

# AKAI SERVICE MANUAL

## (ADDITIONAL)

Use this additional service manual together with the previously published service manual for the AKAI GX-67 and DX-57 models.  
For schematic diagrams and PC Boards, please refer to those provided for the GX-67 and DX-57 models.

### STEREO CASSETTE DECK

## MODEL GX-69

## MODEL DX-59

### SPECIFICATIONS

|                              |                                       |                                                  |  |                                  |  |                                                                          |  |     |  |
|------------------------------|---------------------------------------|--------------------------------------------------|--|----------------------------------|--|--------------------------------------------------------------------------|--|-----|--|
| Track System .....           |                                       | 4 track 2 channel Stereo                         |  | Output Level/Impedance           |  |                                                                          |  |     |  |
| Heads                        |                                       |                                                  |  | Line .....                       |  | 388 mV / 2 k ohms                                                        |  |     |  |
| GX-69 .....                  | Erase Head x 1                        |                                                  |  | Headphones .....                 |  | 1.3 mW (8 ohms)                                                          |  |     |  |
|                              | LC-OFC SGX Head for recording x 1     |                                                  |  | S/N ratio .....                  |  | 57 dB (Measured via Metal tape with peak recording level)                |  |     |  |
|                              | LC-OFC SGX Head for playback x 1      |                                                  |  | Dolby B type                     |  |                                                                          |  |     |  |
| DX-59 .....                  | Erase Head x 1                        |                                                  |  | NR switch ON .....               |  | Improves up to 5 dB at 1 kHz<br>10 dB above 5 kHz                        |  |     |  |
|                              | Hard permalloy Head for recording x 1 |                                                  |  | Dolby C type                     |  |                                                                          |  |     |  |
|                              | Hard permalloy Head for playback x 1  |                                                  |  | NR switch ON .....               |  | Improves up to 15 dB at 500 Hz, 20 dB at 1 kHz to 10 kHz                 |  |     |  |
| Motors .....                 |                                       | Electronic speed controlled                      |  | Power Requirements .....         |  | AC 220 V- 230 V, 50 Hz for Europe except U.K.                            |  |     |  |
|                              |                                       | DC motor for capstan x 1                         |  |                                  |  | AC 110 V- 120 V, 220 V-240 V, 50 / 60 Hz Convertible for other countries |  |     |  |
|                              |                                       | DC motor for reel drive x 1                      |  |                                  |  |                                                                          |  |     |  |
|                              |                                       | DC motor for tape eject/loading x 1 (GX-69 only) |  | Power consumption .....          |  | 15 W                                                                     |  |     |  |
| Wow & Flutter .....          | 0.045 % (WRMS)                        |                                                  |  | Dimensions .....                 |  | 425 (W) x 135 (H) x 51 (D) mm                                            |  |     |  |
|                              | 0.08 % (DIN)                          |                                                  |  | Weight                           |  |                                                                          |  |     |  |
| Tape winding time .....      |                                       | 80 sec. (C-60)                                   |  | GX-69 .....                      |  | 5.4 kg                                                                   |  |     |  |
| Frequency response           |                                       |                                                  |  | DX-59 .....                      |  | 5.3 kg                                                                   |  |     |  |
| GX-69                        | Normal .....                          | 15 Hz to 18,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
|                              | CrO <sub>2</sub> .....                | 15 Hz to 18,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
|                              | Metal .....                           | 15 Hz to 21,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
| DX-59                        | Normal .....                          | 15 Hz to 17,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
|                              | CrO <sub>2</sub> .....                | 15 Hz to 17,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
|                              | Metal .....                           | 15 Hz to 20,000 Hz $\pm$ 3dB                     |  |                                  |  |                                                                          |  |     |  |
| Total harmonic distortion .. |                                       | 1.0 % (METAL tape)                               |  | Standard accessories             |  |                                                                          |  |     |  |
| Input sensitivity/Impedance  |                                       |                                                  |  | Connection cords .....           |  |                                                                          |  | x 2 |  |
| Line .....                   |                                       | 70 mV / 47 k ohms                                |  | Remote control unit .....        |  |                                                                          |  | x 1 |  |
|                              |                                       |                                                  |  | Dry batteries R6 (AA) size ..... |  |                                                                          |  | x 2 |  |
|                              |                                       |                                                  |  | Operator's manual .....          |  |                                                                          |  | x 1 |  |

0 dBs  $\approx$  0.775 V

- \* For improvement purposes, specifications and design are subject to change without notice.
- \* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
- \* "DOLBY", the double-D symbol  and "HX Pro" are trademarks of Dolby Laboratories Licensing Corporation.

# I. PARTS LIST

## ATTENTION

- 1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
- 2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
- 3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

## HOW TO USE THIS PARTS LIST

- 1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
- 2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
- 3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
- 4. How to read the Parts List.

a) Mechanism Block

### 2. HEAD BASE BLOCK

| Ref. No. | Part No.      | Description        |
|----------|---------------|--------------------|
| 1        | BH-T2023A320A | HEAD BASE BLOCK    |
| 2        | HP-H2206A010A | HEAD R/P PR4-8FU C |
| 3        | ZS-477876     | PAN20×03STL CMT    |
| 4        | ZS-536488     | BID20×08STL CMT    |
| 5        | ZG-402895     | SP CS ANGLE ADJUST |

SP (Service Parts) Classification  
This number corresponds with the individual parts index number in that figure.

b) PC Board

### 6. MAIN PC BOARD

| Ref. No. | Part No.  | Description                     |
|----------|-----------|---------------------------------|
| IC1      | EI-324536 | IC HD14049BP                    |
| IC2      | EI-336801 | IC MB8841-564M                  |
| C1A      | EC-338399 | C MMY V 223M 250AC [U, E, B, S] |
| C1B      | EC-350949 | C MMY V 223M 250DC [J]          |
| C1C      | EC-338397 | C MMY V 223M 125AC [C, A]       |
| X1       | EI-318384 | OSC X'TAL NC-18C                |

Symbols for primary destination  
[A] : AAL (U.S.A) [S] : SAA (Australia)  
[B] : BEAB (England) [U] : U/T (Universal Area)  
[C] : CSA (Canada)  
[E] : CEE (Europe) [V] : VDE (Germany)  
[J] : JPN (Japan) [Y] : Custom Version

SP (Service Parts) Classification  
These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

- 5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

## WARNING

⚠ (\*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

## AVERTISSEMENT

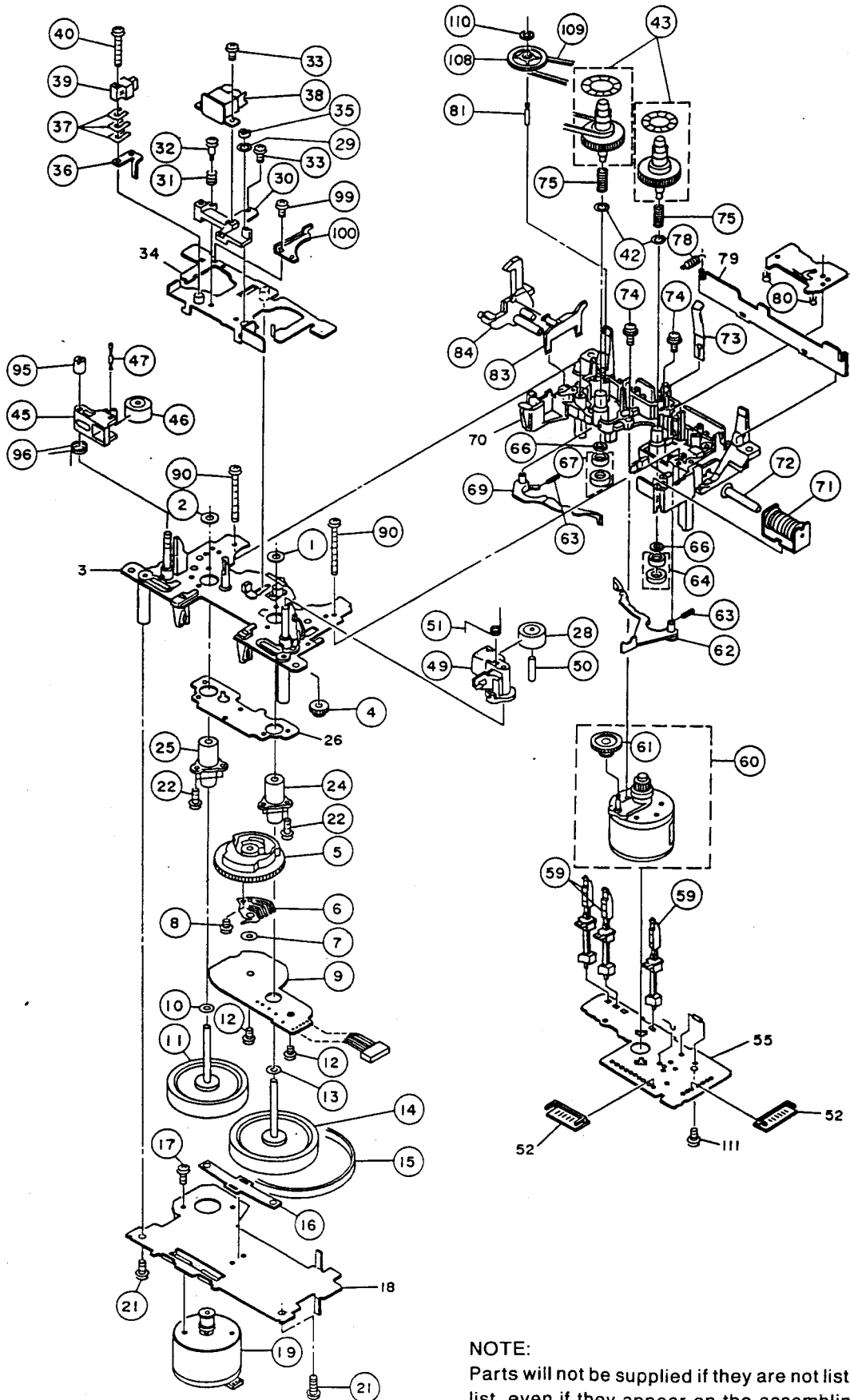
⚠ (\*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

## 1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

| Ref. No. | Part No.      | Description                               | Ref. No. | Part No.   | Description                         |
|----------|---------------|-------------------------------------------|----------|------------|-------------------------------------|
| 1        | AX-D4004A010B | REMOCON BLK RC-G57<br>[DX-59]             | 52       | ES-396610J | SW TACT SOR-122HS T05<br>[REW]      |
| 2        | AX-D4004A010A | REMOCON BLK RC-G67<br>[GX-69]             | 53       | ET-411995J | DETECTOR GP1U581X                   |
| 3        | BB-T2130A050B | MECHA BLK DX-57<br>[DX-59]                | 54       | ET-396487J | TR DTA124XL T05                     |
| 4        | BB-T2130A050A | MECHA BLK GX-67<br>[GX-69]                | 55       | ET-371075  | TR DTA124XS                         |
| 5        | BM-405969J    | MOTOR RF-370 PART<br>[GX-69]              | 56       | ET-373382  | TR DTA143ZS                         |
| 6        | *BT-391561J   | TRANS POW T2118 U<br>[U]                  | 57       | ET-354415  | TR DTA144ES                         |
| 7        | *BT-410582J   | TRANS POW T2130 E<br>[E]                  | 58       | ET-360399  | TR DTC114TS                         |
| 8        | ED-307572     | D SILICON H 1S5131                        | 59       | ET-354365  | TR DTC114YS                         |
| 9        | ED-624903     | D SILICON H 1S2473<br>[GX-69]             | 60       | ET-354371  | TR DTC124ES                         |
| 10       | *ED-511907    | D SILICON 1N4002 100/1.0A                 | 61       | ET-354384  | TR DTC143TS                         |
| 11       | ED-400221J    | D ZENER H HZ11A3LFA F10                   | 62       | ET-405594J | TR DTC143ZL T05                     |
| 12       | ED-346574     | D ZENER H HZ22-2L                         | 63       | ET-373391  | TR DTC143ZS                         |
| 13       | ED-346598     | D ZENER H HZ4 C2                          | 64       | ET-396488J | TR DTC144EL T05                     |
| 14       | *ED-346602    | D ZENER H HZ5 B3                          | 65       | ET-354414  | TR DTC144ES<br>[GX-69]              |
| 15       | ED-343410     | D ZENER H HZ6A1L                          | 66       | ET-370310  | TR DTC144TS                         |
| 16       | *ED-346525    | D ZENER H HZ6A3L                          | 67       | ET-347738  | TR 2SA1282A E,F F05                 |
| 17       | ED-351419     | D ZENER H HZ7B3L                          | 68       | ET-364093  | TR 2SA1283 E,F                      |
| 18       | ED-346536     | D ZENER H HZ7C3L<br>[GX-69]               | 69       | ET-352726  | TR 2SA1392 T,U                      |
| 19       | ED-346541     | D ZENER H HZ9B2L                          | 70       | ET-389803J | TR 2SA933S R,S                      |
| 20       | *EF-358641    | FUSE BET T 250V 800MA<br>[E]              | 71       | ET-400218J | TR 2SC1740S R,S                     |
| 21       | *EF-309387    | FUSE TSC A 250V 1.00A<br>[U]              | 72       | ET-365394  | TR 2SC3242A E,F,G F05               |
| 22       | EH-370972     | FILTER LC LP 370972                       | 73       | ET-378524J | TR 2SC3383 S,T,U                    |
| 23       | EI-367572     | IC BA15218                                | 74       | ET-400741J | TR 2SC3708 T T05                    |
| 24       | EI-373980     | IC BA15218N                               | 75       | ET-394554J | TR 2SD1379                          |
| 25       | EI-353421     | IC BA6229<br>[GX-69]                      | 76       | ET-396072J | TR 2SD2159 V,W                      |
| 26       | EI-384868J    | IC BU4030B                                | 77       | EV-405297J | VR RK14K12B0 SPL C1253X2<br>[GX-69] |
| 27       | EI-394573J    | IC CXA1331S                               | 78       | EV-405298J | VR ROTARY RK11K1120 B102            |
| 28       | EI-394574J    | IC LA2000                                 | 79       | EV-405300J | VR ROTARY RK11K1120 SP W254         |
| 29       | EI-405498J    | IC M50941-627SP 91DECK2 T2130             | 80       | EV-405301J | VR ROTARY RK14K12B0 A503X2          |
| 30       | EI-360043     | IC M5220P                                 | 81       | EV-405299J | VR ROTARY RK16312A0 A104X2          |
| 31       | EI-310036     | IC TC4066BP                               |          |            |                                     |
| 32       | EI-373383     | IC UPC1297CA                              |          |            |                                     |
| 33       | *EI-377101    | IC UPC7805HF                              |          |            |                                     |
| 34       | EI-405327J    | OSC CE CST6.00MGW 6.000MHZ                |          |            |                                     |
| 35       | EM-405274J1   | IND FL CM1068C DOUBLE                     |          |            |                                     |
| 36       | EO-361292     | COIL FIX 1 RC875 682J<br>[GX-69]          |          |            |                                     |
| 37       | EO-405355J    | COIL FIX 3 E1222T472J 472J222J            |          |            |                                     |
| 38       | EO-389245J    | COIL OSC 1 T2118 100.0KHZ                 |          |            |                                     |
| 39       | EO-400766J    | COIL OSC 1 T2128 (HX)-7 200KHZ<br>[GX-69] |          |            |                                     |
| 40       | EO-405296J    | COIL OSC 1 T2130 (HX) 105KHZ<br>[DX-59]   |          |            |                                     |
| 41       | EO-405356J    | COIL TUN 1 105Z391S 105KHZ<br>[DX-59]     |          |            |                                     |
| 42       | EO-405304J    | COIL TUN 1 210Z181S<br>[GX-69]            |          |            |                                     |
| 43       | *ER-320528    | R FUSE H ERD2FC 1/4W 22R0G                |          |            |                                     |
| 44       | *ER-401039J   | R FUSE V T05 ERD2FCV 1/4W 4R7J            |          |            |                                     |
| 45       | ES-405288J1   | SW LEAF MSW18121MPJO<br>[GX-69]           |          |            |                                     |
| 46       | ES-372912     | SW LEAF SPPB21 01-2<br>[GX-69]            |          |            |                                     |
| 47       | ES-393376J    | SW LEAF SPPB22 01-1<br>[GX-69]            |          |            |                                     |
| 48       | *ES-371104    | SW PUSH SDDL01 01-1<br>[POWER SW]         |          |            |                                     |
| 49       | ES-405302J    | SW PUSH SPUY32 3THROW N<br>[DX-59]        |          |            |                                     |
| 50       | ES-405295J    | SW PUSH SPUY42 4THROW N<br>[GX-69]        |          |            |                                     |
| 51       | ES-370965     | SW SLIDE SSSU02 1-01-03N                  |          |            |                                     |

# MECHA BLOCK



## NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

## 2. MECHA BLOCK

| Ref. No. | Part No.      | Description                              |
|----------|---------------|------------------------------------------|
| 1        | ZW-729545J    | TW25                                     |
| 2        | ZW-729440J    | TW22                                     |
| 4        | MZ-729441J    | GEAR ASSIST                              |
| 5        | MZ-729442J    | CAM                                      |
| 6        | ES-729443J    | SW ROTARY                                |
| 7        | ZW-729444J    | WASHER 30X080X050 PSL                    |
| 8        | ZS-729445J    | PAN 20X03                                |
| 9        | EA-732798J    | PC CONTROL                               |
| 10       | ZW-732799J    | WASHER                                   |
| 11       | MI-732800J    | FLYWHEEL                                 |
| 12       | ZS-729449J    | PAN 20X30                                |
| 13       | ZW-732801J    | WASHER 26X047X050 PSL                    |
| 14       | MI-729453J    | FLYWHEEL                                 |
| 15       | MB-729451J    | BELT CAPSTAN                             |
| 16       | MZ-729452J    | HOLDER THRUST                            |
| 17       | ZS-729454J    | PAN 26X03                                |
| 19       | BM-732802J    | MOTOR CAPSTAN SHE2L55                    |
| 21       | ZS-729456J    | SCREW TAPPING 26X08                      |
| 22       | ZS-729457J    | ST PAN 20X08                             |
| 24       | MV-729458J    | MAIN CASE (R)                            |
| 25       | MV-729459J    | MAIN CASE (L)                            |
| 28       | MP-732803J    | PINCH ROLLER                             |
| 29       | ZW-732819J    | WASHER                                   |
| 30       | HZ-732804J    | BASE HEAD                                |
| 31       | ZG-729462J    | SP AZIMUTH                               |
| 32       | MS-729463J    | SHAFT                                    |
| 33       | ZS-732805J    | ST PAN 20X04                             |
| 35       | ZW-729466J    | NUT ADJ                                  |
| 36       | HZ-729467J    | BASE E HEAD                              |
| 37A      | ZW-729468J    | SPACER                                   |
| 37B      | ZW-729465J    | SPACER                                   |
| 37C      | ZW-729546J    | SPACER                                   |
| 38A      | HR-H2411A010A | HEAD COMB RP4-10TG2 RP4-10TG2<br>[GX-69] |
| 38B      | HR-405284J    | HEAD COMBO H2381<br>[DX-59]              |
| 39       | HE-729469J    | HEAD E 876-30-03                         |
| 40       | ZS-729470J    | BID 20X12                                |
| 42       | ZW-732820J    | WASHER                                   |
| 43       | MT-732806J    | REEL TABLE                               |
| 45       | ML-732807J    | ARM PINCH ROLLER (S)                     |
| 46       | MP-732808J    | PINCH ROLLER                             |
| 47       | MS-732809J    | SHAFT PINCH ROLLER                       |
| 49       | ML-732810J    | ARM PINCH ROLLER (R)                     |
| 50       | MS-729475J    | SHAFT PINCH ROLLER                       |
| 51       | ZG-732811J    | SP ARM PINCE ROLLER (R)                  |
| 59       | ES-729477J    | LEAF SW                                  |
| 60       | BM-732812J    | MOTOR REEL PART SGE09014                 |
| 61       | MZ-729479J    | GEAR IDLER                               |
| 62       | ML-729480J    | LEVER ASSIST (A)                         |
| 63       | ZG-732813J    | SP LEVER ASSIST                          |
| 64       | MR-729482J    | PULLEY BRAKE (T) PART (WH)               |
| 66       | ZW-729483J    | WASHER 26X055X013 (PSL)                  |
| 67       | MR-729484J    | PULLEY BRAKE (S) PART (BK)               |
| 69       | ML-732814J    | LEVER ASSIST (B)                         |
| 71       | EP-729487J    | SOLENOID                                 |
| 72       | MS-729488J    | SHAFT SOLENOID                           |
| 73       | ZG-732815J    | SP PLATE CASSETTE HOLDER<br>[DX-59]      |
| 74       | ZS-729490J    | SCREW SPECIAL 26X016                     |
| 75       | ZG-729491J    | SP REEL TABLE                            |
| 78A      | ZG-732816J    | SP PULL CASSETTE PLATE<br>[GX-69]        |
| 78B      | ZG-729494J    | SP PULL CASSETTE PLATE<br>[DX-59]        |
| 80       | ET-729496J    | TR PHOTO NJL5161KF1 B                    |
| 81       | MS-729497J    | SHAFT PULLEY                             |
| 83       | ML-729498J    | LEVER                                    |
| 84       | ML-729499J    | LEVER EJECT                              |
| 90       | ZS-729500J    | PAN 26X30                                |
| 95       | ZS-729501J    | SCREW ADJ ARM PINCH ROLER                |
| 96       | ZG-729502J    | SP PINCH ROLER (S)                       |
| 99       | ZS-729503J    | PAN 20X025                               |
| 100      | MZ-729504J    | STOPPER                                  |
| 108      | MR-729505J    | PULLEY PART                              |
| 109      | MB-732817J    | BELT                                     |
| 110      | ZW-729507J    | WASHER                                   |

## 3. P.C BOARD BLOCK

| Ref. No. | Part No.      | Description                                  |
|----------|---------------|----------------------------------------------|
| 1A       | BA-T2130A020B | PC (#) PREAMP BLK GX-67 (U)<br>[U,E] [GX-69] |
| 1B       | BA-T2130A020E | PC (#) PREAMP BLK DX-57 (U)<br>[U,E] [DX-59] |
| 2A       | BA-T2130A030A | PC (#) SYSCON BLK GX-67<br>[GX-69]           |
| 2B       | BA-T2130A030B | PC (#) SYSCON BLK DX-57<br>[DX-59]           |

PC (#) PRE AMP BLK CONSISTS OF FOLLOWING P.C BOARDS.

- PRE AMP P.C BOARD
- HEAD PHONE P.C BOARD
- POWER SW P.C BOARD

PC (#) SYSCON BLK CONSISTS OF FOLLOWING P.C BOARDS.

- SYSCON P.C BOARD
- TIMER SW P.C BOARD
- EJECT SW P.C BOARD (GX-69)

#### 4. PRE AMP P.C BOARD

| Ref. No. | Part No.    | Description                           |
|----------|-------------|---------------------------------------|
| C801     | EC-364978   | C EC V CUT SME 102M 16.0DC            |
| C802     | EC-364978   | C EC V CUT SME 102M 16.0DC            |
| C807A    | EC-363490   | C EC V CUT SME 222M 16.0DC<br>[GX-69] |
| C807B    | EC-367241   | C EC V CUT SME 472M 16.0DC<br>[DX-59] |
| C811     | EC-375358   | C EC V CUT SME 103M 16.0DC            |
| C817     | EC-364978   | C EC V CUT SME 102M 16.0DC            |
| D301     | ED-624903   | D SILICON H 1S2473<br>[GX-69]         |
| D302     | ED-624903   | D SILICON H 1S2473<br>[GX-69]         |
| D311     | ED-624903   | D SILICON H 1S2473                    |
| D411     | ED-624903   | D SILICON H 1S2473                    |
| D501     | ED-624903   | D SILICON H 1S2473                    |
| D502     | ED-624903   | D SILICON H 1S2473                    |
| D503     | ED-346536   | D ZENER H HZ7C3L<br>[GX-69]           |
| D504     | ED-351419   | D ZENER H HZ7B3L                      |
| D505     | ED-346598   | D ZENER H HZ4 C2                      |
| D506     | ED-624903   | D SILICON H 1S2473                    |
| D507     | ED-624903   | D SILICON H 1S2473                    |
| D508     | ED-624903   | D SILICON H 1S2473                    |
| D509     | ED-624903   | D SILICON H 1S2473                    |
| D801     | *ED-511907  | D SILICON 1N4002 100/1.0A             |
| D802     | *ED-511907  | D SILICON 1N4002 100/1.0A             |
| D803     | *ED-511907  | D SILICON 1N4002 100/1.0A             |
| D804     | *ED-511907  | D SILICON 1N4002 100/1.0A             |
| D805     | ED-346541   | D ZENER H HZ9B2L                      |
| D806     | ED-346541   | D ZENER H HZ9B2L                      |
| D807     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D808     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D809     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D810     | *ED-346525  | D ZENER H HZ6A3L                      |
| D811     | ED-400221J  | D ZENER H HZ11A3LFA F10               |
| D812     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D813     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D814     | *ED-511907  | D SILICON 1N4002 100/1.0A             |
| D815     | ED-343410   | D ZENER H HZ6A1L                      |
| D816     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D817     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D818     | ED-346574   | D ZENER H HZ22-2L                     |
| D819     | *ED-346602  | D ZENER H HZ5 B3                      |
| D820     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| D821     | ED-624903   | D SILICON H 1S2473                    |
| D822     | ED-624903   | D SILICON H 1S2473                    |
| D823     | ED-624903   | D SILICON H 1S2473                    |
| D824     | ED-511907   | D SILICON 1N4002 100/1.0A             |
| FL101    | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-69]        |
| FL141A   | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-69]        |
| FL141B   | EO-405356J  | COIL TUN 1 105Z391S 105KHZ<br>[DX-59] |
| FL171    | EH-370972   | FILTER LC LP 370972                   |
| FL201    | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-69]        |
| FL241A   | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-69]        |
| FL241B   | EO-405356J  | COIL TUN 1 105Z391S 105KHZ<br>[DX-59] |
| FL271    | EH-370972   | FILTER LC LP 370972                   |
| FR800    | *ER-401039J | R FUSE V T05 ERD2FCV 1/4W 4R7J        |
| FR801    | *ER-401039J | R FUSE V T05 ERD2FCV 1/4W 4R7J        |
| FR802    | *ER-320528  | R FUSE H ERD2FC 1/4W 22R0G            |
| IC101    | EI-360043   | IC M5220P                             |
| IC121    | EI-394573J  | IC CXA1331S                           |
| IC141    | EI-367572   | IC BA15218                            |
| IC171    | EI-394573J  | IC CXA1331S                           |
| IC301    | EI-373980   | IC BA15218N                           |
| IC311    | EI-373980   | IC BA15218N                           |
| IC401    | EI-373383   | IC UPC1297CA                          |
| IC501    | EI-394574J  | IC LA2000                             |
| IC502    | EI-384868J  | IC BU4030B                            |
| IC503    | EI-310036   | IC TC4066BP                           |
| IC504    | EI-353421   | IC BA6229<br>[GX-69]                  |
| IC505    | EI-353421   | IC BA6229                             |
| IC801    | *EI-377101  | IC UPC7805HF                          |
| J302     | EJ-336905   | PIN J AJC-035-ACB P 4P                |

