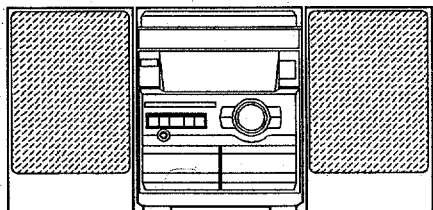


# aiwa



## NSX-A92 NSX-A94 NSX-S90 NSX-S94



COMPACT DISC STEREO  
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: 2ZM-3MK2 PR4NM
- BASIC CD MECHANISM: 4ZG-1 Z1DNM

- TYPE: U, LH, HR

| SYSTEM  | CD CASSEIVER           | SPEAKER            | REMOTE CONTROLLER |
|---------|------------------------|--------------------|-------------------|
| NSX-A92 | CX-NA92<br>(TYPE : U)  | SX-ANA92           | RC-7AS08          |
| NSX-A94 |                        | SX-NA94<br>SX-R240 |                   |
| NSX-S90 | CX-NS90<br>(TYPE : LH) | SX-ANS90           |                   |
| NSX-S94 | CX-NS94<br>(TYPE : LH) | SX-NS94<br>SX-R240 |                   |
| NSX-S94 | CX-NS94<br>(TYPE : HR) | SX-NS94<br>SX-R280 |                   |

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1.  
(S/M Code No.09-974-187-50T)
- If requiring information about the Speaker, see Service Manual of SX-ANA92/  
SX-ANS90/SX-NA94/SX-NS94.  
(S/M Code No.09-974-199-4FP)

## TABLE OF CONTENTS

|                                                           |         |
|-----------------------------------------------------------|---------|
| SPECIFICATIONS .....                                      | 3       |
| PROTECTION OF EYES FROM LASER BEAM DURING SERVICING ..... | 4       |
| PRECAUTION TO REPLACE OPTICAL BLOCK .....                 | 4       |
| ELECTRICAL MAIN PARTS LIST .....                          | 5 ~ 9   |
| CHIP RESISTOR PART CODE .....                             | 9       |
| TRANSISTOR ILLUSTRATION .....                             | 10      |
| BLOCK DIAGRAM .....                                       | 11 ~ 13 |
| SCHEMATIC DIAGRAM – 1 (MAIN : U, LH) .....                | 14 ~ 16 |
| IC BLOCK DIAGRAM – 1 .....                                | 17 ~ 18 |
| WIRING – 1 (MAIN : U, LH) .....                           | 18 ~ 19 |
| SCHEMATIC DIAGRAM – 2 (MAIN : HR) .....                   | 20 ~ 22 |
| WIRING – 2 (MAIN : HR) .....                              | 23 ~ 24 |
| SCHEMATIC DIAGRAM – 3 (FRONT : U, LH) .....               | 25 ~ 26 |
| WIRING – 3 (FRONT : U, LH) .....                          | 27 ~ 28 |
| SCHEMATIC DIAGRAM – 4 (FRONT : HR) .....                  | 29 ~ 30 |
| WIRING – 4 (FRONT : HR) .....                             | 31 ~ 32 |
| SCHEMATIC DIAGRAM – 5 (TUNER FRONTEND / FAN .....         | 33      |
| FL (BJ529GK) GRID ASSIGNMENT / ANODE CONNECTION .....     | 34      |
| WIRING – 5 (AC1 / AC2) .....                              | 35      |
| WIRING – 6 (DECK / HEAD) .....                            | 36      |
| IC BLOCK DIAGRAM – 2 .....                                | 37 ~ 38 |
| IC DESCRIPTION .....                                      | 39 ~ 41 |
| ADJUSTMENT .....                                          | 42 ~ 43 |
| PRACTICAL SERVICE FIGURE .....                            | 44      |
| MECHANICAL EXPLODED VIEW 1 / 1 .....                      | 45 ~ 46 |
| MECHANICAL PARTS LIST 1 / 1 .....                         | 47      |
| SPRING APPLICATION POSITION .....                         | 48      |
| TAPE MECHANISM EXPLODED VIEW 1 / 1 .....                  | 49 ~ 50 |
| TAPE MECHANISM PARTS LIST 1 / 1 .....                     | 51      |
| ACCESSORIES / PACKAGE LIST .....                          | 51      |

# SPECIFICATIONS

## <FM Tuner section>

|                                 |                      |
|---------------------------------|----------------------|
| <b>Tuning range</b>             | 87.5 MHz to 108 MHz  |
| <b>Usable sensitivity (IHF)</b> | 13.2 dBf             |
| <b>Antenna terminals</b>        | 75 ohms (unbalanced) |

## <AM/MW Tuner section>

|                           |                                                                       |
|---------------------------|-----------------------------------------------------------------------|
| <b>Tuning range</b>       | 531 kHz to 1602 kHz (9 kHz step)<br>530 kHz to 1710 kHz (10 kHz step) |
| <b>Usable sensitivity</b> | 350 $\mu$ V/m                                                         |
| <b>Antenna</b>            | Loop antenna                                                          |

## <SW Tuner section>(HR only)

|                     |                         |
|---------------------|-------------------------|
| <b>Tuning range</b> | 5.900 MHz to 17.900 MHz |
| <b>Antenna</b>      | Wire antenna            |

## <Amplifier section>

|                                  |                                                                                                                                                                                                                                                                                                              |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power output</b>              | U:<br>145 W + 145 W (50 Hz - 20 kHz,<br>T.H.D. less than 1 %, 6 ohms)<br>LH:<br>180 W + 180 W<br>(6 ohms, T.H.D. 10 %, 1 kHz)<br>HR:<br>Rated: 145 W + 145 W<br>(6 ohms, T.H.D. 1 %, 1 kHz)<br>Reference: 180 W + 180 W<br>(6 ohms, T.H.D. 10 %, 1 kHz)<br><br>* without connecting to the SURROUND SPEAKERS |
| <b>Total harmonic distortion</b> | 0.05 % (120 W, 1 kHz, 6 ohms,<br>DIN AUDIO)                                                                                                                                                                                                                                                                  |
| <b>Inputs</b>                    | U:<br>VIDEO/AUX: 400 mV (adjustable)<br>MD: 400 mV (adjustable)<br>MIC 1, MIC 2: 1 mV (10 kohms)<br>LH,HR:<br>VIDEO/AUX: 210 mV (adjustable)<br>MD: 210 mV (adjustable)<br>MIC 1, MIC 2: 1.4 mV (10 kohms)                                                                                                   |
| <b>Outputs</b>                   | LINE OUT: 200 mV<br>SUPER WOOFER: 2.9 V<br>SPEAKERS: accept speakers of<br>6 ohms or more<br>SURROUND SPEAKERS:<br>accept speakers of 16 ohms or<br>more<br>PHONES (stereo jack):<br>accepts headphones of 32 ohms<br>or more                                                                                |

## <Cassette deck section>

|                              |                                                                            |
|------------------------------|----------------------------------------------------------------------------|
| <b>Track format</b>          | 4 tracks, 2 channels stereo                                                |
| <b>Frequency response</b>    | CrO2 tape: 50 Hz - 16000 Hz<br>Normal tape: 50 Hz - 15000 Hz               |
| <b>Signal-to-noise ratio</b> | 60 dB (Dolby B NR ON, CrO2 tape<br>peak level)                             |
| <b>Recording system</b>      | AC bias                                                                    |
| <b>Heads</b>                 | Deck 1: Playback head x 1<br>Deck 2: Recording/playback/<br>erase head x 1 |

## <Compact disc player section>

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

## <General>

|                                                   |                                                                                                                                                                                                                                                                           |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power requirements</b>                         | U:<br>120 V AC, 60Hz<br>LH,HR:<br>120 V/220 - 230 V/240 V AC,<br>switchable, 50/60 Hz                                                                                                                                                                                     |
| <b>Power consumption</b>                          | U: 125 W<br>LH,HR: 185 W                                                                                                                                                                                                                                                  |
| <b>Dimensions of main unit<br/>(W x H x D)</b>    | U:<br>260 x 308 x 370 mm<br>(10 $\frac{1}{4}$ x 12 $\frac{1}{4}$ x 14 $\frac{5}{8}$ in.)<br>LH,HR:<br>260 x 309 x 370 mm                                                                                                                                                  |
| <b>Weight of main unit</b>                        | 9 kg (19 lbs 13 oz.)                                                                                                                                                                                                                                                      |
| <b>&lt;Speaker system SX-ANA92 / SX-ANS90&gt;</b> |                                                                                                                                                                                                                                                                           |
| <b>Cabinet type</b>                               | 4 way, bass reflex with surround<br>speaker (magnetic shielded type)                                                                                                                                                                                                      |
| <b>Speakers</b>                                   | Woofer:<br>160 mm (6 $\frac{3}{8}$ in.) cone type<br>Tweeter:<br>50 mm (2 in.) cone type<br>Super tweeter:<br>20 mm (1 $\frac{3}{16}$ in.) ceramic type<br>Cardioid speaker:<br>80 mm (3 $\frac{1}{4}$ in.) cone type<br>Surround speaker:<br>80 mm (3 $\frac{1}{4}$ in.) |
| <b>Impedance</b>                                  | Front speaker: 6 ohms<br>Surround speaker: 16 ohms                                                                                                                                                                                                                        |
| <b>Output sound pressure level</b>                | 87 dB/W/m                                                                                                                                                                                                                                                                 |
| <b>Dimensions (W x H x D)</b>                     | 250 x 390 x 302 mm<br>(9 $\frac{7}{8}$ x 15 $\frac{3}{8}$ x 12 in.)                                                                                                                                                                                                       |
| <b>Weight</b>                                     | 5.0 kg (11 lbs.)                                                                                                                                                                                                                                                          |
| <b>&lt;Speaker system SX-NA94 / SX-NS94&gt;</b>   |                                                                                                                                                                                                                                                                           |
| <b>Cabinet type</b>                               | 3 way, bass reflex<br>(magnetic shielded type)                                                                                                                                                                                                                            |
| <b>Speakers</b>                                   | Woofer:<br>160 mm (6 $\frac{3}{8}$ in.) cone type<br>Tweeter:<br>80 mm (3 $\frac{1}{4}$ in.) cone type<br>Super tweeter:<br>20 mm (1 $\frac{3}{16}$ in.) ceramic type                                                                                                     |
| <b>Impedance</b>                                  | 6 ohms                                                                                                                                                                                                                                                                    |
| <b>Output sound pressure level</b>                | 87 dB/W/m                                                                                                                                                                                                                                                                 |
| <b>Dimensions (W x H x D)</b>                     | 243 x 304 x 245 mm<br>(9 $\frac{5}{8}$ x 12 x 9 $\frac{3}{4}$ in.)                                                                                                                                                                                                        |
| <b>Weight</b>                                     | 3.8 kg (8 lbs. 6 oz.)                                                                                                                                                                                                                                                     |

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

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

## WARNING!!

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



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

## VAROITUS!

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

## WARNING!

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

## CAUTION

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

## ATTENTION

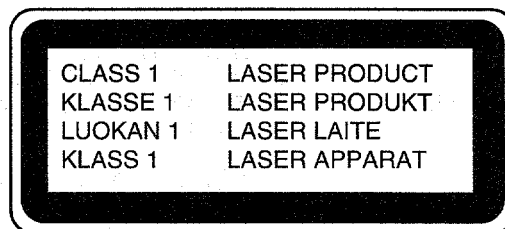
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## 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.

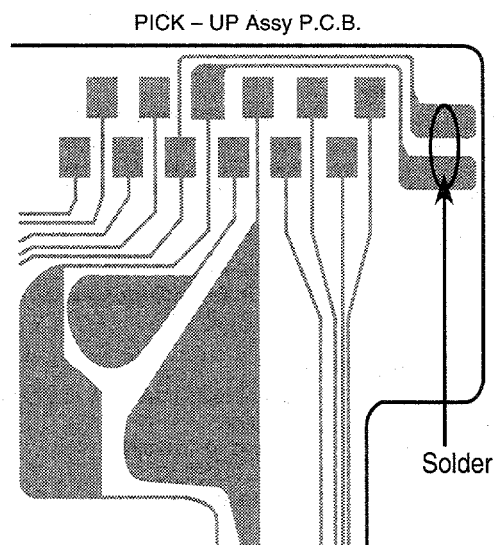


## Precaution to replace Optical block

### (KSS-213B)

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.



# 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         |                |                               |             | C101    | 87-A10-231-090 |           | CAP,E 3300-80                   |
|            | 87-020-454-010 | IC, DN6851                    |             | C102    | 87-A10-231-090 |           | CAP,E 3300-80                   |
|            | 87-NF4-641-010 | IC, LC866548V-5E15<EXCEPT HR> |             | C103    | 87-016-658-090 |           | CAP,E 4700-35 M SMG             |
|            | 87-NF4-642-010 | IC, LC866548V-5E54<HR>        |             | C104    | 87-016-658-090 |           | CAP,E 4700-35 M SMG             |
|            | 87-070-083-010 | IC, GPIU281X<HR>              |             | C105    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF               |
|            | 87-A20-448-010 | IC, PIC-21043TE3<EXCEPT HR>   |             | C106    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF               |
|            | 87-070-289-040 | C-IC, BU2092F                 |             | C107    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF               |
|            | 87-A20-455-010 | IC, HA12211                   |             | C108    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF               |
|            | 87-A20-355-010 | IC, CXA1553P                  |             | C109    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            | 87-A20-083-010 | IC, BA3835S                   |             | C110    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            | 87-A20-450-040 | C-IC, BH3864F                 |             | C111    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            | 87-A20-056-010 | IC, BA3880S                   |             | C112    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            | 87-A20-613-040 | C-IC, BU9262AFS               |             | C113    | 87-010-247-080 |           | CAP,E 100-50 M SME              |
|            | 87-A20-561-040 | C-IC, M65847AFP<HR>           |             | C114    | 87-010-385-080 |           | CAP,E 220-25 M SME<HR>          |
|            | 87-A20-456-040 | C-IC, BH3810FS                |             | C115    | 87-010-385-080 |           | CAP,E 220-25 M SME<HR>          |
|            | 87-017-888-080 | C-IC, NJM4558MD               |             | C116    | 87-010-247-080 |           | CAP,E 100-50 M SME              |
|            | 86-NFZ-655-010 | IC, LC72131D(Z)               |             | C117    | 87-010-430-080 |           | CAP,E 100-63                    |
|            | 87-A20-438-010 | IC, LA1837                    |             | C118    | 87-010-263-080 |           | CAP,E 100-10 SME                |
|            |                |                               |             | C119    | 87-010-260-080 |           | CAP,E 47-25 SME                 |
|            |                |                               |             | C120    | 87-010-403-080 |           | CAP,E 3.3-50 M SME              |
| TRANSISTOR |                |                               |             | C121    | 87-012-140-080 |           | C-CAP,S 470P-50 J CH            |
|            | 87-026-463-080 | TR, 2A933S                    |             | C122    | 87-010-263-080 |           | CAP,E 100-10 SME<U>             |
|            | 87-026-263-080 | C-TR, RN1410                  |             | C123    | 87-010-247-080 |           | CAP,E 100-50 M SME<LH,HR>       |
|            | 89-213-702-010 | TR, 2SB1370E                  |             | C123    | 87-010-382-080 |           | CAP,E 22-25 M SME<U>            |
|            | 87-A30-076-080 | C-TR, 2SC3052F                |             | C124    | 87-010-112-080 |           | CAP,E 100-16 M SME              |
|            | 87-A30-075-080 | C-TR, 2SA1235F                |             | C125    | 87-010-235-080 |           | CAP,E 470-16 SME                |
|            | 87-026-610-080 | TR, KTC3198GR                 |             | C129    | 87-010-393-080 |           | CAP,E 100-35 M SME              |
|            | 87-A30-073-080 | C-TR, RT1N 141C               |             | C201    | 87-010-400-080 |           | CAP,E 0.47-50 M SME             |
|            | 87-A30-085-070 | C-TR, CSA1362GR               |             | C202    | 87-010-400-080 |           | CAP,E 0.47-50 M SME             |
|            | 87-A30-083-080 | TR, CSD1489B                  |             | C205    | 87-010-184-080 |           | C-CAP,S 3300P-50 KB             |
|            | 87-A30-084-080 | TR, CSB1058B                  |             | C206    | 87-010-184-080 |           | C-CAP,S 3300P-50 KB             |
|            | 87-A30-071-080 | C-TR, RT1N 144C               |             | C207    | 87-010-404-080 |           | CAP,E 4.7-50 M SME              |
|            | 87-026-211-080 | C-TR, DTA144EK<HR>            |             | C208    | 87-010-404-080 |           | CAP,E 4.7-50 M SME              |
|            | 87-026-609-080 | TR, KTA1266GR                 |             | C209    | 87-010-404-080 |           | CAP,E 4.7-50 M SME              |
|            | 87-A30-086-070 | C-TR, CSD1306E                |             | C210    | 87-010-404-080 |           | CAP,E 4.7-50 M SME              |
|            | 87-A30-106-070 | C-TR, CMBT5551                |             | C211    | 87-010-186-080 |           | C-CAP,S 4700P-50 KB             |
|            | 87-A30-111-080 | TR, C2N5401                   |             | C212    | 87-010-186-080 |           | C-CAP,S 4700P-50 KB             |
|            | 87-A30-097-010 | TR, FN1016                    |             | C213    | 87-010-260-080 |           | CAP,E 47-25 SME                 |
|            | 87-A30-098-010 | TR, FP1016                    |             | C214    | 87-010-260-080 |           | CAP,E 47-25 SME                 |
|            | 87-A30-089-010 | FET, 2SK2723                  |             | C215    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            | 87-A30-072-080 | C-TR, RT1P 144C               |             | C219    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<U>      |
|            | 87-A30-087-080 | C-FET, 2SK2158                |             | C219    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF<LH,HR>        |
|            | 87-A30-074-080 | C-TR, RT1P 141C               |             | C220    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<U>      |
|            | 89-327-143-080 | C-TR, 2SC2714(O)              |             | C220    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF<LH,HR>        |
|            | 89-505-434-540 | C-FET, 2SK543-TB(4/5)<HR>     |             | C221    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<U>      |
| DIODE      |                |                               |             | C221    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF<LH,HR>        |
|            | 87-A40-246-080 | DIODE, 1N4148T-72             |             | C222    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<U>      |
|            | 87-017-654-010 | DIODE, GBU6JL6131<HR>         |             | C222    | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF<LH,HR>        |
|            | 87-A40-115-060 | DIODE, RS603M<EXCEPT HR>      |             | C223    | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF             |
|            | 87-017-654-060 | DIODE, GBU6JL6131<LH,HR>      |             | C225    | 87-A10-516-080 |           | C-CAP,S 100P-200 JC<HR>         |
|            | 87-017-437-080 | DIODE, 1N4148M                |             | C225    | 87-010-322-080 |           | C-CAP,S 100P-50 J CH<EXCEPT HR> |
|            | 87-A40-269-080 | C-DIODE, MC2836               |             | C226    | 87-A10-516-080 |           | C-CAP,S 100P-200 JC<HR>         |
|            | 87-A40-270-080 | C-DIODE, MC2838               |             | C226    | 87-010-322-080 |           | C-CAP,S 100P-50 J CH<EXCEPT HR> |
|            | 87-070-274-080 | DIODE, 1N4003 SEM             |             | C229    | 87-016-461-080 |           | C-CAP,S 0.47-16 ZF<HR>          |
|            | 87-A40-205-080 | ZENER, UZ6.2BSC               |             | C230    | 87-016-461-080 |           | C-CAP,S 0.47-16 ZF<HR>          |
|            | 87-A40-211-080 | ZENER, UZ36BSA                |             | C241    | 87-010-405-080 |           | CAP,E 10-50 M SME               |
|            | 87-A40-206-080 | ZENER, UZ10BSC                |             | C242    | 87-010-405-080 |           | CAP,E 10-50 M SME<U>            |
|            | 87-A40-004-080 | ZENER, MTZJ16A                |             | C242    | 87-010-406-080 |           | CAP,E 22-50 M SME<LH,HR>        |
|            | 87-A40-274-010 | DIODE, FMB-G16L<LH,HR>        |             | C243    | 87-010-197-080 |           | C-CAP,S 0.01-25 KB              |
|            | 87-A40-370-090 | DIODE, RK46-P20<U>            |             | C244    | 87-010-406-080 |           | CAP,E 22-50 M SME<LH,HR>        |
|            | 87-A40-202-080 | ZENER, UZ5.1BSB               |             | C301    | 87-010-318-080 |           | C-CAP,S 47P-50 J CH             |
|            | 87-017-481-080 | ZENER, UZ-5.6BSB              |             | C302    | 87-010-318-080 |           | C-CAP,S 47P-50 J CH             |
|            | 87-A40-192-080 | ZENER, UZ4.3BSA               |             | C303    | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM        |
|            | 87-A40-239-080 | ZENER, UZ5.6BSA               |             | C304    | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM        |
|            |                |                               |             | C305    | 87-012-145-080 |           | C-CAP,S 270P-50 J CH            |
|            |                |                               |             | C306    | 87-012-145-080 |           | C-CAP,S 270P-50 J CH            |
|            |                |                               |             | C307    | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012         |
|            |                |                               |             | C311    | 87-010-198-080 |           | C-CAP,S 0.022-25 KB             |
|            |                |                               |             | C312    | 87-010-198-080 |           | C-CAP,S 0.022-25 KB             |
|            |                |                               |             | C313    | 87-010-180-080 |           | C-CAP,S 1500P-50 KB             |
| MAIN C.B   |                |                               |             |         |                |           |                                 |

