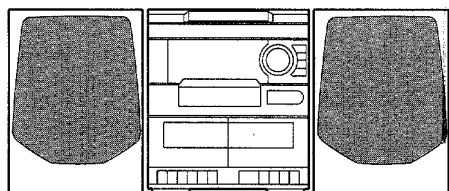


aiwa



XG-S10 NSX-S9 NSX-S10



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : TN-21ZSW-1716
- BASIC CD MECHANISM : 4ZG-1 BDLNC
- TYPE : EZ,G (S9)
D,EZ,HR,HS,V (S10)

製品コード : 87NY9 - 0197 (ST)

| SYSTEM | CD - CASSEIVER | SPEAKER | REMOTE CONTROLLER |
|--------------------------------|----------------|-----------|-------------------|
| NSX-S9 (TYPE : EZ,G) | CX - NS9 | SX - NS10 | RC UNIT, 6AS14 |
| XG-S10 (TYPE : D) | CX - NS10 | | |
| NSX-S10 (TYPE : EZ,HR,HS,V) | | | |

- このサービスマニュアルにはCD メカニズムの説明は含まれていません。
CDメカニズムについては、4ZG-1, S/M CODE No.09-967-149-40Tの
マニュアルを参照してください。
- If requiring information about the CD mechanism, see Service Manual of 4ZG-1,
S/M Code No. 09-965-128-10T.

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SPECIFICATIONS (D)

| | | | |
|----------------------|----------------------------|----------------------|-----------------------------|
| <FM部> | | スピーカー-SX-NS10 | |
| 受信周波数: | 76MHz~108MHz | 形式: | 2ウェイバスレフタイプ (防磁型: EIAJ) |
| アンテナ: | ワイヤーアンテナ | | 6Ω |
| <AM部> | | インピーダンス: | 87dB/W/m |
| 受信周波数: | 531kHz~1602kHz | 出力音圧レベル: | ウーハー120mm, ツィーター10mm |
| アンテナ: | ループアンテナ | 使用スピーカー: | 220(幅) x 302(高) x 238(奥行)mm |
| <タイマー部> | | 最大外形寸法: | 2.5kg |
| プログラムタイマー: | オンタイマー、任意に設定可 | 質量: | |
| スリープタイマー: | 5分単位で設定可、最大240分 | 共通部 | |
| 時間表示: | 12時間/24時間表示 | 電源: | AC100V, 50/60Hz |
| アンプ部 | | 消費電力: | 35W |
| 定格出力: | 15W+15W(1kHz, 6Ω, 10%)EIAJ | 本体最大外形寸法: | 260(幅) x 308(高) x 335(奥行)mm |
| 入力端子: | VIDEO/AUX 端子 400mV | 本体質量: | 4.4kg |
| 出力端子: | SPEAKERS 端子 6Ω | | |
| | PHONES 端子 32Ω | | |
| 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: | ノーマルポジションテープ50 ~10000Hz | | |
| 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 | | |

・使用および外観は、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 (HR,HS)

<FM Tuner section>

Tuning range 87.5 MHz to 108 MHz
Usable sensitivity (IHF) 16.8 dBf
Antenna terminals 75 ohms (unbalanced)

<MW Tuner section> (HR)

Tuning range 531 kHz to 1602 kHz (9 kHz step)
 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity 350 uV/m
Antenna Loop antenna

<SW Tuner section> (HR)

Tuning range 5.9000 MHz - 17.900 MHz
Antenna Wire antenna

<AM Tuner section> (HS)

Tuning range 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity 350 uV/m
Antenna Loop antenna

<Amplifier section>

Power output Rated: 12 W +12 W (T.H.D.1 %, 6 ohms, 1 kHz)
 Reference: 15 W +15 W (T.H.D. 10 %, 6 ohms, 1 kHz)

Total harmonic distortion 0.3 % (6 W, 1 kHz, 6 ohms, DIN AUDIO)

Inputs VIDEO/AUX: 400 mV
Outputs SPEAKERS: accept speakers of 6 ohms or more
 PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format 4 tracks, 2 channels stereo
Frequency response 50 Hz - 10000 Hz
Recording system AC bias
Heads Deck 1 : Recording/playback/erase head x 1
 Deck 2 : Playback head x 1

<Compact disc player section>

Laser Semiconductor laser ($\lambda = 780 \text{ nm}$)
D-A converter 1 bit dual
Signal-to-noise ratio 90 dB (1 kHz, 0 dB)
Harmonic distortion 0.03% (1 kHz, 0 dB)
Wow and flutter Unmeasurable

<Speaker system SX-NS10>

Cabinet type 2 way, bass reflex (magnetic shielded type)
Speakers Woofer : 120 mm cone type
 Tweeter : 10 mm ceramic type
Impedance 6 ohms
Output sound pressure level 87 dB/W/m
Dimensions (W x H x D) 220 x 302 x 238 mm
Weight 2.5 kg (5lbs 8 oz)

<General>

Power requirements HR: 120 V/220 V-240 V AC, (switchable) 50/60 Hz
 HS: 220V AC, 60 Hz

Power consumption

HR: 50 W
 HS: 75 W

Dimensions of main unit (W x H x D) 260 x 308 x 335 mm

Weight of main unit 4.4 kg

• Design and specifications are subject to change without notice.

SPECIFICATIONS (9EZ,G,10EZ,V)

<FM Tuner section> (9EZ,10EZ,9G)

Tuning range 87.5 MHz to 108 MHz
Usable sensitivity (IHF) 16.8 dBf
Antenna terminals 75 ohms (unbalanced)

<FM Tuner section> (V)

Tuning range FM1 (OIRT)
 65 MHz to 74 MHz (10 kHz step)
 FM2 (CCIR)
 87.5 MHz to 108 MHz (50 kHz step)
Antenna terminals Wire antenna

<MW Tuner section>

Tuning range 531 kHz to 1602 kHz (9 kHz step)
 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity 350 uV/m
Antenna Loop antenna

<LW Tuner section>

Tuning range 144 kHz to 290 kHz
Usable sensitivity 1400 uV/m
Antenna Loop antenna

<Amplifier section>

Power output Rated: 12 W +12 W (T.H.D.1 %, 6 ohms 1 kHz/DIN 45500)
 Reference: 15 W + 15 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324)
 DIN MUSIC POWER
 35 W + 35W

Total harmonic distortion 0.3 % (6 W, 1 kHz, 6 ohms, DIN AUDIO)

Inputs VIDEO/AUX: 400 mV
Outputs SPEAKERS: accept speakers of 6 ohms or more
 PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format 4 tracks, 2 channels stereo
Frequency response 50 Hz - 10000 Hz
Recording system AC bias
Heads Deck 1 : Recording/playback/erase head x 1
 Deck 2 : Playback head x 1

<Compact disc player section>

Laser Semiconductor laser ($\lambda = 780$ nm)
D-A converter 1 bit dual
Signal-to-noise ratio 90 dB (1 kHz, 0 dB)
Harmonic distortion 0.03% (1 kHz, 0 dB)
Wow and flutter Unmeasurable

<Speaker system SX-NS10>

Cabinet type 2 way, bass reflex (magnetic shielded type)
Speakers Woofer :
 120 mm($4\frac{3}{4}$ in.) cone type
 Tweeter :
 10 mm($1\frac{13}{32}$ in.) ceramic type
Impedance 6 ohms
Output sound pressure level 87 dB/W/m
Dimensions (W x H x D) 220 x 302 x 238 mm
 ($8\frac{3}{4}$ x 12 x $9\frac{3}{8}$ in.)
Weight 2.5 kg (5 lbs 8oz)

<General>

Power requirements 230 V AC, 50 Hz
Power consumption 80 W
Dimensions of main unit (W x H x D) 260 x 308 x 335 mm
 ($10\frac{1}{4}$ x $12\frac{1}{4}$ x $13\frac{1}{4}$ in.)
Weight of main unit 4.4 kg (9 lbs 11oz)

• 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 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

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

Precaution to replace Optical block (KSS – 213B)

光学ブロック (KSS-213B) 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 the clothes do not touch the diode.

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

光化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。

CAUTION

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

ATTENTION

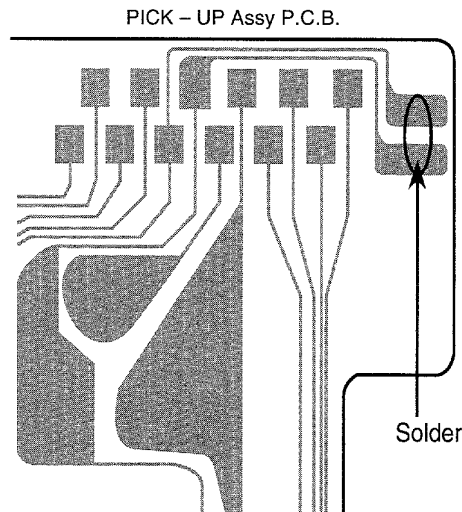
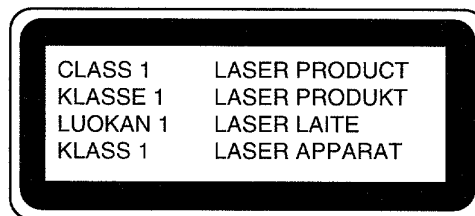
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.



ELECTRICAL MAIN PARTS LIST

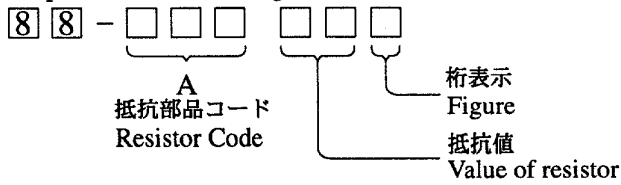
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO. | KANRI NO. | DESCRIPTION | REF. NO. | PART NO. | KANRI NO. | DESCRIPTION |
|------------|----------------|-----------|----------------------------------|----------|----------------|-----------|----------------------------------|
| IC | | | | C151 | 87-018-134-080 | | CAP,TC U 0.01-16YN<10EZ,9EZ,V,G> |
| | | | | C200 | 87-018-211-080 | | CAP,TC U 0.01-50<10EZ,9EZ,G> |
| | 86-NFZ-701-010 | -- | IC,UPD78044HGF-021-3B9<EXP 10EZ> | C201 | 87-010-545-080 | 0E | CAP,E 0.22-50 SME |
| | 86-NFZ-706-010 | IC | UPD78045HGF-017-3B9<10EZ> | C202 | 87-010-545-080 | 0E | CAP,E 0.22-50 SME |
| | 87-A20-593-010 | 1B | IC,SPS-442-1-A | C203 | 87-018-199-089 | -- | CAP,CER 3300P |
| | 87-A20-754-010 | -- | IC,BA4558N-DX | | | | |
| | 87-017-804-010 | 1B | IC,BU4052BC | C204 | 87-018-199-089 | -- | CAP,CER 3300P |
| | | | | C205 | 87-018-199-089 | -- | CAP,CER 3300P<D,HR,HS> |
| | 87-A20-312-010 | -- | IC,M62420SP | C205 | 87-018-196-080 | | CAP,CER 1500P<10EZ,9EZ,V,G> |
| | 87-A20-502-010 | IC | BU1920<10EZ> | C206 | 87-018-199-089 | -- | CAP,CER 3300P<D,HR,HS> |
| | 86-NFZ-655-010 | 1C | IC,LC72131D(Z) | C206 | 87-018-196-080 | | CAP,CER 1500P<10EZ,9EZ,V,G> |
| | 86-NFZ-654-010 | -- | IC,LA1836(Z) | | | | |
| | 87-017-914-010 | IC | BU4094<10EZ> | C207 | 87-010-545-080 | 0E | CAP,E 0.22-50 SME |
| | | | | C208 | 87-010-545-080 | 0E | CAP,E 0.22-50 SME |
| | 87-017-300-010 | IC | NJM2100L<10EZ> | C209 | 87-010-221-080 | -- | CAP,E 470-10 SME |
| | 87-002-641-010 | -- | IC,FA8124P<D> | C210 | 87-010-221-080 | -- | CAP,E 470-10 SME |
| | | | | C211 | 87-018-024-080 | | CAP,TCU 47P-50J SL<10EZ,9EZ,V,G> |
| TRANSISTOR | | | | C212 | 87-018-024-080 | | CAP,TCU 47P-50J SL<10EZ,9EZ,V,G> |
| | 89-213-702-010 | 1A | TR,2SB1370E | C213 | 87-018-104-080 | | CAP,TCU 10P-50J SL<10EZ,9EZ,V,G> |
| | 87-026-610-080 | 0E | TR,KTC3198GR | C214 | 87-018-104-080 | | CAP,TCU 10P-50J SL<10EZ,9EZ,V,G> |
| | 87-026-609-080 | 0E | TR,KTA1266GR | C219 | 87-010-544-080 | -- | CAP,E 0.1-50 SME |
| | 87-026-286-080 | 0E | TR,DTA143ES | C220 | 87-010-544-080 | -- | CAP,E 0.1-50 SME |
| | 87-026-214-080 | 0E | TR,DTA114YS | | | | |
| | | | | C221 | 87-018-134-080 | | CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G> |
| | 89-420-612-010 | -- | TR,2SD2061E | C222 | 87-018-134-080 | | CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G> |
| | 87-026-218-080 | -- | TR,DTC144ES | C225 | 87-016-586-080 | -- | CAP,E 470-25 M SSL |
| | 87-026-292-080 | -- | TR,DTA144WS | C226 | 87-010-408-089 | 0E | CAP,E 47-50 SME |
| | 89-406-555-080 | 0E | TR,2SD655E | C227 | 87-010-405-080 | 0E | CAP,E 10-50 SME |
| | 87-026-289-080 | -- | TR,DTC143XS | | | | |
| | | | | C292 | 87-018-134-080 | | CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G> |
| | 87-A30-092-080 | -- | FET,2SK439E/F | C300 | 87-018-209-080 | 0E | CAP,CER 0.1-50<D,HR,HS> |
| | 89-305-352-380 | -- | TR,2SC535(B/C) | C300 | 87-018-134-080 | | CAP,TC U 0.01-16 NY<10EZ,9EZ,G> |
| | 89-319-233-080 | 0E | TR,2SC19230<HR,D,HS> | C301 | 87-018-195-080 | -- | CAP,CER 1200P-16V |
| | 89-320-011-080 | TR | 2SC2001K<EXP D,HS> | C302 | 87-018-195-080 | -- | CAP,CER 1200P-16V |
| | 87-026-269-080 | TR | DTA114ES<EXP D> | | | | |
| | | | | C303 | 87-010-263-080 | 0E | CAP,E 100-10 SME |
| | 87-026-462-080 | TR | 2SC1740SRS<HR> | C304 | 87-010-263-080 | 0E | CAP,E 100-10 SME |
| | 87-026-463-080 | TR | 2SA933SRS<HR> | C309 | 87-010-546-080 | -- | CAP,E 0.33-50 SME |
| | 89-A30-083-080 | 0E | TR,CSD1489B | C310 | 87-010-546-080 | -- | CAP,E 0.33-50 SME |
| | 87-026-215-080 | -- | TR,DTC114YS<D,10EZ> | C311 | 87-018-130-080 | -- | CAP,TC U 820P-50 K B UP050 |
| | 87-026-219-080 | -- | TR,DTA144ES<D> | | | | |
| | 86-NFZ-658-080 | TR | 2SC2785F<EXP D,HS> | C312 | 87-018-130-080 | -- | CAP,TC U 820P-50 K B UP050 |
| | | | | C314 | 87-010-260-040 | 0E | CAP,E 47-25 SME |
| | | | | C345 | 87-018-115-080 | | CAP,TCU 47P-50J SL<10EZ,9EZ,V,G> |
| | | | | C349 | 87-018-209-080 | | CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G> |
| | | | | C351 | 87-018-195-080 | -- | CAP,CER 1200P-16V |
| DIODE | | | | | | | |
| | 87-070-178-090 | -- | DIODE,1N5402 | C352 | 87-018-195-080 | -- | CAP,CER 1200P-16V |
| | 87-070-274-080 | 0E | DIODE,1N4003 SEM | C353 | 87-010-263-080 | 0E | CAP,E 100-10 SME |
| | 87-A40-309-080 | -- | ZENER,DZ24M | C354 | 87-010-263-080 | 0E | CAP,E 100-10 SME |
| | 87-A40-291-080 | -- | DIODE,1N4148(CPT) | C360 | 87-010-370-089 | 0E | CAP,E 330-6.3 SME |
| | 87-A40-308-080 | -- | ZENER,DZ10M | C390 | 87-018-209-080 | | CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G> |
| | | | | | | | |
| | 87-A40-235-080 | -- | ZENER,MTZJ9.1C | C391 | 87-018-115-080 | | CAP,TCU 47P-50J SL<10EZ,9EZ,V,G> |
| | 87-A40-234-080 | -- | ZENER,MTZJ5.6A | C395 | 87-018-209-080 | -- | CAP,TC U 0.1-50 ZF<HS,D,HR> |
| | 87-A40-226-080 | -- | VARI-CAP,SVC251SPA<HR,HS,D> | C395 | 87-018-134-080 | | CAP,TC U 0.01-16 YN<10EZ> |
| | 87-002-843-080 | DIODE | 1SS108<10EZ> | C400 | 87-018-134-080 | | CAP,TC U 0.01-16 NY<10EZ,9EZ,G> |
| | 87-A40-304-080 | -- | ZENER,DZ6.2M | C401 | 87-010-401-080 | 0E | CAP,E 1-50 SME |
| | | | | | | | |
| | 87-020-465-080 | 0E | DIODE,1SS133 | C402 | 87-010-401-080 | 0E | CAP,E 1-50 SME |
| | 87-070-136-080 | 0E | ZENER,MTZJ5.1B | C403 | 87-018-118-080 | -- | CAP,TC U 82P-50 J B UP050 |
| | | | | C404 | 87-018-118-080 | -- | CAP,TC U 82P-50 J B UP050 |
| | | | | C452 | 87-010-385-080 | -- | CAP,E 220-25 SME |
| | | | | C458 | 87-018-131-080 | -- | CAP,CER 1000P-50V |
| MAIN C.B | | | | | | | |
| | 85-NF5-617-010 | -- | CABLE,FFC 6P-1.25<D> | C459 | 87-018-128-080 | -- | CAP,CERA-SOL SS560P |
| | 86-NFZ-785-010 | CABLE | FFC 6P-1.25<HR,10EZ> | C461 | 87-018-126-080 | -- | CAP,TC U 390P-50 K B UP050 |
| C102 | 87-A10-570-090 | -- | CAP,E 3300-25 SME | C462 | 87-018-126-080 | -- | CAP,TC U 390P-50 K B UP050 |
| C103 | 87-A10-515-090 | -- | CAP,E 2200-25 SME | C505 | 87-010-401-080 | 0E | CAP,E 1-50 SME |
| C105 | 87-018-127-080 | -- | CAP,CER 470P-50V | C506 | 87-010-401-080 | 0E | CAP,E 1-50 SME |
| | | | | | | | |
| C106 | 87-010-260-080 | 0E | CAP,E 47-25 SME | C510 | 87-010-405-080 | 0E | CAP,E 10-50 SME |
| C107 | 87-010-101-080 | 0E | CAP,E 220-16 SME | C511 | 87-010-260-040 | 0E | CAP,E 47-25 SME |
| C108 | 87-010-381-080 | 0E | CAP,E 330-16 SME | C512 | 87-010-260-040 | 0E | CAP,E 47-25 SME |
| C109 | 87-010-384-080 | 0E | CAP,E 100-25 SME | C513 | 87-010-221-080 | -- | CAP,E 470-10 SME |
| C110 | 87-010-384-080 | 0E | CAP,E 100-25 SME | C515 | 87-015-951-080 | -- | CAP,E 1-50 M LL |
| | | | | | | | |
| C111 | 87-010-247-080 | 0E | CAP,E 100-50 SME | C516 | 87-015-951-080 | -- | CAP,E 1-50 M LL |
| C112 | 87-010-263-080 | 0E | CAP,E 100-10 SME | C517 | 87-018-134-080 | | CAP,TC U 0.01-16 YN<10EZ> |
| C113 | 87-010-403-080 | 0E | CAP,E 3.3-50 SME | C518 | 87-018-134-080 | 0E | CAP,TC U 0.01-16 YN |
| C114 | 87-010-374-080 | -- | CAP,E 47-10 SME | C551 | 87-018-115-080 | | CAP,TC U 47P-50 J SL UP050<10EZ> |
| | | | | C552 | 87-018-115-080 | | CAP,TC U 47P-50 J SL UP050<10EZ> |