| Ref. No. | Part No.    | Description                               |
|----------|-------------|-------------------------------------------|
| L141     | EO-405355J  | COIL FIX 3 E1222T472J 472J222J            |
| L241     | EO-405355J  | COIL FIX 3 E1222T472J 472J222J            |
| L331     | EO-361292   | COIL FIX 1 RC875 682J<br>[GX-69]          |
| R306     | ER-378672J  | R OMF H S10 FS 1/2W 181J                  |
| R307     | ER-378672J  | R OMF H S10 FS 1/2W 181J                  |
| SW101A   | ES-405295J  | SW PUSH SPUY42 4THROW N<br>[GX-69]        |
| SW101B   | ES-405302J  | SW PUSH SPUY32 3THROW N<br>[DX-59]        |
| T321A    | EO-400766J  | COIL OSC 1 T2128 (HX)-7 200KHZ<br>[GX-69] |
| T321B    | EO-405296J  | COIL OSC 1 T2130 (HX) 105KHZ<br>[DX-59]   |
| T322     | EO-389245J  | COIL OSC 1 T2118 100.0KHZ                 |
| T421A    | EO-400766J  | COIL OSC 1 T2128 (HX)-7 200KHZ<br>[GX-69] |
| T421B    | EO-405296J  | COIL OSC 1 T2130 (HX) 105KHZ<br>[DX-59]   |
| TR101    | ET-400218J  | TR 2SC1740S R,S                           |
| TR102    | ET-378524J  | TR 2SC3383 S,T,U                          |
| TR103    | ET-352726   | TR 2SA1392 T,U                            |
| TR140    | ET-400218J  | TR 2SC1740S R,S                           |
| TR141    | ET-400218J  | TR 2SC1740S R,S<br>[GX-69]                |
| TR142    | ET-400218J  | TR 2SC1740S R,S                           |
| TR143    | ET-400218J  | TR 2SC1740S R,S                           |
| TR144    | ET-400218J  | TR 2SC1740S R,S                           |
| TR145    | ET-400218J  | TR 2SC1740S R,S                           |
| TR146    | ET-389803J  | TR 2SA933S R,S                            |
| TR201    | ET-400218J  | TR 2SC1740S R,S                           |
| TR240    | ET-400218J  | TR 2SC1740S R,S                           |
| TR241    | ET-400218J  | TR 2SC1740S R,S<br>[GX-69]                |
| TR242    | ET-400218J  | TR 2SC1740S R,S                           |
| TR243    | ET-400218J  | TR 2SC1740S R,S                           |
| TR244    | ET-400218J  | TR 2SC1740S R,S                           |
| TR245    | ET-400218J  | TR 2SC1740S R,S                           |
| TR301    | ET-378524J  | TR 2SC3383 S,T,U                          |
| TR311    | ET-354414   | TR DTC144ES<br>[GX-69]                    |
| TR321    | ET-400218J  | TR 2SC1740S R,S                           |
| TR322    | ET-400218J  | TR 2SC1740S R,S                           |
| TR323    | ET-373391   | TR DTC143ZS                               |
| TR324    | ET-370310   | TR DTC144TS                               |
| TR325    | ET-370310   | TR DTC144TS                               |
| TR326    | ET-354371   | TR DTC124ES                               |
| TR327    | ET-396072J  | TR 2SD2159 V,W                            |
| TR328    | ET-400741J  | TR 2SC3708 T T05                          |
| TR329    | ET-400741J  | TR 2SC3708 T T05                          |
| TR330    | ET-354364   | TR DTC143TS                               |
| TR401    | ET-378524J  | TR 2SC3383 S,T,U                          |
| TR411    | ET-354414   | TR DTC144ES<br>[GX-69]                    |
| TR501    | ET-360399   | TR DTC114TS                               |
| TR502    | ET-373382   | TR DTA143ZS                               |
| TR503    | ET-373382   | TR DTA143ZS                               |
| TR504    | ET-354365   | TR DTC114YS                               |
| TR505    | ET-396072J  | TR 2SD2159 V,W                            |
| TR506    | ET-396072J  | TR 2SD2159 V,W                            |
| TR507    | ET-354365   | TR DTC114YS                               |
| TR508    | ET-354365   | TR DTC114YS                               |
| TR509    | ET-394554J  | TR 2SD1379                                |
| TR510    | ET-354365   | TR DTC114YS                               |
| TR801    | ET-365394   | TR 2SC3242A E,F,G F05                     |
| TR802    | ET-347738   | TR 2SA1282A E,F F05                       |
| TR804    | *ET-378524J | TR 2SC3383 S,T,U                          |
| TR805    | ET-400218J  | TR 2SC1740S R,S                           |
| TR806    | ET-364093   | TR 2SA1283 E,F                            |
| VR101    | EV-394962J  | R S-FIX H T05EVNDXAA03 0.1W10             |
| VR102    | EV-389478J  | R S-FIX H T05EVNDXAA03 0.1W13             |
| VR171    | EV-397174J  | R S-FIX H T05EVNDXAA03 0.1W60             |
| VR181    | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W60<br>[GX-69]  |
| VR201    | EV-394962J  | R S-FIX H T05EVNDXAA03 0.1W10             |
| VR202    | EV-389478J  | R S-FIX H T05EVNDXAA03 0.1W13             |
| VR271    | EV-397174J  | R S-FIX H T05EVNDXAA03 0.1W60             |
| VR281    | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W60<br>[GX-69]  |
| VR311    | EV-389479J  | R S-FIX H T05EVNDXAA03 0.1W23             |
| VR321    | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W60             |

| Ref. No. | Part No.   | Description                               |
|----------|------------|-------------------------------------------|
| VR322A   | EV-389481J | R S-FIX H T05EVNDXAA03 0.1W473<br>[GX-69] |
| VR322B   | EV-397174J | R S-FIX H T05EVNDXAA03 0.1W683<br>[DX-59] |
| VR323    | EV-389476J | R S-FIX H T05EVNDXAA03 0.1W103            |
| VR423    | EV-389476J | R S-FIX H T05EVNDXAA03 0.1W103            |
| VR901    | EV-405297J | VR RK14K12B0 SPL C1253X2<br>[GX-69]       |
| VR902    | EV-405298J | VR ROTARY RK11K1120 B102                  |
| VR903    | EV-405299J | VR ROTARY RK16312A0 A104X2                |
| VR904    | EV-405300J | VR ROTARY RK11K1120 SP W254               |
| VR905    | EV-405301J | VR ROTARY RK14K12B0 A503X2                |
| F1A      | *EF-309387 | FUSE TSC A 250V 1.00A<br>[U]              |
| F1B      | *EF-358641 | FUSE BET T 250V 800MA<br>[E]              |
| F2A      | *EF-309387 | FUSE TSC A 250V 1.00A<br>[U]              |
| F2B      | *EF-358641 | FUSE BET T 250V 800MA<br>[E]              |

## 5. HEAD PHONE P.C BOARD

| Ref. No. | Part No.  | Description                   |
|----------|-----------|-------------------------------|
| J301     | EJ-369995 | PHONE J 3P HLJ0540-410 GP 6.3 |

## 6. POWER SW P.C BOARD

| Ref. No. | Part No.   | Description                      |
|----------|------------|----------------------------------|
| C815     | *EC-338411 | C CE V DE7150 FZ 103P 400AC      |
| SW801    | *ES-371104 | SW PUSH SDDL1 01-1<br>[POWER SW] |

## 7. SYSCON P.C BOARD

| Ref. No. | Part No.   | Description                   |
|----------|------------|-------------------------------|
| D701     | ED-307572  | D SILICON H 1SS131            |
| D702     | ED-307572  | D SILICON H 1SS131            |
| D703     | ED-307572  | D SILICON H 1SS131            |
| D704     | ED-307572  | D SILICON H 1SS131            |
| D705     | ED-307572  | D SILICON H 1SS131            |
| D706     | ED-307572  | D SILICON H 1SS131            |
| D707     | ED-307572  | D SILICON H 1SS131            |
| D708     | ED-307572  | D SILICON H 1SS131            |
| D709     | ED-307572  | D SILICON H 1SS131            |
| D710     | ED-307572  | D SILICON H 1SS131            |
| D711     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D712     | ED-307572  | D SILICON H 1SS131            |
| D713     | ED-307572  | D SILICON H 1SS131            |
| D714     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D715     | ED-307572  | D SILICON H 1SS131            |
| D716     | ED-307572  | D SILICON H 1SS131            |
| D717     | ED-307572  | D SILICON H 1SS131            |
| D718     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D719     | ED-307572  | D SILICON H 1SS131            |
| D720     | ED-307572  | D SILICON H 1SS131            |
| D721     | ED-307572  | D SILICON H 1SS131            |
| D722     | ED-307572  | D SILICON H 1SS131            |
| D723     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D724     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D725     | ED-307572  | D SILICON H 1SS131            |
| D726     | ED-307572  | D SILICON H 1SS131            |
| D727     | ED-307572  | D SILICON H 1SS131<br>[GX-69] |
| D728     | ED-307572  | D SILICON H 1SS131            |
| D729     | ED-307572  | D SILICON H 1SS131            |
| D730     | ED-307572  | D SILICON H 1SS131            |
| IC701    | EI-405498J | IC M50941-627SP 91DECK2 T2130 |

| Ref. No. | Part No.    | Description                                    |
|----------|-------------|------------------------------------------------|
| IN701    | EM-405274J1 | IND FL CM1068C DOUBLE                          |
| RM701    | ET-411995J  | DETECTOR GP1U581X                              |
| TR701    | ET-400218J  | TR 2SC1740S R,S                                |
| TR702    | ET-400218J  | TR 2SC1740S R,S                                |
| TR703    | ET-405594J  | TR DTC143ZL T05                                |
| TR704    | ET-396487J  | TR DTA124XL T05                                |
| TR705    | ET-396488J  | TR DTC144EL T05                                |
| TR706    | ET-396487J  | TR DTA124XL T05                                |
| TR707    | ET-396488J  | TR DTC144EL T05                                |
| TR708    | ET-396487J  | TR DTA124XL T05                                |
| TR709    | ET-396488J  | TR DTC144EL T05                                |
| TR710    | ET-396487J  | TR DTA124XL T05                                |
| TR711    | ET-371075   | TR DTA124XS                                    |
| TR712    | ET-354414   | TR DTC144ES                                    |
| TR713    | ET-371075   | TR DTA124XS                                    |
| TR714    | ET-354414   | TR DTC144ES                                    |
| TR715    | ET-371075   | TR DTA124XS                                    |
| TR716    | ET-354414   | TR DTC144ES                                    |
| TR717    | ET-354414   | TR DTC144ES<br>[GX-69]                         |
| TR718    | ET-354415   | TR DTA144ES                                    |
| TR719    | ET-354415   | TR DTA144ES<br>[GX-69]                         |
| TR720    | ET-354415   | TR DTA144ES                                    |
| TR721    | ET-354415   | TR DTA144ES<br>[GX-69]                         |
| TR722    | ET-354415   | TR DTA144ES                                    |
| TR723    | ET-354415   | TR DTA144ES                                    |
| TR724    | ET-354415   | TR DTA144ES<br>[GX-69]                         |
| TR725    | ET-354415   | TR DTA144ES                                    |
| TS701    | ES-396610J  | SW TACT SOR-122HS T05<br>[REW]                 |
| TS702    | ES-396610J  | SW TACT SOR-122HS T05<br>[PLAY]                |
| TS703    | ES-396610J  | SW TACT SOR-122HS T05<br>[FF]                  |
| TS704    | ES-396610J  | SW TACT SOR-122HS T05<br>[REC]                 |
| TS705    | ES-396610J  | SW TACT SOR-122HS T05<br>[STOP]                |
| TS706    | ES-396610J  | SW TACT SOR-122HS T05<br>[AUTO MUTE]           |
| TS707    | ES-396610J  | SW TACT SOR-122HS T05<br>[COUNTER RESET]       |
| TS708    | ES-396610J  | SW TACT SOR-122HS T05<br>[COUNTER MEMORY]      |
| TS709    | ES-396610J  | SW TACT SOR-122HS T05<br>[COUNTER MODE][GX-69] |
| TS710    | ES-396610J  | SW TACT SOR-122HS T05<br>[TAPE LENGTH][GX-69]  |
| TS711    | ES-396610J  | SW TACT SOR-122HS T05<br>[TAPE MONITOR]        |
| X701     | EI-405327J  | OSC CE CST6.00MGW 6.000MHZ                     |

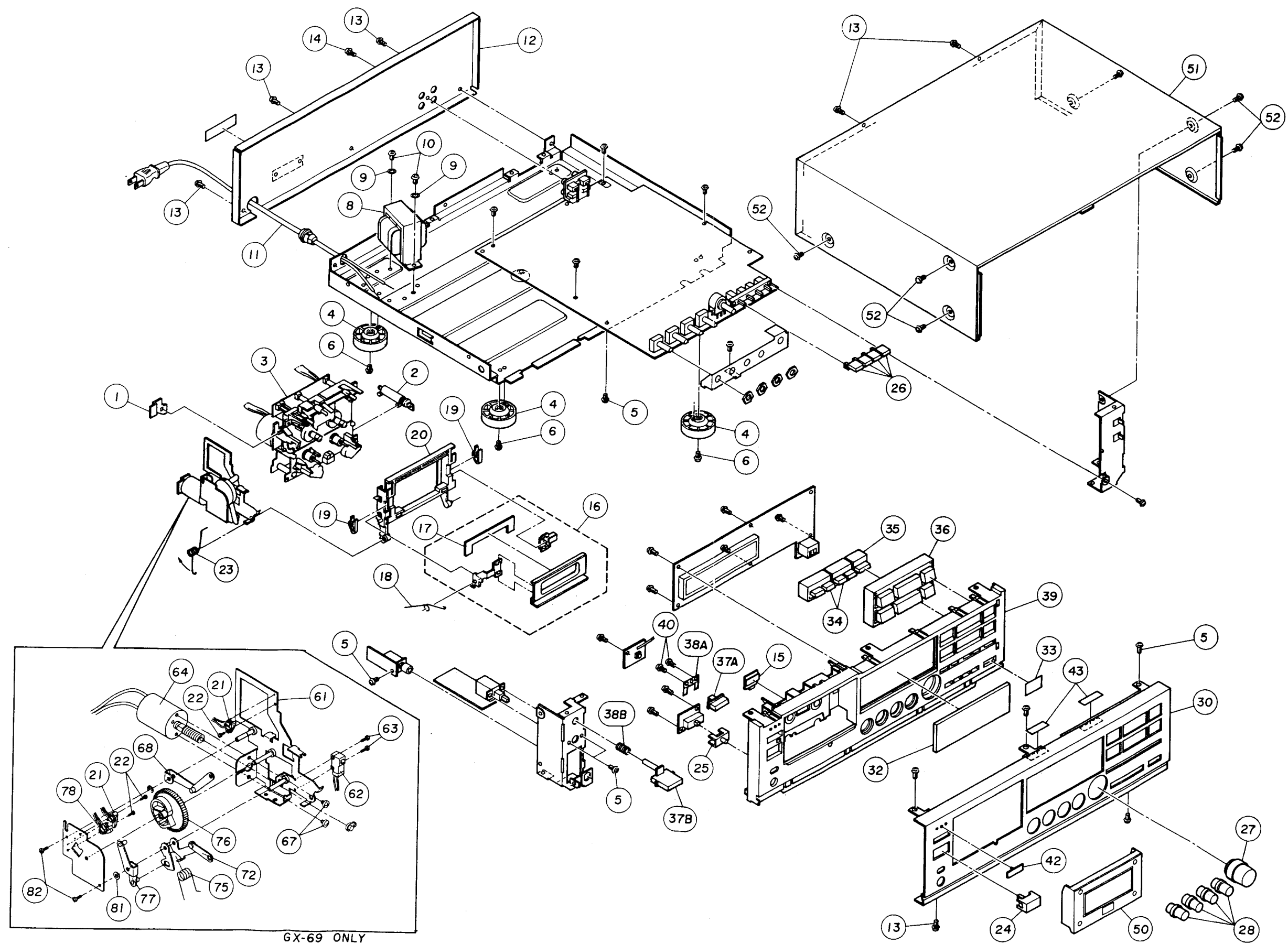
## 8. TIMER SW P.C BOARD

| Ref. No. | Part No.  | Description              |
|----------|-----------|--------------------------|
| SW701    | ES-370965 | SW SLIDE SSSU02 1-01-03N |

## 9. EJECT SW P.C BOARD (GX-67)

| Ref. No. | Part No.   | Description           |
|----------|------------|-----------------------|
| TS712    | ES-396610J | SW TACT SOR-122HS T05 |

# FINAL ASSEMBLY BLOCK



## 10. FAINAL ASSEMBLY BLOCK

| Ref. No. | Part No.      | Description                           |
|----------|---------------|---------------------------------------|
| 1        | MZ-391475J    | PLATE EJECT<br>[DX-59]                |
| 2        | MZ-391606J    | DAMPER K-106                          |
| 3A       | BB-T2130A050A | MECHA BLK GX-67<br>[GX-69]            |
| 3B       | BB-T2130A050B | MECHA BLK DX-57<br>[DX-59]            |
| 4        | SA-379375     | FOOT (N)                              |
| 5        | ZS-305827     | ST BID30X06STL BNI                    |
| 6        | ZS-336714     | ST BID30X12STL CMT                    |
| 8A       | *BT-391561J   | TRANS POW T2118 U<br>[U]              |
| 8B       | *BT-410582J   | TRANS POW T2130 E<br>[E]              |
| 9        | ZW-273914     | SW40                                  |
| 10       | ZS-322580     | ST BID40X08STL BNI                    |
| 11A      | *EW-363656    | AC CORD200 0129AVFF B200 A U/T<br>[U] |
| 11B      | *EW-363669J1  | AC CORD200 0364 LCFL B200 A EV<br>[E] |
| 12A      | SP-411822J    | PANEL REAR GX-69 (U)                  |
| 12B      | SP-411824J    | PANEL REAR GX-69 (E)                  |
| 12C      | SP-411823J    | PANEL REAR DX-59 (U)                  |
| 12D      | SP-411825J    | PANEL REAR DX-59 (E)                  |
| 13       | ZS-358953     | ST BID30X08STL BNI                    |
| 14       | ZS-331532     | PT BID30X08STL BNI                    |
| 15       | ED-344244     | D LED SLF-601C AMBER                  |
| 16       | BZ-391578J    | LID STABILIZER PART<br>[GX-69]        |
| 17       | SZ-391531J    | SHEET DAMP<br>[GX-69]                 |
| 18       | ZG-391481J    | SP TORSION STABILIZER (L)<br>[GX-69]  |
| 19       | ZG-336615     | SP PLATE CASSETTE HOLDER (B)          |
| 20       | TC-405054J3   | CASSETTE CASE                         |
| 21       | ES-393376J    | SW LEAF SPPB22 01-1<br>[GX-69]        |
| 22       | ZS-608106     | PAN20X06STL CMT<br>[GX-69]            |
| 23       | ZG-405059J    | SP TORSION (EJECT)                    |
| 24       | SK-404769J    | BUTTON POWER-B                        |
| 25       | SK-405070J    | KNOB TIMER-B                          |
| 26       | SK-405072J    | BUTTON PUSH (1)                       |
| 27       | SK-405067J    | KNOB VR (1)                           |
| 28       | SK-405068J    | KNOB VR (2)                           |
| 30A      | SP-416095J    | PANEL FRONT GX-69                     |
| 30B      | SP-416096J    | PANEL FRONT DX-59                     |
| 32       | SE-405062J    | WINDOW FLD                            |
| 33       | SZ-361424     | PLATE REMOCON                         |
| 34       | SK-405064J1   | BUTTON COUNTER (1)                    |
| 35       | SK-405065J1   | BUTTON MONITOR (1)                    |
| 36       | SK-405063J1   | BUTTON OP GX-Z6300                    |
| 37A      | SK-405069J    | BUTTON EJECT (1)<br>[GX-69]           |
| 37B      | SK-416094J    | BUTTON EJECT<br>[DX-59]               |
| 38A      | ZG-405048J    | SP PLATE EJECT<br>[GX-69]             |
| 38B      | ZG-405061J    | SP PUSH (EJECT)<br>[DX-59]            |
| 39       | SP-405097J1   | PANEL ESCUTCHEON GX-Z6300             |
| 40       | ZS-390457J    | BT PAN20X04STL BZN                    |
| 42       | SM-365756C    | NAME PLATE AKAI (2)                   |
| 43       | SZ-378311-A   | CUSHION                               |
| 50A      | BD-T2130A090A | LID PANEL BLK GX-Z6300EV-B<br>[GX-69] |
| 50B      | BD-T2130A090B | LID PANEL BLK GX-Z5300-B<br>[DX-59]   |
| 51       | SP-391493J    | COVER UPPER B                         |
| 52       | ZS-322580     | ST BID40X08STL BNI                    |
| 61       | MZ-405106J    | HOLDER (L) PART<br>[GX-69]            |
| 62       | ES-405288J1   | SW LEAF MSW18121MPJO<br>[GX-69]       |
| 63       | ZS-487091     | PAN23X08STL CMT<br>[GX-69]            |
| 64       | BM-405969J    | MOTOR RF-370 PART<br>[GX-69]          |

| Ref. No. | Part No.   | Description                           |
|----------|------------|---------------------------------------|
| 67       | ZS-432674  | PAN30X03STL CMT<br>[GX-69]            |
| 68       | ML-405041J | ARM LOCK (1) PART<br>[GX-69]          |
| 71       | ZW-410051  | RETAINING RING E250SUP CMT<br>[GX-69] |
| 72       | ML-405038J | ARM EJECT (2) PART<br>[GX-69]         |
| 75       | ZG-405058J | SP TORSION (EJ) ARM<br>[GX-69]        |
| 76       | MZ-405056J | GEAR CAM EJECT<br>[GX-69]             |
| 77       | ML-405036J | ARM EJECT (1) PART<br>[GX-69]         |
| 78       | ES-372912  | SW LEAF SPPB21 01-2<br>[GX-69]        |
| 81       | ZW-439018  | PW30X060X030STL NI3<br>[GX-69]        |
| 82       | ZS-460440  | PAN20X04STL CMT<br>[GX-69]            |
| 83X      | *ES-359606 | SW SELECTOR JUH1420-0201 01-4<br>[U]  |

### NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

## 11. ACCESSARY

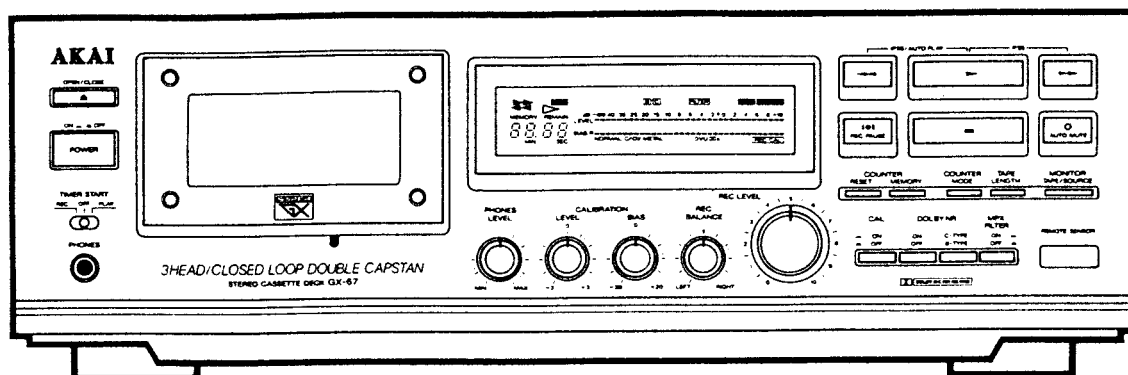
| Ref. No. | Part No.      | Description                   |
|----------|---------------|-------------------------------|
| 1        | EW-383168J1   | CORD TC-C-05S P-P 2P 2PCS     |
| 2A       | AX-D4004A010A | REMOCON BLK RC-G67<br>[GX-69] |
| 2B       | AX-D4004A010B | REMOCON BLK RC-G57<br>[DX-59] |

