-050-019 |           | KEY,CASS R<3000U>                   |
| 1        | 86-NF7-007-019 |           | CAB,FR LH<300LH>                    | 21       | 86-NF7-070-019 |           | KEY,CASS R(W)<3001U>                |
| 1        | 86-NF7-004-019 |           | CAB,FR 390LH<390LH>                 | 22       | 86-NF7-051-019 | 0E        | KEY,CON 1<EXCEPT 3001U>             |
| 1        | 86-NF7-006-019 | 2M        | CAB,FR B<300D>                      | 22       | 86-NF7-077-019 |           | KEY,CON 1(W)<3001U>                 |
| 1        | 86-NF7-001-019 |           | CAB,FR HE<300HE,300HR>              | 23       | 86-NF7-045-019 | -         | KEY,CURSOR<EXCEPT 3001U>            |
| 1        | 86-NF7-002-019 |           | CAB,FR LHH<500LH>                   | 23       | 86-NF7-075-019 |           | KEY,CURSOR(W)<3001U>                |
| 1        | 86-NF7-065-019 |           | CAB,FR U(W)<3001U>                  | 24       | 86-NF7-073-019 |           | KEY,FUN(W)<3001U>                   |
| 2        | 80-VT1-202-019 | 0E        | FELT,12.5-15.5-2                    | 24       | 86-NF7-043-019 | 1B        | KEY,FUNCTION<EXCEPT 3001U>          |
| 3        | 86-NF7-079-019 |           | KEY,VOL(W)<3001U>                   | 25       | 86-NF7-040-019 |           | PANEL,TRAY<EXCEPT 3000U,D,3001U>    |
| 3        | 86-NF7-057-019 | -         | KNOB,VOL<EXCEPT 3001U>              | 25       | 86-NF7-053-019 | 1B        | PANEL,TRAY U<3000U,300D>            |
| 4        | 86-NF7-030-019 |           | BOX,CASS L<EXCEPT 3000U,300D,3001U> | 25       | 86-NF7-068-019 |           | PANEL,TRAY U(W)<3001U>              |
| 4        | 86-NF7-032-019 | 1D        | BOX,CASS UL<3000U,300D>             | 26       | 86-NF6-007-019 | 1C        | WINDOW, TOP                         |
| 4        | 86-NF7-066-019 |           | BOX,CASS UL(W)<3001U>               | 27       | 86-NF7-080-019 |           | CAB,STEEL S(W)<3001U>               |
| 5        | 82-NF7-218-019 | 0E        | SPR-T,CASS                          | 27       | 86-NF6-002-019 | 2M        | CABI,STEEL S<EXCEPT 3001U>          |
| 6        | 86-NF7-036-019 | -         | WINDOW,CASS L                       | 28       | 86-NF7-081-019 |           | PANEL REAR 3001 UWNM<3001U>         |
| 7        | 86-NF7-037-019 | -         | WINDOW,CASS R                       | 28       | 86-NF7-014-019 | -         | PANEL REAR BNM<300D>                |
| 8        | 86-NF7-035-019 | 1D        | BOX,CASS BR<300D>                   | 28       | 86-NF7-029-019 |           | PANEL,REAR 390LHBNM<390LH>          |
| 8        | 86-NF7-031-019 |           | BOX,CASS R<EXCEPT 3000U,300D,3001U> | 28       | 86-NF7-010-019 |           | PANEL,REAR HEJBNM<300HE>            |
| 8        | 86-NF7-033-019 |           | BOX,CASS UR<3000U>                  | 28       | 86-NF7-024-019 |           | PANEL,REAR HRBNM<300HR>             |
| 8        | 86-NF7-067-019 |           | BOX,CASS UR(W)<3001U>               | 28       | 86-NF7-012-019 |           | PANEL,REAR HRJBNM<300HRJ,300HRJ7>   |
| 9        | 86-NF7-039-019 | -         | WINDOW,DISPLAY                      | 28       | 86-NF7-021-019 |           | PANEL,REAR LHBNM<300LH>             |
| 10       | 87-085-184-010 | 0E        | BUSHING,AC CORD D<300D>             | 28       | 86-NF7-011-019 |           | PANEL,REAR LHBNM<500LH>             |
| 10       | 87-085-185-010 |           | BUSHING,AC CORD E<EXT 3000/3001U,D> | 28       | 86-NF7-013-019 |           | PANEL,REAR UBNM<3000U>              |
| 10       | 87-085-189-010 |           | BUSHING,CORD U<3000U,3001U>         | △ 29     | 87-050-098-019 | 1B        | AC CORD ASSY,D<300D>                |