| REF. NO. | PART NO. | KANRI NO. | DESCRIPTION | REF. NO. | PART NO. | KANRI NO. | DESCRIPTION |
|----------|----------------|-----------|---------------------------------|----------|----------------|-----------|---------------------------------|
| C553 | 87-018-115-080 | | CAP,TCU 47P-50 J SL UP050<10EZ> | C867 | 87-018-134-080 | | CAP,TC U 0.01-16 N YU<10EZ> |
| C700 | 87-018-198-010 | | CAP,TC U 2700P-16<10EZ,9EZ,G> | C868 | 87-018-111-080 | | CAP,TCU 27P-50 J SL<10EZ> |
| C701 | 87-010-404-080 | 0E | CAP,E 4.7-50 SME | C869 | 87-018-111-080 | | CAP,TCU 27P-50 J SL<10EZ> |
| C704 | 87-018-131-080 | | CAP,CER 1000P-50V<10EZ,9EZ,V,G> | C903 | 87-010-401-080 | 0E | CAP,E 1-50 SME<HR,D,HR,HS> |
| C711 | 87-010-260-040 | 0E | CAP,E 47-25 SME | C941 | 87-018-107-080 | | CAP,TC U 18P-50 J SL UP050<HR> |
| C712 | 87-010-112-040 | 0E | CAP,E 100-16 SME | C942 | 87-018-141-080 | | CAP,TCU 3.3P-50CH<10EZ,9EZ,V,G> |
| C722 | 87-018-149-080 | -- | CAP,TC U 15P-50 J CH UP050 | C942 | 87-018-104-080 | -- | CAP,TC U 10P-50 J SL<D,HS> |
| C728 | 87-010-248-040 | 0E | CAP,E 220-10 SME | C943 | 87-018-134-080 | | CAP,TC U 0.01-16 N Y<HR> |
| C730 | 87-018-134-080 | | CAP,TC U 0.01-16 YN<10EZ> | C944 | 87-014-051-010 | | CAP PP 560P-100 J<HR> |
| C733 | 87-018-148-080 | -- | CAP,TC U 12P-50 J CH UP050 | C945 | 87-018-134-080 | | CAP,TC U 0.01-16 N Y<HR> |
| C741 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D,10EZ,9EZ,V,G> | C946 | 87-010-401-080 | | CAP,E 1-50 SME<10EZ,9EZ,V,G> |
| C741 | 87-010-546-080 | | CAP,E 0.33-50 SME<HR,HS> | C949 | 87-014-049-080 | | CAP PP 470P-100 J<10EZ,9EZ,V,G> |
| C742 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D,10EZ,9EZ,V,G> | C950 | 87-014-073-010 | | CAP PP 4700P-100 J<HR> |
| C742 | 87-010-546-080 | | CAP,E 0.33-50 SME<HR,HS> | C952 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> |
| C743 | 87-010-404-080 | 0E | CAP,E 4.7-50 SME<D> | C953 | 87-018-134-080 | | CAP,TC U 0.01-16 N Y<HR> |
| C744 | 87-010-260-080 | 0E | CAP,E 47-25 SME<D> | C954 | 87-010-400-080 | | CAP,E 0.47-50 SME<HR> |
| C745 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D> | C955 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> |
| C746 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D> | C956 | 87-010-263-080 | | CAP,E 100-10 SME<HR> |
| C747 | 87-018-134-080 | | CAP,TC U 0.01-16 N YU<D> | C957 | 87-018-104-080 | | CAP,TCU 10P-50 J SL<10EZ> |
| C748 | 87-018-205-080 | -- | CAP,CERA-SOL SS 0.022<D> | C958 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> |
| C749 | 87-010-248-040 | 0E | CAP,E 220-10 SME<D> | C960 | 87-018-209-080 | | CAP,TC U 0.1-50ZF<10EZ,9EZ,V,G> |
| C752 | 87-018-107-080 | -- | CAP,TC U 18P-50 SL UP050<D> | C980 | 87-018-134-080 | | CAP,TC U 0.01-16 NY<10EZ,9EZ,G> |
| C753 | 87-010-402-080 | 0E | CAP,E 2.2-50 SME<D> | C999 | 87-018-209-080 | | CAP,TC U 0.1-50 ZF UP050<HR> |
| C754 | 87-018-147-080 | -- | CAP,TC U 10P-50 J CH UP050<D> | CF801 | 87-008-423-080 | | FLTR,SPF10.7MS3-10EZ,9EZ,G> |
| C755 | 87-010-402-080 | 0E | CAP,E 2.2-50 SME<D> | CF801 | 87-008-261-010 | 1A | FLTR,CFSF10.7MA5<D,HR,HS,V> |
| C760 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D> | CF802 | 82-785-747-080 | | CF,MS2 6HY,R<10EZ,9EZ,G> |
| C761 | 87-010-401-080 | 0E | CAP,E 1-50 SME<D> | CF802 | 87-008-261-010 | | FLTR,CFSF10.7MA5<V> |
| C771 | 87-010-405-040 | 0E | CAP,E 10-50 SME | CON351 | 85-CF5-660-010 | -- | CONN ASSY,8P-RPB |
| C773 | 87-018-208-080 | -- | CAP,0.047-50F | FFE801 | A8-6ZA-195-030 | | 6ZA-1 YFEENM<10EZ,9EZ,G> |
| C774 | 87-010-263-080 | 0E | CAP,E 100-10 SME | FFE801 | A8-6ZA-197-030 | | 6ZA-1 YFEVNM<V> |
| C775 | 87-010-405-040 | 0E | CAP,E 10-50 SME | J201 | 87-A60-024-010 | 1B | JACK,DIA 6.3 BLK W/WS KM |
| C777 | 87-010-400-089 | 0E | CAP,E 0.47-50 SME | J202 | 87-A60-238-010 | 1A | TERMINAL,SP 4P (MSC) |
| C778 | 87-010-401-080 | 0E | CAP,E 1-50 SME | J203 | 87-A60-354-010 | -- | JACK,PIN 2P |
| C779 | 87-010-401-080 | 0E | CAP,E 1-50 SME | J801 | 87-033-235-010 | | TERMINAL,ANT 4P CJ-9028<HR> |
| C781 | 87-010-402-080 | 0E | CAP,E 2.2-50 SME<D> | J802 | 87-033-241-010 | | TERMINAL,ANT 2P<10EZ,9EZ,G> |
| C782 | 87-010-402-080 | 0E | CAP,E 2.2-50 SME<D> | L201 | 87-005-366-010 | | COIL,1uH K<10EZ,9EZ,V,G> |
| C783 | 87-018-208-080 | -- | CAP,0.047-50F<D> | L202 | 87-005-366-010 | | COIL,1uH K<10EZ,9EZ,V,G> |
| C784 | 87-018-208-080 | -- | CAP,0.047-50F<D> | L451 | 87-007-342-010 | 0E | COIL,OSC 85KHZ |
| C791 | 87-010-401-080 | 0E | CAP,E 1-50 SME | L741 | 87-A50-015-010 | -- | COIL,FM DET (TOK) |
| C792 | 87-018-196-080 | -- | CAP,CER 1500P-16V<D,HR,HS,V> | L742 | 87-A90-245-010 | | FLTR,CFAZH-450(TOK)<EXP HR,D> |
| C794 | 87-010-260-080 | 0E | CAP,E 47-25 SME | L742 | 87-A90-052-010 | | FLTR,CFMT-450A(TOK)<HR> |
| C795 | 87-018-208-080 | | CAP,0.047-50F<10EZ,9EZ,V,G> | L742 | 87-A90-053-010 | -- | FLTR,PCFMT-060(TOK)<D> |
| C796 | 87-010-403-080 | 0E | CAP,E 3.3-50 SME | L801 | 87-A50-110-010 | | COIL,FM BPF EX<HR,HS> |
| C799 | 87-010-405-040 | 0E | CAP,E 10-50 SME | L801 | 87-A50-152-010 | -- | COIL,FM BPF D<D> |
| C801 | 87-018-102-089 | -- | CAP,TC U 6.8P-50K SL<D,HR,HS> | L802 | 87-006-244-010 | -- | COIL,RF FM 3-1/2T L4<D,HR,HS> |
| C806 | 87-018-101-089 | -- | CAP,TC U 5.6P-50K SL<D,HR,HS> | L803 | 87-006-246-010 | | COIL,RF FM 3-1/2T L4<HR,HS> |
| C807 | 87-018-102-089 | -- | CAP,TC U 6.8P-50K SL<D,HR,HS> | L803 | 87-A50-154-010 | -- | COIL,RF FM 3-3/4T D<D> |
| C808 | 87-018-098-080 | -- | CAP,TC U 3.3P-50K SL<D,HR,HS> | L804 | 86-NFZ-694-010 | -- | COIL,2.2uH K CECS<D,HR,HS> |
| C809 | 87-018-119-080 | -- | CAP,TC U 100P-50K B<D,HR,HS> | L805 | 87-A50-111-110 | | COIL,FM OSC EX<HR,HS> |
| C811 | 87-018-107-080 | | CAP,TC U 18P-50 J SL<HR,HS> | L805 | 87-A50-153-010 | -- | COIL,FM OSC D<D> |
| C811 | 87-018-103-080 | -- | CAP,CER 8.2P-50V<D> | L806 | 86-ZA1-604-110 | -- | IFT,FM IFT7-6.2<D,HR,HS> |
| C815 | 87-018-134-080 | 0E | CAP,TCU 0.01-16NY<HR,D,10EZ,HS> | L807 | 86-NFZ-694-010 | -- | COIL,2.2uH K CECS<D,HR,HS> |
| C820 | 87-010-260-080 | | CAP,E 47-25 SME<10EZ,9EZ,V,G> | L832 | 87-005-847-080 | | COIL,2.2uH K CECS<10EZ,9EZ,V,G> |
| C821 | 87-018-105-080 | -- | CAP,TC U 12P-50 J SL<D,HR,HS> | L850 | 87-005-847-080 | | COIL,2.2uH K CECS<10EZ> |
| C821 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> | L901 | 86-NF4-666-010 | | COIL,AM PACK 3 (TOK)<HR> |
| C822 | 87-018-111-080 | -- | CAP,CERA-SOL 27P<D,HR,HS> | L901 | 86-NFZ-634-110 | -- | COIL,AM PACK 4 (TOK)<D,HS> |
| C823 | 87-018-111-080 | -- | CAP,CERA-SOL 27P<D,HR,HS> | L941 | 87-A50-020-010 | | COIL,ANT LW<10EZ,9EZ,V,G> |
| C823 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> | L941 | 87-A50-022-010 | | COIL,ANT SW<HR> |
| C824 | 87-018-109-080 | | CAP,TCU 22P-50J SL UP050<HR,HS> | L942 | 87-A50-019-010 | | COIL,OSC LW<10EZ,9EZ,V,G> |
| C824 | 87-018-100-080 | -- | CAP,CER 4.7P-50V<D> | L942 | 87-A50-021-010 | | COIL,OSC SW<HR> |
| C825 | 87-018-209-080 | | CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G> | L943 | 87-005-372-080 | | COIL,1mH K LAL03<HR> |
| C849 | 87-018-134-080 | | CAP,TCU 0.01-16NY<10EZ,9EZ,V,G> | L944 | 87-003-131-080 | | COIL,10mH J EL0607<HR> |
| C851 | 87-018-131-080 | | CAP,TCU 1000P-50B<10EZ,9EZ,V,G> | L981 | 86-NF4-665-010 | | COIL,AM PACK1<10EZ,9EZ,V,G> |
| C852 | 87-018-131-080 | | CAP,TCU 1000P-50K<10EZ,9EZ,V,G> | PR401 | 87-A90-246-080 | | PROTECTOR 0.25A 60V<EXP D> |
| C861 | 87-018-131-080 | | CAP,TCU 1000P-50K<10EZ> | PR401 | 87-035-515-080 | -- | PROTECTOR 0.25A 125V<D> |
| C862 | 87-010-132-080 | | CAP,TCU 2200P-16N X UP050<10EZ> | R245 | 87-022-050-080 | -- | RES,M/F 0.22-1W J |
| C863 | 87-018-127-080 | | CAP,TCU 470P-50 K B UP050<10EZ> | R246 | 87-022-050-080 | -- | RES,M/F 0.22-1W J |
| C864 | 87-010-405-040 | | CAP,E 10-50 SME<10EZ> | SFR451 | 87-A90-557-080 | -- | SFR,33K H HOKU |
| C865 | 87-018-209-080 | | CAP,TC U 0.1-50 ZF UP050<10EZ> | SFR452 | 87-A90-557-080 | -- | SFR,33K H HOKU |
| C866 | 87-010-405-040 | | CAP,E 10-50 SME<10EZ> | SFR722 | 87-A90-500-080 | -- | SFR,10K H NV26TLTA |

○チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

| 容量 Wattage | 種類 Type | 許容誤差 Tolerance | 記号 Symbol | 寸法/Dimensions (mm) | | | 抵抗コード : A 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



E C B

2SC1923
2SC535
KTC3198
KTA1266



E C B

2SD655E
CSD1489B
2SC2001



E C B

DTA114YS DTC114YS
DTA144WS DTA144ES
DTC143XS 2SC2785
DTC144ES 2SA933
DTA143ES 2SC1740
DTA114ES



B C E

2SB1370
2SD2061

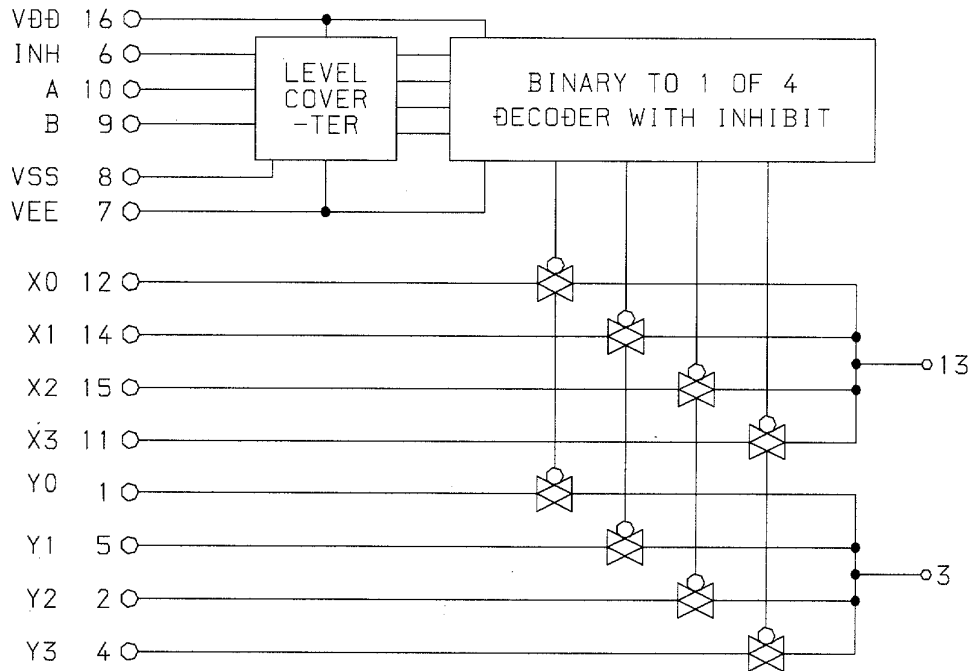


G S D

2SK439

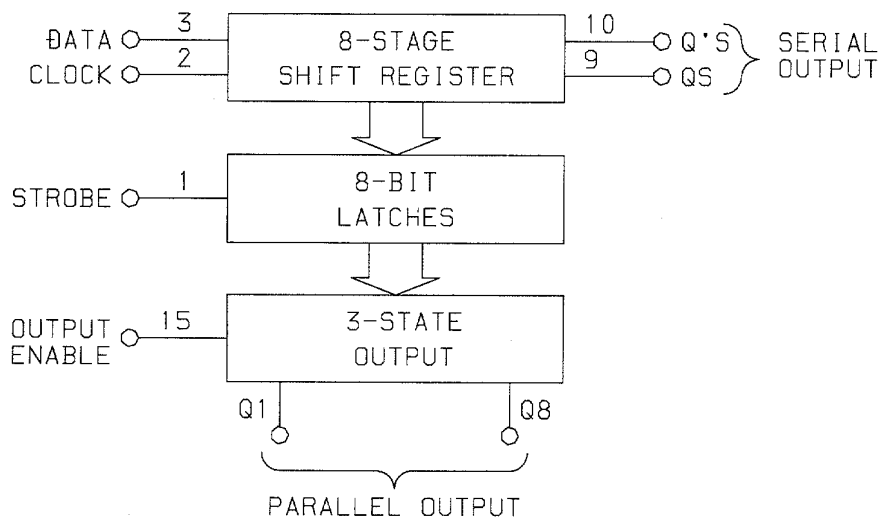
IC BLOCK DIAGRAM - 1

IC, BU4052BC

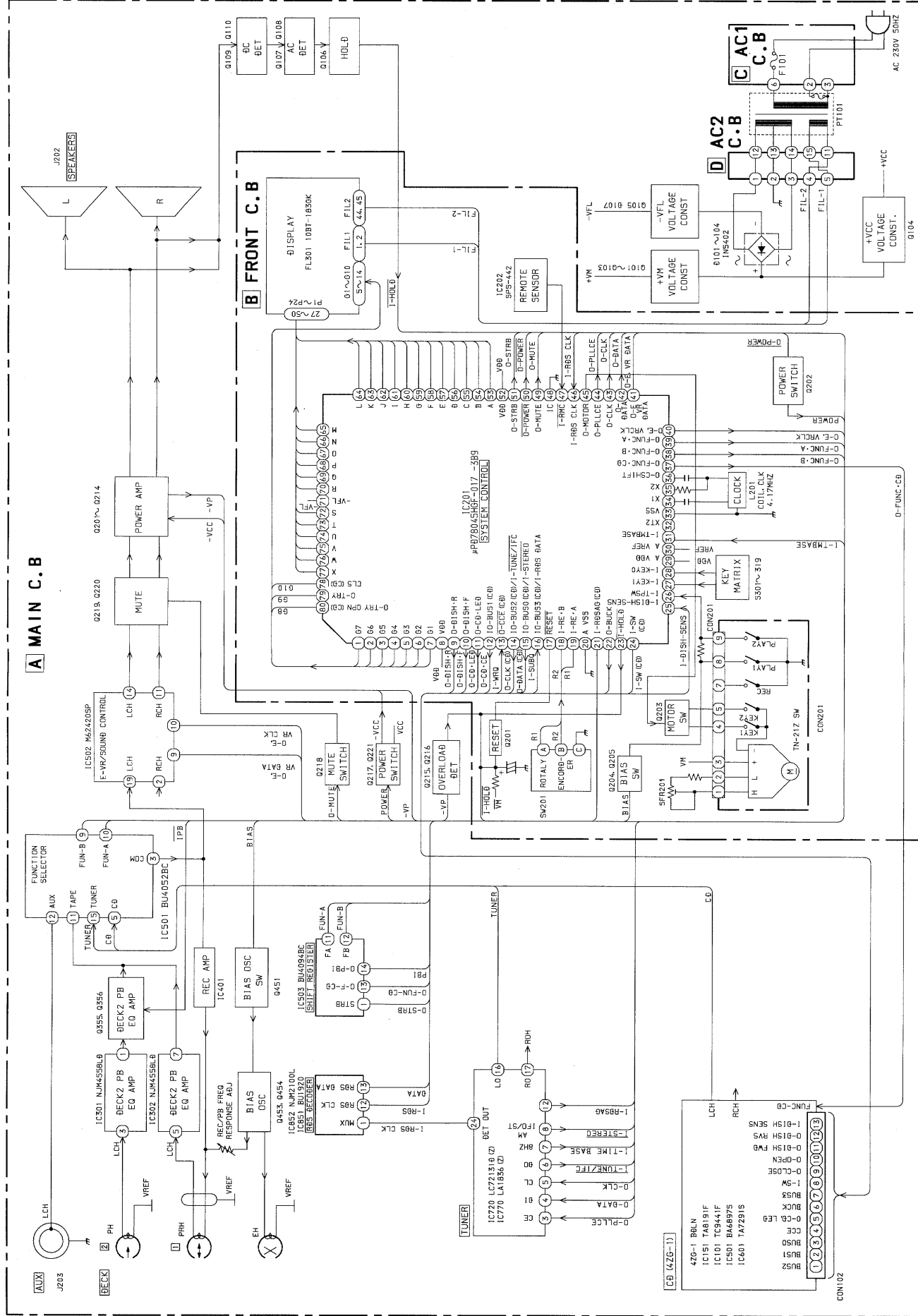


TRUTH TABLE

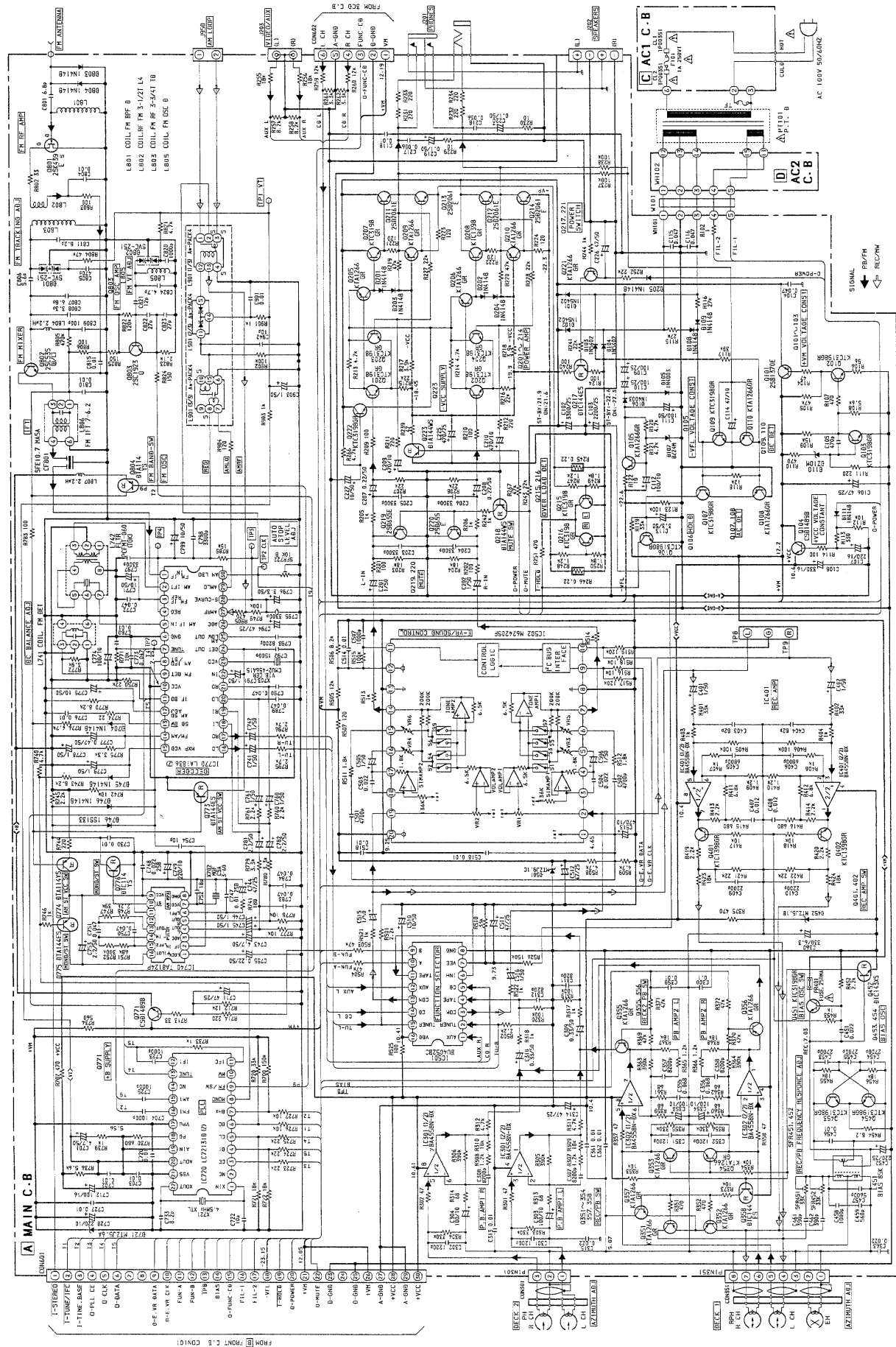
| INHIBIT | A | B | ON SWITCH |
|---------|---|---|-----------|
| L | L | L | X0 Y0 |
| L | H | L | X1 Y1 |
| L | L | H | X2 Y2 |
| L | H | H | X3 Y3 |
| H | X | X | NONE |

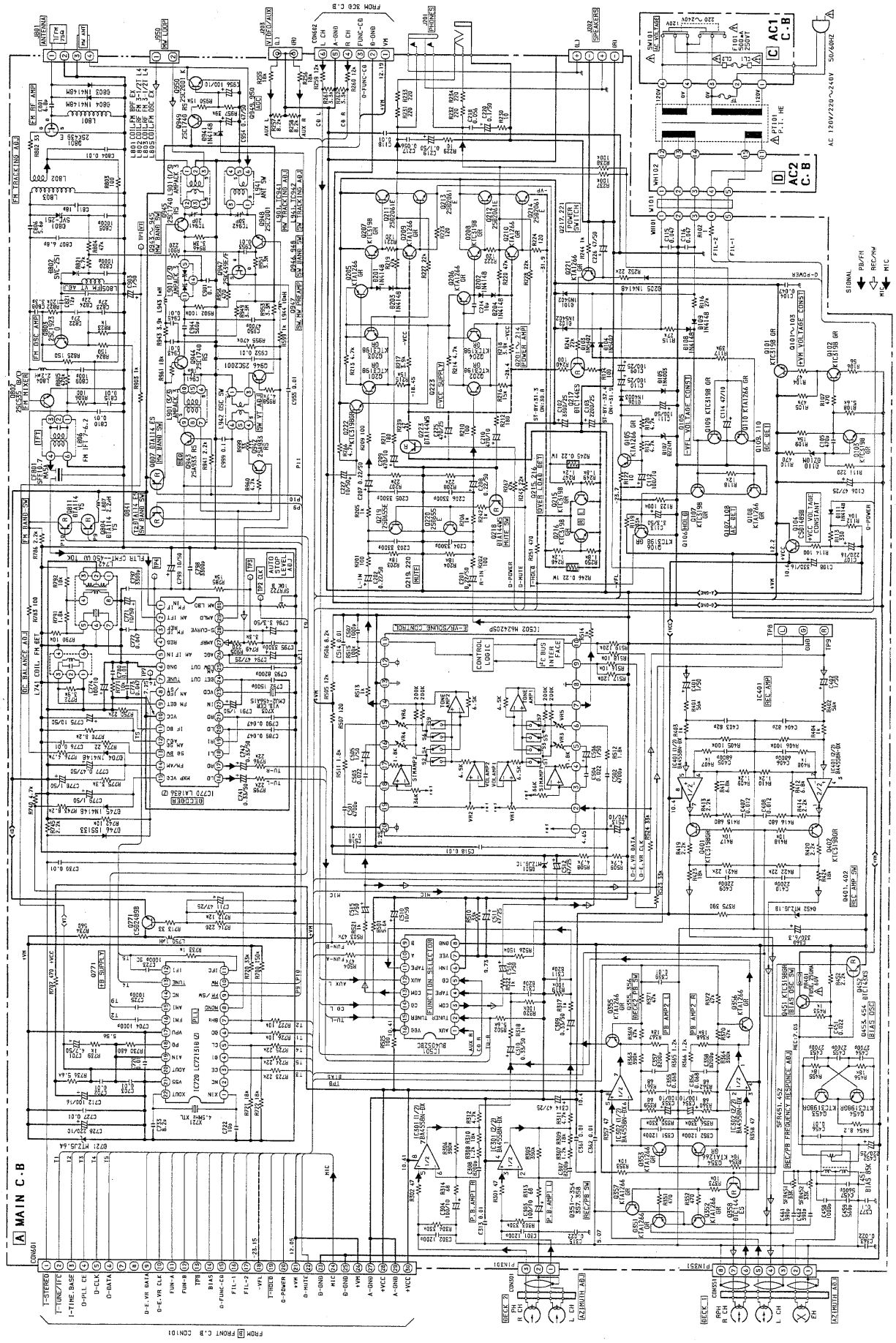


BLOCK DIAGRAM - 2 (MAIN / FRONT : 10EZ)



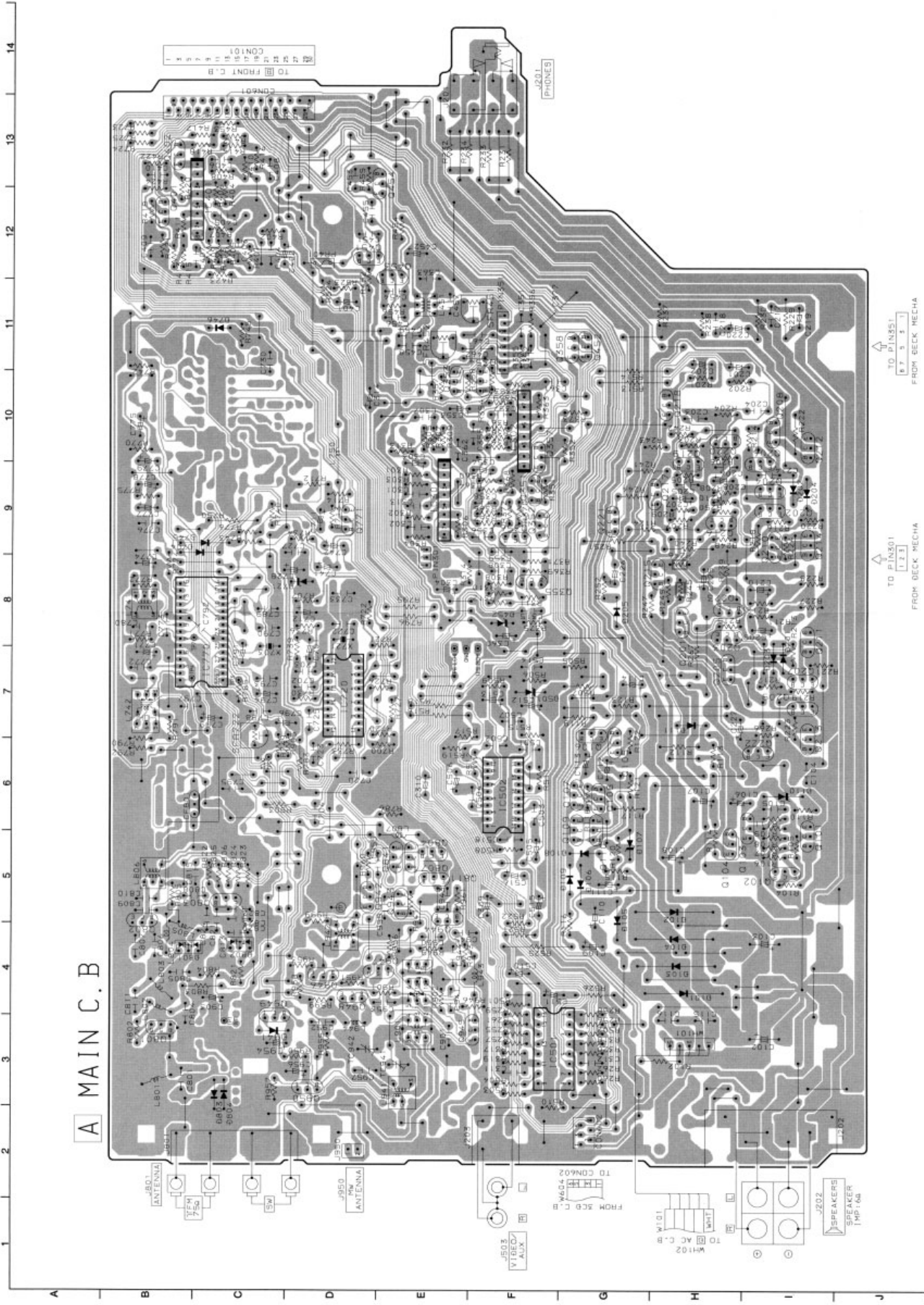
SCHEMATIC DIAGRAM - 1 (MAIN : D)