# INDEX

| Part No.     | Ref. No. | Part No.   | Ref. No. | Part No.   | Ref. No. | Part No.     | Ref. No. |
|--------------|----------|------------|----------|------------|----------|--------------|----------|
| AXD4004A010A | 11-2A    | ED511907   | 4-D808   | ES393376J  | 10-21    | ET400218J    | 4-TR142  |
| AXD4004A010B | 11-2B    | ED511907   | 4-D809   | ES396610J  | 7-TS701  | ET400218J    | 4-TR143  |
| BAT2130A020B | 3-1A     | ED511907   | 4-D812   | ES396610J  | 7-TS702  | ET400218J    | 4-TR144  |
| BAT2130A020E | 3-1B     | ED511907   | 4-D813   | ES396610J  | 7-TS703  | ET400218J    | 4-TR145  |
| BAT2130A030A | 3-2A     | ED511907   | 4-D814   | ES396610J  | 7-TS704  | ET400218J    | 4-TR201  |
| BAT2130A030B | 3-2B     | ED511907   | 4-D816   | ES396610J  | 7-TS705  | ET400218J    | 4-TR240  |
| BBT2130A050A | 10-3A    | ED511907   | 4-D817   | ES396610J  | 7-TS706  | ET400218J    | 4-TR241  |
| BBT2130A050B | 10-3B    | ED511907   | 4-D820   | ES396610J  | 7-TS707  | ET400218J    | 4-TR242  |
| BDT2130A090A | 10-50A   | ED511907   | 4-D824   | ES396610J  | 7-TS708  | ET400218J    | 4-TR243  |
| BDT2130A090B | 10-50B   | ED624903   | 4-D301   | ES396610J  | 7-TS709  | ET400218J    | 4-TR244  |
| BM405969J    | 10-64    | ED624903   | 4-D302   | ES396610J  | 7-TS710  | ET400218J    | 4-TR245  |
| BM732802J    | 2-19     | ED624903   | 4-D311   | ES396610J  | 7-TS711  | ET400218J    | 4-TR321  |
| BM732812J    | 2-60     | ED624903   | 4-D411   | ES396610J  | 9-TS712  | ET400218J    | 4-TR322  |
| BT391561J    | 10-8A    | ED624903   | 4-D501   | ES405288J1 | 10-62    | ET400218J    | 4-TR805  |
| BT410582J    | 10-8B    | ED624903   | 4-D502   | ES405295J  | 4-SW101A | ET400218J    | 7-TR701  |
| BZ391578J    | 10-16    | ED624903   | 4-D506   | ES405302J  | 4-SW101B | ET400218J    | 7-TR702  |
| EA732798J    | 2-9      | ED624903   | 4-D507   | ES729443J  | 2-6      | ET400741J    | 4-TR328  |
| EC338411     | 6-C815   | ED624903   | 4-D508   | ES729477J  | 2-59     | ET400741J    | 4-TR329  |
| EC363490     | 4-C807A  | ED624903   | 4-D509   | ET347738   | 4-TR802  | ET405594J    | 7-TR703  |
| EC364978     | 4-C801   | ED624903   | 4-D821   | ET352726   | 4-TR103  | ET411995J    | 7-RM701  |
| EC364978     | 4-C802   | ED624903   | 4-D822   | ET354364   | 4-TR330  | ET729496J    | 2-80     |
| EC364978     | 4-C817   | ED624903   | 4-D823   | ET354365   | 4-TR504  | EV389476J    | 4-VR323  |
| EC367241     | 4-C807B  | EF309387   | 4-F1A    | ET354365   | 4-TR507  | EV389476J    | 4-VR423  |
| EC375358     | 4-C811   | EF309387   | 4-F2A    | ET354365   | 4-TR508  | EV389478J    | 4-VR102  |
| ED307572     | 7-D701   | EF358641   | 4-F1B    | ET354365   | 4-TR510  | EV389478J    | 4-VR202  |
| ED307572     | 7-D702   | EF358641   | 4-F2B    | ET354371   | 4-TR326  | EV389479J    | 4-VR311  |
| ED307572     | 7-D703   | EH370972   | 4-FL171  | ET354414   | 4-TR311  | EV389481J    | 4-VR322A |
| ED307572     | 7-D704   | EH370972   | 4-FL271  | ET354414   | 4-TR411  | EV389482J    | 4-VR181  |
| ED307572     | 7-D705   | EI310036   | 4-IC503  | ET354414   | 7-TR712  | EV389482J    | 4-VR281  |
| ED307572     | 7-D706   | EI353421   | 4-IC504  | ET354414   | 7-TR714  | EV389482J    | 4-VR321  |
| ED307572     | 7-D707   | EI353421   | 4-IC505  | ET354414   | 7-TR716  | EV394962J    | 4-VR101  |
| ED307572     | 7-D708   | EI360043   | 4-IC101  | ET354414   | 7-TR717  | EV394962J    | 4-VR201  |
| ED307572     | 7-D709   | EI367572   | 4-IC141  | ET354415   | 7-TR718  | EV397174J    | 4-VR171  |
| ED307572     | 7-D710   | EI373383   | 4-IC401  | ET354415   | 7-TR719  | EV397174J    | 4-VR271  |
| ED307572     | 7-D711   | EI373980   | 4-IC301  | ET354415   | 7-TR720  | EV397174J    | 4-VR322B |
| ED307572     | 7-D712   | EI373980   | 4-IC311  | ET354415   | 7-TR721  | EV405297J    | 4-VR901  |
| ED307572     | 7-D713   | EI377101   | 4-IC801  | ET354415   | 7-TR722  | EV405298J    | 4-VR902  |
| ED307572     | 7-D714   | EI384868J  | 4-IC502  | ET354415   | 7-TR723  | EV405299J    | 4-VR903  |
| ED307572     | 7-D715   | EI394573J  | 4-IC121  | ET354415   | 7-TR724  | EV405300J    | 4-VR904  |
| ED307572     | 7-D716   | EI394573J  | 4-IC171  | ET354415   | 7-TR725  | EV405301J    | 4-VR905  |
| ED307572     | 7-D717   | EI394574J  | 4-IC501  | ET360399   | 4-TR501  | EW363656     | 10-11A   |
| ED307572     | 7-D718   | EI405327J  | 7-X701   | ET364093   | 4-TR806  | EW363669J1   | 10-11B   |
| ED307572     | 7-D719   | EI405498J  | 7-IC701  | ET365394   | 4-TR801  | EW383168J1   | 11-1     |
| ED307572     | 7-D720   | EJ336905   | 4-J302   | ET370310   | 4-TR324  | HE729469J    | 2-39     |
| ED307572     | 7-D721   | EJ369995   | 5-J301   | ET370310   | 4-TR325  | HRH2411A010A | 2-38A    |
| ED307572     | 7-D722   | EM405274J1 | 7-IN701  | ET371075   | 7-TR711  | HR405284J    | 2-38B    |
| ED307572     | 7-D723   | EO361292   | 4-L331   | ET371075   | 7-TR713  | HZ729467J    | 2-36     |
| ED307572     | 7-D724   | EO389245J  | 4-T322   | ET371075   | 7-TR715  | HZ732804J    | 2-30     |
| ED307572     | 7-D725   | EO400766J  | 4-T321A  | ET373382   | 4-TR502  | MB729451J    | 2-15     |
| ED307572     | 7-D726   | EO400766J  | 4-T421A  | ET373382   | 4-TR503  | MB732817J    | 2-109    |
| ED307572     | 7-D727   | EO405296J  | 4-T321B  | ET373391   | 4-TR323  | MI729453J    | 2-14     |
| ED307572     | 7-D728   | EO405296J  | 4-T421B  | ET378524J  | 4-TR102  | MI732800J    | 2-11     |
| ED307572     | 7-D729   | EO405304J  | 4-FL101  | ET378524J  | 4-TR301  | ML405036J    | 10-77    |
| ED307572     | 7-D730   | EO405304J  | 4-FL141A | ET378524J  | 4-TR401  | ML405038J    | 10-72    |
| ED343410     | 4-D815   | EO405304J  | 4-FL201  | ET378524J  | 4-TR804  | ML405041J    | 10-68    |
| ED344244     | 10-15    | EO405304J  | 4-FL241A | ET389803J  | 4-TR146  | ML729480J    | 2-62     |
| ED346525     | 4-D810   | EO405355J  | 4-L141   | ET394554J  | 4-TR509  | ML729498J    | 2-83     |
| ED346536     | 4-D503   | EO405355J  | 4-L241   | ET396072J  | 4-TR327  | ML729499J    | 2-84     |
| ED346541     | 4-D805   | EO405356J  | 4-FL141B | ET396072J  | 4-TR505  | ML732807J    | 2-45     |
| ED346541     | 4-D806   | EO405356J  | 4-FL241B | ET396072J  | 4-TR506  | ML732810J    | 2-49     |
| ED346574     | 4-D818   | EP729487J  | 2-71     | ET396487J  | 7-TR704  | ML732814J    | 2-69     |
| ED346598     | 4-D505   | ER320528   | 4-FR802  | ET396487J  | 7-TR706  | MP732803J    | 2-28     |
| ED346602     | 4-D819   | ER378672J  | 4-R306   | ET396487J  | 7-TR708  | MP732808J    | 2-46     |
| ED351419     | 4-D504   | ER378672J  | 4-R307   | ET396487J  | 7-TR710  | MR729482J    | 2-64     |
| ED400221J    | 4-D811   | ER401039J  | 4-FR800  | ET396488J  | 7-TR705  | MR729484J    | 2-67     |
| ED511907     | 4-D801   | ER401039J  | 4-FR801  | ET396488J  | 7-TR707  | MR729505J    | 2-108    |
| ED511907     | 4-D802   | ES359606   | 10-83X   | ET396488J  | 7-TR709  | MS729463J    | 2-32     |
| ED511907     | 4-D803   | ES370965   | 8-SW701  | ET400218J  | 4-TR101  | MS729475J    | 2-50     |
| ED511907     | 4-D804   | ES371104   | 6-SW801  | ET400218J  | 4-TR140  | MS729488J    | 2-72     |
| ED511907     | 4-D807   | ES372912   | 10-78    | ET400218J  | 4-TR141  | MS729497J    | 2-81     |

| Part No.   | Ref. No. | Part No.  | Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. |
|------------|----------|-----------|----------|----------|----------|----------|----------|
| MS732809J  | 2-47     | ZS729500J | 2-90     |          |          |          |          |
| MT732806J  | 2-43     | ZS729501J | 2-95     |          |          |          |          |
| MV729458J  | 2-24     | ZS729503J | 2-99     |          |          |          |          |
| MV729459J  | 2-25     | ZS732805J | 2-33     |          |          |          |          |
| MZ391475J  | 10-1     | ZW273914  | 10-9     |          |          |          |          |
| MZ391606J  | 10-2     | ZW410051  | 10-71    |          |          |          |          |
| MZ405056J  | 10-76    | ZW439018  | 10-81    |          |          |          |          |
| MZ405106J  | 10-61    | ZW729440J | 2-2      |          |          |          |          |
| MZ729441J  | 2-4      | ZW729444J | 2-7      |          |          |          |          |
| MZ729442J  | 2-5      | ZW729465J | 2-37B    |          |          |          |          |
| MZ729452J  | 2-16     | ZW729466J | 2-35     |          |          |          |          |
| MZ729479J  | 2-61     | ZW729468J | 2-37A    |          |          |          |          |
| MZ729504J  | 2-100    | ZW729483J | 2-66     |          |          |          |          |
| SA379375   | 10-4     | ZW729507J | 2-110    |          |          |          |          |
| SE405062J  | 10-32    | ZW729545J | 2-1      |          |          |          |          |
| SK404769J  | 10-24    | ZW729546J | 2-37C    |          |          |          |          |
| SK405063J1 | 10-36    | ZW732799J | 2-10     |          |          |          |          |
| SK405064J1 | 10-34    | ZW732801J | 2-13     |          |          |          |          |
| SK405065J1 | 10-35    | ZW732819J | 2-29     |          |          |          |          |
| SK405067J  | 10-27    | ZW732820J | 2-42     |          |          |          |          |
| SK405068J  | 10-28    |           |          |          |          |          |          |
| SK405069J  | 10-37A   |           |          |          |          |          |          |
| SK405070J  | 10-25    |           |          |          |          |          |          |
| SK405072J  | 10-26    |           |          |          |          |          |          |
| SK416094J  | 10-37B   |           |          |          |          |          |          |
| SM365756C  | 10-42    |           |          |          |          |          |          |
| SP391493J  | 10-51    |           |          |          |          |          |          |
| SP405097J1 | 10-39    |           |          |          |          |          |          |
| SP411822J  | 10-12A   |           |          |          |          |          |          |
| SP411823J  | 10-12C   |           |          |          |          |          |          |
| SP411824J  | 10-12B   |           |          |          |          |          |          |
| SP411825J  | 10-12D   |           |          |          |          |          |          |
| SP416095J  | 10-30A   |           |          |          |          |          |          |
| SP416096J  | 10-30B   |           |          |          |          |          |          |
| SZ361424   | 10-33    |           |          |          |          |          |          |
| SZ378311-A | 10-43    |           |          |          |          |          |          |
| SZ391531J  | 10-17    |           |          |          |          |          |          |
| TC405054J3 | 10-20    |           |          |          |          |          |          |
| ZG336615   | 10-19    |           |          |          |          |          |          |
| ZG391481J  | 10-18    |           |          |          |          |          |          |
| ZG405048J  | 10-38A   |           |          |          |          |          |          |
| ZG405058J  | 10-75    |           |          |          |          |          |          |
| ZG405059J  | 10-23    |           |          |          |          |          |          |
| ZG405061J  | 10-38B   |           |          |          |          |          |          |
| ZG729462J  | 2-31     |           |          |          |          |          |          |
| ZG729491J  | 2-75     |           |          |          |          |          |          |
| ZG729494J  | 2-78B    |           |          |          |          |          |          |
| ZG729502J  | 2-96     |           |          |          |          |          |          |
| ZG732811J  | 2-51     |           |          |          |          |          |          |
| ZG732813J  | 2-63     |           |          |          |          |          |          |
| ZG732815J  | 2-73     |           |          |          |          |          |          |
| ZG732816J  | 2-78A    |           |          |          |          |          |          |
| ZS305827   | 10-5     |           |          |          |          |          |          |
| ZS322580   | 10-10    |           |          |          |          |          |          |
| ZS322580   | 10-52    |           |          |          |          |          |          |
| ZS331532   | 10-14    |           |          |          |          |          |          |
| ZS336714   | 10-6     |           |          |          |          |          |          |
| ZS358953   | 10-13    |           |          |          |          |          |          |
| ZS390457J  | 10-40    |           |          |          |          |          |          |
| ZS432674   | 10-67    |           |          |          |          |          |          |
| ZS460440   | 10-82    |           |          |          |          |          |          |
| ZS487091   | 10-63    |           |          |          |          |          |          |
| ZS608106   | 10-22    |           |          |          |          |          |          |
| ZS729445J  | 2-8      |           |          |          |          |          |          |
| ZS729449J  | 2-12     |           |          |          |          |          |          |
| ZS729454J  | 2-17     |           |          |          |          |          |          |
| ZS729456J  | 2-21     |           |          |          |          |          |          |
| ZS729457J  | 2-22     |           |          |          |          |          |          |
| ZS729470J  | 2-40     |           |          |          |          |          |          |
| ZS729490J  | 2-74     |           |          |          |          |          |          |

# AKAI SERVICE MANUAL



MODEL GX-67

## STEREO CASSETTE DECK

**MODEL GX-67**  
**MODEL DX-57**

## SPECIFICATIONS

|                                |                                                                                                                                         |                                        |                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Track System</b> .....      | 4 track 2 channel Stereo                                                                                                                | <b>S/N ratio</b> .....                 | 57 dB (Measured via Metal tape with peak recording level)                                                                                         |
| <b>Heads</b>                   |                                                                                                                                         | <b>Dolby B type NR</b> .....           | Improves up to 5 dB at switch ON : 1 kHz, 10 dB above 5 kHz                                                                                       |
| GX-67 .....                    | Erase Head x 1<br>LC-OFC SGX Head for recording x 1<br>LC-OFC SGX Head for playback x 1                                                 | <b>Dolby C type NR</b> .....           | Improves up to 15 dB at switch ON : 500 Hz, 20 dB at 1 kHz to 10 kHz                                                                              |
| DX-57 .....                    | Erase Head x 1<br>Hard permalloy Head for recording x 1<br>Hard permalloy Head for playback x 1                                         | <b>Total Harmonic Distortion</b> ..... | 1.0 %                                                                                                                                             |
| <b>Motors</b> .....            | Electronic speed controlled DC motor for capstan x 1<br>DC motor for reel drive x 1<br>DC motor for tape eject/loading x 1 (GX-67 only) | <b>Input Level/Impedance</b>           |                                                                                                                                                   |
| <b>Wow &amp; Flutter</b> ..... | 0.045 % (WRMS)<br>0.08 % (DIN)                                                                                                          | Line .....                             | 70 mV / 47 kohms                                                                                                                                  |
| <b>Tape winding time</b> ..... | 80 sec. (C-60)                                                                                                                          | <b>Output Level/Impedance</b>          |                                                                                                                                                   |
| <b>Frequency Response</b>      |                                                                                                                                         | Line .....                             | 388 mV / 2 kohms                                                                                                                                  |
| GX-67 Normal ....              | 15 Hz to 18,000 Hz $\pm 3$ dB                                                                                                           | Headphones .....                       | 1.3 mW / (8 ohms)                                                                                                                                 |
| CrO <sub>2</sub> .....         | 15 Hz to 18,000 Hz $\pm 3$ dB                                                                                                           | <b>Power Requirements</b> .....        | AC 220 V- 230 V, 50 Hz for Europe except UK<br>AC 240 V, 50 Hz for UK<br>AC 110 V- 120 V, 220 V-240 V, 50 / 60 Hz Convertible for other countries |
| Metal .....                    | 15 Hz to 21,000 Hz $\pm 3$ dB                                                                                                           | <b>Dimensions</b> .....                | 425 (W) x 135 (H) x 351 (D) mm                                                                                                                    |
| DX-57 Normal ....              | 15 Hz to 17,000 Hz $\pm 3$ dB                                                                                                           | <b>Weight</b>                          |                                                                                                                                                   |
| CrO <sub>2</sub> .....         | 15 Hz to 17,000 Hz $\pm 3$ dB                                                                                                           | GX-67 .....                            | 5.4 kg                                                                                                                                            |
| Metal .....                    | 15 Hz to 20,000 Hz $\pm 3$ dB                                                                                                           | DX-57 .....                            | 5.3 kg                                                                                                                                            |
|                                |                                                                                                                                         | <b>Standard accessories</b>            |                                                                                                                                                   |
|                                |                                                                                                                                         | Connection cords .....                 | x 2                                                                                                                                               |
|                                |                                                                                                                                         | Remote control unit .....              | x 1                                                                                                                                               |
|                                |                                                                                                                                         | Dry batteries R6 (AA) size .....       | x 2                                                                                                                                               |
|                                |                                                                                                                                         | Operator's manual .....                | x 1                                                                                                                                               |

0 dBs = 0.775 V

\* For improvement purposes, specifications and design are subject to change without notice.

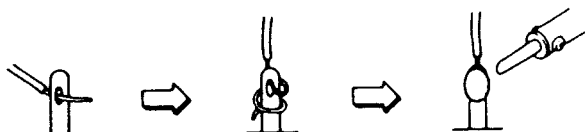
\* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

\* "DOLBY", the double-D symbol  and "HX Pro" are trademarks of Dolby Laboratories Licensing Corporation.

# ★ SAFETY INSTRUCTIONS

## PRECAUTIONS DURING SERVICING

1. Parts identified by the  $\triangle$  (\*) symbol are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.  
These must also be replaced only with specified replacements.  
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation Tape
  - 2) PVC tubing
  - 3) Spacers (Insulating barriers)
  - 4) Insulation sheets for transistors
  - 5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

## SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.

The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15  $\mu$ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.

The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 Mohms.

## MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.



Please leave them at an appropriate depot. All other household batteries can be thrown out with the household waste.

# ★ INFORMATION

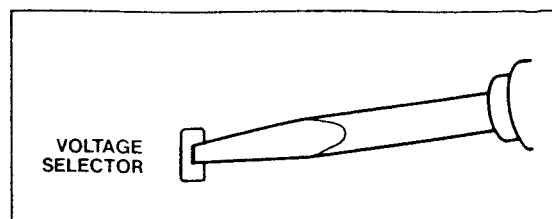
## SYMBOLS FOR PRIMARY DESTINATION

Primary destinations of units are indicated with the following alphabet.

| Symbols | Primary Destinations |
|---------|----------------------|
| B       | UK                   |
| E       | Europe (except UK)   |
| S       | Australia            |
| V       | Germany              |
| U       | Universal Area       |
| Y*      | Custom version       |

## VOLTAGE CONVERSION ( U Model only)

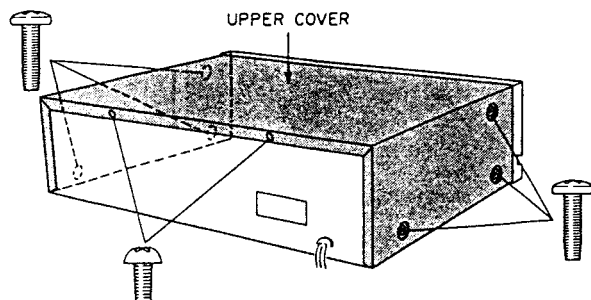
Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel with a flat type screwdriver so that the correct voltage for your area is indicated.



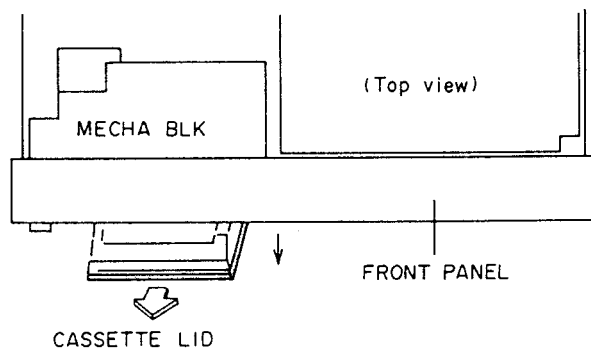
# I.DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in reverse order.

## 1. Removal of the UPPER COVER

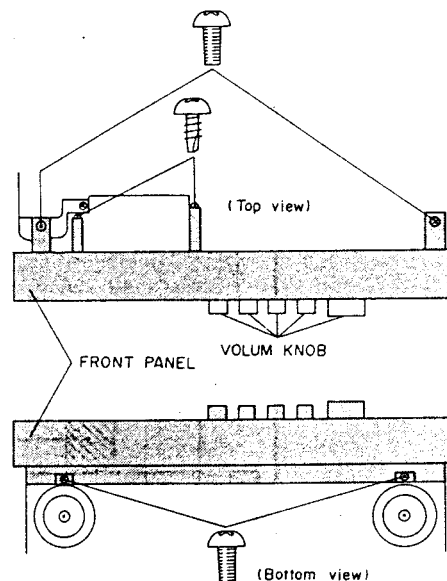


## 2. Removal of the CASSETTE LID

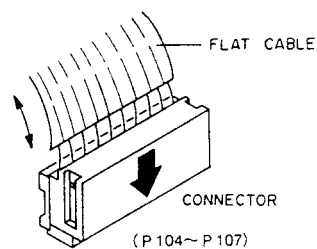


- 1) Turn the power ON and press the OPEN/CLOSE (▲) button to open the cassette lid. (GX-67 ONLY)
- 2) Press the EJECT button to open the cassette lid. (DX-57 ONLY)
- 3) Remove the cassette lid by pulling it in the direction of the arrow (↗)

## 3. Removal of the FRONT PANEL



- 1) Remove the five knobs on the FRONT PANEL.
- 2) Remove the REC LEVEL volume retaining nut.
- 3) Disconnect the P104, P105, P106 and P107 connectors on the PRE AMP PCB.
- 4) Remove the FRONT PANEL retaining screws.



## II. PRINCIPAL PARTS LOCATION

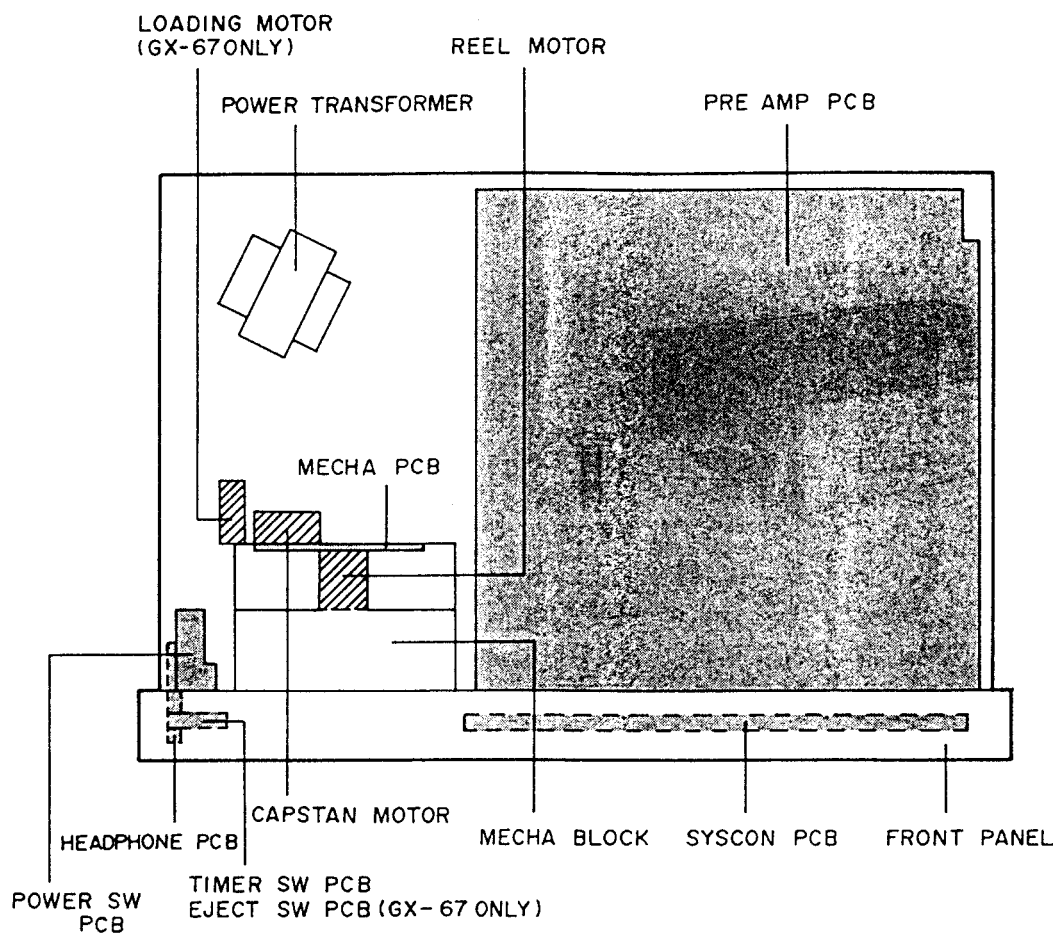
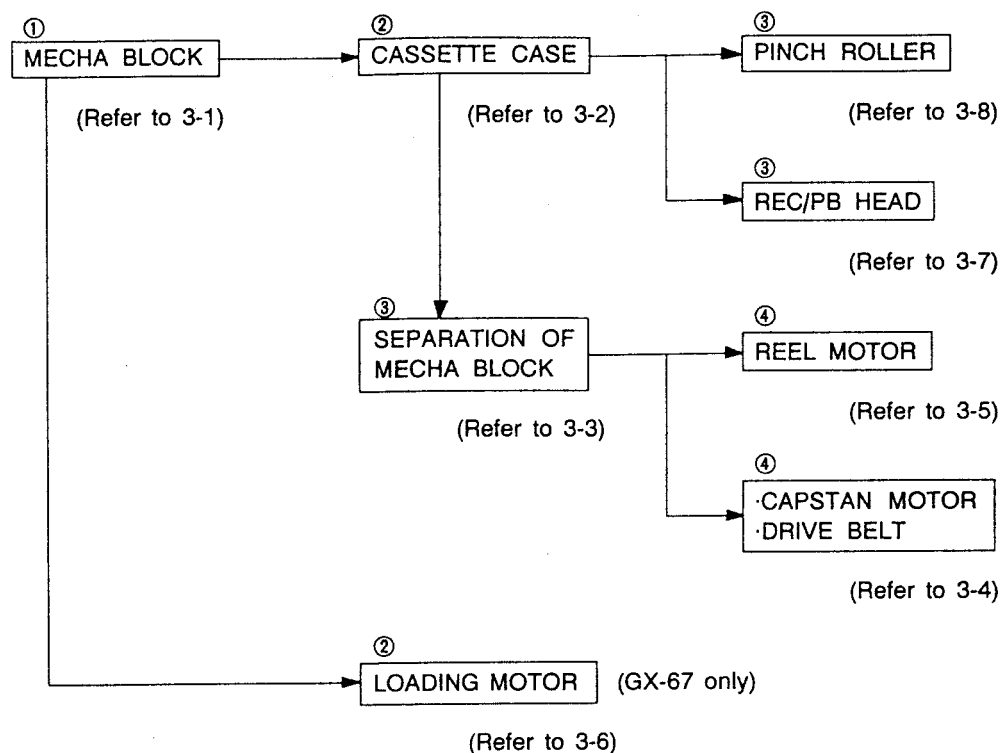


Fig. 2-1 Top view

# III. REPLACEMENT OF THE PRINCIPAL COMPONENT

## [DISMANTLING PROCEDURE OF THE COMPONENT]

When replacement of a mechanical part is necessary, replace the part using one of the following procedures.



## 3-1.HOW TO REMOVE THE MECHA BLOCK

- 1) Disconnect the two connectors on the MECHA BLOCK.
- 2) Disconnect the P101, P102, P103, P108, P109, P110 and P111 connectors on the PRE AMP PCB.
- 3) Remove the MECHA BLOCK retaining screws (A).
- 4) Remove the MECHA BLOCK retaining screws (B) and (C) of bottom side.
- 5) Remove the MECHA BLOCK.
- 6) Reassemble by replacing the parts in the reverse order of removal.

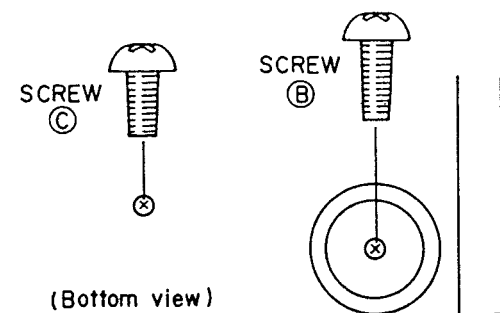


Fig. 3-1

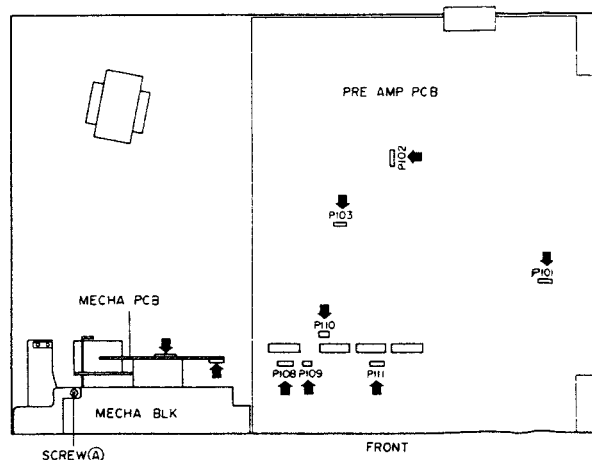


Fig. 3-2

### 3-2.HOW TO REMOVE THE CASSETTE CASE

- 1) Remove the spring ①.
- 2) Remove the lid arm from the cassette case.
- 3) Remove the pivot from the MECHA BLOCK.
- 4) Reassemble by replacing the parts in the reverse order of removal.