| 11       | 86-NF7-078-019 |           | KEY,MIC(W)<3001U>                   | △ 29     | 87-050-079-019 |           | AC CORD ASSY,E<EXCEPT 3000/3001U,D> |
| 11       | 86-NF7-056-019 | -         | KNOB,MIC<EXCEPT 3001U>              | △ 29     | 87-050-053-019 |           | AC CORD ASSY,U-2<3000U,3001U>       |
| 12       | 86-NF7-038-019 | -         | WINDOWS,CD                          | A        | 87-067-688-019 | 0E        | BVT+3-6                             |
| 13       | 82-NE6-067-019 | 1A        | BAGDE,AIWA 30N                      | B        | 87-067-703-019 | 0E        | BVT2+3-10 (W/O SLOT)                |
| 14       | 86-NF7-049-019 | 0E        | KEY,POWER<EXCEPT 3001U>             | C        | 87-067-698-019 | 0E        | BVT 2+3-18 (W/O SLOT)               |
| 14       | 86-NF7-076-019 |           | KEY,POWER(W)<3001U>                 | D        | 87-067-758-019 | 0E        | BVT2+3-12(W/O SLOT)                 |
| 15       | 82-NF7-210-019 | 0E        | GUIDE, FL                           | E        | 87-591-094-419 | 0E        | QIT+3-6 GOLD                        |
| 16       | 86-NF7-044-019 |           | KEY,SURD<500LH,390LH>               | F        | 87-078-019-019 | 0E        | S-SCREW,IT+4-6                      |
| 17       | 86-NF7-041-019 | 0E        | KEY,CD<EXCEPT 3001U>                | G        | 87-067-641-019 | 0E        | UTT2+3-8 W/O SLOT BLK               |
| 17       | 86-NF7-071-019 |           | KEY,CD(W)<3001U>                    |          |                |           |                                     |
| 18       | 86-NF7-042-019 | 0E        | KEY,OPEN<EXCEPT 3001U>              |          |                |           |                                     |
| 18       | 86-NF7-072-019 |           | KEY,OPEN(W)<3001U>                  |          |                |           |                                     |
| 19       | 87-063-164-019 | 0E        | OIL DMPR 80                         |          |                |           |                                     |
| 20       | 86-NF7-047-019 | -         | KEY,CASS L<EXCEPT 3001U>            |          |                |           |                                     |
| 20       | 86-NF7-069-019 |           | KEY,CASS L(W)<3001U>                |          |                |           |                                     |
| 21       | 86-NF7-048-019 | 1B        | KEY,CASS R RVS<EXCEPT 3000U,3001U>  |          |                |           |                                     |

TAPE MECHANISM EXPLODED VIEW 1/1  
(TN-59/SW-103)

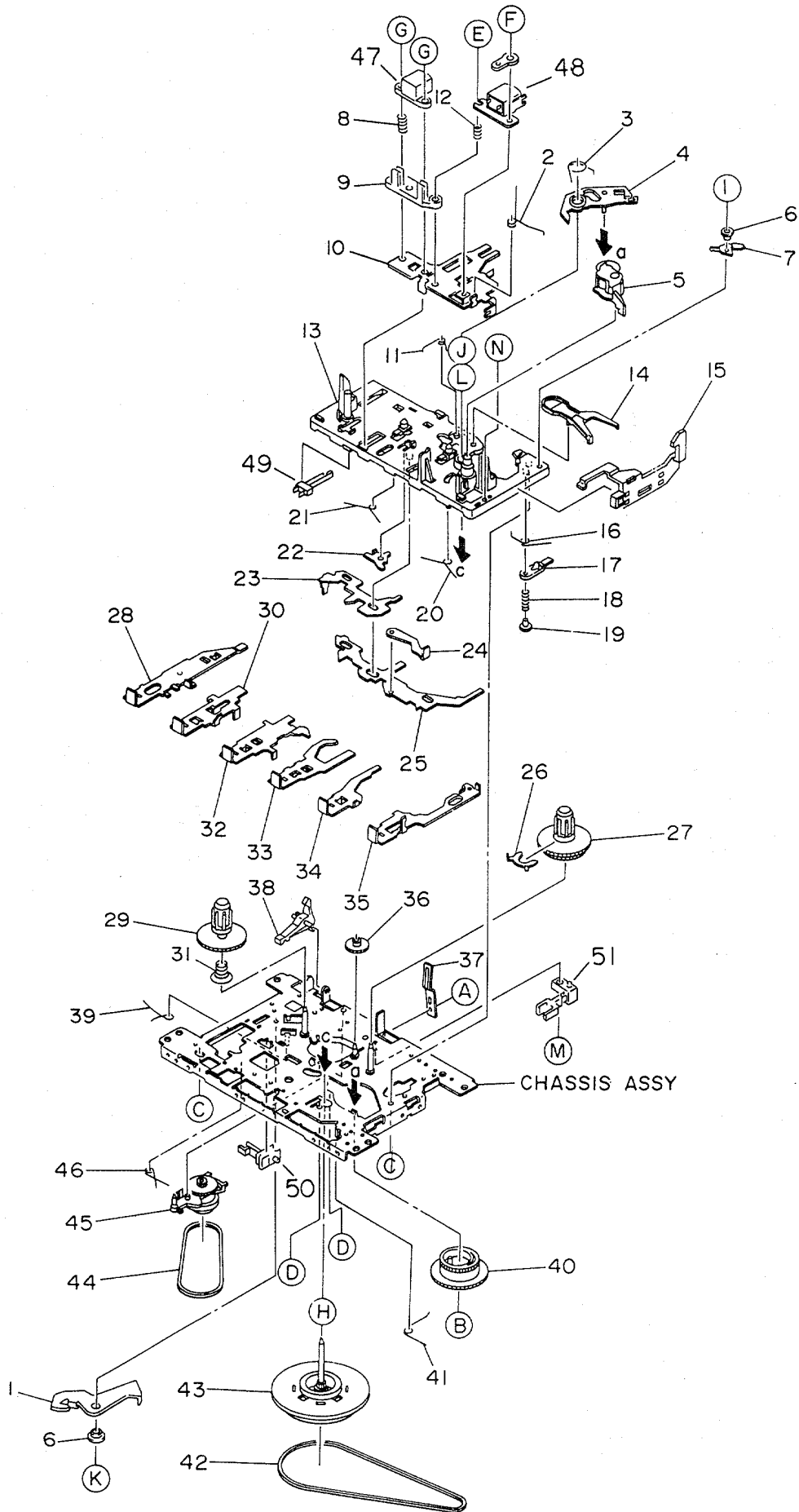


# TAPE MECHANISM PARTS LIST 1/1 (TN-591SW-103)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION             | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION             |
|----------|----------------|-----------|-------------------------|----------|----------------|-----------|-------------------------|
| 1        | S1-821-030-080 | 0E        | EH,SPRING               | 71       | S1-959-140-230 | 0E        | PR STOPPER              |
| 2        | S1-921-030-060 | 0E        | HEAD BASE               | 72       | S1-959-145-010 | -         | ACTUATOR ASSY           |
| 3        | S1-921-030-140 | 1A        | HEAD PANEL              | 73       | S1-959-140-260 | 1B        | SLIDE PLATE             |
| 4        | S1-921-030-090 | 0E        | PANEL P SPR             | 74       | S1-921-090-100 | 0E        | FL GEAR                 |
| 5        | S1-921-260-050 | 0E        | GEAR PLATE SPRING       | 75       | S1-959-093-040 | 1F        | FLYWHEEL(R)ASSY         |