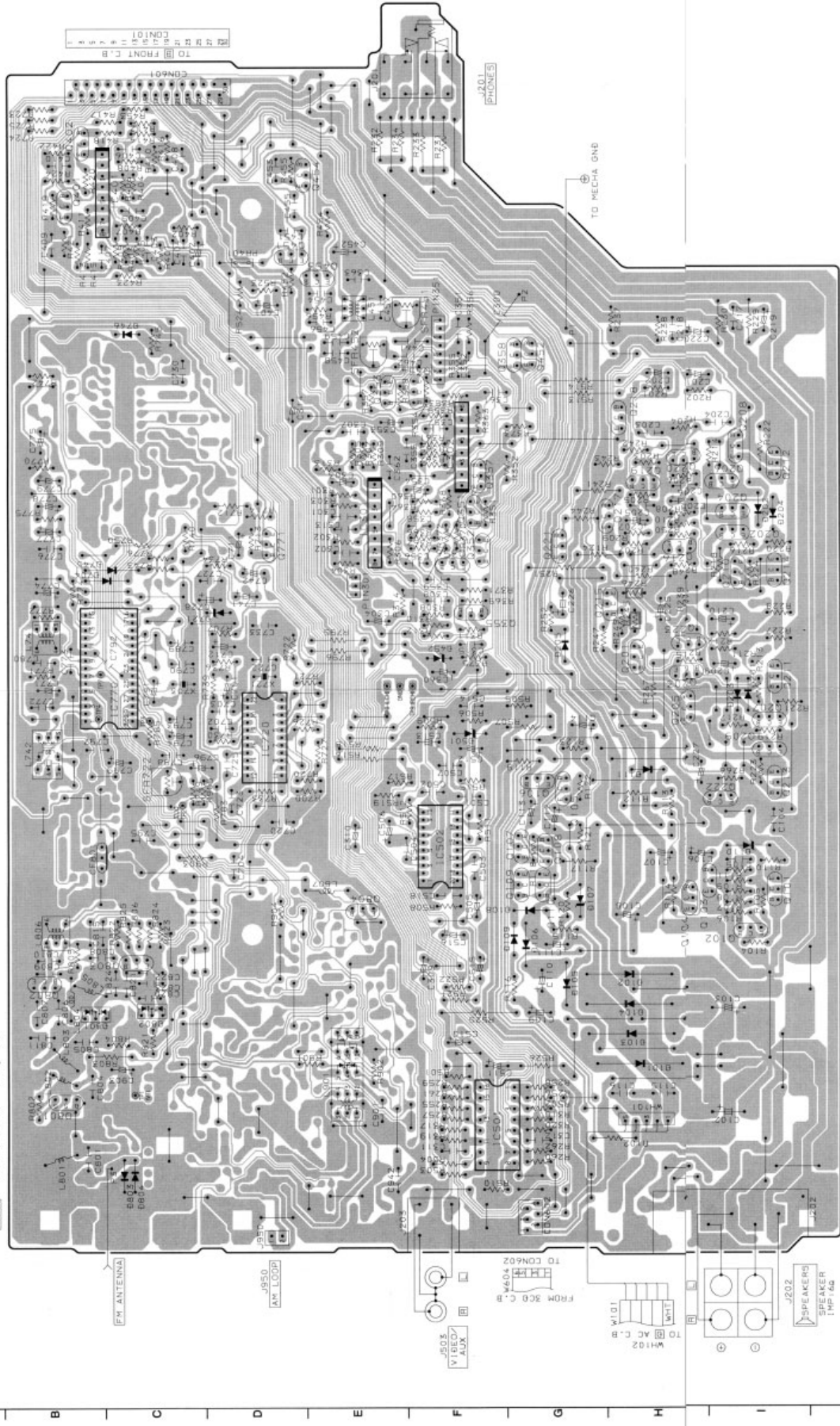
A MAIN C-B

WIRING - 2 (MAIN : HR)



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

A MAIN C. B



J505 VIDEO AUX

J950 AM LOOP

J201 PHONE

J202 SPEAKERS

J203 SPEAKER INPUT

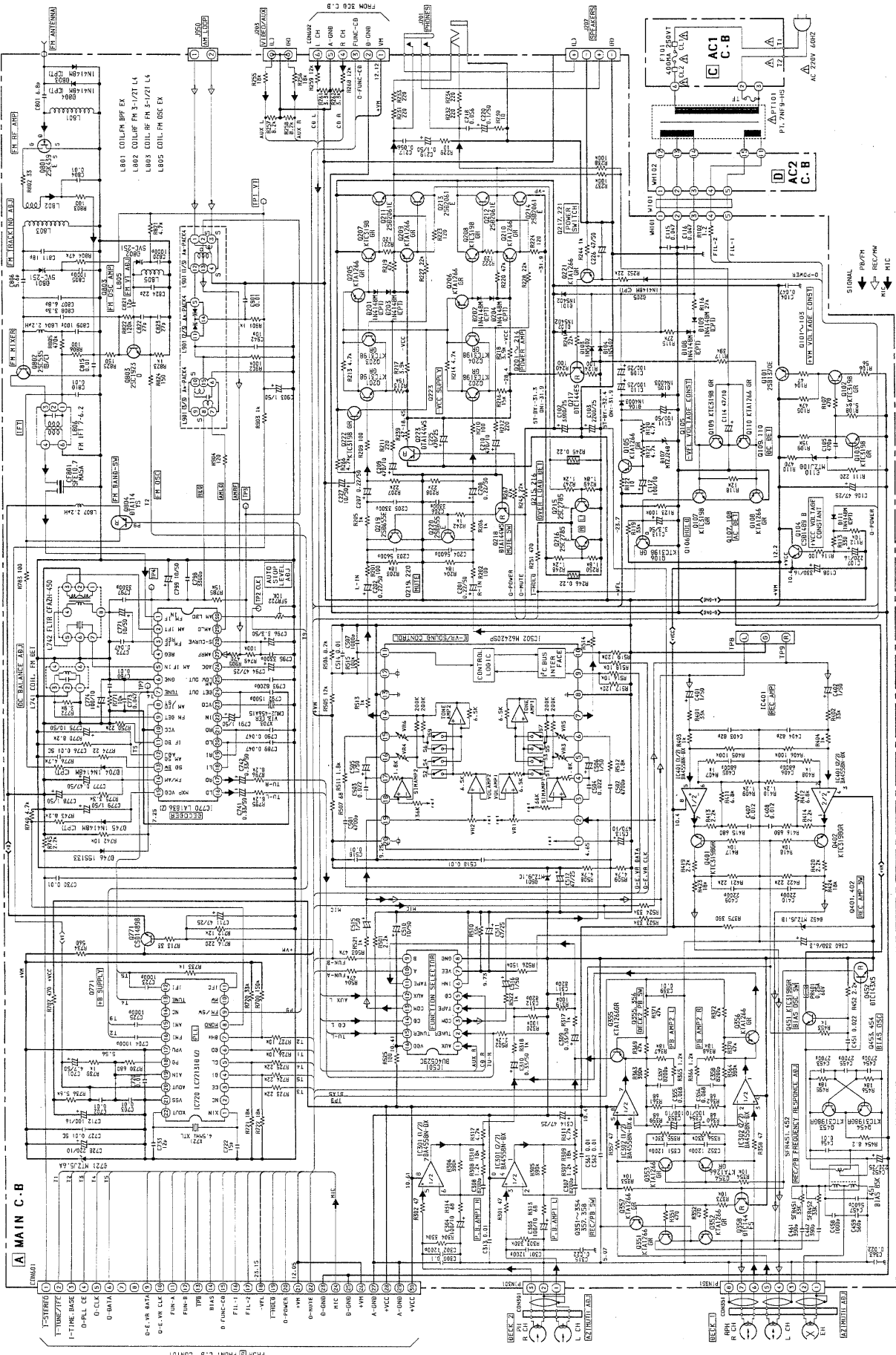
TO FRONT C. B

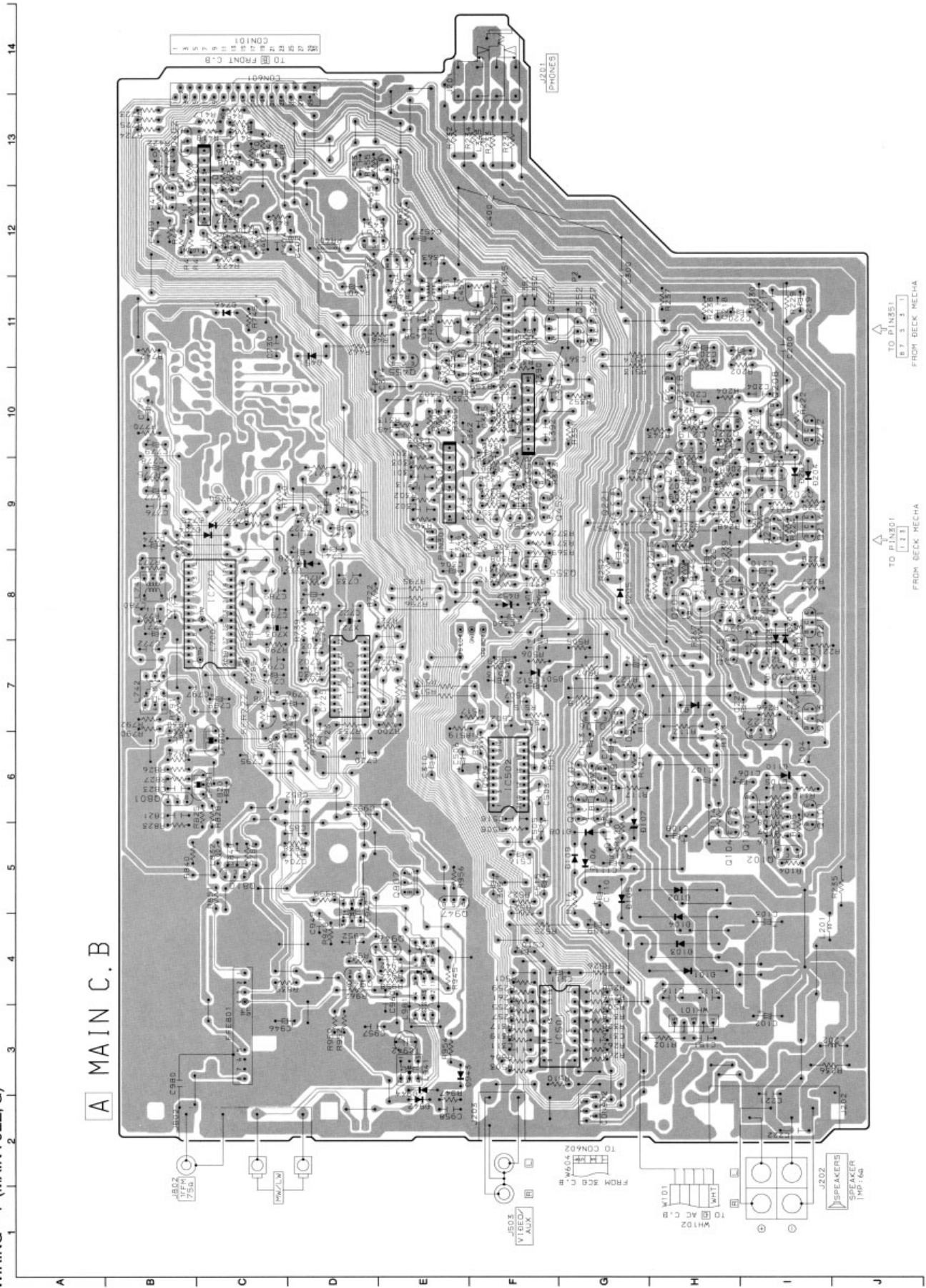
TO MECHA GND

TO PINS1 (1 2 3) FROM BECK MECHA

TO PINS1 (2 3 3) FROM BECK MECHA

SCHEMATIC DIAGRAM -- 3 (MAIN : HS)





A MAIN C.B.

TO PINS 1
8 7 3 3

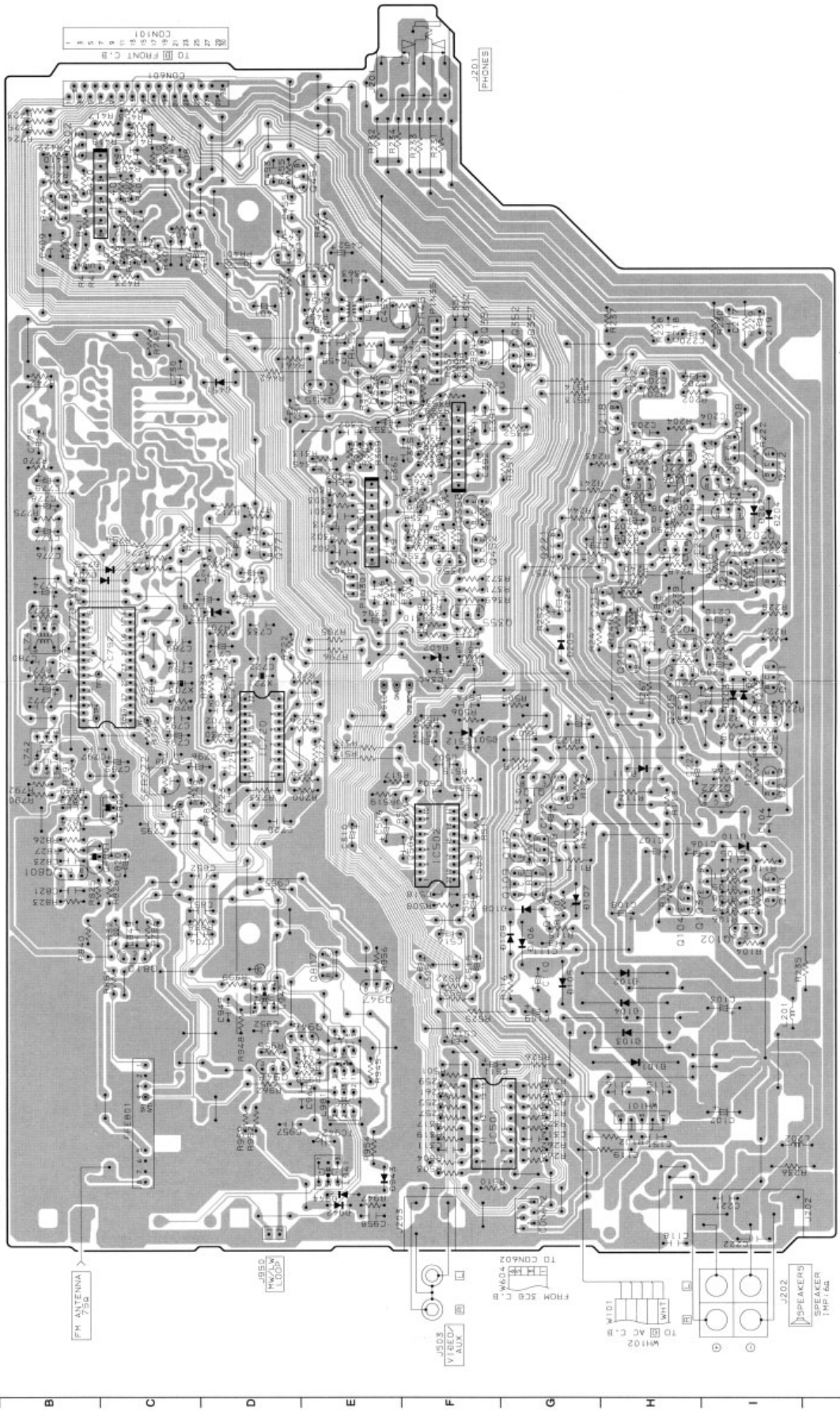
TO PINS 1
1 1 1

FROM BECK MECHA

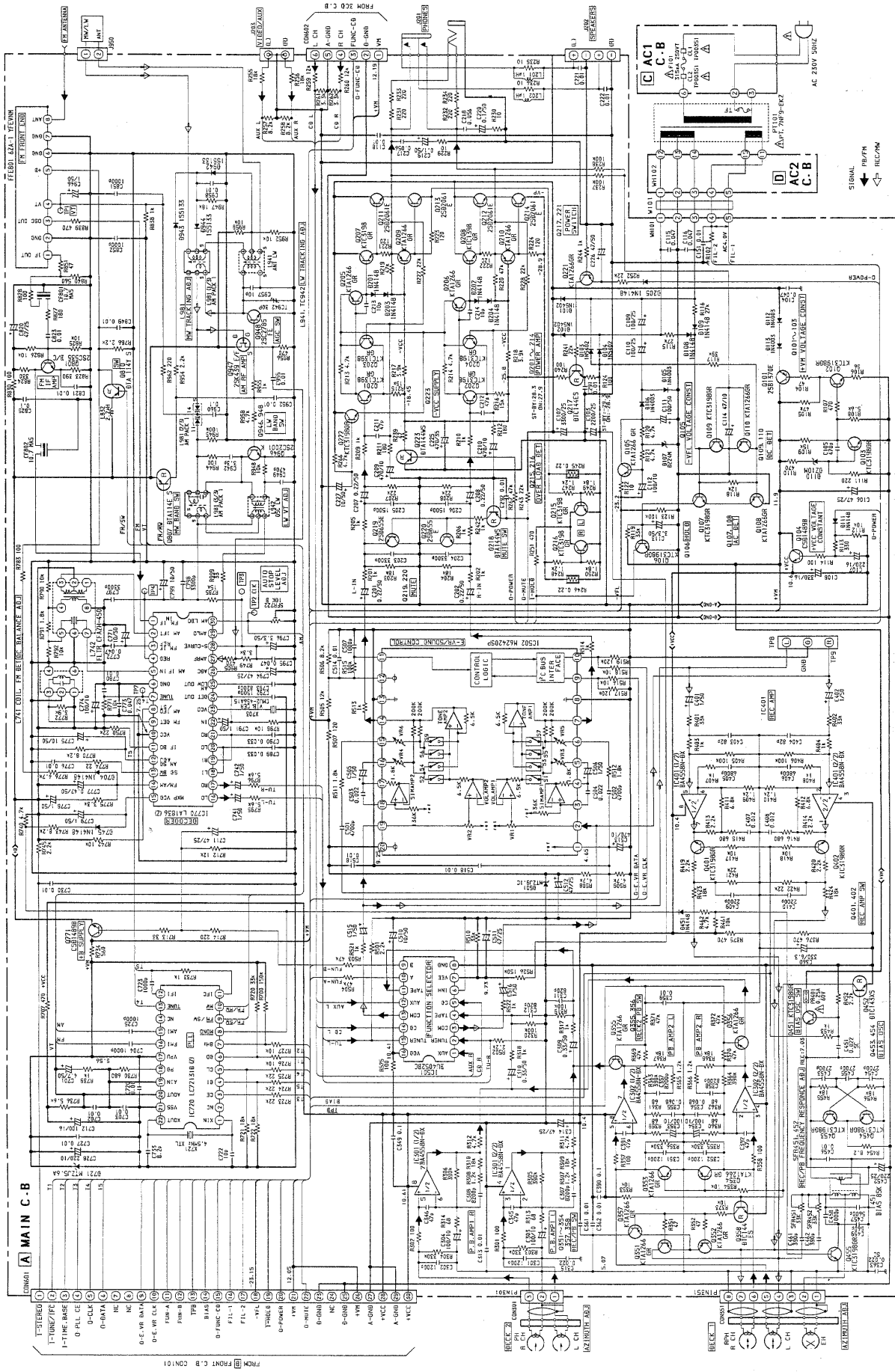
FROM BECK MECHA

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

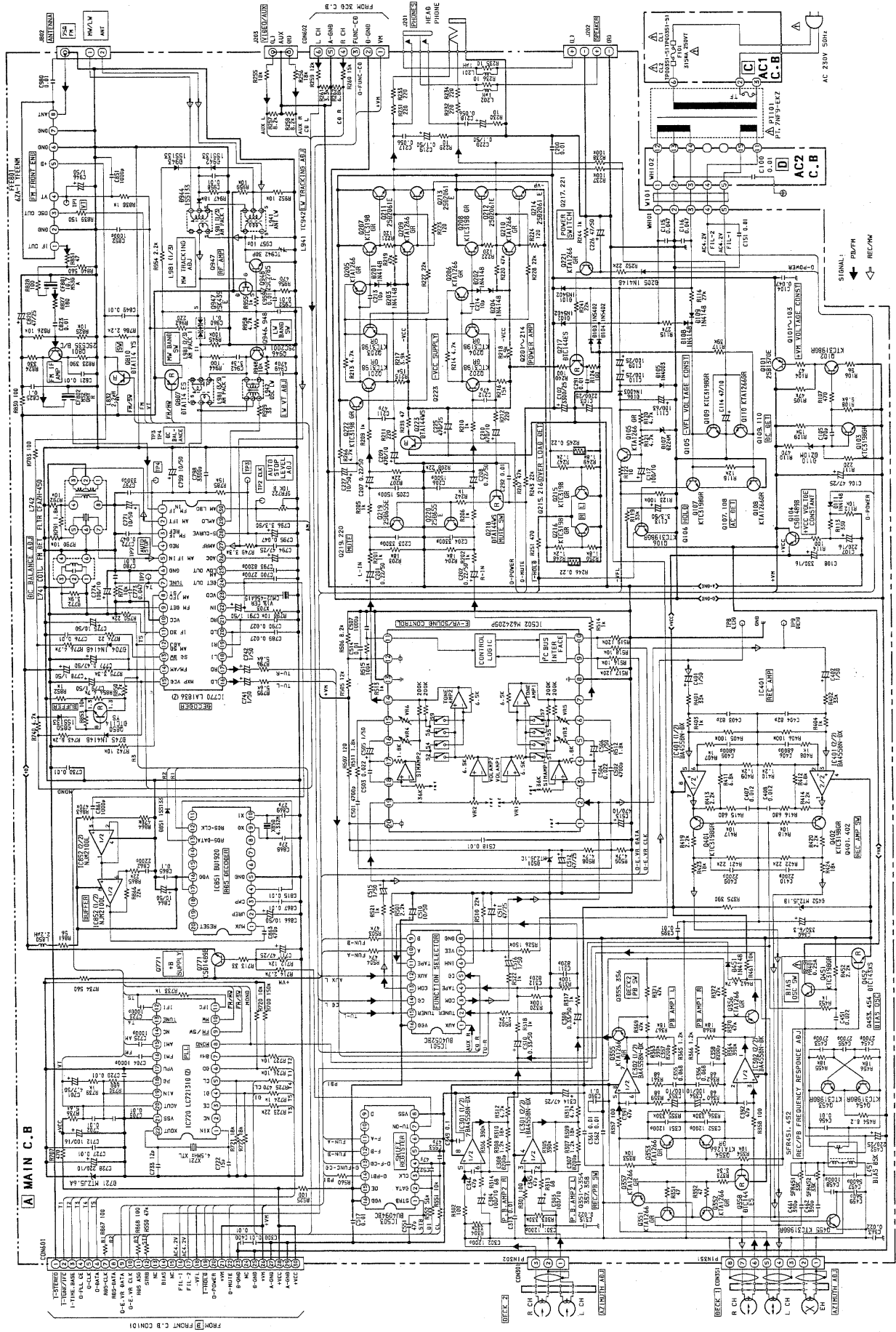
A MAIN C. B



SCHEMATIC DIAGRAM - 5 (MAIN : V)



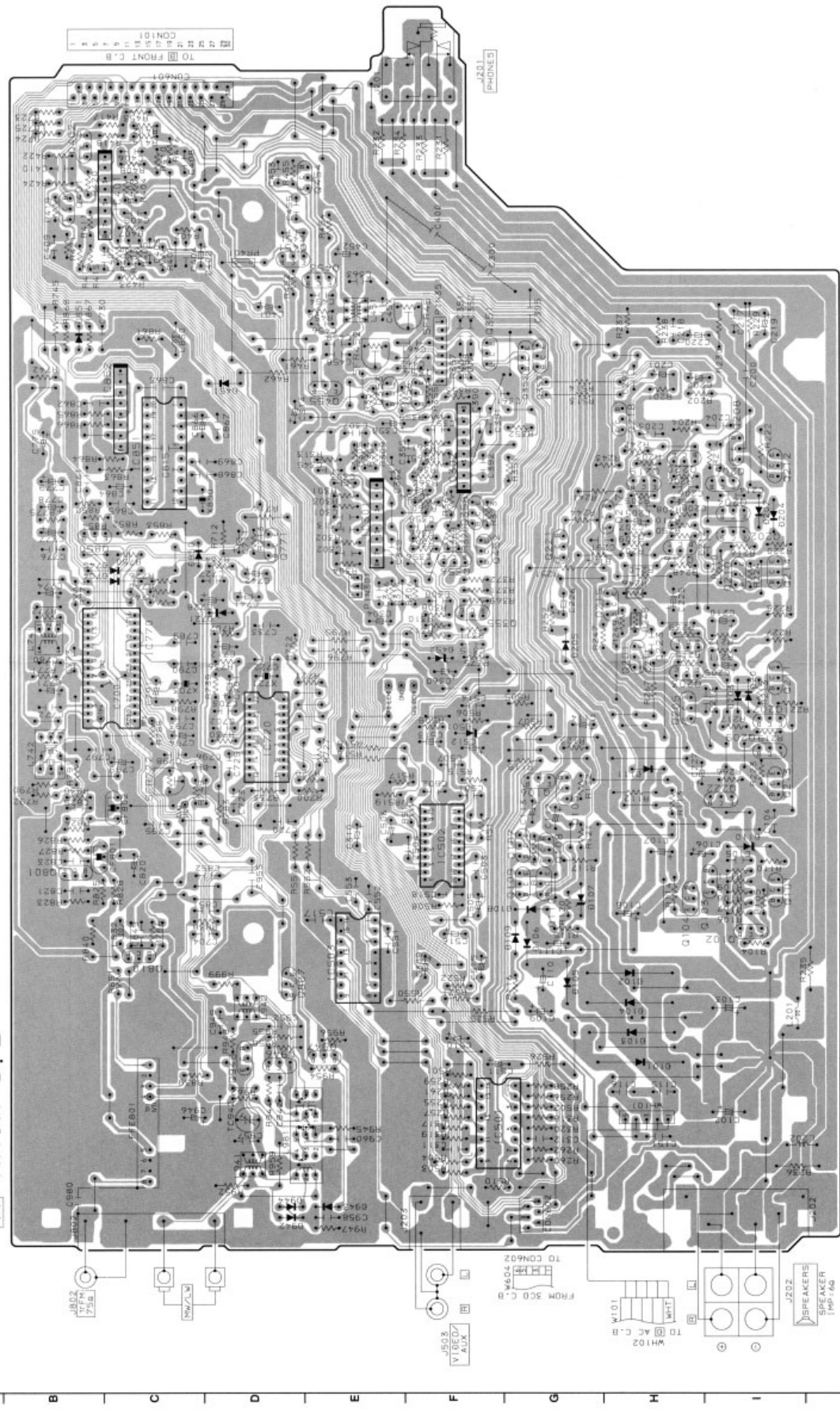
SCHEMATIC DIAGRAM - 6 (MAIN : 10EZ)