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                  | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                   |
|----------|----------------|-----------|------------------------------|----------|----------------|-----------|-------------------------------|
| C314     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB          | C511     | 87-010-177-080 |           | C-CAP,S 820P-50 J SL<HR>      |
| C315     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB          | C512     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<HR>   |
| C316     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB          | C513     | 87-010-374-080 |           | CAP,E 47-10 M SME<HR>         |
| C317     | 87-012-142-080 |           | C-CAP,S 0.33-16 ZF           | C514     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<HR>   |
| C318     | 87-012-142-080 |           | C-CAP,S 0.33-16 ZF           | C515     | 87-010-263-080 |           | CAP,E 100-10 SME<HR>          |
| C319     | 87-012-141-080 |           | C-CAP,S 0.22-16 ZF           | C516     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF<EXCEPT HR>  |
| C320     | 87-012-141-080 |           | C-CAP,S 0.22-16 ZF           | C517     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB<HR>       |
| C321     | 87-012-141-080 |           | C-CAP,S 0.22-16 ZF           | C527     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<HR>   |
| C322     | 87-012-141-080 |           | C-CAP,S 0.22-16 ZF           | C605     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB           |
| C324     | 87-010-260-080 |           | CAP,E 47-25 SME              | C606     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB           |
| C325     | 87-010-370-080 |           | CAP,E 330-6.3 M SME          | C611     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C327     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C613     | 87-010-404-080 |           | CAP,E 4.7-50 M SME            |
| C328     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C614     | 87-010-404-080 |           | CAP,E 4.7-50 M SME            |
| C332     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C615     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB           |
| C335     | 87-010-401-080 |           | CAP,E 1-50 M SME             | C619     | 87-010-263-080 |           | CAP,E 100-10 SME              |
| C336     | 87-010-401-080 |           | CAP,E 1-50 M SME             | C620     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C337     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C621     | 87-010-263-080 |           | CAP,E 100-10 SME              |
| C339     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C622     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C340     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C623     | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF           |
| C351     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH         | C629     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C352     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH         | C646     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH          |
| C354     | 87-010-175-080 |           | C-CAP,S 560P-50 J SL         | C647     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH          |
| C355     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB          | C701     | 87-010-381-080 |           | CAP,E 330-16 SME              |
| C356     | 87-010-260-080 |           | CAP,E 47-25 SME              | C702     | 87-010-404-080 |           | CAP,E 4.7-50 M SME            |
| C357     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB           | C703     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C358     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB          | C704     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C359     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB          | C711     | 87-010-263-080 |           | CAP,E 100-10 SME              |
| C360     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB          | C712     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C370     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C713     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C371     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB          | C714     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C372     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB          | C721     | 87-010-312-080 |           | C-CAP,S 15P-50 J CH           |
| C373     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB          | C722     | 87-010-312-080 |           | C-CAP,S 15P-50 J CH           |
| C374     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB          | C723     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB           |
| C375     | 87-010-545-080 |           | CAP,E 0.22-50 M SME          | C725     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB           |
| C376     | 87-010-545-080 |           | CAP,E 0.22-50 M SME          | C727     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C378     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C728     | 87-010-248-080 |           | CAP,E 220-10 SME              |
| C381     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB           | C755     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C382     | 87-010-318-080 |           | C-CAP,S 47P-50 J CH          | C756     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C383     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB           | C757     | 87-010-318-080 |           | C-CAP,S 47P-50 J CH           |
| C384     | 87-010-402-080 |           | CAP,E 2.2-50 M SME           | C758     | 87-010-149-080 |           | C-CAP,S 5P-50 CH              |
| C385     | 87-010-184-080 |           | C-CAP,S 3300P-50 KB          | C761     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C386     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012      | C762     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C388     | 87-010-154-080 |           | C-CAP,S 10P-50 D CH          | C763     | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF           |
| C401     | 87-010-187-080 |           | C-CAP,S 5600P-50 KB          | C765     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C402     | 87-010-187-080 |           | C-CAP,S 5600P-50 KB          | C766     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C403     | 87-010-405-080 |           | CAP,E 10-50 M SME            | C767     | 87-010-405-080 |           | CAP,E 10-50 M SME             |
| C404     | 87-010-405-080 |           | CAP,E 10-50 M SME            | C768     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C405     | 87-010-260-080 |           | CAP,E 47-25 SME              | C769     | 87-010-408-080 |           | CAP,E 47-50 SME               |
| C406     | 87-010-101-080 |           | CAP,E 220-16 SME             | C770     | 87-015-821-080 |           | C-CAP, 0.047-50 ZF GR         |
| C407     | 87-010-188-080 |           | C-CAP,S 6800P-50 KB          | C771     | 87-010-407-080 |           | CAP,E 33-50 SME               |
| C408     | 87-010-188-080 |           | C-CAP,S 6800P-50 KB          | C772     | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF           |
| C409     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH         | C773     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C410     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH         | C774     | 87-010-263-080 |           | CAP,E 100-10 SME              |
| C411     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB           | C775     | 87-010-404-080 |           | CAP,E 4.7-50 M SME            |
| C412     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB           | C776     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<EXCEPT HR> |
| C413     | 87-010-195-080 |           | C-CAP,S 0.068-25 ZF C2012    | C777     | 87-010-400-080 |           | CAP,E 0.47-50 M SME           |
| C414     | 87-010-195-080 |           | C-CAP,S 0.068-25 ZF C2012    | C778     | 87-010-401-080 |           | CAP,E 1-50 M SME              |
| C415     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C779     | 87-010-401-080 |           | CAP,E 1-50 M SME              |
| C416     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C780     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       |
| C417     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C781     | 87-010-405-080 |           | CAP,E 10-50 M SME             |
| C418     | 87-010-404-080 |           | CAP,E 4.7-50 M SME           | C782     | 87-010-405-080 |           | CAP,E 10-50 M SME             |
| C421     | 87-010-401-080 |           | CAP,E 1-50 M SME             | C783     | 87-015-819-080 |           | C-CAP,0.01-50 K B             |
| C422     | 87-010-401-080 |           | CAP,E 1-50 M SME             | C784     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            |
| C503     | 87-012-154-080 |           | C-CAP,S 150P-50 J CH GRM<HR> | C785     | 87-010-400-080 |           | CAP,E 0.47-50 M SME           |
| C504     | 87-012-154-080 |           | C-CAP,S 150P-50 J CH GRM<HR> | C786     | 87-010-400-080 |           | CAP,E 0.47-50 M SME           |
| C505     | 87-012-145-080 |           | C-CAP,S 270P-50 J CH<HR>     | C787     | 87-010-184-080 |           | C-CAP,S 3300P-50 KB           |
| C506     | 87-012-145-080 |           | C-CAP,S 270P-50 J CH<HR>     | C788     | 87-010-184-080 |           | C-CAP,S 3300P-50 KB           |
| C507     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB<HR>      | C789     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB           |
| C509     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012<HR>  | C790     | 87-010-179-080 |           | C-CAP,S 1200P-50 KB           |
| C510     | 87-010-177-080 |           | C-CAP,S 820P-50 J SL<HR>     | C791     | 87-010-405-080 |           | CAP,E 10-50 M SME             |

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                        | REF. NO.  | PART NO.       | KANRI NO. | DESCRIPTION                       |
|----------|----------------|-----------|------------------------------------|-----------|----------------|-----------|-----------------------------------|
| C793     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB                | RY101     | 87-045-389-010 |           | RELAY,12V OSA-SS-212DM5           |
| C794     | 87-010-406-080 |           | CAP,E 22-50 M SME                  | RY201     | 87-045-382-010 |           | RELAY,12V OUAZ-SH-112L            |
| C795     | 87-010-596-080 |           | C-CAP,S 0.047-16 KR                | SFR301    | 87-024-435-080 |           | SFR,33K H RH063MC                 |
| C796     | 87-010-403-080 |           | CAP,E 3.3-50 M SME                 | SFR302    | 87-024-435-080 |           | SFR,33K H RH063MC                 |
| C797     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB<HR>            | SFR303    | 87-024-435-080 |           | SFR,33K H RH063MC                 |
| C797     | 87-010-182-080 |           | C-CAP,S 2200P-50 KB<EXCEPT HR>     | SFR304    | 87-024-435-080 |           | SFR,33K H RH063MC                 |
| C798     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB<HR>            | SFR305    | 87-024-436-080 |           | SFR,47K H RH063MC                 |
| C798     | 87-010-182-080 |           | C-CAP,S 2200P-50 KB<EXCEPT HR>     | SFR306    | 87-024-436-080 |           | SFR,47K H RH063MC                 |
| C799     | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF                | SFR351    | 87-024-436-080 |           | SFR,47K H RH063MC                 |
| C812     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                 | SFR352    | 87-024-436-080 |           | SFR,47K H RH063MC                 |
| C814     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                 | TC941     | 87-011-220-080 |           | TRIMMER,CER 20P 6.15X5.9VCT51<HR> |
| C820     | 87-010-408-080 |           | CAP,E 47-50 SME                    | TC942     | 87-011-221-080 |           | TRIMMER,CER 30P 6.15X5.9VCT51<HR> |
| C821     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                 | TH201     | 87-A90-221-080 |           | C-THMS,100K<LH,HR>                |
| C822     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                 | TH202     | 87-A90-221-080 |           | C-THMS,100K<LH,HR>                |
| C823     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                 | W1        | 85-NF5-628-010 |           | F-CABLE,7P-2.5                    |
| C828     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012            | X721      | 87-A70-061-010 |           | VIB,XTAL 4.500MHZ CSA-309         |
| C829     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012            | X771      | 87-030-354-010 |           | VIB,CER 450.0KHZ BFU C<HR>        |
| C940     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             |           |                |           |                                   |
| C941     | 87-010-314-080 |           | C-CAP,S 22P-50 J CH<HR>            |           |                |           |                                   |
| C943     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             |           |                |           |                                   |
|          |                |           |                                    | FRONT C.B |                |           |                                   |
| C944     | 87-014-051-080 |           | CAP,PP 560P-100 J<HR>              | C101      | 87-010-198-080 |           | C-CAP,S 0.022-25 KB               |
| C945     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             | C102      | 87-010-198-080 |           | C-CAP,S 0.022-25 KB               |
| C947     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             | C103      | 87-010-197-080 |           | C-CAP,S 0.01-25 KB                |
| C950     | 87-014-073-080 |           | CAP,PP 4700P-100 J<HR>             | C104      | 87-010-312-080 |           | C-CAP,S 15P-50 J CH               |
| C952     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             | C105      | 87-010-316-080 |           | C-CAP,S 33P-50 J CH               |
| C953     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB<HR>             | C106      | 87-010-320-080 |           | C-CAP,S 68P-50 J CH               |
| C954     | 87-010-400-080 |           | CAP,E 0.47-50 M SME<HR>            | C107      | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM          |
| C956     | 87-010-263-080 |           | CAP,E 100-10 SME<HR>               | C108      | 87-010-405-040 |           | CAP,E 10-50 M SME                 |
| C959     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012            | C109      | 87-010-494-040 |           | CAP,E 1-50 5L SRE                 |
| C960     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012            | C110      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| C961     | 87-010-152-080 |           | C-CAP,S 8P-50 D CH<EXCEPT HR>      | C111      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| C962     | 87-010-401-080 |           | CAP,E 1-50 M SME<HR>               | C112      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| CF801    | 87-008-261-010 |           | FLTR,CFSFE10.7MA5                  | C113      | 87-A10-189-040 |           | CAP,E 220-10 M                    |
| CF802    | 87-008-261-010 |           | FLTR,CFSFE10.7MA5                  | C114      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| FC602    | 88-906-241-110 |           | FF-CABLE, 6P 1.25                  | C115      | 87-010-178-080 |           | C-CAP,S 1000P-50 KB               |
| FFE801   | A8-7ZA-290-030 |           | 7ZA-2 FEUNM                        | C116      | 87-010-494-040 |           | CAP,E 1-50 5L SRE                 |
| J252     | 87-A60-024-010 |           | JACK,DIA6.3 BLK ST W/SW KM         | C117      | 87-010-555-040 |           | CAP,E 100-10 5L SRE               |
| J253     | 87-099-474-010 |           | JACK,PIN 3P BLK W/SW               | C118      | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF               |
| J254     | 87-A60-238-010 |           | TERMINAL,SP 4P(MSC)                | C119      | 87-010-408-040 |           | CAP,E 47-50 M SME                 |
| J601     | 87-A60-330-010 |           | JACK,PIN 6P YKC21-3174<U>          | C120      | 87-010-404-040 |           | CAP,E 4.7-50 SME                  |
| J601     | 87-A60-426-010 |           | JACK,PIN 6P YKC21-3835<LH,HR>      | C121      | 87-010-404-040 |           | CAP,E 4.7-50 SME                  |
| J801     | 87-A60-202-010 |           | TERMINAL,ANT 4P MSP-154V-02        | C122      | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF               |
| L201     | 87-003-383-010 |           | COIL,1UH K                         | C123      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L202     | 87-003-383-010 |           | COIL,1UH K                         | C124      | 87-018-209-080 |           | CAP,TC U 0.1-50 ZF UP050          |
| L301     | 87-A50-049-010 |           | COIL,TRAP 85K(COI)                 | C125      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L302     | 87-A50-049-010 |           | COIL,TRAP 85K(COI)                 | C127      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L351     | 87-007-342-010 |           | COIL,OSC 85KHZ BIAS                | C130      | 87-010-178-080 |           | C-CAP,S 1000P-50 KB<HR>           |
| L601     | 87-003-231-080 |           | C-COIL,1215 1UH K ML               | C130      | 87-018-131-010 |           | CAP,TC U 1000P-50 K<EXCEPT HR>    |
| L770     | 87-005-849-080 |           | COIL,10UH K CECS                   | C201      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L771     | 87-A50-165-010 |           | COIL,FM DET-N(TOK)                 | C351      | 87-012-158-080 |           | C-CAP,S 390P-50 J CH GRM          |
| L772     | 87-A90-245-010 |           | FLTR,CFAZH-450 (TOK)<EXCEPT HR>    | C352      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L772     | 87-A90-052-010 |           | FLTR,CFMT-450A(TOK)<HR>            | C353      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L791     | 87-A50-027-010 |           | COIL,1 POLE MPX(TOK)<HR>           | C354      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L791     | 87-003-293-010 |           | COIL,TRAP MPX<EXCEPT HR>           | C355      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L792     | 87-A50-027-010 |           | COIL,1 POLE MPX(TOK)<HR>           | C356      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L792     | 87-003-293-010 |           | COIL,TRAP MPX<EXCEPT HR>           | C357      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| L832     | 87-005-847-080 |           | COIL,2.2UH K CECS                  | C403      | 87-010-992-080 |           | C-CAP,S 0.047-25 KB MK212         |
| L941     | 87-A50-022-010 |           | COIL,ANT SW(COI) 7.96MHZ<HR>       | C404      | 87-010-992-080 |           | C-CAP,S 0.047-25 KB MK212         |
| L942     | 87-A50-173-010 |           | COIL,OSC SW-N(COI)<HR>             | C405      | 87-010-401-040 |           | CAP,E 1-50 M SME                  |
| L943     | 87-005-372-080 |           | COIL,1MH K LAL03<HR>               | C406      | 87-010-494-040 |           | CAP,E 1-50 5L SRE                 |
| L944     | 87-A50-159-010 |           | COIL,10MH K C2B<HR>                | C407      | 87-010-184-080 |           | C-CAP,S 3300P-50 KB               |
| L981     | 86-NF4-666-010 |           | COIL,AM PACK 3(TOK)<HR>            | C408      | 87-010-184-080 |           | C-CAP,S 3300P-50 KBB              |
| L981     | 87-NF4-650-010 |           | COIL,AM PACK4N(TOK)<EXCEPT HR>     | C409      | 87-010-592-080 |           | C-CAP,S 0.022-16 KR GRM           |
| △ PR201  | 87-026-691-080 |           | FUSE,10A 125V 251<U>               | C410      | 87-010-592-080 |           | C-CAP,S 0.022-16 KR GRM           |
| △ PR201  | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V<LH,HR> | C411      | 87-A10-201-080 |           | C-CAP,S 0.33-16 KB                |
| △ PR202  | 87-026-691-080 |           | FUSE,10A 125V 251<U>               | C412      | 87-A10-201-080 |           | C-CAP,S 0.33-16 KB                |
| △ PR202  | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V<LH,HR> | C413      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |
| R123     | 87-022-200-080 |           | RES,M/F 0.56-1W J<U>               | C414      | 87-010-374-040 |           | CAP,E 47-10 SME                   |
| R231     | 87-A00-262-080 |           | RES,M/F 0.15-2W J                  | C415      | 87-010-374-040 |           | CAP,E 47-10 SME                   |
| R232     | 87-A00-262-080 |           | RES,M/F 0.15-2W J                  | C416      | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012           |