| 6        | S1-921-265-020 | 1B        | GEAR PLATE ASSY         | 76       | S1-959-140-170 | 0E        | MODE BUTTON LEVER(S)    |
| 7        | S1-921-140-370 | 0E        | P ARM COLLAR            | 77       | S1-959-140-160 | 1A        | PLAY BUTTON LEVER       |
| 8        | S1-921-140-340 | 1A        | P ARM                   | 78       | S1-959-030-020 | 0E        | SPR,PANEL               |
| 9        | S1-921-141-8A0 | 0E        | M CONTROL SPRING        | 79       | S1-959-140-150 | -         | FF BUTTON LEVER(RS)     |
| 10       | S1-921-260-4A0 | 0E        | SENSING LEVER           | 80       | S1-959-140-140 | -         | FF BUTTON LEVER(FS)     |
| 11       | S1-921-260-020 | 0E        | CAM GEAR                | 81       | S1-959-140-130 | -         | STOP BUTTON LEVER(S)    |
| 12       | S1-921-043-100 | 1C        | PINCH ROLLER ARM ASSY   | 82       | S1-959-143-030 | -         | PROG BUTTON LEVER(S)ASY |
| 13       | S1-921-141-3A0 | 0E        | P CONTROL SPRING        | 83       | S1-851-140-170 | 1C        | MAIN BELT               |
| 14       | S1-921-140-820 | 0E        | PAUSE LEVER(F)          | 84       | S1-959-093-050 | -         | FLYWHEEL(F)ASSY         |
| 15       | S1-921-140-120 | 0E        | PAUSE LEVER SPRING      | 85       | S1-959-150-020 | -         | MUTING PLATE SP         |
| 16       | S1-921-140-110 | 0E        | PAUSE STOPPER           | 86       | S1-959-150-010 | -         | MUTING PLATE            |
| 17       | S1-921-140-150 | 0E        | BUTTON LEVER SPRING (B) | 87       | S1-959-140-200 | 0E        | SPR,EV ACTUATOR         |
| 18       | S1-921-140-140 | 0E        | BUTTON LEVER SPRING (A) | 88       | S1-959-130-020 | -         | EJECT SLIDE LEVER(S)    |
| 19       | S1-921-140-200 | 0E        | PR STOPPER              | 89       | S1-959-010-020 | 1B        | MAIN PLATE              |
| 20       | S1-921-143-180 | 1C        | BASE ASSY               | 90       | S1-959-010-030 | 0E        | SPR,MAIN PLATE          |
| 21       | S1-921-140-090 | 0E        | SWITCH ACTUATOR         | 91       | S1-959-140-220 | -         | SPR,PM BUTTON LEVER     |
| 22       | S1-921-140-640 | 0E        | E KICK LEVER            | 92       | S1-959-015-010 | 1H        | CHASSIS ASSY            |
| 23       | S1-921-140-080 | 0E        | PUSH BUTTON ACTUATOR    | 93       | S1-959-050-010 | 0E        | SENSOR                  |
| 24       | S1-921-140-220 | 0E        | REC BUTTON LEVER        | 94       | S1-921-053-090 | 1F        | TAKE UP REEL ASSY       |
| 25       | S1-921-140-230 | 0E        | PLAY BUTTON LEVER       | 95       | S1-959-050-040 | -         | SENER SPRING            |
| 26       | S1-921-140-240 | 0E        | RWD BUTTON LEVER        | 96       | S1-959-260-090 | 0E        | M CONTROL SPR(F)        |
| 27       | S1-921-140-250 | 0E        | FF BUTTON LEVER         | 97       | S1-959-260-060 | 0E        | SENSING LEVER(F)        |
| 28       | S1-921-140-260 | 0E        | STOP BUTTON LEVER       | 98       | S1-959-260-010 | 0E        | M CONTROL SPR(R)        |
| 29       | S1-921-140-610 | 0E        | PAUSE BUTTON LEVER      | 99       | S1-959-265-010 | 1B        | GEAR PLATE(F)ASSY       |
| 30       | S1-921-020-010 | 0E        | REC ARM                 | 100      | S1-959-260-040 | 0E        | GEAR PLATE SPR(F)       |
| 31       | S1-821-121-730 | 1C        | MAIN BELT               | 101      | S1-959-260-070 | 0E        | SENSING LEVER(R)        |
| 32       | S1-921-093-050 | 1F        | FLYWHEEL ASSY           | 102      | S6-202-140-190 | -         | E HEAD LE15B-C1         |