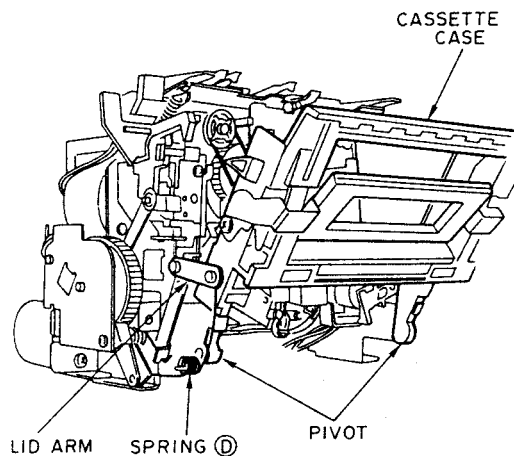


Fig. 3-3

### 3-3.SEPARATION OF THE MECHA BLOCK

- 1) Remove the capstan motor lead wires with a soldering iron.
- 2) Remove the stopper retaining screw ⑤.
- 3) Remove the MECHA BLOCK retaining screws ⑥.
- 4) Separate the REEL BLOCK and the CAPSTAN BLOCK of the MECHA BLOCK.
- 5) Reassemble by replacing the parts in the reverse order of removal.

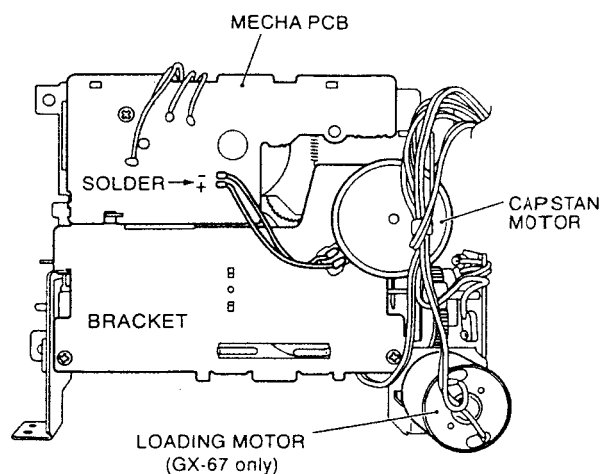


Fig. 3-4

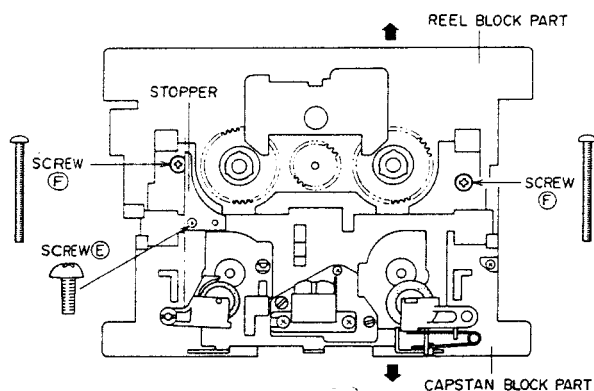


Fig. 3-5

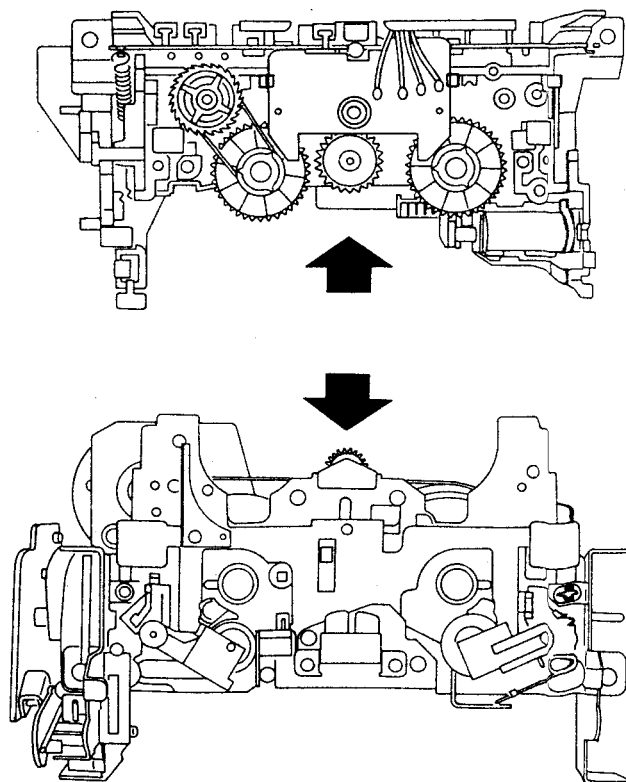


Fig. 3-6

### 3-4.REPLACEMENT OF THE CAPSTAN MOTOR AND DRIVE BELT

- 1) Remove the side plate retaining screw ⑥ and then remove the side plate.
- 2) Remove the bracket retaining screw ④ and then remove the bracket. (Refer to Fig.3-8).

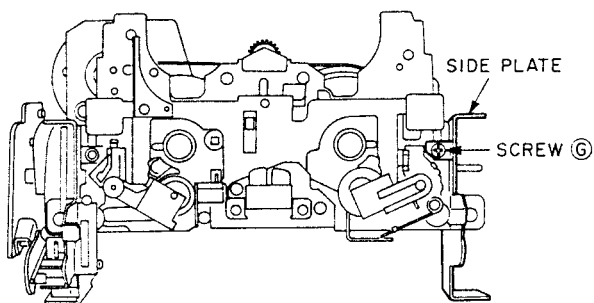


Fig. 3-7

#### 3-4-1. HOW TO REMOVE THE CAPSTAN MOTOR

- 1) Remove the capstan motor retaining screw ①.
- 2) To reassemble, replace the retaining screw and connect the drive belt to the motor pulley.

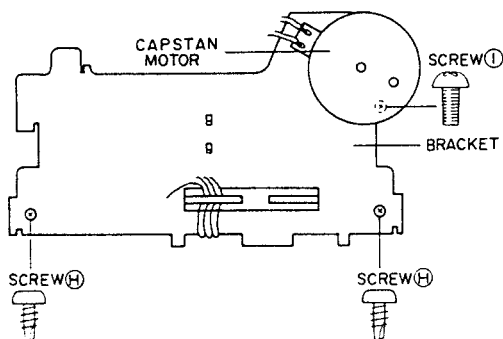


Fig. 3-8

#### 3-4-2. HOW TO REMOVE THE DRIVE BELT

- 1) Remove the DRIVE BELT from the capstan wheel.
- 2) To reassemble, connect the DRIVE BELT to the capstan wheel and then connect it to the motor pulley.

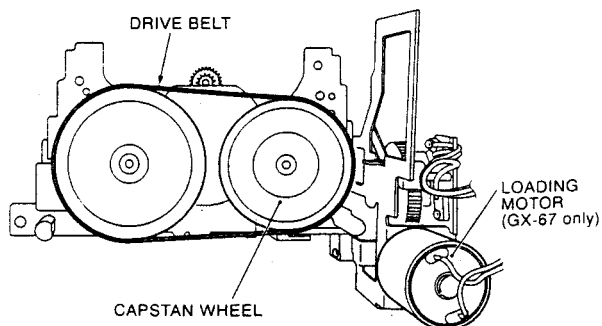


Fig. 3-9

### 3-5.REPLACEMENT OF THE REEL MOTOR

- 1) Remove the solder of all detector switches, lead wires from the solenoid and reel motor leads with a soldering iron.
- 2) Remove the PCB retaining screw ③.
- 3) Release the two hooks which retain the REEL PULSE DETECTION PCB and remove the PCB. (Refer to Fig.3-12)
- 4) Remove the springs of the assist lever (A) and (B).
- 5) Extract the assist lever (A) and (B).
- 6) Remove the reel motor retaining screws ⑤ and remove the REEL MOTOR.
- 7) Reassemble by replacing the parts in the reverse order of removal.

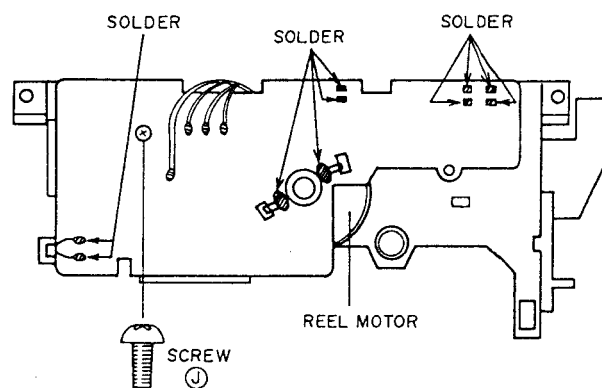


Fig. 3-10

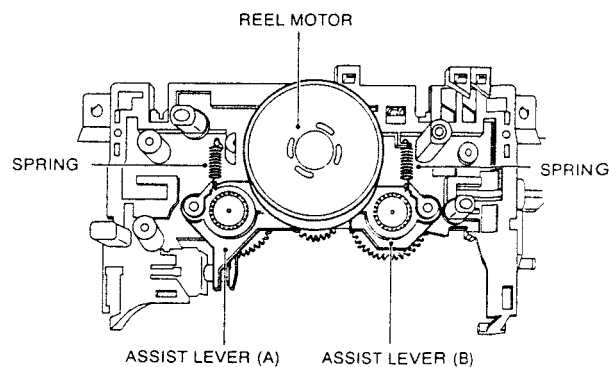


Fig. 3-11

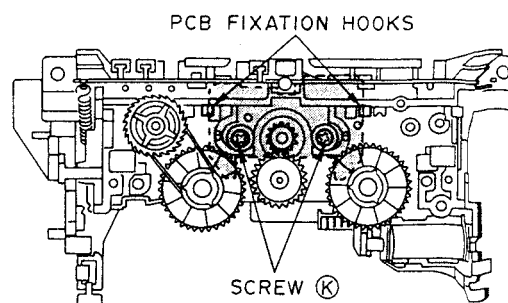


Fig. 3-12

### 3-6.REPLACEMENT OF THE LOADING MOTOR (GX-67 only)

- 1) Remove the holder (2) retaining screws ① and then remove the holder (2).
- 2) Remove the LOADING MOTOR retaining screws ② and remove the LOADING MOTOR.
- 3) Reassemble by replacing the parts in the reverse order of removal.

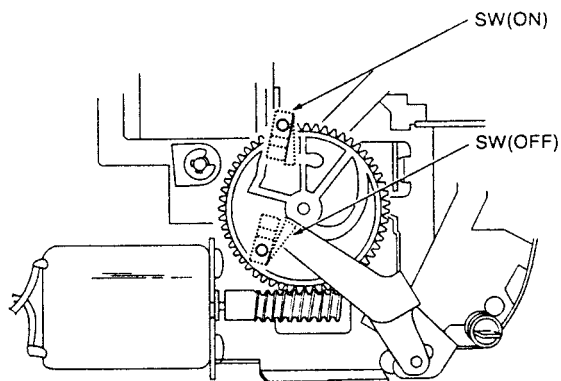


Fig. 3-14

### 3-7.REPLACEMENT OF THE REC/PB HEAD

- 1) Remove the head retaining screws ③.
- 2) Disconnect the lead wires with a soldering iron.
- 3) Reassemble by replacing the parts in the reverse order of removal.

- Never move the head height adjustment screws ④ and ⑤ in this step as they have been adjusted previously.
- After replacement, precise head adjustment is necessary (refer to 5.HEAD ADJUSTMENT).

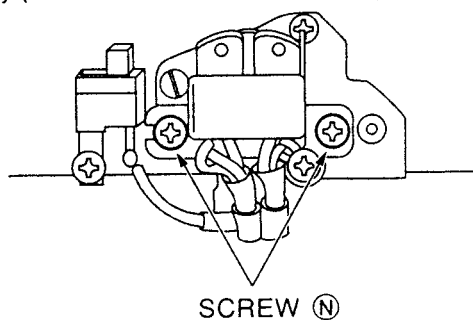


Fig. 3-15

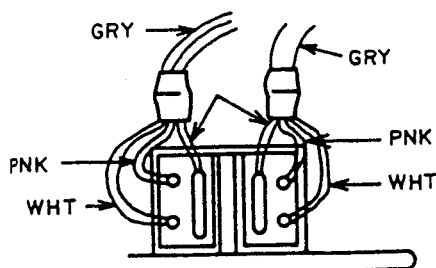


Fig. 3-16

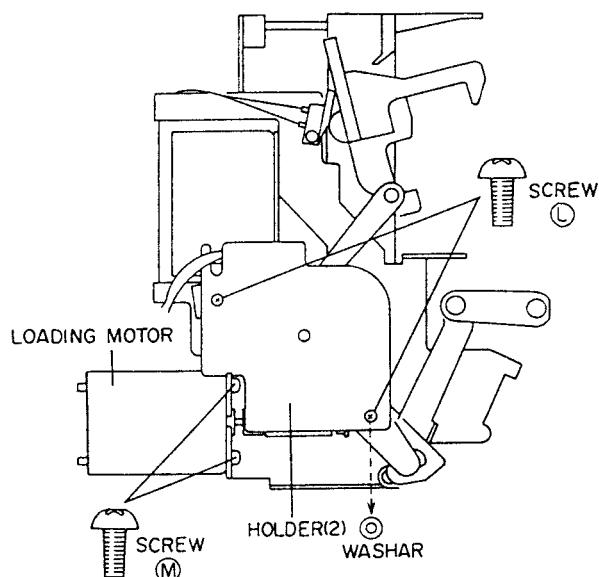


Fig. 3-13

### 3-8.REPLACEMENT OF THE PINCH ROLLER BLOCK

#### 3-8-1. SUPPLY PINCH ROLLER BLOCK

- 1) Remove the tape guide (1) adjustment nut ⑥.
- 2) Extract the SUPPLY PINCH ROLLER BLOCK.
- 3) Reassemble by replacing the parts in the reverse order of removal.

#### [NOTE]

After reassembling the supply pinch roller block, step 5-1, "TAPE GUIDE HEIGHT ADJUSTMENT" must be performed.

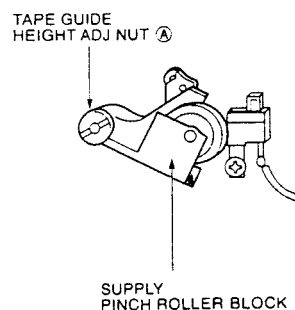


Fig. 3-17

#### 3-8-2. TAKE UP PINCH ROLLER BLOCK

- 1) Release the TAKE UP PINCH ROLLER BLOCK's retaining hook and extract the TAKE UP PINCH ROLLER BLOCK.
- 2) Reassemble by replacing parts in the reverse order of removal.

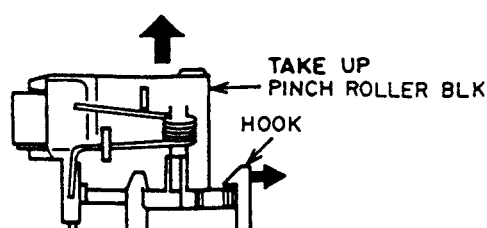


Fig. 3-18

## IV.MECHANICAL ADJUSTMENT

### 4-1.CONFIRMATION OF PINCH ROLLER PRESSURE

- 1) Set the unit in the "PLAY" mode without a cassette tape loaded.
- 2) Push the TAKE UP PINCH ROLLER arm down 1 or 2 mm from the capstan with a spring gauge.  
Release the pressure of the spring gauge little by little and read the scale at the moment when the TAKE UP PINCH ROLLER touches to the capstan and starts rotation.

Also confirm the SUPPLY PINCH ROLLER pressure with the same procedure as above.

Specified pinch roller pressure:

TAKE UP PINCH ROLLER :  $320 \pm 50$  grams

SUPPLY PINCH ROLLER :  $200 \pm 40$  grams

- If either of the PINCH ROLLER's pressure is not satisfactory, replace it.

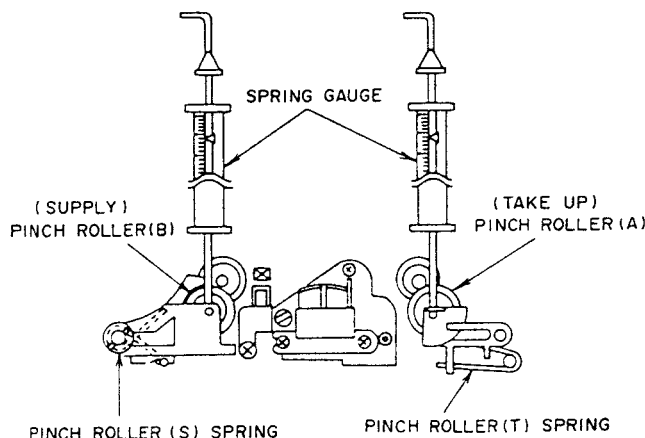


Fig. 4-1

### 4-2.CONFIRMATION OF WINDING TORQUE IN EACH MODE

- 1) Insert the CASSETTE TORQUE METER (AJ-751179).
- 2) Read the TORQUE METER in each mode. For fast forward and rewind, read at the end of the tape when the tape has stopped running.

PLAY mode

TAKE UP TORQUE : 35 to 55 grams

BACK TENSION : 5 to 10 grams

FF and RWD mode : 70 to 160 grams

CASSETTE TORQUE METER  
(AJ751179)

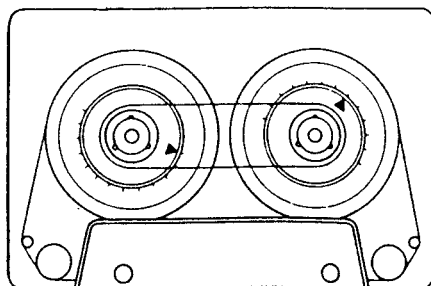


Fig. 4-2

### 4-3.TAPE SPEED ADJUSTMENT

- 1) Connect a frequency counter to the LINE OUT and play back a 3150 Hz test tape (AT-751263).
- 2) Insert a small flat screw driver into a hole on the capstan motor and adjust the tape speed control VR so that the reading on the frequency counter is  $3150 \pm 10$  Hz.

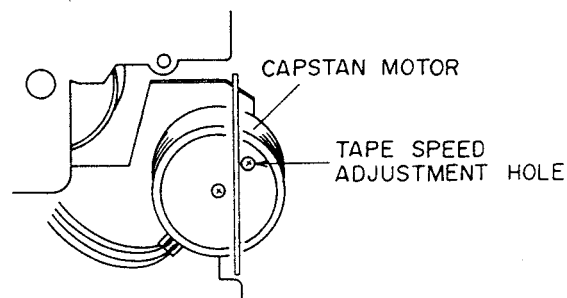


Fig. 4-3

### 4-4.HOW TO REMOVE A JAMMED CASSETTE TAPE

If a damaged tape or defective tape drive mechanism causes a cassette tape to be caught by the capstan, remove the tape from the mechanism block using the following procedure.

- 1) Place your index finger under the mechanism block and turn the capstan wheel (take up side) counterclockwise until the jammed tape loosens.
- 2) Press the EJECT button. (DX-57 only)
- 3) Disconnect the LOADING MOTOR'S P110 connector from the PRE AMP PCB. (GX-67 only)
- 4) Connect a 4.5 V battery onto the LOADING MOTOR and eject the tape. (GX-67 only)

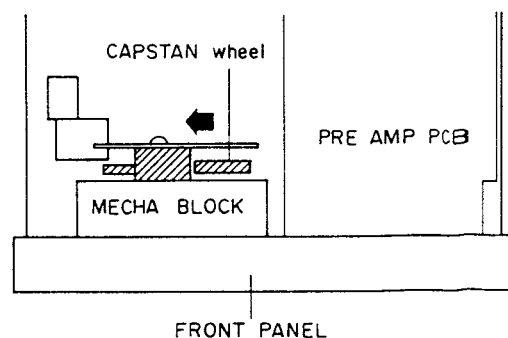


Fig. 4-4

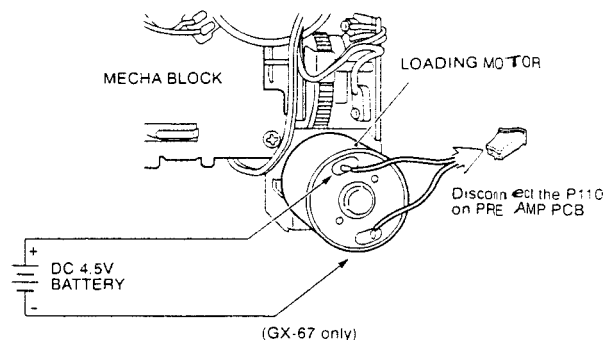


Fig. 4-5

## V. HEAD ADJUSTMENT

### 5-1.TAPE GUIDE HEIGHT ADJUSTMENT

**\* Caution:**

The tape guide adjustment nut ① is important as it fixes the position of the tape guide (1) and has been precisely adjusted at the factory.

Never turn this nut unless it is absolutely necessary (when replacing the SUPPLY PINCH ROLLER BLOCK for example).

- 1) Load the mirror cassette tape (AJ-751178) and engage the PLAY mode.
- 2) Pre-adjust the tape guide adjustment nut ① so that the tape runs smoothly and the edge of the tape is not curled or wrinkled at the TAPE GUIDE (1) or TAPE GUIDE (2).
- 3) Load the 10 kHz head azimuth test tape (AT-750778) and play it back.

Adjust the tape guide adjustment nut ① precisely so that the line output level is maximum and also confirm that the edge of the tape is not curled or wrinkled at both the tape guides.

- 4) After the adjustment is completed, lock the tape guide adjustment nut ① with lock-paint.

### 5-2.REC/PB HEAD AZIMUTH ALIGNMENT ADJUSTMENT

- 1) Load the 10 kHz head azimuth test tape (AT-750778) and play it back.
- 2) Turn the azimuth adjust screw ② so that both the left and right channel line output levels are maximum and in the same phase.
- 3) After the adjustment is completed, lock the azimuth adjust screw ② with lock-paint.

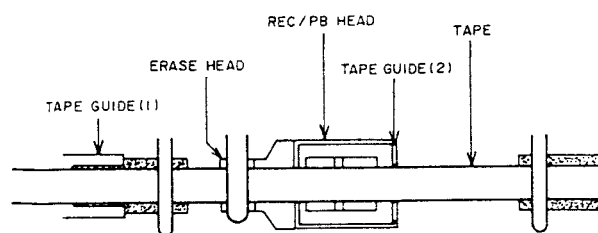


Fig.5-1

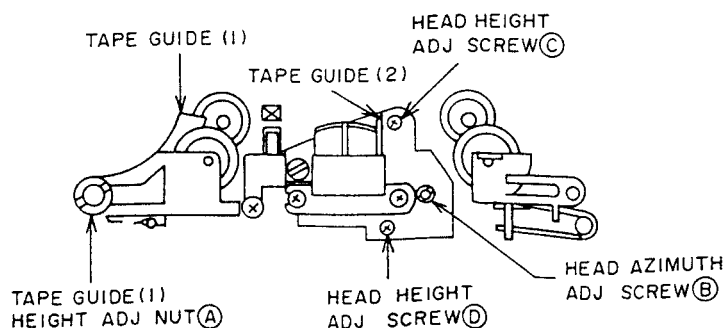


Fig.5-2

### 5-3.ADJUSTMENT WHEN THE REC/PB HEAD IS REPLACED

- 1) Load the mirror cassette tape (AJ-751178) and engage the PLAY mode, confirming that the edge of the tape is not curled or wrinkled at the TAPE GUIDE (2).

**[When the tape is running smoothly]**

- A) Perform the REC / PB HEAD azimuth adjustment (refer to 5-2).
- B) Play back the 1000 Hz (4 track) head height adjustment test tape (AT-750775) and confirm that the LINE OUTPUT level is maximum (− 6 dBs).

**[When the tape is not running smoothly]**

- A) Play back the mirror cassette test tape and observe the TAPE GUIDE (2), checking to see whether its height is too low or too high.
- B) Loosen the azimuth adjust screw ② and pre-adjust the head height adjustment screws ③ and ④.

**NOTE**

Always turn the ③ and ④ screws in the same direction and to the same degrees.

- When the head height is too low : Turn clockwise.
- When the head height is too high : Turn counterclockwise.

(The head height adjust screws ③ and ④ can not be adjusted during playback.)

- C) Play back the mirror cassette tape and check the TAPE GUIDE (2) height again.
  - D) Repeat the above steps B) and C) until results are satisfactory.
  - E) Play back the 10 kHz head azimuth test tape and finely adjust the tape guide adjustment nut ① so that the LINE OUTPUT level is maximum.
  - F) Play back the 1000 Hz (4 track) head height adjust test tape and confirm that the LINE OUTPUT level is maximum (− 6 dBs).
- Move the REC / PB HEAD up or down slightly during playback, and if the level increases, re-adjust the head height adjustment screws ③ and ④.
- G) After the above adjustments are completed, adjust the head azimuth again (Refer to step 5-2).
  - H) Lock the head height adjustment screws ③ and ④ with lock-paint after all the adjustments are satisfactorily completed.