WIRING - 6 (MAIN : 10EZ)

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

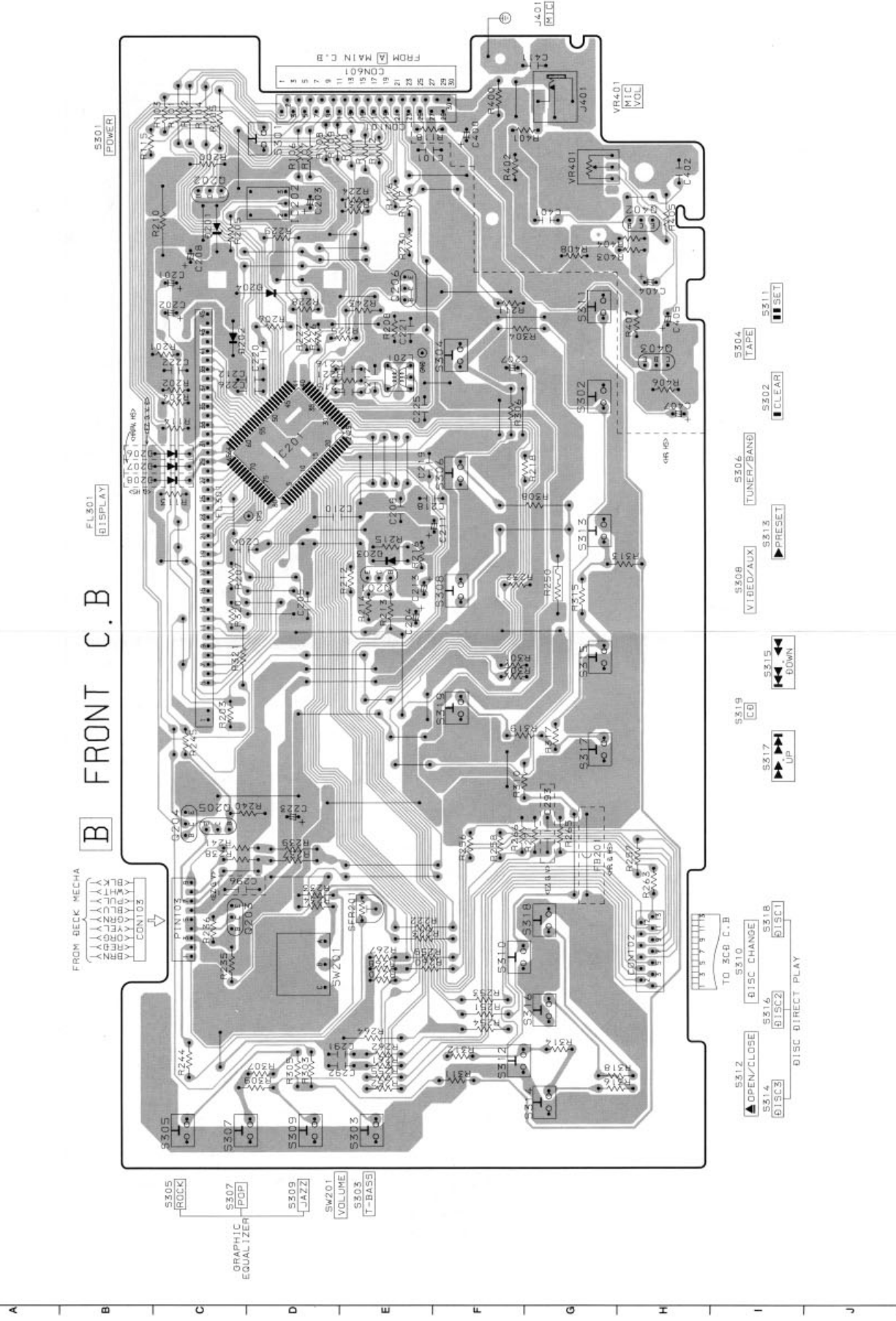
A MAIN C.B



TO PINS01
87 88 89
FROM BECK MECHA

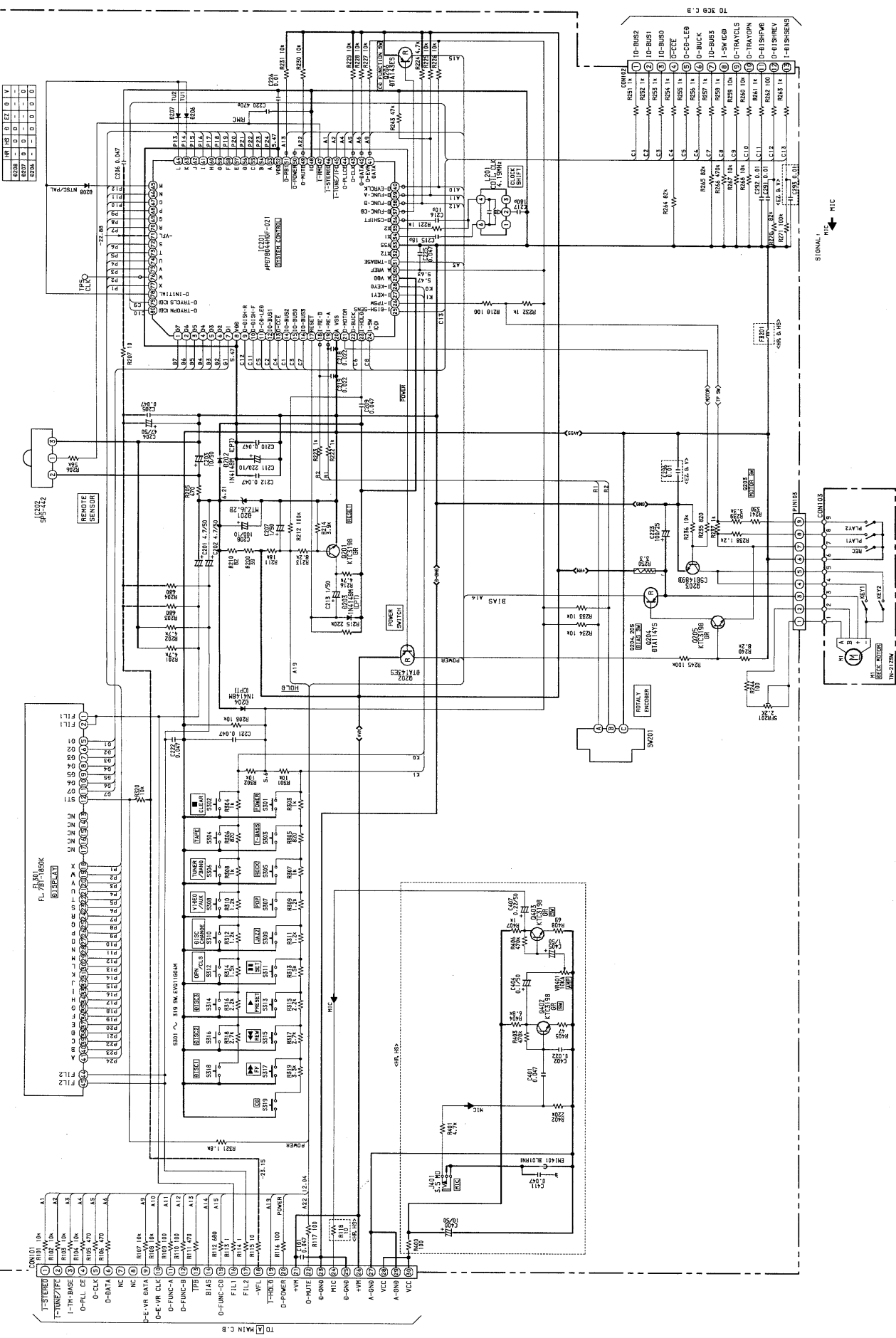
TO PINS01
123
FROM BECK MECHA

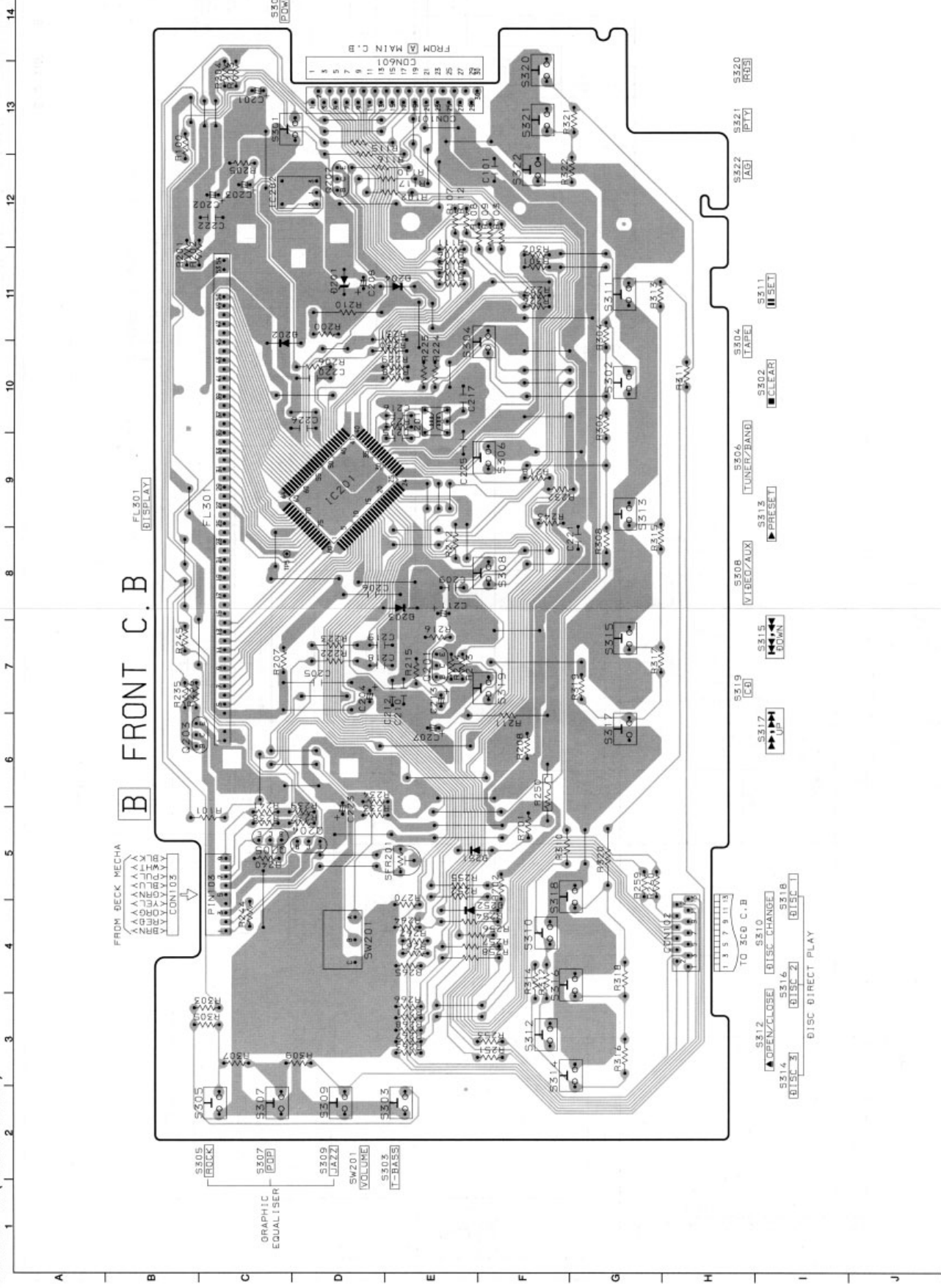
A 1 2 3 4 5 6 7 8 9 10 11 12 13 14



SCHEMATIC DIAGRAM - 7 (FRONT : EXCEPT 10EZ)

FRONT C.B





B FRONT C.B

FROM DECK MECHA
CONT103
1 A A A A A A A
2 G G G G G G G
3 C C C C C C C
4 B B B B B B B
5 V V V V V V V

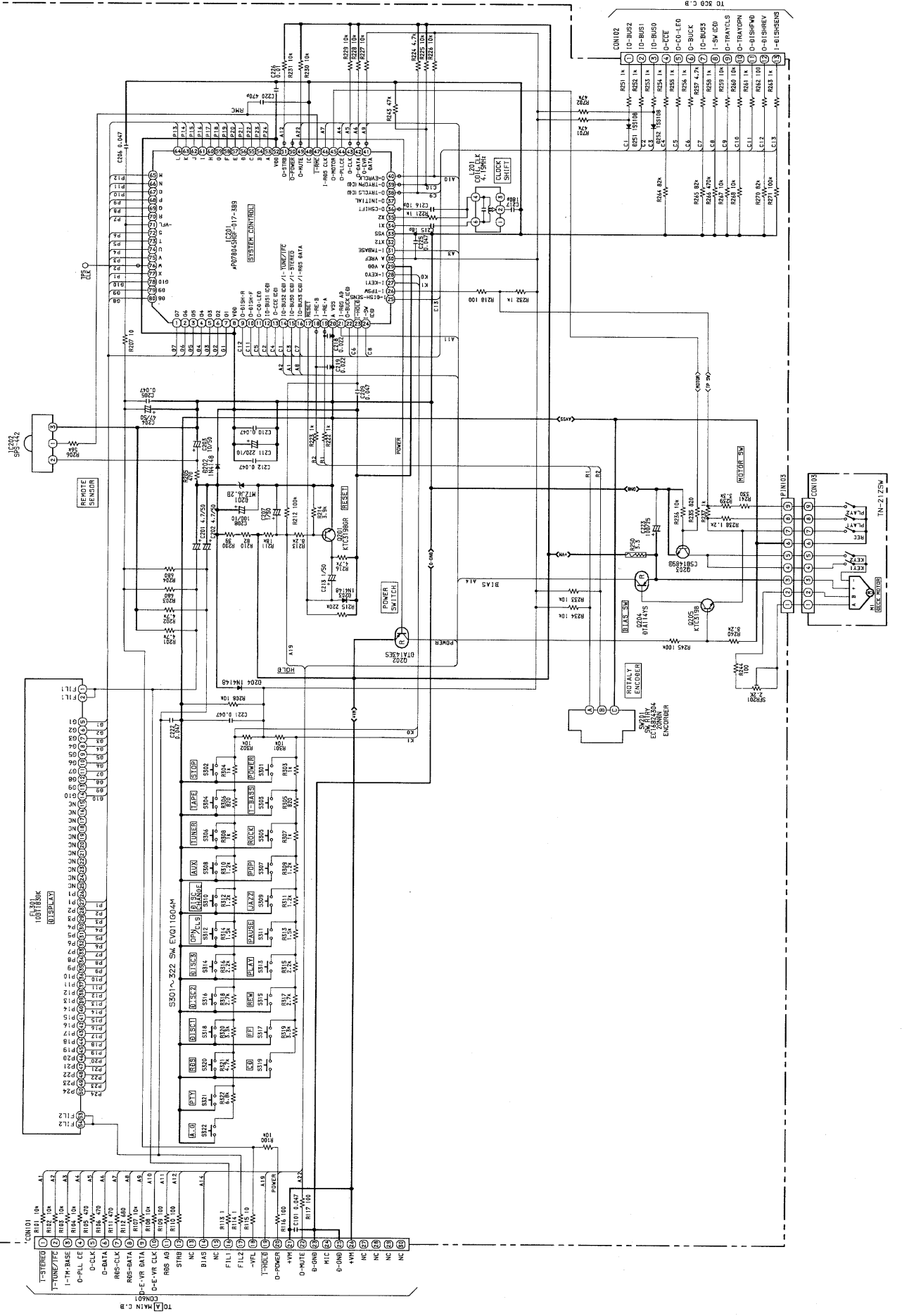
FROM MAIN C.B
CON601
1
2
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6
7
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11
12
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S305 [RECK]
S307 [POP]
S309 [JAZZ]
SW201 [VOLUME]
S303 [T-RASS]
S312 [▲ OPEN/CLOSE]
S310 [DISC CHANGE]
S314 [DISC 3]
S316 [DISC 2]
S318 [DISC 1]
S319 [DISC DIRECT PLAY]

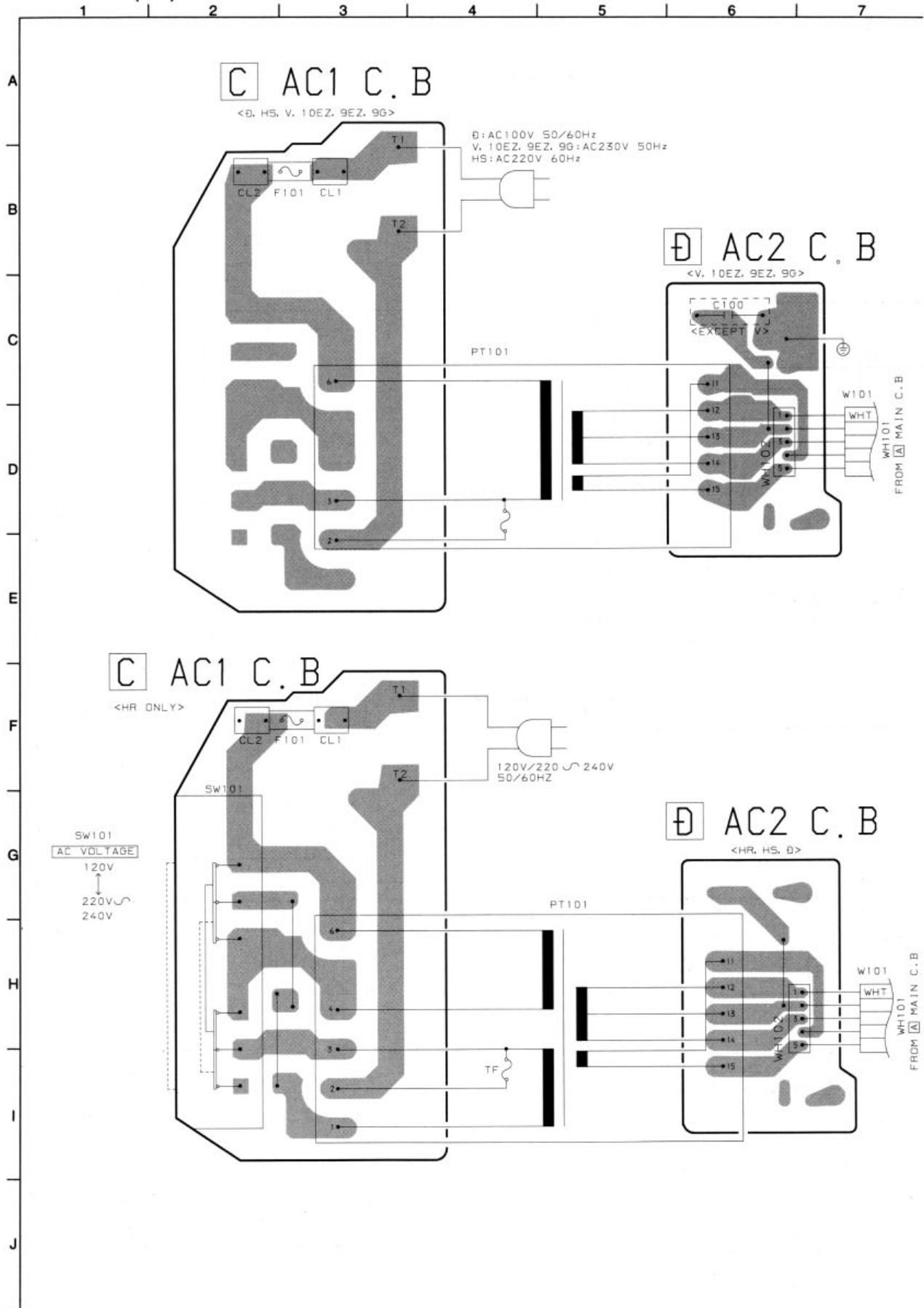
S317 [▶▶▶ UP]
S319 [CB]
S315 [◀◀◀ DOWN]
S313 [▶ PRESET]
S306 [TUNER/BAND]
S302 [■ CLEAR]
S304 [TAGE]
S322 [AB]
S321 [PTY]
S320 [RES]
S315 [S315]
S316 [S316]
S317 [S317]
S318 [S318]
S319 [S319]
S320 [S320]
S321 [S321]
S322 [S322]

SCHEMATIC DIAGRAM - 8 (FRONT : 10EZ)

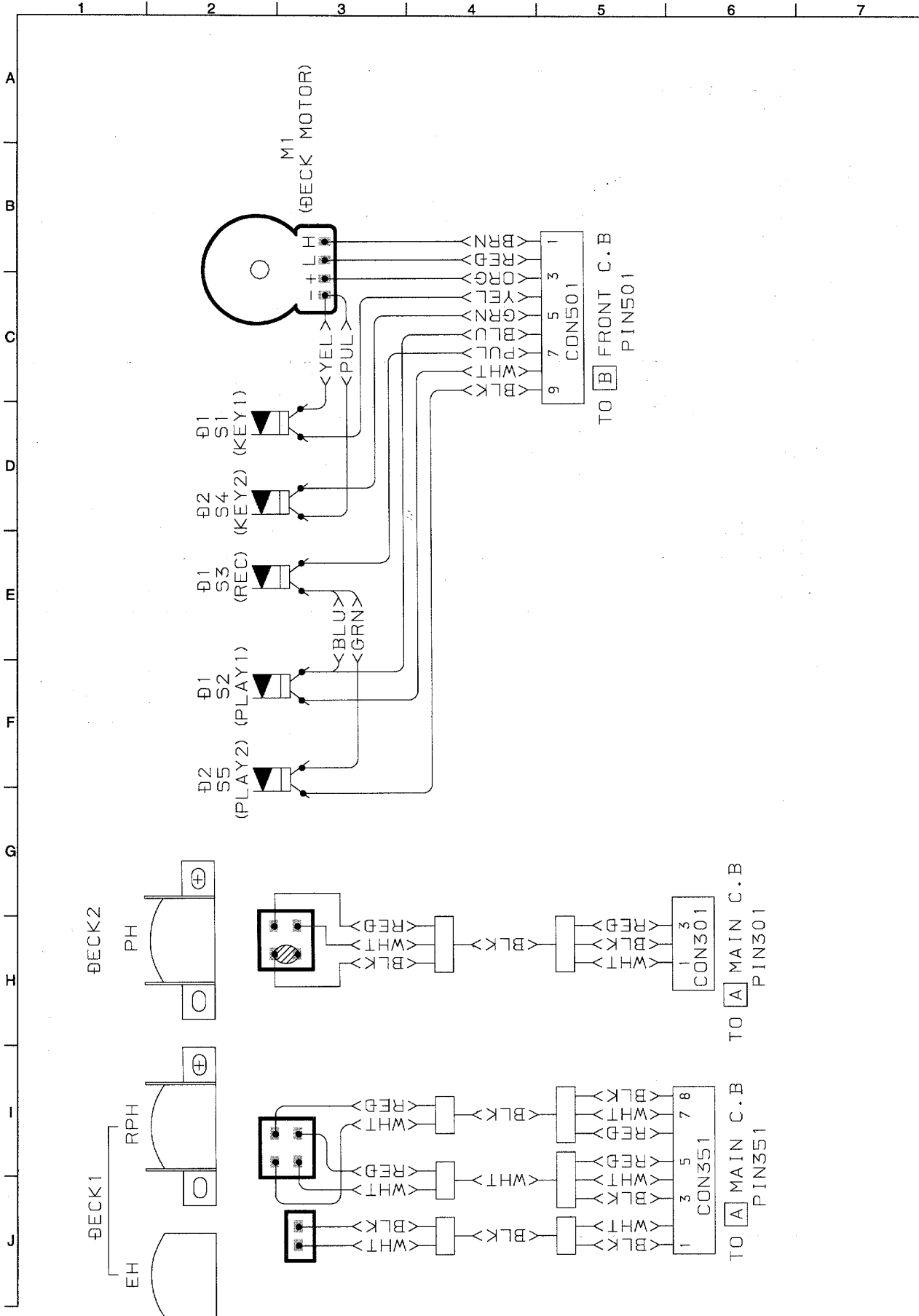
B FRONT C B



WIRING - 9 (AC)