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                   | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                        |
|----------|----------------|-----------|-------------------------------|----------|----------------|-----------|------------------------------------|
| C417     | 87-016-081-080 |           | C-CAP,S 0.1-16 KR             | S304     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C418     | 87-010-405-040 |           | CAP,E 10-50 M SME             | S305     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C501     | 87-010-319-080 |           | C-CAP,S 56P-50 J CH           | S306     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C502     | 87-010-319-080 |           | C-CAP,S 56P-50 J CH           | S307     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C503     | 87-012-393-080 |           | C-CAP,S 0.22-16 K W5R CM/CB   | S308     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C504     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            | S314     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C505     | 87-010-180-080 |           | C-CAP,S 1500P-50 KB           | S315     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C506     | 87-010-213-080 |           | C-CAP,S 0.015-25 KB           | S316     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C507     | 87-010-213-080 |           | C-CAP,S 0.015-25 KB           | S317     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C508     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB            | S318     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C509     | 87-010-181-080 |           | C-CAP,S 1800P-50 KB           | S319     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C510     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       | S320     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C511     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       | S322     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C512     | 87-010-374-040 |           | CAP,E 47-10 SME               | S326     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C513     | 87-010-401-040 |           | CAP,E 1-50 M SME              | S327     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C514     | 87-010-401-040 |           | CAP,E 1-50 M SME              | S328     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C515     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB           | S329     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C516     | 87-010-183-080 |           | C-CAP,S 2700P-50 KB           | S330     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C518     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       | S331     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C519     | 87-010-264-010 |           | CAP,E 100-10 M 5L SR<HR>      | S332     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C519     | 87-010-263-040 |           | CAP,E 100-10 M SME<EXCEPT HR> | S339     | 87-A90-095-080 |           | SW,TACT EVQ11G04M<HR>              |
| C533     | 87-010-545-040 |           | CAP,E 0.22-50 M SME           | S340     | 87-A90-095-080 |           | SW,TACT EVQ11G04M<HR>              |
| C601     | 87-010-405-040 |           | CAP,E 10-50 M SME             | S341     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| C602     | 87-010-186-080 |           | C-CAP,S 4700P-50 KB           | SW101    | 87-A90-471-010 |           | SW,RTRY EC16B24304-25 NON          |
| C603     | 87-010-405-040 |           | CAP,E 10-50 M SME             | X101     | 87-A70-070-080 |           | VIB,CER 5.76MHZ CRHF               |
| C604     | 87-010-382-040 |           | CAP,E 22-25 SME               |          |                |           |                                    |
| C605     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       | KEY C.B  |                |           |                                    |
| C607     | 87-010-321-080 |           | C-CAP,S 82P-50 J CH           |          |                |           |                                    |
| C608     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012       | LED230   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED               |
| C609     | 87-010-545-040 |           | CAP,E 0.22-50 M SME           | LED231   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED               |
| C611     | 87-010-177-080 |           | C-CAP,S 820P-50 J SL          | LED232   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED               |
| C614     | 87-010-248-040 |           | CAP,E 220-10 M SME            | S309     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| FB601    | 87-008-372-080 |           | FLTR,EMIBL01 RN1              | S310     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| FC104    | 85-NF5-615-010 |           | CABLE,PFC 15P-1.25            | S311     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| FC301    | 85-NF5-617-010 |           | CABLE,PFC 6P-1.25             | S312     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| FC102    | 85-NF5-618-010 |           | CABLE,PFC 13P-1.25            | S313     | 87-A90-095-080 |           | SW,TACT EVQ11G04M                  |
| FL101    | 87-NF4-640-010 |           | FL,BJ529GK                    |          |                |           |                                    |
| J601     | 87-A60-284-010 |           | JACK,3.5MO(MSC)               | FAN C.B  |                |           |                                    |
| J602     | 87-A60-284-010 |           | JACK,3.5MO(MSC)               |          |                |           |                                    |
| L501     | 87-005-448-080 |           | COIL,220UH K FLR50            | C130     | 87-010-401-080 |           | CAP,E 1-50 M SME                   |
| LED201   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED          | C131     | 87-010-263-080 |           | CAP,E 100-10 SME                   |
| LED202   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED          | C132     | 87-010-380-080 |           | CAP,E 47-16 M SME                  |
| LED203   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED          | RY103    | 87-A90-143-010 |           | RELAY, DG12D2-OS(M)<U>             |
| LED204   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED          |          |                |           |                                    |
| LED205   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED          | AC1 C.B  |                |           |                                    |
| LED206   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ F101   | 87-035-368-010 |           | FUSE,4A 250V T<LH,HR>              |
| LED207   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ F101   | 87-035-493-010 |           | FUSE,8A 125V T 237<U>              |
| LED208   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ F102   | 87-035-368-010 |           | FUSE,4A 250V T<LH,HR>              |
| LED209   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC1    | 87-033-147-010 |           | FUSE CLAMP,MT-20<LH,HR>            |
| LED210   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC1    | 87-033-213-080 |           | FUSE CLAMP,PFC5000<U>              |
| LED211   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC2    | 87-033-147-010 |           | FUSE CLAMP,MT-20<LH,HR>            |
| LED212   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC2    | 87-033-213-080 |           | FUSE CLAMP,PFC5000<U>              |
| LED213   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC3    | 87-033-147-010 |           | FUSE CLAMP,MT-20<LH,HR>            |
| LED214   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ FC4    | 87-033-147-010 |           | FUSE CLAMP,MT-20<LH,HR>            |
| LED215   | 87-A40-316-080 |           | LED,SLR-56PCT31 GRN           | △ PT101  | 87-NF4-631-010 |           | PT,7NF-4 HR<HR>                    |
| LED216   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           | △ PT101  | 87-NF4-632-010 |           | PT,7NF-4 LH<LH>                    |
| LED217   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           | △ PT101  | 87-NF4-630-010 |           | PT,7NF-4 U<U>                      |
| LED218   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           | △ SW101  | 87-A90-165-010 |           | SW,SL 1-2-3 SWS2301<LH,HR>         |
| LED219   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           | △ T1     | 87-A60-317-010 |           | TERMINAL,1P MSC                    |
| LED220   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           | △ T2     | 87-A60-317-010 |           | TERMINAL,1P MSC                    |
| LED221   | 87-A40-264-080 |           | LED,SLH-56PCTE7 GRN           |          |                |           |                                    |
| LED233   | 87-A40-265-010 |           | LED,SLH-56PCL GRN             | AC2 C.B  |                |           |                                    |
| LED234   | 87-A40-265-010 |           | LED,SLH-56PCL GRN             | △ PR1    | 87-026-691-080 |           | FUSE,10A 125V 251<U>               |
| LED235   | 87-A40-267-010 |           | LED,SLH-56VCL RED             | △ PR1    | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V<LH,HR> |
| LED236   | 87-A40-267-010 |           | LED,SLH-56VCL RED             | △ PR2    | 87-026-691-080 |           | FUSE,10A 125V 251<U>               |
| LED237   | 87-A40-265-010 |           | LED,SLH-56PCL GRN             | △ PR2    | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V<LH,HR> |
| LED238   | 87-A40-265-010 |           | LED,SLH-56PCL GRN             | △ PR5    | 87-026-691-080 |           | FUSE,10A 125V 251<U>               |
| S300     | 87-A90-095-080 |           | SW,TACT EVQ11G04M             | △ PR5    | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V<LH,HR> |
| S302     | 87-A90-095-080 |           | SW,TACT EVQ11G04M             | △ PR6    | 87-026-691-080 |           | FUSE,10A 125V 251<U>               |
| S303     | 87-A90-095-080 |           | SW,TACT EVQ11G04M             |          |                |           |                                    |

| REF. NO. | PART NO.       | KANRI<br>NO. | DESCRIPTION                        |
|----------|----------------|--------------|------------------------------------|
| △ PR6    | 87-026-682-080 |              | PROTECTOR,10A 491SERIES 60V<LH,HR> |

#### DECK C.B

|        |                |                      |
|--------|----------------|----------------------|
| CON502 | 87-099-756-010 | CONN,15P 9604S F     |
| SFR1   | 87-024-581-010 | SFR,3.3K DIA 6H      |
| SOL1   | 82-ZM1-618-310 | SOL ASSY,27          |
| SOL2   | 82-ZM1-618-310 | SOL ASSY,27          |
| SW1    | 87-036-110-010 | SW,MICRO SPPB62      |
| SW2    | 87-036-110-010 | SW,MICRO SPPB62      |
| SW3    | 87-036-110-010 | SW,MICRO SPPB62      |
| SW4    | 87-036-110-010 | SW,MICRO SPPB62      |
| SW5    | 87-A90-248-010 | SW,MICRO ESE11SH2CXQ |
| SW6    | 87-A90-248-010 | SW,MICRO ESE11SH2CXQ |
| SW8    | 87-A90-248-010 | SW,MICRO ESE11SH2CXQ |
| SW9    | 87-A90-248-010 | SW,MICRO ESE11SH2CXQ |
| W1     | 82-ZM3-601-010 | RBN-CORD,4P-75       |

#### HEAD-1 C.B

85-ZM3-602-010 PWB,FLEX I

#### HEAD-2 C.B

|        |                |                  |
|--------|----------------|------------------|
|        | 85-ZM3-602-010 | PWB,FLEX I       |
| CON351 | 83-NEG-608-010 | CONN ASSY,8P-RPB |

#### ○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



A  
抵抗部品コード  
Resistor Code

桁表示  
Figure  
抵抗値  
Value of resistor

#### 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



E C B

KTA1266  
KTC3198



E C B

CSD1489  
CSB1058



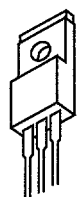
E C B

2SA933



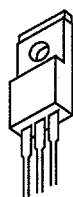
E B C

C2N5401



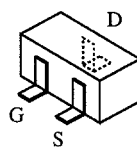
B C E

2SB1370  
FN1016  
FP1016

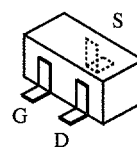


G D S

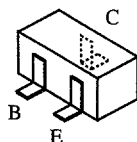
2SK2723



2SK2158

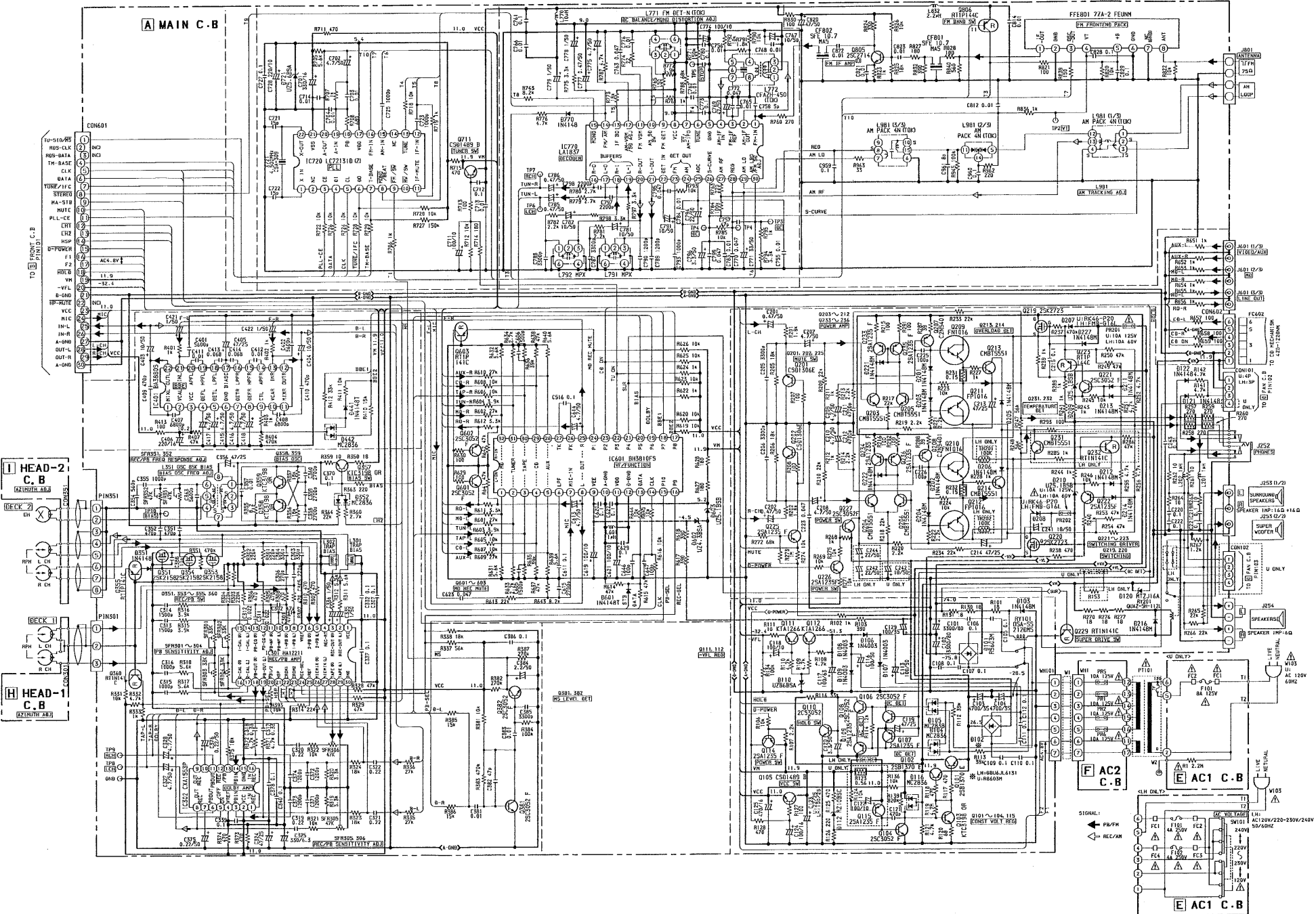


2SK543

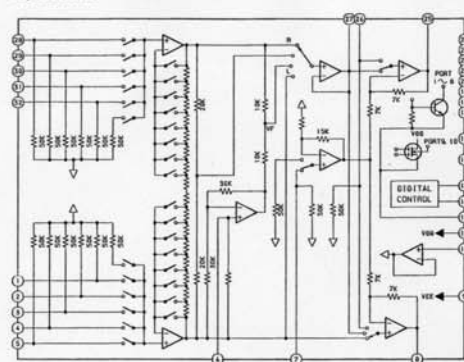


|          |          |
|----------|----------|
| 2SA1235  | DTA144EK |
| 2SC2714  | RN1410   |
| 2SC3052  | RT1N141C |
| CMBT5551 | RT1N144C |
| CSA1362  | RT1P141C |
| CSD1306  | RT1P144C |