# VI.ELECTRICAL ADJUSTMENT

## NOTES

- All adjustments should be made with CAL, DOLBY and MPX FILTER switches OFF (except STEP 4,11)
- Control settings
  - REC LEVEL : Maximum
  - REC BALANCE : Center click position
  - CALIBRATION LEVEL : Center click position (GX-67 only)
  - CALIBRATION BIAS : Center click position (GX-67 only)
  - BIAS : Center click position (DX-57 only)
- Use the following cassette tapes for adjustment.
  - NORMAL TAPE : MAXELL UD1 C-60
  - CrO<sub>2</sub> TAPE : TDK SA C-60
  - METAL TAPE : TDK MA C-60

## ADJUSTMENT KEY

| STEP No. | ADJUSTMENT ITEM                     |
|----------|-------------------------------------|
| 1.       | TEST tape / Supply signal           |
| 2.       | MODE                                |
| 3.       | Adjustment Parts / Adjustment point |
| 4.       | (•) Remarks / (*) Result            |

Adjustment parts

TEST point

- ### 7 NORMAL POSITION BIAS
- NORMAL recording tape / 1 kHz, 12.5 kHz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 28.5 dBs
  - REC / PLAY (⏮ → ⏭), PLAY (⏭)
  - VR 323 (Lch), VR 423 (Rch) / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 28.5 dBs (1 kHz, 12.5 kHz) flat

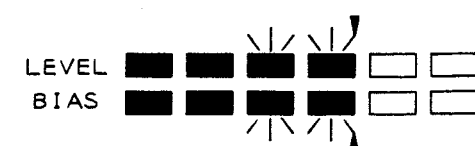
- ### 8 CrO<sub>2</sub> POSITION BIAS
- CrO<sub>2</sub> recording tape / 1 kHz, 12.5 kHz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 28.5 dBs
  - REC/PLAY (⏮ → ⏭), PLAY (⏭)
  - VR 322 / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 28.5 dBs (1 kHz, 12.5 kHz) flat

- ### 9 METAL POSITION BIAS
- METAL recording tape / 1 kHz, 12.5 kHz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 28.5 dBs
  - REC/PLAY (⏮ → ⏭), PLAY (⏭)
  - VR 321 / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 28.5 dBs (1 kHz, 12.5 kHz) flat

- ### 2 ERASE / BIAS FREQUENCY
- METAL recording tape
  - REC / PLAY (⏮ → ⏭)
  - T 322 / P103
  - Connect a frequency counter to P103 (① / ②)  
\* 105 ± 0.2 kHz

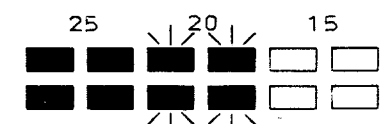
- ### 4 MPX FILTER
- 19 kHz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 6.0 dBs
  - STOP / SOURCE MONITOR
  - FL 171 (Lch), FL 271 (Rch) / LINE OUTPUT
  - MPX sw ON  
• Connect the AC voltimeters to LINE OUTPUT  
\* Minimum level (Less then - 36 dBs)

- ### 11 CAL METER (GX-67 only)
- CrO<sub>2</sub> recording tape
  - CAL SW ON, REC/PLAY (⏮ → ⏭)
  - VR 181 (CAL LEVEL), VR 281 (CAL BIAS) / on FLD (VU meter)
  - Adjustment must be made just before the 0 dB segment lights completely



- ### 3 BIAS DIP POINT
- METAL recording tape
  - REC/PLAY (⏮ → ⏭)
  - T 321 (Lch), T 421 (Rch) / TP-1 and TP-2
  - Connect the DC milli-voltmeter between TP-1 (+) and TP-2 (-)  
\* Minimum DC voltage

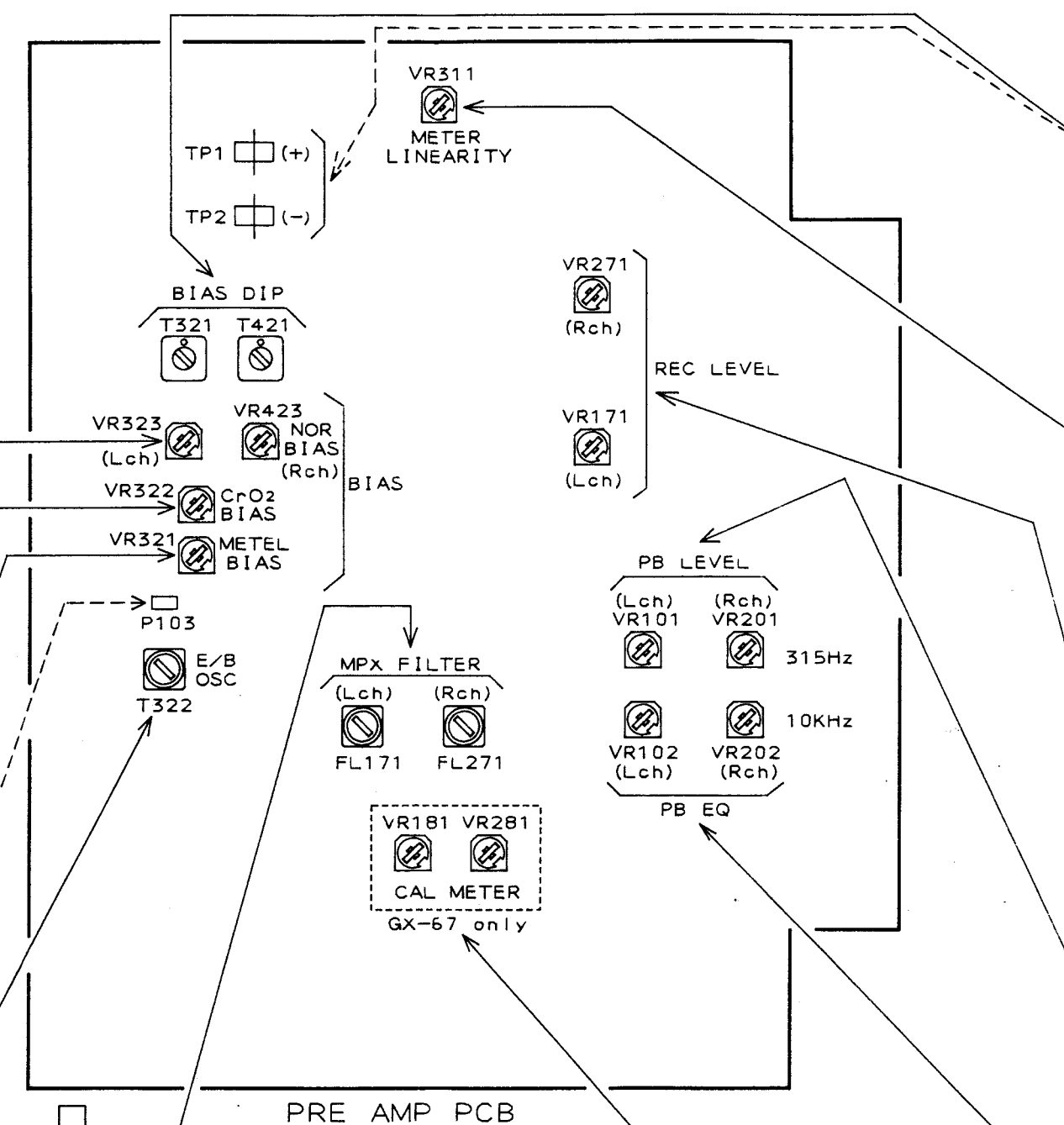
- ### 1 METER LINEARITY
- 400 Hz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 23.0 dBs.
  - STOP/SOURCE MONITOR
  - VR 311 / on FLD (VU meter)
  - Adjustment until the - 20 dB indicator lights completely



- ### 10 RECORDING LEVEL
- NORMAL recording tape / 315 Hz, Set AUDIO signal generator output control so that the LINE OUTPUT level is - 6.0 dBs
  - REC/PLAY (⏮ → ⏭), PLAY (⏭)
  - VR 171 (Lch), VR 271 (Rch) / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 6.0 dBs

- ### 5 PLAYBACK LEVEL
- 315 Hz TEST tape (AT750773)
  - PLAY (⏭)
  - VR 101 (Lch), VR 201 (Rch) / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 6.0 dBs

- ### 6 PLAYBACK EQUALIZER LEVEL
- 10 kHz (-15 dB) TEST tape (AT750778)
  - PLAY (⏭)
  - VR 102 (Lch), VR 202 (Rch) / LINE OUTPUT
  - Connect the AC milli-voltmeters to LINE OUT  
\* - 21.0 dBs



VII. PARTS LIST

ATTENTION

- 1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
- 2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
- 3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

- 1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
- 2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
- 3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
- 4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

| Ref. No. | Part No.      | Description        |
|----------|---------------|--------------------|
| 1        | BH-T2023A320A | HEAD BASE BLOCK    |
| 2        | HP-H2206A010A | HEAD R/P PR4-8FU C |
| 3        | ZS-477876     | PAN20×03STL CMT    |
| 4        | ZS-536488     | BID20×08STL CMT    |
| 5        | ZG-402895     | SP CS ANGLE ADJUST |

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

| Ref. No. | Part No.  | Description                  |
|----------|-----------|------------------------------|
| IC1      | EI-324536 | IC HD14049BP                 |
| IC2      | EI-336801 | IC MB8841-564M               |
| C1A      | EC-338399 | C MMY V 223M 250AC [U,E,B,S] |
| C1B      | EC-350949 | C MMY V 223M 250DC [J]       |
| C1C      | EC-338397 | C MMY V 223M 125AC [C,A]     |
| X1       | EI-318384 | OSC X'TAL NC-18C             |

Symbols for primary destination

[A]: AAL (U.S.A) [S]: SAA (Australia)  
[B]: BEAB (England) [U]: U/T (Universal Area)  
[C]: CSA (Canada)  
[E]: CEE (Europe) [V]: VDE (Germany)  
[J]: JPN (Japan) [Y]: Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

- 5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

Δ(\*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

Δ(\*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

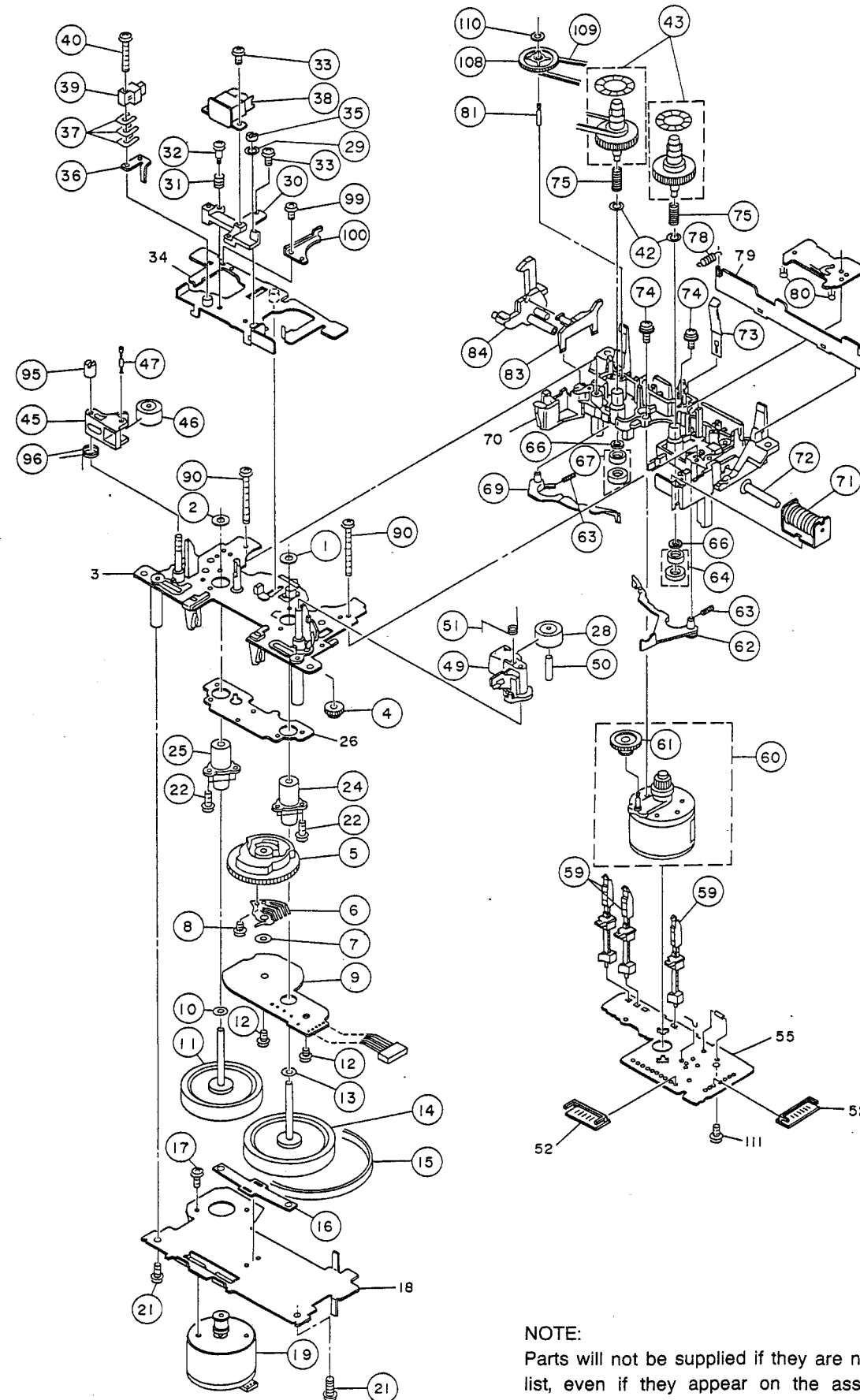
1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

| Ref.No. | Part No.      | Description                             |
|---------|---------------|-----------------------------------------|
| 1       | AX-D4004A010B | REMOCON BLK RC-G57 [DX-57]              |
| 2       | AX-D4004A010A | REMOCON BLK RC-G67 [GX-67]              |
| 3       | BB-T2130A050B | MECHA BLK DX-57 [DX-57]                 |
| 4       | BB-T2130A050A | MECHA BLK GX-67 [GX-67]                 |
| 5       | *BT-391564J   | TRANS POW T2118 BS [B,S]                |
| 6       | *BT-391561J   | TRANS POW T2118 U [U]                   |
| 7       | *BT-405379J   | TRANS POW T2130 E [E]                   |
| 8       | ED-307572     | D SILICON H 1S5131                      |
| 9       | ED-624903     | D SILICON H 1S2473 [GX-67]              |
| 10      | *ED-405583J   | D SILICON RL202BB81 F08 100/2A [B]      |
| 11      | *ED-511907    | D SILICON 1N4002 100/1.0A [EXCEPT B]    |
| 12      | ED-400221J    | D ZENER H HZ11A3LFA F10                 |
| 13      | ED-346574     | D ZENER H HZ22-2L                       |
| 14      | ED-346598     | D ZENER H HZ4 C2                        |
| 15      | *ED-346602    | D ZENER H HZ5 B3                        |
| 16      | ED-343410     | D ZENER H HZ6A1L                        |
| 17      | *ED-346525    | D ZENER H HZ6A3L                        |
| 18      | ED-351419     | D ZENER H HZ7B3L                        |
| 19      | ED-346536     | D ZENER H HZ7C3L [GX-67]                |
| 20      | ED-346541     | D ZENER H HZ9B2L                        |
| 21      | *EF-358641    | FUSE BET T 250V 800MA [E,B,S]           |
| 22      | *EF-309387    | FUSE TSC A 250V 1.00A [U]               |
| 23      | EH-370972     | FILTER LC LP 370972                     |
| 24      | EI-367572     | IC BA15218                              |
| 25      | EI-373980     | IC BA15218N                             |
| 26      | EI-353421     | IC BA6229 [GX-67]                       |
| 27      | EI-384868J    | IC BU4030B                              |
| 28      | EI-394573J    | IC CXA1331S                             |
| 29      | EI-394574J    | IC LA2000                               |
| 30      | EI-405498J    | IC M50941-627SP 91DECK2                 |
| 31      | EI-360043     | IC M5220P                               |
| 32      | EI-310036     | IC TC4066BP                             |
| 33      | EI-373383     | IC UPC1297CA                            |
| 34      | *EI-377101    | IC UPC7805HF                            |
| 35      | EI-405327J    | OSC CE CST6.00MGW 6.000MHZ              |
| 36      | EM-405274J    | IND FL CM1068C DOUBLE                   |
| 37      | EO-361292     | COIL FIX 1 RC875 682J [GX-67]           |
| 38      | EO-405355J    | COIL FIX 3 E1222T472J 472J222J          |
| 39      | EO-389245J    | COIL OSC 1 T2118 100.0KHZ               |
| 40      | EO-400766J    | COIL OSC 1 T2128 (HX) -7 200KHZ [GX-67] |
| 41      | EO-405296J    | COIL OSC 1 T2130 (HX) 105KHZ [DX-57]    |
| 42      | EO-405356J    | COIL TUN 1 105Z391S 105KHZ [DX-57]      |
| 43      | EO-405304J    | COIL TUN 1 210Z181S [GX-67]             |
| 44      | *ER-320528    | R FUSE H ERD2FC 1/4W 22R0G              |
| 45      | *ER-401039J   | R FUSE V T05 ERD2FCV 1/4W 4R7J          |
| 46      | *ES-371104    | SW PUSH SDDL1 01-1 [POWER SW]           |
| 47      | ES-405302J    | SW PUSH SPUY32 3THROW N [DX-57]         |
| 48      | ES-405295J    | SW PUSH SPUY42 4THROW N [GX-67]         |
| 49      | ES-370965     | SW SLIDE SSSU02 1-01-03N                |
| 50      | ES-396610J    | SW TACT SOR-122HS T05 [REW]             |
| 51      | ET-403246J    | DETECTOR HC-377                         |

| Ref.No. | Part No.   | Description                      |
|---------|------------|----------------------------------|
| 52      | ET-396487J | TR DTA124XL T05                  |
| 53      | ET-371075  | TR DTA124XS                      |
| 54      | ET-373382  | TR DTA143ZS                      |
| 55      | ET-354415  | TR DTA144ES                      |
| 56      | ET-360399  | TR DTC114TS                      |
| 57      | ET-354365  | TR DTC114YS                      |
| 58      | ET-354371  | TR DTC124ES                      |
| 59      | ET-354364  | TR DTC143TS                      |
| 60      | ET-405594J | TR DTC143ZL T05                  |
| 61      | ET-373391  | TR DTC143ZS                      |
| 62      | ET-396488J | TR DTC144EL T05                  |
| 63      | ET-354414  | TR DTC144ES [GX-67]              |
| 64      | ET-370310  | TR DTC144TS                      |
| 65      | ET-347738  | TR 2SA1282A E,F F05              |
| 66      | ET-364093  | TR 2SA1283 E,F                   |
| 67      | ET-352726  | TR 2SA1392 T,U                   |
| 68      | ET-389803J | TR 2SA933S R,S                   |
| 69      | ET-400218J | TR 2SC1740S R,S                  |
| 70      | ET-365394  | TR 2SC3242A E,F,G F05            |
| 71      | ET-378524J | TR 2SC3383 S,T,U                 |
| 72      | ET-400741J | TR 2SC3708 T T05                 |
| 73      | ET-396072J | TR 2SD2159 V,W                   |
| 74      | EV-405297J | VR RK14K12B0 SPL C1253X2 [GX-67] |
| 75      | EV-405298J | VR ROTARY RK11K1120 B102         |
| 76      | EV-405300J | VR ROTARY RK11K1120 SP W254      |
| 77      | EV-405301J | VR ROTARY RK14K12B0 A503X2       |
| 78      | EV-405299J | VR ROTARY RK16312A0 A104X2       |

# MECHA BLOCK



## NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

## 2. MECHA BLOCK

| Ref.No. | Part No.      | Description                                  |
|---------|---------------|----------------------------------------------|
| 1       | ZW-729545J    | TW25                                         |
| 2       | ZW-729440J    | TW22                                         |
| 4       | MZ-729441J    | GEAR ASSIST                                  |
| 5       | MZ-729442J    | CAM                                          |
| 6       | ES-729443J    | SW ROTARY                                    |
| 7       | ZW-729444J    | WASHER 30X080X050 PSL                        |
| 8       | ZS-729445J    | PAN 20X03                                    |
| 9       | EA-732798J    | PC CONTROL                                   |
| 10      | ZW-732799J    | WASHER                                       |
| 11      | MI-732800J    | FLYWHEEL                                     |
| 12      | ZS-729449J    | PAN 20X30                                    |
| 13      | ZW-732801J    | WASHER 26X047X050 PSL                        |
| 14      | MI-729453J    | FLYWHEEL                                     |
| 15      | MB-729451J    | BELT CAPSTAN                                 |
| 16      | MZ-729452J    | HOLDER THRUST                                |
| 17      | ZS-729454J    | PAN 26X03                                    |
| 19      | BM-732802J    | MOTOR CAPSTAN SHE2L55                        |
| 21      | ZS-729456J    | SCREW TAPPING 26X08                          |
| 22      | ZS-729457J    | ST PAN 20X08                                 |
| 24      | MV-729458J    | MAIN CASE (R)                                |
| 25      | MV-729459J    | MAIN CASE (L)                                |
| 28      | MP-732803J    | PINCH ROLLER                                 |
| 29      | ZW-732819J    | WASHER                                       |
| 30      | HZ-732804J    | BASE HEAD                                    |
| 31      | ZG-729462J    | SP AZIMUTH                                   |
| 32      | MS-729463J    | SHAFT                                        |
| 33      | ZS-732805J    | ST PAN 20X04                                 |
| 35      | ZW-729466J    | NUT ADJ                                      |
| 36      | HZ-729467J    | BASE E HEAD                                  |
| 37A     | ZW-729468J    | SPACER                                       |
| 37B     | ZW-729465J    | SPACER                                       |
| 37C     | ZW-729546J    | SPACER                                       |
| 38A     | HR-H2411A010A | HEAD COMB RP4-10TG2 RP4-10TG2                |
| 38B     | HR-405284J    | [GX-67]<br>HEAD COMBO H2381<br>[DX-57]       |
| 39      | HE-729469J    | HEAD E 876-30-03                             |
| 40      | ZS-729470J    | BID 20X12                                    |
| 42      | ZW-732820J    | WASHER                                       |
| 43      | MT-732806J    | REEL TABLE                                   |
| 45      | ML-732807J    | ARM PINCH ROLLER (S)                         |
| 46      | MP-732808J    | PINCH ROLLER                                 |
| 47      | MS-732809J    | SHAFT PINCH ROLLER                           |
| 49      | ML-732810J    | ARM PINCH ROLLER (R)                         |
| 50      | MS-729475J    | SHAFT PINCH ROLLER                           |
| 51      | ZG-732811J    | SP ARM PINCE ROLLER (R)                      |
| 59      | ES-729477J    | LEAF SW                                      |
| 60      | BM-732812J    | MOTOR REEL PART SGE09014                     |
| 61      | MZ-729479J    | GEAR IDLER                                   |
| 62      | ML-729480J    | LEVER ASSIST (A)                             |
| 63      | ZG-732813J    | SP LEVER ASSIST                              |
| 64      | MR-729482J    | PULLEY BRAKE (T) PART (WH)                   |
| 66      | ZW-729483J    | WASHER 26X055X013 (PSL)                      |
| 67      | MR-729484J    | PULLEY BRAKE (S) PART (BK)                   |
| 69      | ML-732814J    | LEVER ASSIST (B)                             |
| 71      | EP-729487J    | SOLENOID                                     |
| 72      | MS-729488J    | SHAFT SOLENOID                               |
| 73      | ZG-732815J    | SP PLATE CASSETTE HOLDER<br>[DX-57]          |
| 74      | ZS-729490J    | SCREW SPECIAL 26X016                         |
| 75      | ZG-729491J    | SP REEL TABLE                                |
| 78A     | ZG-732816J    | SP PULL CASSETTE PLATE<br>[GX-67]<br>[DX-57] |
| 78B     | ZG-729494J    | SP PULL CASSETTE PLATE<br>[DX-57]            |
| 80      | ET-729496J    | TR PHOTO NJL5161KF1 B                        |
| 81      | MS-729497J    | SHAFT PULLEY                                 |
| 83      | ML-729498J    | LEVER                                        |
| 84      | ML-729499J    | LEVER EJECT                                  |
| 90      | ZS-729500J    | PAN 26X30                                    |
| 95      | ZS-729501J    | SCREW ADJ ARM PINCH ROLER                    |
| 96      | ZG-729502J    | SP PINCH ROLER (S)                           |
| 99      | ZS-729503J    | PAN 20X025                                   |
| 100     | MZ-729504J    | STOPPER                                      |
| 108     | MR-729505J    | PULLEY PART                                  |
| 109     | MB-732817J    | BELT                                         |
| 110     | ZW-729507J    | WASHER                                       |

### 3. P.C BOARD BLOCK

| Ref.No. | Part No.      | Description                            |
|---------|---------------|----------------------------------------|
| 1A      | BA-T2130A020B | PC (#) PREAMP BLK GX-67 (U)<br>[U,E,S] |
| 1B      | BA-T2130A020C | PC (#) PREAMP BLK GX-67 (B)<br>[B]     |
| 1C      | BA-T2130A020E | PC (#) PREAMP BLK DX-57 (U)<br>[U,E,S] |
| 1D      | BA-T2130A020F | PC (#) PREAMP BLK DX-57 (B)<br>[B]     |
| 2A      | BA-T2130A030A | PC (#) SYSCON BLK GX-67                |
| 2B      | BA-T2130A030B | PC (#) SYSCON BLK DX-57                |

PC (#) PRE AMP BLK CONSISTS OF FOLLOWING P.C BOARD.

- PRE AMP P.C BOARD
- HEAD PHONE P.C BOARD
- POWER SW P.C BOARD

PC (#) SYSCON BLK CONSISTS OF FOLLOWING P.C BOARD.

- SYSCON P.C BOARD
- TIMER SW P.C BOARD
- EJECT SW P.C BOARD

### 4. PRE AMP P.C BOARD

| Ref.No. | Part No.    | Description                             |
|---------|-------------|-----------------------------------------|
| D301    | ED-624903   | D SILICON H 1S2473<br>[GX-67]           |
| D302    | ED-624903   | D SILICON H 1S2473<br>[GX-67]           |
| D311    | ED-624903   | D SILICON H 1S2473                      |
| D411    | ED-624903   | D SILICON H 1S2473                      |
| D501    | ED-624903   | D SILICON H 1S2473                      |
| D502    | ED-624903   | D SILICON H 1S2473                      |
| D503    | ED-346536   | D ZENER H HZ7C3L<br>[GX-67]             |
| D504    | ED-351419   | D ZENER H HZ7B3L                        |
| D505    | ED-346598   | D ZENER H HZ4 C2                        |
| D506    | ED-624903   | D SILICON H 1S2473                      |
| D507    | ED-624903   | D SILICON H 1S2473                      |
| D508    | ED-624903   | D SILICON H 1S2473                      |
| D509    | ED-624903   | D SILICON H 1S2473                      |
| D801A   | *ED-511907  | D SILICON 1N4002 100/1.0A<br>[EXCEPT B] |
| D801B   | *ED-405583J | D SILICON RL202BB81 F08 100/2A<br>[B]   |
| D802A   | *ED-511907  | D SILICON 1N4002 100/1.0A<br>[EXCEPT B] |
| D802B   | *ED-405583J | D SILICON RL202BB81 F08 100/2A<br>[B]   |
| D803A   | *ED-511907  | D SILICON 1N4002 100/1.0A<br>[EXCEPT B] |
| D803B   | *ED-405583J | D SILICON RL202BB81 F08 100/2A<br>[B]   |
| D804A   | *ED-511907  | D SILICON 1N4002 100/1.0A<br>[EXCEPT B] |
| D804B   | *ED-405583J | D SILICON RL202BB81 F08 100/2A<br>[B]   |
| D805    | ED-346541   | D ZENER H HZ9B2L                        |
| D806    | ED-346541   | D ZENER H HZ9B2L                        |
| D807    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D808    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D809    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D810    | *ED-346525  | D ZENER H HZ6A3L                        |
| D811    | ED-400221J  | D ZENER H HZ11A3LFA F10                 |
| D812    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D813    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D814    | *ED-511907  | D SILICON 1N4002 100/1.0A               |
| D815    | ED-343410   | D ZENER H HZ6A1L                        |
| D816    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D817    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D818    | ED-346574   | D ZENER H HZ22-2L                       |
| D819    | *ED-346602  | D ZENER H HZ5 B3                        |
| D820    | ED-511907   | D SILICON 1N4002 100/1.0A               |
| D821    | ED-624903   | D SILICON H 1S2473                      |