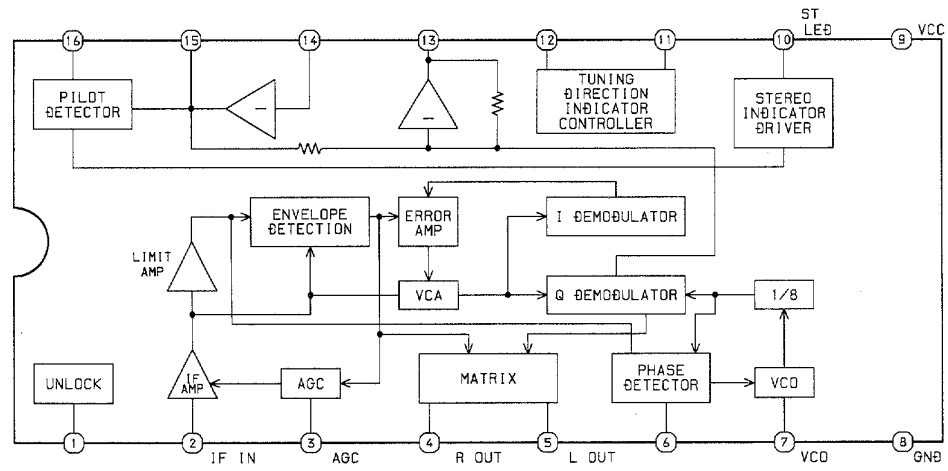


WIRING - 10 (DECK)

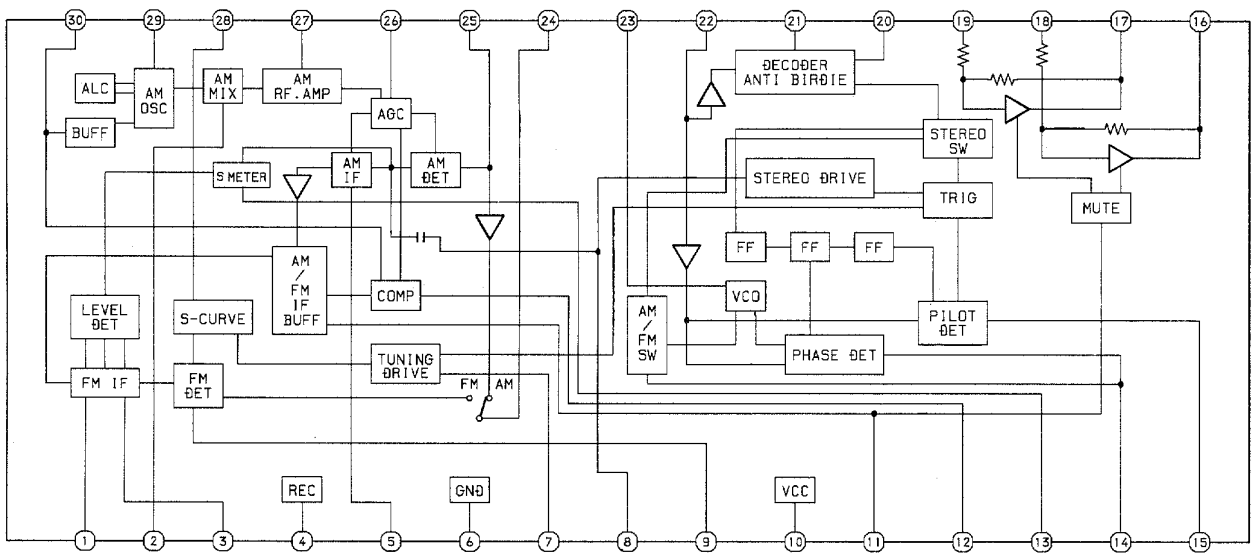


IC BLOCK DIAGRAM - 2

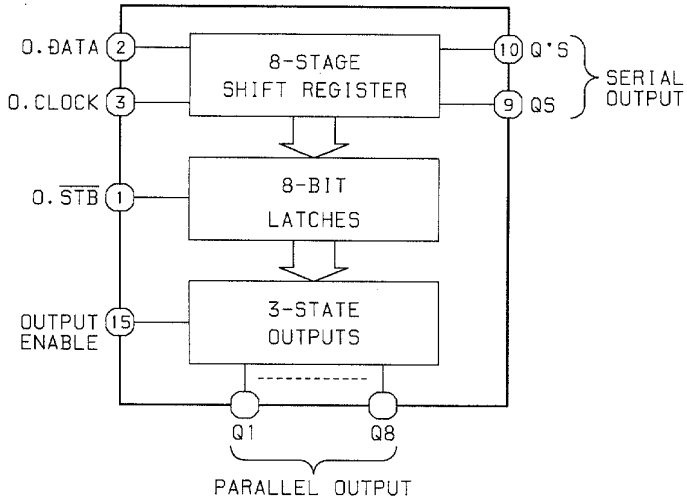
IC, TA8124P



IC, LA1836



IC, BU4094



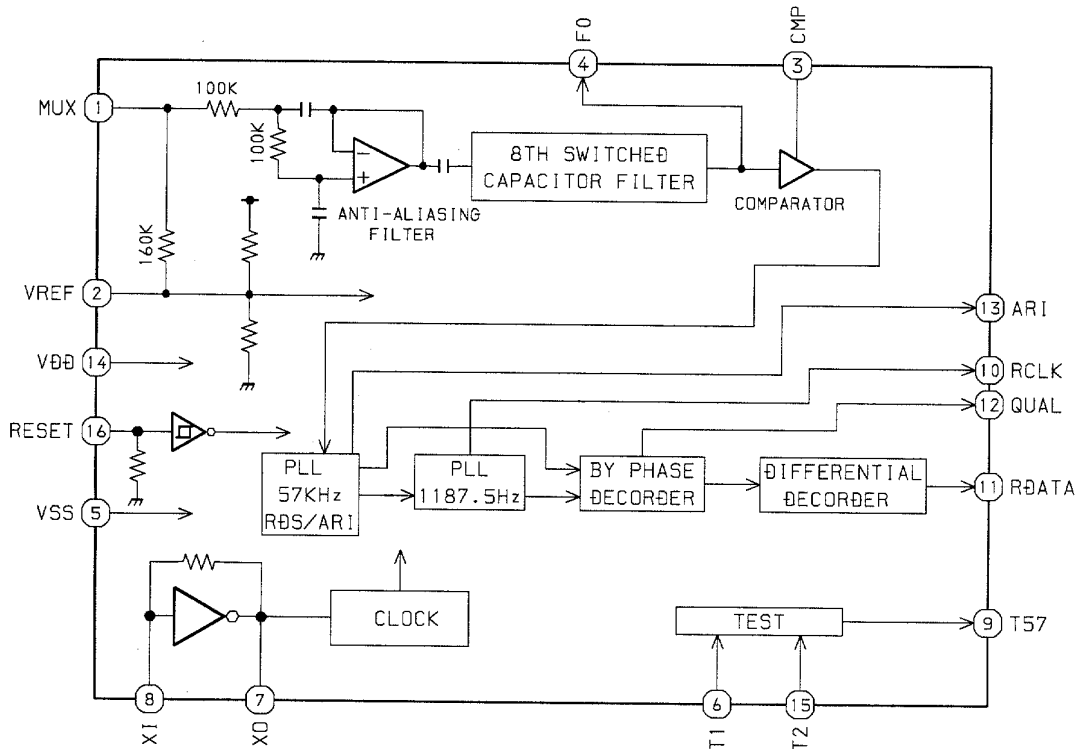
Q1: O. DOLBY ON Q5: O. PLAY
 Q2: O. DOLBY C Q6: O. PB2
 Q3: O. EXT. REC Q7: O. LED
 Q4: O. INT. REC Q8: O. RMT

TRUTH TABLE

| CLOCK | OUTPUT ENABLE | STROBE | DATA | PARALLEL OUTPUTS | | SERIAL OUTPUTS | |
|----------------|---------------|--------|------|------------------|---------|----------------|---------|
| | | | | Q1 | Qn | QS | Q'S |
| \overline{f} | L | x | x | Z | Z | Q7 | NO CHG. |
| \overline{f} | L | x | x | Z | Z | NO CHG. | QS |
| \overline{f} | H | L | x | NO CHG. | NO CHG. | Q7 | NO CHG. |
| \overline{f} | H | H | L | L | Qn-1 | Q7 | NO CHG. |
| \overline{f} | H | H | H | H | Qn-1 | Q7 | NO CHG. |
| \overline{f} | H | x | x | NO CHG. | NO CHG. | NO CHG. | QS |

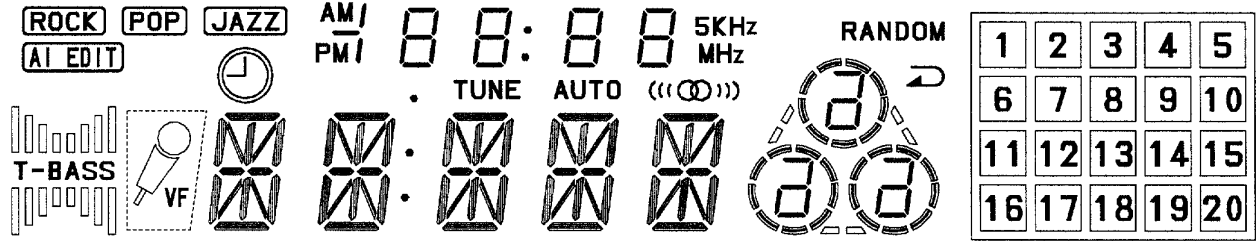
Z = HIGH IMPEDANCE
 x = DON'T CARE

IC, LA1836

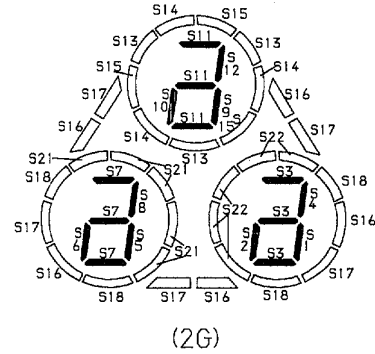
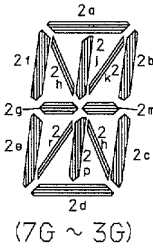
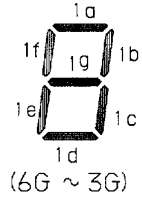


FL GRID ASSIGNMENT & ANODE CONNECTION (EXCEPT 10EZ)

GRID ASSIGNMENT



SEGMENT DESIGNATION

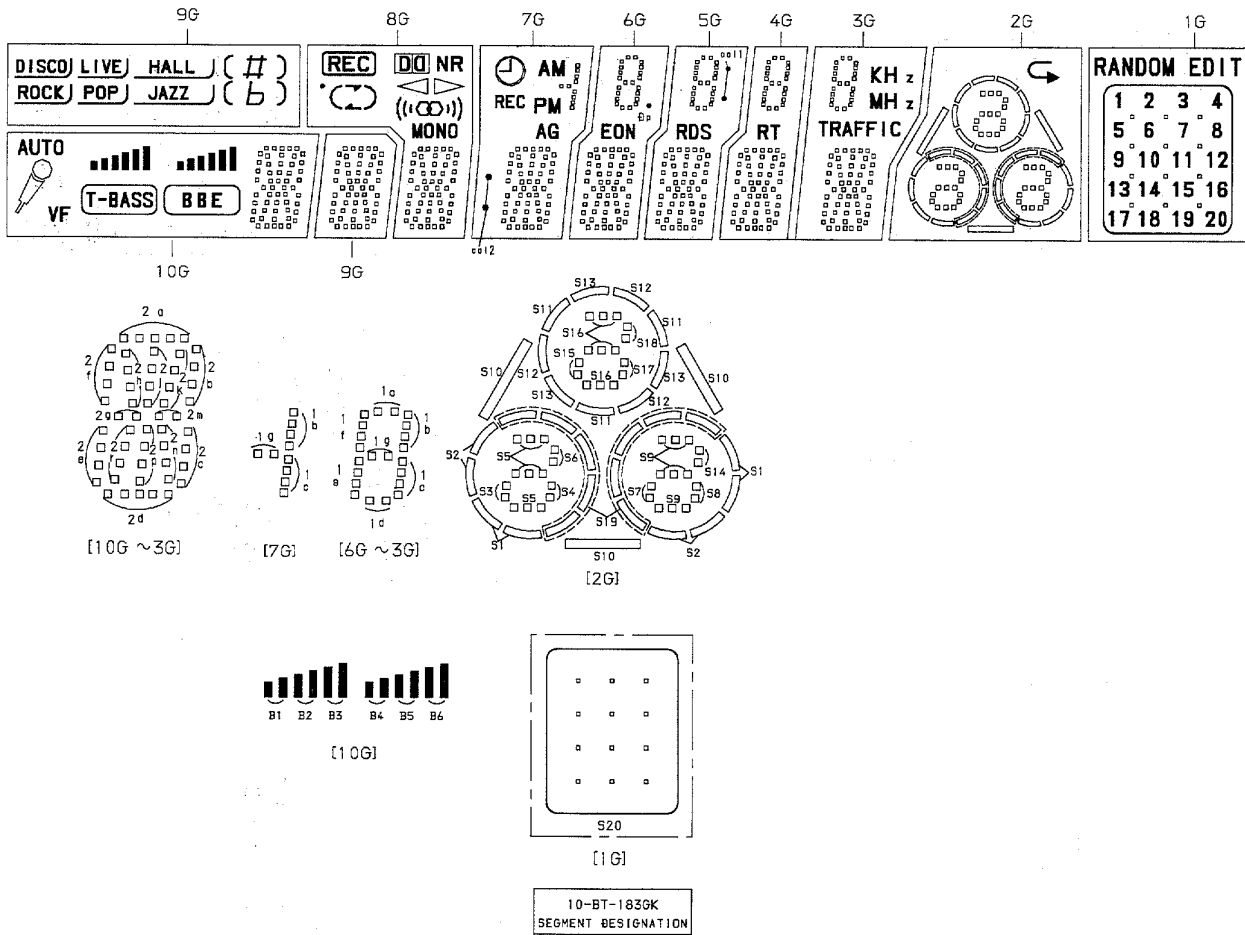


ANODE CONNECTION

| | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|---------|--------|--------|--------|--------|--------|-----------|
| P1 | 2d | 2d | 2d | 2d | 2d | S1 | 20 |
| P2 | 2j, 2p | 2j, 2p | 2j, 2p | 2j, 2p | 2j, 2p | S2 | 19 |
| P3 | 2n | 2n | 2n | 2n | 2n | S3 | 18 |
| P4 | 2r | 2r | 2r | 2r | 2r | S4 | 17 |
| P5 | 2c | 2c | 2c | 2c | 2c | S5 | 16 |
| P6 | 2e | 2e | 2e | 2e | 2e | S6 | 15 |
| P7 | 2m | 2m | 2m | 2m | 2m | S7 | 14 |
| P8 | 2g | 2g | 2g | 2g | 2g | S8 | 13 |
| P9 | 2f | 2f | 2f | 2f | 2f | S9 | 12 |
| P10 | 2b | 2b | 2b | 2b | 2b | S10 | 11 |
| P11 | 2k | 2k | 2k | 2k | 2k | S11 | 10 |
| P12 | 2h | 2h | 2h | 2h | 2h | S12 | 9 |
| P13 | 2a | 2a | 2a | 2a | 2a | S13 | 8 |
| P14 | VF | . | TUNE | AUTO | ((OO)) | S14 | 7 |
| P15 | | o | o (F) | — | MHz | S15 | 6 |
| P16 | AI EDIT | — | o (U) | — | KHz | S16 | 5 |
| P17 | | — | — | — | 5 | S17 | 4 |
| P18 | PM | 1d | 1d | 1d | 1d | S18 | 3 |
| P19 | — | 1e | 1e | 1e | 1e | — | 2 |
| P20 | | 1c | 1c | 1c | 1c | — | 1 |
| P21 | AM | 1g | 1g | 1g | 1g | S21 | — |
| P22 | (JAZZ) | 1f | 1f | 1f | 1f | S22 | — |
| P23 | (POP) | 1b | 1b | 1b | 1b | | — |
| P24 | (ROCK) | 1a | 1a | 1a | 1a | RANDOM | — |
| P25 | — | — | — | — | — | — | |

FL GRID ASSIGNMENT & ANODE CONNECTION (10EZ)

GRID ASSIGNMENT



ANODE CONNECTION

| | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|-----------------|-----------------|-------|--------|----------------|------------|----|---------|-----|--------|
| P1 | 2d | 2d | 2d | 2d | 2d | 2d | 2d | 2d | S1 | 20 |
| P2 | 2n | 2n | 2n | 2n | 2n | 2n | 2n | 2n | S2 | 19 |
| P3 | 2p | 2p | 2p | 2p | 2p | 2p | 2p | 2p | S3 | 18 |
| P4 | 2r | 2r | 2r | 2r | 2r | 2r | 2r | 2r | S4 | 17 |
| P5 | 2e | 2e | 2e | 2e | 2e | 2e | 2e | 2e | S5 | 16 |
| P6 | 2c | 2c | 2c | 2c | 2c | 2c | 2c | 2c | S6 | 15 |
| P7 | 2g | 2g | 2g | 2g | 2g | 2g | 2g | 2g | S7 | 14 |
| P8 | 2m | 2m | 2m | 2m | 2m | 2m | 2m | 2m | S8 | 13 |
| P9 | 2f | 2f | 2f | 2f | 2f | 2f | 2f | 2f | S9 | 12 |
| P10 | 2b | 2b | 2b | 2b | 2b | 2b | 2b | 2b | S10 | 11 |
| P11 | 2k | 2k | 2k | 2k | 2k | 2k | 2k | 2k | S11 | 10 |
| P12 | 2j | 2j | 2j | 2j | 2j | 2j | 2j | 2j | S12 | 9 |
| P13 | 2h | 2h | 2h | 2h | 2h | 2h | 2h | 2h | S13 | 8 |
| P14 | 2a | 2a | 2a | 2a | 2a | 2a | 2a | 2a | S14 | 7 |
| P15 | BBE | (DISCO) | MONO | AG | EON | RDS | RT | TRAFFIC | S15 | 6 |
| P16 | T-BASS | (LIVE) | ((∞)) | col | — | co [LOWER] | — | MHz | S16 | 5 |
| P17 | ∅ _{VF} | (HALL) | ▷ | REC | ∅ _p | co [UPPER] | — | KHz | S17 | 4 |
| P18 | AUTO | (ROCK) | ◁ | ⊕ | 1d | 1d | 1d | 1d | S18 | 3 |
| P19 | B1 | (POP) | ○ | PM | 1e | 1e | 1e | 1e | S19 | 2 |
| P20 | B2 | (JAZZ) | ⊂ | AM | 1c | 1c | 1c | 1c | ↻ | 1 |
| P21 | B3 | ([#]) | Σ | 1g | 1g | 1g | 1g | 1g | — | RANDOM |
| P22 | B4 | ([b]) | ⊃ | 1b, 1c | 1f | 1f | 1f | 1f | — | EDIT |
| P23 | B5 | DISCO LIVE HALL | REC | — | 1b | 1b | 1b | 1b | — | S20 |
| P24 | B6 | ROCK POP JAZZ | NR | — | 1a | 1a | 1a | 1a | — | — |
| P25 | — | # b | — | — | — | — | — | — | — | — |

IC DESCRIPTION (D)

IC, μ PD78044HGF-021-3B9

| 端子番号 | 端子名称 | I/O | 機能説明 | | | | | | | | | | | | | | | |
|---------|-------------------------------|-----|--|----|------|-------|----|------|---------|---|---|---|---|---------|---|---|---|---|
| 1~7 | G7-G1 | O | FLグリッド出力 | | | | | | | | | | | | | | | |
| 8 | VDD | - | 電源端子 | | | | | | | | | | | | | | | |
| 9 | O-DISH-R | O | CDターンテーブル逆回転出力 | | | | | | | | | | | | | | | |
| 10 | O-DISH-F | O | CDターンテーブル正回転出力 | | | | | | | | | | | | | | | |
| 11 | O-CD-LED | O | CDフラッシュウインドウLED ON/OFF 出力 | | | | | | | | | | | | | | | |
| 12 | O-CDCE(CD) | O | CDCE 出力 | | | | | | | | | | | | | | | |
| 13 | I-WRQ(CD) | I | WRQ 入力 | | | | | | | | | | | | | | | |
| 14 | O-CLK(CD) | O | CLK 出力 | | | | | | | | | | | | | | | |
| 15 | O-DATA(CD) | O | データ出力 | | | | | | | | | | | | | | | |
| 16 | I-SUBQ(CD) | I | SUB-Q 入力 | | | | | | | | | | | | | | | |
| 17 | RESET | I | リセット入力 | | | | | | | | | | | | | | | |
| 18 | I-RE-B | I | ロータリーエンコーダー A 入力 | | | | | | | | | | | | | | | |
| 19 | I-RE-A | I | ロータリーエンコーダー B 入力 | | | | | | | | | | | | | | | |
| 20 | A VSS | - | GND | | | | | | | | | | | | | | | |
| 21 | O-MOTOR | O | デッキモータ 入力 | | | | | | | | | | | | | | | |
| 22 | NC | - | 未使用 | | | | | | | | | | | | | | | |
| 23 | I-HOLD | I | 電源不良検出 入力 "L" クロック停止、メモリー保持 | | | | | | | | | | | | | | | |
| 24 | I-CDSW | I | CDターンテーブルフォトセンサー A/D コンバーター入力 | | | | | | | | | | | | | | | |
| 25 | I-DISH | I | CDメカスイッチ A/D コンバーター入力 | | | | | | | | | | | | | | | |
| 26 | I-TPSW | I | デッキメカスイッチ A/D コンバーター入力 | | | | | | | | | | | | | | | |
| 27,28 | I-KEY0,1 | I | キー入力 (AD) | | | | | | | | | | | | | | | |
| 29 | A VDD | - | 電源端子 | | | | | | | | | | | | | | | |
| 30 | A VREF | - | リファレンス電圧 (+5V) | | | | | | | | | | | | | | | |
| 31 | I-TMBASE | I | タイマー時計用リファレンスクロック入力 | | | | | | | | | | | | | | | |
| 32 | NC | - | 未使用 | | | | | | | | | | | | | | | |
| 33 | VSS | - | GND | | | | | | | | | | | | | | | |
| 34,35 | X1,X2 | I/O | 511.47Hz 発振子回路 | | | | | | | | | | | | | | | |
| 36 | O-CSHIFT | O | マイコンクロックシフト出力 | | | | | | | | | | | | | | | |
| 37 | $\overline{\text{O-FUNC-CD}}$ | O | CD用電源、 $\overline{\text{ON}}$ /OFF 出力 | | | | | | | | | | | | | | | |
| 38 | O-FUNC-B | O | ファンクションスイッチ出力 | | | | | | | | | | | | | | | |
| 39 | O-FUNC-A | | <table border="1"> <thead> <tr> <th></th> <th>AUX</th> <th>TUNER</th> <th>CD</th> <th>TAPE</th> </tr> </thead> <tbody> <tr> <td>O-FUNCA</td> <td>0</td> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>O-FUNCB</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> </tr> </tbody> </table> | | AUX | TUNER | CD | TAPE | O-FUNCA | 0 | 0 | 1 | 1 | O-FUNCB | 0 | 1 | 0 | 1 |
| | AUX | | TUNER | CD | TAPE | | | | | | | | | | | | | |
| O-FUNCA | 0 | 0 | 1 | 1 | | | | | | | | | | | | | | |
| O-FUNCB | 0 | 1 | 0 | 1 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 40 | O-EVRCLK | O | 音量クロック出力 | | | | | | | | | | | | | | | |
| 41 | O-EVRDATA | O | 音量データ出力 | | | | | | | | | | | | | | | |
| 42 | O-DATA | O | PLL IC データ出力 | | | | | | | | | | | | | | | |
| 43 | $\overline{\text{O-CLK}}$ | O | PLL IC クロック出力 | | | | | | | | | | | | | | | |
| 44 | $\overline{\text{O-PLLCE}}$ | O | PLL IC チップイネーブル | | | | | | | | | | | | | | | |
| 45 | I-TUNE/IFC | I | チューナー SD 検知入力、IF カウントシリアルデータ入力 | | | | | | | | | | | | | | | |
| 46 | I-STEREO | I | チューナーステレオ検知入力 | | | | | | | | | | | | | | | |
| 47 | I-RMC | I | システムリモコン信号入力 | | | | | | | | | | | | | | | |

| 端子番号 | 端子名称 | I/O | 機能説明 |
|-------|-----------------------------|-----|--|
| 48 | IC | - | GNDに接続 |
| 49 | O-MUTE | O | システムミュート出力 |
| 50 | $\overline{\text{O-POWER}}$ | O | システム電源供給 $\overline{\text{ON/OFF}}$ 出力 |
| 51 | $\overline{\text{O-PB1}}$ | O | 再生デッキ1, 2 スイッチ出力 "L" は デッキ1 |
| 52 | VDD | - | 電源供給入力 |
| 53~70 | O-SEG-A~O-SWG-R | O | FLセグメント出力 P24~P7 |
| 71 | -VFL | - | FLディスプレイ用電源 |
| 72~77 | O-SEG-S~O-SEG-X | O | FLセグメント出力 P6~P1 |
| 78 | O-INITIAL | O | 出力イニシャルダイオード入力 |
| 79 | O-TRYCLS | O | CDトレイクローズデータ出力 |
| 80 | O-TRYOPN | O | CDトレイオープンデータ出力 |