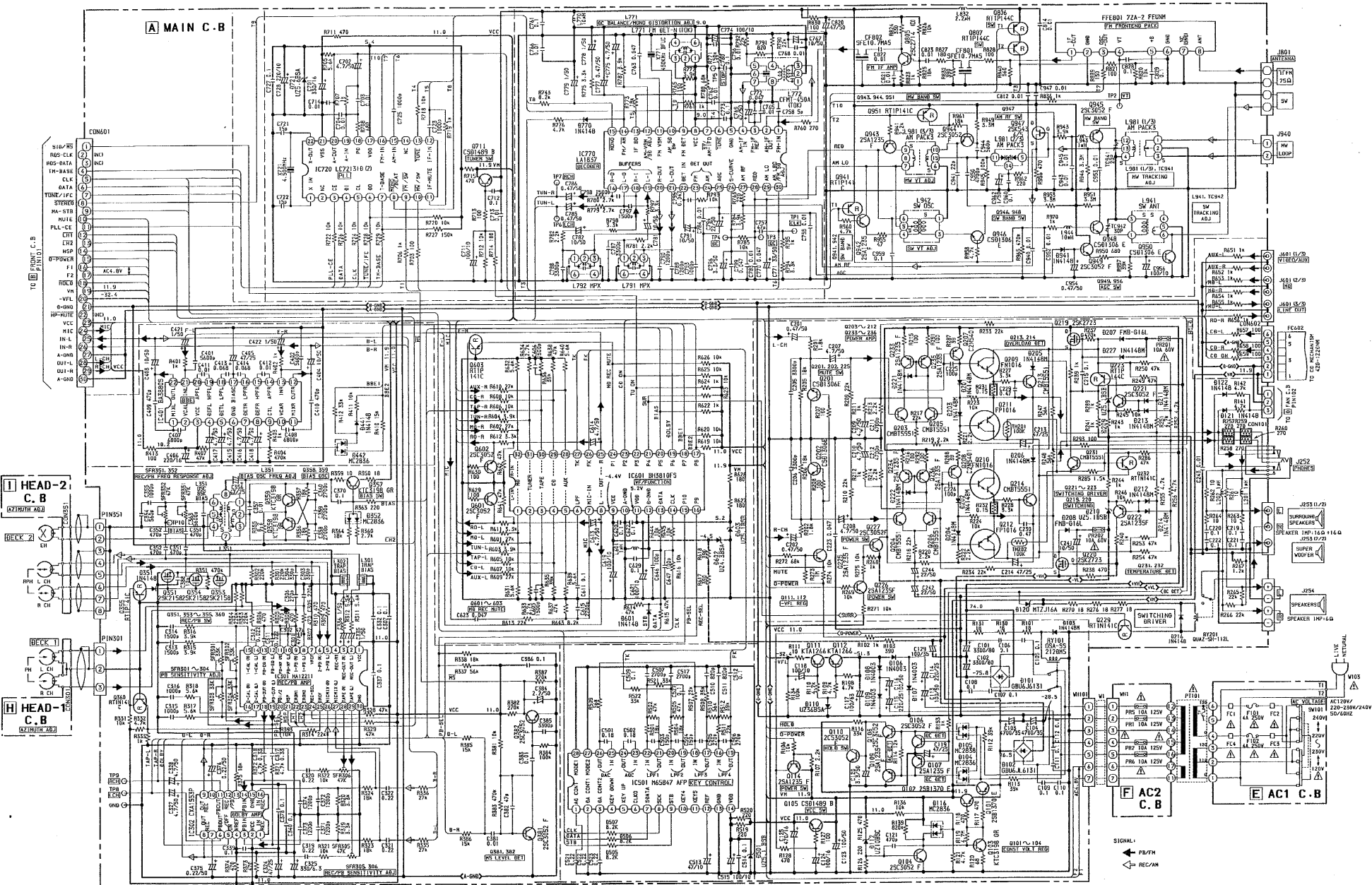


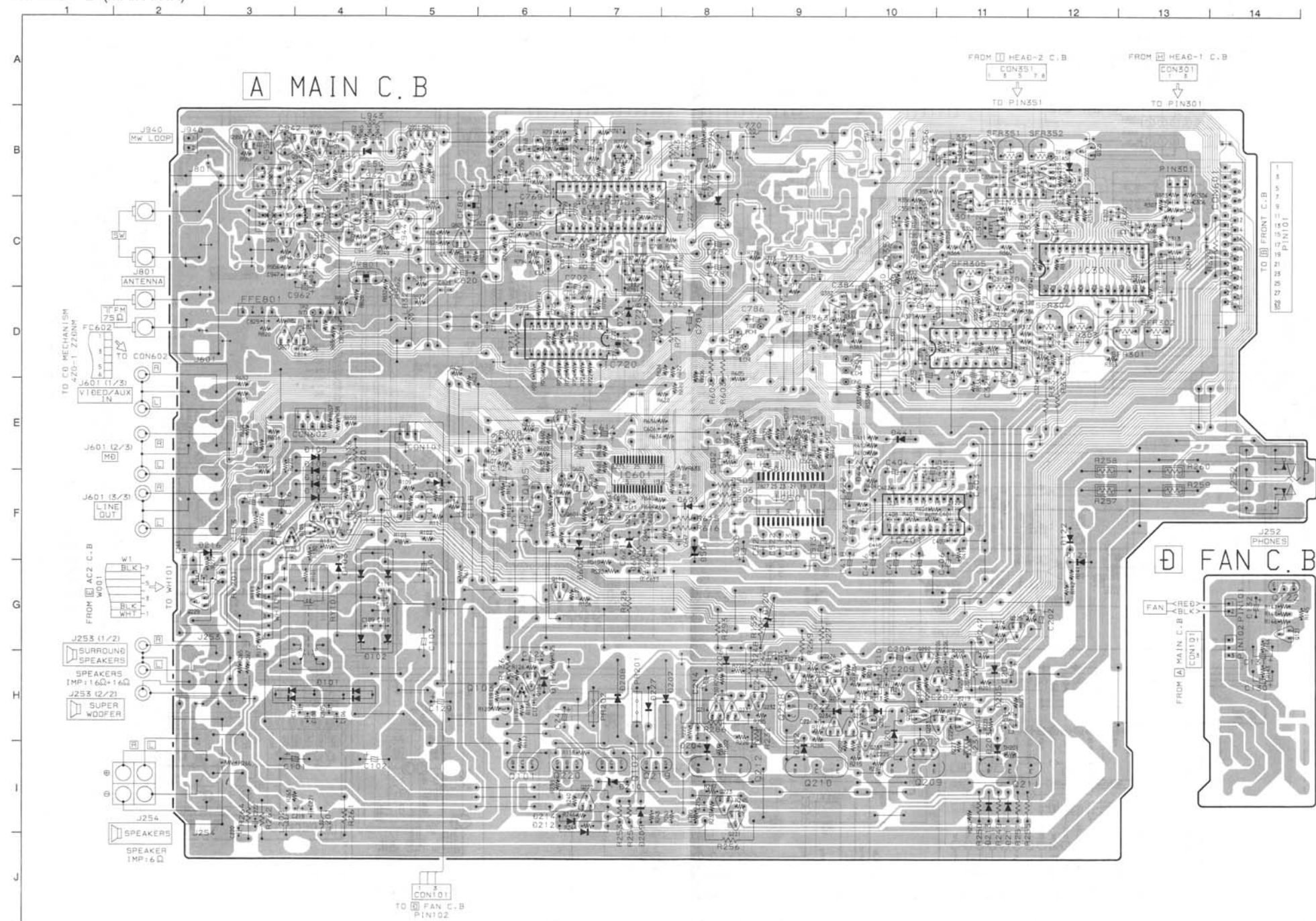


## IC, M65847AFP &lt;HR ONLY&gt;



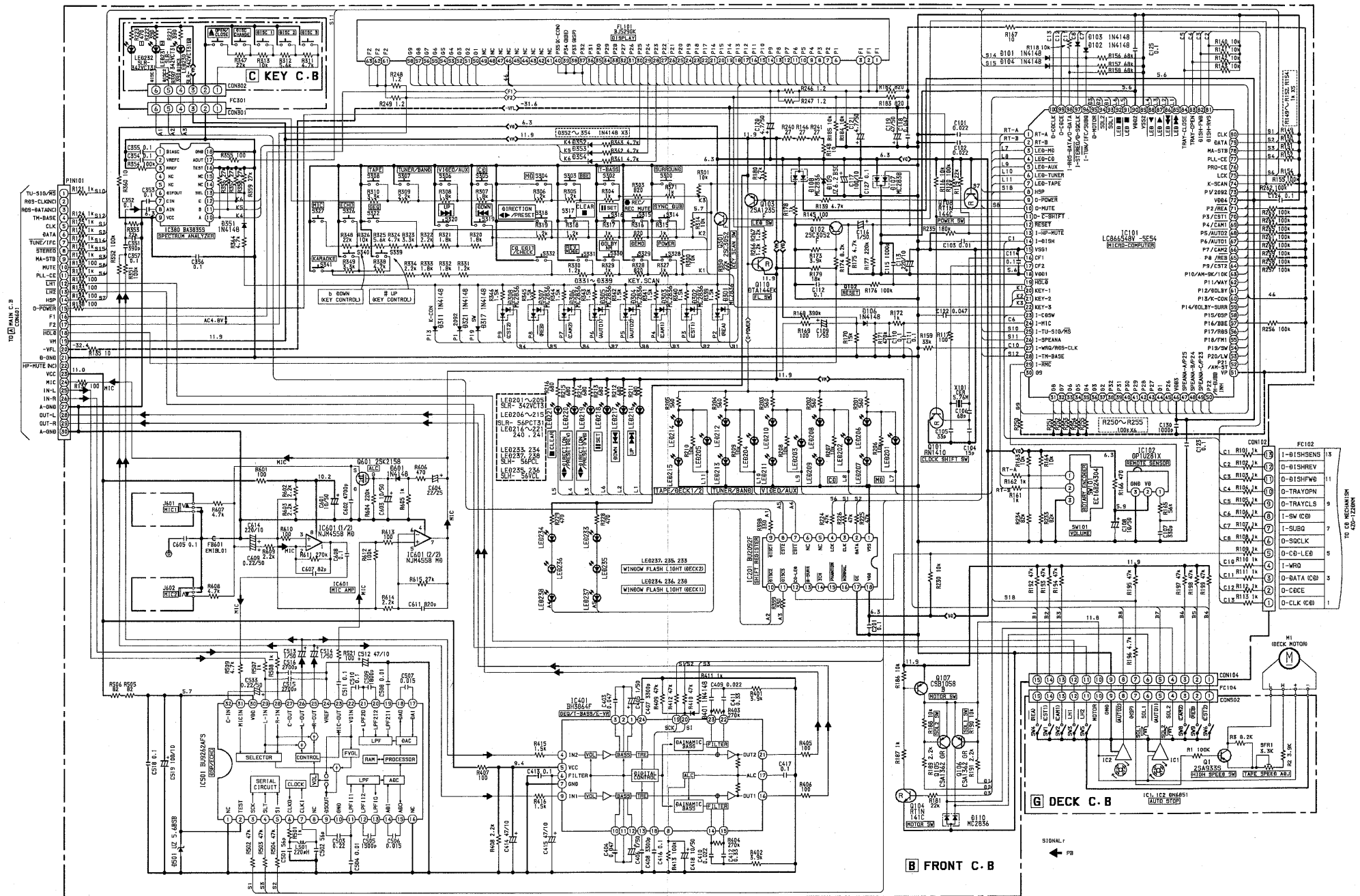
SCHEMATIC DIAGRAM - 2 (MAIN : HR)





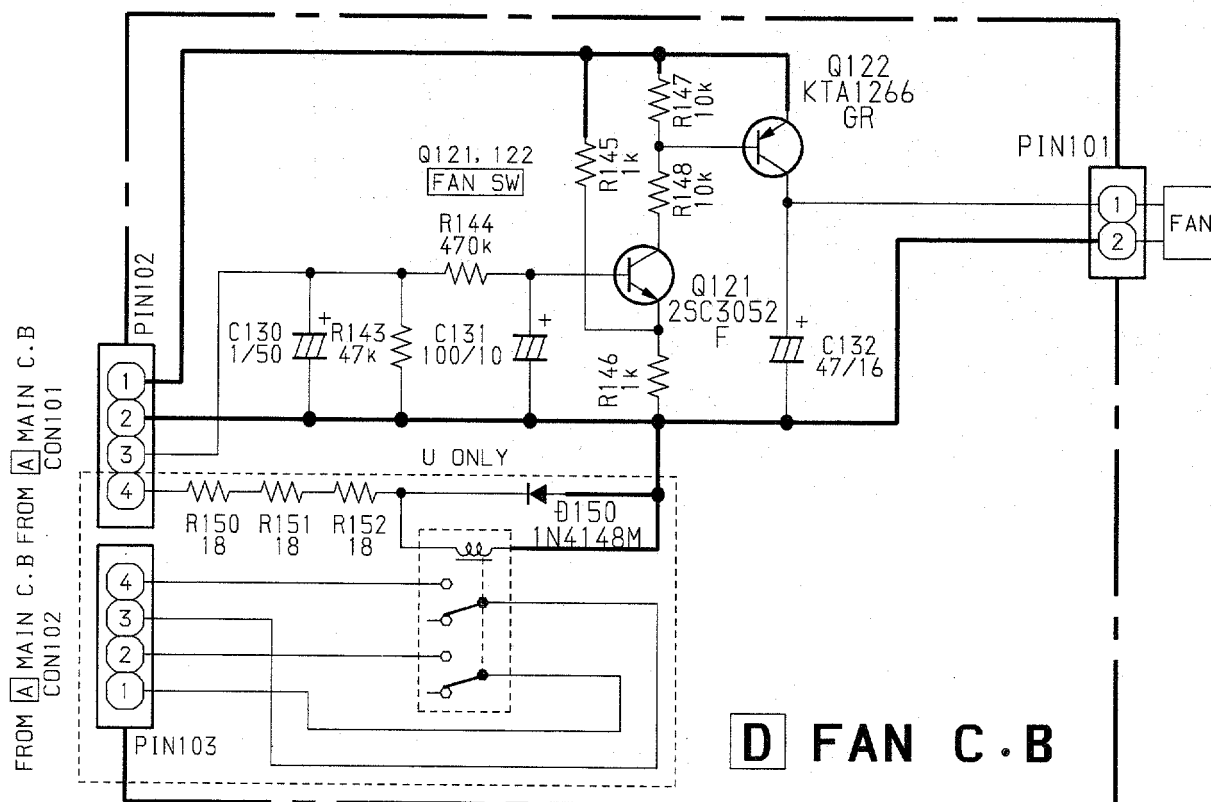
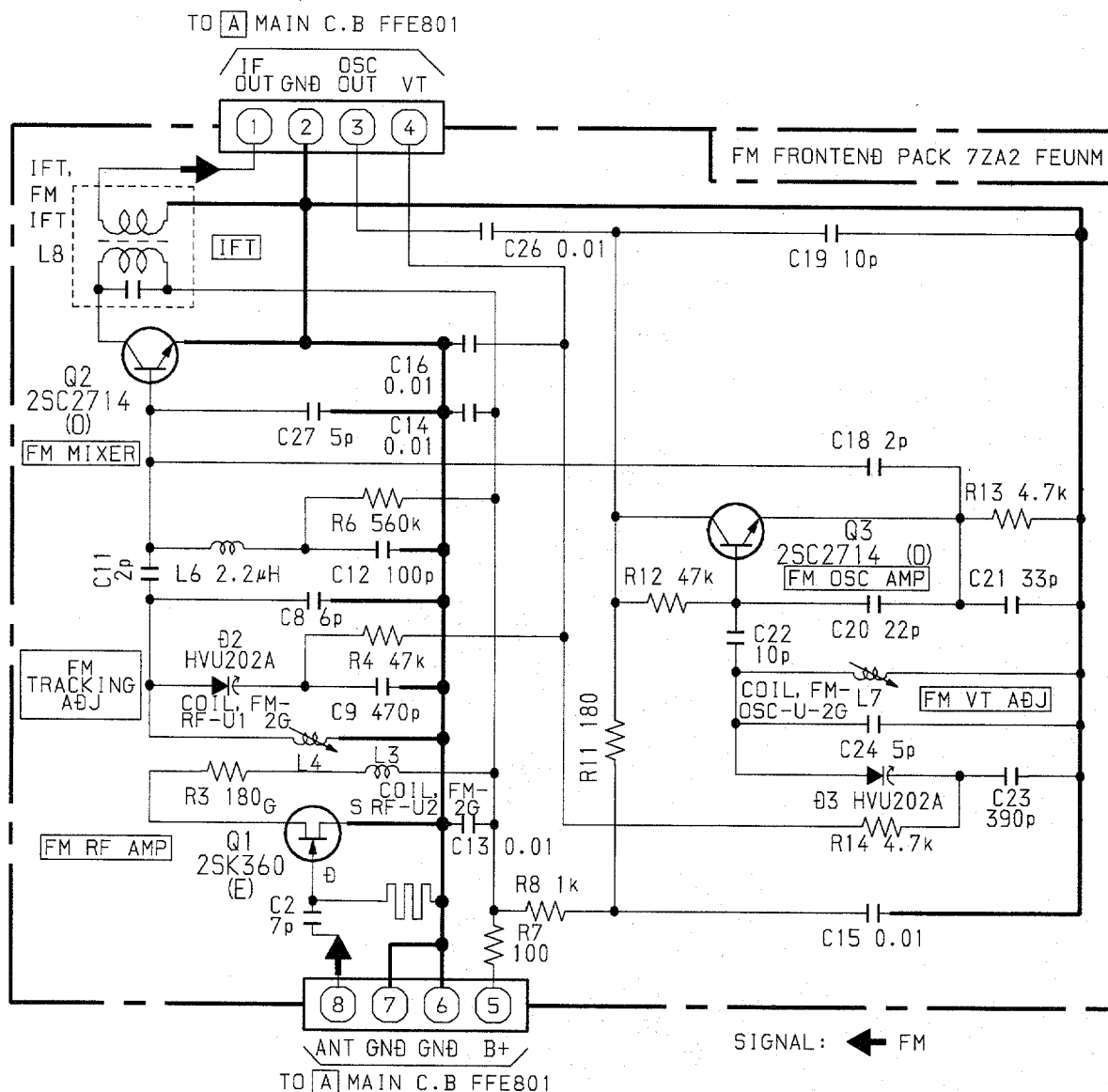






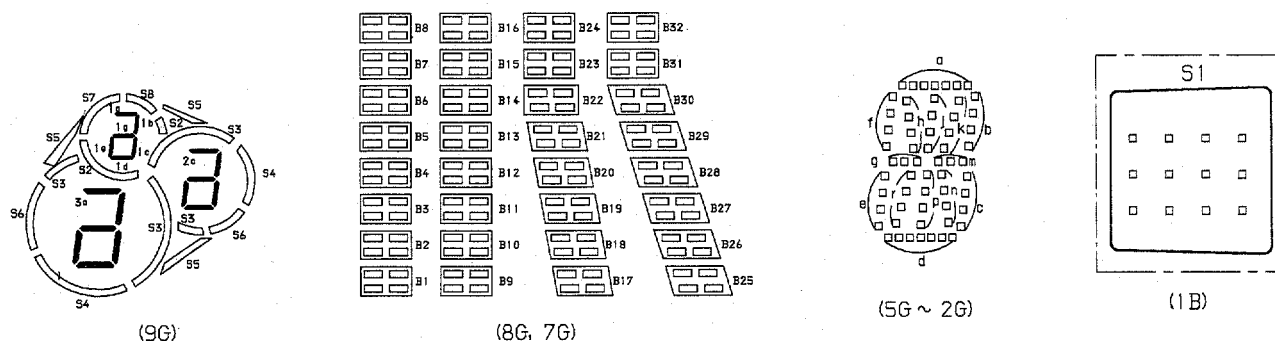
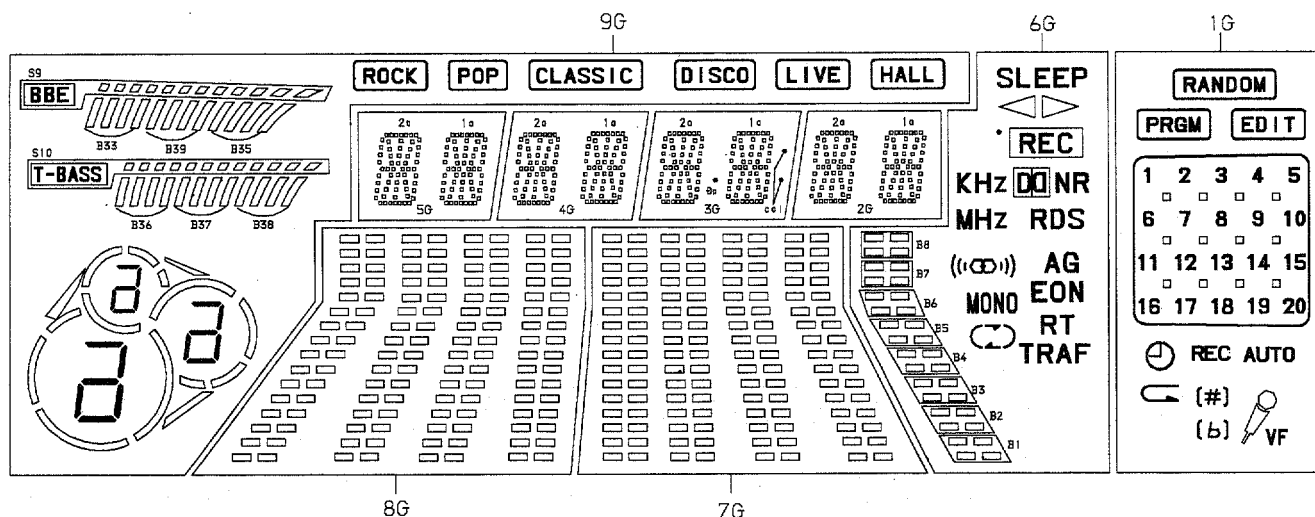