| Ref.No. | Part No.    | Description                                |
|---------|-------------|--------------------------------------------|
| D822    | ED-624903   | D SILICON H 1S2473                         |
| D823    | ED-624903   | D SILICON H 1S2473                         |
| D824    | ED-511907   | D SILICON 1N4002 100/1.0A                  |
| FL101   | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-67]             |
| FL141A  | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-67]             |
| FL141B  | EO-405356J  | COIL TUN 1 105Z391S 105KHZ<br>[DX-57]      |
| FL171   | EH-370972   | FILTER LC LP 370972                        |
| FL201   | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-67]             |
| FL241A  | EO-405304J  | COIL TUN 1 210Z181S<br>[GX-67]             |
| FL241B  | EO-405356J  | COIL TUN 1 105Z391S 105KHZ<br>[DX-57]      |
| FL271   | EH-370972   | FILTER LC LP 370972                        |
| FR800   | *ER-401039J | R FUSE V T05 ERD2FCV 1/4W 4R7J             |
| FR801   | *ER-401039J | R FUSE V T05 ERD2FCV 1/4W 4R7J             |
| FR802   | *ER-320528  | R FUSE H ERD2FC 1/4W 22R0G                 |
| IC101   | EI-360043   | IC M5220P                                  |
| IC121   | EI-394573J  | IC CXA1331S                                |
| IC141   | EI-367572   | IC BA15218                                 |
| IC171   | EI-394573J  | IC CXA1331S                                |
| IC301   | EI-373980   | IC BA15218N                                |
| IC311   | EI-373980   | IC BA15218N                                |
| IC401   | EI-373383   | IC UPC1297CA                               |
| IC501   | EI-394574J  | IC LA2000                                  |
| IC502   | EI-384868J  | IC BU4030B                                 |
| IC503   | EI-310036   | IC TC4066BP                                |
| IC504   | EI-353421   | IC BA6229                                  |
| IC505   | EI-353421   | IC BA6229                                  |
| IC801   | *EI-377101  | IC UPC7805HF                               |
| J302    | EJ-336905   | PIN J AJC-035-ACB P 4P                     |
| L141    | EO-405355J  | COIL FIX 3 E1222T472J 472J222J             |
| L241    | EO-405355J  | COIL FIX 3 E1222T472J 472J222J             |
| L331    | EO-361292   | COIL FIX 1 RC875 682J<br>[GX-67]           |
| SW101A  | ES-405295J  | SW PUSH SPUY42 4THROW N<br>[GX-67]         |
| SW101B  | ES-405302J  | SW PUSH SPUY32 3THROW N<br>[DX-57]         |
| T321A   | EO-400766J  | COIL OSC 1 T2128 (HX) -7 200KHZ<br>[GX-67] |
| T321B   | EO-405296J  | COIL OSC 1 T2130 (HX) 105KHZ<br>[DX-57]    |
| T322    | EO-389245J  | COIL OSC 1 T2118 100.0KHZ                  |
| T421A   | EO-400766J  | COIL OSC 1 T2128 (HX)-7 200KHZ<br>[GX-67]  |
| T421B   | EO-405296J  | COIL OSC 1 T2130 (HX) 105KHZ<br>[DX-57]    |
| TR101   | ET-400218J  | TR 2SC1740S R,S                            |
| TR102   | ET-378524J  | TR 2SC3383 S,T,U                           |
| TR103   | ET-352726   | TR 2SA1392 T,U                             |
| TR140   | ET-400218J  | TR 2SC1740S R,S                            |
| TR141   | ET-400218J  | TR 2SC1740S R,S<br>[GX-67]                 |
| TR142   | ET-400218J  | TR 2SC1740S R,S                            |
| TR143   | ET-400218J  | TR 2SC1740S R,S                            |
| TR144   | ET-400218J  | TR 2SC1740S R,S                            |
| TR145   | ET-400218J  | TR 2SC1740S R,S                            |
| TR146   | ET-389803J  | TR 2SA933S R,S                             |
| TR201   | ET-400218J  | TR 2SC1740S R,S                            |
| TR240   | ET-400218J  | TR 2SC1740S R,S                            |
| TR241   | ET-400218J  | TR 2SC1740S R,S<br>[GX-67]                 |
| TR242   | ET-400218J  | TR 2SC1740S R,S                            |
| TR243   | ET-400218J  | TR 2SC1740S R,S                            |
| TR244   | ET-400218J  | TR 2SC1740S R,S                            |
| TR245   | ET-400218J  | TR 2SC1740S R,S                            |
| TR301   | ET-378524J  | TR 2SC3383 S,T,U                           |
| TR311   | ET-354414   | TR DTC144ES<br>[GX-67]                     |
| TR321   | ET-400218J  | TR 2SC1740S R,S                            |
| TR322   | ET-400218J  | TR 2SC1740S R,S                            |
| TR323   | ET-373391   | TR DTC143ZS                                |
| TR324   | ET-370310   | TR DTC144TS                                |
| TR325   | ET-370310   | TR DTC144TS                                |
| TR326   | ET-354371   | TR DTC124ES                                |
| TR327   | ET-396072J  | TR 2SD2159 V,W                             |
| TR328   | ET-400741J  | TR 2SC3708 T T05                           |

| Ref.No. | Part No.    | Description                               |
|---------|-------------|-------------------------------------------|
| TR329   | ET-400741J  | TR 2SC3708 T T05                          |
| TR330   | ET-354364   | TR DTC143TS                               |
| TR401   | ET-378524J  | TR 2SC3383 S,T,U                          |
| TR411   | ET-354414   | TR DTC144ES<br>[GX-67]                    |
| TR501   | ET-360399   | TR DTC114TS                               |
| TR502   | ET-373382   | TR DTA143ZS                               |
| TR503   | ET-373382   | TR DTA143ZS                               |
| TR504   | ET-354365   | TR DTC114YS                               |
| TR505   | ET-396072J  | TR 2SD2159 V,W                            |
| TR506   | ET-396072J  | TR 2SD2159 V,W                            |
| TR507   | ET-354365   | TR DTC114YS                               |
| TR508   | ET-354365   | TR DTC114YS                               |
| TR510   | ET-354365   | TR DTC114YS                               |
| TR801   | ET-365394   | TR 2SC3242A E,F,G F05                     |
| TR802   | ET-347738   | TR 2SA1282A E,F F05                       |
| TR804   | *ET-378524J | TR 2SC3383 S,T,U                          |
| TR805   | ET-400218J  | TR 2SC1740S R,S                           |
| TR806   | ET-364093   | TR 2SA1283 E,F                            |
| VR101   | EV-394962J  | R S-FIX H T05EVNDXAA03 0.1W102            |
| VR102   | EV-389478J  | R S-FIX H T05EVNDXAA03 0.1W153            |
| VR171   | EV-397174J  | R S-FIX H T05EVNDXAA03 0.1W683            |
| VR181   | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W682<br>[GX-67] |
| VR201   | EV-394962J  | R S-FIX H T05EVNDXAA03 0.1W102            |
| VR202   | EV-389478J  | R S-FIX H T05EVNDXAA03 0.1W153            |
| VR271   | EV-397174J  | R S-FIX H T05EVNDXAA03 0.1W683            |
| VR281   | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W682<br>[GX-67] |
| VR311   | EV-389479J  | R S-FIX H T05EVNDXAA03 0.1W223            |
| VR321   | EV-389482J  | R S-FIX H T05EVNDXAA03 0.1W682            |
| VR322A  | EV-389481J  | R S-FIX H T05EVNDXAA03 0.1W473<br>[GX-67] |
| VR322B  | EV-397174J  | R S-FIX H T05EVNDXAA03 0.1W683<br>[DX-57] |
| VR323   | EV-389476J  | R S-FIX H T05EVNDXAA03 0.1W103            |
| VR423   | EV-389476J  | R S-FIX H T05EVNDXAA03 0.1W103            |
| VR901   | EV-405297J  | VR RK14K12B0 SPL C1253X2<br>[GX-67]       |
| VR902   | EV-405298J  | VR ROTARY RK11K1120 B102                  |
| VR903   | EV-405299J  | VR ROTARY RK16312A0 A104X2                |
| VR904   | EV-405300J  | VR ROTARY RK11K1120 SP W254               |
| VR905   | EV-405301J  | VR ROTARY RK14K12B0 A503X2                |
| F1A     | *EF-309387  | FUSE TSC A 250V 1.00A<br>[U]              |
| F1B     | *EF-358641  | FUSE BET T 250V 800MA<br>[E,B,S]          |
| F2A     | *EF-309387  | FUSE TSC A 250V 1.00A<br>[U]              |
| F2B     | *EF-358641  | FUSE BET T 250V 800MA<br>[E,B,S]          |

## 5. HEAD PHONE P.C BOARD

| Ref.No. | Part No.  | Description                   |
|---------|-----------|-------------------------------|
| J301    | EJ-369995 | PHONE J 3P HLJ0540-410 GP 6.3 |

## 6. POWER SW P.C BOARD

| Ref.No. | Part No.   | Description                      |
|---------|------------|----------------------------------|
| C815    | *EC-338411 | C CE V DE7 FZ 103P 400AC         |
| SW801   | *ES-371104 | SW PUSH SDDL1 01-1<br>[POWER SW] |

## 7. SYSCON P.C BOARD

| Ref.No. | Part No.   | Description                   |
|---------|------------|-------------------------------|
| D701    | ED-307572  | D SILICON H 1SS131            |
| D702    | ED-307572  | D SILICON H 1SS131            |
| D703    | ED-307572  | D SILICON H 1SS131            |
| D704    | ED-307572  | D SILICON H 1SS131            |
| D705    | ED-307572  | D SILICON H 1SS131            |
| D706    | ED-307572  | D SILICON H 1SS131            |
| D707    | ED-307572  | D SILICON H 1SS131            |
| D708    | ED-307572  | D SILICON H 1SS131            |
| D709    | ED-307572  | D SILICON H 1SS131            |
| D710    | ED-307572  | D SILICON H 1SS131            |
| D711    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D712    | ED-307572  | D SILICON H 1SS131            |
| D713    | ED-307572  | D SILICON H 1SS131            |
| D714    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D715    | ED-307572  | D SILICON H 1SS131            |
| D716    | ED-307572  | D SILICON H 1SS131            |
| D717    | ED-307572  | D SILICON H 1SS131            |
| D718    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D719    | ED-307572  | D SILICON H 1SS131            |
| D720    | ED-307572  | D SILICON H 1SS131            |
| D721    | ED-307572  | D SILICON H 1SS131            |
| D722    | ED-307572  | D SILICON H 1SS131            |
| D723    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D724    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D725    | ED-307572  | D SILICON H 1SS131            |
| D726    | ED-307572  | D SILICON H 1SS131            |
| D727    | ED-307572  | D SILICON H 1SS131<br>[GX-67] |
| D728    | ED-307572  | D SILICON H 1SS131            |
| D729    | ED-307572  | D SILICON H 1SS131            |
| D730    | ED-307572  | D SILICON H 1SS131            |
| D731    | ED-307572  | D SILICON H 1SS131            |
| D732    | ED-307572  | D SILICON H 1SS131            |
| IC701   | EI-405498J | IC M50941-627SP 91DECK2       |
| IN701   | EM-405274J | IND FL CM1068C DOUBLE         |
| RM701   | ET-403246J | DETECTOR HC-377               |
| TR701   | ET-400218J | TR 2SC1740S R,S               |
| TR702   | ET-400218J | TR 2SC1740S R,S               |
| TR703   | ET-405594J | TR DTC143ZL T05               |
| TR704   | ET-396487J | TR DTA124XL T05               |
| TR705   | ET-396488J | TR DTC144EL T05               |
| TR706   | ET-396487J | TR DTA124XL T05               |
| TR707   | ET-396488J | TR DTC144EL T05               |
| TR708   | ET-396487J | TR DTA124XL T05               |
| TR709   | ET-396488J | TR DTC144EL T05               |
| TR710   | ET-396487J | TR DTA124XL T05               |
| TR711   | ET-371075  | TR DTA124XS                   |
| TR712   | ET-354414  | TR DTC144ES                   |
| TR713   | ET-371075  | TR DTA124XS                   |
| TR714   | ET-354414  | TR DTC144ES                   |
| TR715   | ET-371075  | TR DTA124XS                   |
| TR716   | ET-354414  | TR DTC144ES                   |
| TR717   | ET-354414  | TR DTC144ES<br>[GX-67]        |
| TR718   | ET-354415  | TR DTA144ES                   |
| TR719   | ET-354415  | TR DTA144ES<br>[GX-67]        |

| Ref.No. | Part No.   | Description                                    |
|---------|------------|------------------------------------------------|
| TR720   | ET-354415  | TR DTA144ES                                    |
| TR721   | ET-354415  | TR DTA144ES<br>[GX-67]                         |
| TR722   | ET-354415  | TR DTA144ES                                    |
| TR723   | ET-354415  | TR DTA144ES                                    |
| TR724   | ET-354415  | TR DTA144ES<br>[GX-67]                         |
| TR725   | ET-354415  | TR DTA144ES                                    |
| TS701   | ES-396610J | SW TACT SOR-122HS T05<br>[REW]                 |
| TS702   | ES-396610J | SW TACT SOR-122HS T05<br>[PLAY]                |
| TS703   | ES-396610J | SW TACT SOR-122HS T05<br>[FF]                  |
| TS704   | ES-396610J | SW TACT SOR-122HS T05<br>[REC]                 |
| TS705   | ES-396610J | SW TACT SOR-122HS T05<br>[STOP]                |
| TS706   | ES-396610J | SW TACT SOR-122HS T05<br>[AUTO MUTE]           |
| TS707   | ES-396610J | SW TACT SOR-122HS T05<br>[COUNTER RESET]       |
| TS708   | ES-396610J | SW TACT SOR-122HS T05<br>[COUNTER MEMORY]      |
| TS709   | ES-396610J | SW TACT SOR-122HS T05<br>[COUNTER MODE][GX-67] |
| TS710   | ES-396610J | SW TACT SOR-122HS T05<br>[TAPE LENGTH][GX-67]  |
| TS711   | ES-396610J | SW TACT SOR-122HS T05<br>[TAPE MONITOR]        |
| X701    | EI-405327J | OSC CE CST6.00MGW 6.000MHZ                     |

## 8. TIMER SW P.C BOARD

| Ref.No. | Part No.  | Description              |
|---------|-----------|--------------------------|
| SW701   | ES-370965 | SW SLIDE SSSU02 1-01-03N |

## 9. EJECT SW P.C BOARD (GX-67)

| Ref.No. | Part No.   | Description           |
|---------|------------|-----------------------|
| TS712   | ES-396610J | SW TACT SOR-122HS T05 |

## 10. FAINAL ASSEMBLY BLOCK

| Ref.No. | Part No.      | Description                           |
|---------|---------------|---------------------------------------|
| 1       | MZ-391475J    | PLATE EJECT<br>[DX-57]                |
| 2       | MZ-391606J    | DAMPER K-106                          |
| 3A      | BB-T2130A050A | MECHA BLK GX-67<br>[GX-67]            |
| 3B      | BB-T2130A050B | MECHA BLK DX-57<br>[DX-57]            |
| 4       | SA-379375     | FOOT (N)                              |
| 5       | ZS-305827     | ST BID30X08STL BNI                    |
| 6       | ZS-336714     | ST BID30X12STL CMT                    |
| 8A      | *BT-391561J   | TRANS POW T2118 U<br>[U]              |
| 8B      | *BT-405379J   | TRANS POW T2130 E<br>[E]              |
| 8C      | *BT-391564J   | TRANS POW T2118 BS<br>[B,S]           |
| 9       | ZW-273914     | SW40                                  |
| 10      | ZS-322580     | ST BID40X08STL BNI                    |
| 11A     | *EW-363656    | AC CORD200 0129AVFF B200 A U/T<br>[U] |
| 11B     | *EW-363669    | AC CORD200 0364 LCFL B200 A EV<br>[E] |
| 11C     | *EW-363681    | AC CORD200 LCFL B200 A B<br>[B]       |
| 11D     | *EW-363695    | AC CORD220 0436 LCFL B200 A S<br>[S]  |
| 12A     | SP-405910J    | PANEL REAR GX-67 (U)                  |
| 12B     | SP-405912J    | PANEL REAR DX-57 (U)                  |
| 12B     | SP-405915J    | PANEL REAR GX-67 (E)                  |
| 12C     | SP-405916J    | PANEL REAR DX-57 (E)                  |
| 12D     | SP-405917J    | PANEL REAR GX-67 (B,S)                |
| 12E     | SP-405918J    | PANEL REAR DX-57 (B,S)                |
| 13      | ZS-358953     | ST BID30X08STL BNI                    |
| 14      | ZS-331532     | PT BID30X08STL BNI                    |
| 15      | ED-344244     | D LED SLF-601C AMBER                  |
| 16      | BZ-391578J    | LID STABILIZER PART<br>[GX-67]        |
| 17      | SZ-391531J    | SHEET DAMP<br>[GX-67]                 |
| 18      | ZG-391481J    | SP TORSION STABILIZER (L)<br>[GX-67]  |
| 19      | ZG-336615     | SP PLATE CASSETTE HOLDER (B)          |
| 20      | TC-405054J1   | CASSETTE CASE                         |
| 21      | ES-393376J    | SW LEAF SPPB22 01-1<br>[GX-67]        |
| 22      | ZS-608106     | PAN20X06STL CMT<br>[GX-67]            |
| 23      | ZG-405059J    | SP TORSION (EJECT)                    |
| 24-B    | SK-373236B    | KNOB POWER-B                          |
| 24-G    | SK-373236A    | KNOB POWER-G                          |
| 25-B    | SK-405070J    | KNOB TIMER-B                          |
| 25-G    | SK-405071J    | KNOB TIMER-G                          |
| 26-B    | SK-405085J    | BUTTON PUSH (2)-B                     |
| 26-G    | SK-405086J    | BUTTON PUSH (2)-G                     |
| 27-B    | SK-405087J    | KNOB VR (3)-B                         |
| 27-G    | SK-405088J    | KNOB VR (3)-G                         |
| 28-B    | SK-405089J    | KNOB VR (4)-B                         |
| 28-G    | SK-405090J    | KNOB VR (4)-G                         |
| 30A-B   | SP-405099J    | PANEL FRONT GX-67-B                   |
| 30B-B   | SP-405101J    | PANEL FRONT DX-57-B                   |
| 30C-G   | SP-405100J    | PANEL FRONT GX-67-G                   |
| 30D-G   | SP-405102J    | PANEL FRONT DX-57-G                   |
| 32      | SE-405062J    | WINDOW FLD                            |
| 33      | SZ-361424     | PLATE REMOCON                         |
| 34-B    | SK-405092J    | BUTTON COUNTER (2)-B                  |
| 34-G    | SK-405093J    | BUTTON COUNTER (2)-G                  |
| 35-B    | SK-405094J    | BUTTON MONITOR (2)-B                  |
| 35-G    | SK-405095J    | BUTTON MONITOR (2)-G                  |
| 36-B    | SK-405073J    | BUTTON OP GX-67-B                     |
| 36-G    | SK-405074J    | BUTTON OP GX-67-G                     |
| 37A-B   | SK-405081J    | BUTTON EJECT (2)-B<br>[GX-67]         |
| 37A-G   | SK-405082J    | BUTTON EJECT (2)-G<br>[GX-67]         |
| 37B-B   | SK-405083J    | BUTTON EJECT (3)-B<br>[DX-57]         |
| 37B-G   | SK-405084J    | BUTTON EJECT (3)-G<br>[DX-57]         |
| 38A     | ZG-405048J    | SP PLATE EJECT<br>[GX-67]             |

| Ref.No. | Part No.      | Description                           |
|---------|---------------|---------------------------------------|
| 38B     | ZG-405061J    | SP PUSH (EJECT)<br>[DX-57]            |
| 39-B    | SP-405097J1   | PANEL ESCUTCHEON GX-Z6300             |
| 39-G    | SP-405098J1   | PANEL ESCUTCHEON GX-67-G              |
| 40      | ZS-390457J    | BT PAN20X04STL BZN                    |
| 42-B    | SM-365756C    | NAME PLATE AKAI (2)                   |
| 42-G    | SM-365756A    | NAME PLATE AKAI-G                     |
| 43      | SZ-378311-A   | CUSHION                               |
| 50A-B   | BD-T2130A090C | LID PANEL BLK GX-67-B                 |
| 50A-G   | BD-T2130A090E | LID PANEL BLK GX-67-G                 |
| 50B-B   | BD-T2130A090D | LID PANEL BLK DX-57-B                 |
| 50B-G   | BD-T2130A090F | LID PANEL BLK DX-57-G                 |
| 51-B    | SP-391493J    | COVER UPPER B                         |
| 51-G    | SP-391492J    | COVER UPPER G                         |
| 52-B    | ZS-322580     | ST BID40X08STL BNI                    |
| 52-G    | ZS-322570     | ST BID40X08STL NI3                    |
| 60      | ZS-342733     | ST PAN26X04STL CMT<br>[GX-67]         |
| 61      | MZ-405106J    | HOLDER (L) PART<br>[GX-67]            |
| 62      | ES-405288J    | SW LEAF MSW-18120A<br>[GX-67]         |
| 63      | ZS-487091     | PAN23X08STL CMT<br>[GX-67]            |
| 64      | BM-405969J    | MOTOR RF-370 PART<br>[GX-67]          |
| 67      | ZS-432674     | PAN30X03STL CMT<br>[GX-67]            |
| 68      | ML-405041J    | ARM LOCK (1) PART<br>[GX-67]          |
| 71      | ZW-410051     | RETAINING RING E250SUP CMT<br>[GX-67] |
| 72      | ML-405038J    | ARM EJECT (2) PART<br>[GX-67]         |
| 75      | ZG-405058J    | SP TORSION (EJ) ARM<br>[GX-67]        |
| 76      | MZ-405056J    | GEAR CAM EJECT<br>[GX-67]             |
| 77      | ML-405036J    | ARM EJECT (1) PART<br>[GX-67]         |
| 78      | ES-372912     | SW LEAF SPPB21 01-2<br>[GX-67]        |
| 81      | ZW-318238     | PW30X060X030PBR NI3<br>[GX-67]        |
| 82      | ZS-460440     | PAN20X04STL CMT<br>[GX-67]            |

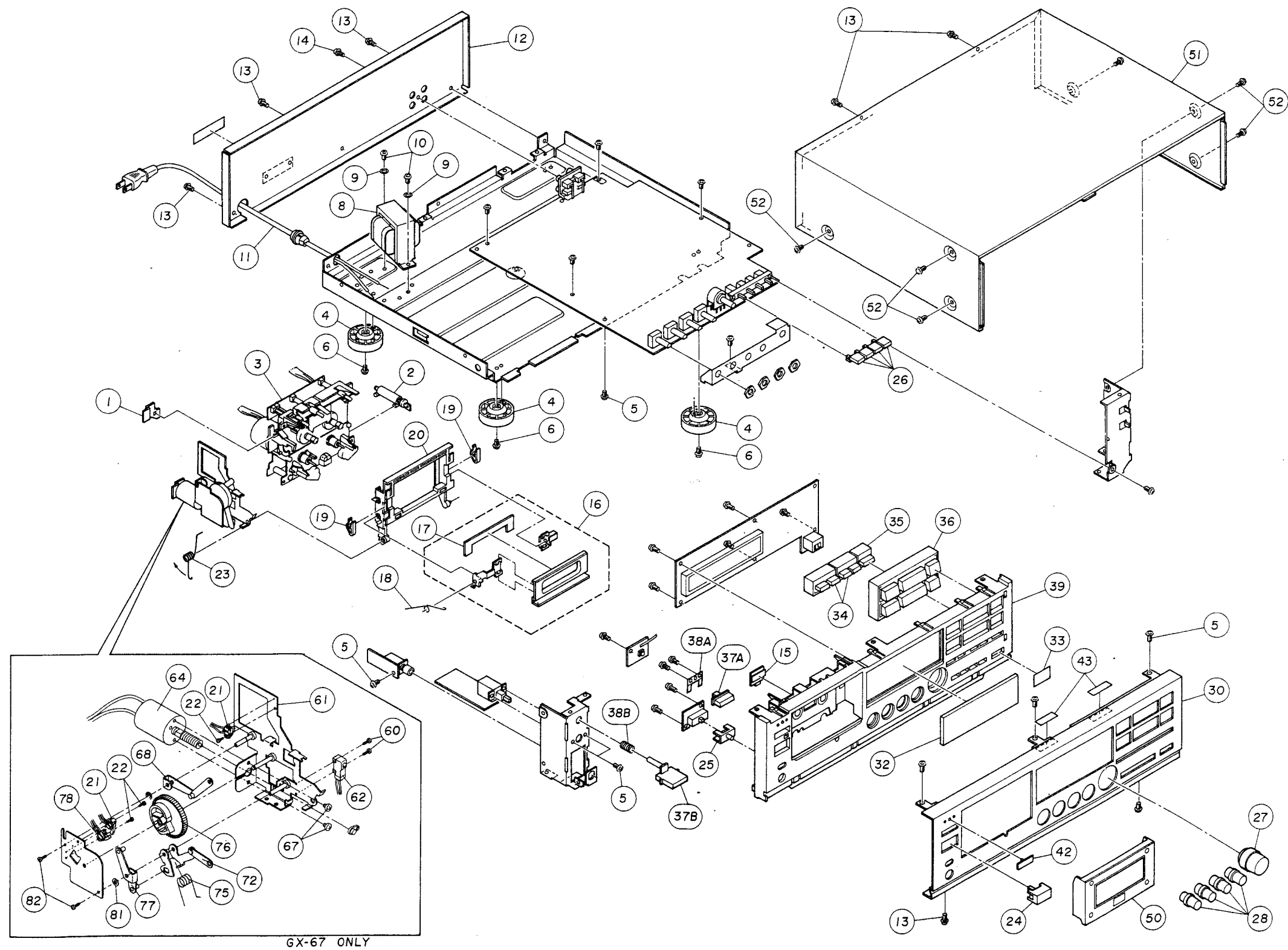
### NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

## 11. ACCESSARY

| Ref.No. | Part No.      | Description                   |
|---------|---------------|-------------------------------|
| 1       | EW-383168J    | CORD TC-C-05S P-P 2P 2PCS     |
| 2A      | AX-D4004A010A | REMOCON BLK RC-G67<br>[GX-67] |
| 2B      | AX-D4004A010B | REMOCON BLK RC-G57<br>[DX-57] |