IC, LC72131

| 端子番号 | 端子名称 | I/O | 機能説明 | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--------|---|--------|--------|--------|----|--|--------|--|--|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|
| 1 | XIN | I/O | 水晶発振子 (4.5MHz) に接続 | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | XOUT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | NC | - | 未使用 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | CE | I | IC 起動、"H" でアクティブ | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DI | I | 適切キー作動時、CPU(μ PD78044HGF-201-3B9)からデジタルデータ入力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | CLK | I | データDIでクロックする | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DO | O | CPU(μ PD78044HGF-201-3B9)へデジタルデータ出力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | TM-BASE | O | 時計用リファレンスクロック信号 (8Hz) を出力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | $\overline{\text{MONO}} / \text{BEAT}$ | O | MONO/BEAT スイッチ時 "H" でを出力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | $\overline{\text{FM}} / \text{AM}$ | O | 以下のように "L" または "H" を出力 <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table> | 2 BAND | | 3 BAND | | | 3 BAND | | | AM | FM | LW | MW | FM | MW | SW | FM | H | L | H | H | L | H | L | L |
| 2 BAND | | 3 BAND | | | 3 BAND | | | | | | | | | | | | | | | | | | | | | | |
| AM | FM | LW | MW | FM | MW | SW | FM | | | | | | | | | | | | | | | | | | | | |
| H | L | H | H | L | H | L | L | | | | | | | | | | | | | | | | | | | | |
| 10 | $\overline{\text{MW}}$ | O | 以下のように "L" または "H" を出力 <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table> | 2 BAND | | 3 BAND | | | 3 BAND | | | AM | FM | LW | MW | FM | MW | SW | FM | L | L | H | L | L | L | H | L |
| 2 BAND | | 3 BAND | | | 3 BAND | | | | | | | | | | | | | | | | | | | | | | |
| AM | FM | LW | MW | FM | MW | SW | FM | | | | | | | | | | | | | | | | | | | | |
| L | L | H | L | L | L | H | L | | | | | | | | | | | | | | | | | | | | |
| 11 | IF-MUTE | O | インターナルカウンタをコントロール | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | IFIN | I | ゼネラルバポーズカウンタ入力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | $\overline{\text{TUNE}}$ | I | 選局時、"L" を受信 | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | NC | - | 未使用 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | A MIN | I | AM ローカル発振周波数信号を受信 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | F MIN | I | FM ローカル発振周波数信号を受信 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | VDD | - | IC(+5V)へ電源供給 | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | PD | O | PLL チャージポンプ出力 | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | AIN | I | PLL アクティブ低域フィルター用 MOS トランジスター | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | AOUT | O | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | VSS | - | GND | | | | | | | | | | | | | | | | | | | | | | | | |

IC DESCRIPTION (EXCEPT D)

IC, μ PD78044HGF-201-3B9 <EXCEPT 10EZ>

| Pin No. | Pin Name | I/O | Description | | | | | | | | | | | | | | | |
|---------|--------------------------------|-----|--|----|------|-------|----|------|---------|---|---|---|---|---------|---|---|---|---|
| 1~7 | G7~G1 | O | FL grid output. | | | | | | | | | | | | | | | |
| 8 | VDD | - | Power supply input. | | | | | | | | | | | | | | | |
| 9 | O-DISH-R | O | CD turntable reverse rotation output. | | | | | | | | | | | | | | | |
| 10 | O-DISH-F | O | CD turntable forward rotation output. | | | | | | | | | | | | | | | |
| 11 | O-CD-LED | O | CD flash window LED ON/OFF output. | | | | | | | | | | | | | | | |
| 12 | IO-BUS1 | I/O | μ processor interface,data input/output. | | | | | | | | | | | | | | | |
| 13 | $\overline{\text{O-CCE}}$ | O | μ processor interface,chip enable signal. When "L" : BUS 3~0 are active. | | | | | | | | | | | | | | | |
| 14 | IO-BUS2 | I/O | μ processor interface,data input/output. | | | | | | | | | | | | | | | |
| 15 | IO-BUS0 | I/O | μ processor interface,data input/output. | | | | | | | | | | | | | | | |
| 16 | IO-BUS3 | I/O | μ processor interface,data input/output. | | | | | | | | | | | | | | | |
| 17 | $\overline{\text{RESET}}$ | I | Reset input. | | | | | | | | | | | | | | | |
| 18 | I-RE-B | I | Rotary encoder A input. | | | | | | | | | | | | | | | |
| 19 | I-RE-A | I | Rotary encoder B input. | | | | | | | | | | | | | | | |
| 20 | A VSS | - | GND. | | | | | | | | | | | | | | | |
| 21 | O-MOTOR | O | Deck motor output. | | | | | | | | | | | | | | | |
| 22 | O-BUCK | O | μ processor interface,clock output. | | | | | | | | | | | | | | | |
| 23 | $\overline{\text{I-HOLD}}$ | I | Power failure detected input "L" to stop clock and maintain memory. | | | | | | | | | | | | | | | |
| 24 | I-SW(CD) | I | CD mechanical switch A/D converter input. | | | | | | | | | | | | | | | |
| 25 | I-DISH-SENS | I | CD turntable photo sensor A/D converter input. | | | | | | | | | | | | | | | |
| 26 | I-TPSW | I | Deck mechanical switch A/D converter input. | | | | | | | | | | | | | | | |
| 27,28 | I-KEY1,0 | I | Key input. (A/D) | | | | | | | | | | | | | | | |
| 29 | A VDD | - | Power supply input. | | | | | | | | | | | | | | | |
| 30 | A VREF | - | Reference voltage. (+5V) | | | | | | | | | | | | | | | |
| 31 | I-TMBASE | I | Reference clock input for timer watch. | | | | | | | | | | | | | | | |
| 32 | XT2(NC) | - | Not used. | | | | | | | | | | | | | | | |
| 33 | VSS | - | GND. | | | | | | | | | | | | | | | |
| 34,35 | X1,X2 | I/O | 4.19MHz oscillator circuit. | | | | | | | | | | | | | | | |
| 36 | O-CSHIFT | O | Micon clock shift output. (active high) | | | | | | | | | | | | | | | |
| 37 | O-FUNC-CD | O | Power supply for CD. Output ON/OFF. | | | | | | | | | | | | | | | |
| 38 | O-FUNC-B | O | Function switch output. | | | | | | | | | | | | | | | |
| 39 | O-FUNC-A | | <table border="1"> <thead> <tr> <th></th> <th>AUX</th> <th>TUNER</th> <th>CD</th> <th>TAPE</th> </tr> </thead> <tbody> <tr> <td>O-FUNCA</td> <td>0</td> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>O-FUNCB</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> </tr> </tbody> </table> | | AUX | TUNER | CD | TAPE | O-FUNCA | 0 | 0 | 1 | 1 | O-FUNCB | 0 | 1 | 0 | 1 |
| | AUX | | TUNER | CD | TAPE | | | | | | | | | | | | | |
| O-FUNCA | 0 | 0 | 1 | 1 | | | | | | | | | | | | | | |
| O-FUNCB | 0 | 1 | 0 | 1 | | | | | | | | | | | | | | |
| 40 | O-EVRCLK | O | Electrical volume clock output. | | | | | | | | | | | | | | | |
| 41 | O-EVRDATA | O | Electrical volume data output. | | | | | | | | | | | | | | | |
| 42 | O-DATA | O | PLL IC data output. | | | | | | | | | | | | | | | |
| 43 | O-CLK | O | PLL IC clock output. | | | | | | | | | | | | | | | |
| 44 | O-PLLCE | O | PLL IC chip enable. | | | | | | | | | | | | | | | |
| 45 | $\overline{\text{I-TUNE/IFC}}$ | I | Tuner SD detected input. IF count serial data input. | | | | | | | | | | | | | | | |
| 46 | $\overline{\text{I-STEREO}}$ | I | Tuner stereo detected input. | | | | | | | | | | | | | | | |
| 47 | $\overline{\text{I-RMC}}$ | I | System remote control signal input. | | | | | | | | | | | | | | | |

| Pin No. | Pin Name | I/O | Description |
|---------|-----------------------------|-----|--|
| 48 | IC | - | Connected to GND. |
| 49 | O-MUTE | O | System mute output. |
| 50 | $\overline{\text{O-POWER}}$ | O | System power supply $\overline{\text{ON/OFF}}$ output. |
| 51 | $\overline{\text{O-PB1}}$ | O | Playback Deck 1 and 2 switch output. "L" = Deck 1. |
| 52 | VDD | - | Power supply input. |
| 53~70 | A ~ R | O | FL segment output P24~P7. |
| 71 | -VFL | - | Power for FL display. |
| 72~77 | S ~ X | O | FL segment output P6~P1. |
| 78 | O-INITIAL | O | Output initial diode input. |
| 79 | O-TRYCLS(CD) | O | CD tray close data output. |
| 80 | O-TRYOPN(CD) | O | CD tray open data output. |

IC, $\mu\text{PD78045HGF-017-3B9 <10EZ>$

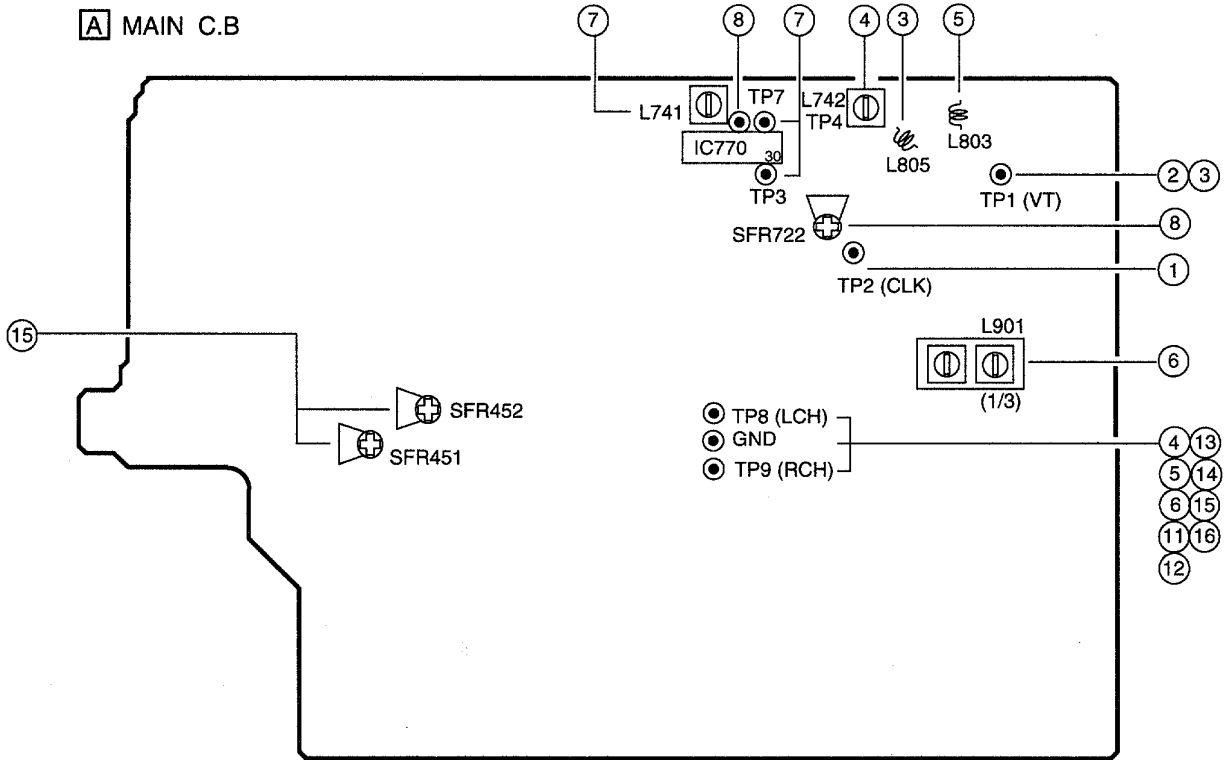
| Pin No. | Pin Name | I/O | Description |
|---------|----------------------------|-----|---|
| 1~7 | G7~G1 | O | FL grid output. |
| 8 | VDD | - | Power supply input. |
| 9 | O-DISH-R | O | CD turntable reverse rotation output. |
| 10 | O-DISH-F | O | CD turntable forward rotation output. |
| 11 | O-CD-LED | O | CD flash window LED $\overline{\text{ON/OFF}}$ output. |
| 12 | IO-BUS1(CD) | I/O | BUS1(CD) output. |
| 13 | O-CCE(CD) | O | CCE(CD) output. |
| 14 | IO-BUS2(CD)/ I-TUNE/IFC | I/O | BUS2(CD) output / IFC input. |
| 15 | IO-BUS0(CD)/ I-STEREO | I/O | BUS0(CD) output / FM ST indicator. |
| 16 | IO-BUS3(CD)/ I-RDS DATA | I/O | BUS3(CD) input / RDS data input. |
| 17 | RESET | - | Reset input. |
| 18 | I-RE-B | I | Rotary encoder A input. |
| 19 | I-RE-A | I | Rotary encoder B input. |
| 20 | A VSS | - | GND. |
| 21 | I-RDS AG | I | RDS signal input. |
| 22 | O-BUCK(CD) | O | Buck(CD) output. |
| 23 | $\overline{\text{I-HOLD}}$ | I | Power failure detected input "L" to stop clock and maintain memory. |
| 24 | I-CDSW | I | CD mechanical switch A/D converter input. |
| 25 | I-DISH | I | CD turntable photo sensor A/D converter input. |
| 26 | I-TPSW | I | Deck mechanical switch A/D converter input. |
| 27,28 | I-KEY0,1 | I | Key input. (A/D) |
| 29 | A VDD | - | Power supply input. |
| 30 | A VREF | - | Reference voltage. (+5V) |

| Pin No. | Pin Name | I/O | Description |
|---------|-----------------|-----|--|
| 31 | I-TMBASE | I | Reference clock input for timer watch. |
| 32 | NC | - | Not used. |
| 33 | VSS | - | GND. |
| 34,35 | X1,X2 | I/O | 511.47Hz oscillator circuit. |
| 36 | O-CSHIFT | O | Micon clock shift output. (active high). |
| 37 | O-INITIAL | - | Not used. |
| 38 | O-TRY CLS(CD) | O | CD tray close / open output. |
| 39 | O-TRY OPN(CD) | | |
| 40 | O-EVRCLK | O | Electrical volume clock output. |
| 41 | O-EVRDATA | O | Electrical volume data output. |
| 42 | O-DATA | O | PLL IC data output. |
| 43 | O-CLK | O | PLL IC clock output. |
| 44 | O-PLLCE | O | PLL IC chip enable. |
| 45 | O-MOTOR | O | Deck motor output. |
| 46 | I-RDS CLK | I | RDS input. |
| 47 | I-RMC | I | System remote control signal input. |
| 48 | IC | - | Connected to GND. |
| 49 | O-MUTE | O | System mute output. |
| 50 | O-POWER | O | System power supply ON/OFF output. |
| 51 | O-STRB | O | Shift register (STRB). |
| 52 | VDD | - | Power supply input. |
| 53~70 | O-SEG-A~O-SWG-R | O | FL segment output P24~P7. |
| 71 | -VFL | - | Power for FL display. |
| 72~77 | O-SEG-S~O-SEG-X | O | FL segment output P6~P1. |
| 78~80 | G10~G8 | O | FL grid output. |

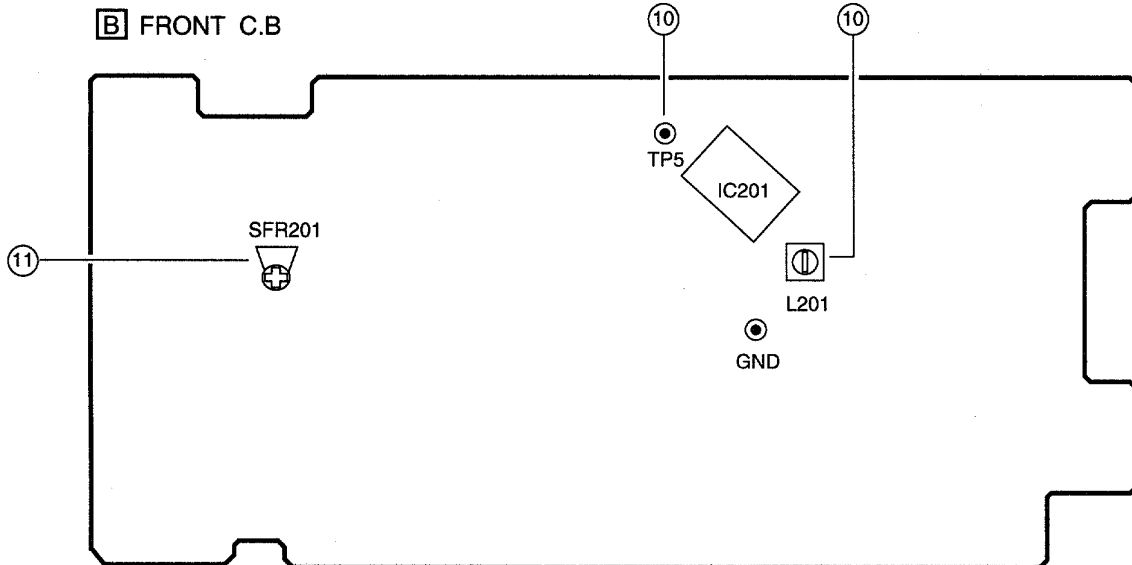
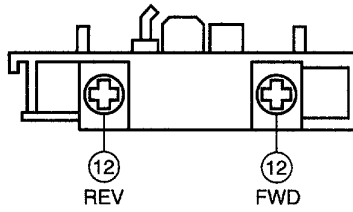
IC, LC72131

| Pin No. | Pin Name | I/O | Description | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|------------------------------------|--------|---|--------|--------|--------|----|--|--------|--|--|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|
| 1 | XIN | I/O | A crystal oscillator (4.5MHz) is connected between these pins. | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | XOUT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | NC | - | Not used. | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | CE | I | To enable the IC. Active "H". | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DI | I | Digital data input from CPU (μ PD78044HGF). | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | CLK | I | To clock in the data DI. | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DO | O | Digital data output to CPU (μ PD78044HGF). | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 8Hz | O | Outputs a reference clock signal (8Hz) for the clock. | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | $\overline{\text{MONO}}$ | O | Outputs "H" when MONO is switched. | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | $\overline{\text{FM}} / \text{AM}$ | O | Output "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table> | 2 BAND | | 3 BAND | | | 3 BAND | | | AM | FM | LW | MW | FM | MW | SW | FM | H | L | H | H | L | H | L | L |
| 2 BAND | | 3 BAND | | | 3 BAND | | | | | | | | | | | | | | | | | | | | | | |
| AM | FM | LW | MW | FM | MW | SW | FM | | | | | | | | | | | | | | | | | | | | |
| H | L | H | H | L | H | L | L | | | | | | | | | | | | | | | | | | | | |
| 10 | $\overline{\text{MW}}$ | O | Outputs "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table> | 2 BAND | | 3 BAND | | | 3 BAND | | | AM | FM | LW | MW | FM | MW | SW | FM | L | L | H | L | L | L | H | L |
| 2 BAND | | 3 BAND | | | 3 BAND | | | | | | | | | | | | | | | | | | | | | | |
| AM | FM | LW | MW | FM | MW | SW | FM | | | | | | | | | | | | | | | | | | | | |
| L | L | H | L | L | L | H | L | | | | | | | | | | | | | | | | | | | | |
| 11 | IFC | O | To control internal counter. | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | IFI | I | General purpose counter input. | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | $\overline{\text{TUNE}}$ | I | Receives "L" when station is tuned. | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | NC | - | Not used. | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | AMI | I | Receives the AM local oscillator frequency signal. | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | FMI | I | Receives the FM local oscillator frequency signal. | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | VPU | - | Supply power to IC (+5V). | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | PD | O | PLL charge pump output. | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | AIN | I | The MOS transistor for PLL active low pass filter. | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | AOUT | O | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | VSS | - | Ground. | | | | | | | | | | | | | | | | | | | | | | | | |

ADJUSTMENT - 1 <TUNER / DECK: D>



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



< TUNER SECTION >

1. クロック周波数確認
条件： •テストポイント：TP2
方法： AM1602kHzにセットし、テストポイントの周波数が2052kHz \pm 0.08kHzになることを確認する。
2. AM VT確認
条件： •テストポイント：TP1(VT)
方法： AM1602kHzにセットし、テストポイントの電圧が5.6V \pm 1.0Vになることを確認する。
3. FM VT調整
条件： •テストポイント：TP1(VT)
•調整箇所：L805
方法： FM76.0MHz,108.0MHzにセットし、テストポイントが0.4V(87.5MHz)以上であることを確認後、L805で8.0V \pm 0.05V(108.0MHz)になるように調整する。
4. AM IF 調整
条件： •テストポイント：TP8,TP9
•入力レベル：可変
•調整箇所：L742
方法： AM999kHzを入力し、L742を調整してテストポイントのレベルが最大になるようにする。
5. FM トラッキング調整
条件： •テストポイント：TP8,TP9
•入力レベル：可変
•調整箇所：L803
方法： 76.0MHzでのレベルが最大になるようにL803を調整する。テストポイントの感度が0 \pm 6dB(76.0MHz)、4 \pm 6dB(108.0MHz)であることを確認する。
6. AM トラッキング調整
条件： •テストポイント：TP8,TP9
•調整箇所：L901(1/3),.....999kHz
方法： AM999kHzを入力し、L901(1/3)を調整してテストポイントのレベルが最大になるようにする。
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： FM98.0MHzにセットしTP3,TP4間の電圧が0V \pm 0.04VになるようにL741を調整する。調整後、歪率が1.3%以下であることを確認する。
8. オートストップレベル調整
条件： •テストポイント：TP7
•調整箇所：SFR722
•入力レベル：54dB
方法： FM98.0MHzにセットし、TP7の電圧が約0.1VになるようにSFR722を調整する。その後、入力レベルを2dB下げTP7の電圧が約7.0Vになる様調整する。
9. オートストップレベル確認
AM
方法： AM999kHzにセットし、TP7が43dB \sim 68dBであることを確認する。

FM

方法： FM98.0MHzにセットし、TP7が20dB \pm 10dBであることを確認する。

10. マイコンクロック調整

条件： •テストポイント：TP5
•調整箇所：L201

方法： 周波数カウンタをTP5とGNDに接続しL201が511.47 \pm 0.4Hzになるよう調整する。

< DECK SECTION >

11. テープスピード調整

条件： •テストテープ：TTA-410
•テストポイント：TP8,TP9
•調整箇所：SFR201

方法： テストテープを再生し、周波数カウンタが3000Hz \pm 5HzになるようSFR201を調整する。

12. アジマス調整

条件： •テストテープ：TTA-410
•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10kHzを再生し、出力が最大になるようアジマス調整ネジを調整する。次にFWD と REV PLAYも同様の方法で調整する。

13. 再生周波数特性調整 (デッキ1, デッキ2)

条件： •テストテープ：TTA-320
•テストポイント：TP8,TP9

方法： テストテープの315Hz、8kHzを再生し8kHzと315Hzの出力差が \pm 5dBであることを確認する。

14. 再生感度確認 (デッキ1, デッキ2)

条件： •テストテープ：TTA-210
•テストポイント：TP8,TP9

方法： テストテープのを再生し、テストポイントの出力が150mV \pm 3dBであることを確認する。

15. 録再周波数特性調整 (デッキ1, デッキ2)

条件： •テストテープ：TTA-602
•テストポイント：TP8,TP9
•入力信号：800Hz/8kHz(LINE IN)
•調整箇所：SFR 451(Lch)
SFR 452(Rch)

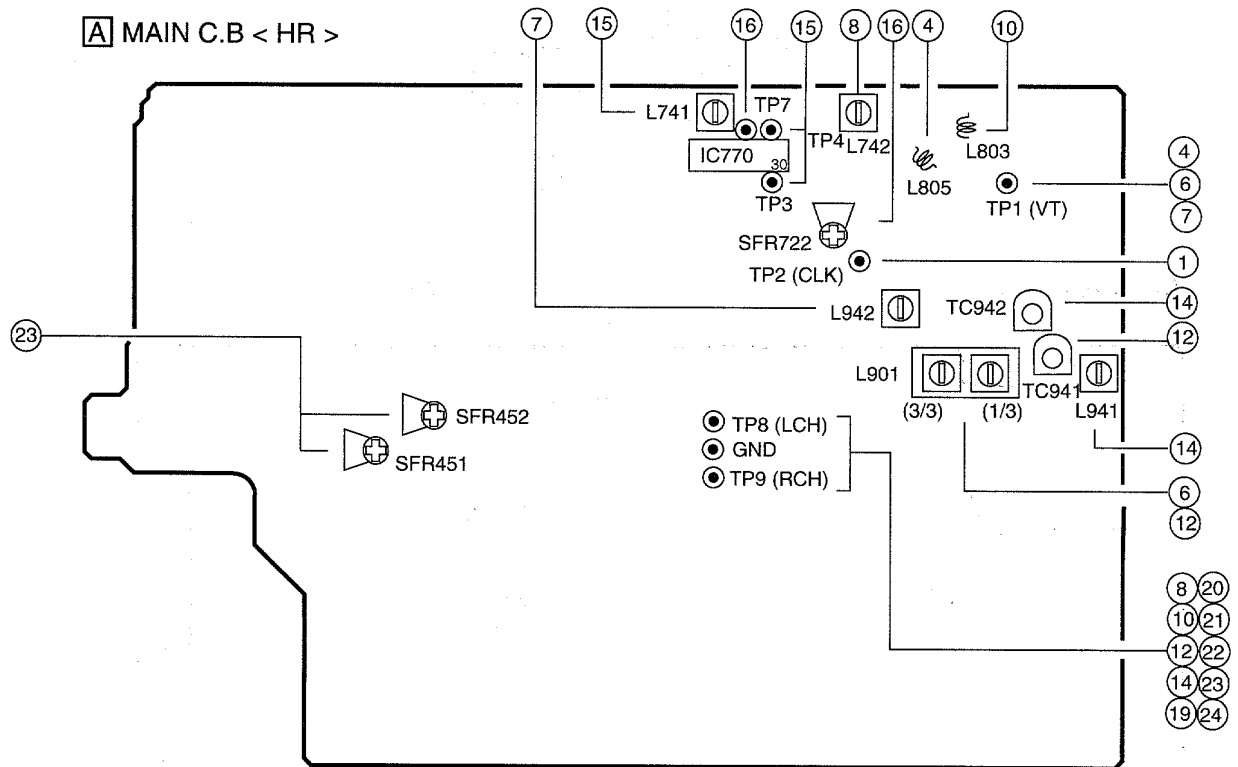
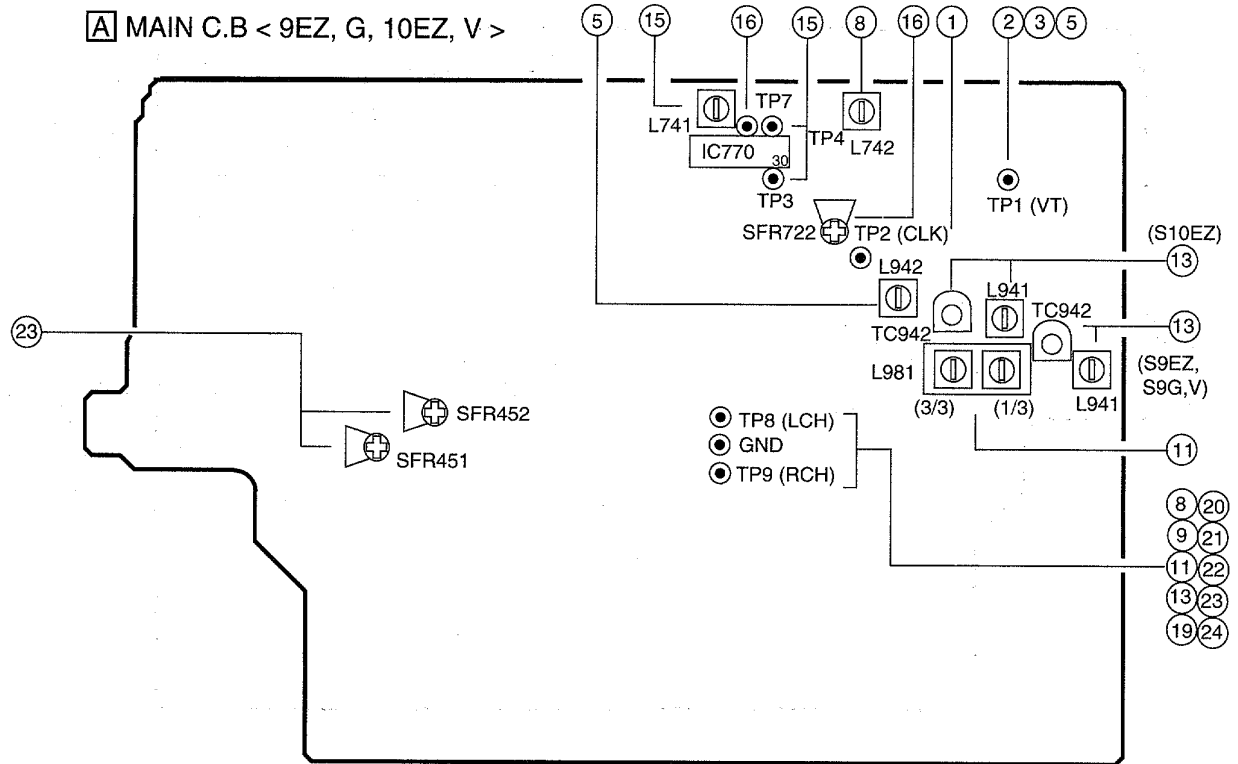
方法： 800Hzの信号をRECモードで入力する。TP8,TP9の出力レベルが11mVになるようOSCアッテネータを調整する。テストテープに800Hz、8kHz信号を録再し、800Hzの信号に対し、8kHzの出力レベルが12mV(+1.0dB) \pm 0.5dBになるように両チャンネルのSFR調整する。