# SCHEMATIC DIAGRAM - 5 (TUNER FRONTEND / FAN)



# FL (BJ529GK) GRID ASSIGNMENT / ANODE CONNECTION

## GRID ASSIGNMENT



## ANODE CONNECTION

|     | 9G         | 8G, 7G | 6G    | 5G, 4G | 3G        | 2G | 1G       |
|-----|------------|--------|-------|--------|-----------|----|----------|
| P1  | S8         | B32    | ▷     | -      | CO (DOWN) | -  | (RANDOM) |
| P2  | S2         | B24    | ◁     | 1d     | 1d        | 1d | -        |
| P3  | 1b         | B16    | SLEEP | 1n     | 1n        | 1n | (PRGM)   |
| P4  | 1c         | B8     | B8    | 1p     | 1p        | 1p | (EDIT)   |
| P5  | 1e         | B31    | ○     | 1r     | 1r        | 1r | 1        |
| P6  | 1a, 1d, 1g | B23    | (REC) | 1e     | 1e        | 1e | 2        |
| P7  | 2b         | B15    | KHz   | 1c     | 1c        | 1c | 3        |
| P8  | 2c         | B7     | B7    | 1g     | 1g        | 1g | 4        |
| P9  | 2e         | B30    | MHz   | 1m     | 1m        | 1m | 5        |
| P10 | 2a, 2d, 2g | B22    | -     | 1f     | 1f        | 1f | 6        |
| P11 | 3b         | B14    | DO NR | 1b     | 1b        | 1b | 7        |
| P12 | 3c         | B6     | B6    | 1k     | 1k        | 1k | 8        |
| P13 | 3e         | B29    | RDS   | 1j     | 1j        | 1j | 9        |
| P14 | 3a, 3d, 3g | B21    | -     | 1h     | 1h        | 1h | 10       |
| P15 | S3         | B13    | -     | 1a     | 1a        | 1a | 11       |
| P16 | S5         | B5     | B5    | -      | co (UP)   | -  | 12       |
| P17 | S7         | B28    | -     | -      | 0p        | -  | 13       |
| P18 | S4         | B20    | -     | 2d     | 2d        | 2d | 14       |

|     |                      |     |          |    |    |    |         |
|-----|----------------------|-----|----------|----|----|----|---------|
| P19 | S6                   | B12 | -        | 2n | 2n | 2n | 15      |
| P20 | (HALL)               | B4  | B4       | 2p | 2p | 2p | 16      |
| P21 | (LIVE)               | B27 | AG       | 2r | 2r | 2r | 17      |
| P22 | (DISCO)              | B19 | (((( ))) | 2e | 2e | 2e | 18      |
| P23 | (CLASSIC)            | B11 | EON      | 2o | 2o | 2o | 19      |
| P24 | (POP)                | B3  | B3       | 2q | 2q | 2q | 20      |
| P25 | (ROCK)               | B26 | RT       | 2m | 2m | 2m | AUTO    |
| P26 | B36                  | B18 | MONO     | 2i | 2i | 2i | VF      |
| P27 | B37                  | B10 | TRAF     | 2b | 2b | 2b | ⊖       |
| P28 | B38                  | B2  | B2       | 2k | 2k | 2k | REC     |
| P29 | B33                  | B25 | )        | 2j | 2j | 2j | ⌂       |
| P30 | B34                  | B17 | Z        | 2h | 2h | 2h | (#)     |
| P31 | B35                  | B9  | C        | 2o | 2o | 2o | ( ) (b) |
| P32 | ROCK POP CLASSIC S10 | B1  | B1       | -  | -  | -  | S1      |
| P33 | DISCO LIVE HALL      | -   | -        | -  | -  | -  | -       |
| P34 | S9                   | -   | -        | -  | -  | -  | -       |
| P35 | -                    | -   | -        | -  | -  | -  | b #     |

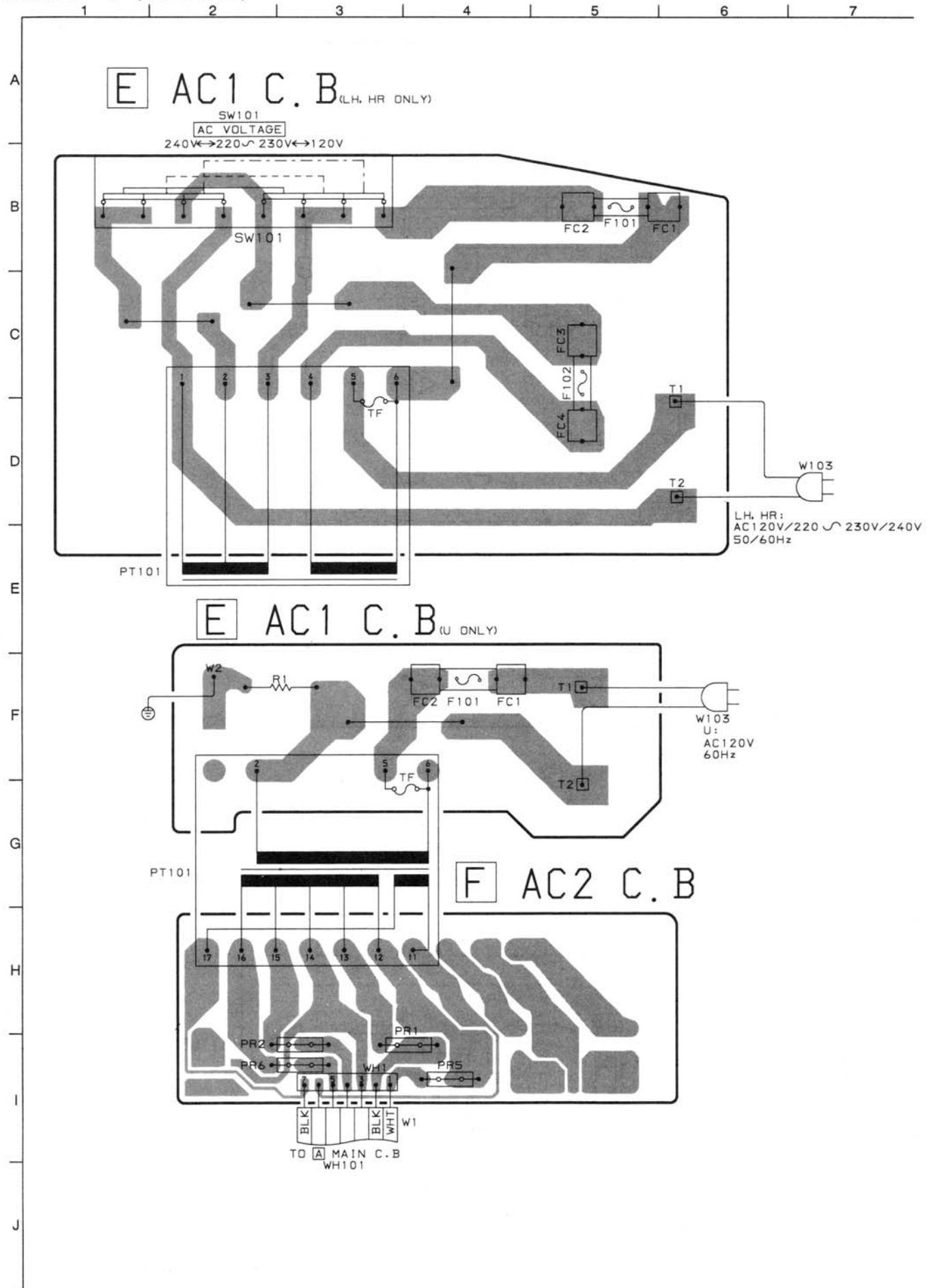
## PIN CONNECTION

|            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PIN NO.    | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 | 52 | 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40  | 39  | 38  | 37  | 36  | 35  | 34  | 33  | 32  | 31  |
| CONNECTION | F2 | F2 | F2 | NP | NP | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G | NC | NC | NC | NC | NC | NC | NC | NC | NC | P35 | P34 | P33 | P32 | P31 | P30 | P29 | P28 | P27 | P26 |

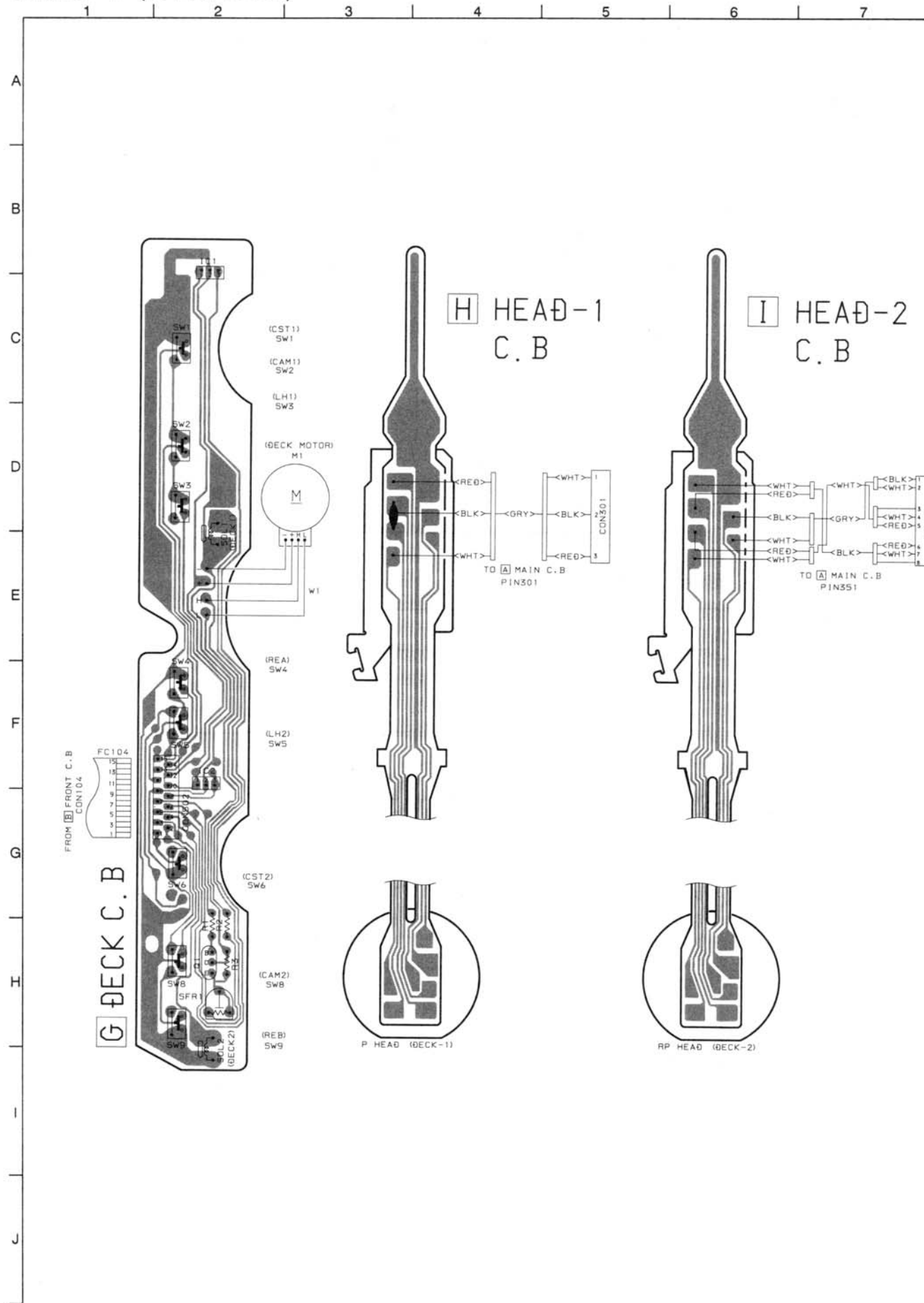
  

|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| PIN NO.    | 30  | 29  | 28  | 27  | 26  | 25  | 24  | 23  | 22  | 21  | 20  | 19  | 18  | 17  | 16  | 15  | 14 | 13 | 12 | 11 | 10 | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  |
| CONNECTION | P25 | P24 | P23 | P22 | P21 | P20 | P19 | P18 | P17 | P16 | P15 | P14 | P13 | P12 | P11 | P10 | P9 | P8 | P7 | P6 | P5 | P4 | P3 | P2 | P1 | NP | NP | F1 | F1 | F1 |