| 33       | S1-821-120-650 | 0E        | COLLAR SCREW(B)         | 103      | S6-201-010-750 | -         | R.P.HEAD RP-7442BS-0951 |
| 34       | S1-921-120-250 | 1B        | P KICK LEVER(B)         | 104      | S6-401-011-490 | -         | LEAF SW MSW-1541 T      |
| 35       | S1-851-140-070 | 1B        | MOTOR BRACKET           | 105      | S6-401-010-380 | -         | LEAF SWITCH MSW-1275    |
| 36       | S1-851-140-060 | 1B        | P KICK LEVER(A)         | 106      | S6-401-011-610 | -         | LEAF SW MSW-17820-MVE1  |
| 37       | S1-851-140-040 | 0E        | SPR P KICK LEVER        | 107      | S6-002-030-290 | -         | MOTOR EG-530YD-2BH      |
| 38       | S1-821-120-230 | 0E        | PR, COLLAR SCREW(A)     | A        | S9-P17-205-710 | 0E        | SCREW,M2-7.5            |
| 39       | S1-959-120-010 | -         | MOTOR PULLEY            | B        | S9-B01-200-310 | 0E        | SCREW,+2-3              |
| 40       | S1-821-120-660 | 0E        | MOTOR RUBBER            | C        | S9-F08-200-710 | 0E        | SCREW,M2-7              |
| 41       | S1-851-140-180 | 0E        | MOTOR COLLAR SCREW      | D        | S9-C04-202-530 | 0E        | S-SCREW,TAP 2-2.5       |
| 42       | S1-821-070-110 | 1C        | RF,BELT                 | E        | S9-P04-200-500 | 0E        | SCREW,TAP M2-5          |
| 43       | S1-959-073-010 | -         | RF CLUTCH ASSY          | F        | S9-P04-200-310 | 0E        | SCREW,TAP M2-3          |
| 44       | S1-921-140-170 | 0E        | P.S.LEVER SPRING        | G        | S9-W06-300-030 | -         | HLW CUT 1.2-3.8-0.3     |
| 45       | S1-921-140-210 | 0E        | REC BUTTON LEVER SPR    | H        | S9-P05-200-610 | 0E        | S-SCREW,TAP2-6          |
| 46       | S1-921-140-160 | 0E        | E ACTUATOR SPRING       | I        | S9-W06-500-020 | -         | HLW CUT 1.45-3.8-0.5    |
| 47       | S1-921-130-030 | 0E        | EJECT SLIDE LEVER       | J        | S9-B10-200-510 | 0E        | SCREW,TAP 2-5           |
| 48       | S1-829-100-010 | 0E        | SPR,PACK                | K        | S9-C07-204-510 | 0E        | SCREW,TAP 2-4.5         |
| 49       | S1-821-100-700 | 0E        | FF GEAR                 | L        | S9-W01-400-100 | -         | HLW 2.0-3.5-0.4         |
| 50       | S1-921-145-010 | -         | CHASSIS ASSY            | M        | S9-P05-200-610 | 0E        | SCREW,TAP M2-6          |
| 51       | S1-821-100-690 | 0E        | REC SAFETY LEVER        | N        | S9-P04-200-410 | 0E        | C TAPPING SCREW M2-4    |
| 52       | S1-921-050-060 | 0E        | SENSOR                  | O        | S9-W05-300-100 | -         | HLW 2.1-3.5-0.3         |
| 53       | S1-921-053-030 | 1F        | TAKE UP REEL ASSY       | P        | S9-P14-200-630 | 0E        | SCREW(SPECIAL)M2-6 BLK  |
| 54       | S1-821-100-990 | 0E        | SPR,BACK TENSION        | Q        | S9-E01-001-520 | -         | E RING S1.5             |
| 55       | S1-921-055-040 | 1E        | SUPPLY REEL ASSY        |          |                |           |                         |
| 56       | S1-959-040-040 | 0E        | SPR,P.ROLLER ARM(R)     |          |                |           |                         |
| 57       | S1-851-040-050 | 0E        | PLATE HEAD SPR          |          |                |           |                         |
| 58       | S1-959-260-050 | 0E        | GEAR PLATE SPR(R)       |          |                |           |                         |
| 59       | S1-959-265-020 | 1B        | GEAR PLATE(R)ASSY       |          |                |           |                         |