16. 録再感度確認

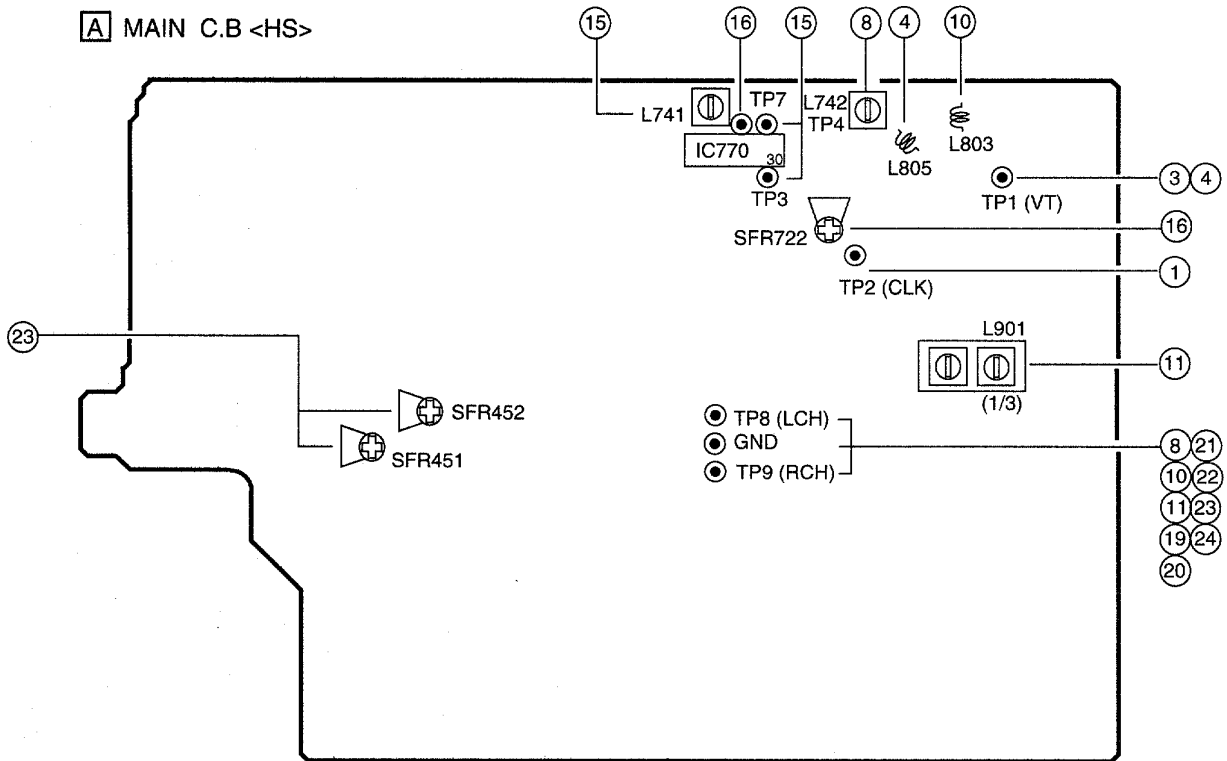
条件： •テストテープ：TTA-602
•テストポイント：TP8,TP9
•入力信号：800Hz(LINE IN)

方法： 800Hzの信号をRECモードで入力する。TP8,TP9の出力レベルが11mVになるようOSCアッテネータを調整する。テストテープに800Hz信号を録再し、出力信号が10mV(+1.0dB) \pm 2.5dBであることを確認する。

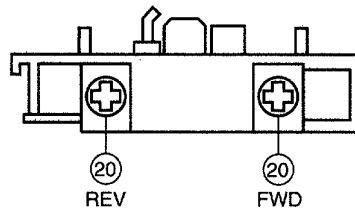
ADJUSTMENT - 1 <TUNER / DECK: EXCEPT D>



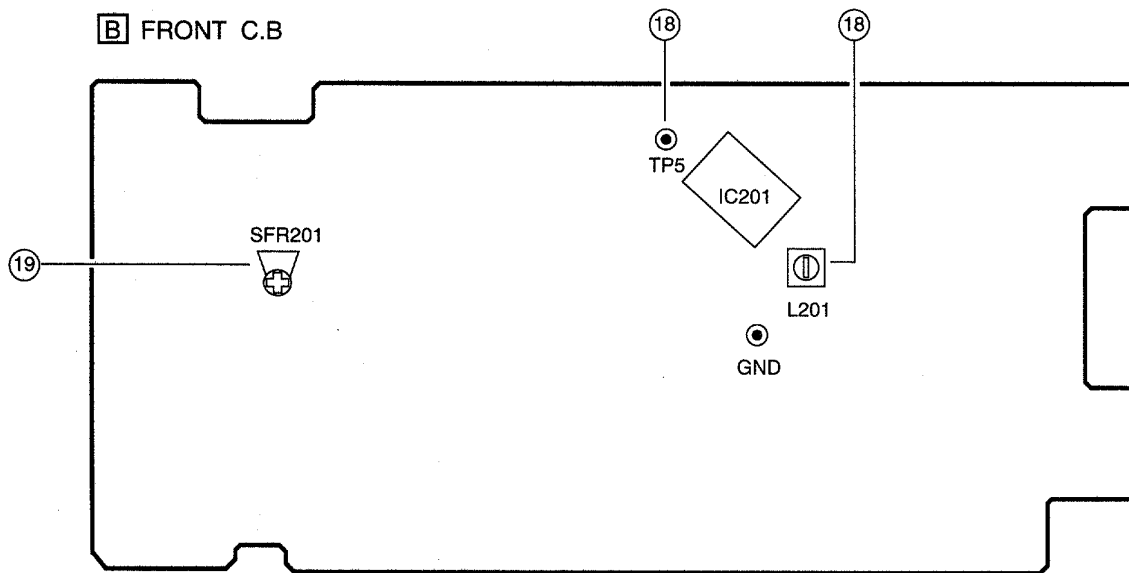
A MAIN C.B <HS>



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



B FRONT C.B



< TUNER SECTION >

1. Clock Frequency Check
Settings : • Test point : TP2
Method : Set to AM(MW) 1602kHz and check that the test point is 2052kHz \pm 0.08kHz.
2. FM VT Check (9EZ,G,10EZ)
Settings : • Test point : TP1 (VT)
Method : Set to FM 87.5MHz,108.0MHz and check that the test point more than 1.5V(87.5MHz), less than 8.2V (108.0MHz).
2. FM VT Check (V)
Settings : • Test point : TP1 (VT)
Method : Set to FM 65.0MHz,108.0MHz and check that the test point more than 1.0V(65.0MHz), less than 9.5V (108.0MHz).
3. MW VT Check (9EZ,G,10EZ,V,HS)
Settings : • Test point : TP1 (VT)
Method : Set to MW 1602kHz and check that the test point is 5.6V \pm 1.0V.
4. FM VT Adjustment (HR,HS)
Settings : • Test point : TP1 (VT)
• Adjustment location : L805
Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 1.0V(87.5MHz) and adjust L805 so that the test point becomes 7.0V \pm 0.05V (108.0MHz).
5. LW VT Adjustment (9EZ,G,10EZ,V)
Settings : • Test point : TP1 (VT)
• Adjustment location : L942
Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V \pm 0.05V.
6. MW VT Adjustment (HR)
Settings : • Test point : TP1 (VT)
• Adjustment location : L901(3/3)
Method : Set to MW 1710kHz and adjust L901(3/3) so that the test point becomes 8.5V \pm 0.05V.
7. SW VT Adjustment (HR)
Settings : • Test point : TP1 (VT)
• Adjustment location : L942
Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes 7.0V \pm 0.05V.
8. AM(MW) IF Adjustment
Settings : • Test point : TP8,TP9
• Input level : adjustable
• Adjustment location : L742
Method : Set to AM(MW) 999kHz and adjust L742 so that the test point becomes maximum.
9. FM Tracking Check (9EZ,G,10EZ)
Settings : • Test point : TP7, TP8
Method : Set to FM 98.0MHz and check that the test point is 10dB \pm 6dB.
9. FM Tracking Check (V)
Settings : • Test point : TP7, TP8
Method : Set to FM 70.0MHz, 98.0MHz and check that the test point is 6dB \pm 6dB(70.0MHz), 5dB \pm 6dB (98.0MHz).
10. FM Tracking Adjustment (HR,HS)
Settings : • Test point : TP8, TP9
• Input level : adjustable
• Adjustment location : L803
Method : The level at 87.5MHz is adjusted to maximum by L803 then check that the usable sensitivity is 0dB \pm 6dB(87.5MHz), 4dB \pm 6dB(108.0MHz).
11. AM Tracking Adjustment (HS)
Settings : • Test point : TP8, TP9
• Adjustment location : L901(1/3) 999kHz
Method : Set to AM(MW) 999kHz and adjust L901(1/3) so that the test point become maximum.
11. MW Tracking Adjustment (9EZ,G,10EZ,V)
Settings : • Test point : TP8, TP9
• Adjustment location : L981(1/3) 999kHz
Method : Set to AM(MW) 999kHz and adjust L981(1/3) so that the test point become maximum.
12. MW Tracking Adjustment (HR)
Settings : • Test point : TP8, TP9
• Adjustment location : L901(1/3) 603kHz
TC941 1404kHz
Method : Set up TC941 to center before adjustment, the level at 603kHz is adjusted to maximum by L901(1/3). Then the level at 1404kHz is adjusted to maximum by TC941.
13. LW Tracking Adjustment (9EZ,G,10EZ,V)
Settings : • Test point : TP8, TP9
• Adjustment location : L941 144kHz
TC942 290kHz
Method : Set up TC941 to center before adjustment, the level at 144kHz is adjusted to maximum by L941. Then the level at 290kHz is adjusted to maximum by TC942.
14. SW Tracking Adjustment (HR)
Settings : • Test point : TP8, TP9
• Input level : adjustable
• Adjustment location : L941 5.9MHz
TC942 17.9MHz
Method : Set up TC941 to center before adjustment, the level at 5.9MHz is adjusted to maximum by L941. Then the level at 17.9MHz is adjusted to maximum by TC942.
15. DC Balance / Mono Distortion Adjustment
Settings : • Test point : TP3, TP4
• Adjustment location : L741
• Input level : 54dB
Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V \pm 0.04V. Next, check that the distortion is less than 1.3% .
16. Auto Stop Level Adjustment
Settings : • Test point : TP7
• Adjustment location : SFR722
• Input level : 54dB
Method : Set to FM 98.0 MHz and adjust voltage low (about 0.1V) by SFR722. After that voltage high (about 7.0V) by 2dB down.
17. Auto Stop Level Check
AM(MW)
Method : Check auto stop at AM(MW) 999kHz and the level is 43 ~ 68 dB.

FM

Method : Check auto stop at FM 98.0MHz and the level is 20 dB \pm 10 dB.

SW (HR)

Method : Check auto stop at SW 12.0MHz and the level is 45 dB \pm 10 dB.

18. μ -con Clock Adjustment

Settings : • Test point : TP5

• Adjustment location : L201

Method : Connect frequency counter across TP5 and GND then adjust L201 so that the test point becomes $511.47 \pm 0.4\text{Hz}$ [9EZ, G,HR,HS,V], $371.92 \pm 0.4\text{Hz}$ [10EZ].

< DECK SECTION >

19. Tape Speed Adjustment

Settings : • Test tape : TTA-410

• Test point : TP8, TP9

• Adjustment location : SFR201

Method : Play back the test tape and adjust SFR201 so that the frequency counter reads 3000Hz \pm 5Hz.

20. Head Azimuth Adjustment

Settings : • Test tape : TTA-410

• Test point : TP8, TP9

• Adjustment location : Head azimuth adjustment screw

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

21. PB Frequency Response Check (DECK 1, DECK 2)

Settings : • Test tape : TTA-320

• 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 5dB.

22. PB Sensitivity Check (DECK 1, DECK 2)

Settings : • Test tape : TTA-210

• Test point : TP8, TP9

Method : Play back the test tape and check that the output level of the test point is $150\text{mV} \pm 3.0\text{dB}$.

23. REC/PB Frequency Response Adjustment

Settings : • Test tape : TTA-602

• Test point : TP8, TP9

• Input signal : 800Hz / 8kHz (LINE IN)

• Adjustment location : SFR451 (Lch)
SFR452 (Rch)

Method : Apply a 800Hz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 11mV. Record and play back the 800Hz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 12mV (+1.0dB) \pm 0.5dB with respect to that of the 800Hz signal.

24. REC/PB Sensitivity Check

Settings : • Test tape : TTA-602

• Test point : TP8, TP9

• Input signal : 800Hz (LINE IN)

Method : Apply a 800Hz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 11mV. Record and play back the 800Hz signals and check that the output is $10\text{mV} (-1.0\text{dB}) \pm 2.5\text{dB}$.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

| | |
|-------------------------|---------------------------------------|
| IHF Sensitivity : | V : |
| | 10dB ± 4dB [at 65.0 MHz] |
| | 6dB ± 4dB [at 70.0 / 74.0 MHz] |
| | 5dB ± 4dB [at 87.5 / 98.0 / 108.0MHz] |
| (THD 3%) | D : |
| | 1dB ± 6dB [at 76.0MHz] |
| | 4dB ± 6dB [at 83.0MHz] |
| | -2dB ~ 16dB [at 108.0MHz] |
| | 9EZ,G,10EZ : |
| | 11dB ± 6dB [at 87.5 / 98.0MHz] |
| | 1dB ~ 19dB [at 108.0MHz] |
| | HR,HS : |
| | 1dB ± 6dB [at 87.5MHz] |
| | 4dB ± 6dB [at 98.0MHz] |
| | -2dB ~ 16dB [at 108.0MHz] |
| Quieting sensitivity : | STEREO |
| | V : |
| | Less than 36dB |
| | [at 65.0 / 70.0 / 74.0MHz] |
| | [at 87.5 / 98.0 / 108.0MHz] |
| (at S/N 50dB) | D,HR,HS : |
| | Less than 35dB |
| | [at 76.0 / 83.0 / 108.0MHz(D)] |
| | [at 87.5 / 98.0 / 108.0MHz(HR,HS)] |
| (at S/N 46dB) | 9EZ,G,10EZ : |
| | Less than 36dB |
| | [at 87.5 / 98.0 / 108.0MHz] |
| Signal to noise ratio : | STEREO |
| | D,HR,HS : |
| | More than 60dB |
| | [at 83.0MHz(D)] |
| | [at 98.0MHz(HR,HS)] |
| | V : |
| | More than 55dB |
| | [at 70.0 / 98.0MHz] |
| | MONO |
| | D,HR,HS : |
| | More than 70dB |
| | [at 83.0MHz(D)] |
| | [98.0MHz(HR,HS)] |
| | 9EZ,G,10EZ : |
| | More than 67dB |
| | [at 98.0MHz] |
| | V : |
| | More than 65dB |
| | [at 70.0 / 98.0MHz] |
| Distortion : | STEREO |
| | D,HR,HS,9EZ,G,10EZ : |
| | Less than 2.0% |
| | [at 83.0MHz(D)] |
| | [at 98.0MHz(HR,HS,9EZ,G,10EZ)] |
| | V : |
| | Less than 2.3% |
| | [at 70.0MHz] |
| | MONO |
| | D,HR,HS,9EZ,G,10EZ : |
| | Less than 1.3% |
| | [at 83.0MHz(D)] |
| | [at 98.0MHz(HR,HS,9EZ,G,10EZ)] |
| | V : |
| | Less than 1.5% |
| | [at 70.0MHz] |
| Auto stop level : | 10 ~ 30dB |
| | [at 70.0MHz(V)] |
| | [at 83.0MHz(D)] |
| | [at 98.0MHz(HR,HS,9EZ,G,10EZ)] |

| | |
|--------------------------|--------------------------|
| Stereo separation : | D,HR,HS : |
| | More than 28dB |
| | [at 83.0MHz(D)] |
| | [at 98.0MHz(HR,HS)] |
| | 9EZ,G,10EZ,V : |
| | More than 20dB |
| | [at 98.0MHz(9EZ,G,10EZ)] |
| | [at 70.0 / 98.0MHz(V)] |
| Intermediate frequency : | 10.7MHz |

<AM(MW) SECTION>

| | |
|--------------------------|---------------------|
| Sensitivity : | Less than 66dB |
| (S/N 20dB) | [at 603kHz] |
| | Less than 60dB |
| | [at 999kHz/1404kHz] |
| Signal to noise ratio : | More than 30dB |
| | [at 999kHz] |
| Distortion : | Less than 3.0% |
| | [at 999kHz] |
| Auto stop level : | 43dB ~ 68dB |
| | [at 999kHz] |
| Stereo separation : | D : |
| | More than 12dB |
| | [at 999kHz] |
| Intermediate frequency : | 450kHz |

<LW SECTION> (9EZ,G,10EZ,V only)

| | |
|--------------------------|-------------------------|
| Sensitivity : | Less than 72dB |
| (S/N 20dB) | [at 144 / 198 / 290kHz] |
| Signal to noise ratio : | More than 30dB |
| | [at 198kHz] |
| Distortion : | Less than 1.5% |
| | [at 198kHz] |
| Intermediate frequency : | 450kHz |

<SW SECTION> (HR only)

| | |
|--------------------------|------------------------------------|
| Sensitivity : | Less than 47dB [at 5.9MHz] |
| (S/N 20dB) | Less than 41dB [at 12.0 / 17.9MHz] |
| Signal to noise ratio : | More than 35dB |
| | [at 12.0MHz] |
| Distortion : | Less than 1.5% |
| | [at 12.0MHz] |
| Intermediate frequency : | 450kHz |

<DECK SECTION>

| | |
|-----------------------|-----------------------|
| Tape speed : | 3000Hz ± 45Hz |
| Wow & flutter : | Less than 0.35% |
| | (RMS) |
| 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 : | 2.8V ± 3dB |
| | (SP OUT 2V) |
| REC/PB output level : | 2.0V ± 3.5dB |
| | (SP OUT 2V,NORM) |
| Distortion (REC/PB) : | Less than 2.0% (NORM) |
| Noise level (PB) : | Less than 20mV |

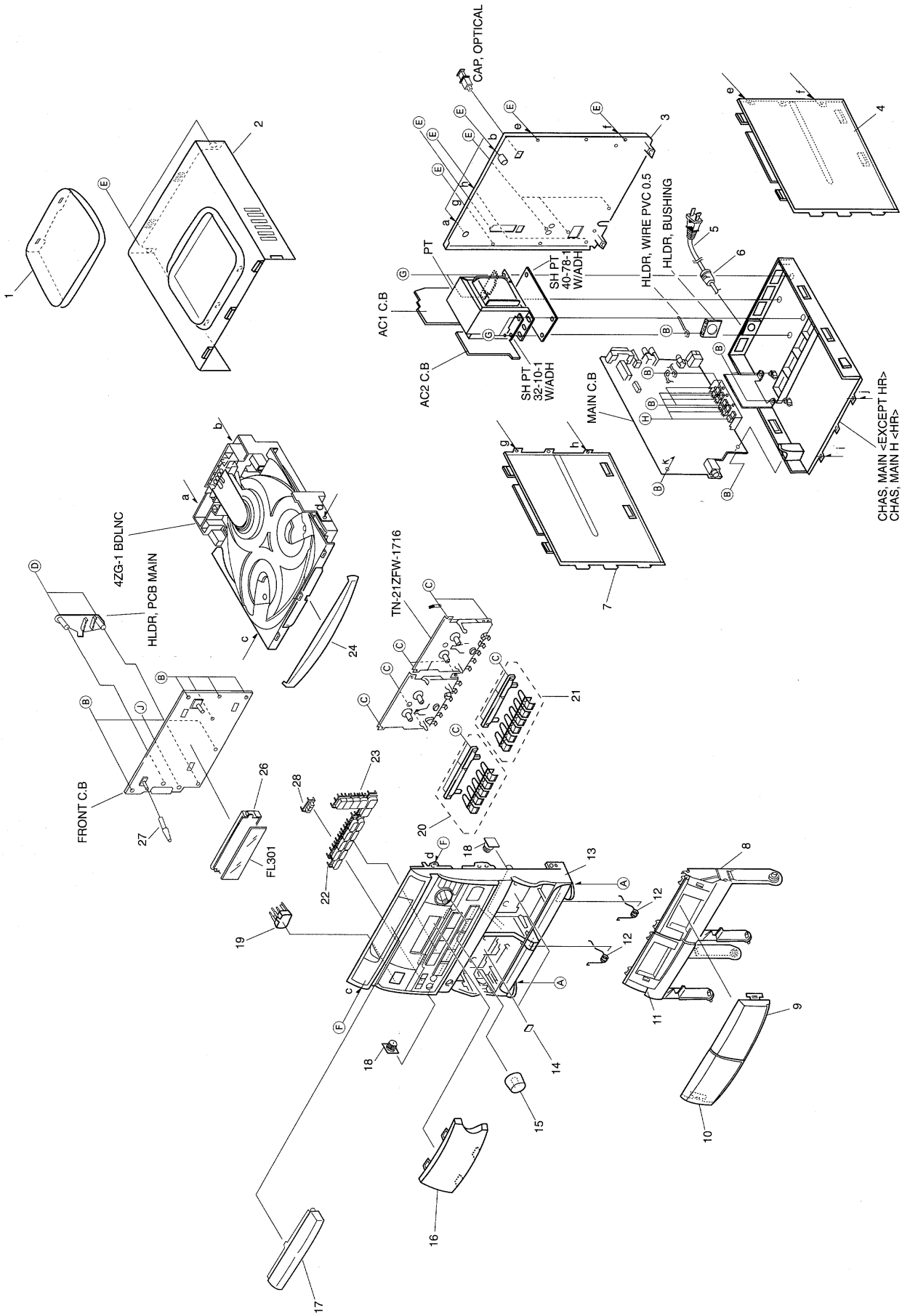
Noise level (REC/PB) : (NORM,SP OUT 2V,DOLBY OFF)
 Less than 35mV
 Crosstalk : (NORM,SP OUT 2V,DOLBY OFF)
 More than 55dB
 Channel separation : (SP OUT 2V,1kHz)
 More than 35 dB
 Erasing ratio : (SP OUT 2V,1kHz)
 More than 55dB
 Test tape : (at 400Hz, 10VU,NORM)
 NORM : TTA-602