NOTE 1) F1, F2-----FILAMENT  
2) NP-----NO PIN  
3) NC-----NO CONNECTION  
4) 1G~9G-----GR10

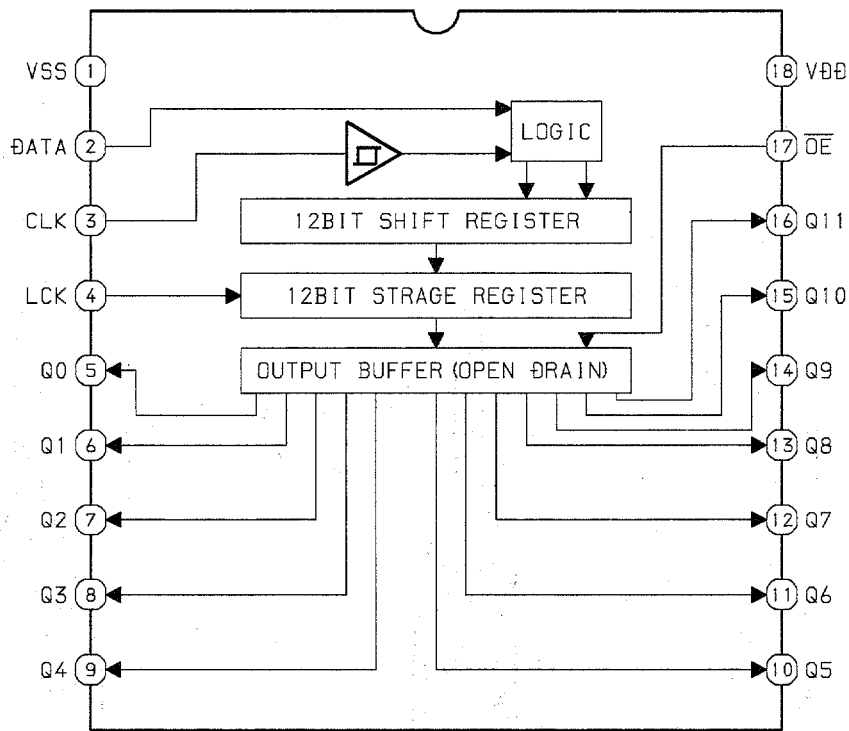


# WIRING - 6 (DECK / HEAD)

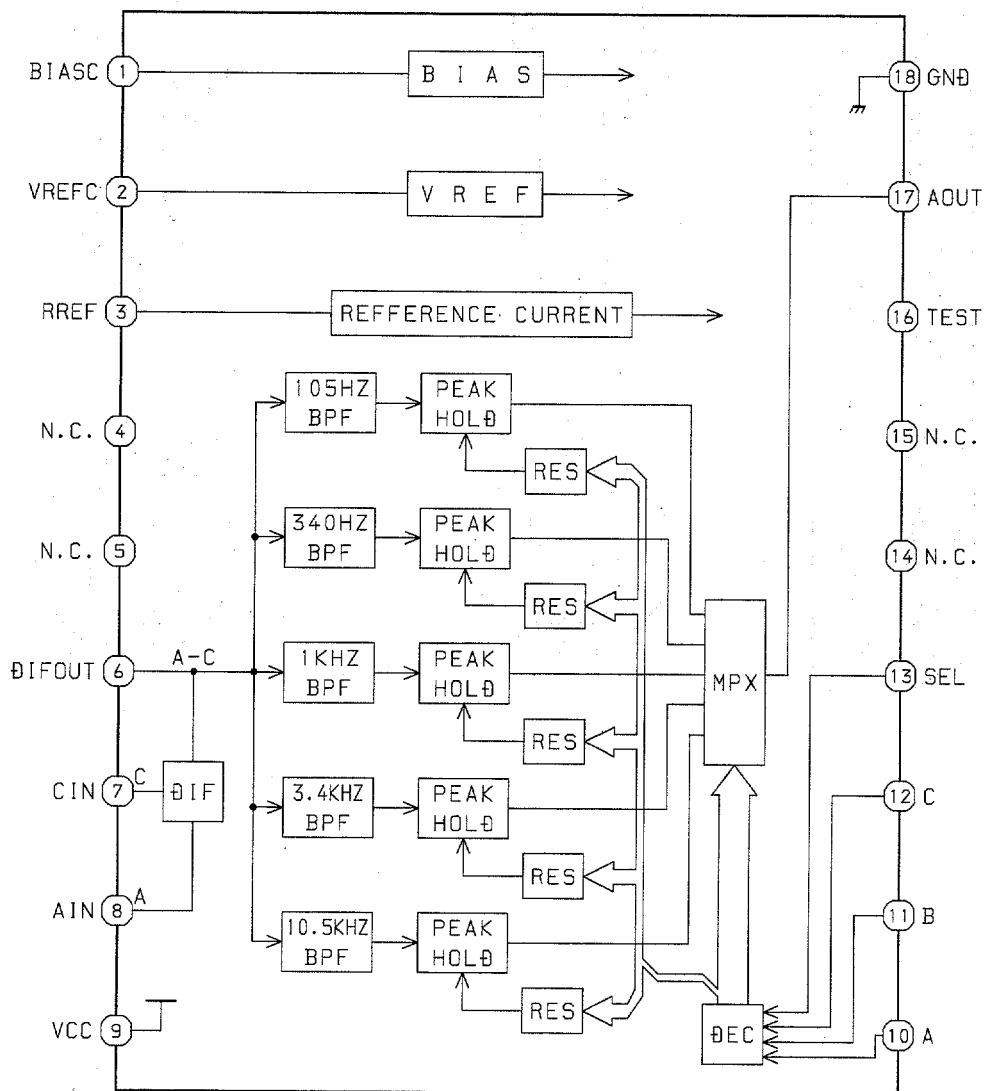


IC BLOCK DIAGRAM – 2

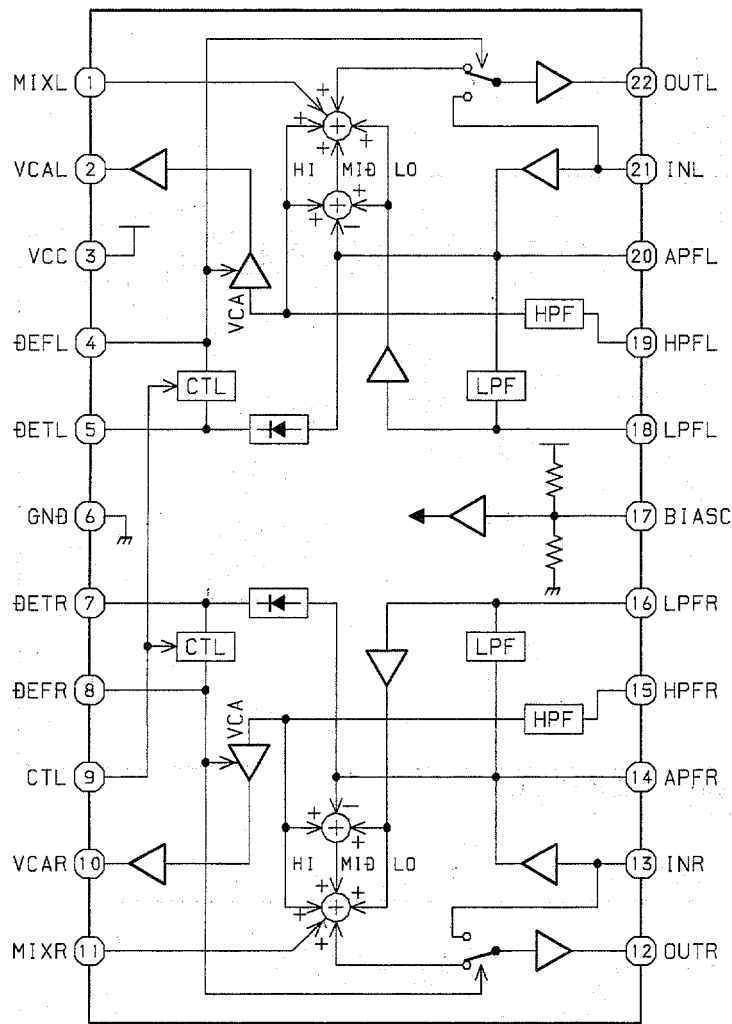
IC, BU2092F



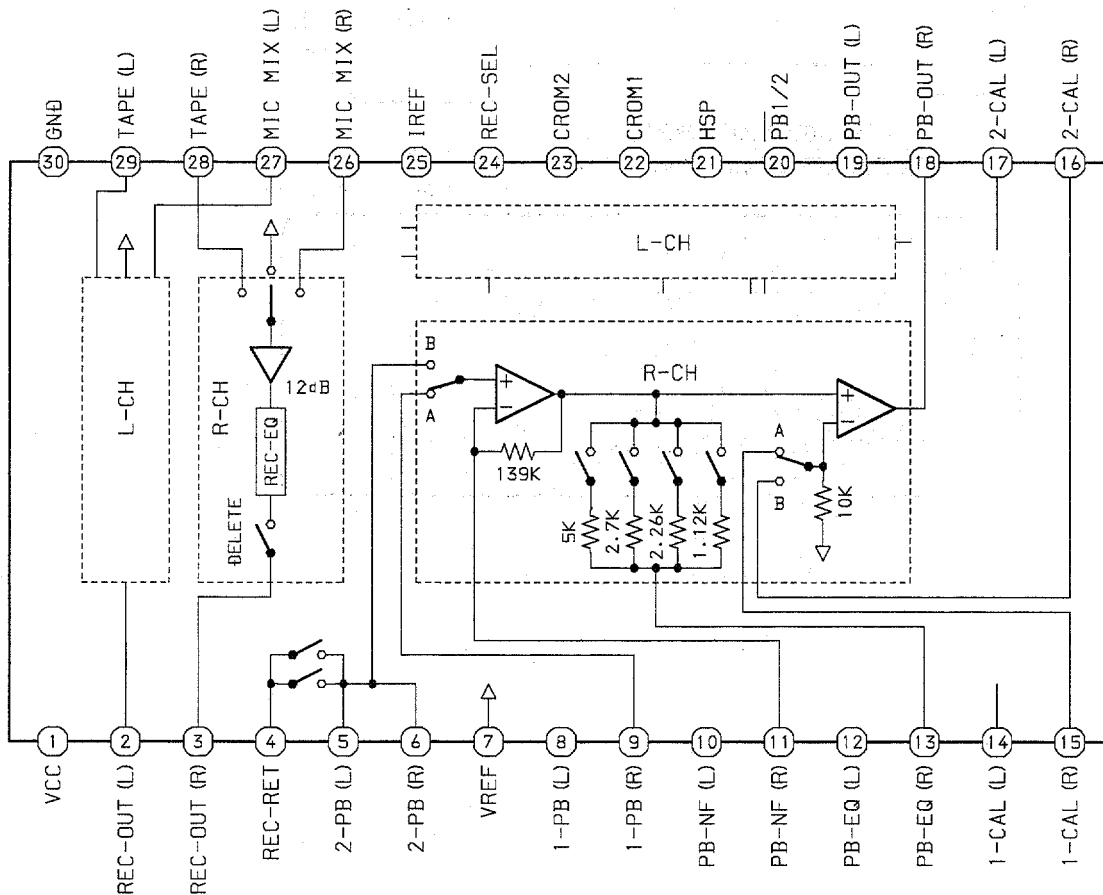
IC, BA3835S



# IC, BA3880S



# IC, HA12211



# IC DESCRIPTION

IC, LC866548V

| Pin No. | Pin Name                        | I/O | Description                                                     |
|---------|---------------------------------|-----|-----------------------------------------------------------------|
| 1       | RT-A                            | I   | Rotary encoder A input.                                         |
| 2       | RT-B                            | I   | Rotary encoder B input.                                         |
| 3       | $\overline{\text{LED-MD}}$      | O   | "MD" LED $\overline{\text{ON}}$ /OFF output.                    |
| 4       | $\overline{\text{LED-CD}}$      | O   | "CD " LED $\overline{\text{ON}}$ /OFF output.                   |
| 5       | $\overline{\text{LED-AUX}}$     | O   | "AUX" LED $\overline{\text{ON}}$ /OFF output.                   |
| 6       | $\overline{\text{LED-TUNER}}$   | O   | "TUNER" LED $\overline{\text{ON}}$ /OFF output.                 |
| 7       | $\overline{\text{LED-TAPE}}$    | O   | "TAPE" LED $\overline{\text{ON}}$ /OFF output.                  |
| 8       | HSP                             | O   | Tape deck motor high speed $\overline{\text{ON}}$ /OFF output.  |
| 9       | $\overline{\text{O-POWER}}$     | O   | System power supply $\overline{\text{ON}}$ /OFF output.         |
| 10      | $\overline{\text{O-MUTE}}$      | O   | System mute $\overline{\text{ON}}$ /OFF output.                 |
| 11      | $\overline{\text{O-CLK-SHIFT}}$ | O   | U-COM clock shift output.                                       |
| 12      | $\overline{\text{RESET}}$       | I   | Reset input.                                                    |
| 13      | $\overline{\text{I-HP-MUTE}}$   | –   | Not connected.                                                  |
| 14      | I-DISH                          | I   | CD turntable photo sensor A/D converter input.                  |
| 15      | VSS 1                           | –   | GND.                                                            |
| 16      | CF 1                            | –   | 5.76MHz oscillator circuit.                                     |
| 17      | CF 2                            |     |                                                                 |
| 18      | VDD 1                           | –   | Power supply input.                                             |
| 19      | $\overline{\text{HOLD}}$        | I   | Power failure detected input "1" to stop clock and main memory. |
| 20      | KEY-1                           | I   | KEY input. (A/D)                                                |
| 21      | KEY-2                           |     |                                                                 |
| 22      | KEY-3                           |     |                                                                 |
| 23      | I-CD SW                         | I   | CD mechanical switch A/D converter input.                       |
| 24      | I-MIC                           | I   | Microphone input for AUTO VF display.                           |
| 25      | $\overline{\text{I-TU-SIG/MS}}$ | I   | Tuner signal and deck music sensor signal input.                |
| 26      | I-SPEANA                        | I   | A/D input for spectrum analyzer display.                        |
| 27      | I-WRQ/RDS-CLK                   | I   | CD WRQ input . TUNER RDS CLOCK input.                           |
| 28      | I-TM-BASE                       | I   | REFERENCE CLOCK input for timer watch.                          |
| 29      | $\overline{\text{I-RMC}}$       | I   | System remote control signal input.                             |
| 30 ~ 37 | G9 ~ G2                         | O   | FL GRID output G2~G9.                                           |
| 38 ~ 43 | P32 ~ P27                       | O   | FL SEGMENT output P27~P32.                                      |
| 44      | G1                              | O   | FL grid output G1.                                              |
| 45      | P26                             | O   | FL SEGMENT output P26.                                          |
| 46      | VDD3                            | –   | Power supply input.                                             |
| 47      | SPEANA-A/P25                    | O   | Spectrum analyzer band switching output /FL segment P25 output. |
| 48      | SPEANA-B/P24                    | O   | Spectrum analyzer band switching output /FL segment P24 output. |
| 49      | SPEANA-C/P23                    | O   | Spectrum analyzer band switching output /FL segment P23 output. |
| 50      | P22/H-DUBB INH                  | O/I | FL segment P22 output / high dubbing inhibit input to diode.    |
| 51      | VP                              | –   | Power supply input for FL display.                              |
| 52      | P21/AM-ST                       | O/I | FL segment P21 output / AM stereo input to diode.               |
| 53      | P20/LW                          | O/I | FL segment P20 output / LW mode data input to diode.            |

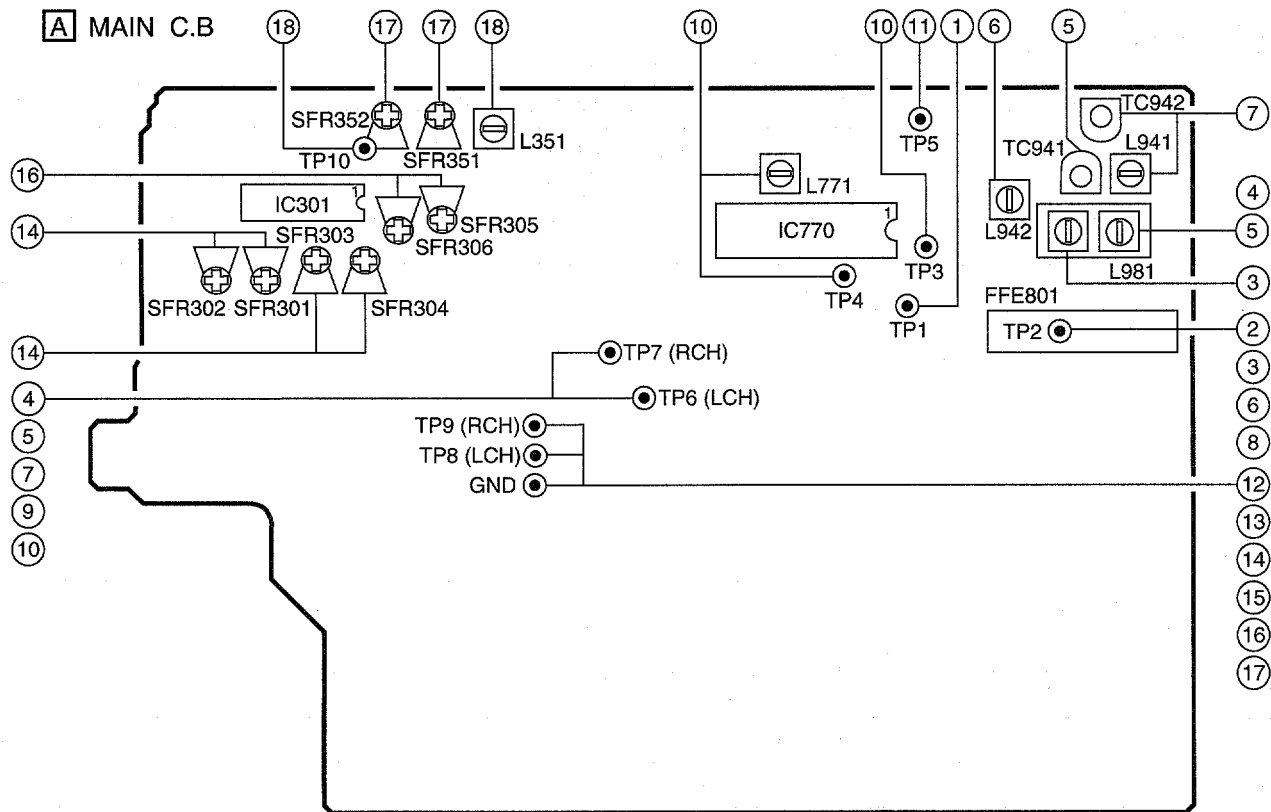
| Pin No. | Pin Name                                                       | I/O | Description                                                                      |
|---------|----------------------------------------------------------------|-----|----------------------------------------------------------------------------------|
| 54      | P19/SW                                                         | O/I | FL segment P19 output / SW mode data input to diode.                             |
| 55      | P18/FM 1                                                       | O/I | FL segment P18 output / FM1 (OIRT) data input to diode.                          |
| 56      | P17/RDS                                                        | O/I | FL segment P17 output / RDS data input to diode.                                 |
| 57      | P16/BBE                                                        | O/I | FL segment P16 output / BBE data input to diode.                                 |
| 58      | P15/DSP                                                        | O/I | FL segment P15 output / DSP data input to diode.                                 |
| 59      | P14/DOLBY-SURR                                                 | O/I | FL segment P14 output / DOLBY-SURR data input to diode.                          |
| 60      | P13/K-CON                                                      | O/I | FL segment P13 output / K-CON data input to diode.                               |
| 61      | P12/DOLBY                                                      | O/I | FL segment P12 output / DOLBY data input to diode.                               |
| 62      | P11/WAY                                                        | O/I | FL segment P11 output / DECK/WAY MECHA data input to diode.                      |
| 63      | P10/AM-9K/10K                                                  | O/I | FL segment P10 output / INITIAL AM 10 kHz step data input to diode.              |
| 64      | P9/ $\overline{\text{CST}} 2$                                  | O/I | FL segment P9 output / DECK2 cassette detect switch data input.                  |
| 65      | P8/ $\overline{\text{REB}}$                                    | O/I | FL segment P8 output / DECK2 side-B record OK switch data input.                 |
| 66      | P7/ $\overline{\text{CAM}} 2$                                  | O/I | FL segment P7 output / DECK2 CAM switch data input.                              |
| 67      | P6/ $\overline{\text{AUTO}} 1$                                 | O/I | FL segment P6 output / DECK1 AUTO stop signal input.                             |
| 68      | P5/ $\overline{\text{AUTO}} 2$                                 | O/I | FL segment P5 output / DECK2 AUTO stop signal input.                             |
| 69      | P4/ $\overline{\text{CAM}} 1$                                  | O/I | FL segment P4 output / DECK1 CAM switch data input.                              |
| 70      | P3/ $\overline{\text{CST}} 1$                                  | O/I | FL segment P3 output / DECK1 cassette detect switch data input.                  |
| 71      | P2/ $\overline{\text{REA}}$                                    | O/I | FL segment P2 output / DECK2 side A record OK switch data input.                 |
| 72      | VDD 4                                                          | –   | Power supply input.                                                              |
| 73      | P1/2092                                                        | O/I | FL segment P1 output / SHIFT resistor IC 2092 data input to diode.               |
| 74      | K-SCAN                                                         | O   | Switch SCAN timing output.                                                       |
| 75      | L CK                                                           | O   | Latch clock output for front shift resistor.                                     |
| 76      | PRO-CE                                                         | O   | PRO LOGIC IC chip enable output.                                                 |
| 77      | PLL-CE                                                         | O   | PLL IC chip enable output.                                                       |
| 78      | MA-STB                                                         | O   | Latch strobe output for MAIN PWB.                                                |
| 79      | DATA                                                           | O   | DATA output for MAIN, FORNT, PROLOGIC PWB.                                       |
| 80      | CLK                                                            | O   | CLOCK output for MAIN, FORNT, PROLOGIC PWB.                                      |
| 81      | DISH-RVS                                                       | O   | CD turntable reverse rotation output.                                            |
| 82      | DISH-FWD                                                       | O   | CD turntable forward rotation output.                                            |
| 83      | TRAY-OPEN                                                      | O   | CD TRAY OPEN data output.                                                        |
| 84      | TRAY-CLOSE                                                     | O   | CD TRAY CLOSE data output.                                                       |
| 85      | $\overline{\text{LED}} \blacktriangleright\blacktriangleright$ | O   | $\blacktriangleright\blacktriangleright$ LED $\overline{\text{ON}}$ /OFF output. |
| 86      | $\overline{\text{LED}} \blacktriangleleft\blacktriangleleft$   | O   | $\blacktriangleleft\blacktriangleleft$ LED $\overline{\text{ON}}$ /OFF output.   |
| 87      | $\overline{\text{LED}} \blacktriangleright$                    | O   | $\blacktriangleright$ LED $\overline{\text{ON}}$ /OFF output.                    |
| 88      | $\overline{\text{LED}} \blacktriangleleft$                     | O   | $\blacktriangleleft$ LED $\overline{\text{ON}}$ /OFF output.                     |
| 89      | VSS 2                                                          | –   | GND.                                                                             |
| 90      | VDD 2                                                          | –   | Power supply input.                                                              |
| 91      | $\overline{\text{LED}} \blacksquare$                           | O   | $\blacksquare$ LED $\overline{\text{ON}}$ /OFF output.                           |
| 92      | $\overline{\text{LED}} \blacksquare\blacksquare$               | O   | $\blacksquare\blacksquare$ LED $\overline{\text{ON}}$ /OFF output.               |
| 93      | SOL 1                                                          | O   | DECK 1 Solenoid output.                                                          |
| 94      | SOL 2                                                          | O   | DECK 2 Solenoid output.                                                          |

| Pin No. | Pin Name          | I/O | Description                                           |
|---------|-------------------|-----|-------------------------------------------------------|
| 95      | O-MOTOR           | O   | DECK MOTOR ON/OFF output.                             |
| 96      | I-TUNE/IFC/SUBQ   | I   | Tune IF count serial data input /CD SUB Q data input. |
| 97      | I-STEREO/O-SQCLK  | I/O | Tuner stereo detected input/CD SQ CLOCK output.       |
| 98      | I-RDS-DATA/O-DATA | I/O | RDS data input/CD data output.                        |
| 99      | O-CD CE           | O   | CD CE output.                                         |
| 100     | O-CD CLK          | O   | CD CLOCK output.                                      |