| 60       | S1-959-260-030 | 0E        | CAM GEAR                |          |                |           |                         |
| 61       | S1-959-040-020 | 0E        | SPR,P.ROLLER ARM(F)     |          |                |           |                         |
| 62       | S1-959-030-030 | 1A        | HEAD BASE               |          |                |           |                         |
| 63       | S1-959-030-010 | 1C        | HEAD PANEL              |          |                |           |                         |
| 64       | S1-959-043-040 | 1C        | PINCH ROLLER ARM(R)ASSY |          |                |           |                         |
| 65       | S1-959-260-080 | 0E        | M CONTROL ARM           |          |                |           |                         |
| 66       | S1-959-043-030 | 1C        | RINCH ROLLER ARM(F)ASSY |          |                |           |                         |
| 67       | S1-821-030-070 | 0E        | AZIMUTH SPRING          |          |                |           |                         |
| 68       | S1-959-140-090 | 0E        | ROTARY ARM              |          |                |           |                         |
| 69       | S1-959-140-270 | 0E        | ROTARY SPRING           |          |                |           |                         |
| 70       | S1-959-143-010 | 1H        | BASE ASSY               |          |                |           |                         |

TAPE MECHANISM EXPLODED VIEW 1/2  
 TN-21ZSW-1370)

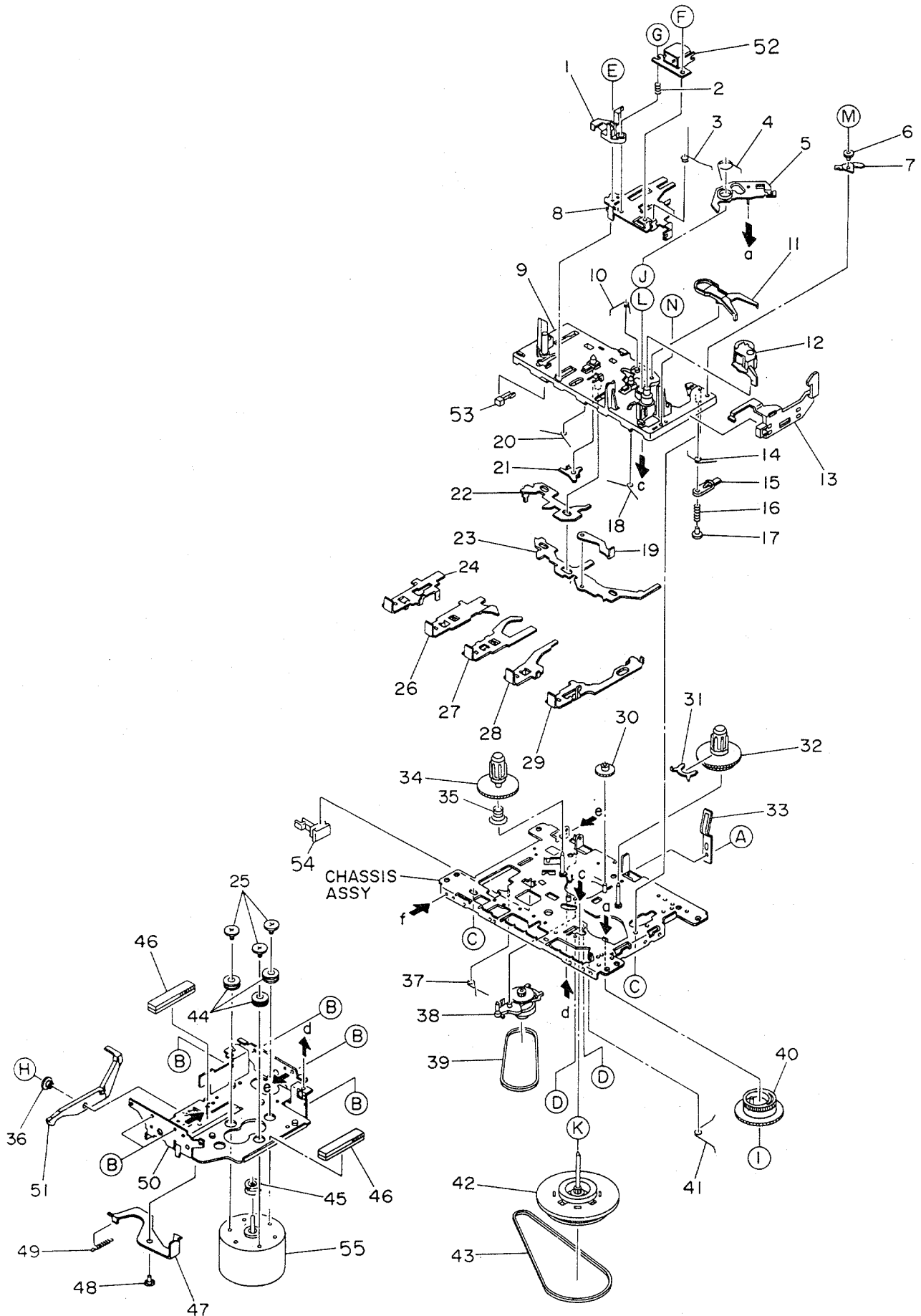


# TAPE MECHANISM PARTS LIST 1/2 (TN-21ZSW-1370)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION            | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION              |
|----------|----------------|-----------|------------------------|----------|----------------|-----------|--------------------------|
| 1        | S1-921-020-010 |           | REC ARM                | 36       | S1-821-100-700 |           | FF GEAR                  |
| 2        | S1-921-030-090 |           | PANEL P SPRING         | 37       | S1-829-100-010 |           | PACK SPRING              |
| 3        | S1-921-260-050 |           | GEAR PLATE SPRING      | 38       | S1-821-100-690 |           | RECORD SAFETY LEVER      |
| 4        | S1-921-265-020 |           | GEAR PLATE ASSY        | 39       | S1-921-140-210 |           | REC BUTTON LEVER SPRING  |
| 5        | S1-921-043-100 |           | PINCH ROLLER ARM ASSY  | 40       | S1-921-260-020 |           | CAM GEAR                 |
| 6        | S1-921-140-370 |           | P ARM COLLER           | 41       | S1-921-140-160 |           | E ACTUATOR SPRING        |
| 7        | S1-921-140-340 |           | P ARM                  | 42       | S1-921-090-240 |           | MAIN BELT                |
| 8        | S1-821-030-080 |           | EH SPRING              | 43       | S1-921-093-030 |           | FLYWHEEL ASSY            |
| 9        | S1-921-030-060 |           | HEAD BASE              | 44       | S1-821-070-110 |           | RF BELT                  |
| 10       | S1-921-030-140 |           | HEAD PANEL             | 45       | S1-921-073-040 |           | RF CLUTCH ASSY           |
| 11       | S1-921-141-8A0 |           | M CONTROL SPRING       | 46       | S1-921-140-170 |           | P.S.LEVER SPRING         |
| 12       | S1-821-030-070 |           | AZIMUTH SPRING         | 47       | S6-202-140-190 |           | E HEAD                   |