ACCESSORIES / PACKAGE LIST

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

| REF. NO. | PART NO. | KANRI NO. | DESCRIPTION |
|----------|----------------|---------------------|-----------------|
| 1 | 87-NF9-909-019 | IB, E(ECA) | -C<HR> |
| 1 | 87-NF9-910-019 | IB, E(EGFSI) | -C<10EZ> |
| 1 | 87-NF9-911-019 | IB, V-C<V> | |
| 1 | 87-NF9-912-019 | IB, E(EGFSI) | -C-9<9EZ> |
| 1 | 87-NF9-913-010 | -- IB, D(J) | -I<D> |
| 1 | 87-NF9-922-019 | IB, HS(K) | -C<HS> |
| 1 | 87-NF9-920-010 | IB, G(E) | -C<G> |
| 2 | 87-A90-030-010 | ANT, LOOP AM-NC | C<10EZ, 9EZ, G> |
| 3 | 87-A90-054-010 | -- ANT, LOOP AM-CON | C<HR, HS, V, D> |
| 4 | 87-A90-118-010 | ANT, WIRE FM(Z) | <10EZ, 9EZ, G> |
| 5 | 87-043-115-010 | ANT, FEEDER FM | <HR> |
| 6 | 87-A90-119-010 | ANT, WIRE SW (5M) | <HR> |
| 7 | 86-NFZ-638-110 | RC UNIT, RC-6AS14 | |
| △ 8 | 87-A90-312-016 | PLUG, CONVERSION | WTN-1157R1<HR> |

MECHANICAL EXPLODED VIEW 1 / 1

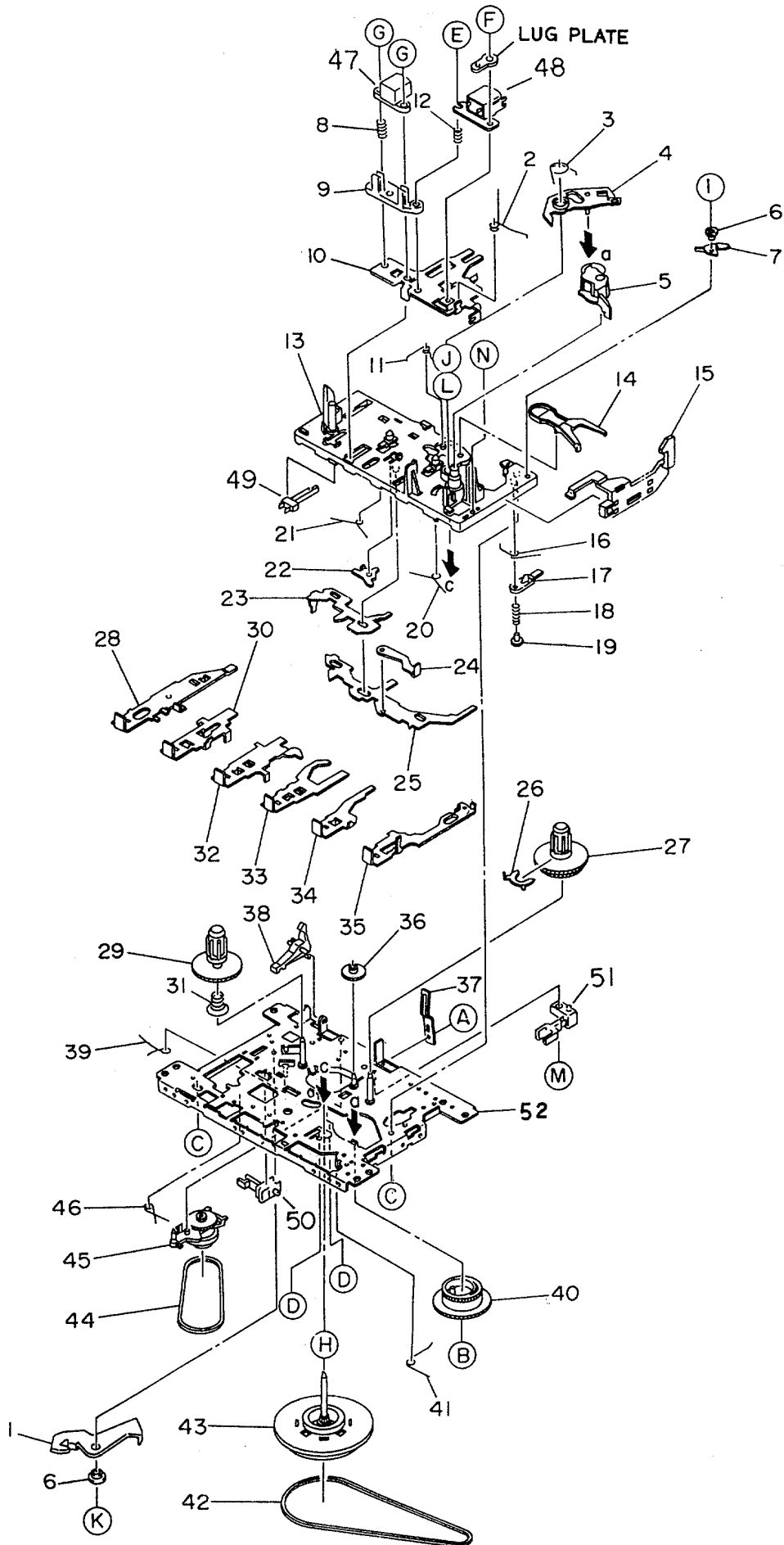


MECHANICAL PARTS LIST 1 / 1

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-NFZ-001-010 | -- | WINDOW, TOP | 13 | 87-NF9-007-010 | | CABI, FR V<V> |
| 2 | 87-NF9-055-010 | -- | PANEL, TOP | 14 | 81-532-080-010 | 1A | LBL, CASS-COMPT |
| 3 | 87-NF9-022-010 | | CABI, REAR EZSTNC (RDS) <10EZ> | 15 | 87-NF9-048-010 | -- | KNOB, RTRY VOL |
| 3 | 87-NF9-015-010 | | CABI, REAR VJSTNM<V> | 16 | 87-NF9-034-010 | | WINDOW, DISP E (RDS) <10EZ> |
| 3 | 87-NF9-027-010 | | CABI, REAR HSSTNC<HS> | 16 | 87-NF9-039-010 | | WINDOW, DISP<HR, HS> |
| 3 | 87-NF9-028-010 | -- | CABI, REAR STNC<D> | 16 | 87-NF9-040-010 | -- | WINDOW, DISP U<9EZ, G, V, D> |
| 3 | 87-NF9-025-010 | | CABI, REAR GSTNC<G> | 17 | 87-NF9-038-010 | -- | WINDOW, CD |
| 3 | 87-NF9-023-010 | | CABI, REAR E1STNC<9EZ> | 18 | 87-063-164-010 | -- | OIL-DMPR, |
| 3 | 87-NF9-013-010 | | CABI, REAR HRJSTNM<HR> | 19 | 87-NF9-044-110 | | KEY, POWER<EXP D> |
| 4 | 87-NF9-057-010 | -- | PANEL, RIGHT | 19 | 87-NF9-058-010 | -- | KEY, POWER<D> |
| △ | 5 | 87-050-079-010 | AC CORD ASSY, BLK<HR, 10EZ, 9EZ, V> | 20 | 87-NF9-041-010 | -- | KEY, CASS L |
| △ | 5 | 87-050-081-110 | AC CORD ASSY, G<G> | 21 | 87-NF9-042-010 | -- | KEY, CASS R |
| △ | 5 | 87-A80-006-010 | AC CORD ASSY, HS<HS> | 22 | 87-NF9-046-010 | -- | KEY, ASSY 1 |
| △ | 5 | 87-050-098-010 | 1B AC CORD ASSY, D BLK<D> | 23 | 87-NF9-047-010 | | KEY, ASSY 2<EXP D> |
| | 6 | 87-085-184-010 | 0E BUSHING, AC CORD (D) CM-22A<D> | 23 | 87-NF9-054-010 | -- | KEY, ASSY 2B<D> |
| | 6 | 87-085-185-010 | BUSHING, CORD (E) CM-22B<EXP D> | 24 | 87-NF9-050-010 | | PANEL, TRAY U<EXP D> |
| | 7 | 87-NF9-056-010 | -- | 24 | 87-NF9-051-010 | -- | PANEL, TRAY B<D> |
| | 8 | 87-NF9-031-010 | BOX, CASS R<HR, HS> | 25 | 82-NB6-067-010 | -- | BADGE, AIWA 3CN |
| | 8 | 87-NF9-033-010 | BOX, CASS UR<10EZ, 9EZ, V, G> | 26 | 82-NF7-210-110 | -- | GUIDE, FL |
| | 8 | 87-NF9-053-010 | -- | 27 | 87-NF9-049-010 | | KNOB RTRY MIC<HR, HS> |
| | 9 | 87-NF9-037-010 | -- | A | 87-067-581-010 | -- | BVT2+3-15 W/O SLOT |
| | 10 | 87-NF9-036-010 | -- | B | 87-067-703-010 | 0E | BVT2+3-10 W/O SLOT |
| | 11 | 87-NF9-030-010 | BOX, CASS L<HR, HS> | C | 87-067-758-010 | 0E | BVT2+3-12 W/O SLOT |
| | 11 | 87-NF9-032-010 | BOX, CASS UL<10EZ, 9EZ, V, G> | D | 87-067-698-010 | -- | BVT2+3-18 W/O SLOT |
| | 11 | 87-NF9-052-010 | -- | E | 87-067-761-010 | 0E | BVT2+3-10 BLK |
| | 12 | 82-NF7-218-010 | -- | F | 87-721-097-410 | 0E | QT2+3-12 GLD |
| | 13 | 87-NF9-002-010 | CABI, FR HE<HR, HS> | G | 87-741-172-410 | -- | UT2+4-12 W/O SLOT |
| | 13 | 87-NF9-004-010 | CABI, FR E RDS<10EZ> | H | 87-067-579-010 | 0E | BVT2+3-8 W/O SLOT |
| | 13 | 87-NF9-005-010 | -- | J | 87-661-096-410 | -- | VFT1+3-10 |
| | 13 | 87-NF9-006-010 | CABI, FR E1<9EZ, G> | | | | |

TAPE MECHANISM EXPLODED VIEW 1 / 2

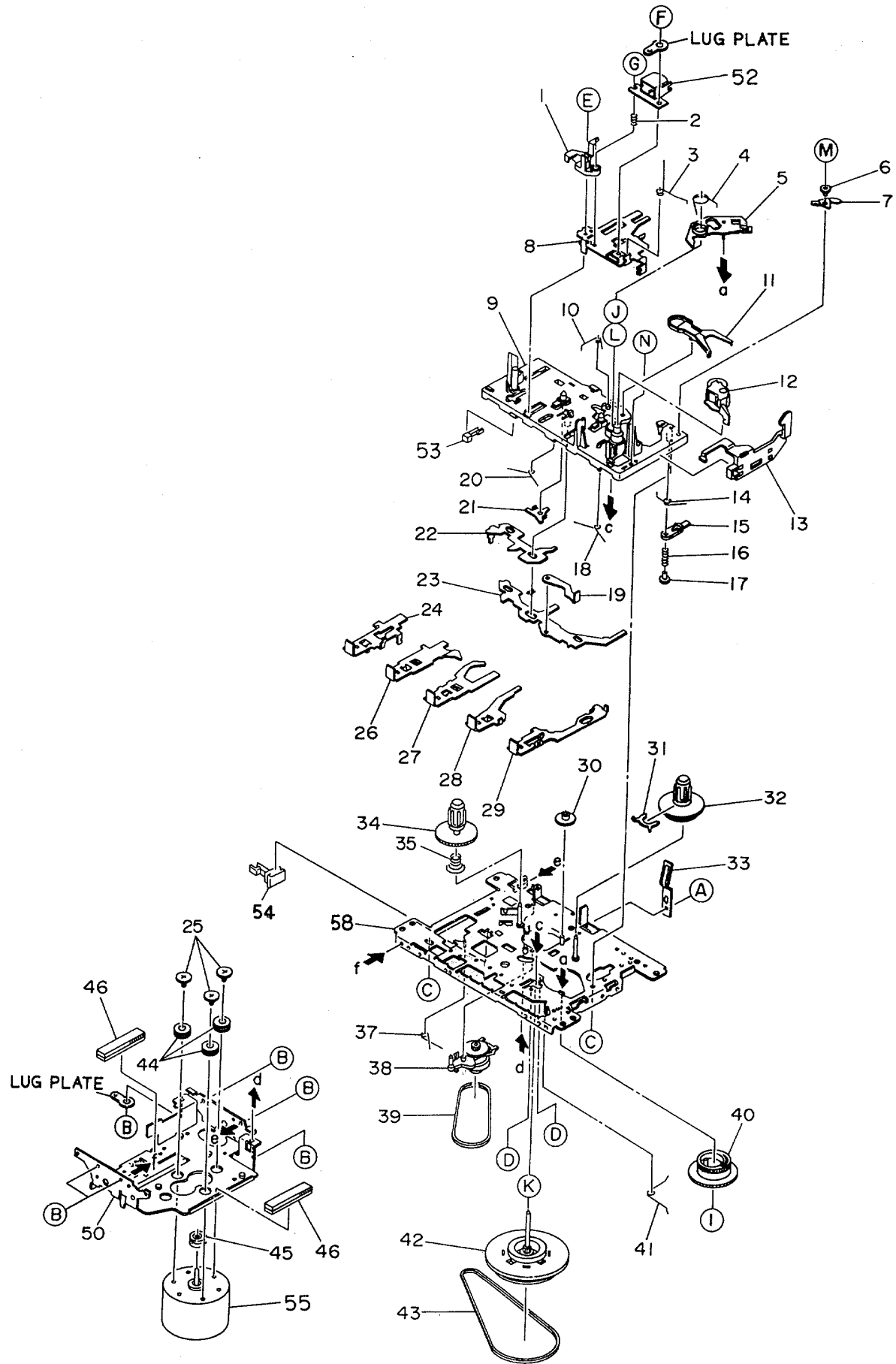


TAPE MECHANISM PARTS LIST 1/2

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 | 0E | REC ARM | 36 | S1-821-100-700 | 0E | FF GEAR |
| 2 | S1-921-030-090 | 0E | PANEL P SPRING | 37 | S1-829-100-010 | 0E | PACK SPRING |
| 3 | S1-921-260-050 | 0E | GEAR PLATE SPRING | 38 | S1-821-100-690 | 1C | RECORD SAFETY LEVER |
| 4 | S1-921-265-020 | 0E | GEAR PLATE ASSY | 39 | S1-921-140-210 | 1A | REC BUTTON LEVER SPRING |
| 5 | S1-921-043-100 | 1C | PINCH ROLLER ARM ASSY | 40 | S1-921-260-020 | 1B | CAM GEAR |
| 6 | S1-921-140-370 | 0E | P ARM COLLER | 41 | S1-921-140-160 | 0E | E ACTUATOR SPRING |
| 7 | S1-921-140-340 | 0E | P ARM | 42 | S1-921-090-240 | 1C | MAIN BELT |
| 8 | S1-821-030-080 | 0E | EH SPRING | 43 | S1-921-093-030 | 0E | FLYWHEEL ASSY |
| 9 | S1-921-030-060 | 0E | HEAD BASE | 44 | S1-821-070-110 | 0E | RF BELT |
| 10 | S1-921-030-140 | 0E | HEAD PANEL | 45 | S1-921-073-080 | ?? | RF CLUTCH ASSY |
| 11 | S1-921-141-8A0 | 0E | M CONTROL SPRING | 46 | S1-921-140-170 | 1H | P.S.LEVER SPRING |
| 12 | S1-821-030-070 | 0E | AZIMUTH SPRING | 47 | S6-202-140-190 | 1E | E HEAD |
| 13 | S1-921-143-180 | 1C | BASE ASSY | 48 | S6-201-010-750 | 0E | R.P.HEAD RP-7442BS |
| 14 | S1-921-260-4A0 | 0E | SENSING LEVER | 49 | S6-401-011-490 | 1B | LEAF SW MSW-1541T |
| 15 | S1-921-130-020 | 0E | EJECT SLIDE LEVER | 50 | S6-401-011-610 | 1B | LEAF SW MSW-17820MVEI |
| 16 | S1-921-141-3A0 | 1C | P CONTROL SPRING | 51 | S6-401-010-380 | 1B | LEAF SW MSW-1275 |
| 17 | S1-921-140-550 | 2B | PAUSE LEVER(E) | 52 | S1-921-015-010 | ?? | CHASSIS ASSY |
| 18 | S1-921-140-120 | 0E | PAUSE LEVER SPRING | A | S9-179-000-000 | 0E | C TAP SCREW M2-3 |
| 19 | S1-921-140-110 | 1H | PAUSE STOPPER | B | S9-422-000-000 | 0E | P WASHER CUT 12-3.8-0.3 |
| 20 | S1-921-140-150 | 0E | BUTTON LEVER SPRING(B) | C | S9-679-000-000 | 0E | P TAP SCREW M2-5 |
| 21 | S1-921-140-140 | 1F | BUTTON LEVER SPRING(A) | D | S9-999-180-090 | 0E | TAP SCREW M2-4.5 |
| 22 | S1-921-140-200 | 0E | PR STOPPER | E | S9-922-000-000 | 0E | AZIMUTH SCREW M2-8 |
| 23 | S1-921-140-090 | 0E | SWITCH ACTUATOR | F | S9-115-000-000 | 0E | + BIND SCREW M2-3 |
| 24 | S1-921-140-640 | 0E | E KICK LEVER | G | S9-821-000-000 | 0E | +CAP SCREW M2-8 |
| 25 | S1-921-140-080 | 1E | PUSH BUTTON ACTUATOR | H | S9-882-000-000 | 0E | P WASHER 2-3.5-0.4 |
| 26 | S1-921-050-060 | 0E | SENSOR | I | S9-999-200-410 | 1B | P TAP SCREW M2-3 |
| 27 | S1-921-053-030 | 1F | TAKE UP REEL ASSY | J | S9-999-030-130 | 0E | P WASHER CUT 1.45-3.8-0. |
| 28 | S1-921-140-220 | 0E | REC BUTTON LEVER | K | S9-180-000-000 | 0E | C TAP SCREW M2-4 |
| 29 | S1-921-053-040 | 1E | SUPPLY REEL ASSY | L | S9-999-000-030 | 0E | P WASHER 2.1-4-0.13 |
| 30 | S1-921-140-230 | 1D | PLAY BUTTON LEVER | M | S9-181-000-000 | 1F | C TAP SCREW M2-5 |
| 31 | S1-821-100-990 | 0E | BACK TENSION SPRING | N | S9-P05-200-610 | 0E | S TAPPING SCREW M2-6 |
| 32 | S1-921-140-240 | 0E | REW BUTTON LEVER | | | | |
| 33 | S1-921-140-250 | 0E | FF BUTTON LEVER | | | | |
| 34 | S1-921-140-660 | 1A | STOP BUTTON LEVER | | | | |
| 35 | S1-921-140-610 | 1F | PAUSE BUTTON LEVER | | | | |

TAPE MECHANISM EXPLODED VIEW 2 / 2



TAPE MECHANISM PARTS LIST 2 / 2

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

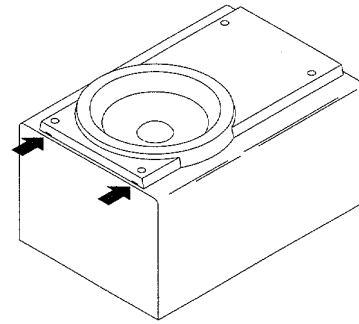
| REF.NO. | PART NO. | KANRI NO. | DESCRIPTION | REF.NO. | PART NO. | KANRI NO. | DESCRIPTION |
|---------|----------------|-----------|------------------------|---------|----------------|-----------|-------------------------|
| 1 | S1-921-030-4A0 | 0E | HEAD BASE | 37 | S1-921-140-170 | 1H | P.S.LEVER SPRING |
| 2 | S1-821-030-070 | 0E | AZIMUTH SPRING | 38 | S1-921-073-080 | ?? | RF CLUTCH ASSY |
| 3 | S1-921-030-090 | 0E | PANEL P SPRING | 39 | S1-821-070-110 | 0E | RF BELT |
| 4 | S1-921-260-050 | 0E | GEAR PLATE SPRING | 40 | S1-921-260-020 | 1B | CAM GEAR |
| 5 | S1-921-265-020 | 0E | GEAR PLATE ASSY | 41 | S1-921-140-160 | 0E | E ACTUATOR SPRING |
| 6 | S1-921-140-370 | 0E | P ARM COLLER | 42 | S1-921-093-040 | 1F | FLYWHEEL ASSY |
| 7 | S1-921-140-340 | 0E | P ARM | 43 | S1-921-090-240 | 1C | MAIN BELT |
| 8 | S1-921-030-110 | 1A | HEAD PANEL | 44 | S1-820-130-060 | 0E | MOTOR RUBBER |
| 9 | S1-921-143-170 | 0E | BASE ASSY | 45 | S1-921-120-130 | 0E | MOTOR PULLEY |
| 10 | S1-921-141-8A0 | 0E | M CONTROL SPRING | 46 | S1-921-120-120 | 1B | ANTI VIBR FELT MAT |
| 11 | S1-921-260-4A0 | 0E | SENSING LEVER | 50 | S1-921-120-110 | 1B | MOTOR BRACKET |
| 12 | S1-921-043-100 | 1C | PINCH ROLLER ARM ASSY | 52 | S6-201-010-750 | 0E | R.P.HEAD RP-7442BS |
| 13 | S1-921-130-020 | 0E | EJECT SLIDE LEVER | 53 | S6-401-011-490 | 1B | LEAF SW MSW-1541T |
| 14 | S1-921-141-3A0 | 1C | P CONTROL SPRING | 54 | S6-401-011-610 | 1B | LEAF SW MSW-17820MVE1 |
| 15 | S1-921-140-550 | 2B | PAUSE LEVER(E) | 55 | S6-002-030-290 | 2M | MOTOR BG530YD-2BH |
| 16 | S1-921-140-120 | 0E | PAUSE LEVER SPRING | 58 | S1-921-015-010 | ?? | CHASSIS ASSY |
| 17 | S1-921-140-110 | 1H | PAUSE STOPPER | A | S9-179-000-000 | 0E | C TAP SCREW M2-3 |
| 18 | S1-921-140-150 | 0E | BUTTON LEVER SPRING(B) | B | S9-180-000-000 | 0E | C TAP SCREW M2-4 |
| 19 | S1-821-011-590 | 0E | E KICK LEVER | C | S9-679-000-000 | 0E | P TAP SCREW M2-5 |
| 20 | S1-921-140-140 | 1F | BUTTON LEVER SPRING(A) | D | S9-999-180-090 | 0E | TAP SCREW M2-4.5 |
| 21 | S1-921-140-200 | 0E | PR STOPPER | E | S9-004-000-000 | 0E | SCREW M2-6 |
| 22 | S1-921-140-090 | 0E | SWITCH ACTUATOR | F | S9-115-000-000 | 0E | + BIND SCREW M2-3 |
| 23 | S1-921-140-080 | 1E | PUSH BUTTON ACTUATOR | G | S9-922-000-000 | 0E | AZIMUTH SCREW M2-8 |
| 24 | S1-921-140-230 | 1D | PLAY BUTTON LEVER | I | S9-422-000-000 | 0E | P WASHER CUT 12-3.8-0.3 |
| 25 | S1-821-120-020 | 0E | MOTOR COLLER SCREW | J | S9-999-030-130 | 0E | P WASHER CUT 1.45-3.8 |
| 26 | S1-921-140-240 | 0E | REW BUTTON LEVER | K | S9-882-000-000 | 0E | P WASHER 2-3.5-0.4 |
| 27 | S1-921-140-250 | 0E | FF BUTTON LEVER | L | S9-999-000-030 | 0E | P WASHER2.1-4-0.13 |
| 28 | S1-921-140-260 | 0E | STOP BUTTON LEVER | M | S9-999-200-410 | 1B | P TAP SCREW M2-3 |
| 29 | S1-921-140-610 | 1F | PAUSE BUTTON LEVER | N | S9-P05-200-610 | 0E | S TAPPING SCREW M2-6 |
| 30 | S1-821-100-700 | 0E | FF GEAR | | | | |
| 31 | S1-921-050-060 | 0E | SENSOR | | | | |
| 32 | S1-921-053-030 | 1F | TAKE UP REEL ASSY | | | | |
| 33 | S1-829-100-010 | 0E | PACK SPRING | | | | |
| 34 | S1-921-053-040 | 1E | SUPPLY REEL ASSY | | | | |
| 35 | S1-821-100-990 | 0E | BACK TENSION SPRING | | | | |

SPEAKER DISASSEMBLY INSTRUCTIONS

Type.1

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

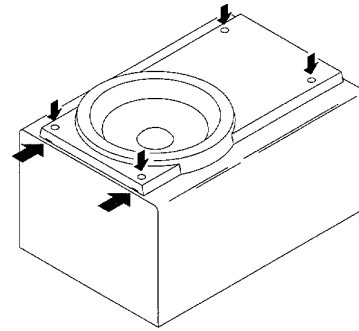
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャップをマイナスドライバーで端の方から持ち上げて外すと中にビスが有りますので、ビスを取り外します。矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

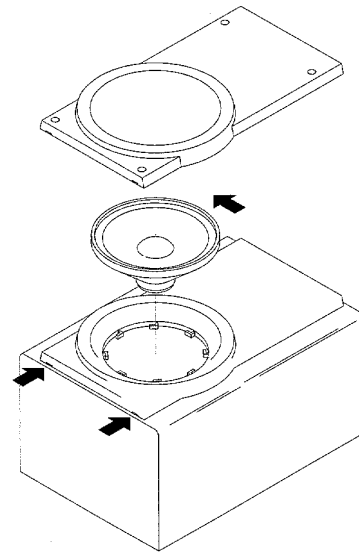
Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SX-NA10 / NS10 (YU,YJ,YS,YL,ST) SPEAKER PARTS LIST

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

| REF. NO. | PART NO. | KANRI NO. | DESCRIPTION |
|----------|----------------|--------------|-------------|
| 1 | 87-NSK-601-019 | SPKR,120 | |
| 2 | 86-NSZ-602-019 | SPKR,CERA 14 | |
| 3 | 87-NSK-001-019 | PANEL,FR ST | |
| 4 | 86-NSZ-003-019 | NET | |
| 5 | 87-NS7-611-019 | CORD,SPKR | |

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 SERGESUPPRESSOR 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-SCREW |
| ヒンジ | HINGE |
| ヒンジビス | S-SCREW |
| ビスセレート | SCREW, SERRART |

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

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