# FINAL ASSEMBLY BLOCK



## NOTE

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# AKAI

MODEL **DX-57**

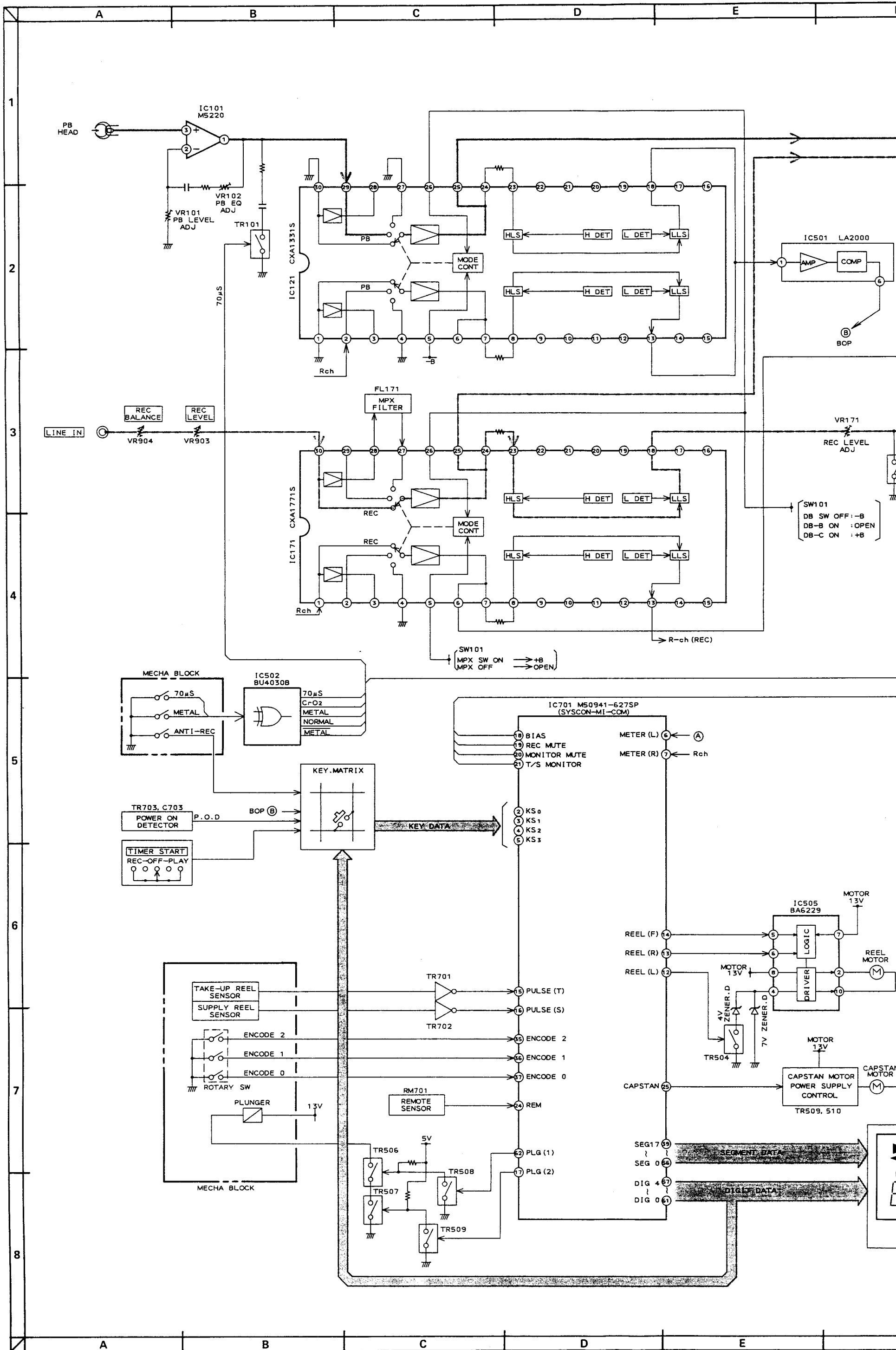
MODEL **GX-67**

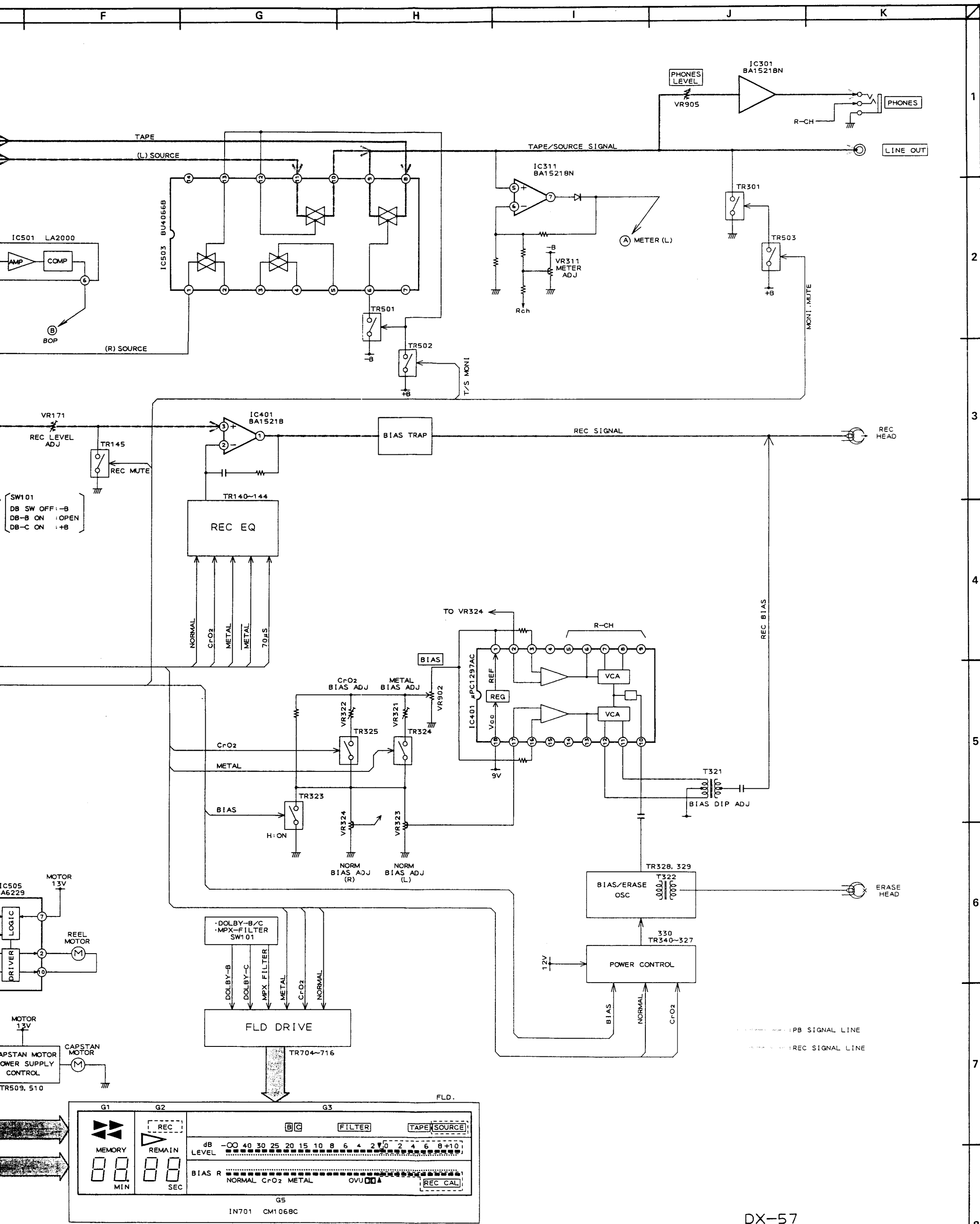
## SCHEMATIC DIAGRAMS AND PC BOARDS

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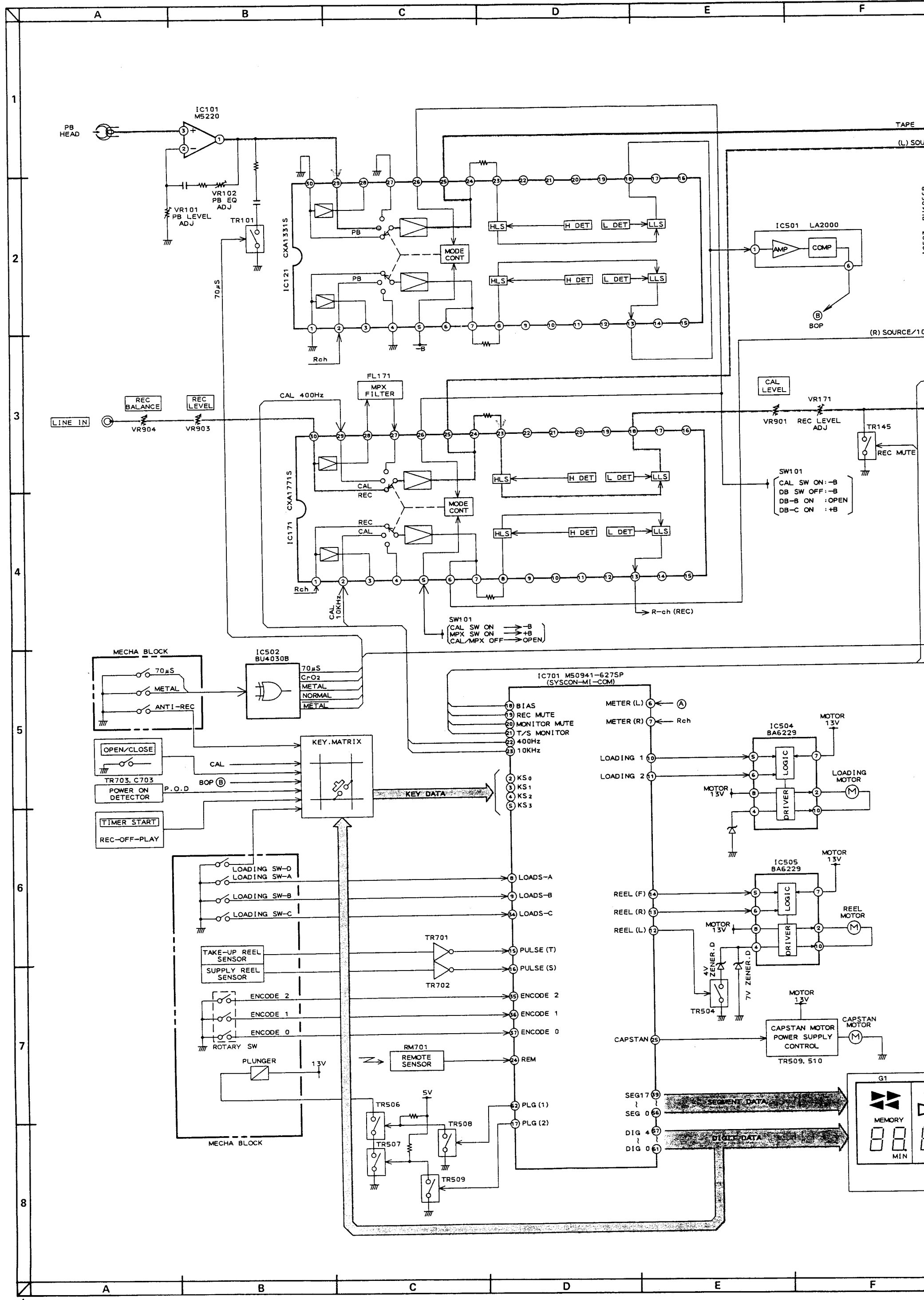
|                                          |    |
|------------------------------------------|----|
| 1. DX-57 BLOCK DIAGRAM .....             | 3  |
| 2. GX-67 BLOCK DIAGRAM .....             | 4  |
| 3. CONNECTION DIAGRAM .....              | 6  |
| 4. DX-57 PRE AMP SCHEMATIC DIAGRAM ..... | 7  |
| 5. GX-67 PRE AMP SCHEMATIC DIAGRAM ..... | 8  |
| 6. PRE AMP AND OTHER PC BOARDS .....     | 9  |
| 7. SYSCON SCHEMATIC DIAGRAM .....        | 10 |
| 8. SYSCON PC BOARD .....                 | 11 |
| 9. EJECT SW AND TIMER SW PC BOARDS ..... | 12 |

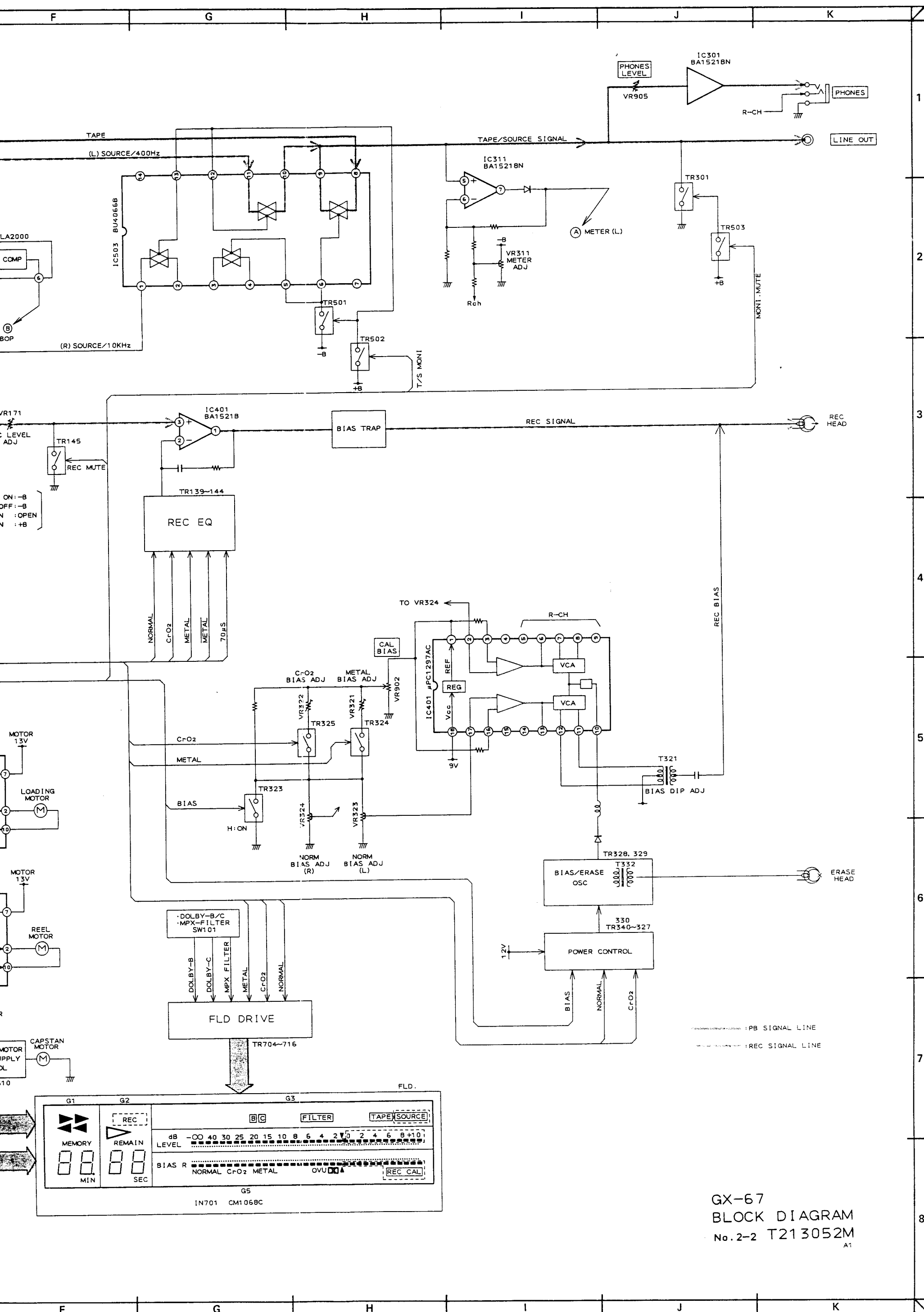
Use these schematic diagrams and PC boards together with the provided service manual.

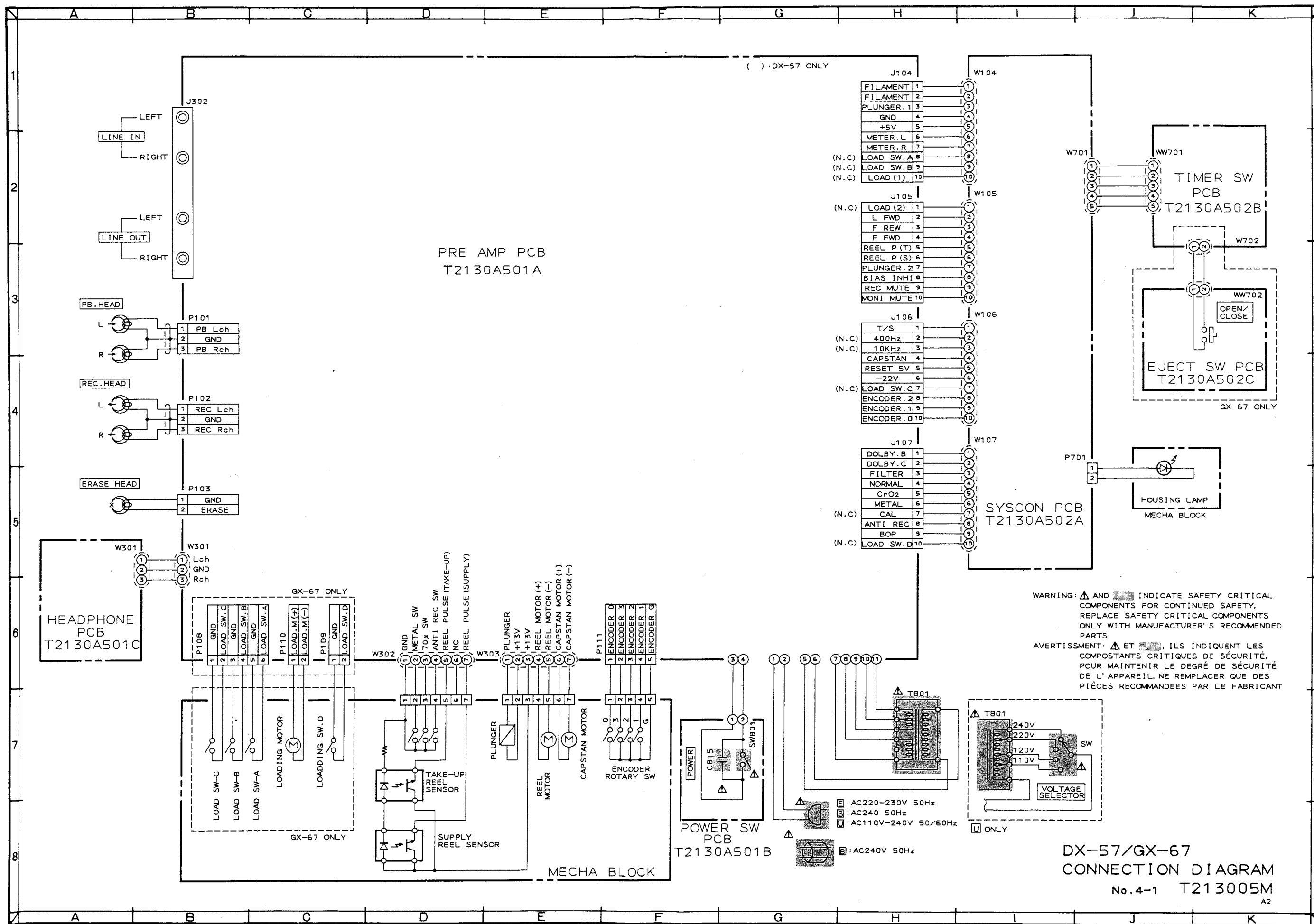


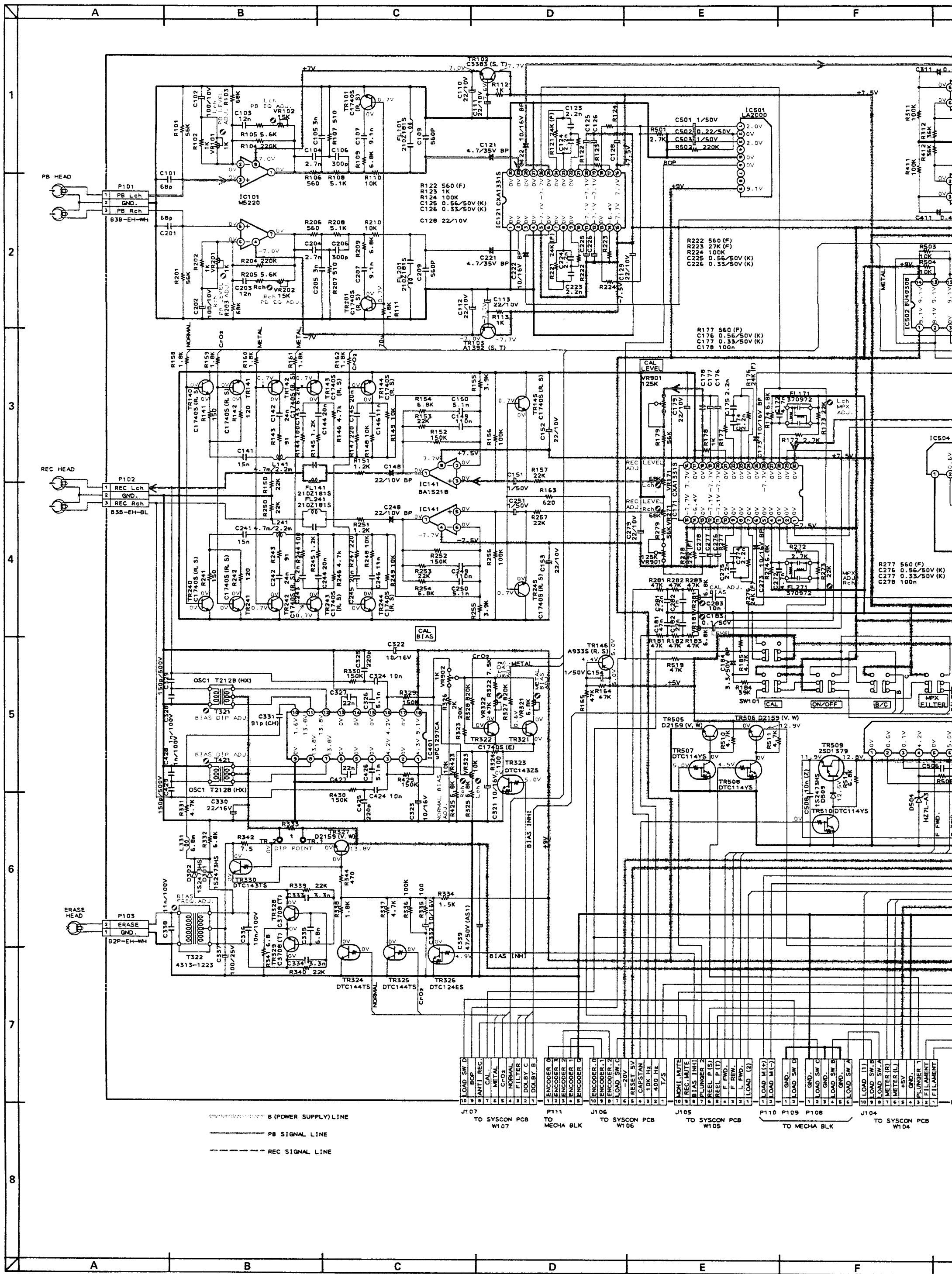


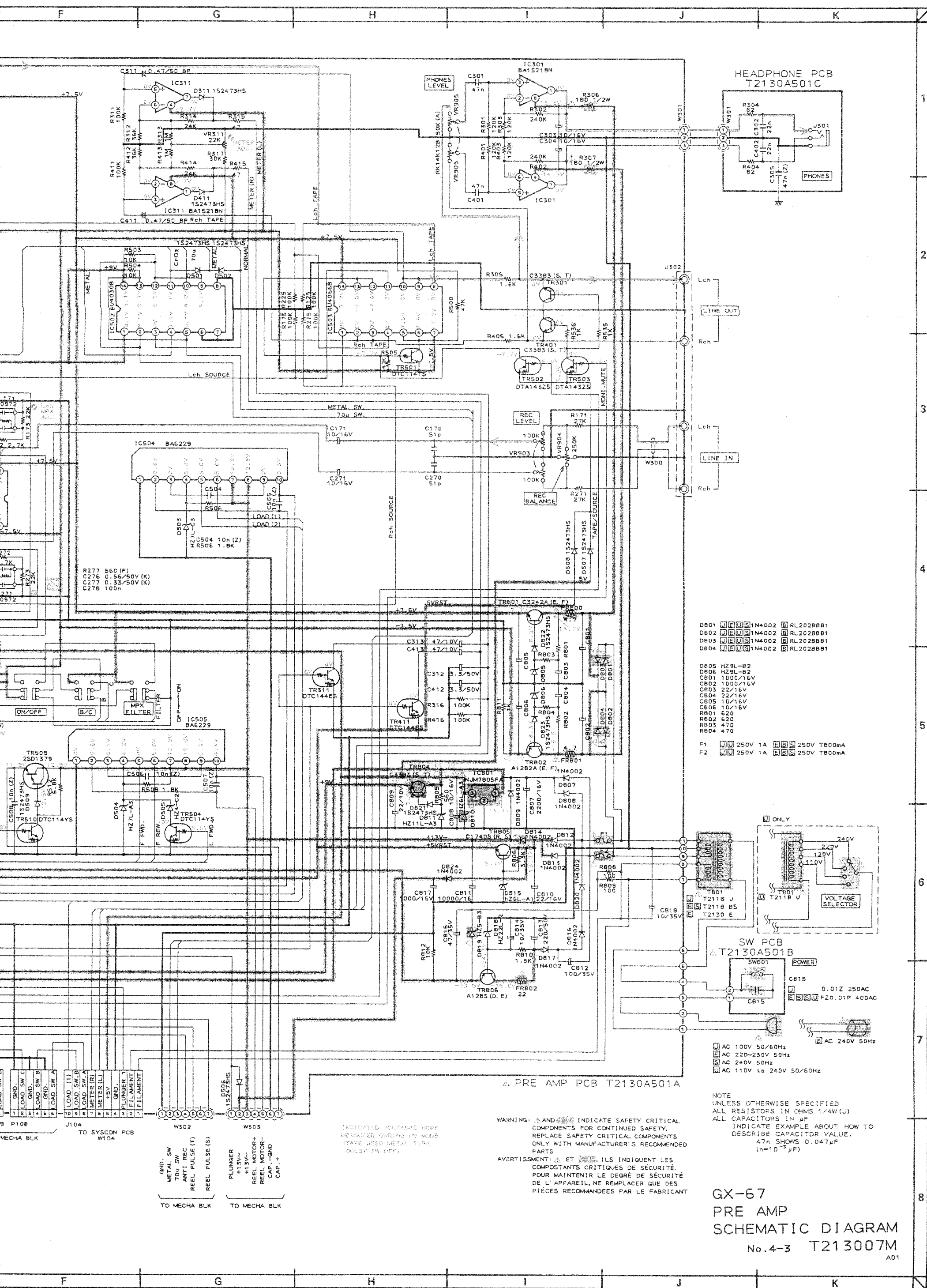
DX-57  
BLOCK DIAGRAM  
No. 2-1 T213053M  
A1