| 13       | S1-921-143-180 |           | BASE ASSY              | 48       | S6-201-010-750 |           | R.P.HEAD RP-7442BS       |
| 14       | S1-921-260-4A0 |           | SENSING LEVER          | 49       | S6-401-011-490 |           | LEAF SW MSW-1541T        |
| 15       | S1-921-130-020 |           | EJECT SLIDE LEVER      | 50       | S6-401-011-610 |           | LEAF SW MSW-17820MVEI    |
| 16       | S1-921-141-3A0 |           | P CONTROL SPRING       | 51       | S6-401-010-380 |           | LEAF SW MSW-1275         |
| 17       | S1-921-140-550 |           | PAUSE LEVER(E)         | A        | S9-179-000-000 |           | C TAP SCREW M2-3         |
| 18       | S1-921-140-120 |           | PAUSE LEVER SPRING     | B        | S9-422-000-000 |           | P WASHER CUT 12-3.8-0.3  |
| 19       | S1-921-140-110 |           | PAUSE STOPPER          | C        | S9-679-000-000 |           | P TAP SCREW M2-5         |
| 20       | S1-921-140-150 |           | BUTTON LEVER SPRING(B) | D        | S9-999-180-090 |           | TAP SCREW M2-4.5         |
| 21       | S1-921-140-140 |           | BUTTON LEVER SPRING(A) | E        | S9-922-000-000 |           | AZIMUTH SCREW M2-8       |
| 22       | S1-921-140-200 |           | PR STOPPER             | F        | S9-115-000-000 |           | + BIND SCREW M2-3        |
| 23       | S1-921-140-090 |           | SWITCH ACTUATOR        | G        | S9-821-000-000 |           | +CAP SCREW M2-8          |
| 24       | S1-921-140-640 |           | E KICK LEVER           | H        | S9-882-000-000 |           | P WASHER 2-3.5-0.4       |
| 25       | S1-921-140-080 |           | PUSH BUTTON ACTUATOR   | I        | S9-999-200-410 |           | P TAP SCREW M2-3         |
| 26       | S1-921-050-060 |           | SENER                  | J        | S9-999-030-130 |           | P WASHER CUT 1.45-3.8-0. |
| 27       | S1-921-053-030 |           | TAKE UP REEL ASSY      | K        | S9-180-000-000 |           | C TAP SCREW M2-4         |
| 28       | S1-921-140-220 |           | REC BUTTON LEVER       | L        | S9-999-000-030 |           | P WASHER 2.1-4-0.13      |
| 29       | S1-921-053-040 |           | SUPPLY REEL ASSY       | M        | S9-181-000-000 |           | C TAP SCREW M2-5         |
| 30       | S1-921-140-230 |           | PLAY BUTTON LEVER      | N        | S9-P05-200-610 |           | S TAPPING SCREW M2-6     |
| 31       | S1-821-100-990 |           | BACK TENSION SPRING    |          |                |           |                          |
| 32       | S1-921-140-240 |           | REW BUTTON LEVER       |          |                |           |                          |
| 33       | S1-921-140-250 |           | FF BUTTON LEVER        |          |                |           |                          |
| 34       | S1-921-140-660 |           | STOP BUTTON LEVER      |          |                |           |                          |
| 35       | S1-921-140-610 |           | PAUSE BUTTON LEVER     |          |                |           |                          |

TAPE MECHANISM EXPLODED VIEW 2/2



# TAPE MECHANISM PARTS LIST 2/2 (TN-21ZSW-1370)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION            | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION              |
|----------|----------------|-----------|------------------------|----------|----------------|-----------|--------------------------|
| 1        | S1-921-030-4A0 |           | HEAD BASE              | 36       | S1-821-120-650 |           | COLLER B                 |
| 2        | S1-821-030-070 |           | AZIMUTH SPRING         | 37       | S1-921-140-170 |           | P.S.LEVER SPRING         |