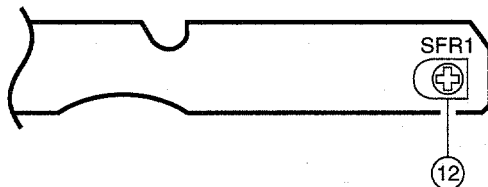
#### IC, LC72131D

| Pin No. | Pin Name                                      | I/O    | Description                                                                                                                                                                                                                                                                                                                        |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
|---------|-----------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|----|--|--------|--|--|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|
| 1       | X IN                                          | I      | A crystal oscillator (7.2MHz) is connected between these pins.                                                                                                                                                                                                                                                                     |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 22      | X OUT                                         | O      |                                                                                                                                                                                                                                                                                                                                    |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 2       | NC                                            | –      | Not used.                                                                                                                                                                                                                                                                                                                          |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 3       | CE                                            | I      | To enable the IC. Active "H".                                                                                                                                                                                                                                                                                                      |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 4       | DI                                            | I      | Digital data input from CPU(LC866548V) when relevant key is operated. Active "H".                                                                                                                                                                                                                                                  |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 5       | CL                                            | I      | To clock in the data DI.                                                                                                                                                                                                                                                                                                           |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 6       | DO                                            | O      | Digital data output to CPU (LC866548V).                                                                                                                                                                                                                                                                                            |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 7       | T-BASE                                        | O      | Outputs a reference clock signal (8Hz) for the clock.                                                                                                                                                                                                                                                                              |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 8       | MONO / BEAT                                   | O      | Outputs "H" when MONO / BEAT is switched.                                                                                                                                                                                                                                                                                          |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 9       | $\overline{\text{FM}} / \overline{\text{SW}}$ | O      | Output "L" or "H" as follows: <table><tr><td colspan="2">2 BAND</td><td colspan="3">3 BAND</td><td colspan="3">3 BAND</td></tr><tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr><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></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      | $\overline{\text{MW}} / \text{SW}$            | O      | Outputs "L" or "H" as follows: <table><tr><td colspan="2">2 BAND</td><td colspan="3">3 BAND</td><td colspan="3">3 BAND</td></tr><tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr><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></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      | To control internal counter.                                                                                                                                                                                                                                                                                                       |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 12      | IF-IN                                         | I      | General purpose counter input.                                                                                                                                                                                                                                                                                                     |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 13      | $\overline{\text{TUNE}}$                      | I      | Receives "L" when station is tuned.                                                                                                                                                                                                                                                                                                |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 14      | NC                                            | –      | Not used.                                                                                                                                                                                                                                                                                                                          |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 15      | AM-IN                                         | I      | Receives the AM local oscillator frequency signal.                                                                                                                                                                                                                                                                                 |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 16      | FM-IN                                         | I      | Receives the FM local oscillator frequency signal.                                                                                                                                                                                                                                                                                 |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 17      | VDD                                           | –      | Supply power to IC (+5V).                                                                                                                                                                                                                                                                                                          |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 18      | PD                                            | O      | PLL charge pump output.                                                                                                                                                                                                                                                                                                            |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 19      | A-IN                                          | I      | The MOS transistor for PLL active low pass filter.                                                                                                                                                                                                                                                                                 |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 20      | A-OUT                                         | O      |                                                                                                                                                                                                                                                                                                                                    |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |
| 21      | VSS                                           | –      | Ground.                                                                                                                                                                                                                                                                                                                            |        |        |        |    |  |        |  |  |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |

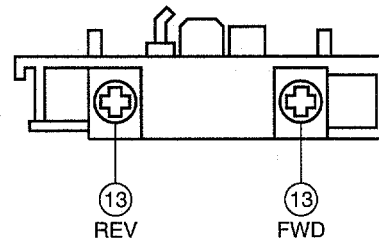
## ADJUSTMENT



**G DECK C.B**



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



### < TUNER SECTION >

- Clock Frequency Check**  
 Settings : • Test point : TP1 (CLK)  
 Method : Set to AM(MW) 1710kHz and check that the test point is 2160kHz  $\pm$  0.045kHz.
- AM VT Check <U, LH>**  
 Settings : • Test point : TP2 (VT)  
 Method : Set to AM 1710kHz and check that the test point is 6.0V  $\pm$  1.0V.
- MW VT Adjustment <HR>**  
 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. Then set to MW 530kHz and check that the test point is more than 0.3V.
- AM Tracking Adjustment <U, LH>**  
 Settings : • Test point : TP6 (Lch), TP7 (Rch)  
 • Adjustment location : L981  
 Method : Set to AM 1000kHz and adjust L981 so that the test point becomes maximum.
- MW Tracking Adjustment <HR>**  
 Settings : • Test point : TP6 (Lch), TP7 (Rch)  
 • Adjustment location :  
 L981 ..... 600kHz  
 TC941 ..... 1400kHz  
 Method : Set up TC941 to center before adjustment. The level at 600kHz is adjusted to MAX by L981. Then the level at 1400kHz is adjusted to MAX by TC941.

6. SW VT Adjustment <HR>
 

Settings : • Test point : TP2 (VT)  
 • Adjustment location : L942

Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes  $7.0V \pm 0.05V$ .
7. SW Tracking Adjustment <HR>
 

Settings : • Test point : TP6 (Lch), TP7 (Rch)  
 • 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.
8. FM VT Check
 

Settings : • Test point : TP2(VT)

Method : Set to FM 87.5MHz (108.0MHz) and check that the test point is more than 1.5V (less than 8.5V).
9. FM Tracking Check
 

Settings : • Test point : TP6 (Lch), TP7 (Rch)

Method : Set to FM 98.0MHz and check that the test point is  $2dB \pm 6dB$  at distortion less than 3%.
10. DC Balance / Mono Distortion Adjustment
 

Settings : • Test point : TP3, TP4 (DC balance)  
 TP6, TP7 (Distortion)  
 • Adjustment location : L771  
 • Input level : 54dB

Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 output becomes  $0V \pm 0.04V$ .  
 Next, check that the distortion is less than 1.3%.
11. FM Auto Stop Level Check
 

Settings : • Test point : TP5 (STOP)

Method : Set to FM 98.0 MHz and check for voltage low (about 0.01V). After that voltage high (about 7.0V) out by 2dB down.
12. Tape Speed Adjustment (DECK2)
 

Settings : • Test tape : TTA-100  
 • Test point : TP8 (Lch), TP9 (Rch)  
 • Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the test point becomes  $3000Hz \pm 5Hz$ (FWD) and FWD PLAY speed  $\pm 45Hz$ (REV).
13. Head Azimuth Adjustment (DECK1, DECK2)
 

Settings : • Test tape : TTA-300  
 • Test point : TP8 (Lch), TP9 (Rch)  
 • 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 PLAY and REV PLAY mode.
14. PB Sensitivity Adjustment (DECK1, DECK2)
 

Settings : • Test tape : TTA-200  
 • Test point : TP8 (Lch), TP9 (Rch)  
 • Adjustment location :  
 SFR301 (DECK1, Lch)  
 SFR302 (DECK1, Rch)  
 SFR303 (DECK2, Lch)  
 SFR304 (DECK2, Rch)

Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 245mV.
15. PB Frequency Response Check (DECK1, DECK2)
 

Settings : • Test tape : TTA-300  
 • Test point : TP8 (Lch), TP9 (Rch)

Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.
16. REC/PB Sensitivity Adjustment (DECK2)
 

Settings : • Test tape : TTA-602  
 • Test point : TP8 (Lch), TP9 (Rch)  
 • Input signal : 1kHz (LINE IN)  
 • Adjustment location : SFR305 (Lch)  
 SFR306 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 17mV.  
 Record and play back the 1kHz signals and adjust SFRs so that the output is  $17mV \pm 0.5dB$ .
17. REC/PB Frequency Response Adjustment (DECK2)
 

Settings : • Test tape : TTA-602  
 • Test point : TP8 (Lch), TP9 (Rch)  
 • Input signal : 1kHz / 10kHz (LINE IN)  
 • Adjustment location : SFR351 (Lch)  
 SFR352 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 170mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes  $0dB \pm 0.5dB$  with respect to that of the 1kHz signal.
18. Bias OSC Frequency Adjustment (DECK2)
 

Settings : • Test point : TP10 (BIAS)  
 • Adjustment location : L351

Method : Set DECK2 to the record mode and adjust L351 so that the frequency at the test point is  $85kHz \pm 1kHz$ .

## < DECK SECTION >

# PRACTICAL SERVICE FIGURE

## <TUNER SECTION>

### <FM SECTION>

|                                 |                                                                        |
|---------------------------------|------------------------------------------------------------------------|
| IHF Sensitivity :<br>(THD 3%)   | 6dB $\pm$ 4dB<br>[at 87.5MHz]<br>5dB $\pm$ 4dB<br>[at 98.0 / 108.0MHz] |
| S/N 50dB Quieting sensitivity : | 30dB $\pm$ 6dB<br>[at 87.5 / 98.0 / 108.0MHz]                          |
| Signal to noise ratio :         | (MONO) More than 65dB<br>(STEREO) More than 64dB<br>[at 98.0MHz]       |
| Distortion :<br>(Input 54dB)    | (MONO) Less than 1.3%<br>(STEREO) Less than 2.0%<br>[at 98.0MHz]       |
| Auto stop level :               | 25dB $\pm$ 10dB<br>[at 98.0MHz]                                        |
| Stereo separation :             | More than 25dB<br>[at 98.0MHz]                                         |
| Intermediate frequency :        | 10.7MHz                                                                |

### <AM(MW) SECTION>

|                              |                                                                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Sensitivity :<br>(S/N 20 dB) | 55dB $\pm$ 5dB<br>[at 600kHz (U, LH)]<br>[at 603kHz (HR)]<br>53dB $\pm$ 5dB<br>[at 1000 / 1400kHz (U, LH)]<br>[at 999 / 1404kHz (HR)] |
| Signal to noise ratio :      | More than 36dB<br>[at 1000kHz (U, LH)]<br>[at 999kHz (HR)]                                                                            |
| Distortion :                 | Less than 1.5%<br>[at 1000kHz (U, LH)]<br>[at 999kHz (HR)]                                                                            |
| Auto stop level :            | 50dB +10/-15dB<br>[at 1000kHz (U, LH)]<br>[at 999kHz (HR)]                                                                            |
| Intermediate frequency :     | 450kHz                                                                                                                                |

### <SW SECTION> (HR only)

|                             |                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------|
| Sensitivity :<br>(S/N 20dB) | 38dB $\pm$ 6dB [at 5.9MHz]<br>33dB $\pm$ 5dB [at 12.0MHz]<br>30dB $\pm$ 8dB [at 17.9MHz] |
| Signal to noise ratio :     | More than 34dB [at 12.0MHz]                                                              |

## <DECK SECTION>

|                         |                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------|
| Tape speed :            | 3000Hz $\pm$ 45Hz                                                                       |
| Wow & flutter :         | Less than 0.15% (W.R.M.S)                                                               |
| Pinch roller pressure : | 270 ~ 330g (FWD, REV)                                                                   |
| Take-up torque :        | 30 ~ 55g-cm (FWD, REV)                                                                  |
| F.F & REW torque :      | 75 ~ 180g-cm (FWD)<br>75 ~ 130g-cm (REW)                                                |
| Back tension :          | 2 ~ 7g-cm (FWD, REV)                                                                    |
| PB Output level :       | 330mV $\pm$ 1dB                                                                         |
| REC/PB Output level :   | 180mV $\pm$ 2dB                                                                         |
| Distortion (REC/PB) :   | Less than 2.0% (NORMAL, CrO2)                                                           |
| Noise level (PB) :      | Less than 1.8mV<br>(DOLBY B NR OFF, NORMAL)<br>Less than 1.2mV<br>(DOLBY B NR ON, CrO2) |
| Noise level (REC/PB) :  | Less than 2.2mV<br>(DOLBY B NR OFF, NORMAL)<br>Less than 1.5mV<br>(DOLBY B NR ON, CrO2) |
| Crosstalk :             | More than 60dB (1kHz, NORMAL)                                                           |
| Channel separation :    | More than 30dB (1kHz, NORMAL)                                                           |
| Erasing ratio :         | More than 60dB (at 125Hz, CrO2)                                                         |
| REC bias frequency :    | 85kHz                                                                                   |
| Test tape :             | NORMAL : TTA-602<br>CrO2 : TTA-615                                                      |

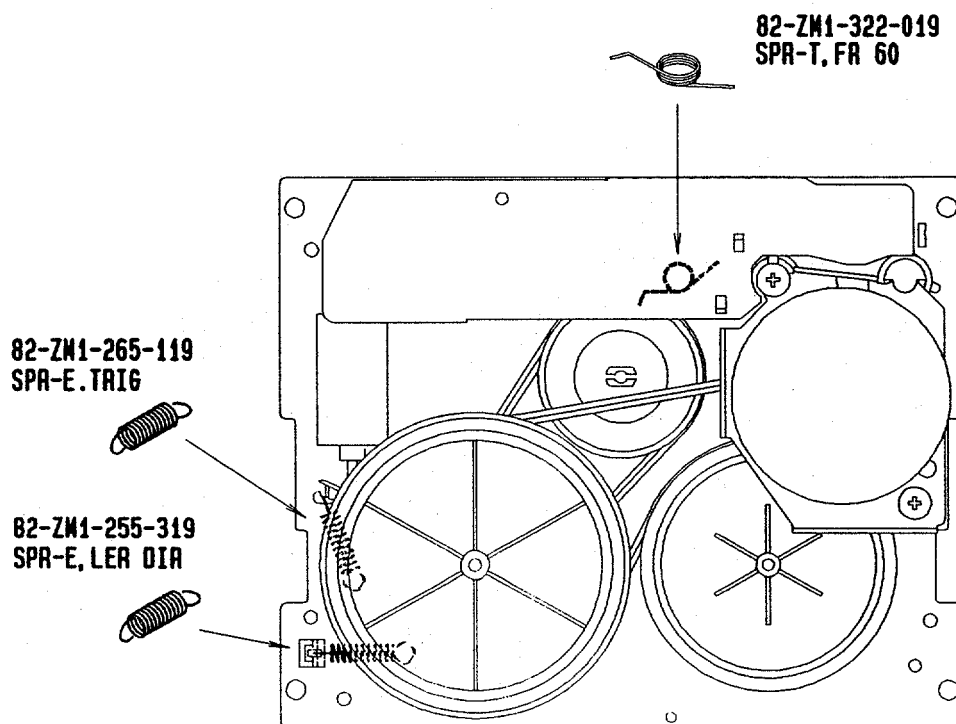
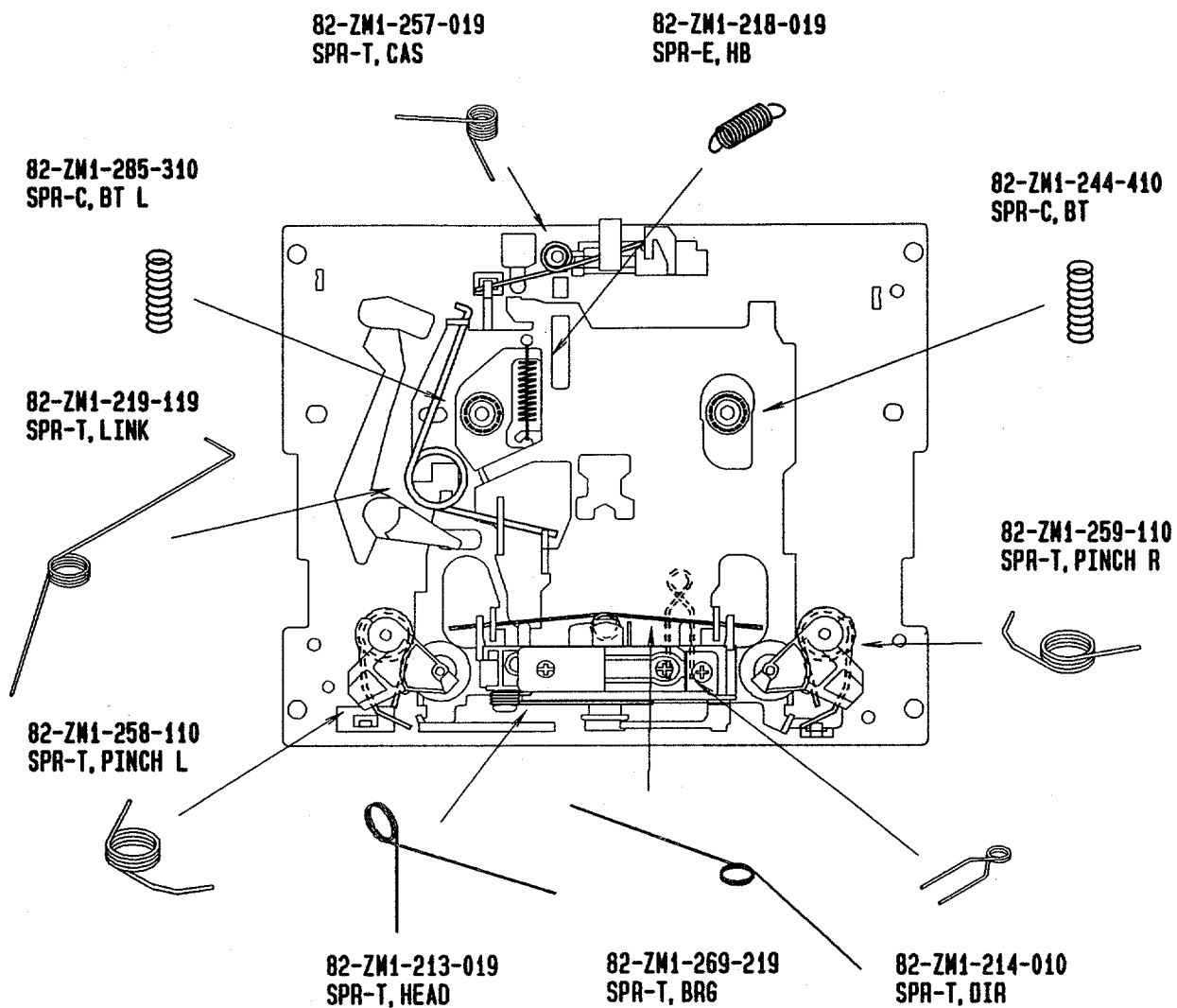