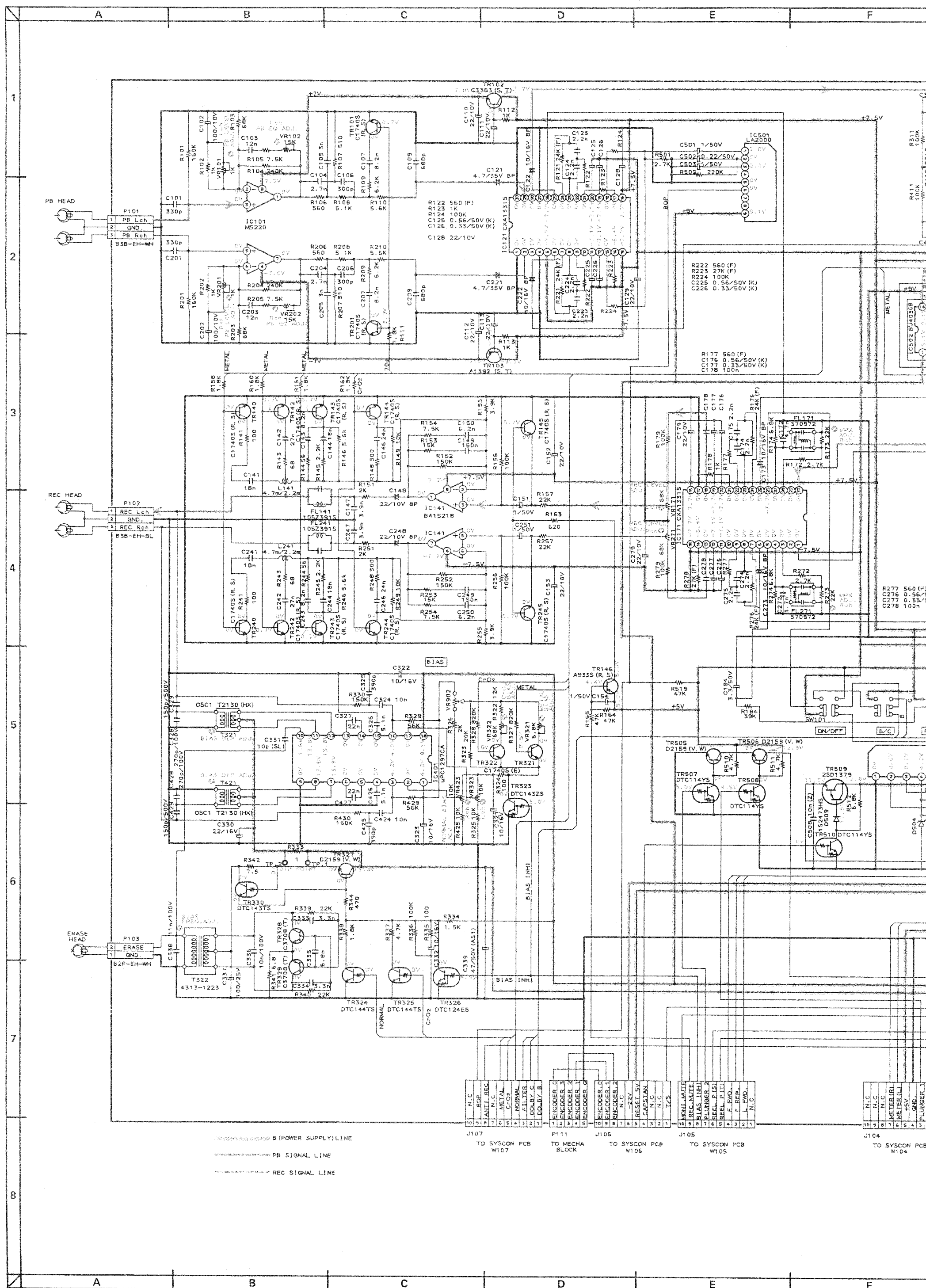


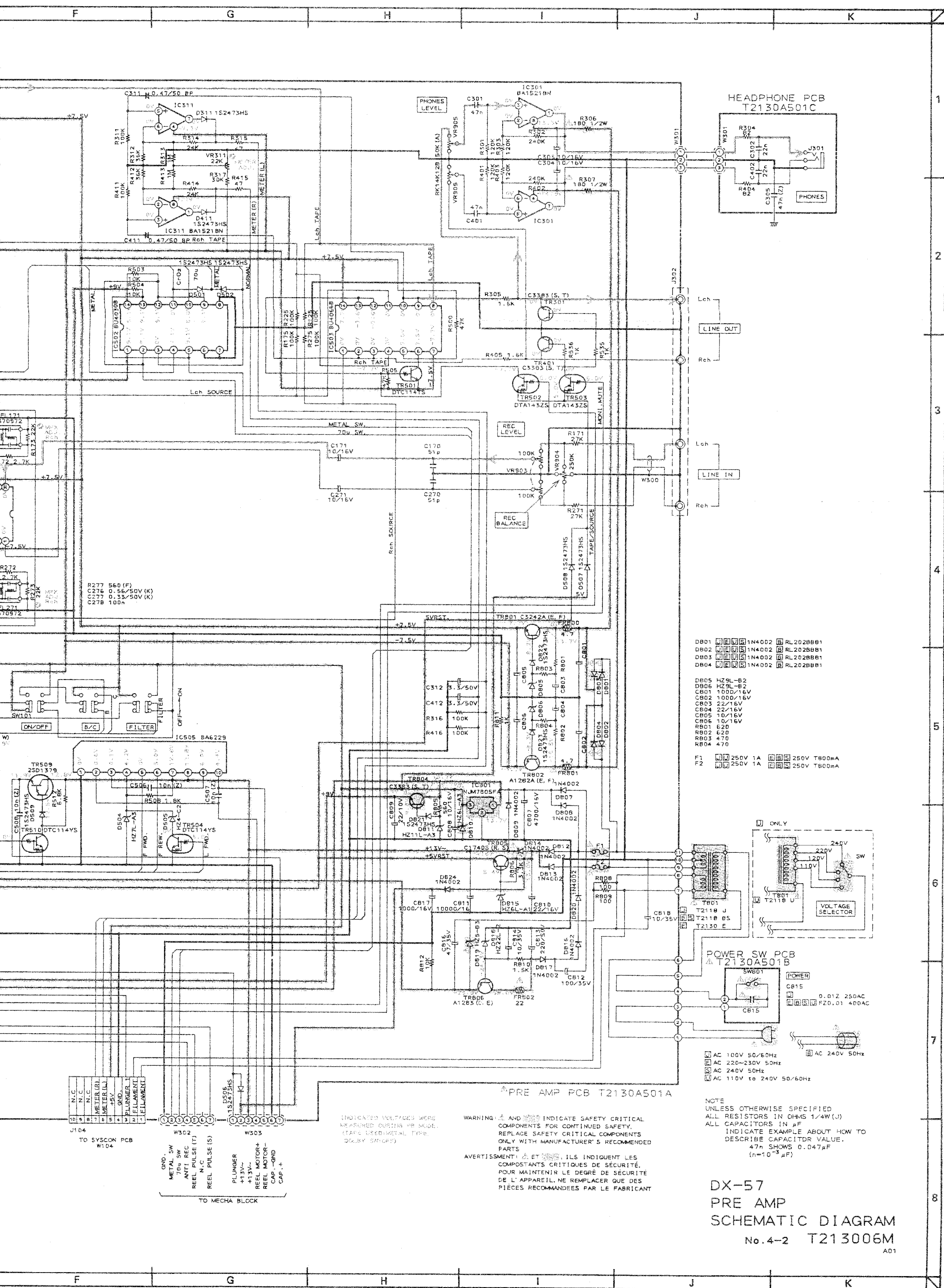




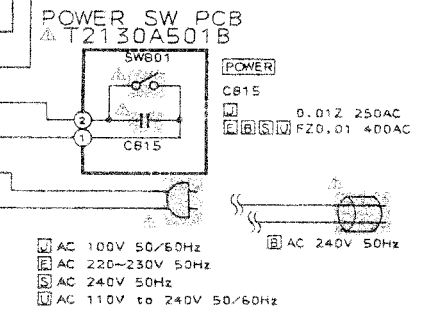
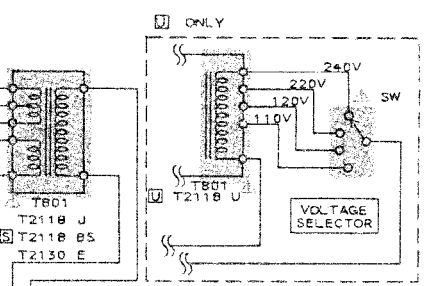








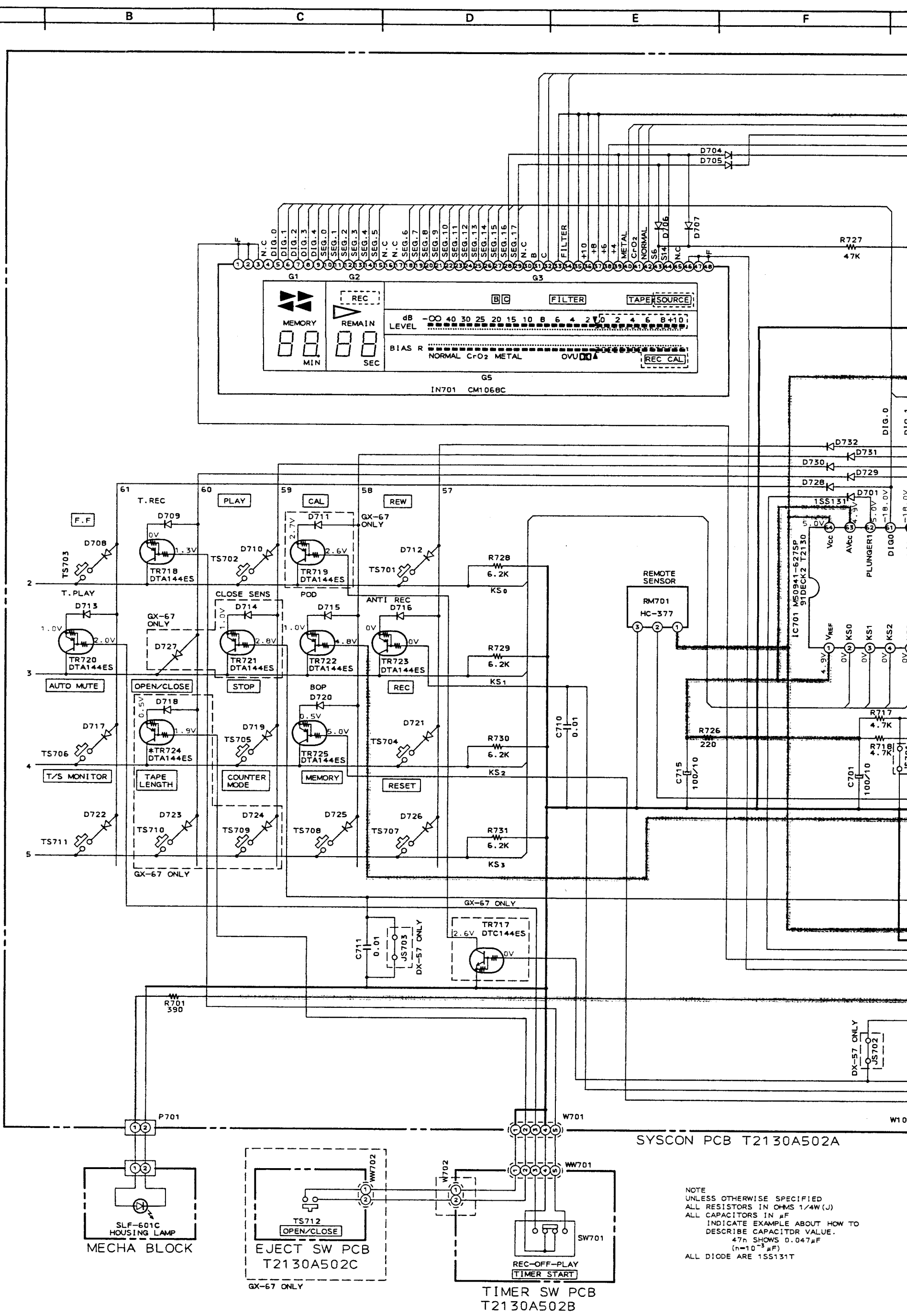
- DB01 1N4002 RL202B881  
DB02 1N4002 RL202B881  
DB03 1N4002 RL202B881  
DB04 1N4002 RL202B881  
DB05 HZ9L-B2  
DB06 HZ9L-B2  
CB01 1000/16V  
CB02 1000/16V  
CB03 22/16V  
CB04 22/16V  
CB05 10/16V  
CB06 10/16V  
RB01 620  
RB02 620  
RB03 470  
RB04 470  
F1 250V 1A T800mA  
F2 250V 1A T800mA



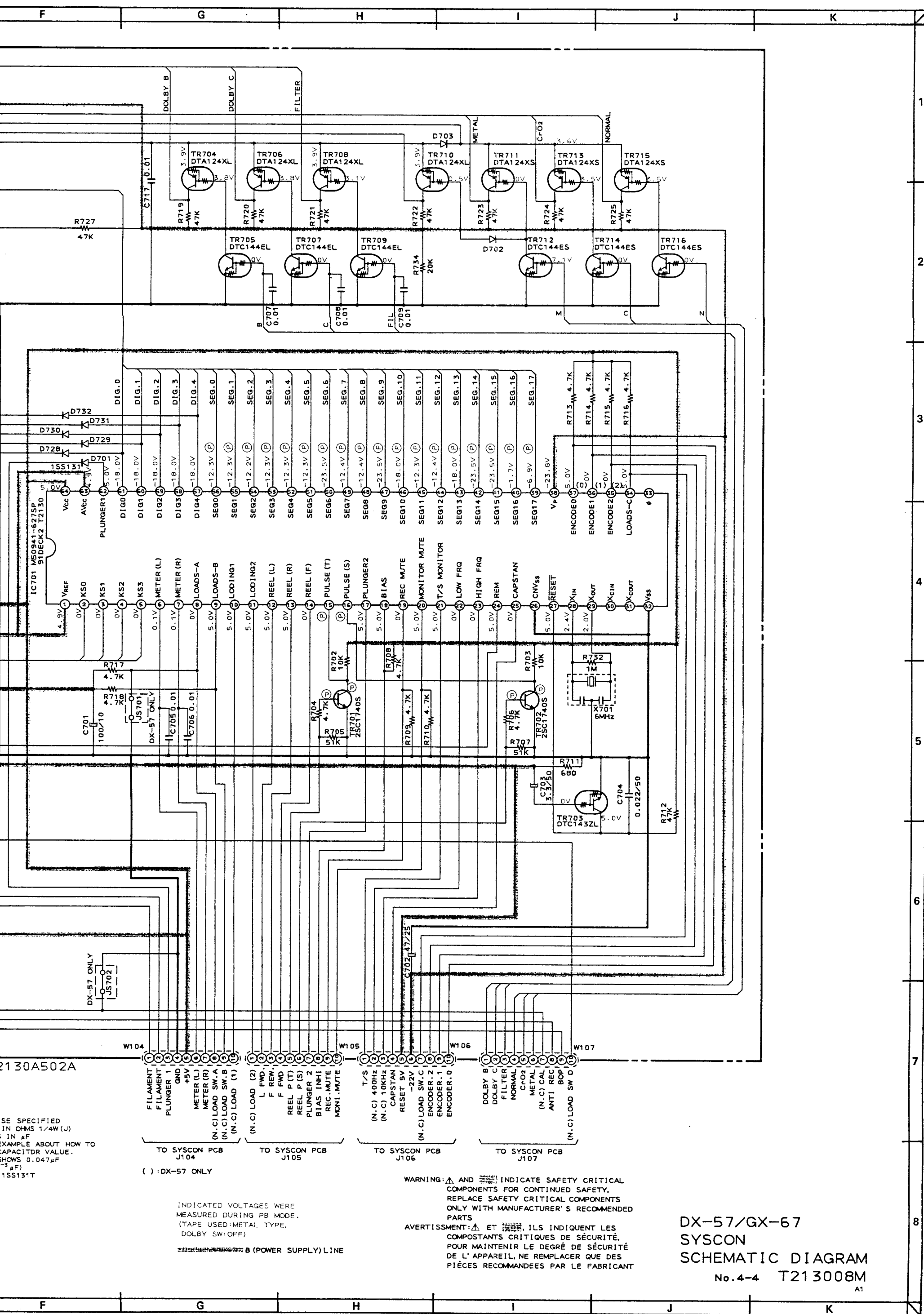
NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS 1/4W (J)  
ALL CAPACITORS IN  $\mu$ F  
INDICATE EXAMPLE ABOUT HOW TO  
DESCRIBE CAPACITOR VALUE.  
47n SHOWS 0.047 $\mu$ F  
(n=10<sup>-3</sup>  $\mu$ F)

AC 100V 50/60Hz  
AC 220-230V 50Hz  
AC 240V 50Hz  
AC 110V to 240V 50/60Hz

DX-57  
PRE AMP  
SCHEMATIC DIAGRAM  
No. 4-2 T213006M  
A01



NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS 1/4W(J)  
ALL CAPACITORS IN  $\mu$ F  
INDICATE EXAMPLE ABOUT HOW TO  
DESCRIBE CAPACITOR VALUE.  
47n SHOWS 0.047 $\mu$ F  
(n=10<sup>-9</sup>  $\mu$ F)  
ALL DIODE ARE 1SS131T



# PRINCIPAL PARTS LOCATION

## ICS

IC101 ..... E1,2  
IC121 ..... C1  
IC141 ..... C3  
IC171 ..... E3  
IC301 ..... G,H6  
IC311 ..... A,B3  
IC401 ..... C5  
IC501 ..... B1  
IC502 ..... F4  
IC503 ..... A2  
IC504 ..... F6  
(67 ONLY)  
IC505 ..... E6  
IC801 ..... B4

## CONNECTORS

P101 ..... E1,2  
P102 ..... C4  
P103 ..... D5  
P108 ..... G5,6  
(67 ONLY)  
P109 ..... G5  
(67 ONLY)  
P110 ..... F5  
(67 ONLY)  
P111 ..... G4  
J104 ..... F,G6  
J105 ..... F,G5  
J106 ..... F,G4,5  
J107 ..... F,G4  
J302 ..... A2,3

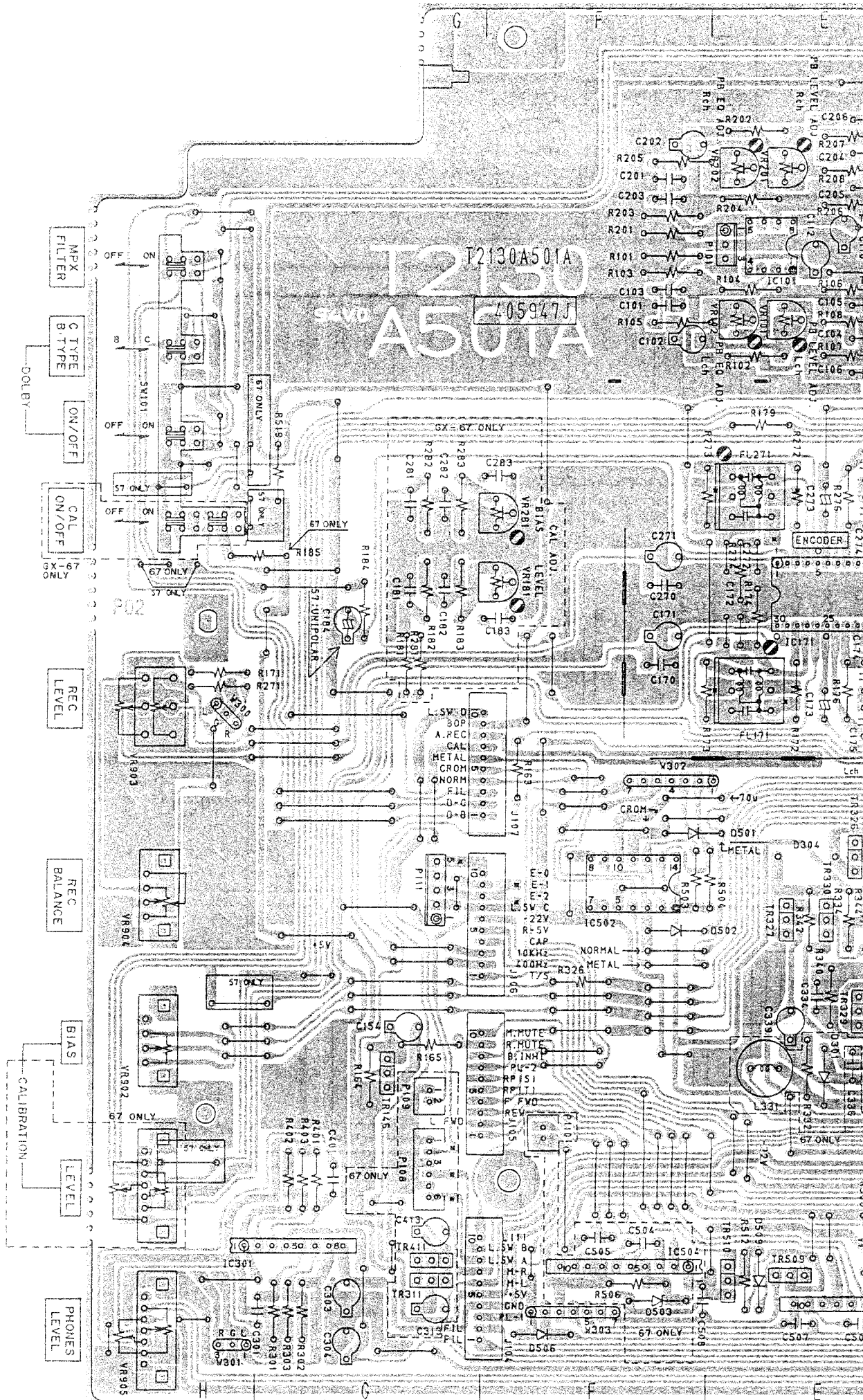
## WIRES

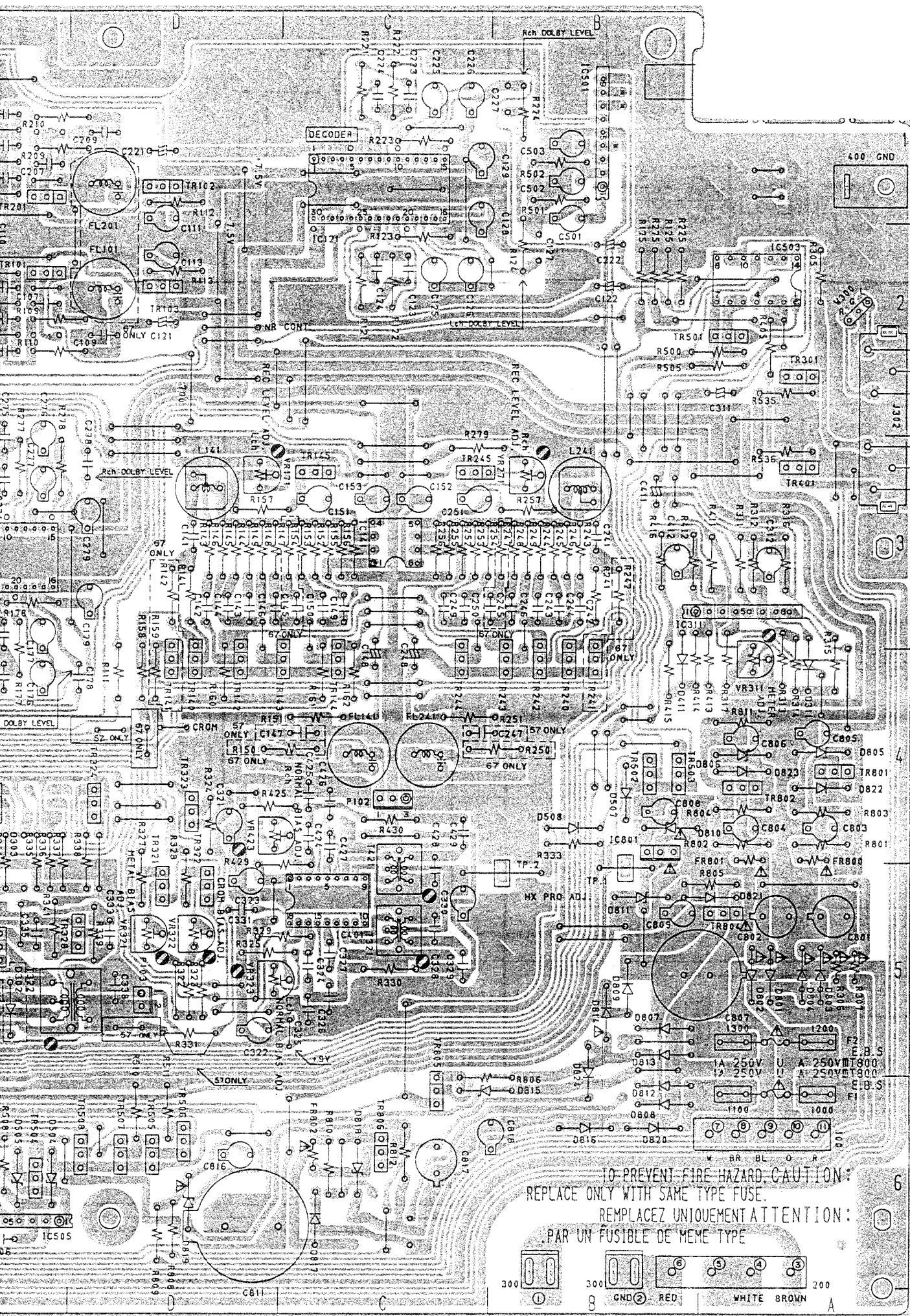
W300 ..... A2,H4  
W301 ..... H6  
W302 ..... F4  
W303 ..... F6

## TRANSISTORS

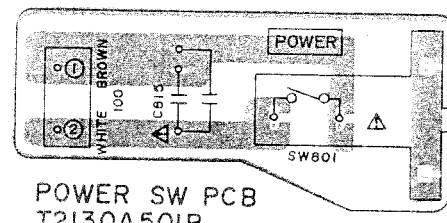
TR101 ..... E2  
TR102 ..... D1  
TR103 ..... D2  
TR140 ..... D3,4  
TR141 ..... D3,4  
(67 ONLY)

TR142 ..... D3,4  
TR143 ..... C3,4  
TR144 ..... C3,4  
TR145 ..... C3  
TR146 ..... G5  
TR201 ..... E1  
TR240 ..... B3,4  
TR241 ..... B3,4  
(67 ONLY)  
TR242 ..... B3,4  
TR243 ..... B3,4  
TR244 ..... C3,4  
TR245 ..... C3  
TR301 ..... A2  
TR311 ..... G6  
TR321 ..... D5  
TR322 ..... D5  
TR323 ..... D4  
TR324 ..... D4  
TR325 ..... E4  
TR326 ..... E4  
TR327 ..... E4,5  
TR328 ..... D5  
TR329 ..... E5  
TR330 ..... E4,5  
TR401 ..... A3  
TR411 ..... G6  
TR501 ..... A2  
TR502 ..... B4  
TR503 ..... B4  
TR504 ..... E6  
TR505 ..... D6  
TR506 ..... D6  
TR507 ..... D6  
TR508 ..... D6  
TR509 ..... E6  
TR510 ..... E6  
TR801 ..... A4  
TR802 ..... A4  
TR804 ..... A5  
TR805 ..... C6  
TR806 ..... C6





HEADPHONE PCB  
T2130A501C

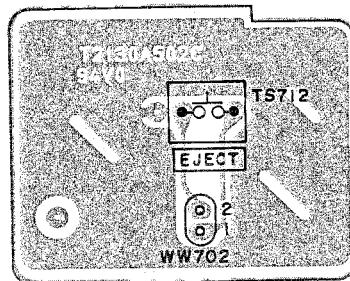


POWER SW PCB  
T2130A501B

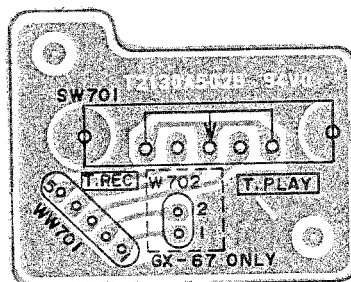
PRE AMP PCB T2130A501A1

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SECURITE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL, NE REMPLACER QUE DES PIECES RECOMMANDEES PAR LE FABRICANT.





EJECT SW PCB  
T2130A502C  
(GX-67 ONLY)



TIMER SW PCB  
T2130A502B  
GX-67 ONLY

## ABBREVIATIONS (CASSETTE)

| ABBREVIATION  | EXPLANATION                         | ABBREVIATION | EXPLANATION                   |
|---------------|-------------------------------------|--------------|-------------------------------|
| AC            | Alternating Current                 | MIN          | MINute                        |
| A/D           | Analog/Digital                      | MML          | Maximum Modulation Level      |
| AF            | Auto Fader                          | MOL          | Maximum Output Level          |
| AMP           | AMPlifier                           | MPX          | Multi PleX                    |
| AR            | Anti Recording                      | NC           | Not Connected (No Connection) |
| AT BIAS       | Auto Turning BIAS                   | NFB          | Negative Feed Back            |
| ATT           | ATTenuator                          | NORM         | NORMal                        |
| BAL           | BALance                             | NR           | Noise Reduction               |
| BEF           | Band Elimination Filter             | OSC          | OSCillator (OSCillation)      |
| BSS           | Blank Search System                 | P            | Pulse                         |
| CAP M         | CAPstan Motor                       | PB           | Play Back                     |
| CH            | CHannel                             | QMSS         | Quick Memory Search System    |
| COMP          | COMParator                          | QR           | Quick Reverse                 |
| CONT          | CONTinuanance                       | R CH         | Right CHannel                 |
| CRLP          | Computer Recording Level Processing | REC          | RECOard (RECOding)            |
| CS            | Chip Select                         | REV          | REVERSE                       |
| D/A           | Digital/Analog                      | ROT          | ROTation                      |
| DC            | Direct Current                      | REW          | REWind                        |
| DET           | DETECTOR                            | SEC          | SECOnd                        |
| DISCRI        | DISCRIminator                       | SELE         | SELEctor                      |
| DUB           | DUBbing                             | SENS         | SENSitivity                   |
| EQ            | EQUALizer                           | SEPP         | Single Ended Push Pull        |
| FF (or F.FWD) | Fast Forward                        | SIG          | SIGnal                        |
| FLD           | FLuorescent Display                 | SPECT        | SPECTrum                      |
| FREQ          | FREQUENCY                           | STD          | STANdard                      |
| FWD           | ForWARd                             | SW           | SWitch                        |
| GND           | GrouND                              | SYSCON       | SYStem CONtrol                |
| H             | High                                | TP           | Test Point                    |
| HPF           | High Pass Filter                    | TRIG         | TRIGa                         |
| IND           | INDicator                           | VCA          | Voltage Control Attenuator    |
| IPLS          | Instant Program Location System     | VOL          | VOLUME                        |
| L             | Low                                 | VOLT         | VOLTage                       |
| L CH          | Left CHannel                        | VR           | Variable Resistor             |
| LED           | Light Emitting Diode                | X'TAL        | cysTAL                        |
| MEMO          | MEMORy                              | X1           | Normal speed                  |
| MICOM         | MicroCOMputer                       | X2           | Dubble speed                  |