| 3        | S1-921-030-090 |           | PANEL P SPRING         | 38       | S1-921-073-040 |           | RF CLUTCH ASSY           |
| 4        | S1-921-260-050 |           | GEAR PLATE SPRING      | 39       | S1-821-070-110 |           | RF BELT                  |
| 5        | S1-921-265-020 |           | GEAR PLATE ASSY        | 40       | S1-921-260-020 |           | CAM GEAR                 |
| 6        | S1-921-140-370 |           | P ARM COLLER           | 41       | S1-921-140-160 |           | E ACTUATOR SPRING        |
| 7        | S1-921-140-340 |           | P ARM                  | 42       | S1-921-093-040 |           | FLYWHEEL ASSY            |
| 8        | S1-921-030-110 |           | HEAD PANEL             | 43       | S1-921-090-240 |           | MAIN BELT                |
| 9        | S1-921-143-170 |           | BASE ASSY              | 44       | S1-820-130-060 |           | MOTOR RUBBER             |
| 10       | S1-921-141-8A0 |           | M CONTROL SPRING       | 45       | S1-921-120-130 |           | MOTOR PULLEY             |
| 11       | S1-921-260-4A0 |           | SENSING LEVER          | 46       | S1-921-120-120 |           | ANTI VIBR FELT MAT       |
| 12       | S1-921-043-100 |           | PINCH ROLLER ARM ASSY  | 47       | S1-821-120-680 |           | P KICK LEVER (A)         |
| 13       | S1-921-130-020 |           | EJECT SLIDE LEVER      | 48       | S1-821-120-230 |           | PK COLLER SCREW A        |
| 14       | S1-921-141-3A0 |           | P CONTROL SPRING       | 49       | S1-821-120-250 |           | P KICK LEVER SPRING      |
| 15       | S1-921-140-550 |           | PAUSE LEVER(E)         | 50       | S1-921-120-110 |           | MOTOR BRACKET            |
| 16       | S1-921-140-120 |           | PAUSE LEVER SPRING     | 51       | S1-921-120-090 |           | P KICK LEVER             |
| 17       | S1-921-140-110 |           | PAUSE STOPPER          | 52       | S6-201-010-750 |           | R.P.HEAD RP-7442BS       |
| 18       | S1-921-140-150 |           | BUTTON LEVER SPRING(B) | 53       | S6-401-011-490 |           | LEAF SW MSW-1541T        |
| 19       | S1-821-011-590 |           | E KICK LEVER           | 54       | S6-401-011-610 |           | LEAF SW MSW-17820MVE1    |
| 20       | S1-921-140-140 |           | BUTTON LEVER SPRING(A) | 55       | S6-002-030-290 |           | MOTOR EG530YD-2BH        |
| 21       | S1-921-140-200 |           | PR STOPPER             | A        | S9-179-000-000 |           | C TAP SCREW M2-3         |
| 22       | S1-921-140-090 |           | SWITCH ACTUATOR        | B        | S9-180-000-000 |           | C TAP SCREW M2-4         |
| 23       | S1-921-140-080 |           | PUSH BUTTON ACTUATOR   | C        | S9-679-000-000 |           | P TAP SCREW M2-5         |
| 24       | S1-921-140-230 |           | PLAY BUTTON LEVER      | D        | S9-999-180-090 |           | TAP SCREW M2-4.5         |
| 25       | S1-821-120-020 |           | MOTOR COLLER SCREW     | E        | S9-004-000-000 |           | SCREW M2-6               |
| 26       | S1-921-140-240 |           | REW BUTTON LEVER       | F        | S9-115-000-000 |           | + BIND SCREW M2-3        |
| 27       | S1-921-140-250 |           | FF BUTTON LEVER        | G        | S9-922-000-000 |           | AZIMUTH SCREW M2-8       |
| 28       | S1-921-140-260 |           | STOP BUTTON LEVER      | H        | S9-182-000-000 |           | C TAP SCREW M2-6         |
| 29       | S1-921-140-610 |           | PAUSE BUTTON LEVER     | I        | S9-422-000-000 |           | P WASHER CUT 12-3.8-0.3  |