# MECHANICAL PARTS LIST 1 / 1

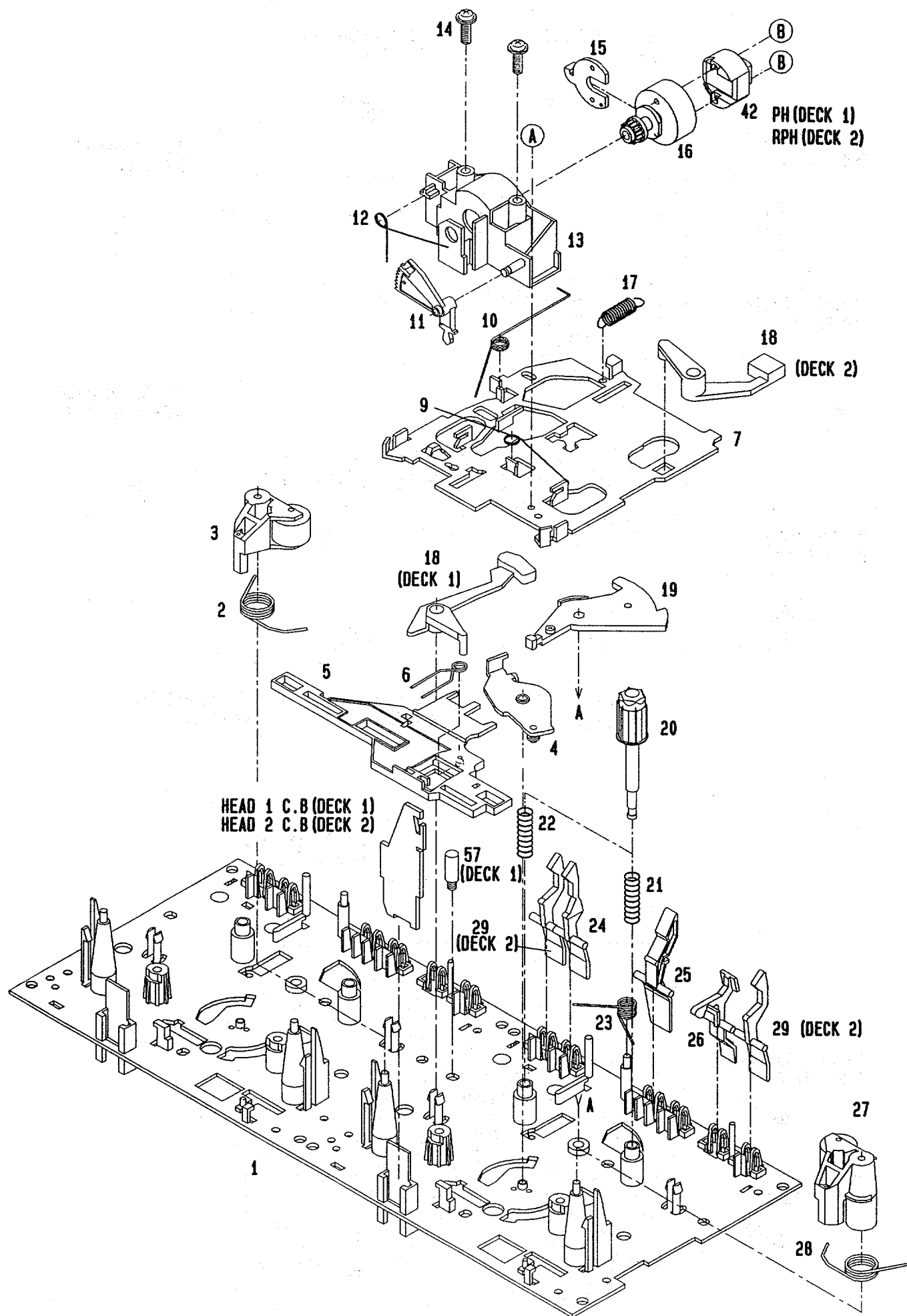
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

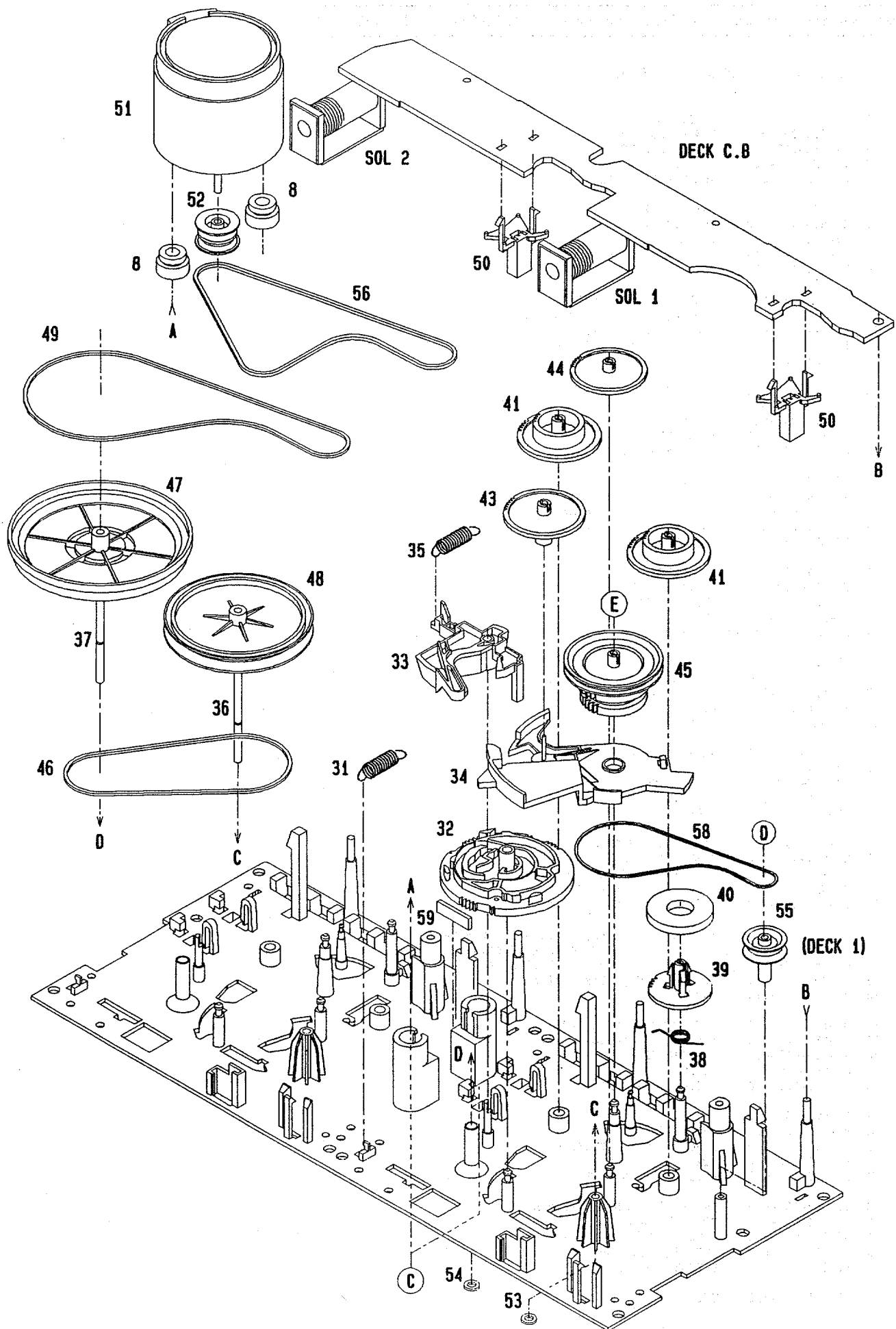
| REF. NO. | PART NO.       | KANRI<br>NO. | DESCRIPTION                                 |
|----------|----------------|--------------|---------------------------------------------|
| 1        | 87-NF4-034-010 |              | WINDOW, CASS 1                              |
| 2        | 87-NF4-032-010 |              | PANEL, CASS 1H                              |
| 3        | 87-NF4-033-010 |              | PANEL, CASS 2H                              |
| 4        | 87-NF4-035-010 |              | WINDOW, CASS 2                              |
| 5        | 82-NF5-219-010 |              | SPR-T, EJECT 2(SIN)                         |
| 6        | 87-NF4-005-010 |              | BOX, CASS 2                                 |
| 7        | 86-NF6-061-010 |              | REFLECTOR, CASS                             |
| 8        | 87-NF4-004-010 |              | BOX, CASS 1                                 |
| 9        | 82-NF5-218-010 |              | SPR-T, EJECT 1(SIN)                         |
| 10       | 87-NF4-031-010 |              | PANEL, FR H                                 |
| 11       | 87-NF4-038-010 |              | WINDOW, DISPLAY H<90LH, 94HR>               |
| 11       | 87-NF4-081-010 |              | WINDOW, DISPLAY LH S94<94LH>                |
| 11       | 87-NF4-039-010 |              | WINDOW, DISPLAY U<92U>                      |
| 11       | 87-NF4-078-010 |              | WINDOW, DISPLAY U 94<94U>                   |
| 12       | 87-NF4-080-010 |              | PLATE, DISP                                 |
| 13       | 87-NF4-042-010 |              | PANEL, OPE                                  |
| 14       | 87-NF4-036-010 |              | KEY, DEMO                                   |
| 15       | 87-NF4-007-010 |              | KEY, CD                                     |
| 16       | 87-NF4-028-010 |              | KNOB, RTRY VOL                              |
| 17       | 81-532-080-010 |              | LBL, CASS-COMPT                             |
| 18       | 87-063-165-010 |              | OIL-DMPR, 150                               |
| 19       | 87-NF4-001-010 |              | CABI, FR H<94HR>                            |
| 19       | 87-NF4-074-010 |              | CABI, FR LH<94LH, 90LH>                     |
| 19       | 87-NF4-002-010 |              | CABI, FR U<92U, 94U>                        |
| 20       | 87-NF4-037-010 |              | WINDOW, CD                                  |
| 21       | 87-NF4-008-010 |              | KEY, POWER                                  |
| 22       | 87-NF4-020-010 |              | KEY, ASSY FUN                               |
| 23       | 87-NF4-027-010 |              | KEY, ASSY OPE                               |
| 24       | 87-NF4-009-010 |              | KEY, GEQ                                    |
| 25       | 87-NF4-010-010 |              | KEY, BBE                                    |
| 26       | 87-NF4-012-010 |              | KEY, DOLBY                                  |
| 27       | 87-NF4-045-010 |              | KEY, KARAOKE<94HR>                          |
| 27       | 87-NF4-046-010 |              | KEY, VF U<EXCEPT 94HR>                      |
| 28       | 87-NF4-011-010 |              | KEY, VOL                                    |
| 29       | 82-NE6-067-010 |              | BADGE, AIWA 30N                             |
| 30       | 87-NF4-029-010 |              | PANEL, TRAY H                               |
| 31       | 87-NF4-216-010 |              | HLDR, LOCK 1                                |
| 32       | 82-NF5-228-010 |              | SPR-C, LOCK                                 |
| 33       | 82-NF5-229-010 |              | PLATE, LOCK                                 |
| 34       | 87-NF4-217-010 |              | HLDR, LOCK 2                                |
| 35       | 87-NF4-053-010 |              | CABI, REAR HRJSTNM<94HR>                    |
| 35       | 87-NF4-055-010 |              | CABI, REAR LHSTNM<90LH>                     |
| 35       | 87-NF4-059-010 |              | CABI, REAR LHSTNM S94<94LH>                 |
| 35       | 87-NF4-051-010 |              | CABI, REAR USTNM<92U>                       |
| 35       | 87-NF4-058-010 |              | CABI, REAR USTNM 94<94U>                    |
| 36       | 87-085-185-010 |              | BUSHING, AC CORD(E)CM-22B<94LH, 90LH, 94HR> |
| 36       | 87-085-189-010 |              | BUSHING, AC CORD(U)CM-22C<92U, 94U>         |
| 37       | 87-050-079-010 |              | AC CORD ASSY, E BLK<94LH, 90LH, 94HR>       |
| 37       | 87-050-053-010 |              | AC CORD ASSY, U-2<92U, 94U>                 |
| 38       | 86-NFT-005-110 |              | CABI, STEEL TS                              |
| 39       | 86-NF6-007-010 |              | WINDOW, TOP<EXCEPT 94U>                     |
| 39       | 86-NF6-101-010 |              | WINDOW, TOP UL<94U>                         |
| 40       | 87-A90-463-010 |              | FAN, 2408NL                                 |
| 41       | 87-NF4-079-010 |              | PLATE, FL J                                 |
| A        | 87-067-703-010 |              | BVT2+3-10 W/O SLOT                          |
| B        | 87-591-094-410 |              | QIT+3-6                                     |
| C        | 87-067-688-010 |              | BVTT+3-6                                    |
| D        | 87-067-975-010 |              | S-SCREW, IT+4-8 SWCH12A                     |
| E        | 87-721-096-410 |              | QT2+3-10 W/O SLOT                           |
| F        | 87-067-758-010 |              | BVT2+3-12 W/O SLOT                          |
| G        | 87-067-633-010 |              | BVT2+3-8 W/O SLOT W/CONVEX                  |
| H        | 87-721-097-410 |              | QT2+3-12 W/O SLOT                           |
| I        | 87-067-641-010 |              | UTT2+3-8 W/O SLOT BLK                       |
| J        | 87-067-584-010 |              | BVT2+3-6 W/O SLOT                           |
| K        | 87-067-690-010 |              | BVIT3B+3-12 BLK                             |
| L        | 87-571-104-410 |              | VIT+3-30                                    |

# SPRING APPLICATION POSITION



# TAPE MECHANISM EXPLODED VIEW 1 / 1





# TAPE MECHANISM 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        | 82-ZM3-301-519 |           | CHAS ASSY, M2         | 36       | 82-ZM1-236-019 |           | CAPSTAN N 2-41.5            |
| 2        | 82-ZM1-258-110 |           | SPR-T, PINCH L        | 37       | 82-ZM1-239-019 |           | CAPSTAN N 2.2-41.7          |
| 3        | 82-ZM1-341-110 |           | LVR ASSY, PINCH L2    | 38       | 82-ZM1-322-019 |           | SPR-T, FR60                 |
| 4        | 82-ZM1-333-010 |           | PLATE, LINK 2         | 39       | 82-ZM1-220-219 |           | GEAR, IDLER                 |
| 5        | 82-ZM1-266-11K |           | LVR, DIR              | 40       | 82-ZM3-616-019 |           | RING MAGNET 4               |
| 6        | 82-ZM1-214-010 |           | SPR-T, DIR            | 41       | 82-ZM1-216-31K |           | GEAR, REEL                  |
| 7        | 82-ZM1-206-81K |           | CHAS, HEAD            | 42       | 87-A90-319-010 |           | HEAD, PH HADKH2 FPC         |
| 8        | 82-ZM3-307-019 |           | CUSH-G, DIA3.7-8-3.2  | 42       | 87-A90-320-010 |           | HEAD, RPH HADKH5 FPC        |
| 9        | 82-ZM1-269-219 |           | SPR-T, BRG            | 43       | 82-ZM1-225-21K |           | GEAR, FR                    |
| 10       | 82-ZM1-219-119 |           | SPR-T, LINK           | 44       | 82-ZM1-226-019 |           | GEAR, REW                   |
| 11       | 82-ZM1-210-119 |           | GEAR, H T             | 45       | 82-ZM3-333-310 |           | SLIP DISK ASSY 2            |
| 12       | 82-ZM1-213-019 |           | SPR-T, HEAD           | 46       | 82-ZM1-338-010 |           | BELT FR4                    |
| 13       | 82-ZM1-207-619 |           | GUIDE, TAPE           | 47       | 82-ZM1-349-110 |           | FLY-WHL, R W(DECK 2)        |
| 14       | 86-ZM4-206-010 |           | S-SCREW, AZIMUTH      | 47       | 82-ZM3-338-110 |           | FLY-WHL, R3 W(DECK 1)       |
| 15       | 82-ZM1-314-119 |           | PLATE, HEAD           | 48       | 82-ZM1-348-010 |           | FLY-WHL, L W(DECK 2)        |
| 16       | 82-ZM1-208-119 |           | HLDR, HEAD            | 48       | 82-ZM1-348-010 |           | FLY-WHL, L W(DECK 1)        |
| 17       | 82-ZM1-218-019 |           | SPR-E, HB             | 49       | 82-ZM3-329-210 |           | BELT, SBU R2                |
| 18       | 82-ZM1-263-110 |           | LVR, EJECT L (DECK 1) | 50       | 82-ZM1-245-210 |           | HLDR, IC                    |
| 18       | 82-ZM1-264-010 |           | LVR, EJECT R (DECK 2) | 51       | 87-045-347-019 |           | MOT, SHU2L 70(M1)           |
| 19       | 82-ZM1-222-21K |           | LVR, PLAY             | 52       | 82-ZM3-221-010 |           | PULLEY, MOT 2M              |
| 20       | 82-ZM1-217-319 |           | REEL TABLE            | 53       | 82-ZM1-288-019 |           | SH, 1.63-3.2-0.5 SLT        |
| 21       | 82-ZM1-244-510 |           | SPR-C, BT             | 54       | 80-ZM6-243-019 |           | SH, 1.75-3.6-0.5 SLT        |
| 22       | 82-ZM1-285-310 |           | SPR-C, BT L           | 55       | 82-ZM3-335-210 |           | PULLEY, COUPLER M3 (DECK 1) |
| 23       | 82-ZM1-257-019 |           | SPR-T, CAS            | 56       | 82-ZM3-337-010 |           | BELT, SBU MOT 2             |
| 24       | 82-ZM1-241-319 |           | LVR, MC               | 57       | 82-ZM3-339-010 |           | SHAFT, COUPLER N3 (DECK 1)  |
| 25       | 82-ZM1-242-019 |           | LVR, CAS              | 58       | 86-ZM1-206-010 |           | BELT, MAIN L                |
| 26       | 82-ZM1-243-019 |           | LVR, STOP             | 59       | 82-ZM3-340-010 |           | SH, BELT D2                 |
| 27       | 82-ZM1-344-110 |           | LVR ASSY, PINCH R2    | A        | 85-ZM3-202-010 |           | S-SCREW, TG                 |
| 28       | 82-ZM1-259-110 |           | SPR-T, PINCH R        | B        | 80-ZM6-207-019 |           | V+1.6-7                     |
| 29       | 82-ZM1-240-11K |           | LVR, REC (DECK 2)     | C        | 82-ZM3-318-019 |           | S-SCRW MOTOR M2             |
| 31       | 82-ZM1-255-319 |           | SPR-E, LVR DIR        | D        | 87-B10-043-010 |           | W-P, 0.99-4-0.25 SLT        |
| 32       | 82-ZM3-305-01K |           | GEAR, CAM M2          | E        | 82-ZM3-334-010 |           | PW, 2.16-6-0.4              |
| 33       | 82-ZM1-227-21K |           | LVR, TRIG             |          |                |           |                             |
| 34       | 82-ZM3-306-11K |           | LVR, FR M2            |          |                |           |                             |
| 35       | 82-ZM1-265-119 |           | SPR-E, TRIG           |          |                |           |                             |

## 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-NF4-901-010 |           | IB, H(ECA)M<94HR>                             |
| 1        | 87-NF4-902-010 |           | IB, LH(ES)M<94LH, 90LH>                       |
| 1        | 87-NF4-903-010 |           | IB, U(ESP)M<92U, 94U>                         |
| 2        | 87-NF4-655-010 |           | RC UNIT, RC-7AS08                             |
| 3        | 87-A90-312-010 |           | PLUG, CONVERSION WTN-1157R1<94LH, 90LH, 94HR> |
| 4        | 87-A90-064-010 |           | FEEDER-ANT, FM (SHS)                          |
| 5        | 87-A90-054-010 |           | ANT, LOOP AM-CON C<94HR>                      |
| 5        | 87-006-225-010 |           | ANT, LOOP ANT NC2<EXCEPT 94HR>                |
| 6        | 87-043-095-010 |           | ANT, WIRE<94HR>                               |

# 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       |

## 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          |

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