| 30       | S1-821-100-700 |           | FF GEAR                | J        | S9-999-030-130 |           | P WASHER CUT 1.45-3.8-0. |
| 31       | S1-921-050-060 |           | SENSOR                 | K        | S9-882-000-000 |           | P WASHER 2-3.5-0.4       |
| 32       | S1-921-053-030 |           | TAKE UP REEL ASSY      | L        | S9-999-000-030 |           | P WASHER2.1-4-0.13       |
| 33       | S1-829-100-010 |           | PACK SPRING            | M        | S9-999-200-410 |           | P TAP SCREW M2-3         |
| 34       | S1-921-053-040 |           | SUPPLY REEL ASSY       | N        | S9-P05-200-610 |           | S TAPPING SCREW M2-6     |
| 35       | S1-821-100-990 |           | BACK TENSION SPRING    |          |                |           |                          |

# ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                 |
|----------|----------------|-----------|-----------------------------|
| 1        | 86-NF7-905-019 | --        | IB, D(J)-M<D>               |
| 1        | 86-NF7-901-019 |           | IB, H(ECA)-M<HE,HR>         |
| 1        | 86-NF7-909-019 |           | IB, LO(ESP)-M<300LH>        |
| 1        | 86-NF7-902-019 |           | IB, U(ESF)-M<U>             |
| 1        | 86-NF7-907-019 |           | IB, LH (ESF)-M<500LH>       |
| 1        | 86-NF7-915-019 |           | IB, LH-M-390<390LH>         |
| 2        | 87-043-115-019 | 1A        | ANT,FEEDER FM               |
| 3        | 87-006-225-019 | 1D        | AM LOOP ANT NC2<LH,U,D>     |
| 3        | 87-A90-054-019 |           | ANT,LOOP AM-CON C<HE,HR>    |
| 4        | 87-A90-120-019 |           | ANT,WIRE SW(5M)-SHS<HE,HR>  |
| 5        | 85-MA7-051-019 | 2A        | RC,RC-T516                  |
| △ 6      | 87-099-789-019 |           | PLUG,ADPTR IR44<EXCEPT U,D> |



# 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      |
| TC CAP      | CAP, CERA-SOL      |
| THMS        | THERMISTOR         |
| TR          | TRANSISTOR         |
| TRIMER      | 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    | SERGE SUPPRESSOR   |
| セラコン        | CAP, CERA          |

## MECHANICAL SECTION

| DESCRIPTION    | REFERENCE NAME      |
|----------------|---------------------|
| ADHESHIVE      | SHEET ADHESHIVE     |
| AZ             | AZIMUTH             |
| BAR-ANT        | BAR-ANTENNA         |
| BAT            | BATTERY             |
| 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         |
| LBL            | LABEL               |
| LID, BATT      | LID, BATTERY        |
| LID, CASS      | LID, CASSETTE       |
| LVR            | LEVER               |
| P-SP           | P-SPRING            |
| PANEL, CONT    | PANEL, CONTROL      |
| PANEL, FR      | PANEL, FRONT        |
| PRGM           | PROGRAM             |
| PULLY, LOAD MO | PULLY, LOAD 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    |
| T-SP           | T-SPRING            |
| TERM           | TERMINAL            |
| TRIG           | TRIGGER             |
| TUN            | TUNING              |
| VOL            | VOLUME              |
| W              | WASHER              |
| WHL            | WHEEL               |
| WORM-WHL       | WORM-WHEEL          |
| ジグアーム          | ARM, SHAFT          |
| ジグガイド          | GUIDE, SHAFT        |
| ストラップ          | STRAP               |
| トクナベ           | S-SCRW              |
| ヒンジ            | HINGE               |
| ヒンジビス          | S-SCRW              |
| ビスセレート         | SCRW, SERPART       |

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

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